

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.
N.C.	2021CPT.01.05.10281.1	1
STATE PROJ. NO.		DESCRIPTION
2021CPT.01.05.10281.1		PE, CONST.
49238.3.1		CONST

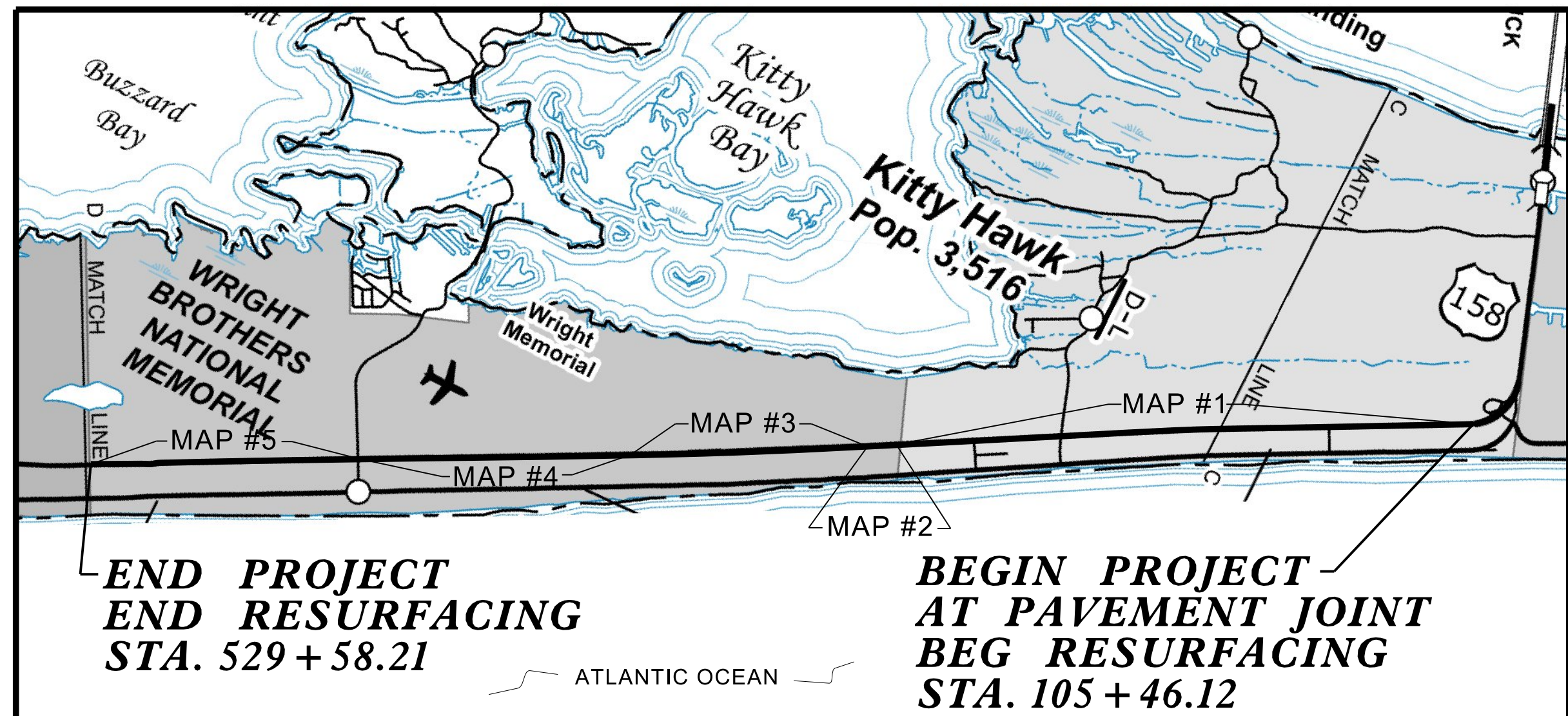
STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

**DARE COUNTY**



LOCATION: US\_158\_FROM\_PAVEMENT\_JOINT\_AT\_REST\_AREA\_IN\_KITTY\_HAWK\_TO\_EIGHTH\_ST.\_AT\_NAGS\_HEAD\_CITY\_LIMITS

TYPE OF WORK: DRAINAGE, CONCRETE CURB RAMPS MILLING & RESURFACING



CONTRACT: DA00496 WBS NO.: 2021CPT.01.05.10281.1, ETC

12-MAR-2021 09:35 S:\Shared\DDC\US\_158 Bypass\_US 64\2021Design Files\2021CPT.01.05.10281.1\_Diddc.tshl.dgn \$\$\$USERNAME\$\$\$

GRAPHIC SCALES  
  
NTS

PROJECT LENGTH
LENGTH ROADWAY MAP #1 = 3.354 MILES
LENGTH ROADWAY MAP #2 = 0.166 MILES
LENGTH ROADWAY MAP #3 = 1.369 MILES
LENGTH ROADWAY MAP #4 = 1.573 MILES
LENGTH ROADWAY MAP #5 = 1.571 MILES
LENGTH ROADWAY PROJECT = 8.033 MILES

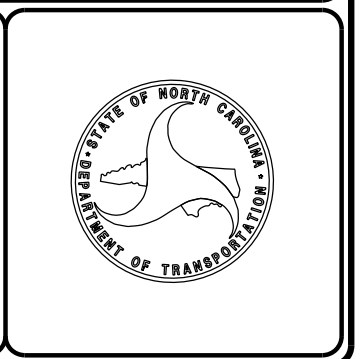
Prepared In the Office of:  
**DIVISION OF HIGHWAYS**  
113 Airport Dr., Edenton NC, 27944

2018 STANDARD SPECIFICATIONS

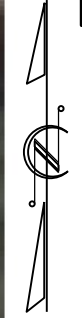
W. B. HOBBS, PE  
DIVISION PROJECT TEAM LEAD

CHRIS SLACHTA  
DIVISION PROPOSALS ENGINEER

S. P. FENWICK, PLS  
DIVISION DESIGN ENGINEER



US 158 AT  
EAST LANDING DRIVE  
(MAP 4)



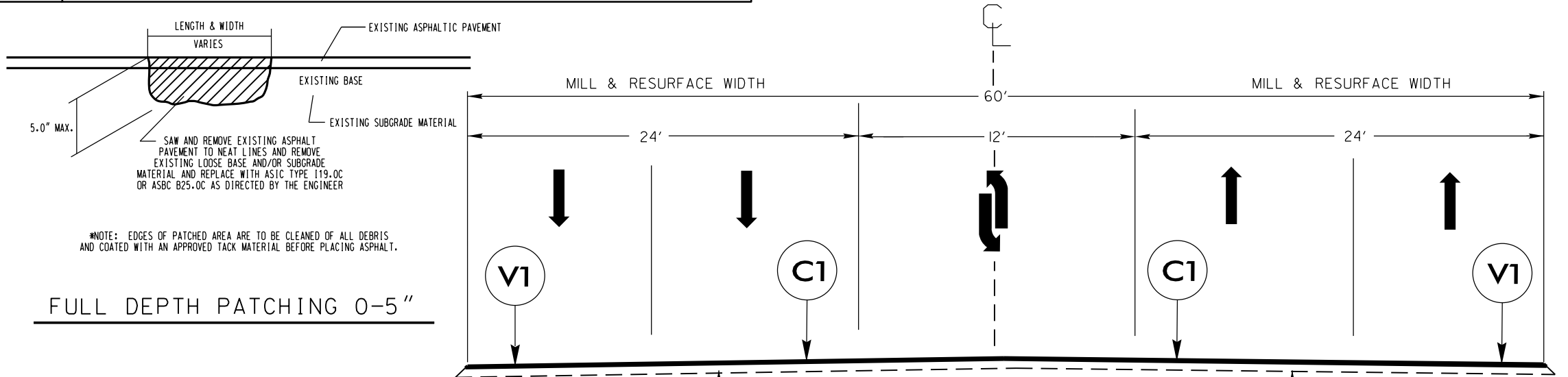
REVISIONS


# PAVEMENT SCHEDULE

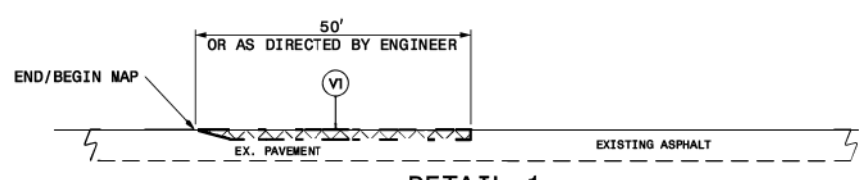
<b>C1</b>	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
<b>V1</b>	MILLING ASPHALT PAVEMENT. 1.5" IN DEPTH.
<b>U</b>	EXISTING PAVEMENT.

