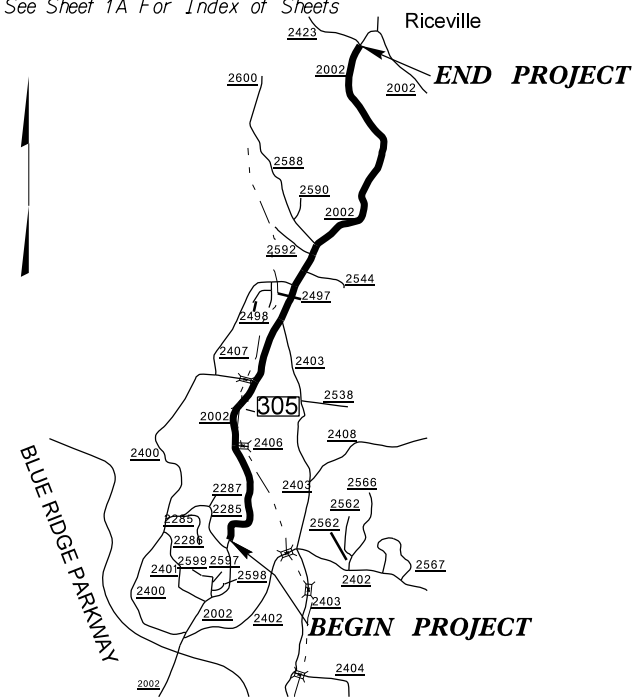


09/105/999

See Sheet 1A For Index of Sheets



VICINITY MAP

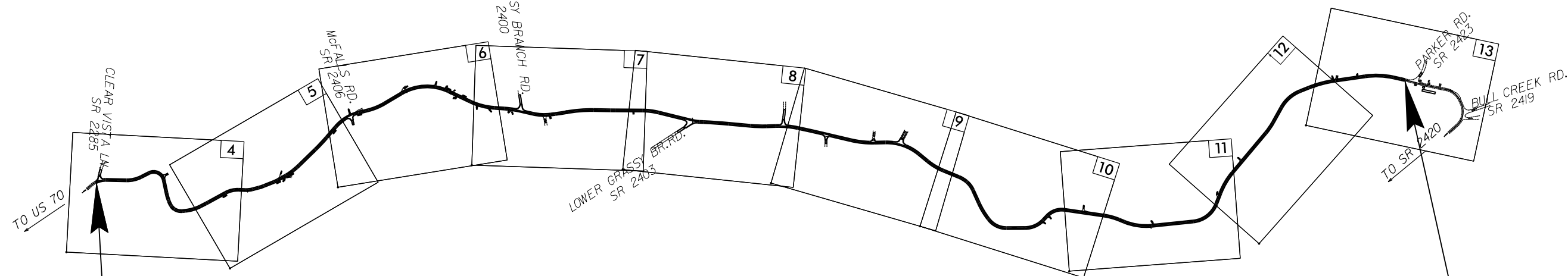
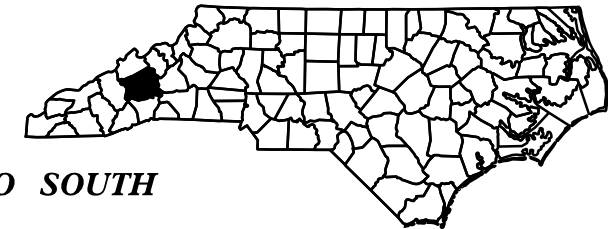
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

BUNCOMBE COUNTY

LOCATION: SR 2002 FROM SOUTH OF SR 2285 CLEAR VISTA LN. TO SOUTH OF SR 2423 PARKER RD

TYPE OF WORK: WIDENING, RESURFACING, DRAINAGE, GUARDRAIL AND PAVEMENT MARKINGS

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	W-5213G	1	22



-L- STA 10+00 BEGIN TIP PROJECT W-5213G

-L- STA 141+00 END TIP PROJECT W-5213G

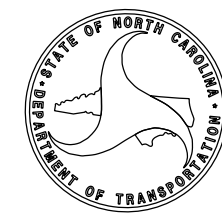
GRAPHIC SCALES



PLANS

PROJECT LENGTH

LENGTH OF ROAD TIP PROJECT W-5213G = 2.48 MILES



TIP PROJECT: W-5213G

CONTRACT: DM00226

31-OCT-2018 11:52
S:\DDC\Projects\Buncombe\W-5213G\W5213G-DDC-f.sh.dgn
\$\$\$\$\$SERNAME\$\$\$\$\$

8/17/99

INDEX OF SHEETS

SHEET NUMBER	SHEET
1	TITLE SHEET
1A	INDEX OF SHEETS, GENERAL NOTES, AND STANDARD DRAWINGS
2A	PAVEMENT SCHEDULE AND TYPICAL SECTIONS
2B THRU 2D	DETAIL SHEETS
3	SUMMARY SHEETS
4 THRU 18	PLAN SHEETS

2018 ROADWAY ENGLISH STANDARD DRAWINGS

EFF. 01-16-2018
REV.

The following Roadway Standards as appear in "Roadway Standard Drawings" Highway Design Branch - N. C. Department of Transportation - Raleigh, N. C., Dated January, 2018 are applicable to this project and by reference hereby are considered a part of these plans:

STD.NO.	TITLE
DIVISION 3 - PIPE CULVERTS	
300.01	Method of Pipe Installation
310.10	Driveway Pipe Construction
DIVISION 8 - INCIDENTALS	
840.14	Concrete Drop Inlet - 12" thru 30" Pipe
840.16	Drop Inlet Frame and Grates - for use with Std. Dwg 840.14 and 840.15
840.46	Traffic Bearing Precast Drainage Structure
862.01	Guardrail Placement
862.02	Guardrail Installation

GENERAL NOTES: 2018 SPECIFICATIONS
EFFECTIVE: 01-16-2018
REVISED:

GRADING AND SURFACING OR RESURFACING AND WIDENING:

THE GRADE LINES SHOWN DENOTE THE FINISHED ELEVATION OF THE PROPOSED SURFACING AT GRADE POINTS SHOWN ON THE TYPICAL SECTIONS. WHERE NO GRADE LINES ARE SHOWN, THE PROFILES SHOWN DENOTE THE TOP ELEVATION OF THE EXISTING PAVEMENT ALONG THE CENTER LINE OF SURVEY ON WHICH THE PROPOSED RESURFACING WILL BE PLACED. GRADE LINES MAY BE ADJUSTED BY THE ENGINEER IN ORDER TO SECURE A PROPER TIE-IN.

GUARDRAIL:

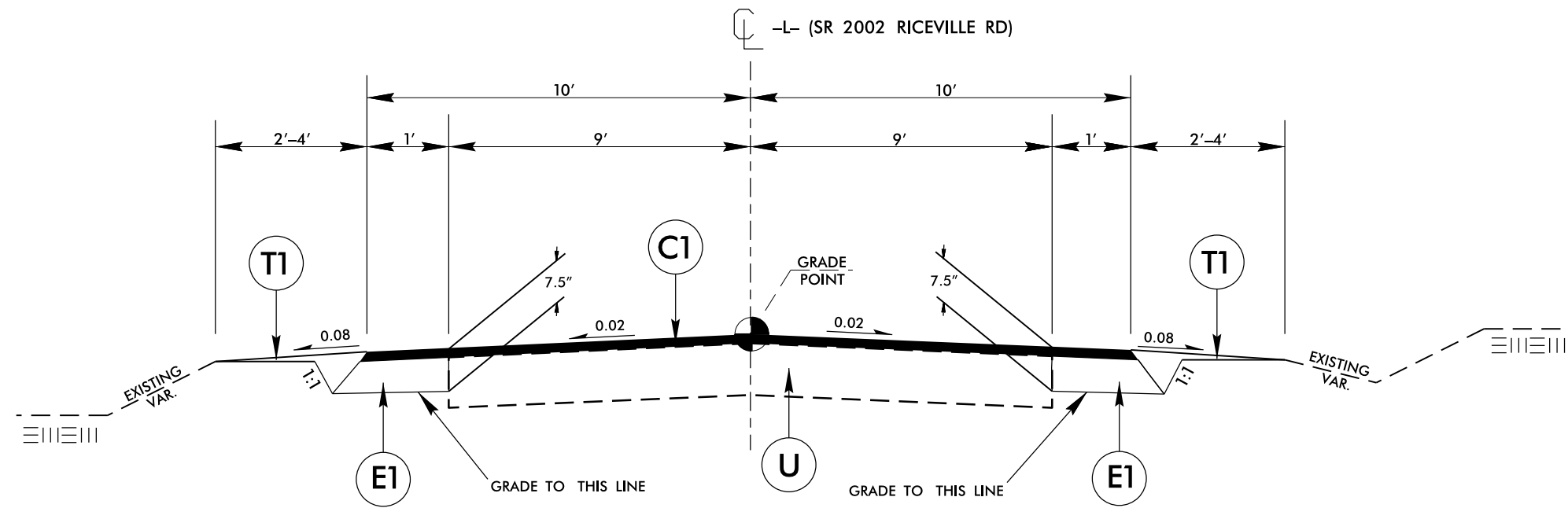
THE GUARDRAIL LOCATIONS SHOWN ON THE PLANS MAY BE ADJUSTED DURING CONSTRUCTION AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHOULD CONSULT WITH THE ENGINEER PRIOR TO ORDERING GUARDRAIL MATERIAL.

