09/28/99

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

WATAUGA COUNTY

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	11C.095115	1	17

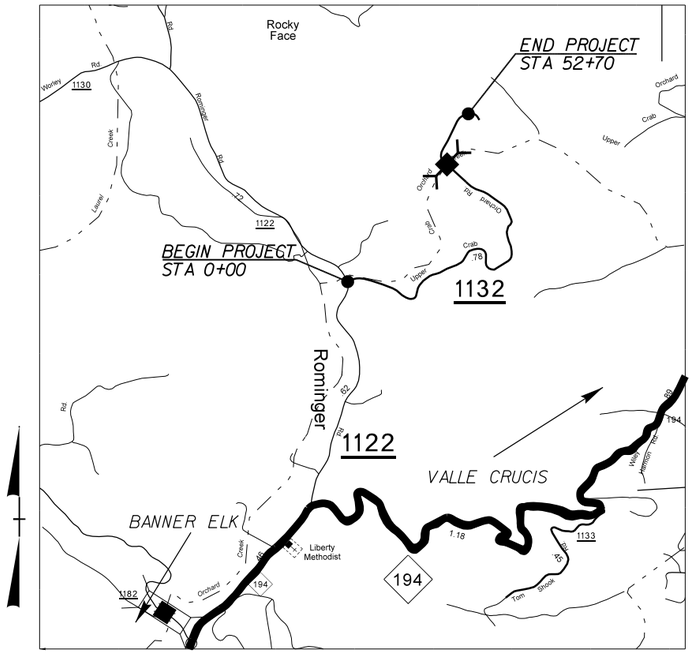
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION

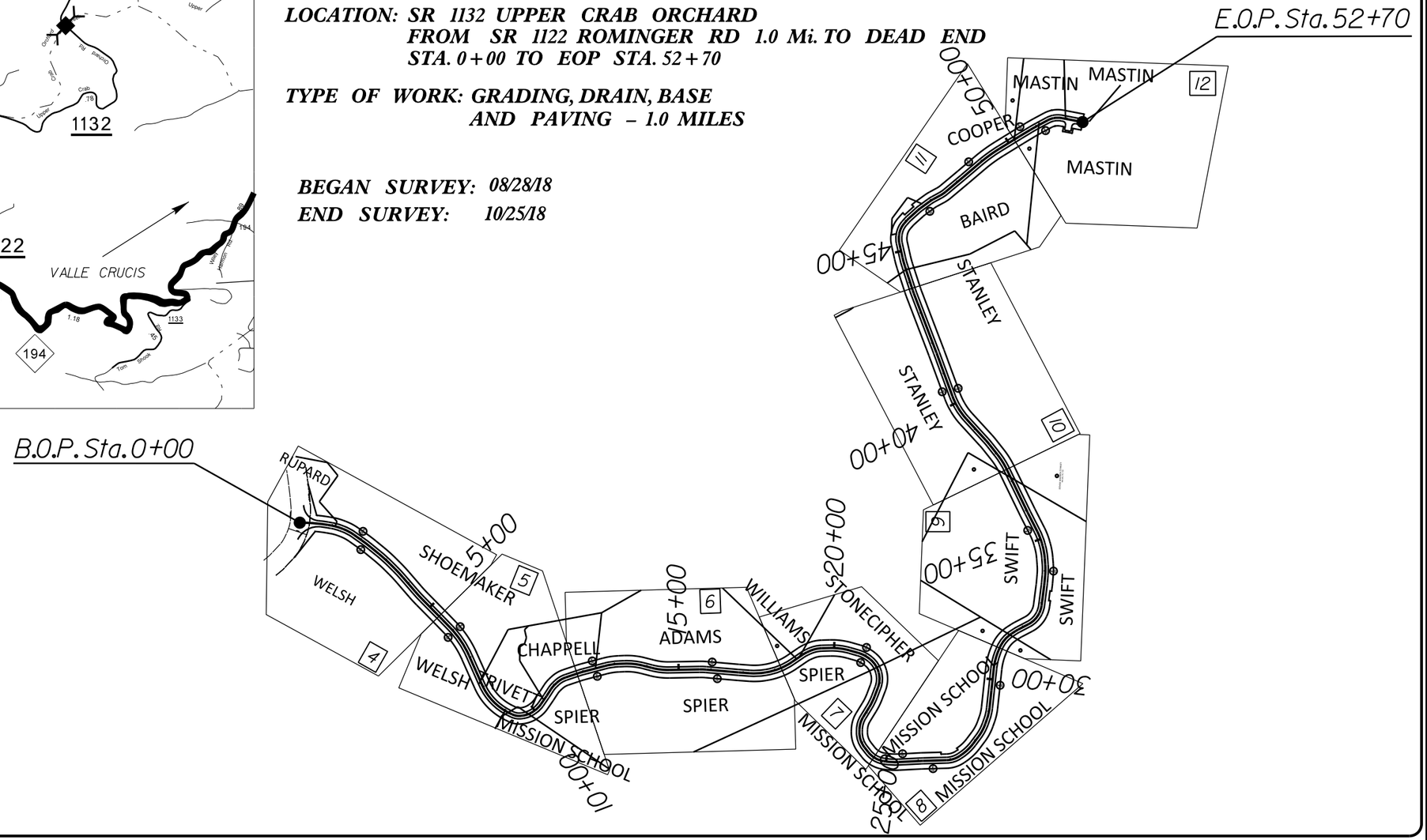
LOCATION: *SR 1132 UPPER CRAB ORCHARD*
FROM SR 1122 ROMINGER RD 1.0 Mi. TO DEAD END
STA. 0+00 TO EOP STA. 52+70

TYPE OF WORK: *GRADING, DRAIN, BASE*
AND PAVING – 1.0 MILES

BEGAN SURVEY: *08/28/18*
END SURVEY: *10/25/18*

VICINITY MAP





REVISED:08–07–2025

GRAPHIC SCALES

PLANS: 50 0 50 100
PROFILE (HORIZONTAL): 0 5 10
PROFILE (VERTICAL): 0 5 10

DESIGN DATA

ADT	=	
ADT	=	
DHV	=	%
D	=	%
T	=	% *
V	=	MPH

* TTST DUAL

PROJECT LENGTH
1.0 Miles

Prepared In the Office of:
DIVISION OF HIGHWAYS
DIVISION 11, DISTRICT 2 BOONE
P.O. BOX 1460, BOONE, N.C. 28607

2024 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:

LETTING DATE:

Michael L. Poe, PE
DIVISION ENGINEER

Kenny Heavner, PE
DISTRICT ENGINEER

DIVISION ENGINEER
P.E.
SIGNATURE:

DISTRICT ENGINEER
P.E.
SIGNATURE:

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

P.E.
STATE HIGHWAY DESIGN ENGINEER

07-AUG-2025 09:42
P:\Road_Projects\Secondary\Watauga\SRII32_Upper_Crab_Orchard\PlanSheets\WAII32_rdy_tsh_1.dgn
$$$$$$USERNAME$$$$$$

8/17/99

PROJECT REFERENCE NO.	SHEET NO.
11C.095115	1-A

ROADWAY DESIGN ENGINEER

GENERAL NOTES

INDEX OF SHEETS

SHEET NUMBER	SHEET
1	TITLE SHEET
1-A	INDEX OF SHEETS, GENERAL NOTES, AND LIST OF STANDARD DRAWINGS
1-B	CONVENTIONAL SYMBOLS
1-C	
1-D	UTILITIES POLE DATA AND CENTER LINE SHIFT SHEET
1-E	
2	PAVEMENT SCHEDULE, TYPICAL SECTIONS, AND WEDGING DETAILS
3	
3-B	RIGHT OF WAY DATA SHEET
3-C	DRAINAGE SUMMARY SHEET (48" AND UNDER)
4 THRU 12	PLAN SHEETS

07-AUG-2025 10:31
P:\Road Projects\Secondary\Watauga\SR1132_Upper_Crab_Orchard\PlanSheets\WA1132_rdy_1a.dgn
$$$$USERNAME$$$$

3/15/06

PROJECT REFERENCE NO.	SHEET NO.
11C.095115	1-B

Note: Not to Scale

****S.U.E. = Subsurface Utility Engineering***

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

CONVENTIONAL PLAN SHEET SYMBOLS

BOUNDARIES AND PROPERTY:

- State Line
- County Line
- Township Line
- City Line
- Reservation Line
- Property Line
- Existing Iron Pin — EIP
- Property Corner
- Property Monument — ECM
- Parcel/Sequence Number — 123
- Existing Fence Line
- Proposed Woven Wire Fence
- Proposed Chain Link Fence
- Proposed Barbed Wire Fence
- Existing Wetland Boundary — WLB
- Proposed Wetland Boundary — WLB
- Existing Endangered Animal Boundary — EAB
- Existing Endangered Plant Boundary — EPB

BUILDINGS AND OTHER CULTURE:

- Gas Pump Vent or U/G Tank Cap
- Sign — S
- Well — W
- Small Mine
- Foundation
- Area Outline
- Cemetery
- Building
- School
- Church
- Dam

HYDROLOGY:

- Stream or Body of Water
- Hydro, Pool or Reservoir
- Jurisdictional Stream — JS
- Buffer Zone 1 — BZ 1
- Buffer Zone 2 — BZ 2
- Flow Arrow
- Disappearing Stream
- Spring
- Wetland
- Proposed Lateral, Tail, Head Ditch — FLOW
- False Sump

RAILROADS:

- Standard Gauge — CSX TRANSPORTATION
- RR Signal Milepost — MILEPOST 35
- Switch — SWITCH
- RR Abandoned
- RR Dismantled

RIGHT OF WAY:

- Baseline Control Point
- Existing Right of Way Marker
- Existing Right of Way Line
- Proposed Right of Way Line — RW
- Proposed Right of Way Line with Iron Pin and Cap Marker — RW
- Proposed Right of Way Line with Concrete or Granite Marker — RW
- Existing Control of Access — CA
- Proposed Control of Access — CA
- Existing Easement Line — E
- Proposed Temporary Construction Easement — E
- Proposed Temporary Drainage Easement — TDE
- Proposed Permanent Drainage Easement — PDE
- Proposed Permanent Utility Easement — PUE

ROADS AND RELATED FEATURES:

- Existing Edge of Pavement
- Existing Curb
- Proposed Slope Stakes Cut — C
- Proposed Slope Stakes Fill — F
- Proposed Wheel Chair Ramp — WCR
- Proposed Wheel Chair Ramp Curb Cut — WCC
- Curb Cut for Future Wheel Chair Ramp — CCFR
- Existing Metal Guardrail
- Proposed Guardrail
- Existing Cable Guiderail
- Proposed Cable Guiderail
- Equality Symbol
- Pavement Removal

VEGETATION:

- Single Tree
- Single Shrub
- Hedge
- Woods Line
- Orchard
- Vineyard — Vineyard

EXISTING STRUCTURES:

MAJOR:

- Bridge, Tunnel or Box Culvert — CONC
- Bridge Wing Wall, Head Wall and End Wall — CONC WW

MINOR:

- Head and End Wall — CONC HW
- Pipe Culvert
- Footbridge
- Drainage Box: Catch Basin, DI or JB — CB
- Paved Ditch Gutter
- Storm Sewer Manhole — S
- Storm Sewer — S

UTILITIES:

POWER:

- Existing Power Pole
- Proposed Power Pole
- Existing Joint Use Pole
- Proposed Joint Use Pole
- Power Manhole — P
- Power Line Tower
- Power Transformer
- U/G Power Cable Hand Hole — HH
- H-Frame Pole
- Recorded U/G Power Line — P
- Designated U/G Power Line (S.U.E.*) — P

TELEPHONE:

- Existing Telephone Pole
- Proposed Telephone Pole
- Telephone Manhole — T
- Telephone Booth
- Telephone Pedestal — T
- Telephone Cell Tower
- U/G Telephone Cable Hand Hole — HH
- Recorded U/G Telephone Cable — T
- Designated U/G Telephone Cable (S.U.E.*) — T
- Recorded U/G Telephone Conduit — TC
- Designated U/G Telephone Conduit (S.U.E.*) — TC
- Recorded U/G Fiber Optics Cable — T FO
- Designated U/G Fiber Optics Cable (S.U.E.*) — T FO

WATER:

- Water Manhole — W
- Water Meter
- Water Valve
- Water Hydrant
- Recorded U/G Water Line — W
- Designated U/G Water Line (S.U.E.*) — W
- Above Ground Water Line — A/G Water

TV:

- TV Satellite Dish
- TV Pedestal — C
- TV Tower
- U/G TV Cable Hand Hole — HH
- Recorded U/G TV Cable — TV
- Designated U/G TV Cable (S.U.E.*) — TV
- Recorded U/G Fiber Optic Cable — TV FO
- Designated U/G Fiber Optic Cable (S.U.E.*) — TV FO

GAS:

- Gas Valve
- Gas Meter
- Recorded U/G Gas Line — G
- Designated U/G Gas Line (S.U.E.*) — G
- Above Ground Gas Line — A/G Gas

SANITARY SEWER:

- Sanitary Sewer Manhole
- Sanitary Sewer Cleanout
- U/G Sanitary Sewer Line — SS
- Above Ground Sanitary Sewer — A/G Sanitary Sewer
- Recorded SS Forced Main Line — FSS
- Designated SS Forced Main Line (S.U.E.*) — FSS

MISCELLANEOUS:

- Utility Pole
- Utility Pole with Base
- Utility Located Object
- Utility Traffic Signal Box — S
- Utility Unknown U/G Line — ?UTL
- U/G Tank; Water, Gas, Oil
- A/G Tank; Water, Gas, Oil
- U/G Test Hole (S.U.E.*)
- Abandoned According to Utility Records — AATUR
- End of Information — E.O.I.

