

|                       |                             |             |
|-----------------------|-----------------------------|-------------|
| STATE                 | STATE PROJECT REFERENCE NO. | SHEET NO.   |
| N.C.                  | 2021CPT.01.06.10581.1       | 1           |
| STATE PROJ. NO.       |                             | DESCRIPTION |
| 2021CPT.01.06.10581.1 |                             | PE, CONST   |

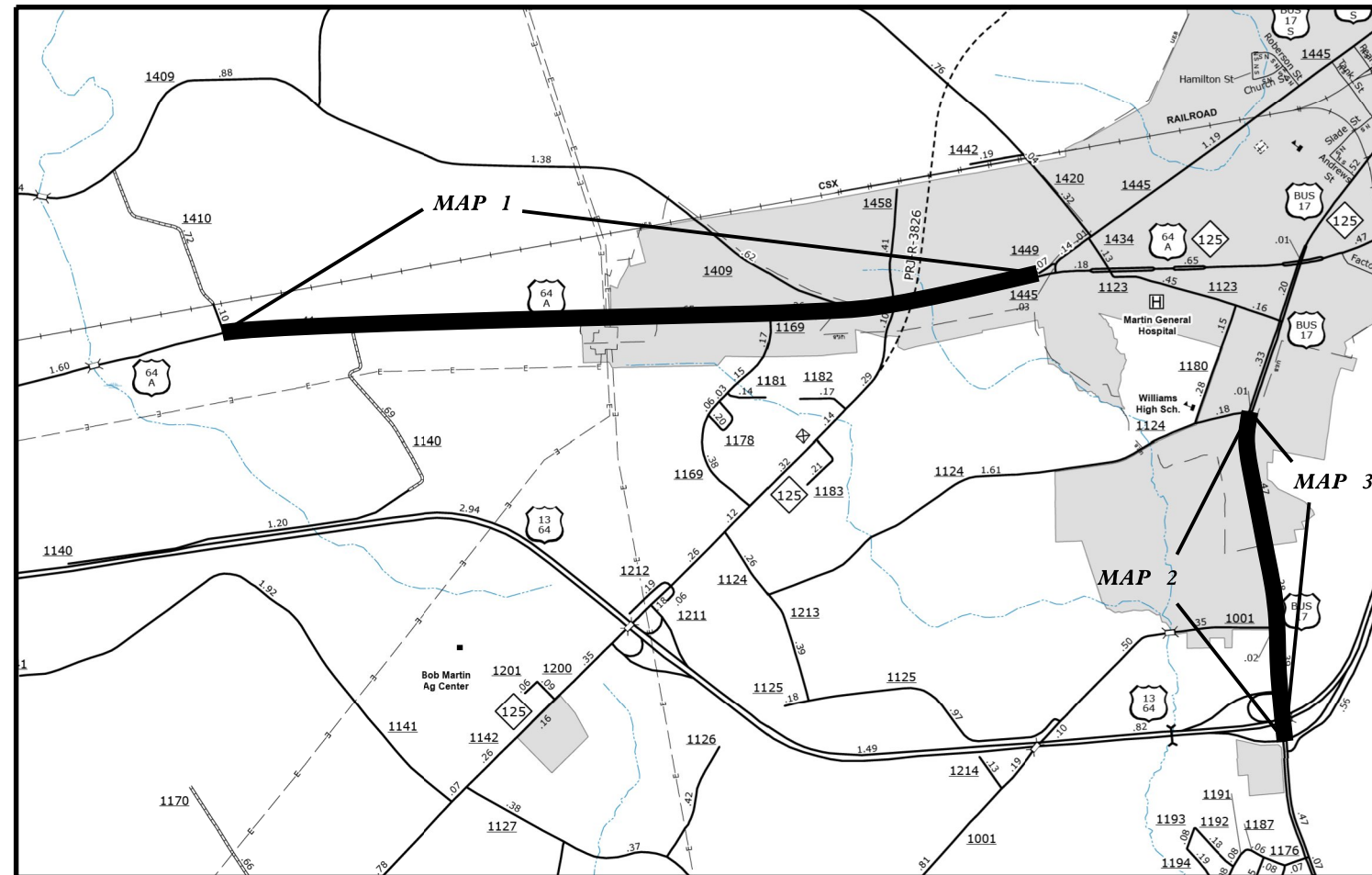
STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

**MARTIN COUNTY**

LOCATION: MAP 1 - US 64 ALT FROM SR 1410 (CULLIPHER RD) TO SR 1445 (WEST MAIN ST)

MAPS 2 & 3 - US 17 NORTH & SOUTH FROM EXIT 514 TO SR 1124 (GARRETT RD)

TYPE OF WORK: MILLING & RESURFACING



**CONTRACT: DA00489 WBS PROJECT: 2021CPT.01.06.10581.1**

GRAPHIC SCALES

NTS

PROJECT LENGTH

LENGTH ROADWAY MAP #1 = 2.61 MILES  
LENGTH ROADWAY MAP #2 = 1.12 MILES  
LENGTH ROADWAY MAP #3 = 1.12 MILES

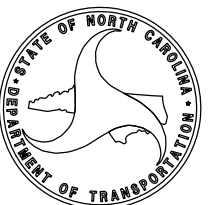
Prepared In the Office of:  
**DIVISION OF HIGHWAYS**  
113 AIRPORT DR., EDENTON, NC, 27932