PROJECT NOTES:

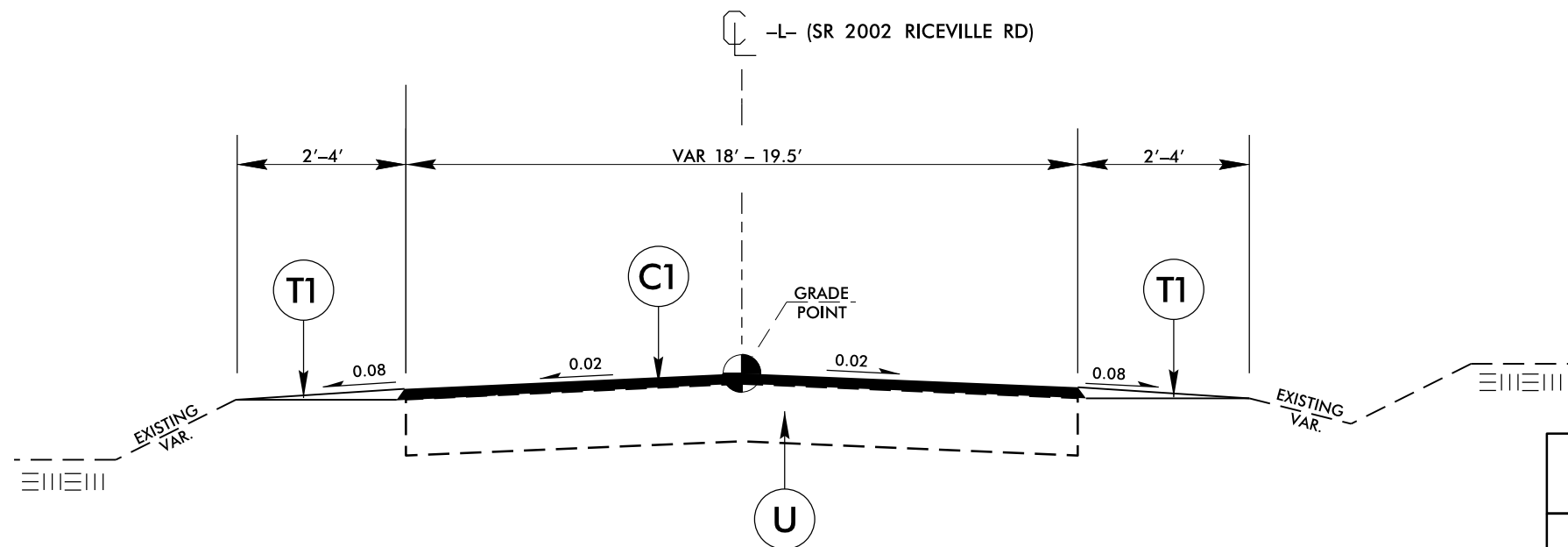
ALL DATA PROVIDED IS FOR ESTIMATING PURPOSES ONLY. NO SURVEY DATA IS AVAILABLE FOR THIS PROJECT. ALL MEASUREMENTS ARE NON-SURVEY GRADE FIELD MEASUREMENTS.

NO SUBSURFACE PLANS ARE AVAILABLE ON THIS PROJECT.THE CONTRACTOR SHOULD MAKE THEIR OWN INVESTIGATION AS TO THE SUBSURFACE CONDITIONS.

PIPE LOCATIONS SHOWN ON PLANS ARE FOR REPRESENTATION ONLY. SEE PIPE SUMMARY FOR STATION LOCATIONS AND LENGTHS.



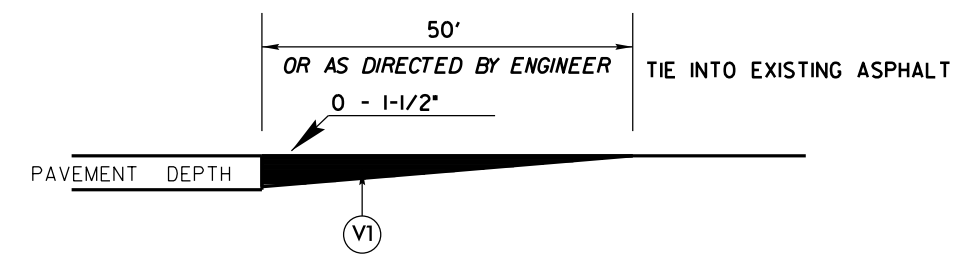
TYPICAL SECTION NO. 1



TYPICAL SECTION NO. 2

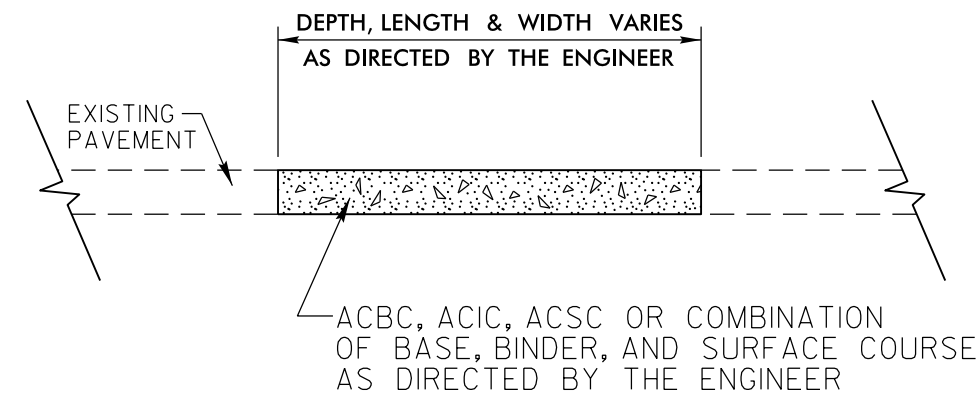
PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
E1	PROP. APPROX. 6" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C AT AN AVERAGE RATE OF 342 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.
T1	SHOULDER RECONSTRUCTION.
U	EXISTING PAVEMENT.