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

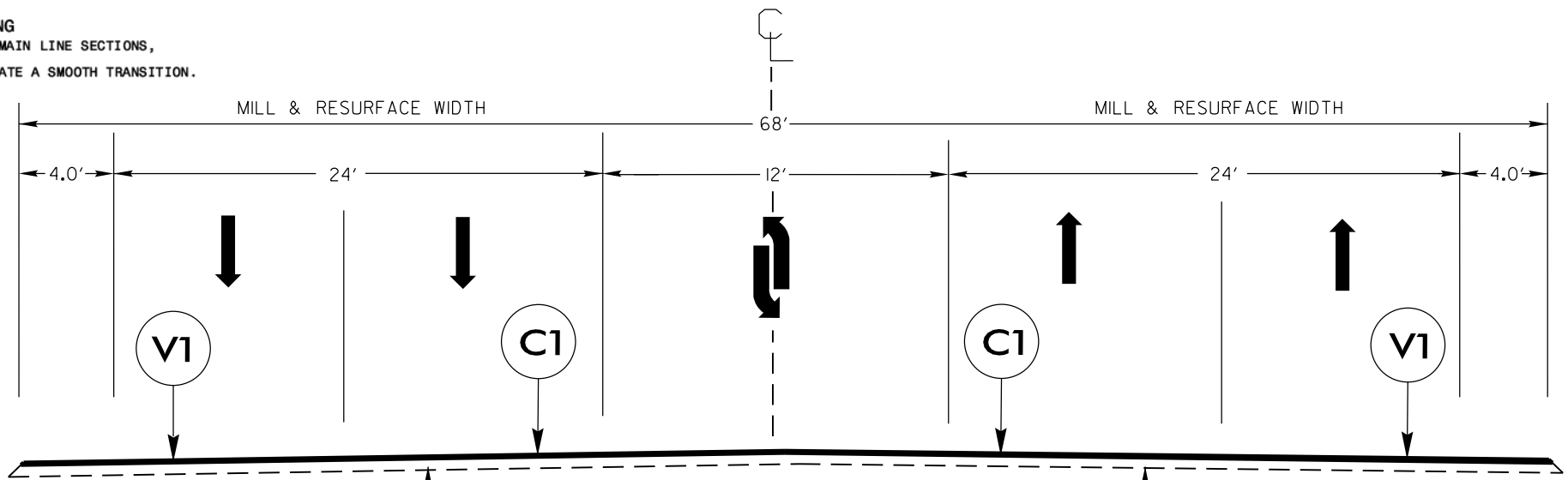


**TYPICAL SECTION NO. 2**  
USE WITH: MAP 2  
STA. 282+54.00 TO STA. 291+28.00



**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.



**TYPICAL SECTION NO. 1**  
USE WITH: MAPS 1 & 4  
STA. 105+46.12 TO STA. 282+54.00  
STA. 363+54.00 TO STA. 446+61.00

NOTE:

\* ON MAP 1 AT SR 1206 (KITTY HAWK RD.), MILL AND RESURFACE TO PAVEMENT JOINT APPROXIMATELY 295' WEST OF CL INTERSECT US 158, OR AS DIRECTED BY ENGINEER.

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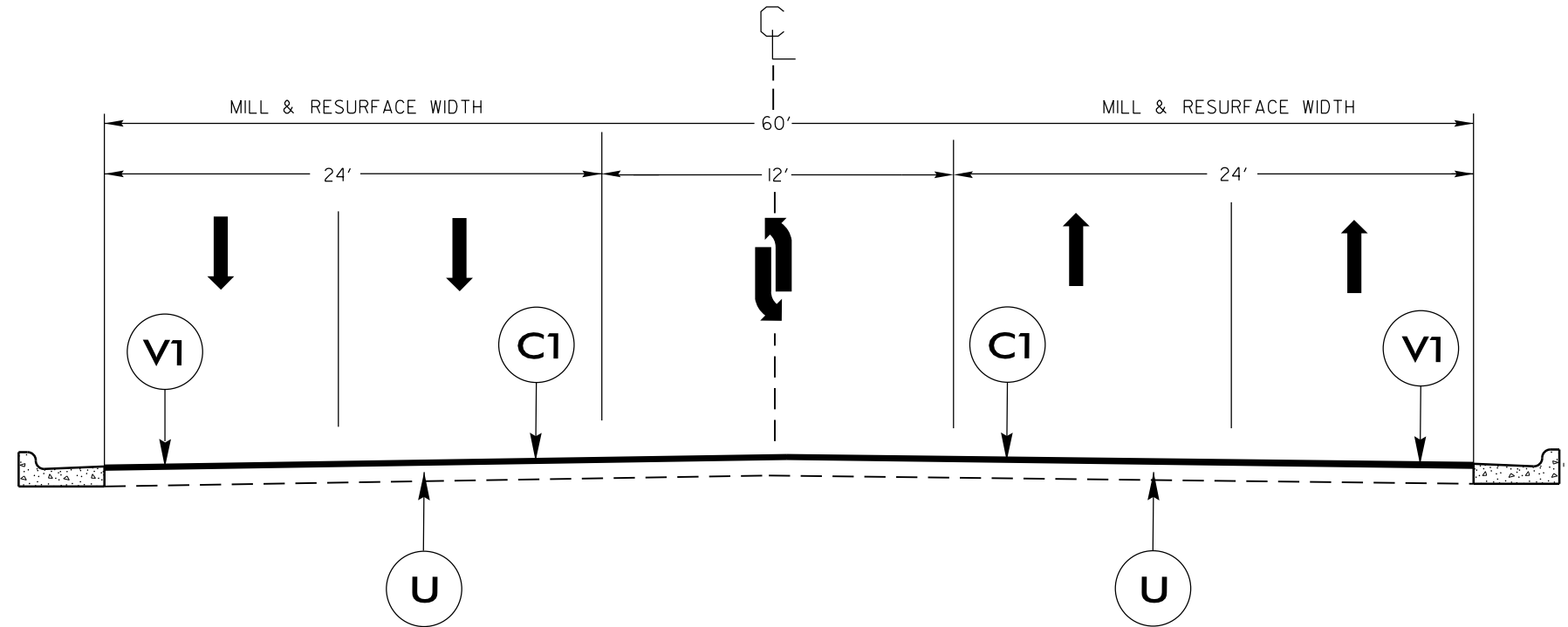
# PAVEMENT SCHEDULE

PROJECT REFERENCE NO.	SHEET NO.
2021CPT.01.05.10281.1	3

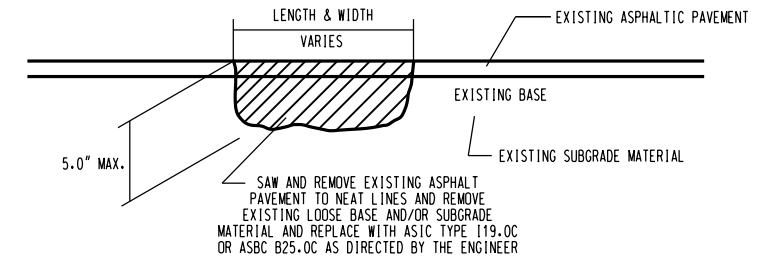
C1	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
V1	MILLING ASPHALT PAVEMENT. 1.5" IN DEPTH.
U	EXISTING PAVEMENT.