2018 STANDARD SPECIFICATIONS

W.B. HOBBS, P.E.  
DIVISION PROJECT TEAM LEAD

CHRIS SLACHTA  
DIVISION PROPOSALS ENGINEER

S.P. FENWICK, PLS  
DESIGN ENGINEER



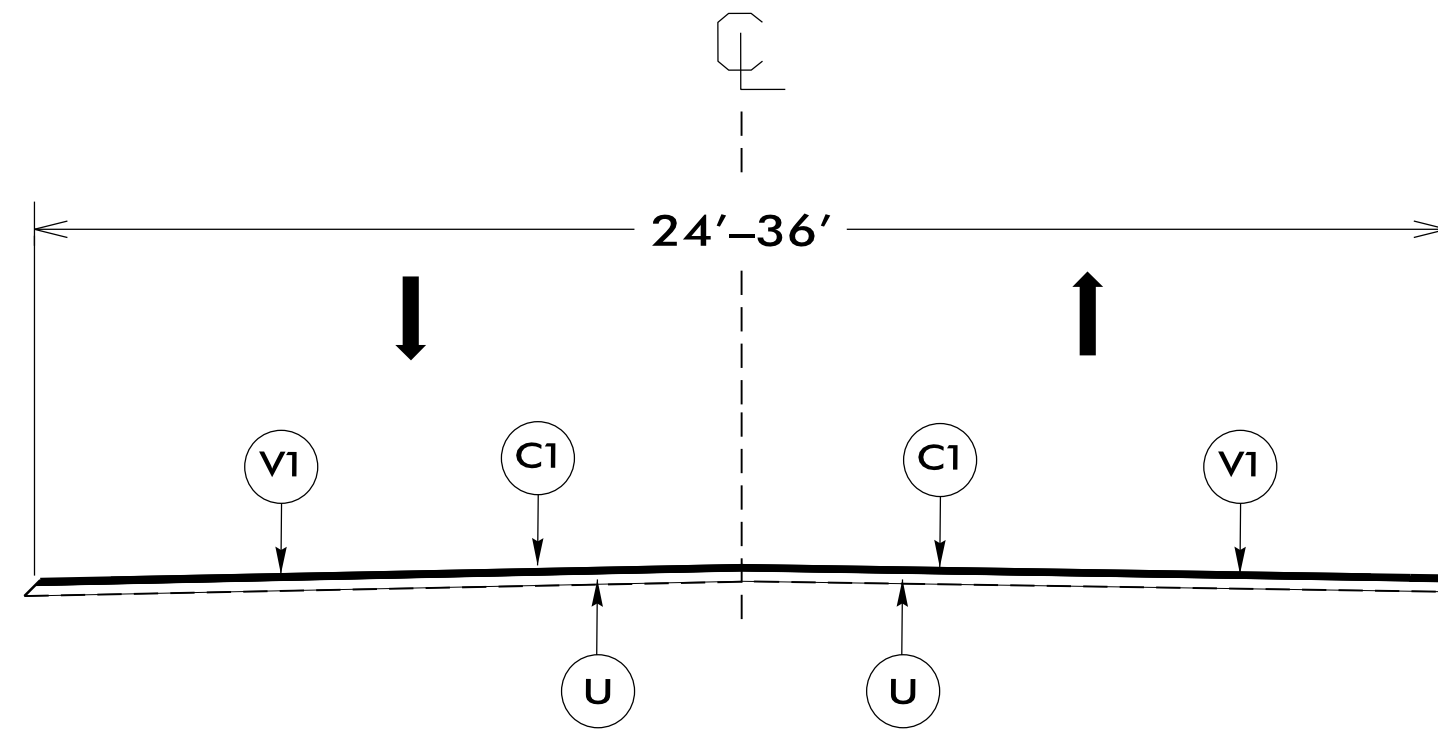
P A V E M E N T S C H E D U L E

|    |  |
|----|--|
| C1 | PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD. |
| C2 | PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. |
| V1 | MILLING ASPHALT PAVEMENT. 1.5" IN DEPTH.   |
| U  | EXISTING PAVEMENT.   |

NOTES:

\*ALL PAVED S.R. ROADS TO BE RESURFACED TO THE ENDS OF THE RADII., OR AS DIRECTED BY THE ENGINEER

\*EDGES, PAVEMENT WIDENING, INTERSECTIONS, AND BRIDGE FLARES ARE INCLUDED IN THE SUMMARY OF QUANTITIES



**TYPICAL SECTION NO. 1**

USE WITH MAP 1

NTS

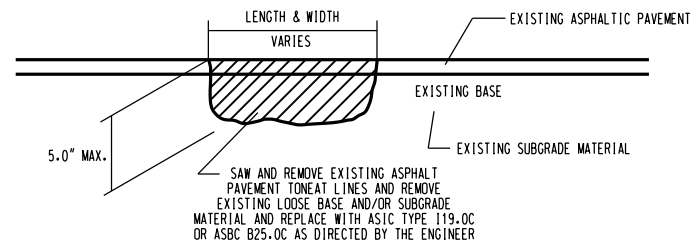
PAVEMENT SCHEDULE

|    |  |
|----|--|
| C1 | PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD. |
| C2 | PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. |
| V1 | MILLING ASPHALT PAVEMENT. 1.5" IN DEPTH.   |
| U  | EXISTING PAVEMENT.   |

NOTES:

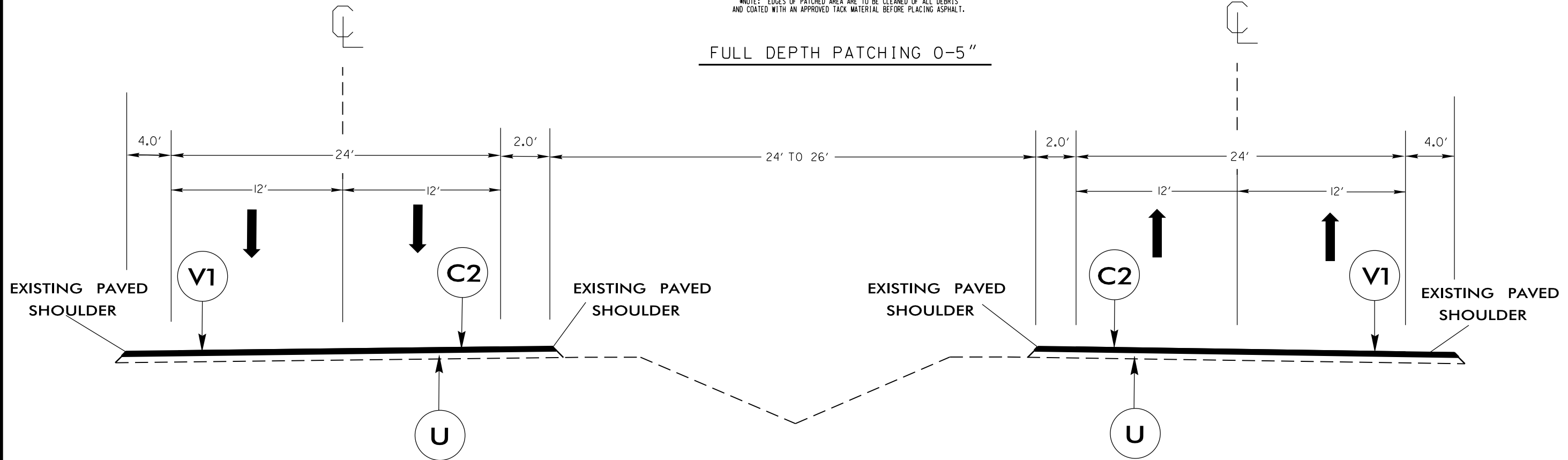
\*ALL PAVED S.R. ROADS OR RAMPS TO BE RESURFACED TO THE ENDS OF THE RADII, OR AS DIRECTED BY THE ENGINEER

\*EDGES, INTERSECTIONS, AND BRIDGE FLARES ARE INCLUDED IN THE SUMMARY OF QUANTITIES



\*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 0-5"



TYPICAL SECTION NO. 2

USE WITH MAP 2 & 3

|                       |           |
|-----------------------|-----------|
| PROJECT NO.           | SHEET NO. |
| 2021CPT.01.06.10581.1 | 4         |