PAVEMENT SCHEDULE	
C1	1½" TYPE S9.5C,
V1	INCIDENTAL MILLING
V2	MILLING ASPHALT PAVEMENT, 1-1/2" DEPTH

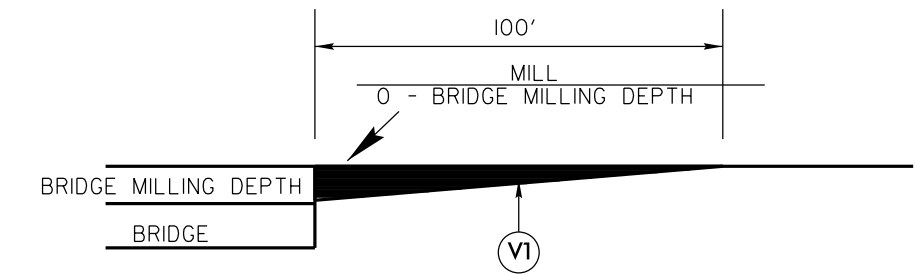


DETAIL TO TIE INTO EXIST PAVEMENT

THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE FACT THAT HE WILL BE REQUIRED TO MILL THE EXISTING ASPHALT PAVEMENT TO ENSURE A PROPER TIE-IN WITH THE EXISTING SURFACE AT THE BEGINNING, END AND Y LINES OF EACH MAP TO BE RESURFACED WITH ASPHALT CONC SURFACE COURSE, TYPE S9.5C THIS WILL BE PAID FOR AS INCIDENTAL MILLING.



DETAIL FOR PATCHING EXISTING PAVEMENT

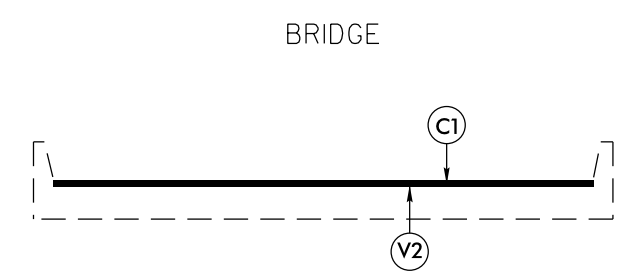
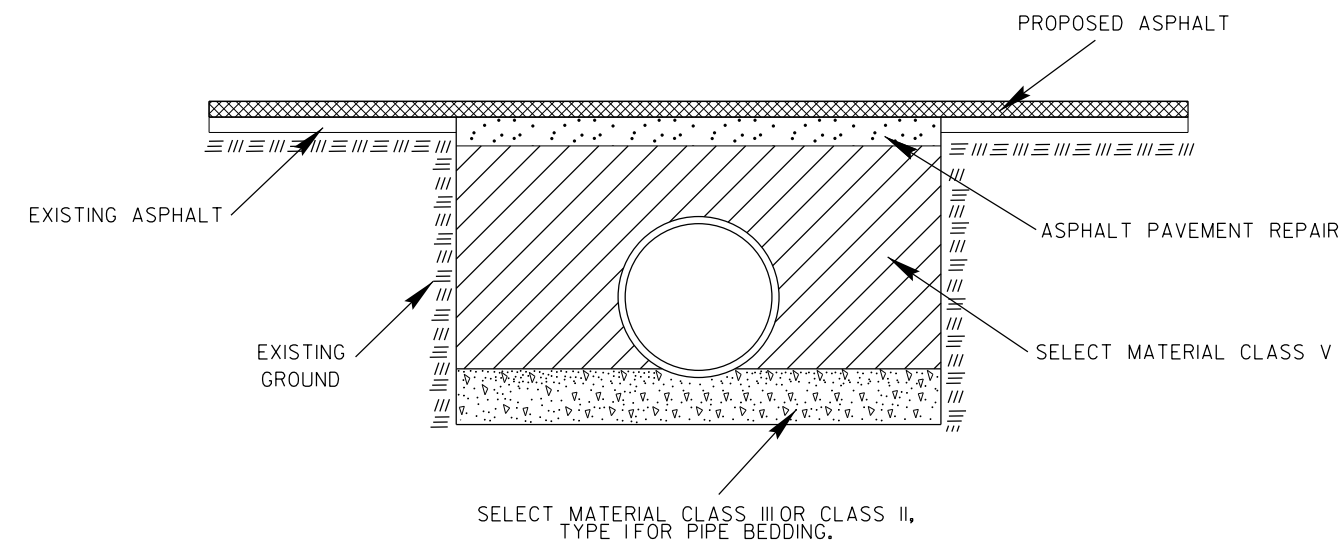


MILLING DETAIL AT BRIDGE APPROACHES

WHERE BRIDGES WILL BE MILLED THEN RESURFACED. THIS WILL BE PAID FOR AS 1-1/2" MILLING. USE AT BRIDGE NUMBER: 305

PIPE BACKFILL DETAIL

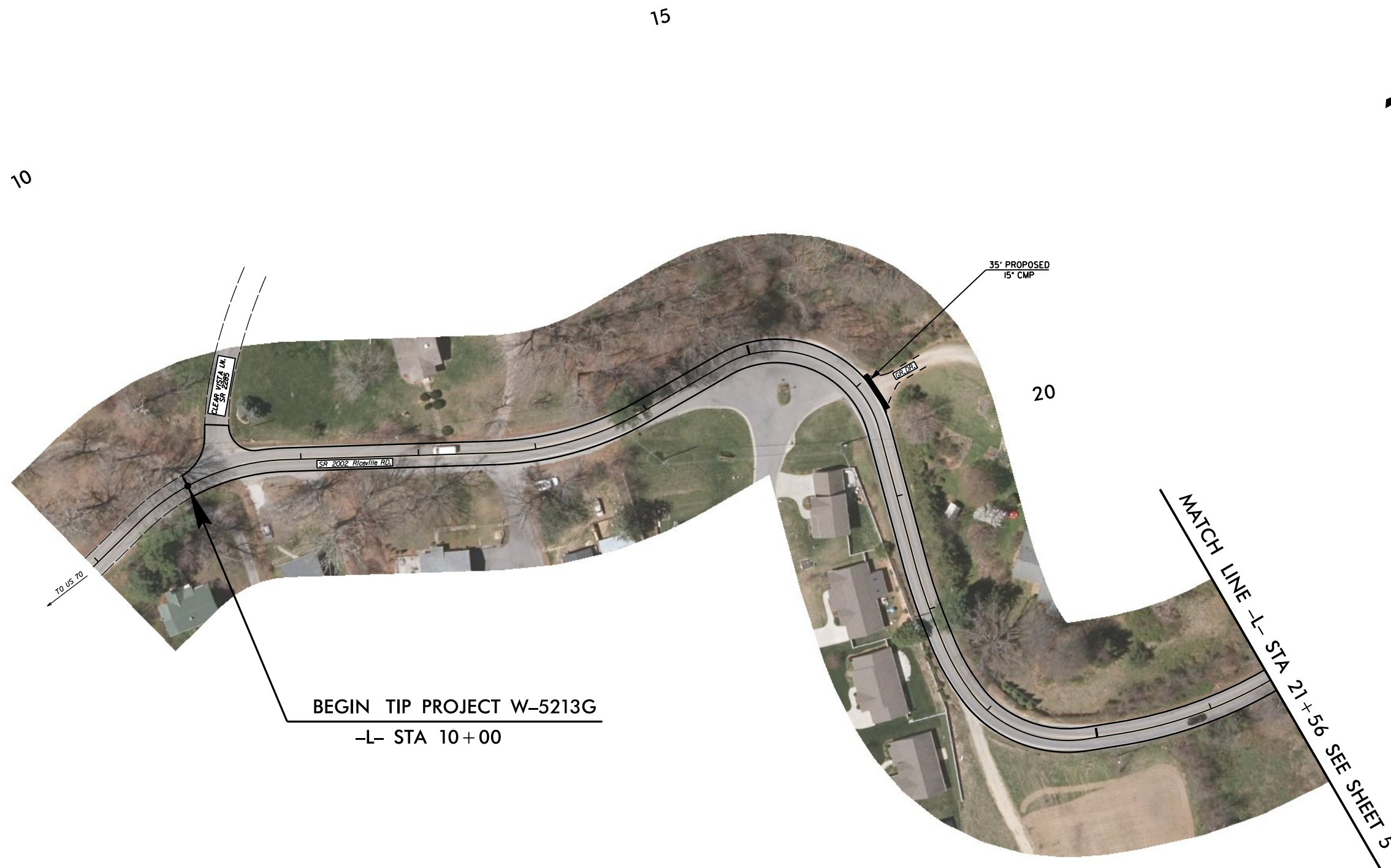
TO BE USED FOR BACKFILL OF ROADWAY PIPES ONLY