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

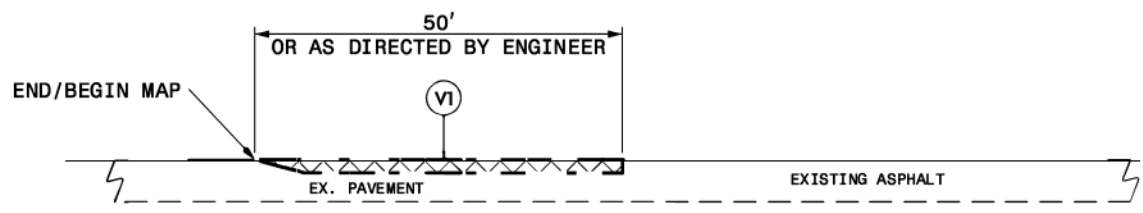


**TYPICAL SECTION NO. 3**  
 USE WITH: MAPS 3 & 5  
 STA. 291+28.00 TO STA. 363+54.00  
 STA. 446+61.00 TO STA. 529+58.21



\*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"**



**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.

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4/04/06

COMPUTED BY: DATE:
CHECKED BY: DATE:

PROJECT REFERENCE NO. SHEET NO.
2021CPT.01.05.10281J 5

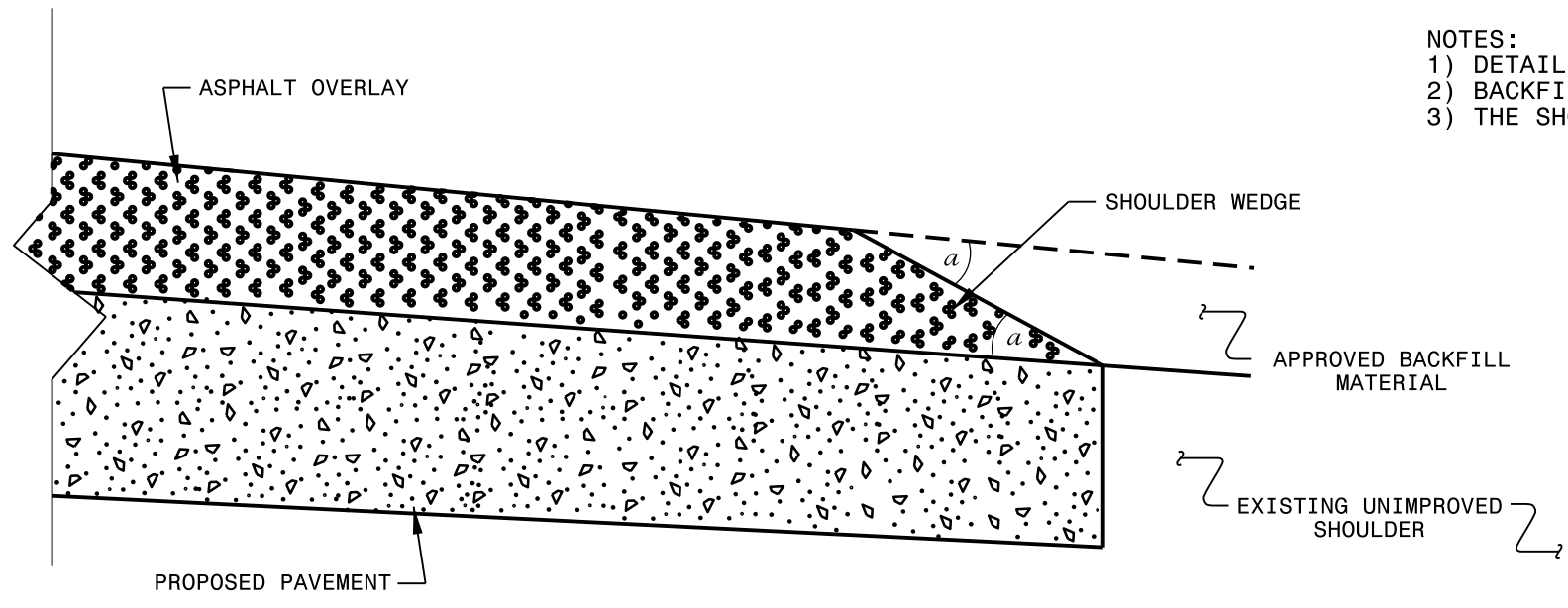
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
SUB-REGIONAL & REGIONAL

LIST OF PIPES, ENDWALLS, ETC. (FOR PIPES 48" & UNDER)

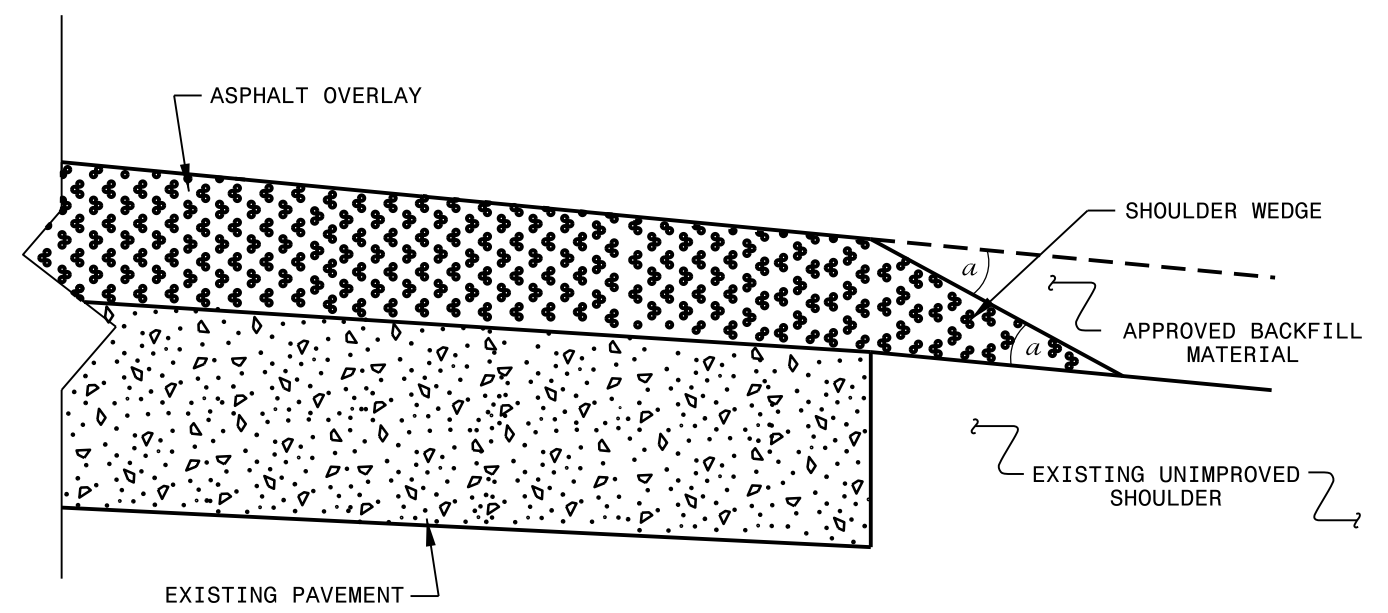
Main data table with columns for Station, Location, Structure No., Invert Elevation, Slope, Pipe Type (DRAINAGE PIPE, CAA PIPE, R.C. PIPE), Quantities, Frame/Grates, and Remarks. Includes a list of abbreviations like C.B., N.D.I., D.I., etc.