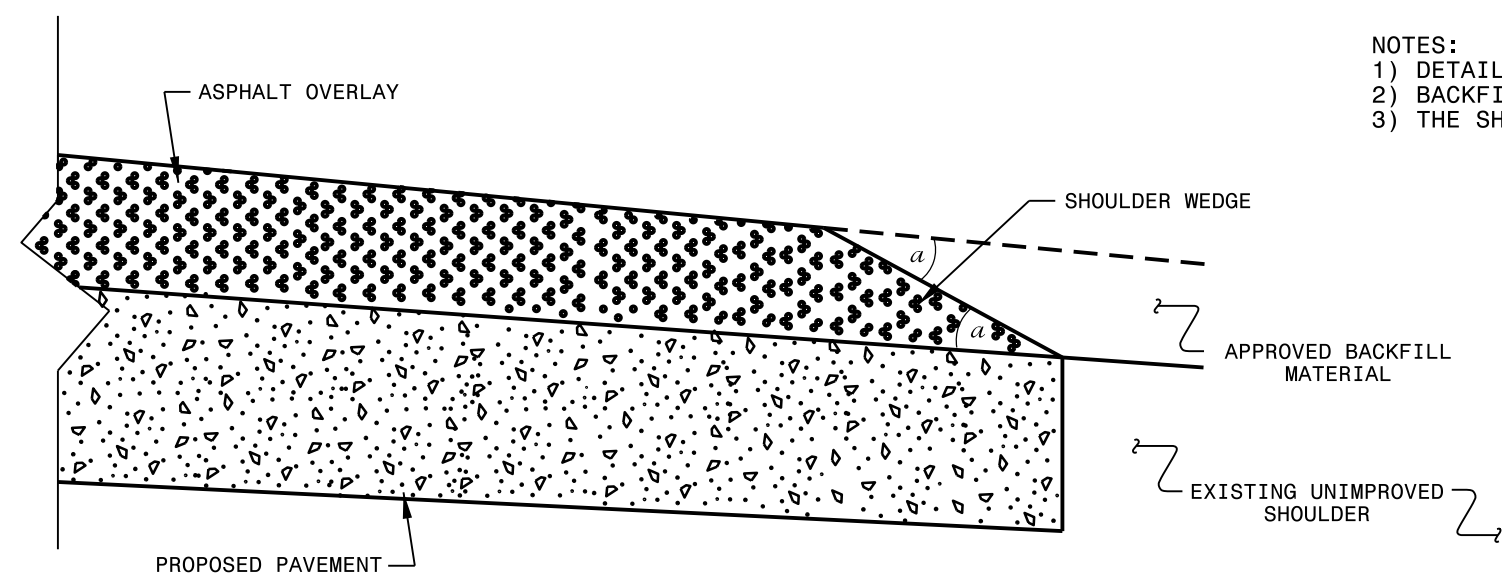
### SUMMARY OF QUANTITIES

| PROJECT NO                                      | COUNTY | MAP NO | ROUTE     | DESCRIPTION  | TYP NO | LANES | LANE TYPE | FINAL SURFACE TESTING REQUIRED | WARM MIX ASPHALT REQUIRED | MATERIAL TRANSFER VEHICLE | LENGTH      | WIDTH | MOBILIZATION | INCIDENTAL STONE BASE | MILLING ASPHALT PAVEMENT, 1 1/2" DEPTH | INCIDENTAL MILLING | ASPHALT CONC SURFACE COURSE, TYPE S9.5B | ASPHALT CONC SURFACE COURSE, TYPE S9.5C | ASPHALT BINDER FOR PLANT MIX | GENERIC PAVING ITEM, PATCHING EXISTING PAVEMENT FULL DEPTH 0-5 IN | STEEL BEAM GUARDRAIL | GUARDRAIL IMPACT ATTENUATOR UNITS, TYPE TL-3 | REMOVE EXISTING GUARDRAIL | TEMPORARY SILT FENCE | COIR FIBER WATTLE | JUNCTION BOX (STANDARD SIZE) | INDUCTIVE LOOP SAWCUT | LEAD-IN CABLE (14-2) |  |
|---|--------|--------|-----------|--|--------|-------|-----------|--------------------------------|---------------------------|---------------------------|-------------|-------|--------------|-----------------------|--|--------------------|---|---|------------------------------|---|----------------------|--|---------------------------|----------------------|-------------------|------------------------------|-----------------------|----------------------|--|
|   |        |        |           |  |        |       |           |                                |                           |                           | MI          | FT    | LS           | TONS                  | SY                                     | SY                 | TONS                                    | TONS                                    | TONS                         | TON   | LF                   | EACH   | LF                        | LF                   | LF                | EA                           | LF                    | LF                   |  |
| 2021CPT.01.06.10581.1                           | Martin | 1      | US 64 ALT | SR1410 CULLIPHER RD TO SR1445 W MAIN ST              | 1      | 2     | 2WU       | NO                             | NO                        | YES                       | 2.61        | 24    | 1            | 52                    | 48,520                                 | 5,449              | 4,494                                   |   | 301                          | 50  |                      |  | 100                       | 50                   |                   |                              |                       |                      |  |
| 2021CPT.01.06.10581.1                           | Martin | 2      | US 17 SBL | BEGIN PROJECT AT EXIT 514 US 17 TO SR1124 GARRETT RD | 2      | 2     | 2WU       | NO                             | NO                        | YES                       | 1.12        | 30    | *            | 22                    | 19,712                                 | 8,739              |   | 2,397                                   | 144                          | 20  | 156                  | 2  | 256                       | 100                  | 50                | 1                            | 276                   | 50                   |  |
| 2021CPT.01.06.10581.1                           | Martin | 3      | US 17 NBL | BEGIN PROJECT AT EXIT 514 US 17 TO SR1124 GARRETT RD | 2      | 2     | 2WU       | NO                             | NO                        | YES                       | 1.12        | 30    | *            | 22                    | 19,712                                 | 5,738              |   | 2,145                                   | 129                          | 20  | 156                  | 2  | 256                       | 100                  | 50                | 1                            | 416                   | 50                   |  |
| <b>TOTAL FOR PROJ NO. 2021CPT.01.06.10581.1</b> |        |        |           |  |        |       |           |                                |                           |                           | <b>4.85</b> |       | <b>1</b>     | <b>96</b>             | <b>87,944</b>                          | <b>19,926</b>      | <b>4,494</b>                            | <b>4,542</b>                            | <b>574</b>                   | <b>90</b>   | <b>312</b>           | <b>4</b>                                     | <b>512</b>                | <b>300</b>           | <b>150</b>        | <b>2</b>                     | <b>692</b>            | <b>100</b>           |  |