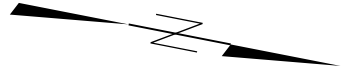


BRIDGE DETAIL

**BRIDGE NUMBER 305
MILL 1-1/2" OFF EXISTING PAVEMENT**

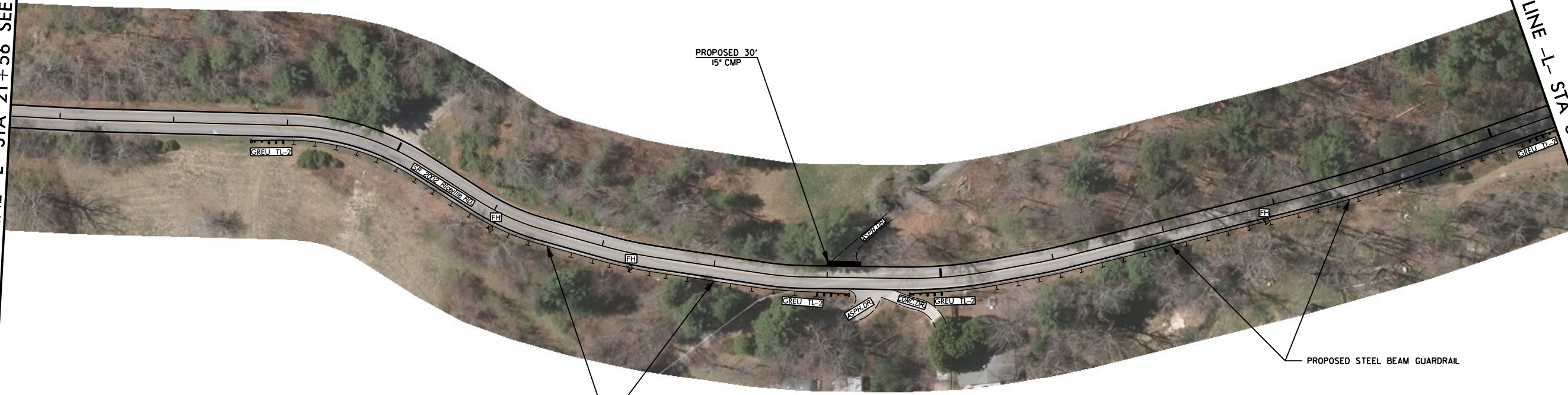
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MATCH LINE -L- STA 21+56 SEE SHEET 4

MATCH LINE -L- STA 35+56 SEE SHEET 6



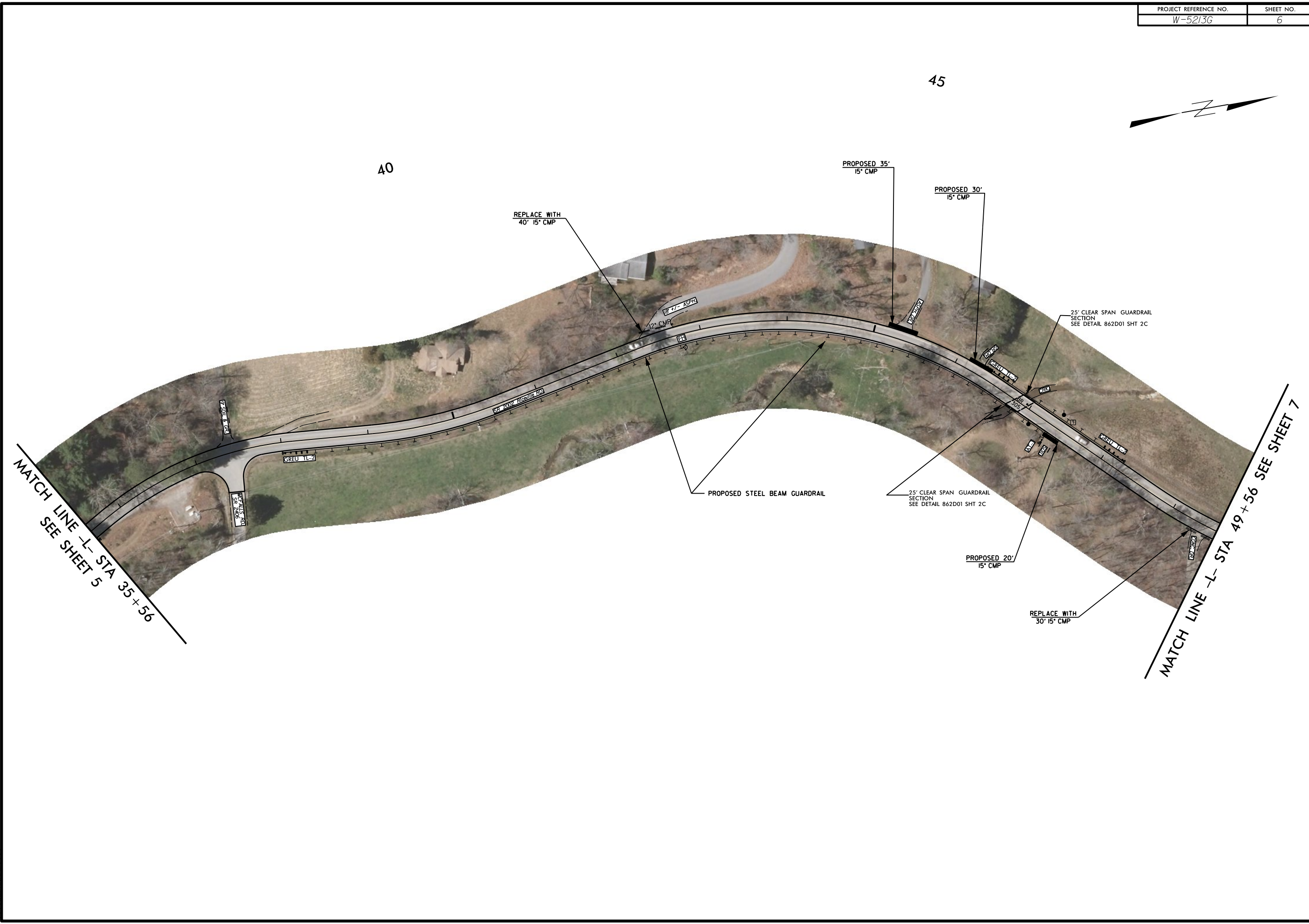
25

30

35

8/17/99

31-OCT-2018 13:28
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 \$\$\$LISTANDPLOT\$\$\$



MATCH LINE -L- STA 35+56
 SEE SHEET 5

MATCH LINE -L- STA 49+56
 SEE SHEET 7

40

45

REPLACE WITH
 40' 15' CMP

PROPOSED 35'
 15' CMP

PROPOSED 30'
 15' CMP

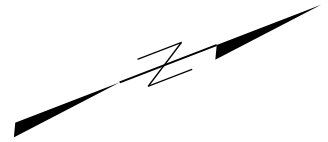
25' CLEAR SPAN GUARDRAIL
 SECTION
 SEE DETAIL 862D01 SHT 2C