16-MAR-2021 05:11:51
up:\is\2021\05\Design Files\2021CPT.01.05.10281\1.D\ddc\_sh5.dgn

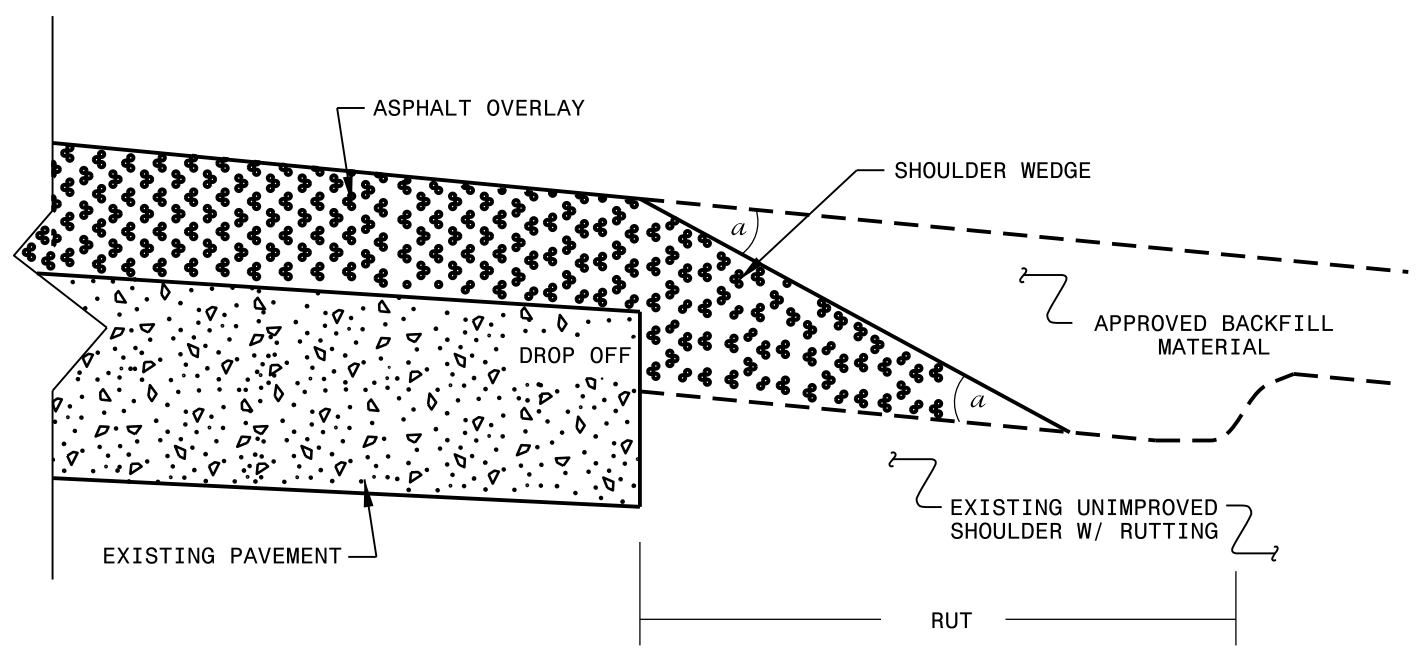
- NOTES:  
 1) DETAIL DOES NOT APPLY TO OGAFB AND ULTRA-THIN BONDED WEARING COURSE.  
 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.  
 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS AND SIDE STREETS.



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



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

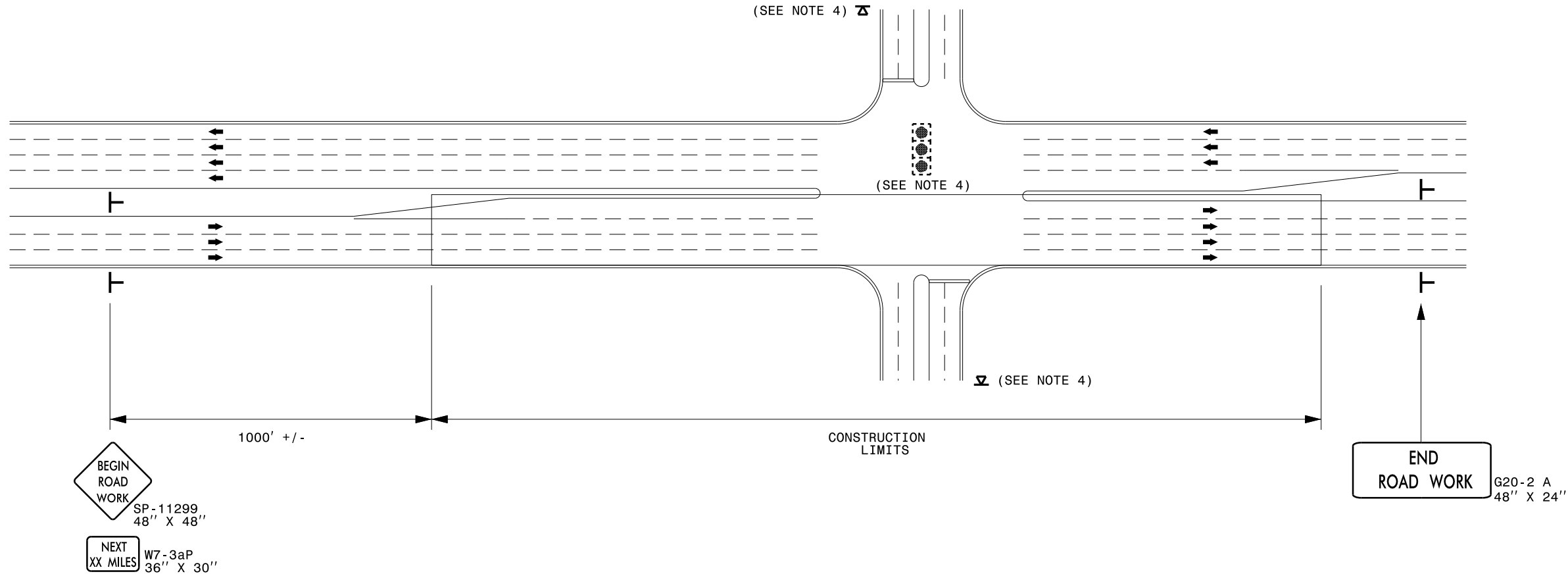


**SHOULDER WEDGE DETAIL**  
 (Resurfacing Adjacent to  
 Rutted Shoulder)

- SHOULDER WEDGE ANGLE = 30°

<b>CONTRACT STANDARDS AND DEVELOPMENT UNIT</b>	
Office 919-707-6950	FAX 919-250-4119
<b>SHOULDER WEDGE DETAILS</b>	
ORIGINAL BY: T.SPELL	DATE: 7-19-11
MODIFIED BY:	DATE: 10/16/12
CHECKED BY:	DATE:
FILE SPEC.: szusr/details/stand/shoulderwedgedetail.dgn	