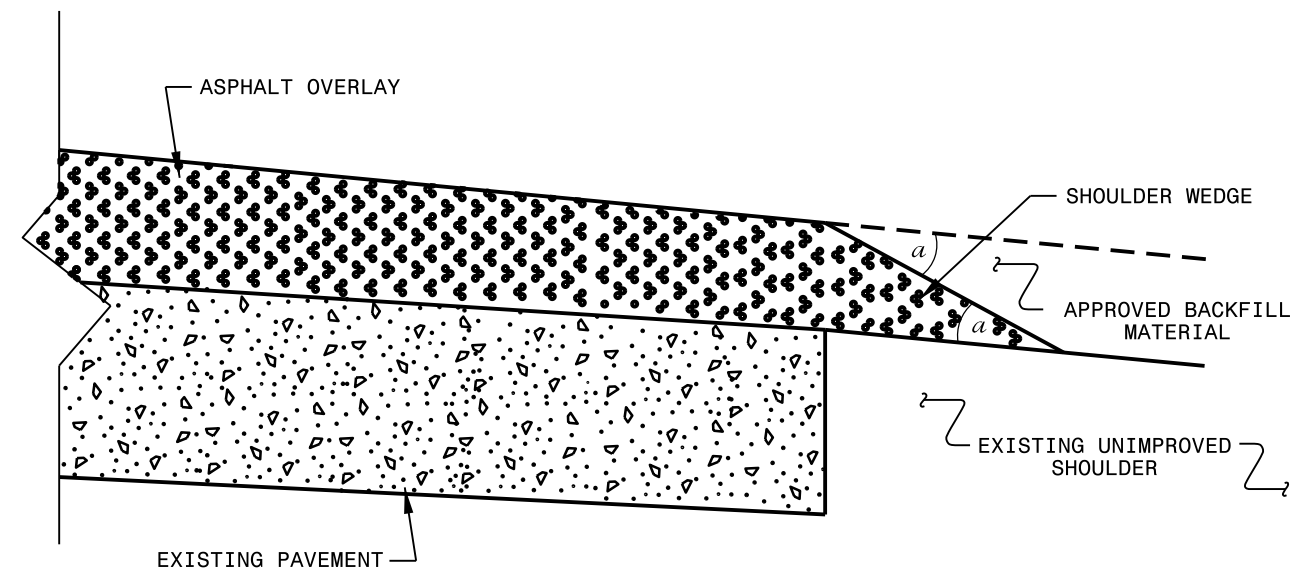
### THERMOPLASTIC AND PAINT QUANTITIES

| PROJECT NO                                      | COUNTY | MAP NO | ROUTE     | DESCRIPTION  | TYP NO | LANES | LANE TYPE | LENGTH      | WIDTH | WORK ZONE ADVANCE/ GENERAL WARNING SIGNING | TEMPORARY TRAFFIC CONTROL | THERMO PAVEMENT MARKING LINES (6", 90 MILS) WHITE | THERMO PAVEMENT MARKING LINES (6", 90 MILS) YELLOW | GENERIC PAVEMENT MARKING ITEM, THERMO LINE 24" 90 MILS (SP) | THERMO PAVEMENT MARKING SYMBOL (90 MILS), LT ARROW | THERMO PAVEMENT MARKING SYMBOL (90 MILS), STR & LT ARROW | THERMO PAVEMENT MARKING SYMBOL (90 MILS), STR ARROW | THERMO PAVEMENT MARKING SYMBOL (90 MILS), RT ARROW | THERMO PAVEMENT MARKING SYMBOL (90 MILS), STR & RT ARROW | PAINT PAVEMENT MARKING LINES, 4" WHITE | PAINT PAVEMENT MARKING LINES, 4" YELLOW | PAINT PAVEMENT MARKING LINES, 24" | PAINT PAVEMENT MARKING SYMBOL (LT ARROW) | PAINT PAVEMENT MARKING SYMBOL (STR & LT ARROW) | PAINT PAVEMENT MARKING SYMBOL (STR ARROW) | PAINT PAVEMENT MARKING SYMBOL (RT ARROW) | PAINT PAVEMENT MARKING SYMBOL (STR & RT ARROW) | GENERIC PAVEMENT MARKING ITEM, NON-CAST IRON SNOWPLOWABLE PAVEMENT MARKER |    |    |    |
|---|--------|--------|-----------|--|--------|-------|-----------|-------------|-------|--|---------------------------|---|--|---|--|--|---|--|--|--|---|-----------------------------------|--|--|---|--|--|---|----|----|----|
|   |        |        |           |  |        |       |           | MI          | FT    | SF   | LS                        | LF  | LF   | LF  | EA   | EA   | EA  | EA   | EA   | EA                                     | EA                                      | EA                                | EA                                       | EA   | EA  | EA                                       | EA   | EA  | EA | EA | EA |
| 2021CPT.01.06.10581.1                           | Martin | 1      | US 64 ALT | SR1410 CULLIPHER RD TO SR1445 W MAIN ST              | 1      | 2     | 2WU       | 2.61        | 24    | 560  | 1                         | 28,084  | 17,226   | 84  | 50   | 4  | 2   |  |  | 56,168                                 | 34,452                                  | 168                               | 50                                       | 4  | 2   |  |  | 164   |    |    |    |
| 2021CPT.01.06.10581.1                           | Martin | 2      | US 17 SBL | BEGIN PROJECT AT EXIT 514 US 17 TO SR1124 GARRETT RD | 2      | 2     | 2WU       | 1.12        | 30    | 328  | *                         | 12,051  | 7,392  | 75  | 7  | 1  | 1   | 3  | 1  | 24,102                                 | 14,784                                  | 150                               | 7  | 1  | 1   | 3  | 1  | 71  |    |    |    |
| 2021CPT.01.06.10581.1                           | Martin | 3      | US 17 NBL | BEGIN PROJECT AT EXIT 514 US 17 TO SR1124 GARRETT RD | 2      | 2     | 2WU       | 1.12        | 30    | 336  | *                         | 12,051  | 7,392  | 155   | 6  |  | 5   | 2  |  | 24,102                                 | 14,784                                  | 310                               | 6  |  | 5   | 2  |  | 71  |    |    |    |
| <b>TOTAL FOR PROJ NO. 2021CPT.01.06.10581.1</b> |        |        |           |  |        |       |           | <b>4.85</b> |       | <b>1,224</b>                               | <b>1</b>                  | <b>52,186</b>                                     | <b>32,010</b>                                      | <b>314</b>  | <b>63</b>  | <b>5</b>   | <b>8</b>  | <b>5</b>   | <b>1</b>   | <b>104,372</b>                         | <b>64,020</b>                           | <b>628</b>                        | <b>63</b>                                | <b>5</b>                                       | <b>8</b>                                  | <b>5</b>                                 | <b>1</b>                                       | <b>306</b>  |    |    |    |
|   |        |        |           |  |        |       |           |             |       |  |                           | <b>84,196</b>                                     |  |   |  |  | <b>82</b>   |  |  |  |   | <b>168,392</b>                    |  |  |   |  | <b>82</b>                                      |   |    |    |    |