PROPOSED STEEL BEAM GUARDRAIL

25' CLEAR SPAN GUARDRAIL
 SECTION
 SEE DETAIL 862D01 SHT 2C

PROPOSED 20'
 15' CMP

REPLACE WITH
 30' 15' CMP



MATCH LINE -L- STA 49+56 SEE SHEET 6

MATCH LINE -L- STA 63+56 SEE SHEET 8

50

55

60

REPLACE WITH
30' 15" CMP

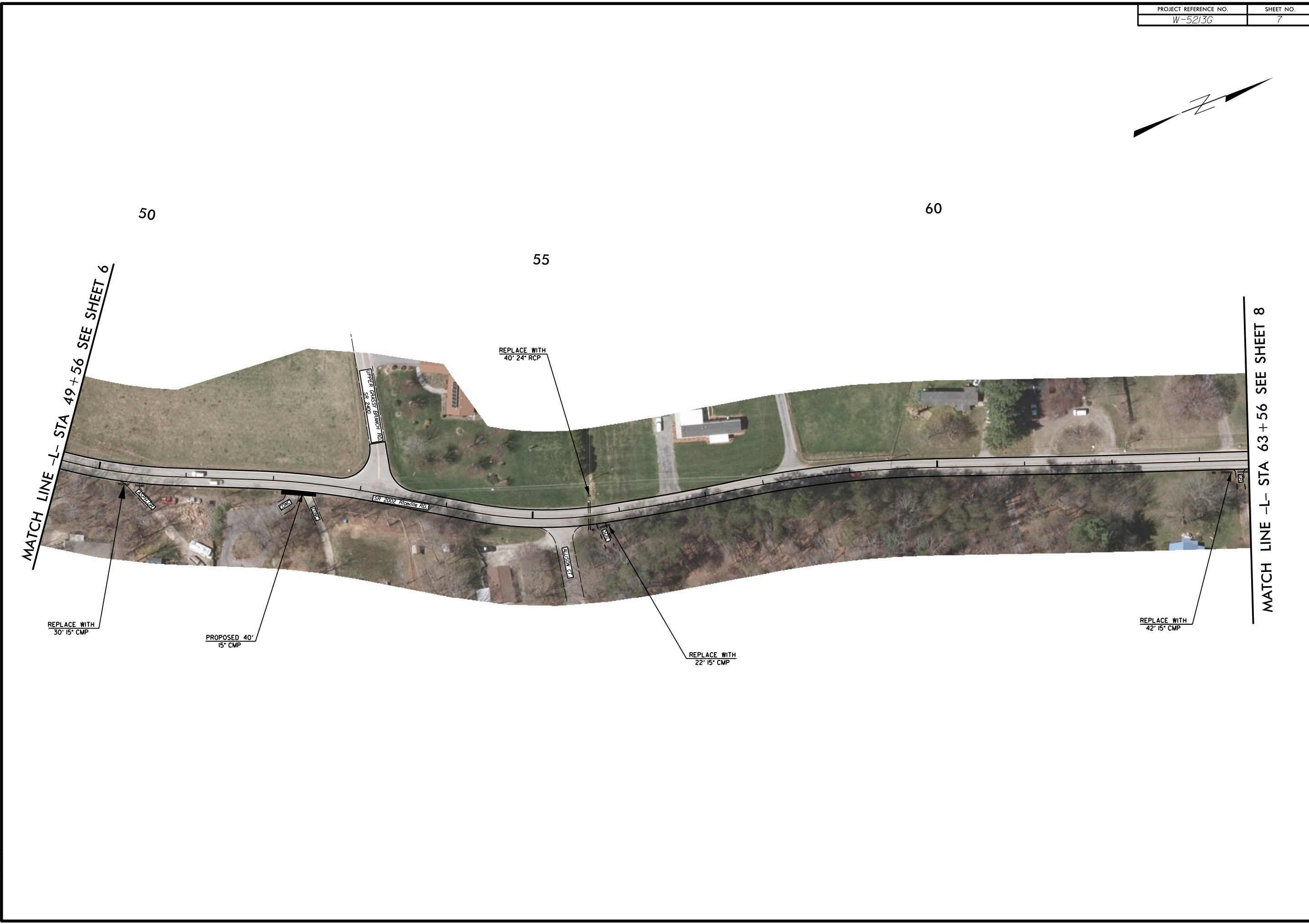
PROPOSED 40'
15" CMP

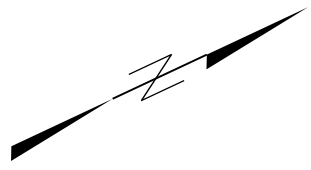
REPLACE WITH
40' 24" RCP

REPLACE WITH
22' 15" CMP

REPLACE WITH
42' 15" CMP

8/17/99
31-OCT-2018 11:53
S:\DDC\Projects\Buncombe\W-5213G\W5213G-DDC-psh_s7.dgn
\$\$\$\$\$





65

70

75

MATCH LINE -L- STA 63 + 56 SEE SHEET 7

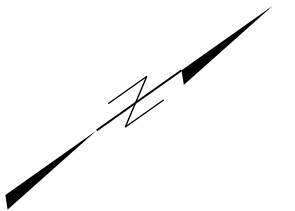
MATCH LINE -L- STA 77 + 56 SEE SHEET 9

REPLACE WITH
60" 36" RCP

LOWER GRASSY BRANCH EXT
SR 2407

SR 2002 Riceville Rd

UPPER GRASSY BRANCH EXT
SR 2407



80

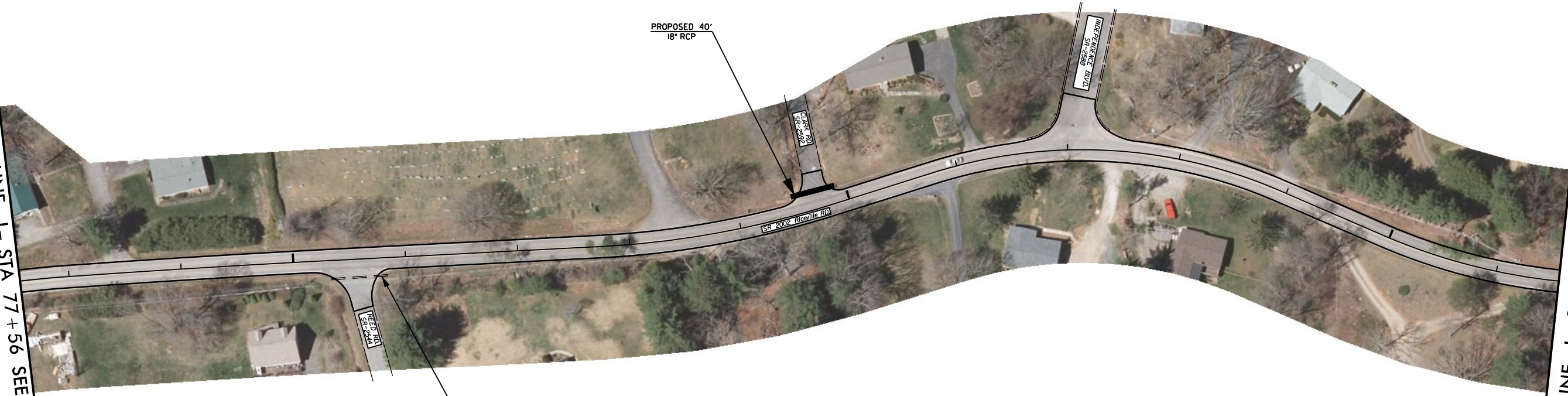
85

90

MATCH LINE -L- STA 77+56 SEE SHEET 8

MATCH LINE -L- STA 91+56 SEE SHEET 10

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31-OCT-2018 11:54
S:\DDC\Projects\Buncombe\W-5213G\W5213G-DDC-psh_s9.dgn
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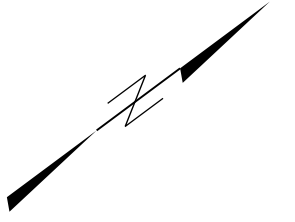