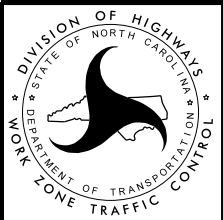
# URBAN / SUBURBAN WORKZONES



**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.

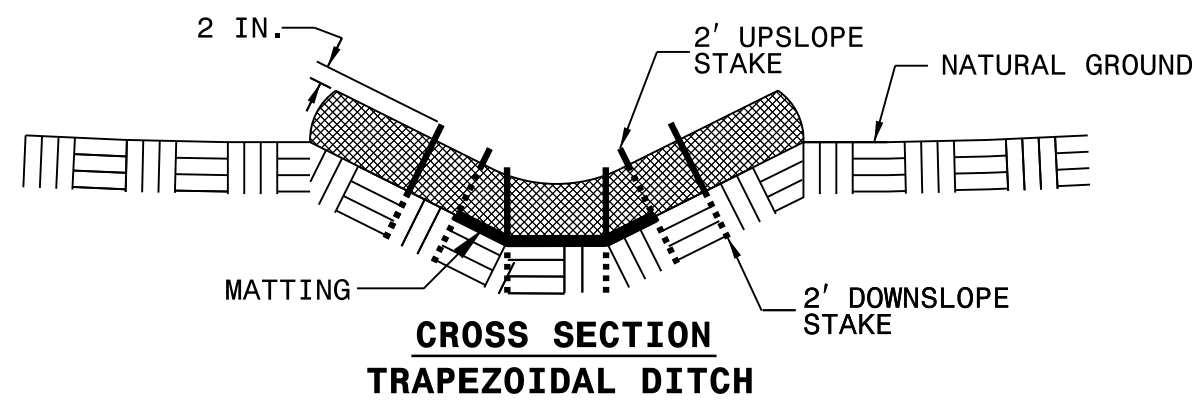
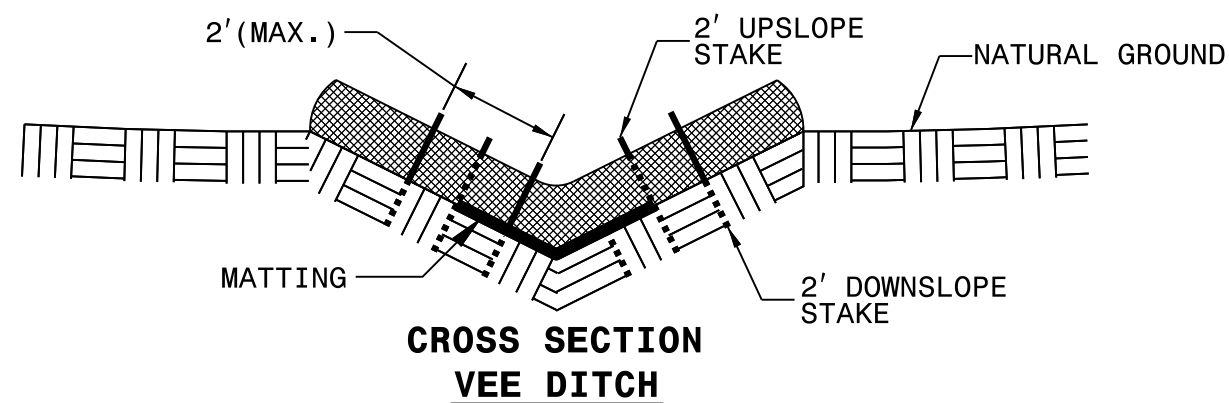
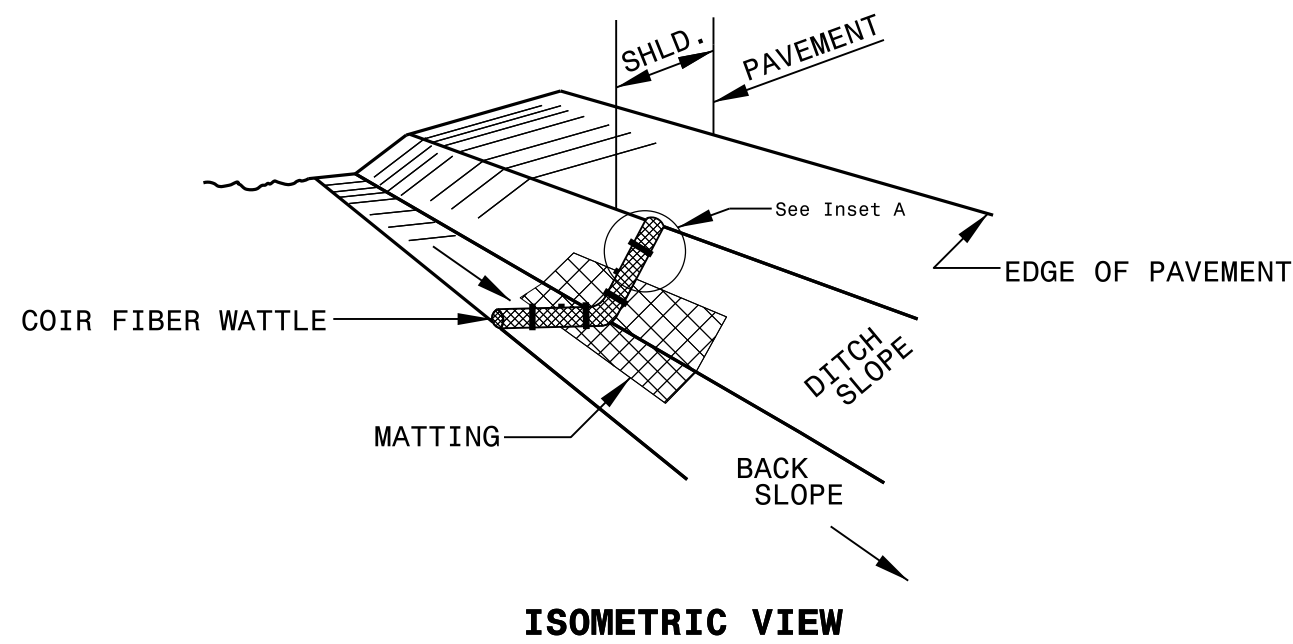
LEGEND	
T	STATIONARY SIGN
➔	DIRECTION OF TRAFFIC FLOW