7/2/99

ENTERED BY: jmg DATE: 10/24/18
CHECKED BY: jmg DATE: 10/24/18

REVISIONS
DATE:

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

POLE DATA SHEET

PROJECT REFERENCE NO.	SHEET NO.
IIC.0951115	1-D

CENTERLINE SHIFT STA's

OWNER OF THE POLE LINE: MOUNTAIN ELECTRIC CO

STATION	POLE NUMBER	DIST. FROM CENTER PRESENT ROAD		DIST. FROM CENTER PROJECT		DIST. FROM PROJECT AFTER MOVING		REMARKS
		LEFT	RIGHT	LEFT	RIGHT	LEFT	RIGHT	
2+27		17.5		16.5		25		2PL,1TL,2GW
6+55		19.6		15.6		25		2PL,1PW,1TL,2GW,1TRNS
7+69		22.2		18.2		25		1PW,1GW
8+95			18.4		13.4		25	2PL,1PW,2GW,1TRNS
10+58		21.1		26.2				1PW,1TL,1SL,1GW
12+90		16.4		14.4		25		2PL,1GW
16+76			11.7		11.7		25	2PL,1TL,1PW,1TW,2GW,1TRNS
16+95		16.8		16.8		25		1PW,1TW
19+82		34		28.0		28		2PL,1TL,1PW,1TW,1TRNS,3GW
21+81		10.4		10.4		25		2PL,2GW
28+59		9.0		9.0		25		1PW,1TW
37+49		18.4		20.4		25		2PL,1TL,1GW
41+47		14.8		14.8		25		2PL,1TL
46+31			35.4		27.4		27.4	4PL,1TL,1PW,1GW,1TRNS
51+04		11.2		18.2		25		1PW,1SL
51+85			20.2		15.2		25	1PW,1TW

OWNER OF THE POLE LINE: SKYLINE

STATION	POLE NUMBER	DIST. FROM CENTER PRESENT ROAD		DIST. FROM CENTER PROJECT		DIST. FROM PROJECT AFTER MOVING		REMARKS
		LEFT	RIGHT	LEFT	RIGHT	LEFT	RIGHT	
2+27		17.5		26.5		26.5		2PL,1TL,2GW
6+55		19.6		15.6		25		2PL,1PW,1TL,1TL,2GW,1TRNS
8+97			18.1		13.1		25	1TL,1TW,2GW
12+85		15.5		13.5		25		1TL,1GW
14+77		12.5		16.5		25		1TL,1GW
16+76			11.7		11.7		25	2PL,1PW,1TL,1TW,2GW,1TRNS
16+95		16.8		16.8		25		1PW,1TW
19+82		34		28.0		28		2PL,1TL,1PW,1TW,1TRNS,3GW
21+81		10.4		10.4		25		2PL,2GW
28+59		9.0		9.0		25		1PW,1TW
37+49		18.4		20.4		25		2PL,1TL,1GW
41+47		14.8		14.8		25		2PL,1TL
46+31			35.4		27.4		27.4	4PL,1TL,1PW,1GW,1TRNS
51+85			20.2		15.2		25	1PW,1TL
52+70 EOP								

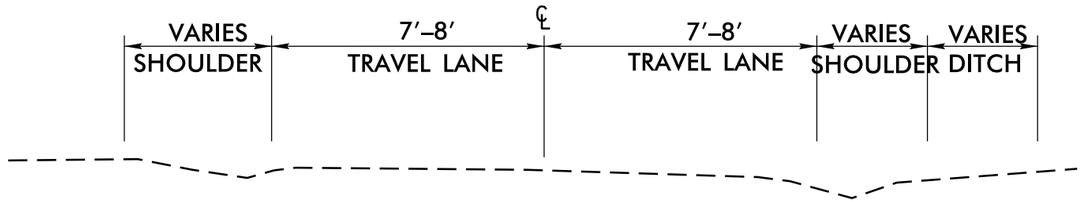
OWNER OF THE POLE LINE: SKYLINE

STATION	POLE NUMBER	DIST. FROM CENTER PRESENT ROAD		DIST. FROM CENTER PROJECT		DIST. FROM PROJECT AFTER MOVING		REMARKS
		LEFT	RIGHT	LEFT	RIGHT	LEFT	RIGHT	
0+00			67.4		67.4			PED
8+81		23.9		18.9		25		PED
19+82		25.6		26.6		26.6		PED
28+67		13.4		13.4		25		PED
31+89			12.7		12.7		25	PED
49+03		17.3		15.3			25	PED
51+84			18.7		13.7		25	PED

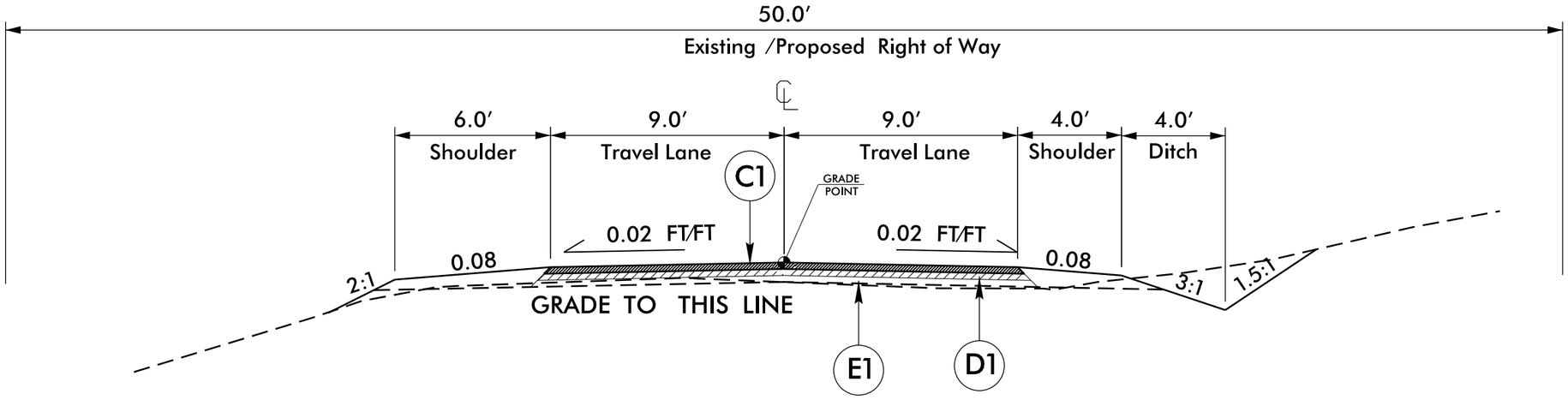
STATION		STATION	
LEFT	RIGHT	LEFT	RIGHT
1+00	3′	37+00	2′
2+00	1′	38+00	4′
3+00	1′	39+00	1′
4+00	4′	4′ 40+00	
5+00	4′	41+00	
6+00	4′	42+00	
7+00	4′	43+00	
8+00	7′	1′ 44+00	
9+00	5′	45+00	3′
10+00	7′	46+00	8′
11+00		47+00	7′
12+00	5′	48+00	1′
13+00	2′	2′ 49+00	
14+00	5′	50+00	2′
15+00	4′	51+00	7′
16+00	2′	52+00	5′
17+00	2′	52+70 EOP	5′
18+00	4′	54+00	
19+00	1′	55+00	
20+00	6′	56+00	
21+00		57+00	
22+00		58+00	
23+00		59+00	
24+00		60+00	
25+00		61+00	
26+00	3′	62+00	
27+00	9′	63+00	
28+00	1′	64+00	
29+00		65+00	
30+00		66+00	
31+00	2′	67+00	
32+00		68+00	
5′ 33+00		69+00	
34+00		70+00	
35+00	1′	71+00	
36+00	1′	72+00	

07-AUG-2025 10:34
\\wa1125rdu1\d-dgn
$$$$USERNAME$$$$

PROJECT REFERENCE NO.	SHEET NO.
IIC.095115	2
ROADWAY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER



14'–16' EXISTING TYPICAL SECTION



TYPICAL SECTION NO. 1

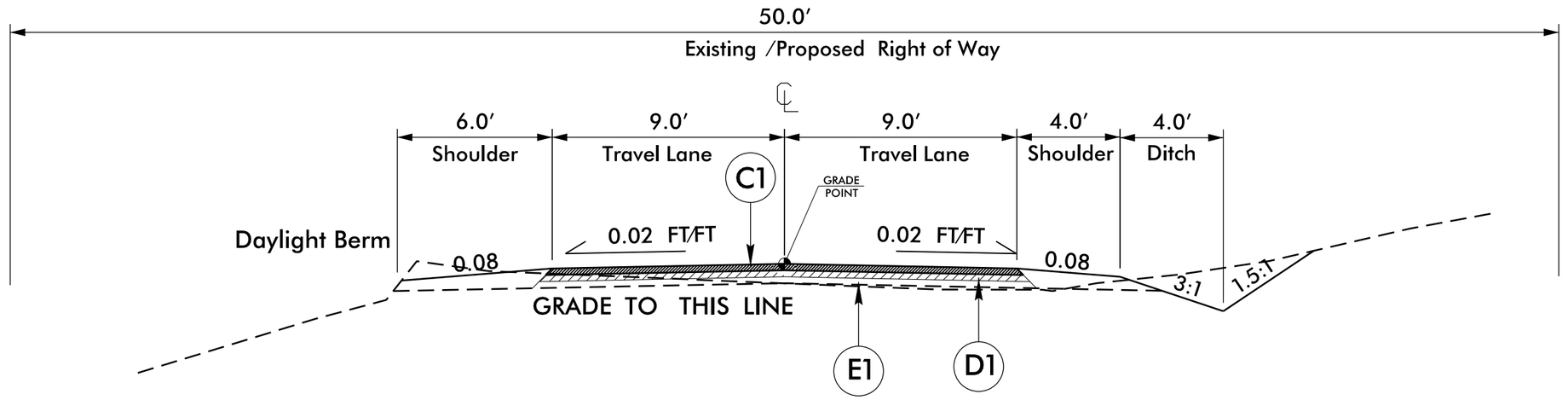
C1	PROP. ASPHALT SURFACE TREATMENT (TRIPLE SEAL).
D1	PROP. APPROX. 3" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 342 LBS. PER SQ. YD.
E1	PROP. APPROX. 6" AGGREGATE BASE COURSE.

5' 0' 5'
GRAPHIC SCALE

6/2/99
07-AUG-2025 10:35
.\WA1132 tup 2.dgn
$$$$USERNAME$$$$

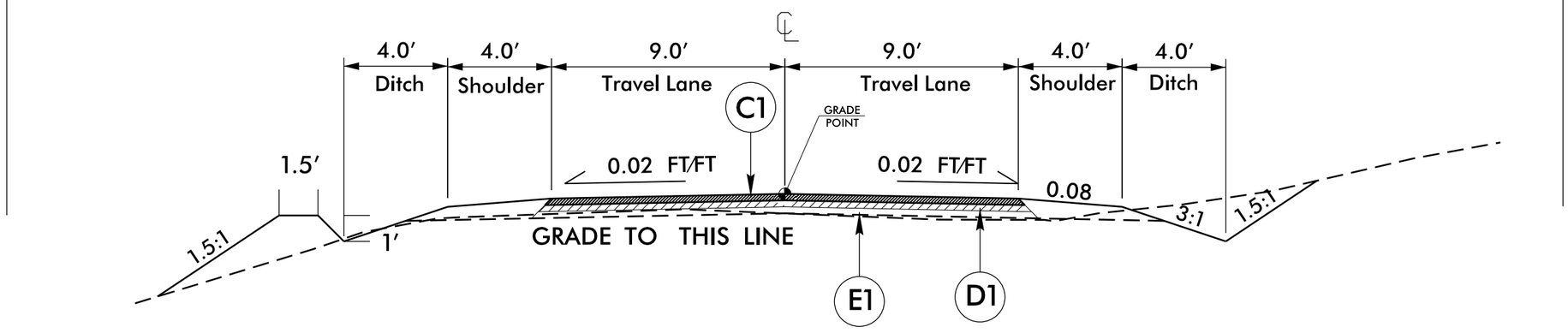
6/2/99

PROJECT REFERENCE NO.	SHEET NO.
IIC.095115	2
ROADWAY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER



TYPICAL SECTION NO. 2

Sta 10+25 to 11+50
Sta 30+50 to 32+00



TYPICAL SECTION NO. 3

Sta 51+05 to 51+40

C1	PROP. ASPHALT SURFACE TREATMENT (TRIPLE SEAL).
D1	PROP. APPROX. 3" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 342 LBS. PER SQ. YD.
E1	PROP. APPROX. 6" AGGREGATE BASE COURSE.

5' 0' 5'
GRAPHIC SCALE

07-AUG-2025 10:36
P:\Road Projects\Secondary\Watauga\SR1132_Upper_Crab_Orchard\PlanSheets\WA1132_typ_2.dgn
$$$$USERNAME$$$$

12/06/05

ENTERED BY: jmg	DATE: 10/24/18
CHECKED BY: jmg	DATE: 10/24/18

DATE:	REVISIONS

PROJECT REFERENCE NO.	SHEET NO.
11C.095115	3-B

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

RIGHT OF WAY DATA SHEET

PARCEL NO.	PROPERTY OWNERS NAME	ADDRESS	CITY	STATE	ZIP	DEED BOOK / PAGE	NCPIN	PHONE
1	CHARLES D. RUPARD	750 ROMINGER RD	BANNER ELK	NC	28604	RB1086/14	1970131333	
2	WILLIAM & MARILYN WELSH	PO BOX 647	VALLE CRUCIS	NC	28691	RB187/248	1970125575	
3	NAOMI B. SHOEMAKER	1302 BRIARFIELD RD	NEWPORT NEWS	VA	23606	RB84/442	1970132853	
4	JASON & MICHELLE TRIVETT	106 STEVEN CHARLES LN	NEWLAND	NC	28657	RB1848/859	1970138181	
5	VALLE CRUCIS MISSION SCHOOL	PO BOX 654	VALLE CRUCIS	NC	28691	DB1/594	1970238128	
6	BEVERLY CHAPPELL, ET AL.	299 UPPER CRAB ORCHARD	BANNER ELK	NC	28604	RB1836/65	1970230224	
7	PETER SPIER 2016 LIVING TRUST	320 RUN HILL RD	BREWSTER	MA	02631	RB1895/381	1970233135	
8	PHYLLIS P. ADAMS	1021 FALLS BRIDGE DR	RALEIGH	NC	27614	RB1131/868	1970233587	
9	KEVIN F. & CINDY A. WILLIAMS	455 UPPER CRAB ORCHARD	BANNER ELK	NC	28604	RB1049/539	1970236811	
10	PAUL & DENISE W. STONECIPHER	465 UPPER CRAB ORCHARD	BANNER ELK	NC	28604	RB1064/661	1970238777	
11	JAMES B., JERLENE SWIFT	6248 WINFIELD CIRCLE	APPLING	GA	30802	RB141/78	1970344079	
12	DENISE WARDEN STANLEY	279 POPLAR SUMMIT	BOONE	NC	28607	RB549/726	1970341613	
13	STEVE BAIRD, ET AL.	5415 ROB CARSWELL ST	MORGANTON	NC	28690	RB532/619	1970255091	
14	MATTHEW COOPER	PO BOX 2496	BOONE	NC	28607	RB1693/254	1970153464	
15	CHARLES MASTIN	1037 UPPER CRAB ORCHARD	BANNER ELK	NC	28604	RB81/136	1970255595	
16	CHRISTOPHER C. MASTIN	1067 UPPER CRAB ORCHARD	BANNER ELK	NC	28604	RB1724/272	1970257733	
17	CHARLES AND JUDY MASTIN	1038 UPPER CRAB ORCHARD	BANNER ELK	NC	28604	RB431/511	1970267054	

PARCEL NO.	PROPERTY OWNERS NAME	ADDRESS	CITY	STATE	ZIP	DEED BOOK / PAGE	NCPIN	PHONE

07-AUG-2025 10:38
\\WA1122-fsu-3\cad\
$$$$USERNAME$$$$

D11CAD-224780

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PROJECT NO.	SHEET NO.
11C.095115	3-C

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

		NEW PIPES									EXISTING PIPES											
		TYPE B DRAINAGE PIPE (RCP, CSP, CAAP, HDDE OR PVC) (UNLESS NOTED OTHERWISE)																				
SIZE	LOCATION (LT, RT, OR CL)'	12"	15"	18"	24"	30"	36"	42"	48"		12"	15"	18"	24"	30"	36"	42"	48"	PIPE REMOVAL	D.I. STD. 840.14 OR STD. 840.15	D.I. FRAME AND GRATE STD. 840.16	J.B. STD. 840.31 OR 840.32	REMARKS
TYPE																						
STATION																						
0+81	CL			45'									38'						0'				REPLACE
4+03	CL			35'															0'				ADD
																			0'				
																			0'				
9+45	CL					40'									29'				0'				REPLACE WET PIPE
																			0'				
9+77	RT		20'								20'								20'				REPLACE
																			0'				
14+64	CL			35'															0'				ADD
18+78	RT			40'									40'						0'				REPLACE
21+13	CL				45'									34'					0'				REPLACE
																			0'				
24+91	CL			65'									27'						27'				REPLACE
25+09	LT			15'															0'			1	ADD PIPE AND SPRING BOX W SLAB LID
27+09	RT		55'																0'				ADD
																			0'				
28+73	RT		25'																0'				ADD
																			0'				
31+93	CL													50'					50'				REMOVE
																			0'				
32+03	CL				55'														0'				ADD
																			0'				
32+98	LT	60'																	0'				
																			0'				
32+98	RT																		0'	1	1		TRAFFIC BEARING WITH CONC APRON
33+09	CL			56'									40'						0'				REPLACE
																			0'				
36+93	CL			40'															0'				ADD
																			0'				
39+53	CL				50'									24'					0'				REPLACE WET PIPE
																			0'				
41+70	CL			50'									36'						0'				REPLACE WET PIPE
																			0'				
44+34	CL																	50'	0'				DO NOT DISTURB 112"x75" CMAP
																			0'				
44+47	CL																	50'	0'				DO NOT DISTURB 112"x75" CMAP
																			0'				
44+91	LT				60'														0'				ADD WET PIPE
																			0'				
45+42	LT		25'																0'				ADD
																			0'				
46+90	CL				65'									40'					0'				REPLACE WET PIPE
																			0'				
47+04	LT		41'									41'							0'				REPLACE
48+47	LT		20'																0'				ADD
49+69	CL						60'									45'			0'				REPLACE WET PIPE
																			0'				
50+87	LT		40'																0'				ADD
																			0'				
51+75	LT		40'																0'				ADD
																			0'				
SHEET TOTALS		60	266	381	275	40	60	0	0	**1082**	20	41	181	148	29	45	0	100	**97**	1	1	1	

PROJECT REFERENCE NO.	SHEET NO.
11C.095115	4
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

8/17/99

REVISIONS

Revision 01-09-19: Removed Sight Distance Triangles from Right of Way.