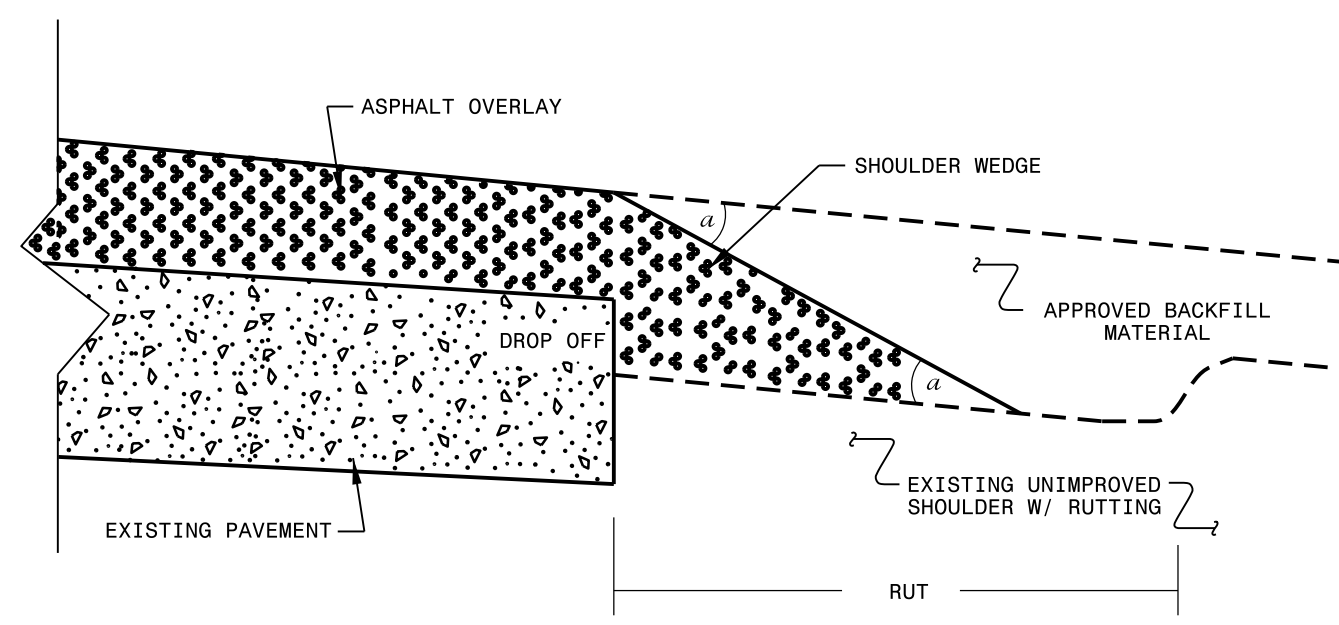
- NOTES:  
 1) DETAIL DOES NOT APPLY TO OGAFD AND ULTRA-THIN BONDED WEARING COURSE.  
 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.  
 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS AND SIDE STREETS.



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



**SHOULDER WEDGE DETAIL**  
 (Resurfacing Projects w/ NO Widening)



**SHOULDER WEDGE DETAIL**  
 (Resurfacing Adjacent to  
 Rutted Shoulder)

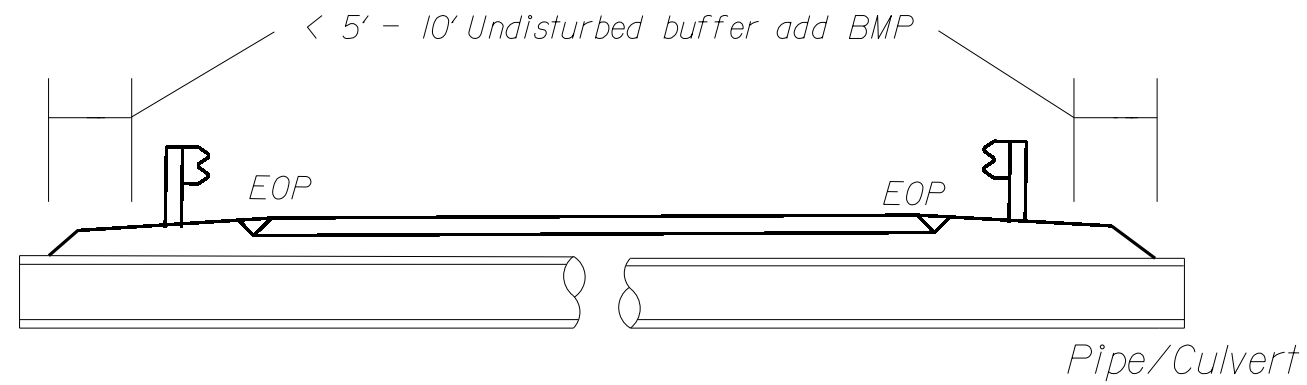
- SHOULDER WEDGE ANGLE = 30°

|  |                |
|--|----------------|
| <b>CONTRACT STANDARDS<br/>AND DEVELOPMENT UNIT</b>       |                |
| Office 919-707-6950 FAX 919-250-4119                     |                |
| <b>SHOULDER WEDGE<br/>DETAILS</b>                        |                |
| 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 |                |

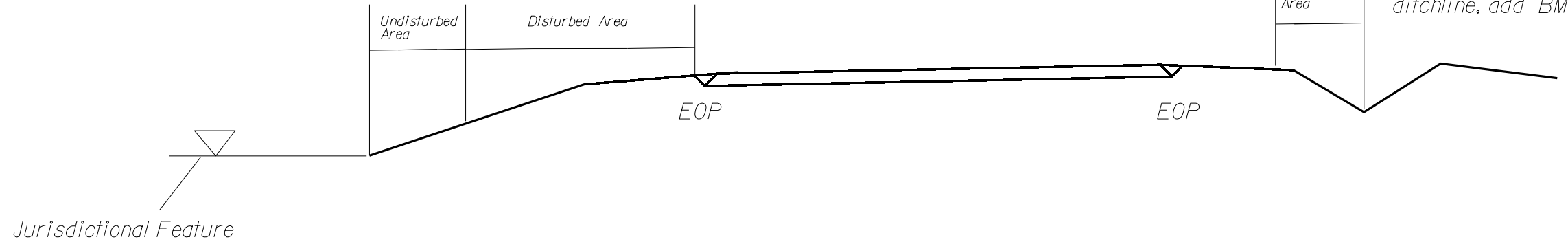
NOTES: Less than 5' - 10' undisturbed buffer from ROW, ditchline, water feature, or drainage inlet, add BMP.