	<p><b>RESURFACING ADVANCE WARNING SIGNS FOR URBAN / SUBURBAN FACILITIES</b></p>
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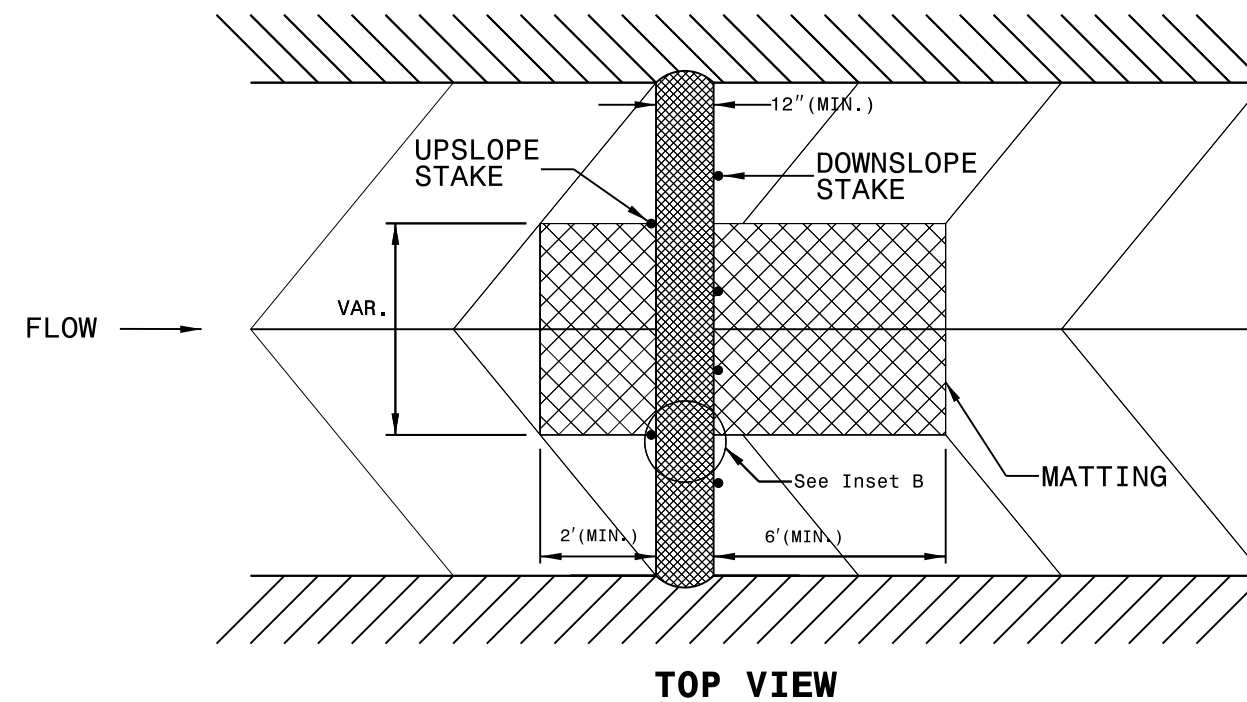
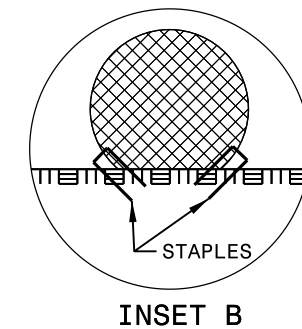
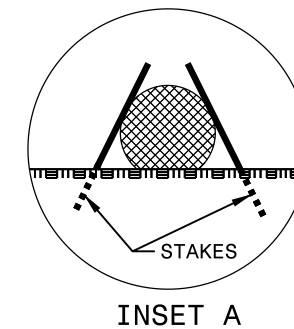
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 \$\$\$USERNAME\$\$\$



# 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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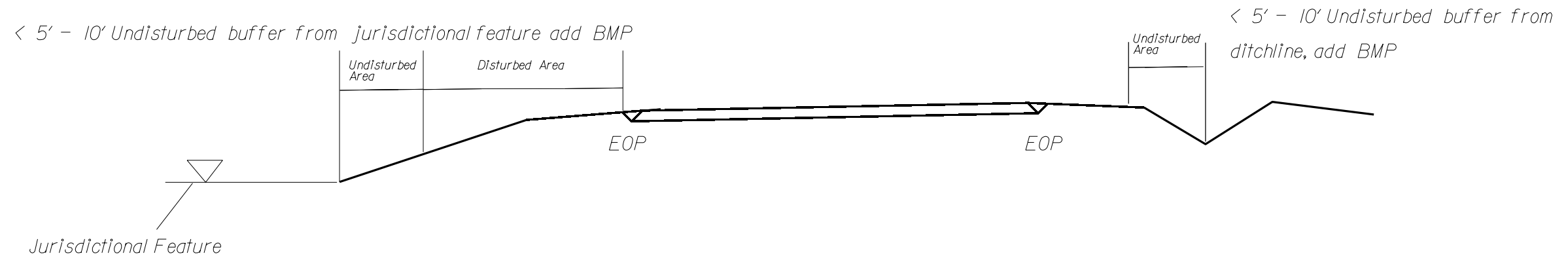
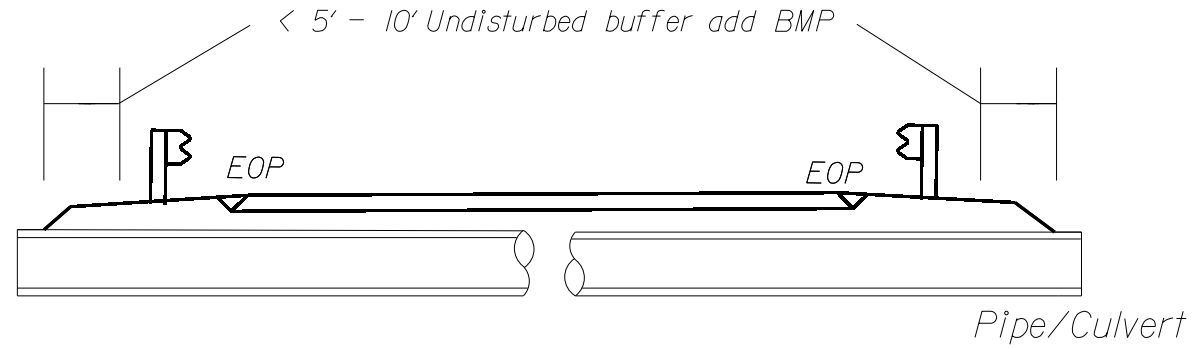
## ***SOIL STABILIZATION TIMEFRAMES***

<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.

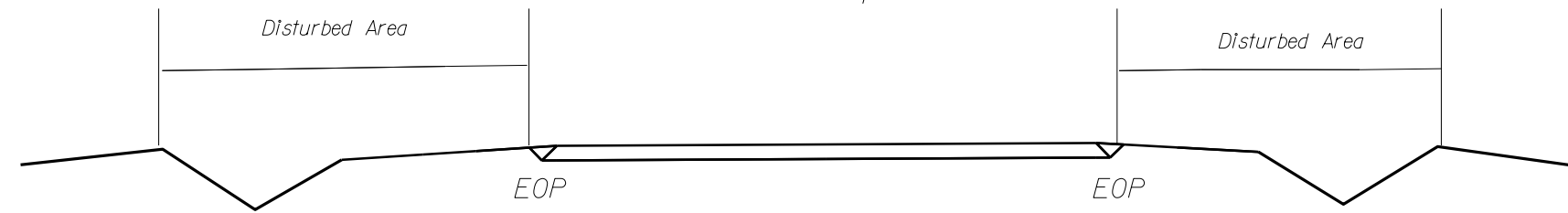
NOTES: Less than 5' - 10' undisturbed buffer from ROW, ditchline, water feature, or drainage inlet, add BMP.