1

CHARLES D. RUPARD
RB 1086, PG 14

1+00

2+00

3+00

4+00

5+00

3

NAOMI B. SHOEMAKER
RB 84, PG 442

No Embankment Construction
Sta. 4+00 to 10+25 Lt.

Sta 0+31+.48
25.00LT

+24
39.9

+29
29.9

+52
19.8

F0.0
15.0

F0.0
15.0

F0.0
15.0

+27
16.5

F8.6
32.2

EXISTING R/W

GUARDRAIL

B.O.P. Sta. 0+00

+28
26.0

F0.0
15.0

AST

15"x18"

GRAVEL

SR 1132
UPPER CRAB ORCHARD RD.

+95
12.6

C0.0
17.0

C12.4
35.6

C23.1
51.7

C32.3
65.5

C25.4
55.1

C24.9
54.4

50'

60.00'

Sta 0+26.68
25.00RT

+00
67.4

SR 1122
ROMINGER RD.

AST

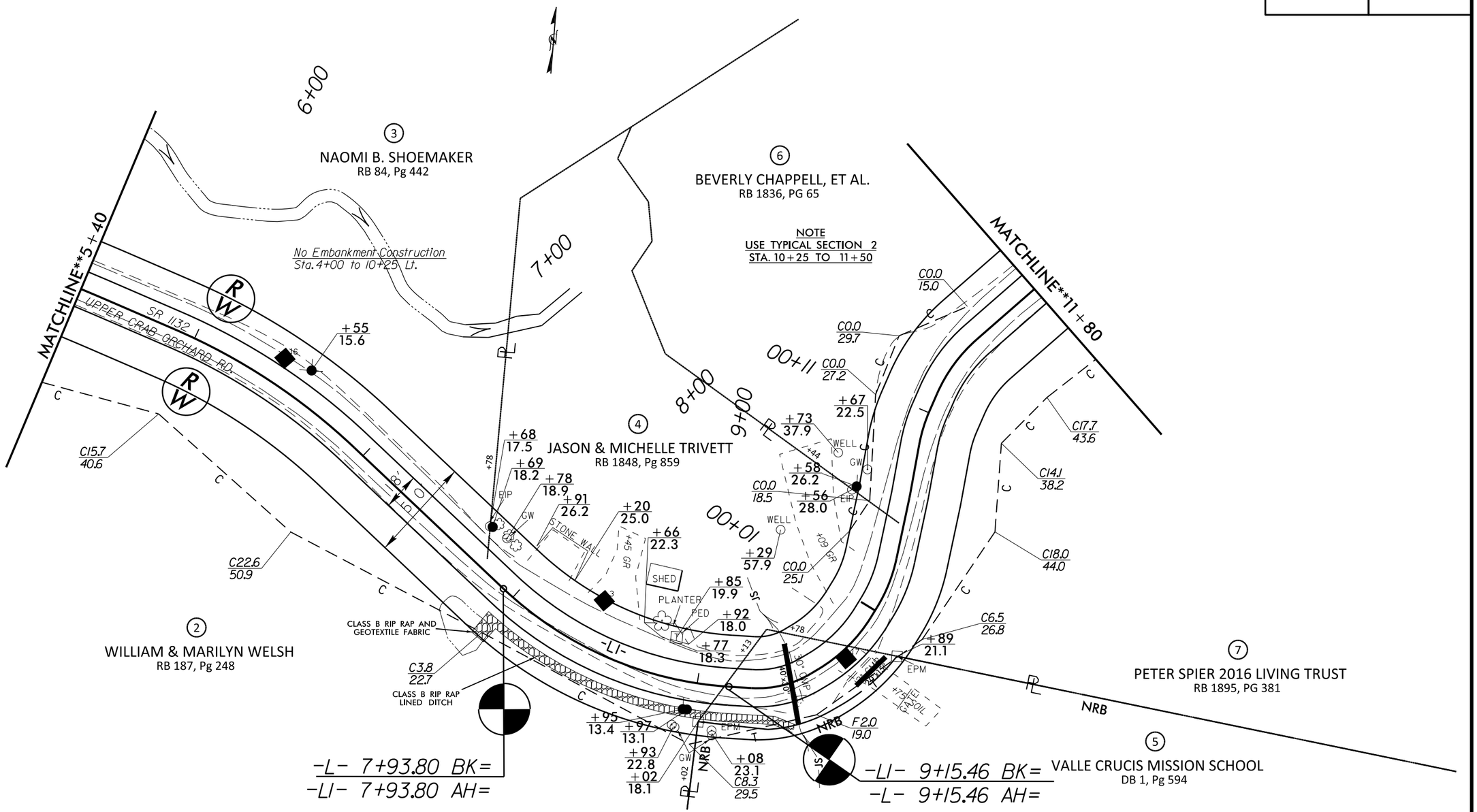
2

WILLIAM & MARILYN WELSH
RB 187, PG 248

MATCHLINE**5+40

07-AUG-2025 10:41
\4.dgn
$$$$USERNAME$$$$

PROJECT REFERENCE NO.	SHEET NO.
11C.095115	5
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

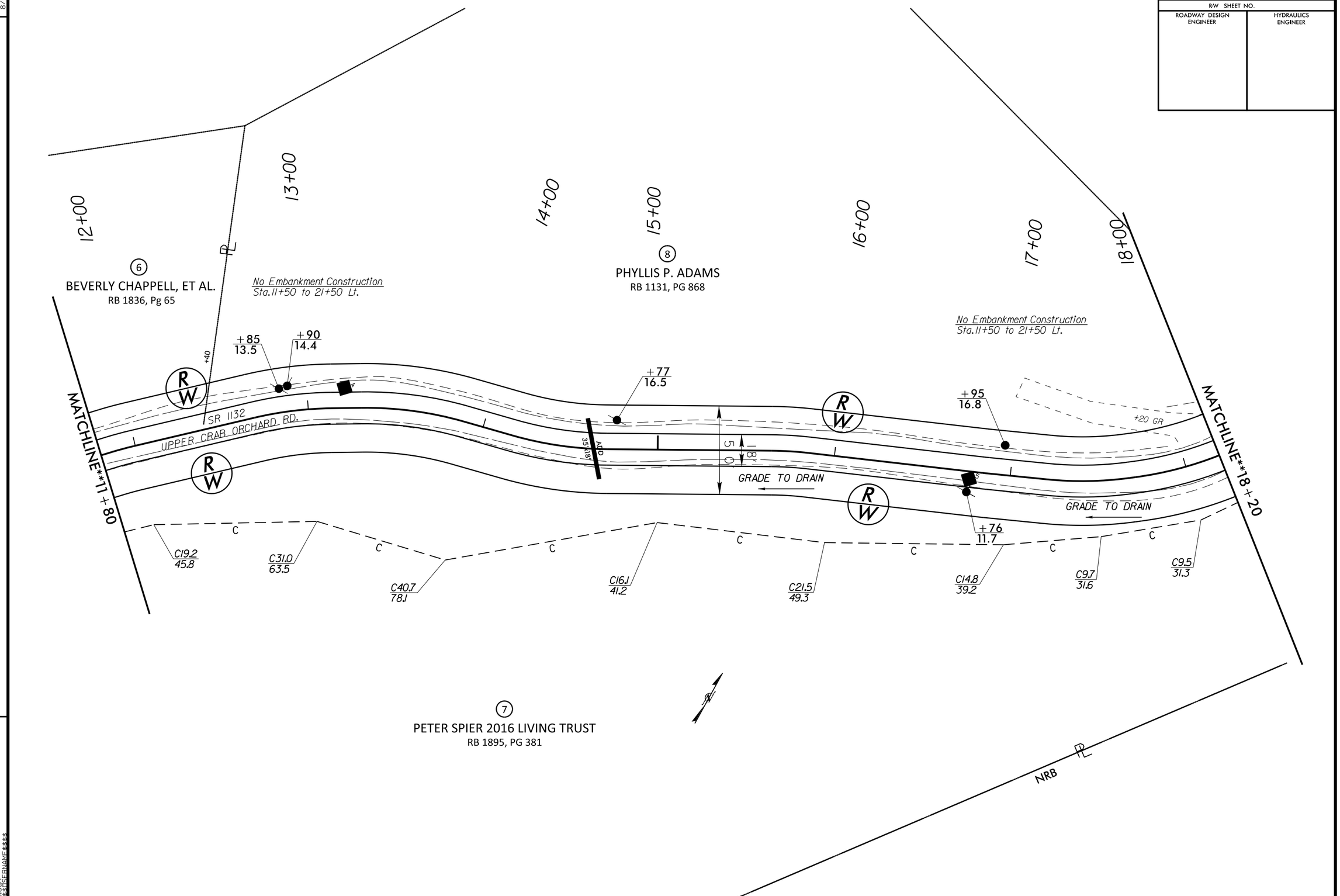


REVISIONS

8/17/99

07-AUG-2025 10:47

PROJECT REFERENCE NO.	SHEET NO.
11C.095115	6
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

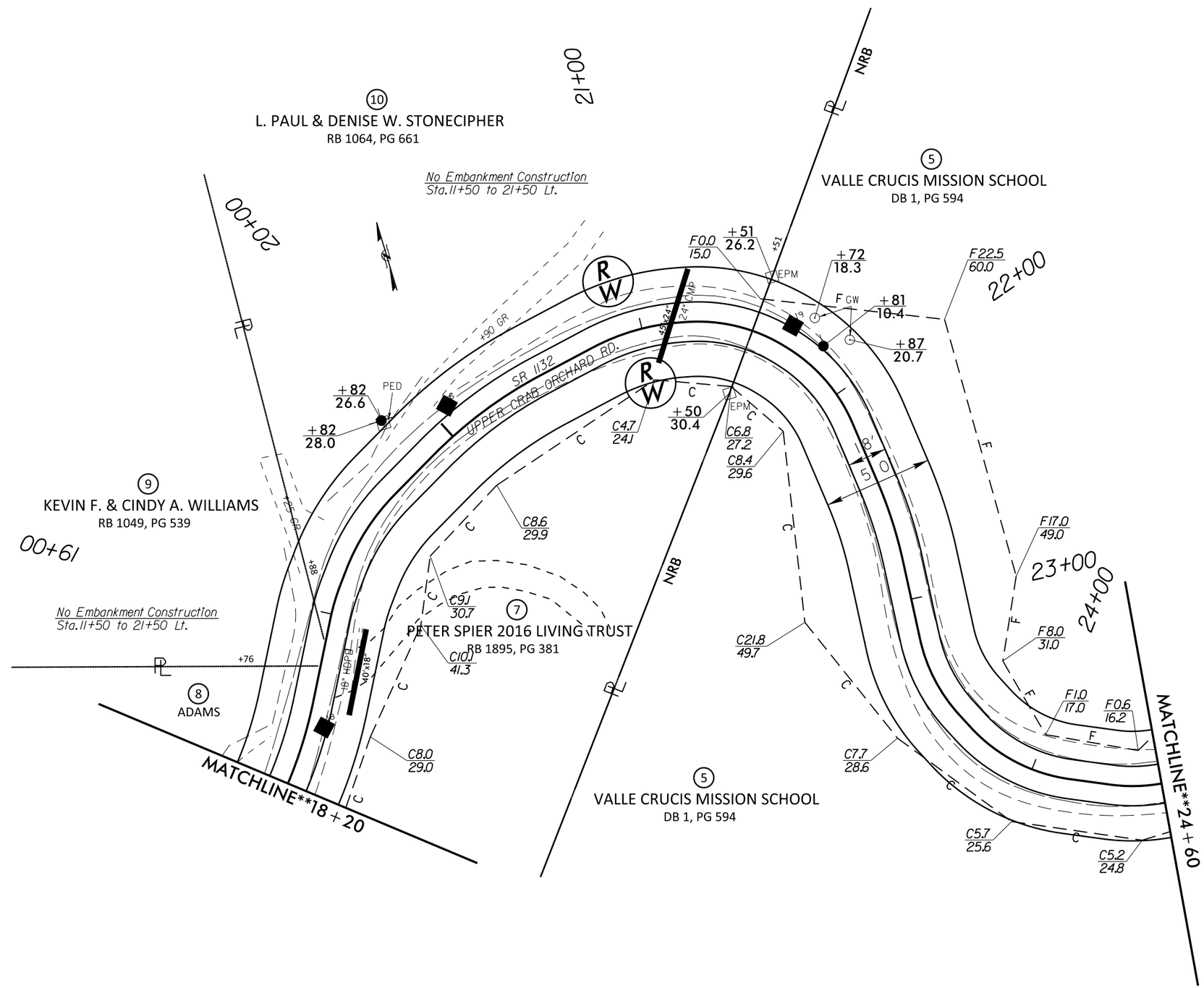


REVISIONS

8/17/99

07-AUG-2025 10:48
\6.dgn
$$$$USERNAME$$$$

PROJECT REFERENCE NO.	SHEET NO.
11C.095115	7
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

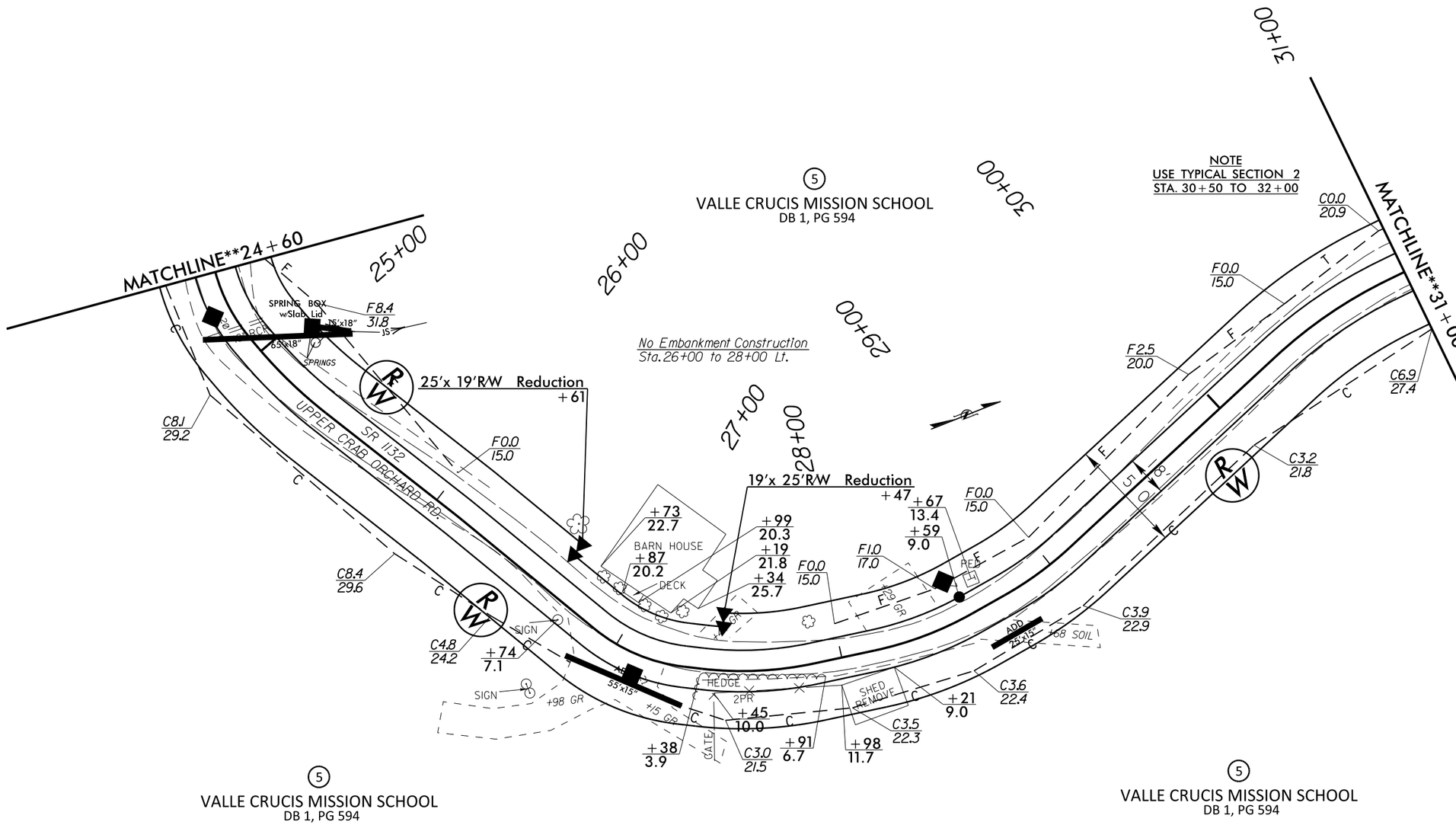


REVISIONS

8/17/99

07-AUG-2025 10:49

PROJECT REFERENCE NO.	SHEET NO.
11C.095115	8
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