BMP Options: Wattle or Silt Fence

# EROSION CONTROL DETAIL

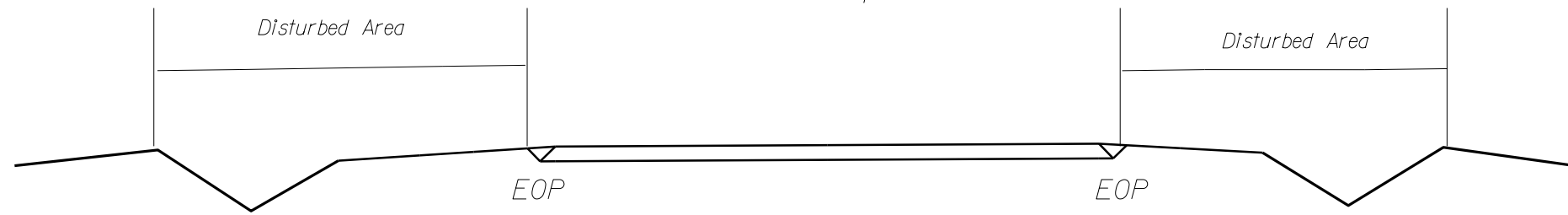


< 5' - 10' Undisturbed buffer from jurisdictional feature add BMP

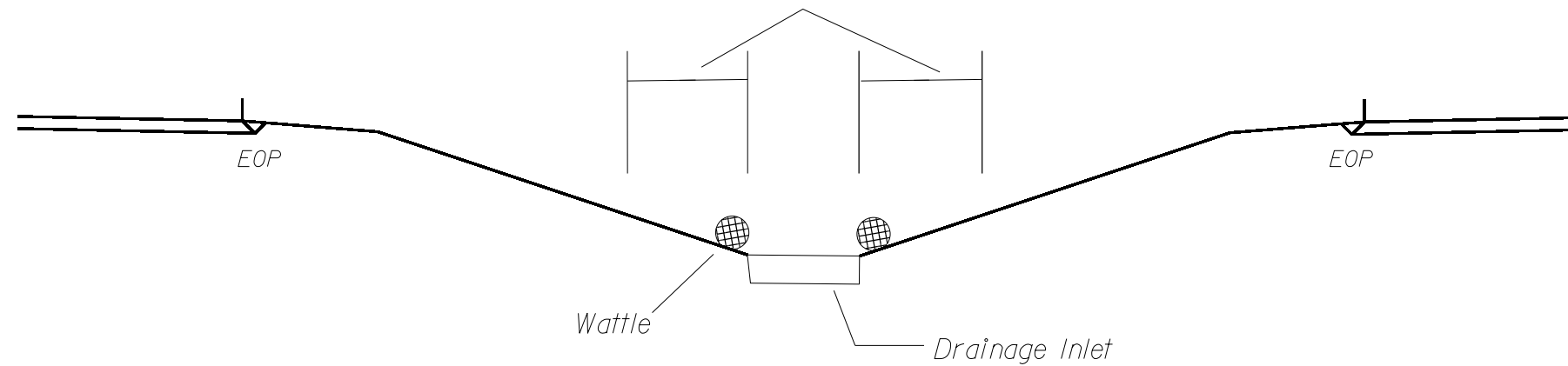


< 5' - 10' Undisturbed buffer from ditchline, add BMP

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

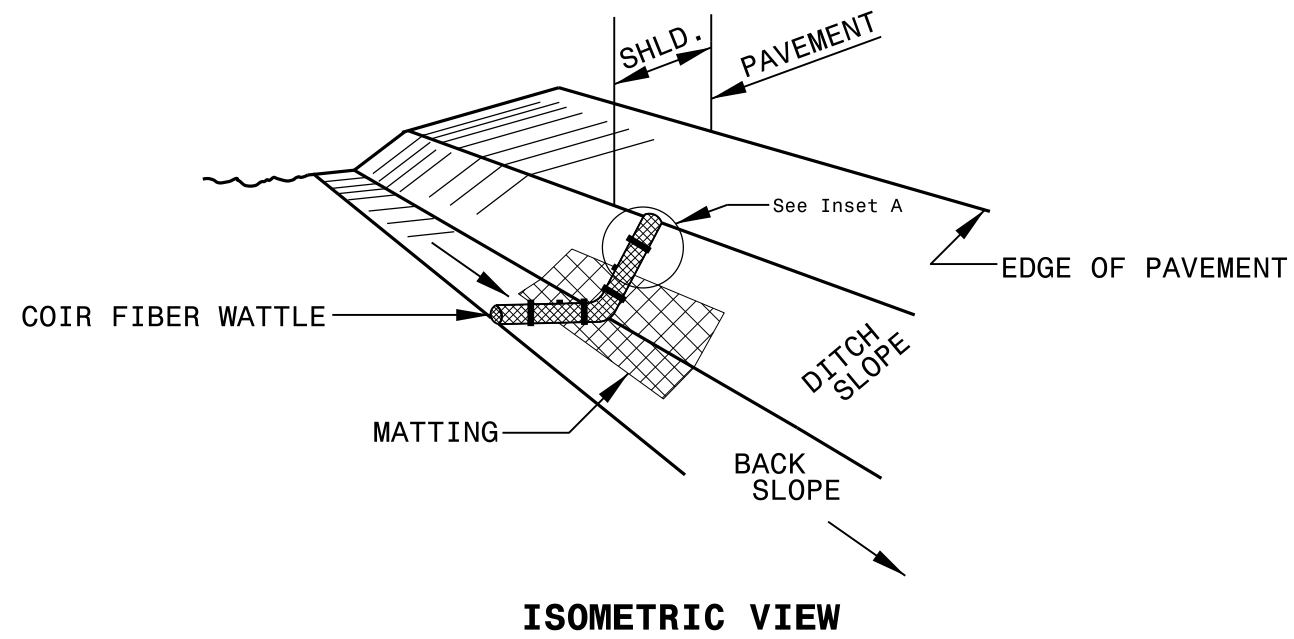


< 5' - 10' Undisturbed buffer from inlet, add wattle



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.