BMP Options: Wattle or Silt Fence

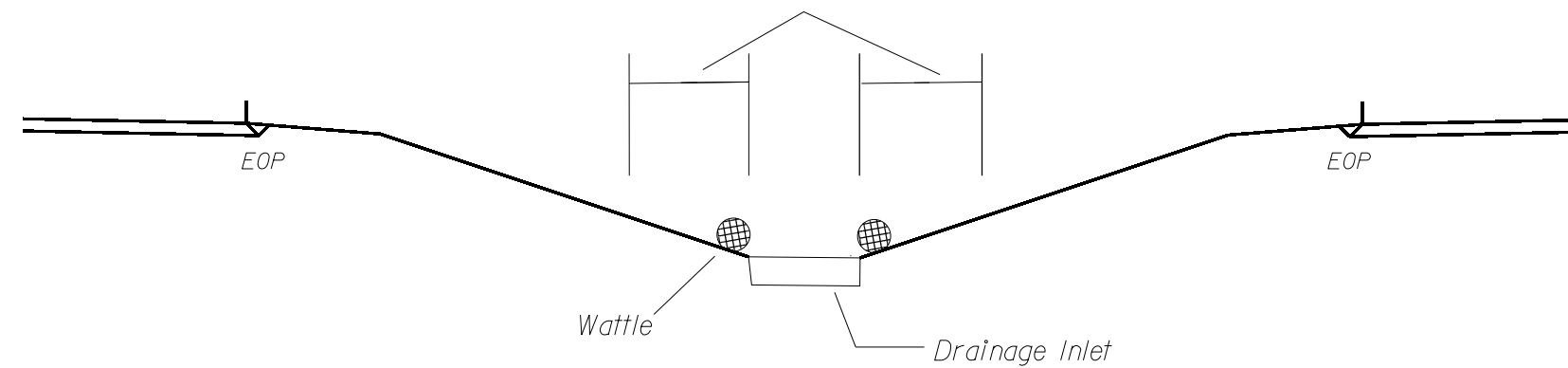
# EROSION CONTROL DETAIL



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



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



NOT TO SCALE

# CURB RAMPS

US 158  
Map 2

SHEET 10

**Legend**

- Remove & Replace
- Retrofit

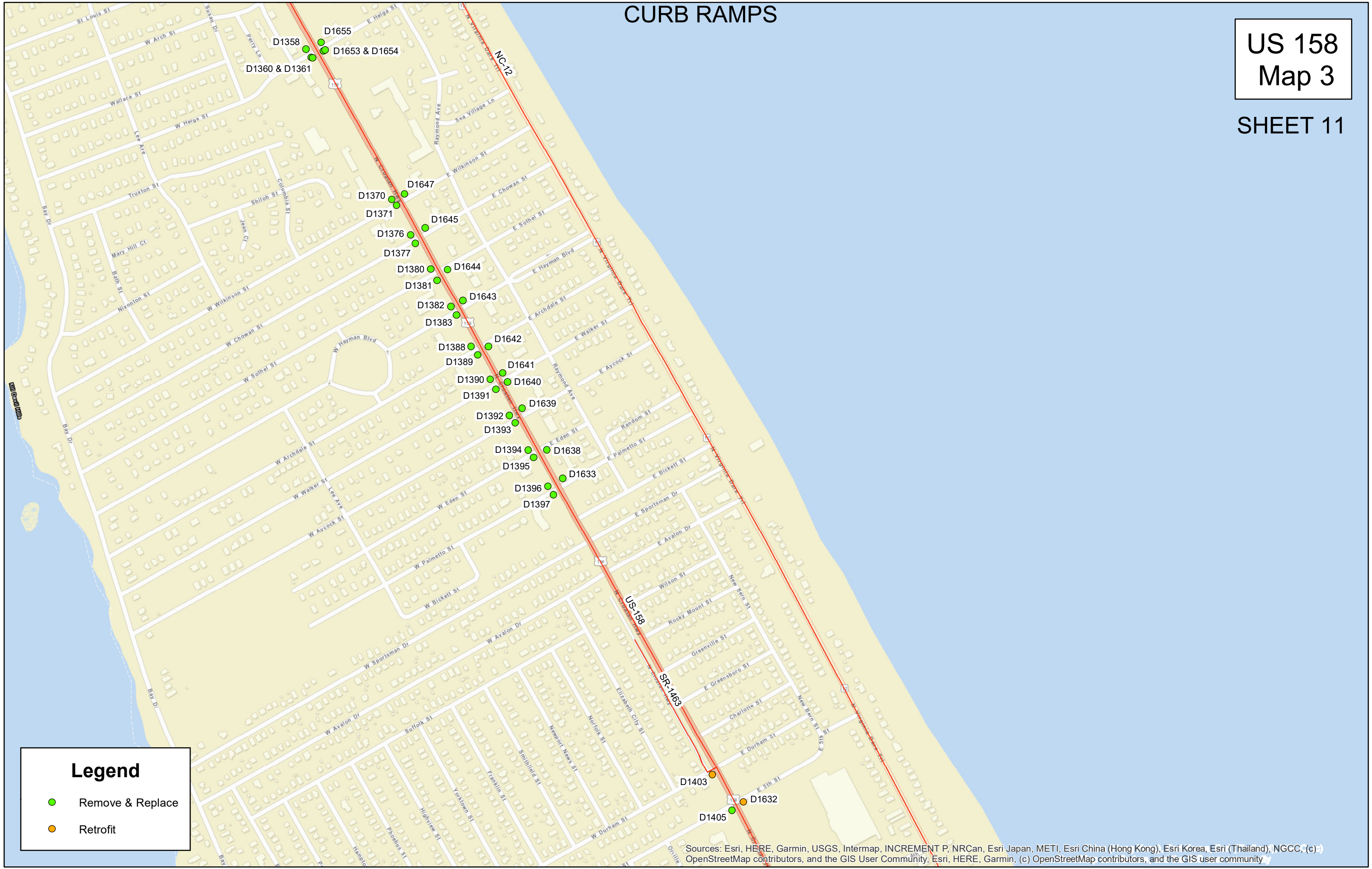


Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community, Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community

# CURB RAMPS

US 158  
Map 3

SHEET 11



## Legend

- Remove & Replace
- Retrofit

# CURB RAMPS

US 158  
Map 4

SHEET 12



**Legend**

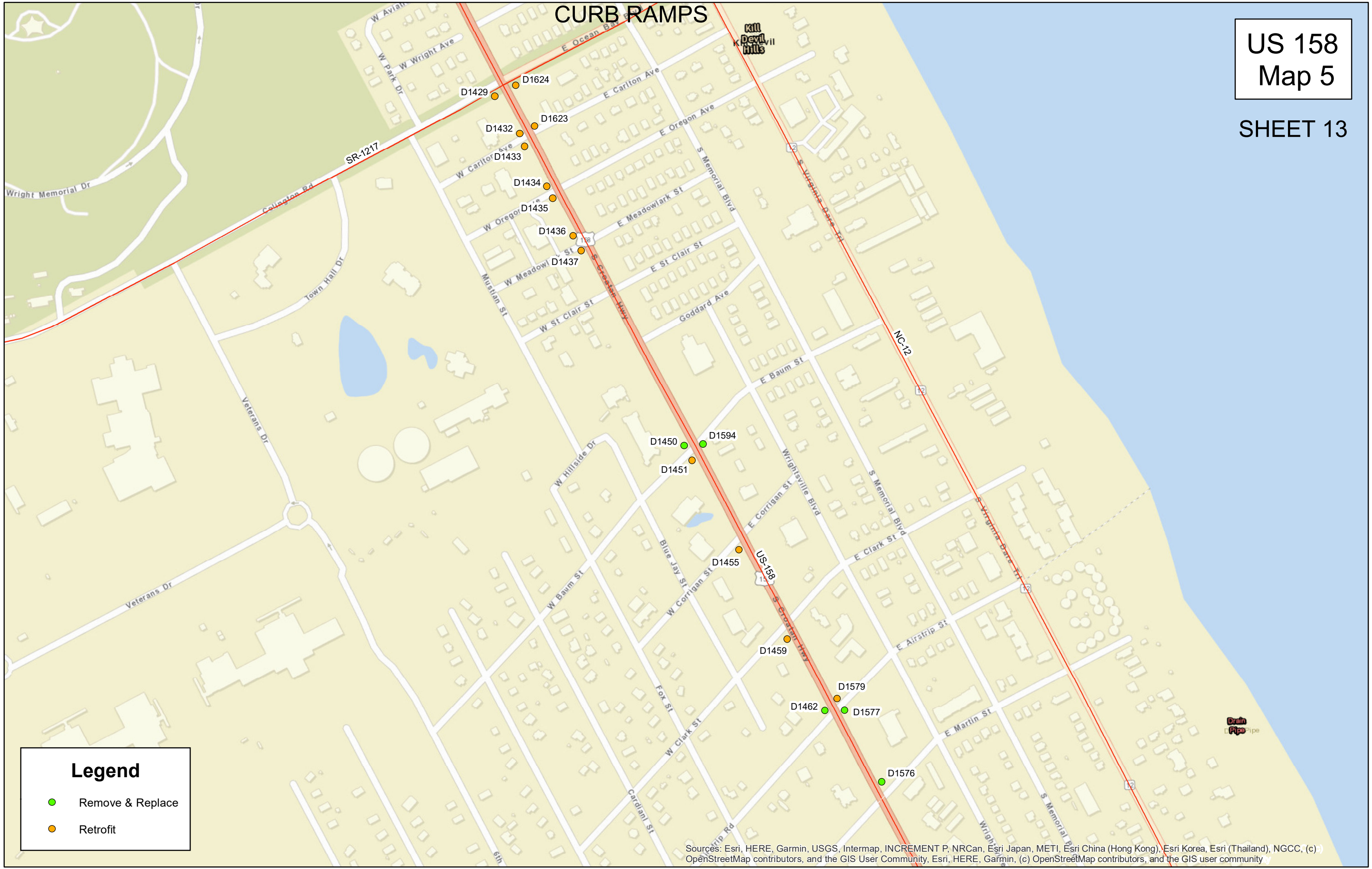
- Remove & Replace
- Retrofit

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community, Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community