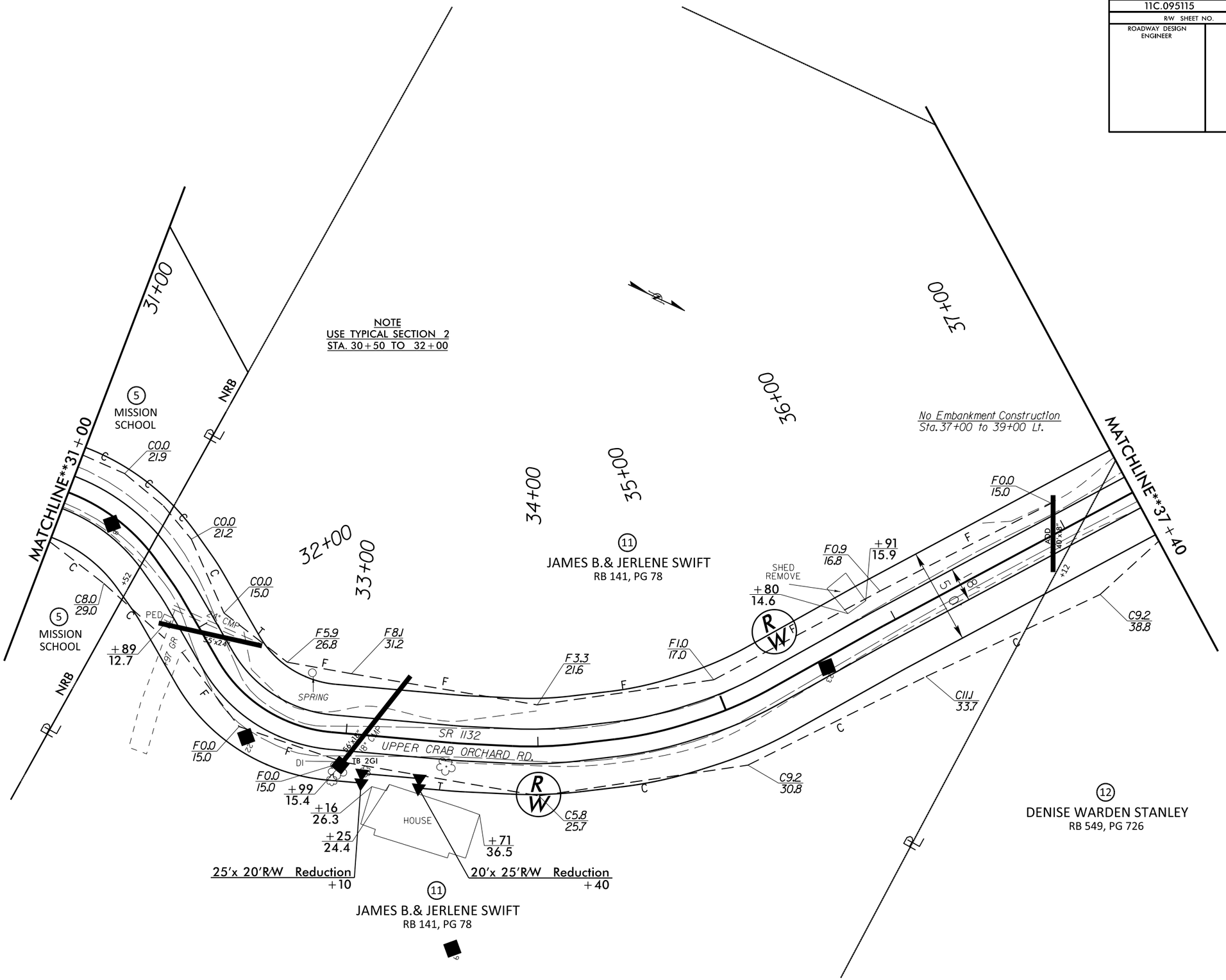
REVISIONS

Revised 3-15-19: Extended Right of Way Reduction 10.0' In Both Directions Starting From Sta.26+61 Lt.to Sta.27+47 Lt.

8/17/99

07-AUG-2025 10:51
8.dgn
$$$$USERNAME$$$$

PROJECT REFERENCE NO.	SHEET NO.
11C.095115	9
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

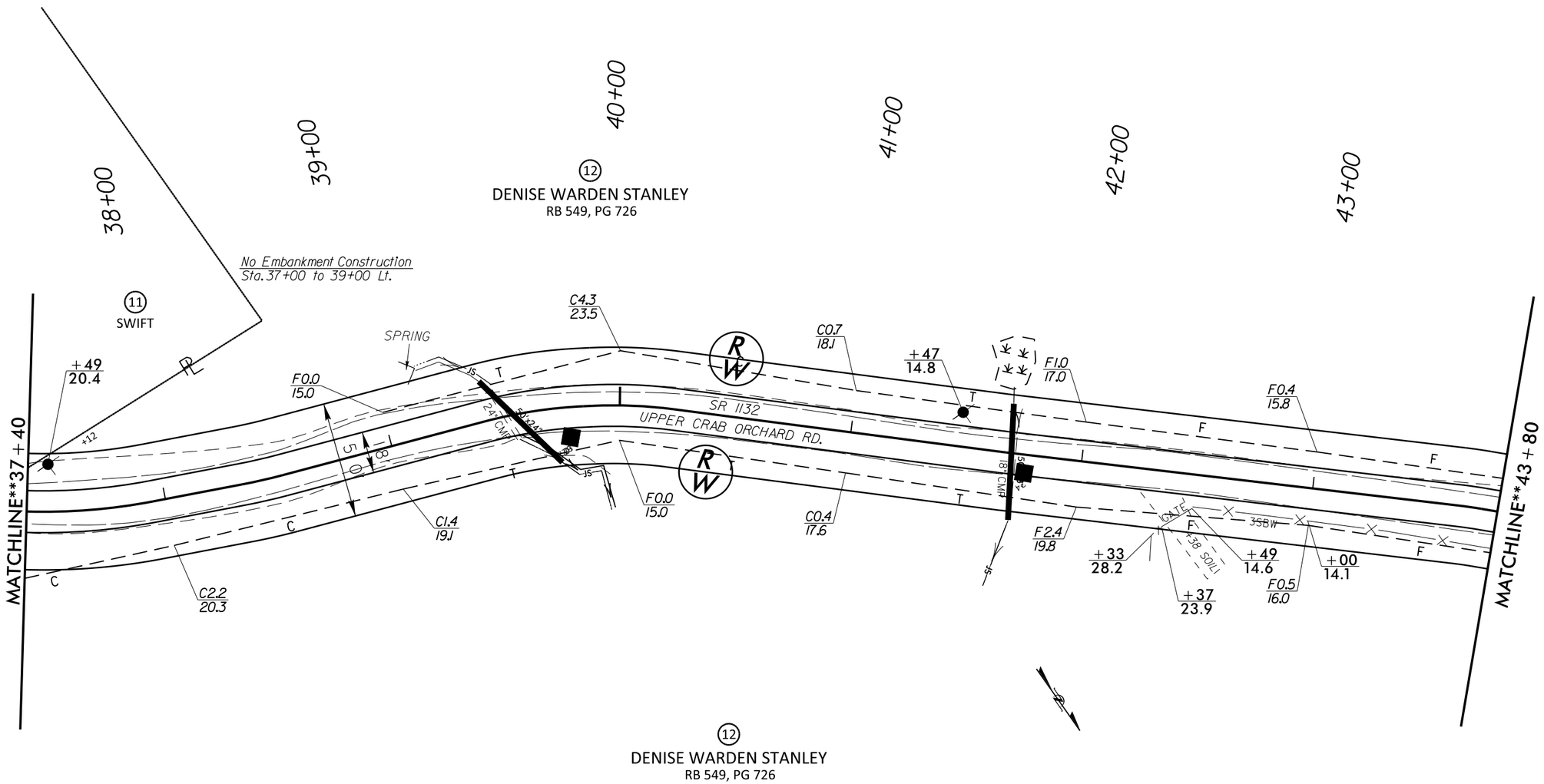


REVISIONS

8/17/99

21-SEP-2026 08:40
P:\Road_Projects\Secondary\Watauga\SR1132_Upper_Crab_Orchard\PlanSheets\9.dgn
$$$$USERNAME$$$$

PROJECT REFERENCE NO.	SHEET NO.
11C.095115	10
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



REVISIONS

8/17/99

07-AUG-2025 10:54
\10.dgn
$$$$USERNAME$$$$

PROJECT REFERENCE NO.	SHEET NO.
11C.095115	11
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

8/17/99

REVISIONS

Revised 4-12-19: Removed R/W Reduction located at stations 46+10 to 46+47 Lt. Remove Shed at same location.

46+00 47+00 48+00 49+00 50+00 45+00 44+00

MATCHLINE**43+80

MATCHLINE**50+20

CLASS B RIP RAP AND GEOTEXTILE FABRIC

72.90' N40^46'13"W

10.00' S45^21'52"W

ADD-80x24"

24" CMP

ADD 25x15"

15" CMP

+80 GR

+42 GR

+51 2SBW

+72

+41

+75 CMP

HOUSE

SHED

REMOVE SHED

BARN

GATE

PEDE

SPRING

SR 1132 UPPER CRAB ORCHARD RD.

2SBW

3SBW

JS

RW

RL

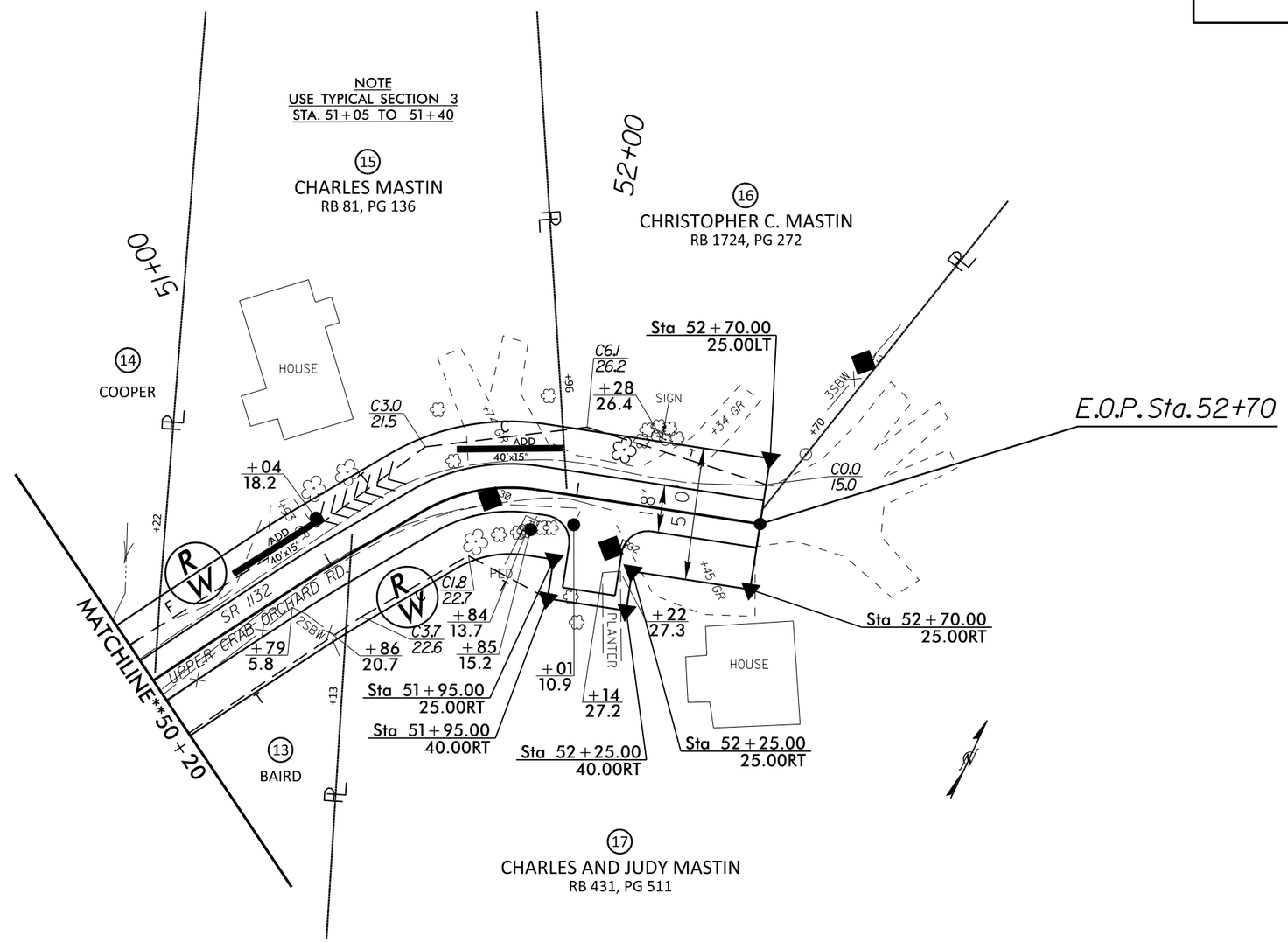
(14) MATTHEW COOPER
RB 1693, PG 254

(13) STEVE BAIRD, ET AL.
RB 532, PG 619

(12) STANLEY

| | | |

PROJECT REFERENCE NO.	SHEET NO.
11C.095115	12
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



REVISIONS

8/17/99

07-AUG-2025 10:59
\12.dgn
$$$$USERNAME$$$$

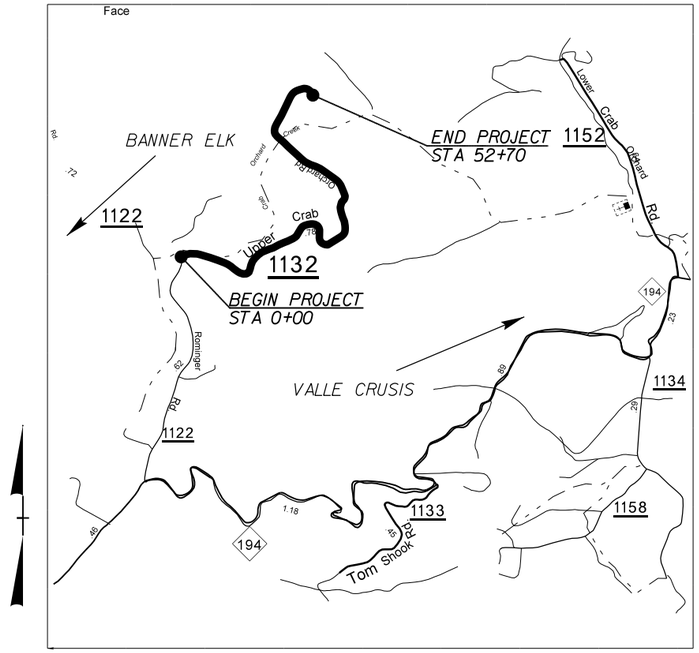
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

WATAUGA COUNTY

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	11C.095115	EC-1	21

STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION

VICINITY MAP



LOCATION: SR 1132 UPPER CRAB ORCHARD RD
FROM SR 1112 ROMINGER RD 1.0 Mi. TO DEAD END
STA 00+00 TO E.O.P. 52+70

TYPE OF WORK: GRADING, DRAINAGE, BASE AND PAVING – 1.0 MILES

BEGAN SURVEY: 08/28/18
END SURVEY: 10/25/18

EROSION AND SEDIMENT CONTROL MEASURES

Std. #	Description	Symbol
1630.03	Temporary Silt Ditch	TSD
1630.05	Temporary Diversion	TD
1605.01	Temporary Silt Fence	
1606.01	Special Sediment Control Fence	
1622.01	Temporary Berms and Slope Drains	
1630.02	Silt Basin Type B	
1633.01	Temporary Rock Silt Check Type-A	
	Temporary Rock Silt Check Type-A with Matting and Polyacrylamide (PAM)	
1633.02	Temporary Rock Silt Check Type-B	
	Wattle / Coir Fiber Wattle	EW CFW
	Wattle / Coir Fiber Wattle with Polyacrylamide (PAM)	
1634.01	Temporary Rock Sediment Dam Type-A	
1634.02	Temporary Rock Sediment Dam Type-B	
1635.01	Rock Pipe Inlet Sediment Trap Type-A	
1635.02	Rock Pipe Inlet Sediment Trap Type-B	
1630.04	Stilling Basin	
1630.06	Special Stilling Basin	
	Rock Inlet Sediment Trap:	
1632.01	Type A	A
1632.02	Type B	B
1632.03	Type C	C
	Skimmer Basin	
	Tiered Skimmer Basin	
	Infiltration Basin	

THIS PROJECT CONTAINS EROSION CONTROL PLANS FOR CLEARING AND GRUBBING PHASE OF CONSTRUCTION.