REPLACE WITH
56' 18" RCP

PROPOSED 40'
18" RCP

SR 2002
RICEVILLE RD

SR 2002
RICEVILLE RD



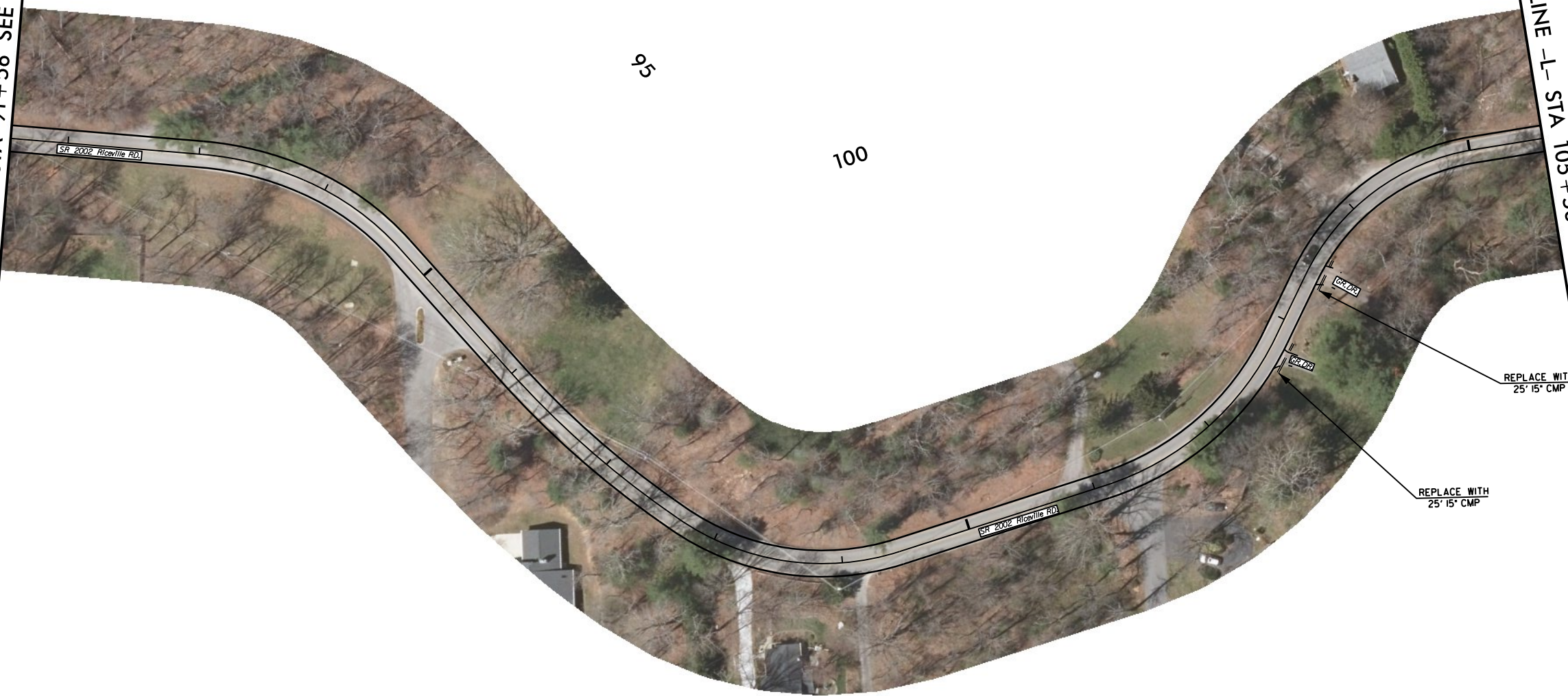
105

95

100

MATCH LINE -L- STA 91+56 SEE SHEET 9

MATCH LINE -L- STA 105+56 SEE SHEET 11



REPLACE WITH
25' 15" CMP

REPLACE WITH
25' 15" CMP



MATCH LINE -L- STA 105+56 SEE SHEET 10

MATCH LINE -L- STA 119+56 SEE SHEET 12

PROPOSED 65'
15° CMP

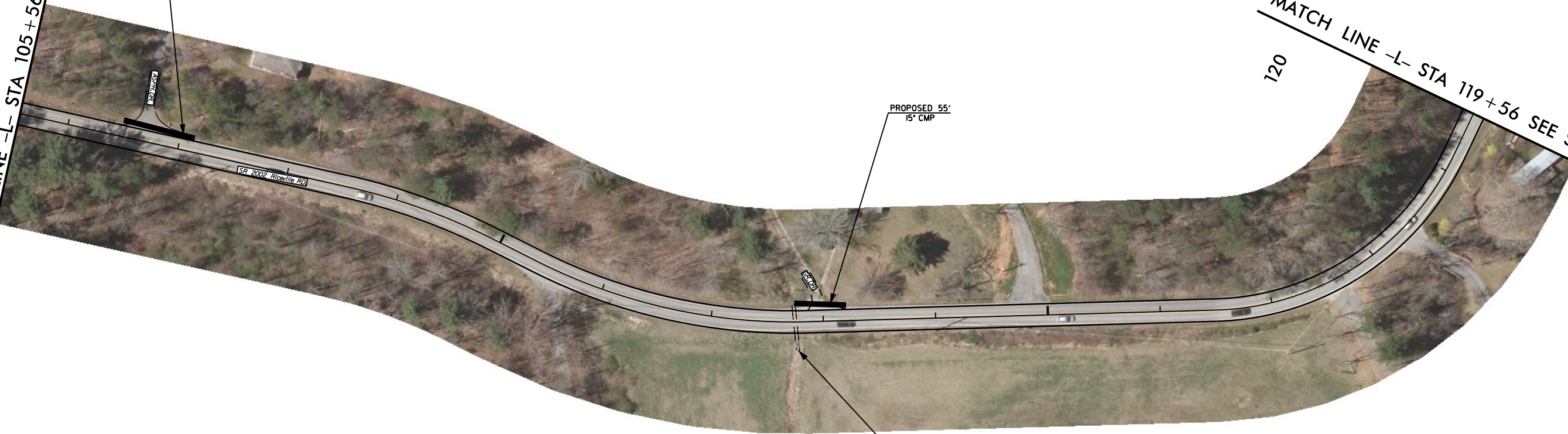
PROPOSED 55'
15° CMP

REPLACE WITH
40' 36" RCP

110

115

120



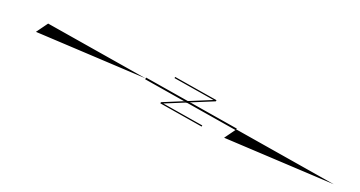
8/17/99



130

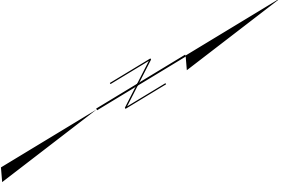
125

120



MATCH LINE -L- STA 119+56 SEE SHEET 11

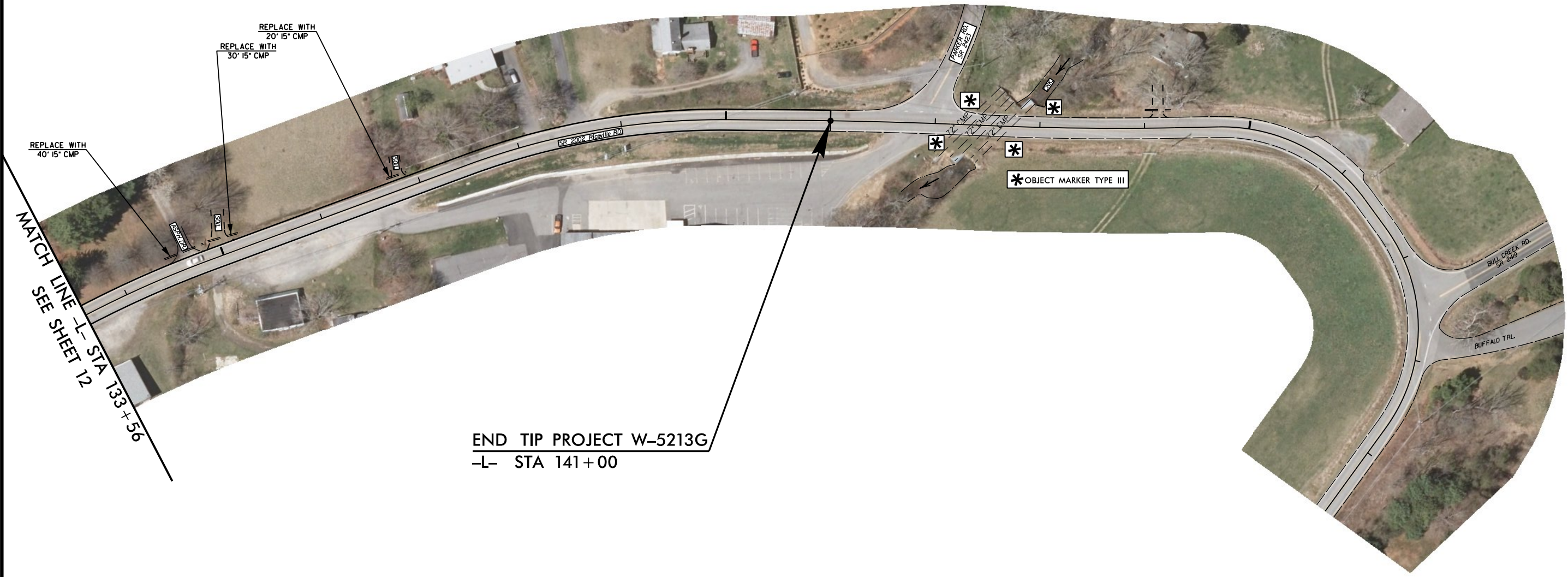
MATCH LINE -L- STA 133+56 SEE SHEET 13



135

140

145



REPLACE WITH
40' 15" CMP

REPLACE WITH
30' 15" CMP

REPLACE WITH
20' 15" CMP

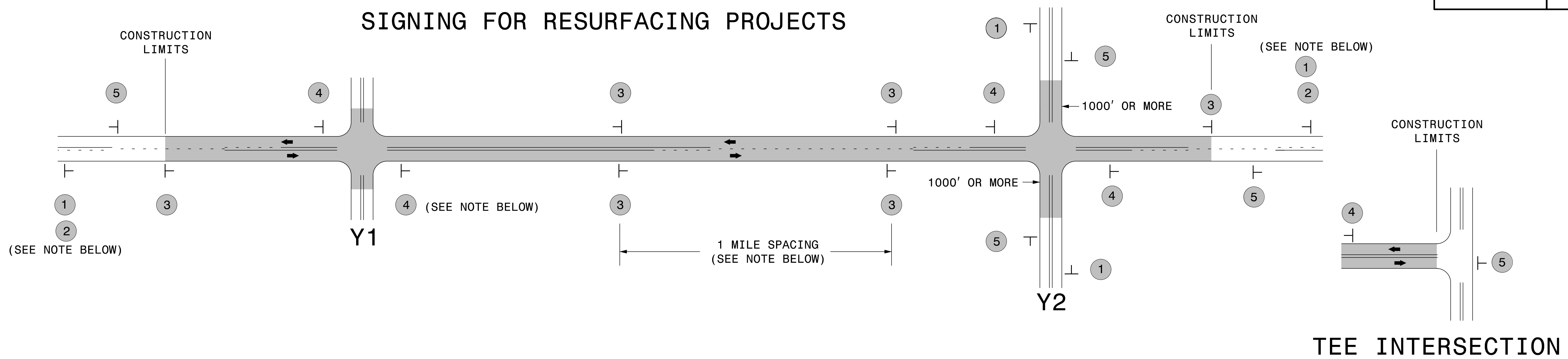
MATCH LINE -L- STA 133+56

END TIP PROJECT W-5213G
-L- STA 141+00

* OBJECT MARKER TYPE III

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 31-OCT-2018 11:55
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 \$\$\$LSTRANDP\$\$\$\$

SIGNING FOR RESURFACING PROJECTS



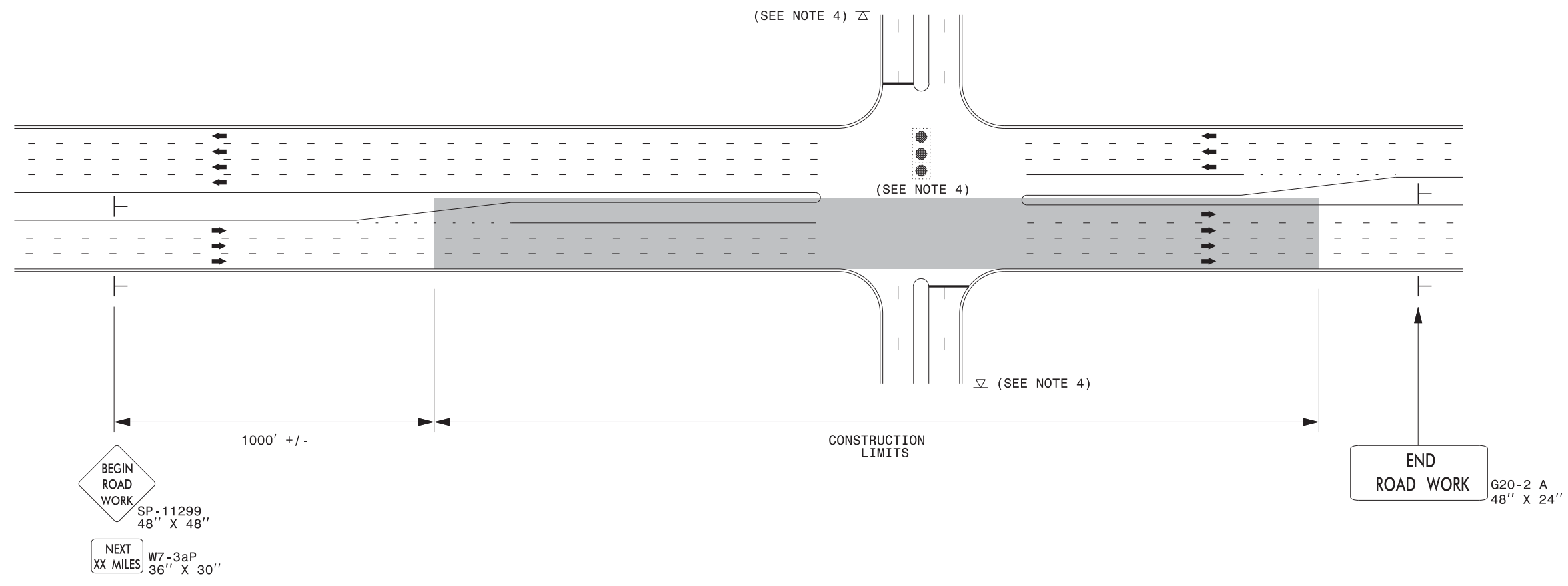
MAINLINE (-L-) SIGNING

-Y- LINE SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION	MAINLINE (-L-) SIGNING		-Y- LINE SIGNING	