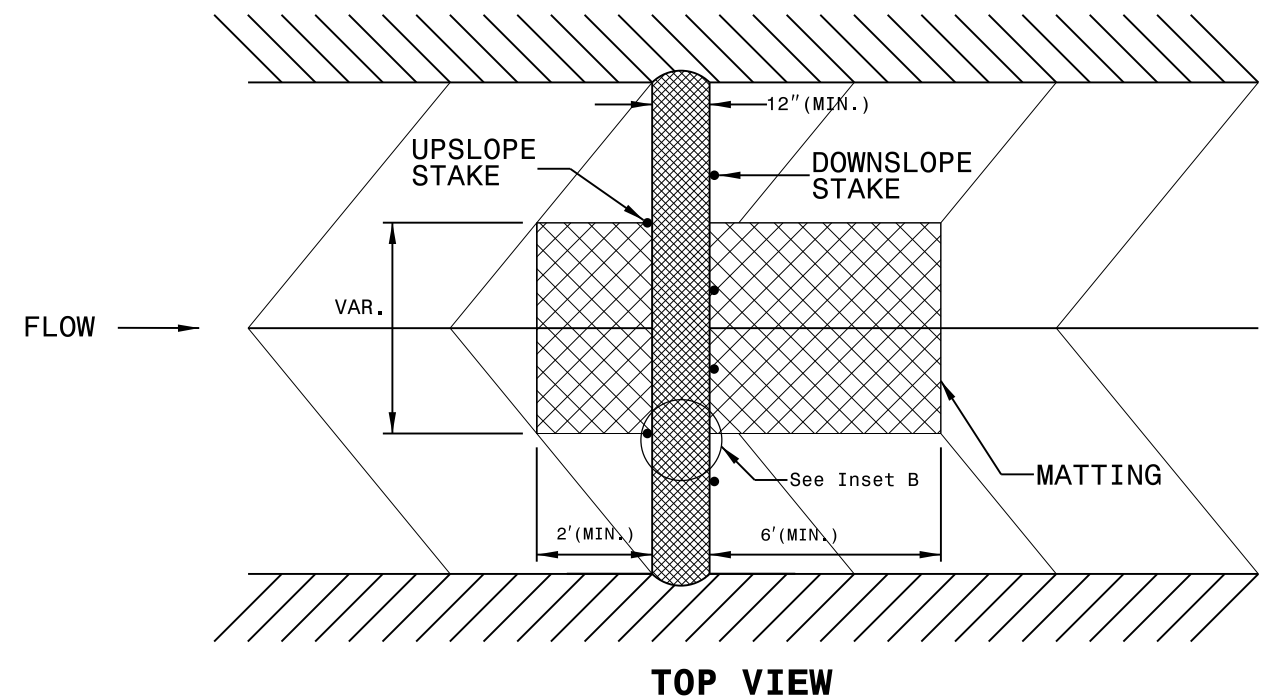
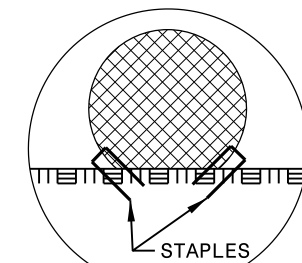
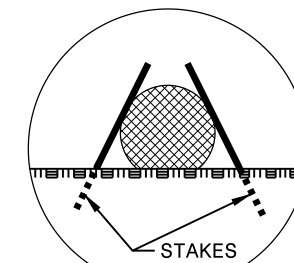
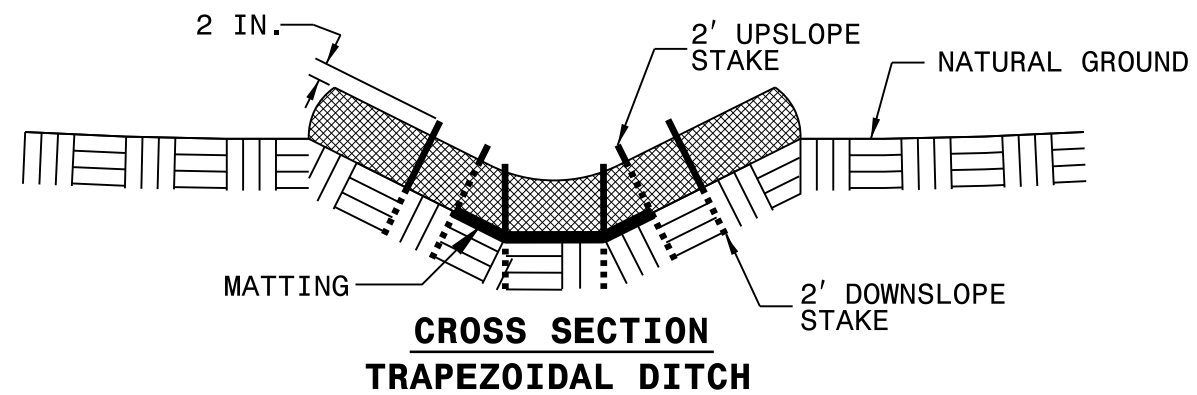
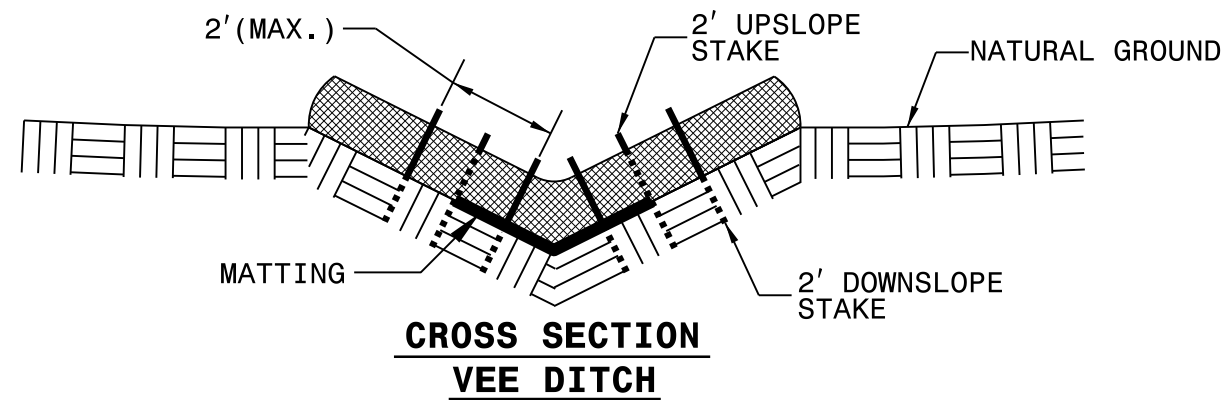
ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.

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

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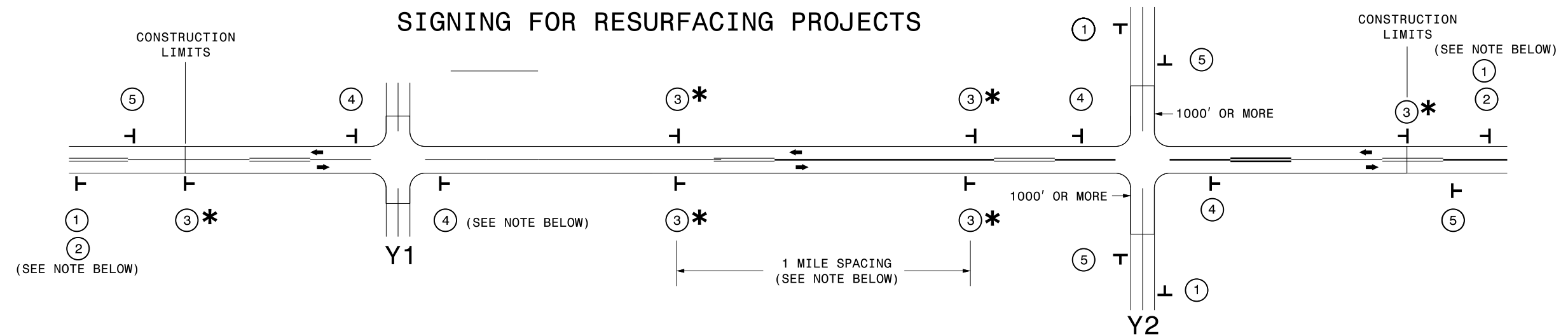
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## ***SOIL STABILIZATION TIMEFRAMES***

| <i>SITE DESCRIPTION</i>                      | <i>STABILIZATION TIME</i> | <i>TIMEFRAME EXCEPTIONS</i>  |
|--|---------------------------|--|
| PERIMETER DIKES, SWALES, DITCHES AND SLOPES  | 7 DAYS                    | NONE   |
| HIGH QUALITY WATER (HOW) 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 HOW ZONES.   |