ENVIRONMENTALLY SENSITIVE AREA(S) EXIST ON THIS PROJECT

Refer To E. C. Special Provisions for Special Considerations.

REVISION:

GRAPHIC SCALE

25 0 50
PLANS

5 0 10
PROFILE (HORIZONTAL)

5 0 10
PROFILE (VERTICAL)

ROADSIDE ENVIRONMENTAL UNIT
DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY WITH THE REGULATIONS SET FORTH BY THE NCG-010000 GENERAL CONSTRUCTION PERMIT EFFECTIVE AUGUST 3, 2011 ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES DIVISION OF WATER QUALITY.

Prepared In the Office of:

DIVISION OF HIGHWAYS
DIVISION 11, DISTRICT 2 BOONE
P.O. BOX 1460, BOONE, N.C. 28607

2024 STANDARD SPECIFICATIONS

Roadway Standard Drawings

The following roadway english standards as appear in "Roadway Standard Drawings"– Roadway Design Unit – N. C. Department of Transportation – Raleigh, N. C., dated January 2012 and the latest revison thereto are applicable to this project and by reference hereby are considered a part of these plans.

1604.01	Railroad Erosion Control Detail	1632.01	Rock Inlet Sediment Trap Type A
1605.01	Temporary Silt Fence	1632.02	Rock Inlet Sediment Trap Type B
1606.01	Special Sediment Control Fence	1632.03	Rock Inlet Sediment Trap Type C
1607.01	Gravel Construction Entrance	1633.01	Temporary Rock Silt Check Type A
1622.01	Temporary Berms and Slope Drains	1633.02	Temporary Rock Silt Check Type B
1630.01	Riser Basin	1634.01	Temporary Rock Sediment Dam Type A
1630.02	Silt Basin Type B	1634.02	Temporary Rock Sediment Dam Type B
1630.03	Temporary Silt Ditch	1635.01	Rock Pipe Inlet Sediment Trap Type A
1630.04	Stilling Basin	1635.02	Rock Pipe Inlet Sediment Trap Type B
1630.05	Temporary Diversion	1640.01	Coir Fiber Baffle
1630.06	Special Stilling Basin	1645.01	Temporary Stream Crossing
1631.01	Matting Installation		

07-AUG-2025 11:12
$$$$USERNAME$$$$
EC_TSH_1.dgn

04/16/11

PROJECT REFERENCE NO.	SHEET NO.
11C.095115	1A

EROSION CONTROL & PIPE INSTALLATION SCHEDULE
TROUT BUFFER ZONE SEQUENCE
GENERAL E&SC NOTES
GROUND STABILIZATION CHART

Erosion Control Schedule and Notes

1. Generally, the order of installation of the erosion control measures will be as follows:

   A. Temporary silt basins shall be installed before clearing and grubbing begins.

   B. Silt fences and temporary silt ditches shall be installed after clearing and before grading.

   C. Temporary stone ditch checks with PAM or wattles with PAM shall be installed in all disturbed areas as soon as the disturbance begins.

   D. Final stone ditch checks or wattles shall be installed as soon as ditch line is established.

   E. Pipe outlet and inlet protection will be done as soon as the pipe is installed.

   F. Other permanent erosion control measures are to be implemented as soon as practical.

2. Temporary rock silt checks, type B will be spaced by percent grade as shown in the erosion control plan.

3. No. 5 stone, or equivalent, will be used in conjunction with the temporary rock silt checks in locations where water is leaving the project or entering a pipe.

4. All devices are to be cleaned out when half full.

5. Establish permanent vegetation per ground stabilization chart.

Notes:

For silt basin size see the attached erosion control plans.

PAM is to be placed on all Type A checks and wattles in the erosion control chain except for the final device in HWQ and Trout projects.

Wet Pipe Installation Schedule and Notes

1. Prior to installing any E&SC measures identify permit conditions and impact area limits.

2. Install erosion control devices.

3. Manage the water course. The pipe must be placed in the dry. Install dewatering measures.

4. Remove material and existing pipe while limiting, material and sediment from entering stream and escaping the project.

5. Excavation of stream channel shall not exceed 10' on either side of new pipe or culvert unless indicated on permit.

6. Per permit conditions for Corps of Engineers and the Wildlife Resources Commission, all pipes in streams 48”or greater must be buried 12” below streambed elevation. Pipes less than 48”must be buried with 20% of the diameter below streambed elevation.

7. Place the new pipe and compact backfill.

8. Install slope protection on the outlet and inlet ends of the pipe. Also complete installation of erosion control measures and perform maintenance as needed on existing measures.

9. Establish permanent vegetation per ground stabilization chart.

10. More information on wet pipe installation can be found in the BMP manual section 4.2 "Pipe & Culvert installation"

General Erosion Control Sequence & Notes for NC DOT Projects in Trout Buffer Zones

1. Prior to installing any E&SC measures identify permit conditions and impact area limits. Review trout buffer variance approval conditions for any special provisions.

2. All materials should be on the hand before work is commenced.

3. Install EC devices

4. Work within the buffer zone should be sequenced to minimize the length of time that disturbed areas are exposed. Stream bank stabilization, which includes the area from the edge of water to the top of bank, should be phased so that each day’s work is a completed work, including provision of adequate ground cover.

5. Graded slopes and fills within the trout buffer zone will within 7 calendar days of completion of any phase of grading be planted or otherwise provided with temporary or permanent ground cover, devices, or structures sufficient to restrain erosion.

6. Graded slopes and fills within the trout buffer zone (excluding road shoulders) shall be protected with rolled erosion control product, bonded fiber matrix, or flexible growth medium after seeding.

Notes:

Silt fence backed by woven wire, with a post spacing of 6 feet, shall be used instead of standard silt fence in trout buffer zone. Special sediment control fence shall be used in areas where bedrock is encountered which prohibits the proper anchoring of fabric, and in low points of the silt fence in 3-foot sections to allow for concentrated flows.

The disturbed areas within the stream buffer shall be restored to native vegetation characteristic of an undisturbed buffer to the extent practical upon completion of construction.

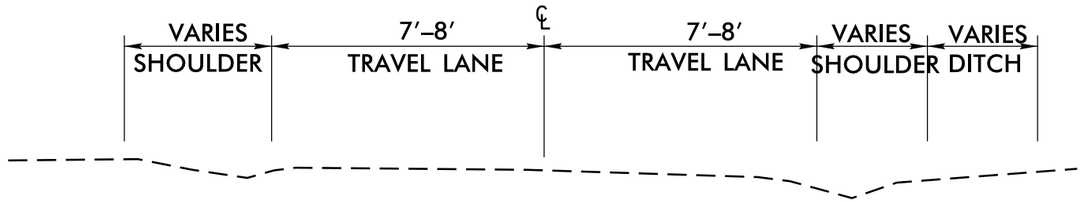
Flyrock protection such as blast mats should be provided for blasting in close proximity to streams.

PAM is to be placed on all Type A checks and wattles in the erosion control chain except for the final device in HWQ and Trout projects.

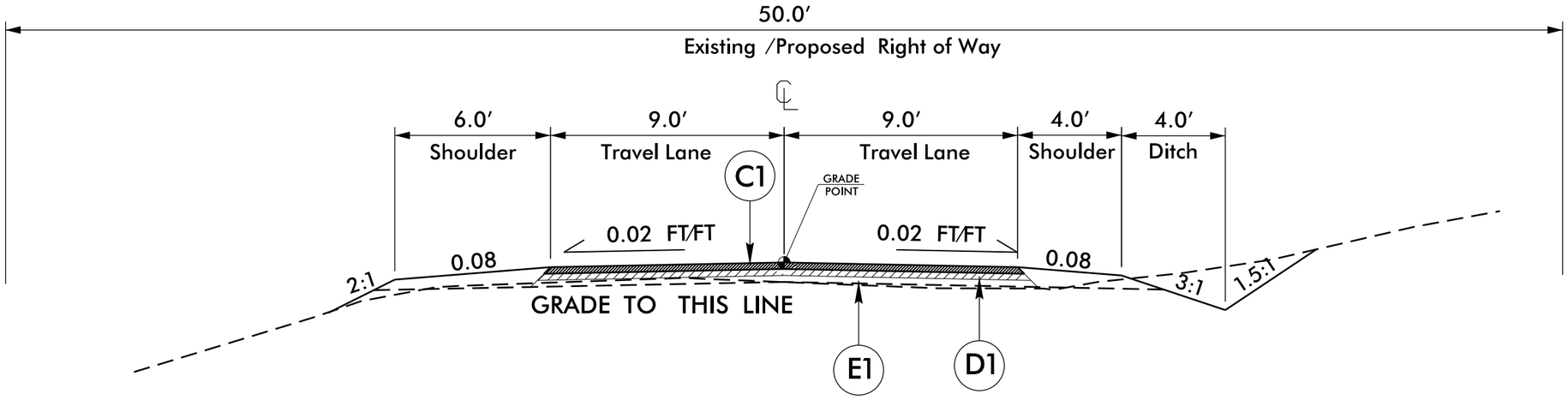
GROUND STABILIZATION CHART

Site Area Description	Stabilization Time Frame	Stabilization Time Frame Exceptions
Perimeter dikes, swales, ditches and slopes	7 days	None
High Quality Water Zones	7 days	None
Slopes steeper than 3:1	7 days	If slopes are 10 ft. 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 lenght
All other areas flatter than 4:1	14 days	None (except for perimeters and HQW zones)

PROJECT REFERENCE NO.	SHEET NO.
IIC.095115	2
ROADWAY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER



14'–16' EXISTING TYPICAL SECTION



TYPICAL SECTION NO. 1

C1	PROP. ASPHALT SURFACE TREATMENT (TRIPLE SEAL).
D1	PROP. APPROX. 3" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 342 LBS. PER SQ. YD.
E1	PROP. APPROX. 6" AGGREGATE BASE COURSE.

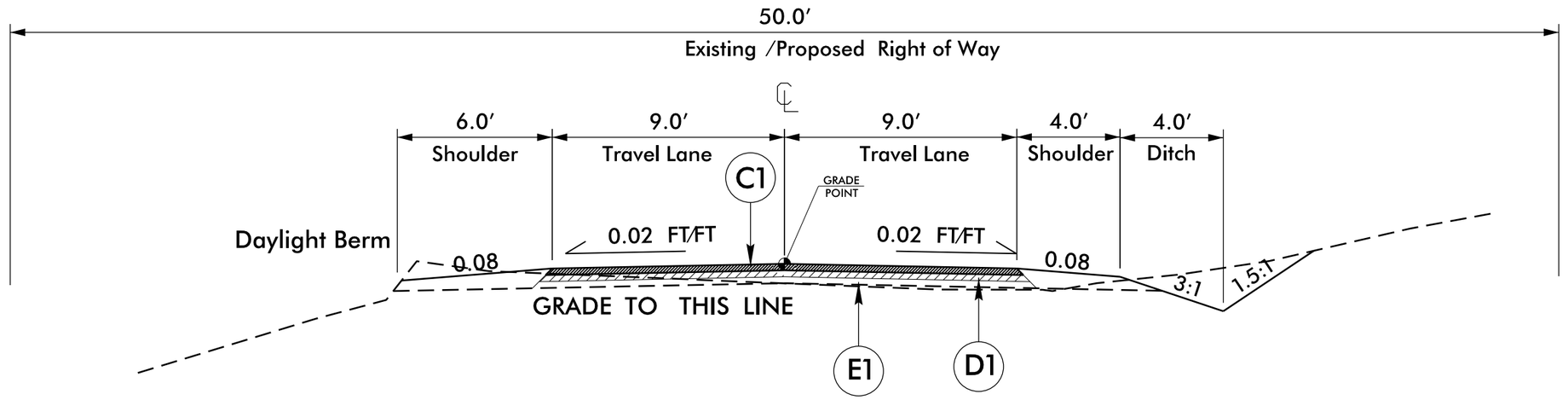
5' 0' 5'
GRAPHIC SCALE

6/2/99

07-AUG-2025 10:35
.\WA1132 tup 2.dgn
$$$$USERNAME$$$$

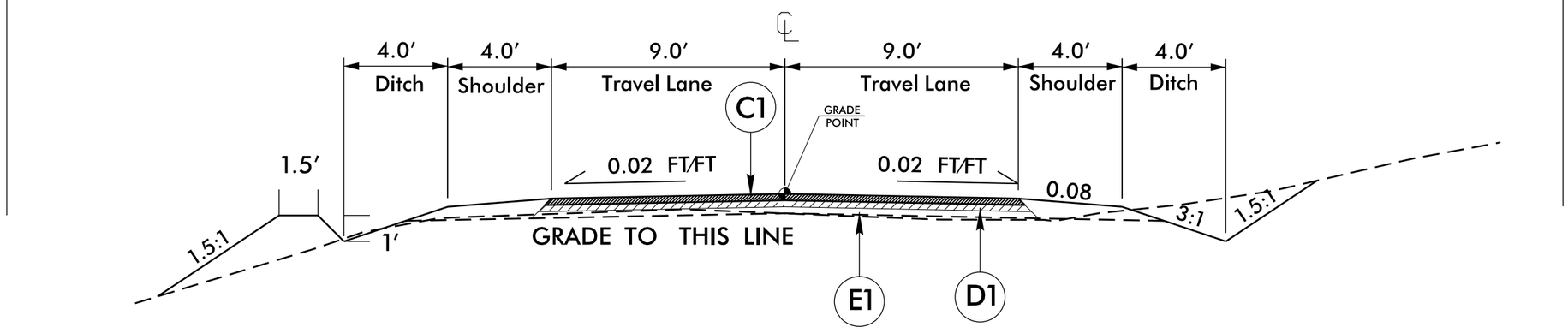
6/2/99

PROJECT REFERENCE NO.	SHEET NO.
IIC.095115	2
ROADWAY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER



TYPICAL SECTION NO. 2

Sta 10+25 to 11+50
Sta 30+50 to 32+00



TYPICAL SECTION NO. 3

Sta 51+05 to 51+40

C1	PROP. ASPHALT SURFACE TREATMENT (TRIPLE SEAL).
D1	PROP. APPROX. 3" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 342 LBS. PER SQ. YD.
E1	PROP. APPROX. 6" AGGREGATE BASE COURSE.