	1	 W20-1 48" X 48"	<p>PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000' ALONG -Y- LINE.</p>	<p>NO REQUIRED STATIONARY SIGNING FOR THE FOLLOWING -Y- LINE CONDITIONS:</p> <ol style="list-style-type: none"> LESS THAN 1000' OF RESURFACING ALONG -Y- LINE SUBDIVISION ROADS DEAD END ROADS <p>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> W20-1 48" X 48" W20-7 A 48" X 48" <p>PLACED 500' IN ADVANCE OF FLAGGER. PLACED 250' IN ADVANCE OF FLAGGER.</p>
	2	 W7-3aP 24" X 18"	<p>#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)</p>	
	3	 SP 13107 48" X 48"	<ul style="list-style-type: none"> PLACE INITIALLY AT THE CONSTRUCTION LIMITS AND SPACE 1 MILE APART THEREAFTER. AT TEE INTERSECTIONS INSTALL INITIALLY 0.5 MILE FROM INTERSECTION AND SPACE 1 MILE APART THEREAFTER. 	
	4	 SP 13106 48" X 48"	<ul style="list-style-type: none"> 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	 G20-2 A 48" X 24"	<p>PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS OR AS SHOWN WHEN WORK ENDS AT A 3-WAY TEE INTERSECTION.</p>		

RESURFACING ADVANCE WARNING SIGNS FOR RURAL AND SUBURBAN 2 LANE ROADWAYS

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	
├	STATIONARY SIGN
➔	DIRECTION OF TRAFFIC FLOW

	<p>RESURFACING ADVANCE WARNING SIGNS FOR URBAN / SUBURBAN FACILITIES</p>
--	---

4/8/2015 C:\Users\rmgarrett\Downloads\Resurfacing_AdvWarn_UrSu (2).dgn User:rmgarrett

SIGN NUMBER: 11299

BACKG COLOR: Fluorescent Orange

DESIGN BY: WJ

CHECKED BY:

DATE: Jun 22, 2011

TYPE: B

COPY COLOR: Black

PROJECT ID: ALL

DIV: ALL

QUANTITY: SEE PLANS

SYMBOL	X	Y	WID	HT

SIGN WIDTH: 5'-6"

HEIGHT: 5'-6"

SP 11299

PROJECT REFERENCE NO.