## SIGNING FOR RESURFACING PROJECTS



| LEGEND |                           |
|--------|---------------------------|
| T      | STATIONARY SIGN           |
| ←      | DIRECTION OF TRAFFIC FLOW |

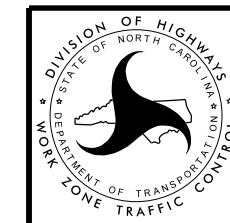
### MAINLINE (-L-) SIGNING

### -Y- LINE SIGNING

| SIGNING NOTES AND<br>PLACEMENT PER DIRECTION |  |  |
|--|--|--|
| ①<br>②                                       |  | <p style="text-align: center;">NO REQUIRED STATIONARY SIGNING FOR THE FOLLOWING -Y- LINE CONDITIONS:</p> <ol style="list-style-type: none"> <li>1) LESS THAN 1000' OF RESURFACING ALONG -Y- LINE</li> <li>2) SUBDIVISION ROADS</li> <li>3) DEAD END ROADS</li> </ol>   |
| ③ *  |  | <p style="text-align: center;">WHEN PAVING/CONSTRUCTION ACTIVITIES PROCEED ACROSS AN UNSIGNED -Y- LINE, ADVANCE WARNING PORTABLE SIGNS SHALL BE USED ALONG THE -Y- LINE AS SHOWN BELOW. REMOVE UPON COMPLETION OF WORK.</p>  |
| ④  |  | <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <br/> <small>W20-1<br/>48" X 48"</small> </div> <div style="text-align: center;"> <br/> <small>W20-7 A<br/>48" X 48"</small> </div> </div> <p style="text-align: center;">PLACED 500' IN ADVANCE OF FLAGGER. PLACED 250' IN ADVANCE OF FLAGGER.</p> |
| ⑤  |  |  |

### \* SIGNING FOR ASPHALT SURFACE TREATMENTS (ONLY)

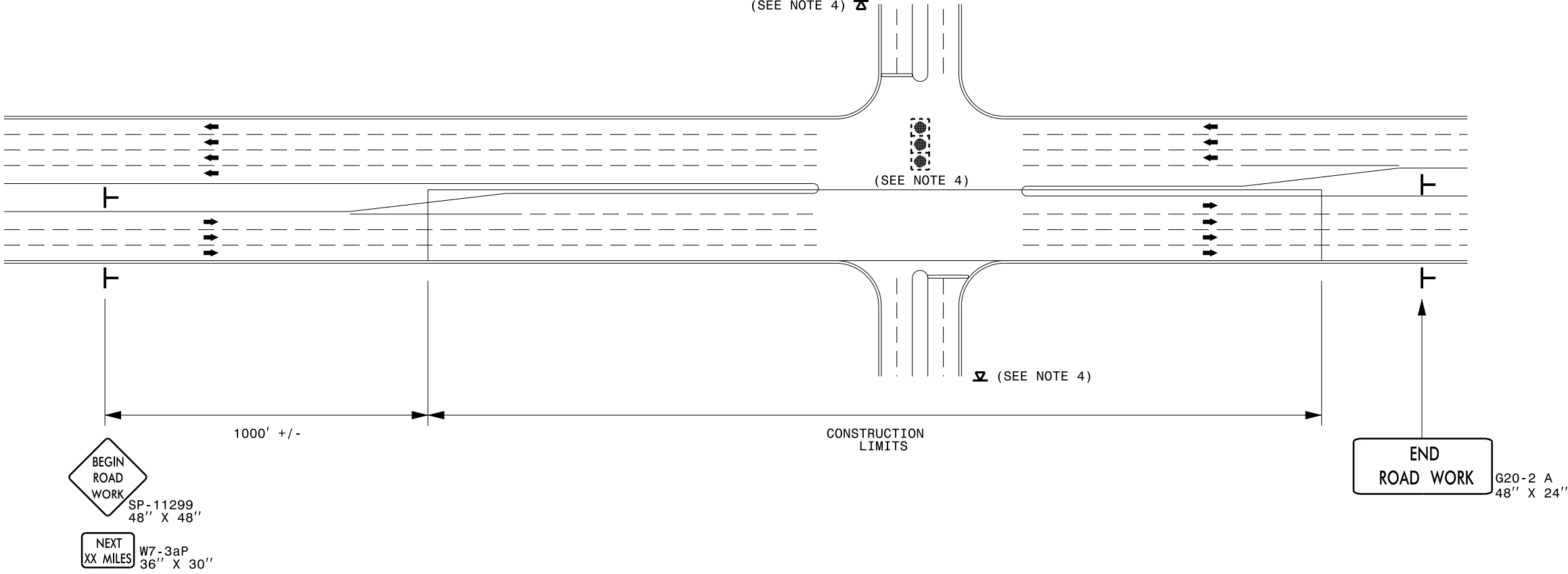
SUBSTITUTE LOW/SOFT SHOULDER SIGNS BY ALTERNATING THE FOLLOWING TWO SIGNS:  
STARTING WITH "UNMARKED PAVEMENT AHEAD" (SP 06026) FOLLOWED BY "LOOSE GRAVEL" (W8-7).



RESURFACING  
ADVANCE WARNING SIGNS  
FOR  
RURAL AND SUBURBAN  
2 LANE ROADWAYS

03-DEC-2020 13:37 S:\Shared\Division One Resurfacing & Retreatment Plans\Kevin 20-21Resurfacing\DA00489-20-21Martin Pr\marfes\Design Files\DA00489-Diddc-sh2A-1.dgn \$\$\$USERNAME\$\$\$

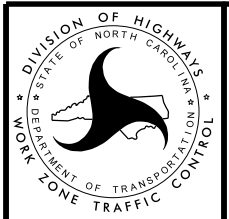
# URBAN / SUBURBAN WORKZONES



**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 |                           |
|--------|---------------------------|
| T      | STATIONARY SIGN           |
| ➔      | DIRECTION OF TRAFFIC FLOW |



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

03-DEC-2020 13:38  
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 \$\$\$USERNAME\$\$\$