5' 0' 5'
GRAPHIC SCALE

07-AUG-2025 10:36
P:\Road Projects\Secondary\Watauga\SR1132_Upper_Crab_Orchard\PlanSheets\WA1132_typ_2.dgn
$$$$USERNAME$$$$

PROJECT REFERENCE NO.	SHEET NO.
11C.095115	EC-3
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SOIL STABILIZATION SUMMARY SHEET

MATTING FOR EROSION CONTROL

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
4	-L-	0+00	0+83	RT	70
4	-L-	0+83	4+05	RT	225
5	-L-	7+35	9+16	RT	50
7	-L-	18+91	21+09	RT	140
8	-L-	22+60	24+86	RT	185
9	-L-	33+03	9+16	RT	165
10	-L-	39+06	41+00	RT	145
10	-L-	39+00	41+69	LT	165
11	-L-	46+89	49+71	LT	205
				SUBTOTAL	1350
MISCELLANEOUS MATTING TO BE INSTALLED AS DIRECTED BY THE ENGINEER					
				TOTAL	1350
				SAY	1350

PERMANENT SOIL REINFORCEMENT MAT

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
5	-L-	9+16	13+83	RT	305
9	-L-	33+03	36+88	RT	280
10	-L-	36+88	39+60	RT	215
11	-L-	44+41	46+30	RT	130
11	-L-	45+42	46+52	LT	140
			SUBTOTAL		1070
		ADDITIONAL PSRM TO BE INSTALLED			
				TOTAL	1070
				SAY	1070

PROJECT REFERENCE NO.	SHEET NO.
11C.095115	EC-3B
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SOIL STABILIZATION TIMEFRAMES

SITE DESCRIPTION	STABILIZATION TIME	TIMEFRAME EXCEPTIONS
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.

D11CAD-224780

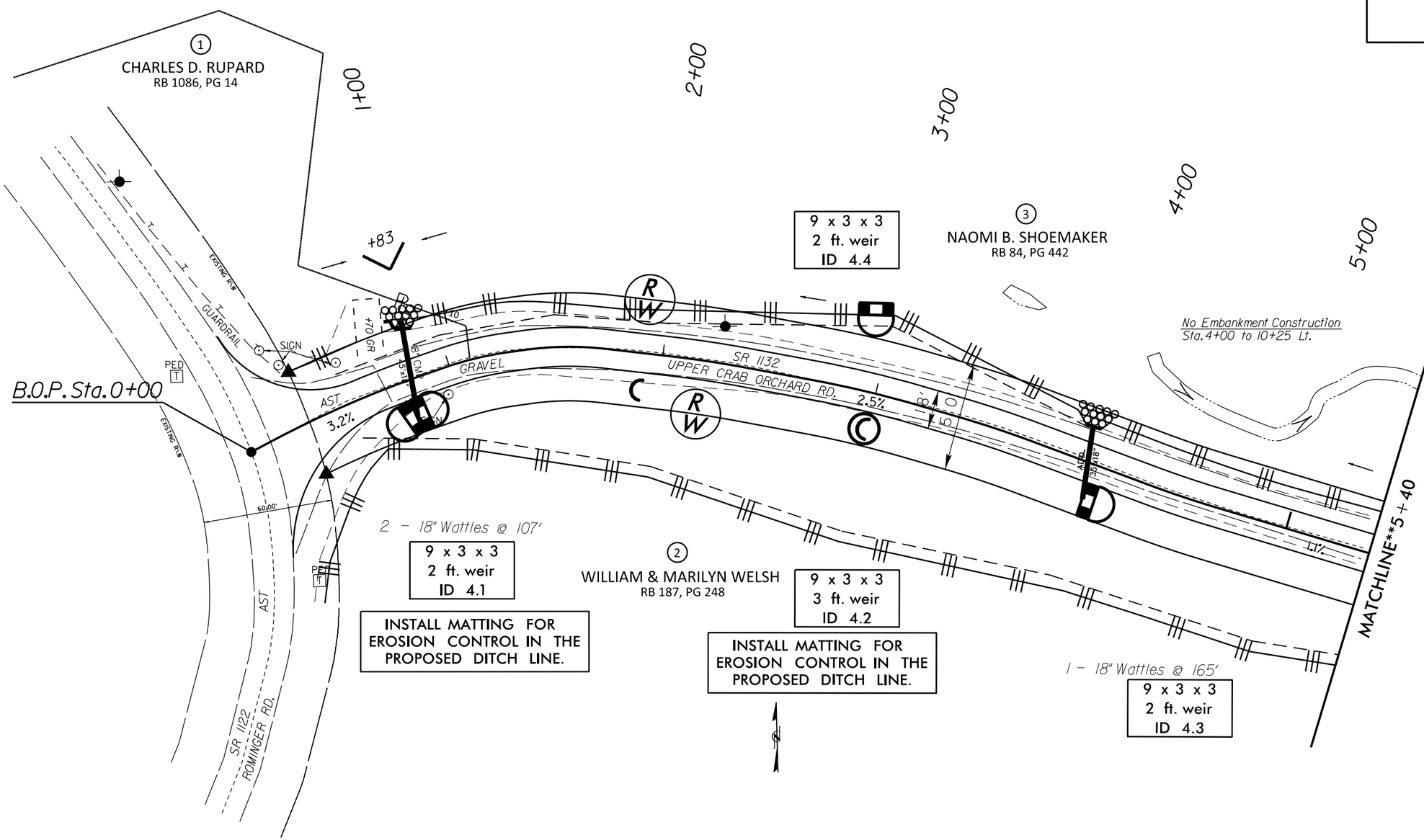
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PROJECT NO.	SHEET NO.
11C.095115	3-C

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

		NEW PIPES									EXISTING PIPES											
		TYPE B DRAINAGE PIPE (RCP, CSP, CAAP, HDDE OR PVC) (UNLESS NOTED OTHERWISE)																				
SIZE	LOCATION (LT, RT, OR CL)'	12"	15"	18"	24"	30"	36"	42"	48"		12"	15"	18"	24"	30"	36"	42"	48"	PIPE REMOVAL	D.I. STD. 840.14 OR STD. 840.15	D.I. FRAME AND GRATE STD. 840.16	J.B. STD. 840.31 OR 840.32	REMARKS
TYPE																						
STATION																						
0+81	CL			45'									38'						0'				REPLACE
4+03	CL			35'															0'				ADD
																			0'				
																			0'				
9+45	CL					40'									29'				0'				REPLACE WET PIPE
																			0'				
9+77	RT		20'								20'								20'				REPLACE
																			0'				
14+64	CL			35'															0'				ADD
18+78	RT			40'									40'						0'				REPLACE
21+13	CL				45'									34'					0'				REPLACE
																			0'				
24+91	CL			65'									27'						27'				REPLACE
25+09	LT			15'															0'			1	ADD PIPE AND SPRING BOX W SLAB LID
27+09	RT		55'																0'				ADD
																			0'				
28+73	RT		25'																0'				ADD
																			0'				
31+93	CL													50'					50'				REMOVE
																			0'				
32+03	CL				55'														0'				ADD
																			0'				
32+98	LT	60'																	0'				
																			0'				
32+98	RT																		0'	1	1		TRAFFIC BEARING WITH CONC APRON
33+09	CL			56'									40'						0'				REPLACE
																			0'				
36+93	CL			40'															0'				ADD
																			0'				
39+53	CL				50'									24'					0'				REPLACE WET PIPE
																			0'				
41+70	CL			50'									36'						0'				REPLACE WET PIPE
																			0'				
44+34	CL																	50'	0'				DO NOT DISTURB 112"x75" CMAP
																			0'				
44+47	CL																	50'	0'				DO NOT DISTURB 112"x75" CMAP
																			0'				
44+91	LT				60'														0'				ADD WET PIPE
																			0'				
45+42	LT		25'																0'				ADD
																			0'				
46+90	CL				65'									40'					0'				REPLACE WET PIPE
																			0'				
47+04	LT		41'									41'							0'				REPLACE
48+47	LT		20'																0'				ADD
49+69	CL						60'									45'			0'				REPLACE WET PIPE
																			0'				
50+87	LT		40'																0'				ADD
																			0'				
51+75	LT		40'																0'				ADD
																			0'				
SHEET TOTALS		60	266	381	275	40	60	0	0	**1082**	20	41	181	148	29	45	0	100	**97**	1	1	1	

PROJECT REFERENCE NO.	SHEET NO.
11C.095115	EC4
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

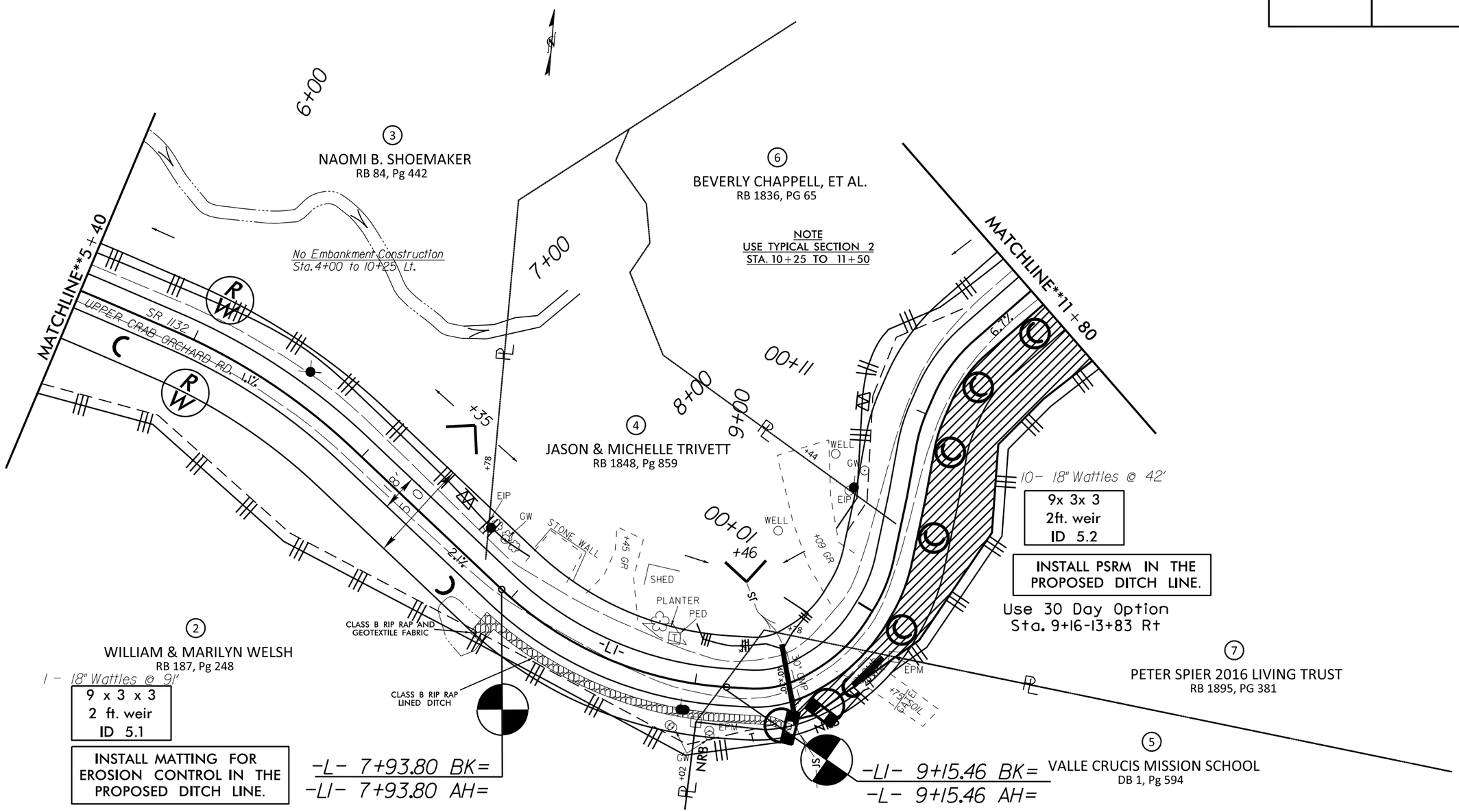


REVISIONS

8/17/99

26-AUG-2025 14:03
P:\Road_Projects\Secondary\Watauga\SR1132_Upper_Crab_Orchard\EC Work\Plan Sheets\EC-4.dgn
$$$$USERNAME$$$$

PROJECT REFERENCE NO.	SHEET NO.
11C.095115	EC5
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

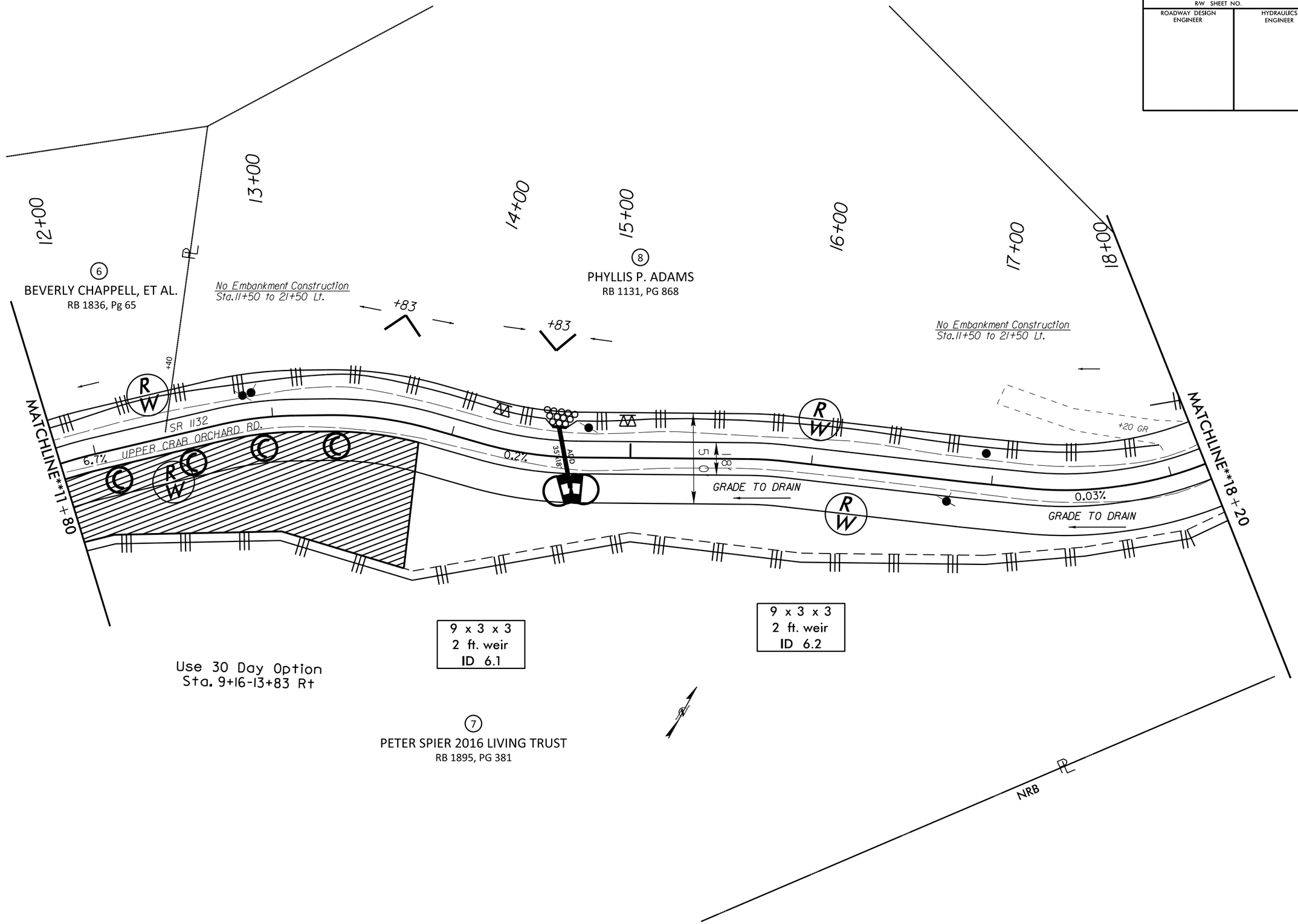


REVISIONS

8/17/99

26-AUG-2025 14:08
P:\Road_Projects\Secondary\Watauga\SR1132_Upper_Crab_Orchard\EC Work\Plan Sheets\EC-5.dgn
$$$$USERNAME$$$$