SHEET NO.

W-5213G

16

TOTAL AREA: 30.5 Sq.Ft.

BORDER TYPE: INSET

RECESS: 0.59"

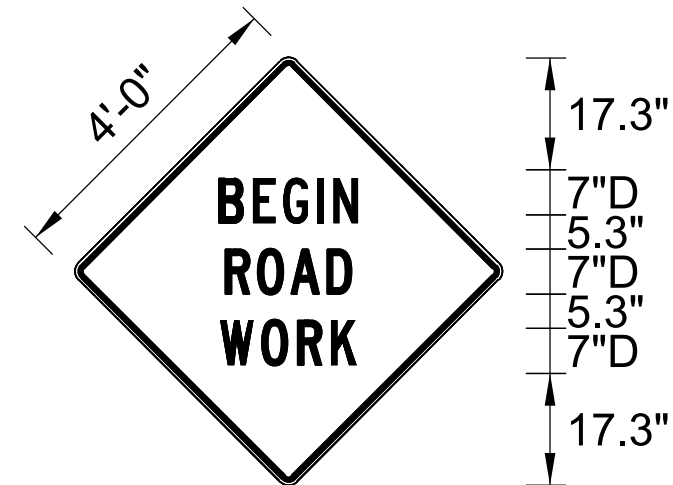
WIDTH: 0.75"

RADII: 1.38"

NO. Z BARS: N/A

LENGTH: N/A

MAT'L: 0.125" (3.2 mm) ALUMINUM



BORDER
R=1.38"
TH=0.75"
IN=0.59"

Spacing Factor is 1 unless specified otherwise

USE NOTES: 1,2

- Legend and border shall be direct applied black non-reflective sheeting.
- Background shall be Type VII, VIII, or IX (prismatic) fluorescent orange retroreflective sheeting.

LETTER POSITIONS

Letter spacings are to start of next letter

Series/Size
Text Length

Letter spacings are to start of next letter																Series/Size Text Length	
		B	E	G	I	N											D 2000
	20.5	6	5.4	6.3	2.8	4.8	20.5										25.2
		R	O	A	D												D 2000
	21.4	5.8	5.9	7	4.8	21.4											23.5
		W	O	R	K												D 2000
	20.9	7.1	6.5	5.9	4.9	20.9											24.5

SIGN NUMBER: SP13106
 TYPE: STATIONARY
 QUANTITY: SEE PLANS

BACKG COLOR: Fluorescent Orange
 COPY COLOR: Black

DESIGN BY: B. RASHID
 PROJECT ID:

CHECKED BY: AIA
 DIV:

DATE: Apr 26, 2013

SYMBOL	X	Y	WID	HT

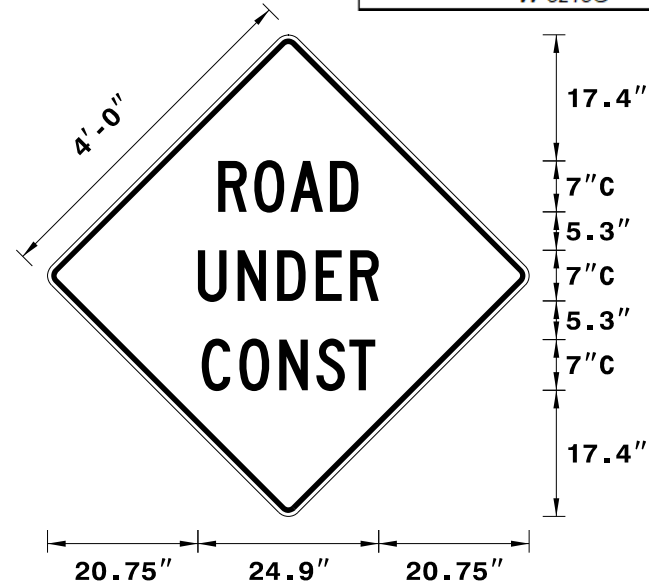
SIGN WIDTH: 4'-0"
 HEIGHT: 4'-0"
 TOTAL AREA: 16.00 Sq.Ft.

BORDER TYPE: INSET
 RECESS: 0.75"
 WIDTH: 1.25"
 RADII: 3"

NO. Z BARS:
 LENGTH:

MAT'L: 0.080" (2.0 mm) ALUMINUM

PROJECT REFERENCE NO.	SHEET NO.
W-5213G	17



Spacing Factor is 1 unless specified otherwise

USE NOTES: 1,2

- Legend and border shall be direct applied black non-reflective sheeting.
- Background shall be NC GRADE B fluorescent orange retroreflective sheeting.

LETTER POSITIONS

Letter spacings are to start of next letter

Letter spacings are to start of next letter																	Series/Size Text Length	
		R	O	A	D													C 2000
	23.5	5	5	5.5	3.9	23.5												19.3
		U	N	D	E	R												C 2000
	20.7	5.5	5.5	5.3	4.8	3.9	20.7											24.9
		C	O	N	S	T												C 2000
	21.2	5.2	5.5	5.1	4.6	3.6	21.2											23.9

SIGN NUMBER: SP13107
 TYPE: STATIONARY
 QUANTITY: SEE PLANS

BACKG COLOR: Fluorescent Orange
 COPY COLOR: Black

DESIGN BY: B. RASHID
 PROJECT ID:

CHECKED BY: AIA
 DIV:

DATE: Apr 26, 2013

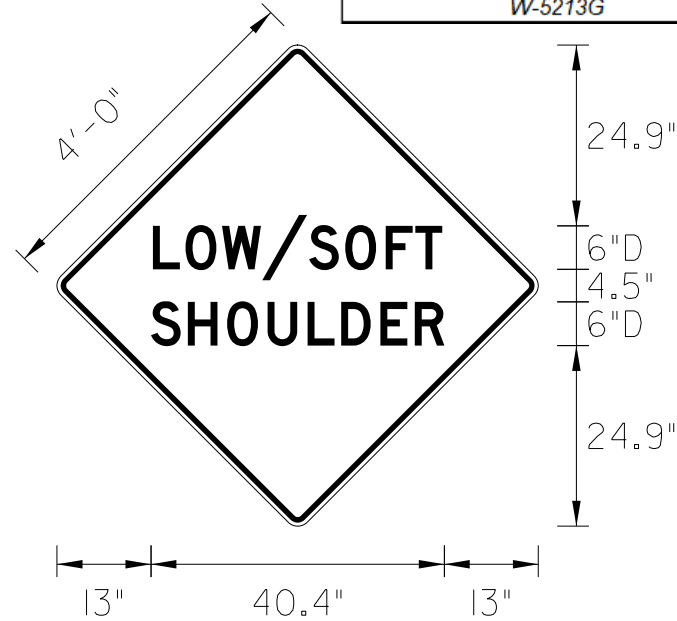
SYMBOL	X	Y	WID	HT

MAT'L: 0.080" (2.0 mm) ALUMINUM

BORDER TYPE: INSET
 RECESS: 0.75"
 WIDTH: 1.25"
 RADII: 3"

NO. Z BARS:
 LENGTH:

PROJECT REFERENCE NO.	SHEET NO.
W-5213G	18



Spacing Factor is 1 unless specified otherwise

USE NOTES: 1,2

1. Legend and border shall be direct applied black non-reflective sheeting.
2. Background shall be NC GRADE B fluorescent orange retroreflective sheeting.

LETTER POSITIONS

Letter spacings are to start of next letter											Series/Size
L	O	W	/	S	O	F	T				Text Length
13.2	4.5	5	5.5	6.5	5	5.6	4.1	3.7	13.2		D 2000
											39.9
S	H	O	U	L	D	E	R				Text Length
13	5.1	5.4	5.6	5.5	4.6	5.4	4.7	4.1	13		D 2000
											40.4