# CURB RAMPS

US 158  
Map 5

SHEET 13

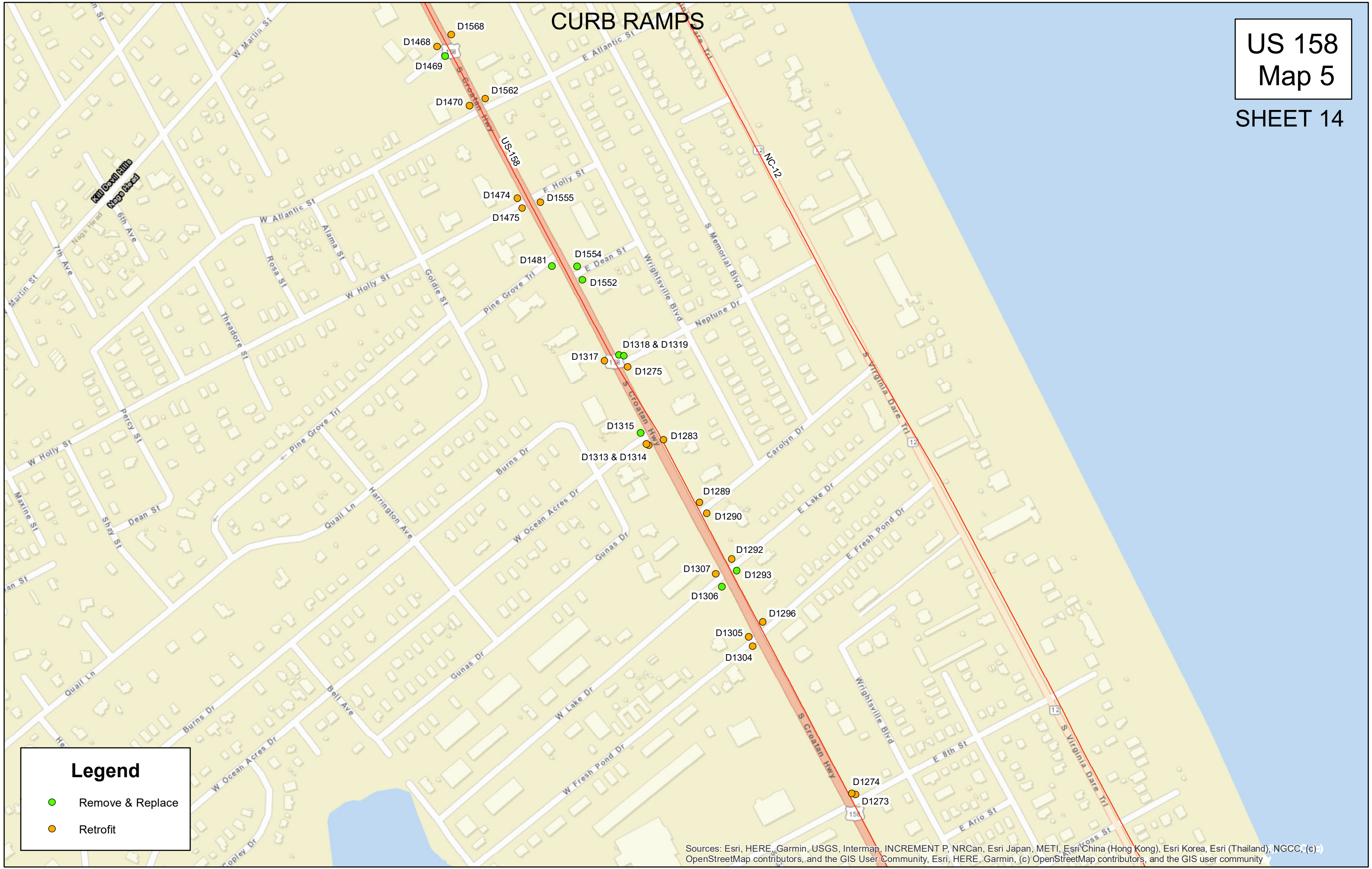


**Legend**

- Remove & Replace
- Retrofit

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community, Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community

# CURB RAMPS



**Legend**

- Remove & Replace
- Retrofit

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community, Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community



Major Route	Minor Route	Number of Retrofit Ramps	Retrofit Ramp ID	Number of Remove & Replace	Remove & Replace ID	Map #
US-158	Arch St			3	D1356, D1357, D1656,	2
US-158	Helga St			6	D1358, D1360, D1361, D1653, D1654, D1655	3
US-158	Wilkinson St			3	D1370, D1371, D1647	3
US-158	Chowan St			3	D1376, D1377, D1645	3
US-158	Sothel St			3	D1380, D1381, D1644	3
US-158	Hayman Blvd			3	D1382, D1383, D1643	3
US-158	Archdale St			3	D1388, D1389, D1642	3
US-158	Walker St			4	D1390, D1391, D1640, D1641	3
US-158	Aycock St			3	D1392, D1393, D1639	3
US-158	Eden St			3	D1394, D1395, D1638	3
US-158	Palmetto St			3	D1396, D1397, D1633	3
US-158	Durham St	1	D1403			3
US-158	Fifth St	1	D1632	1	D1405	3
US-158	Third St	1	D1416	1	D1625	4
US-158	First St			1	D1421	4
US-158	SR-1217	2	D1429, D1624			5
US-158	Carlton Ave	3	D1432, D1433, D1623			5
US-158	Oregon Ave	2	D1434, D1435			5
US-158	Meadowlark St	2	D1436, D1437			5
US-158	Baum St	1	D1451	2	D1450, D1594	5
US-158	Corrigan St	1	D1455			5
US-158	Clark St	1	D1459			5
US-158	Airstrip Rd	1	D1579	2	D1462, D1577	5
US-158	Martin St			1	D1576	5
US-158	Boundary St	2	D1468, D1568	1	D1469	5
US-158	Atlantic St	2	D1470, D1562			5
US-158	Holly St	3	D1474, D1475, D1555			5

Major Route	Minor Route	Number of Retrofit Ramps	Retrofit Ramp ID	Number of Remove & Replace	Remove & Replace ID	Map #
US-158	Pine Grove Trl			1	D1481	5
US-158	Dean St			2	D1552, D1554	5
US-158	Neptune Dr	2	D1275, D1317	2	D1318, D1319	5
US-158	Ocean Acres Dr	3	D1283, D1313, D1314	1	D1315	5
US-158	Carolyn Dr	2	D1289, D1290			5
US-158	Lake Dr	2	D1292, D1307	2	D1293, D1306	5
US-158	Fresh Pond Dr	3	D1296, D1304, D1305			5
US-158	Eighth St	2	D1273, D1274			5