PROJECT REFERENCE NO.	SHEET NO.
11C.095115	EC6
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



REVISIONS

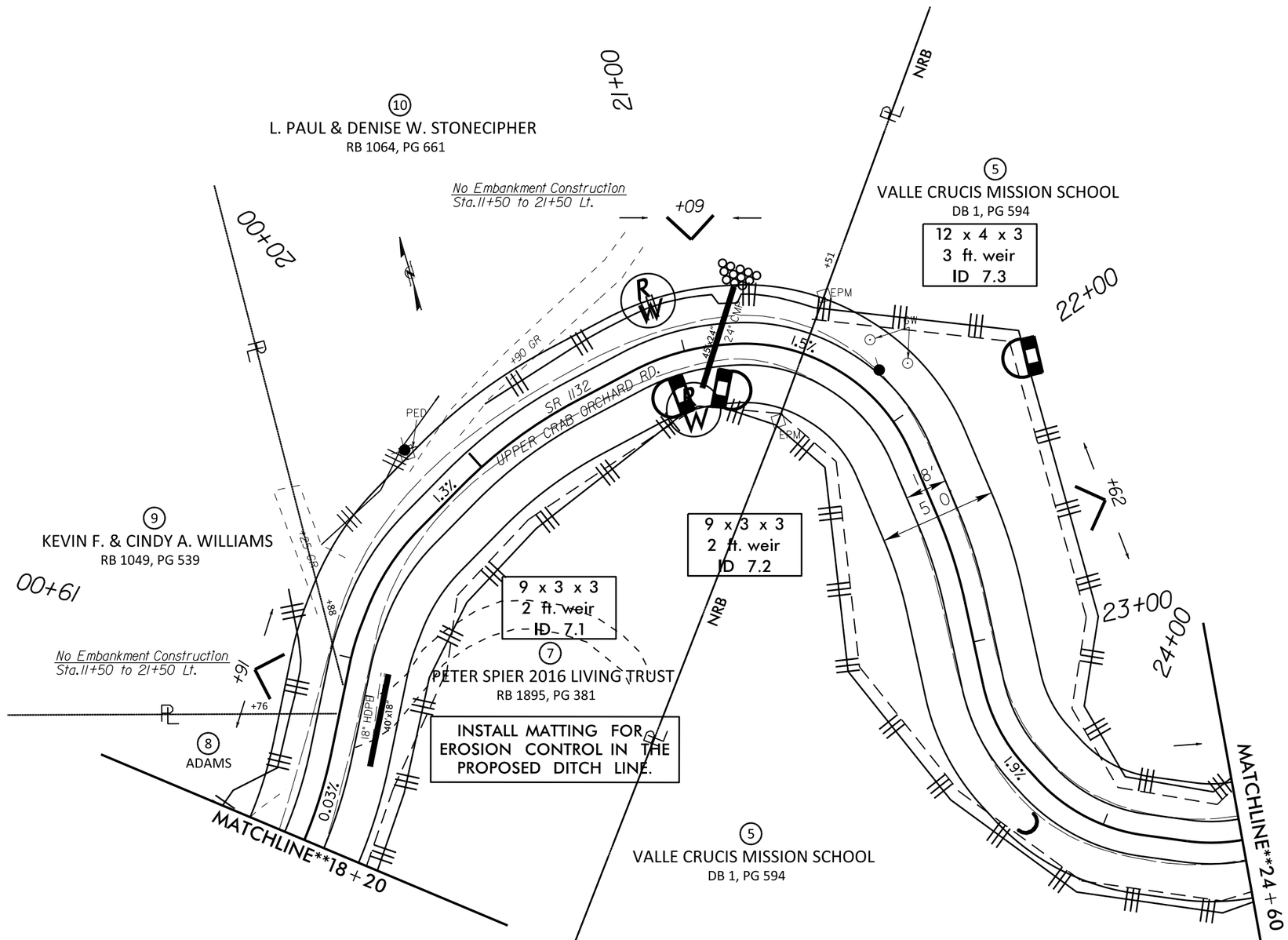
8/17/99

26-AUG-2025 14:09
P:\Road_Projects\Secondary\Watauga\SR1132_Upper_Crab_Orchard\EC Work\Plan Sheets\EC-6.dgn
$$$$USERNAME$$$$

PROJECT REFERENCE NO.	SHEET NO.
11C.095115	EC7
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

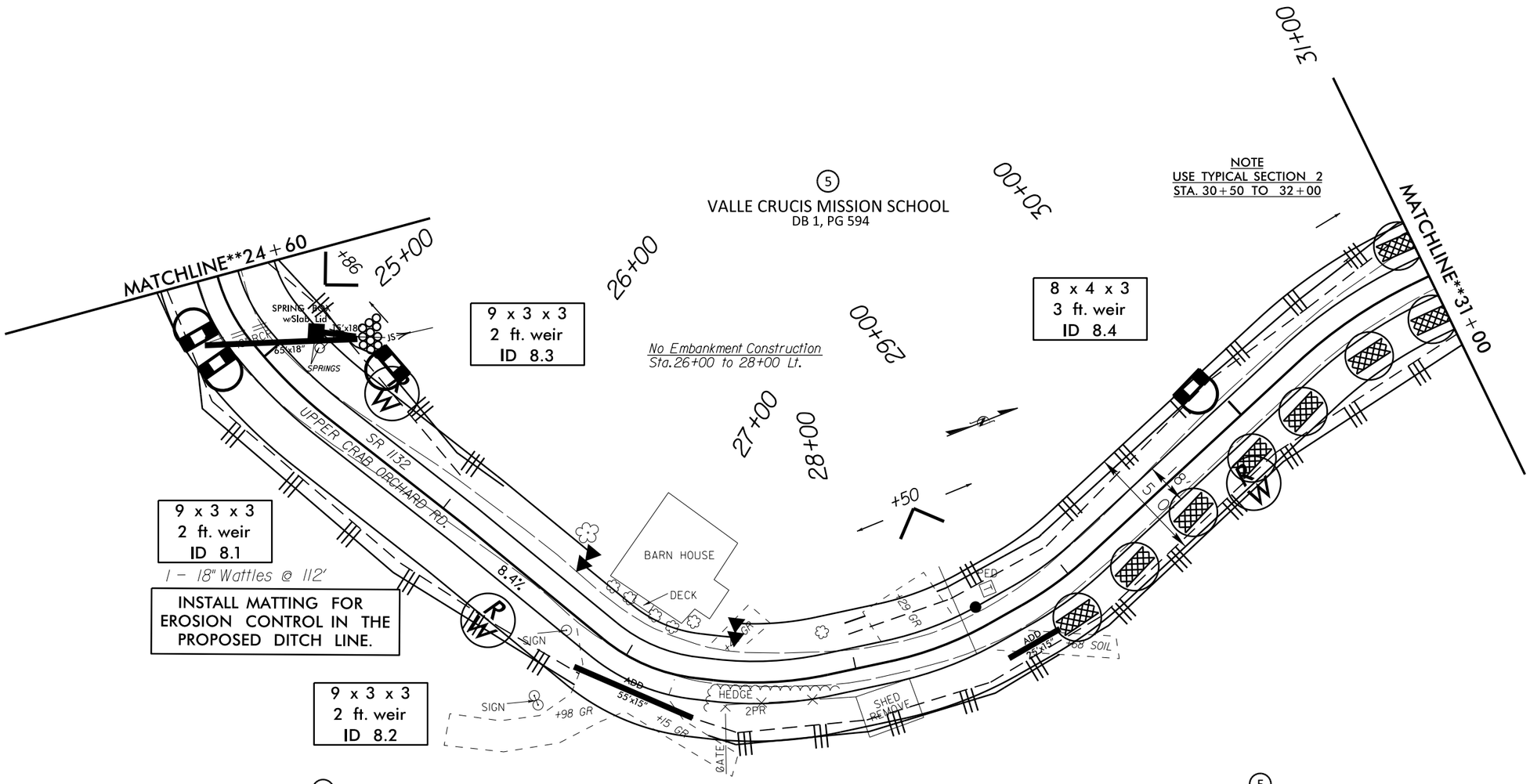
8/17/99

REVISIONS



26-AUG-2025 14:13
C:\Projects\Secondary\Watauga\SR1132_Upper_Crab_Orchard\EC Work\Plan Sheets\EC-7.dgn
$$$$USERNAME$$$$

PROJECT REFERENCE NO.	SHEET NO.
11C.095115	EC8
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

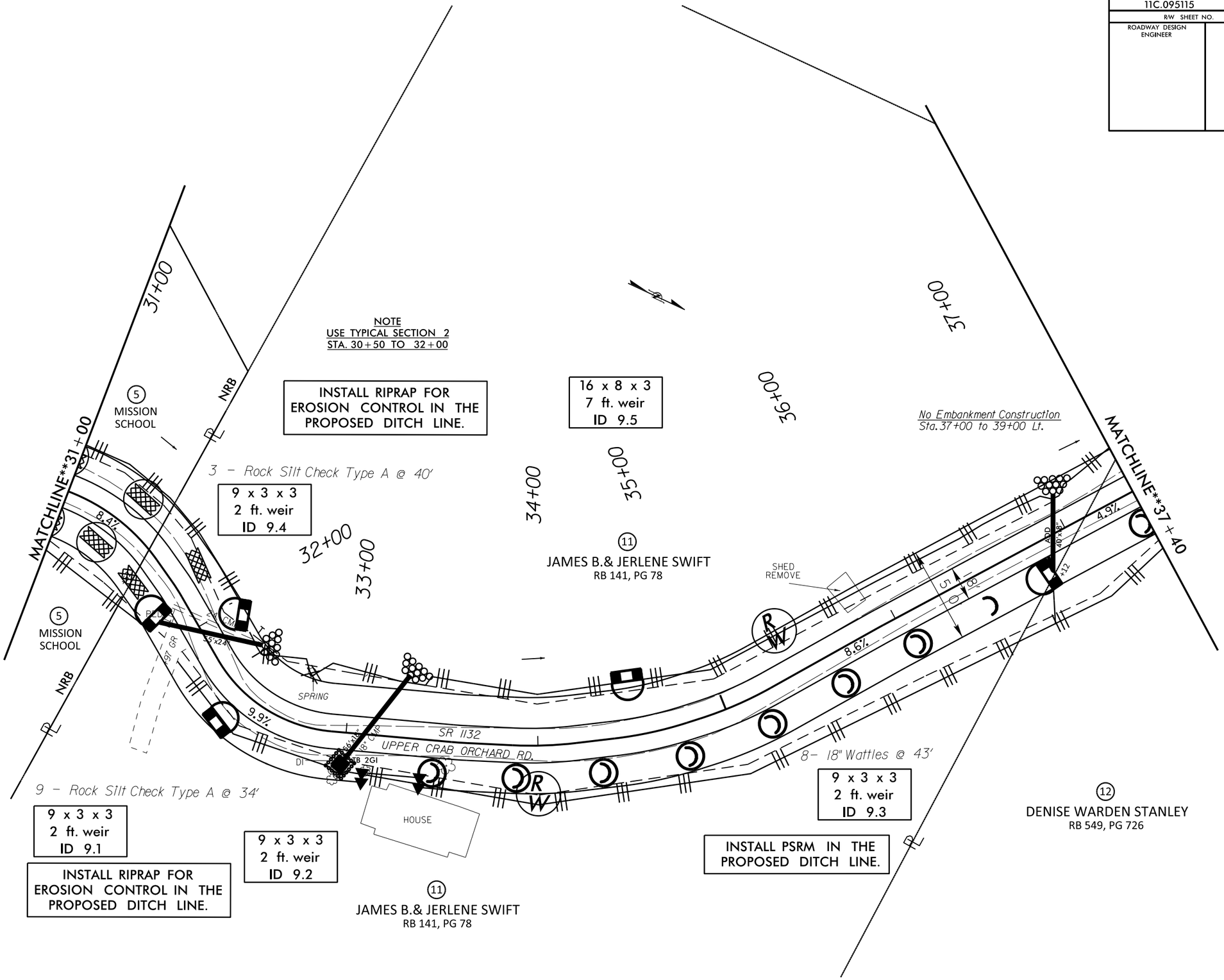


REVISIONS

8/17/99

26-AUG-2025 14:12
P:\Road_Projects\Secondary\Watauga\SR1132_Upper_Crab_Orchard\EC Work\Plan Sheets\EC-8.dgn
$$$$USERNAME$$$$

PROJECT REFERENCE NO.	SHEET NO.
11C.095115	EC9
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

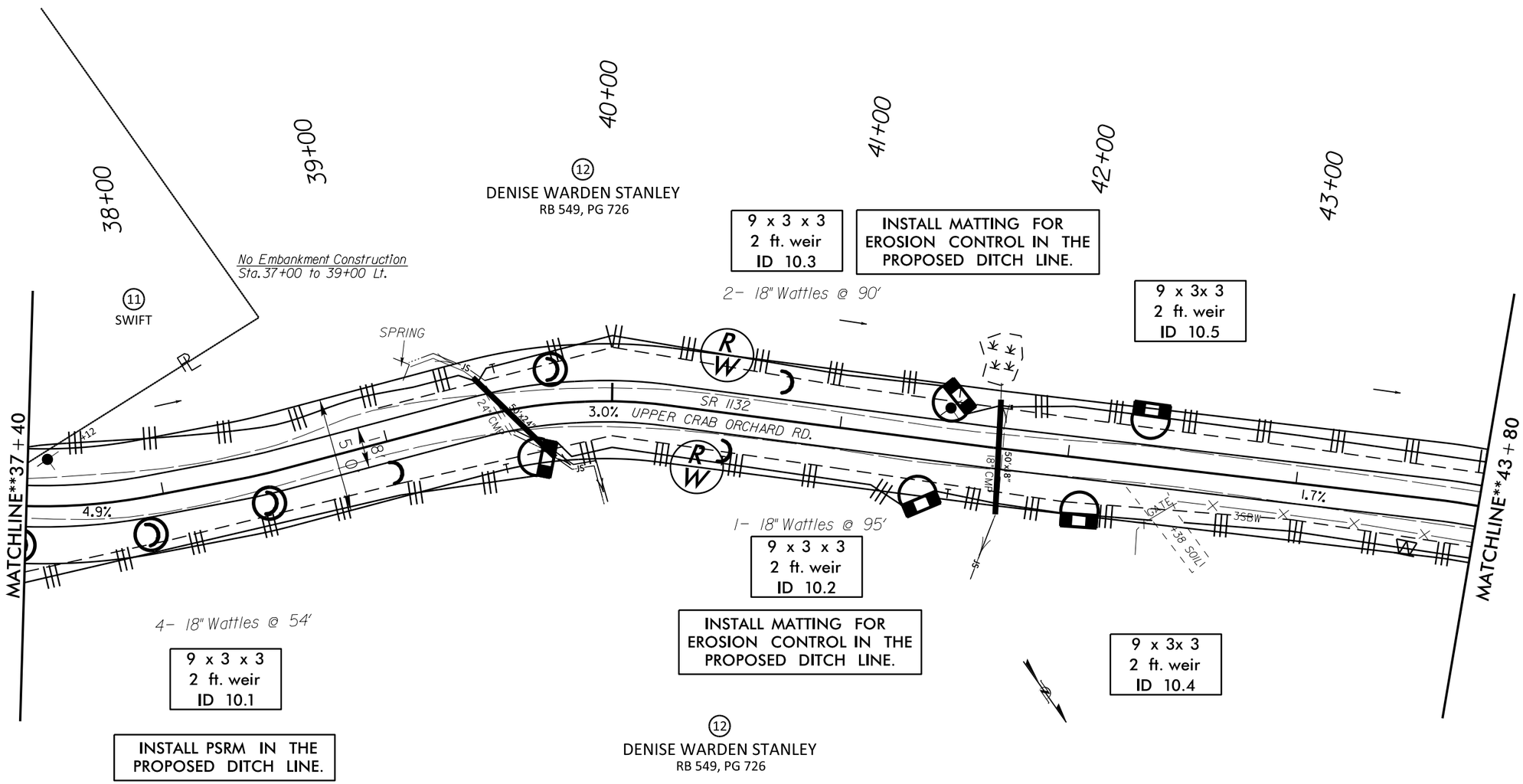


REVISIONS

8/17/99

21-SEP-2026 08:55
P:\Road Projects\Secondary\Watauga\SR1132_Upper_Crab_Orchard\EC Work\Plan Sheets\EC-9.dgn
$$$$USERNAME$$$$

PROJECT REFERENCE NO.	SHEET NO.
11C.095115	EC10
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



REVISIONS

8/17/99

26-AUG-2025 14:16
P:\Road_Projects\Secondary\Watauga\SR1132_Upper_Crab_Orchard\EC Work\Plan Sheets\EC-10.dgn
$$$$USERNAME$$$$

PROJECT REFERENCE NO.	SHEET NO.
11C.095115	EC11
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

8/17/99

REVISIONS

9 x 3 x 3
2 ft. weir
ID 11.6

9 x 3 x 3
2 ft. weir
ID 11.7

INSTALL PSRM IN THE PROPOSED DITCH LINE.

9 x 3 x 3
2 ft. weir
ID 11.8

INSTALL MATTING FOR EROSION CONTROL IN THE PROPOSED DITCH LINE.

9 x 3 x 3
2 ft. weir
ID 11.9

9 x 3 x 3
2 ft. weir
ID 11.1

INSTALL PSRM IN THE PROPOSED DITCH LINE.

9 x 3 x 3
2 ft. weir
ID 11.2

9 x 3 x 3
2 ft. weir
ID 11.3

9 x 3 x 3
2 ft. weir
ID 11.4

9 x 3 x 3
2 ft. weir
ID 11.5

45+00
46+00
47+00
48+00
49+00
50+00
MATCHLINE**43+80
MATCHLINE**50+20
44+00

2 - 18" Wattles @ 37'
1 - 18" Wattles @ 141'
3 - 18" Wattles @ 47'

CLASS B RIP RAP AND GEOTEXTILE FABRIC

SR 1132
UPPER CRAB ORCHARD RD.

5.8%
2.3%
1.7%
3.4%

HOUSE
SHED
BARN
GATE
SPRING

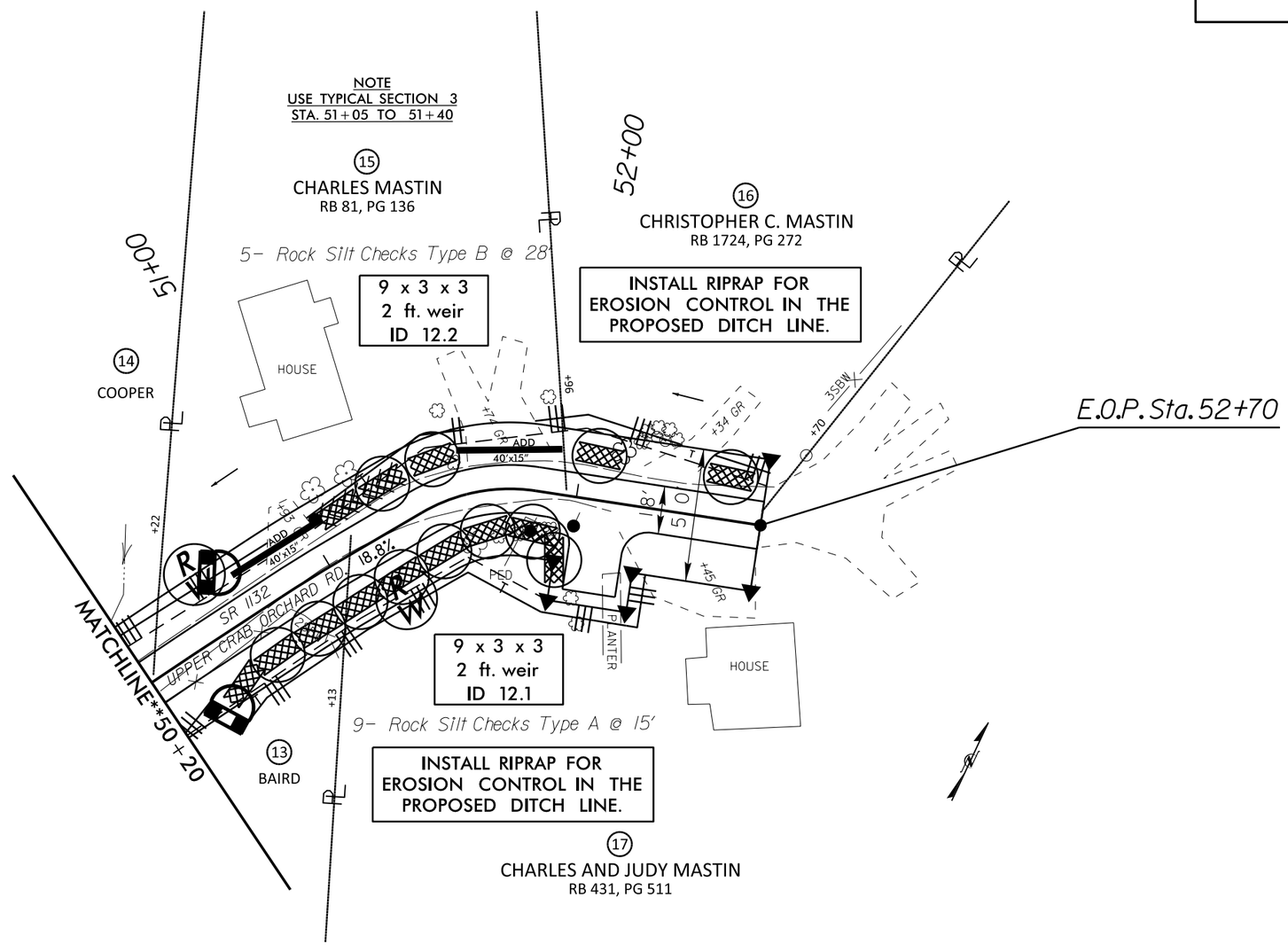
(14) MATTHEW COOPER
RB 1693, PG 254

(13) STEVE BAIRD, ET AL.
RB 532, PG 619

(12) STANLEY

26-AUG-2025 14:18
P:\Roads\Projects\Secondary\Watauga\SR1132_Upper_Crab_Orchard\EC Work\Plan Sheets\EC-11.dgn
$$$$USERNAME$$$$

PROJECT REFERENCE NO.	SHEET NO.
11C.095115	EC12
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

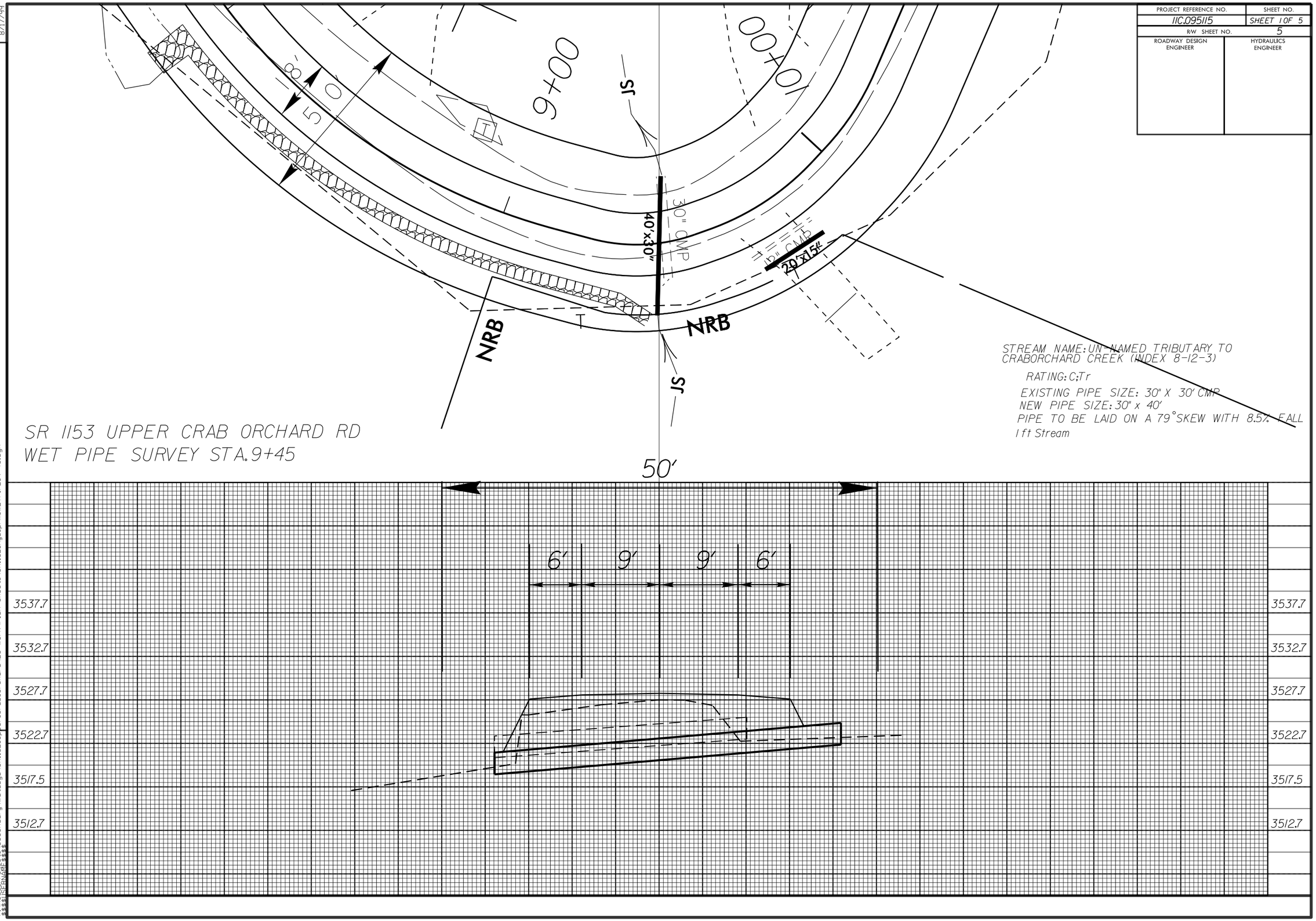


REVISIONS

8/17/99

26-AUG-2025 14:21
P:\Road_Projects\Secondary\Watauga\SR1132_Upper_Crab_Orchard\EC Work\Plan Sheets\EC-12.dgn
$$$$USERNAME$$$$

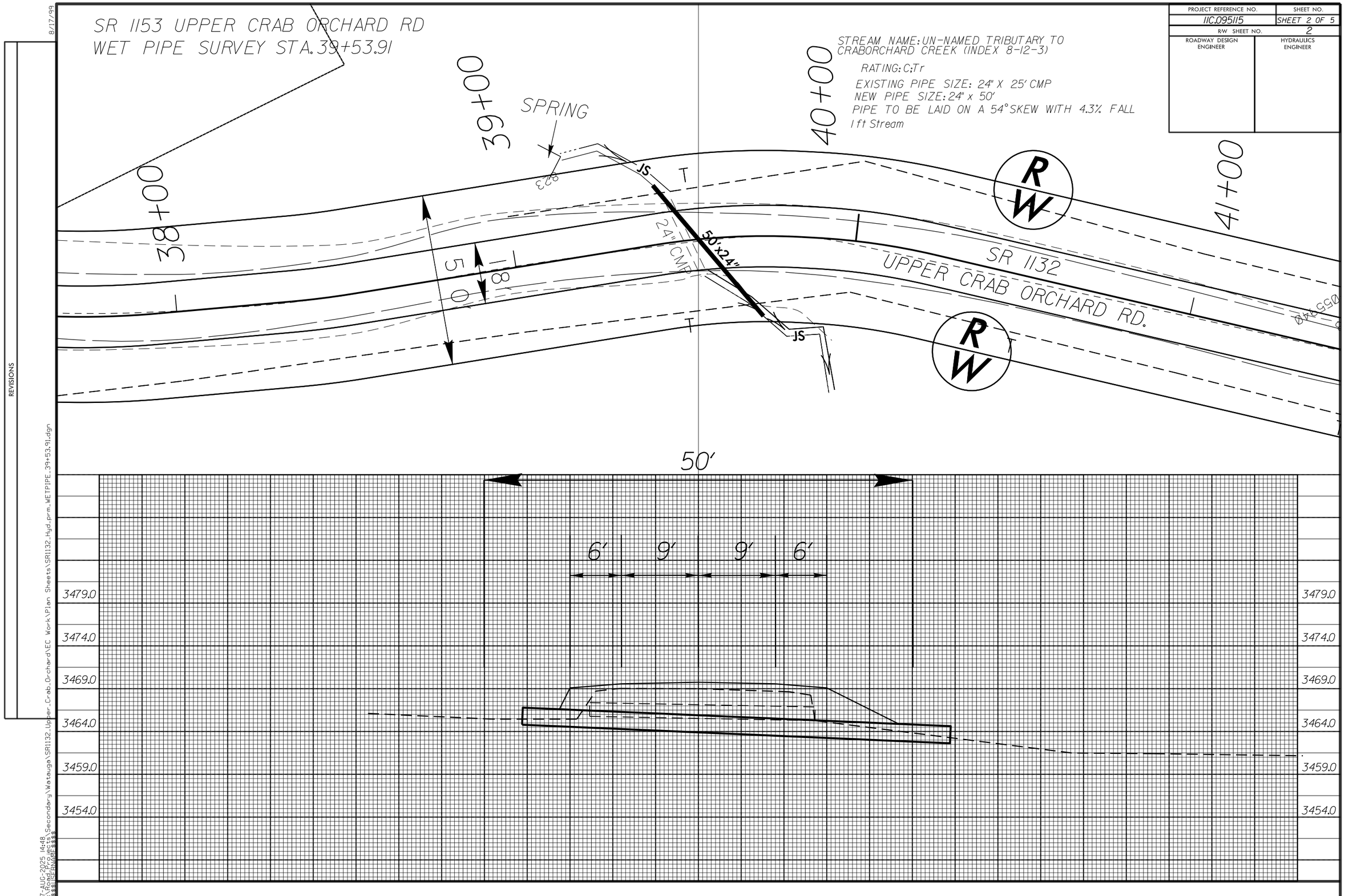
PROJECT REFERENCE NO.	SHEET NO.
11C.095115	SHEET 1 OF 5
R/W SHEET NO.	5
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



REVISIONS

8/17/99

07-AUG-2025 14:39
P:\Road_Projects\Secondary\Watauga\SR1132_Upper_Crab_Orchard\EC Work\Plan Sheets\SR1132_Hyd_prm_WETPIPE_9+45.dgn
$$$$USERNAME$$$$



REVISIONS

8/17/99

07-AUG-2025 14:48
P:\Road Projects\Secondary\Watauga\SR1132_Upper_Crab_Orchard\EC Work\Plan Sheets\SR1132_Hyd_prm_WETPIPE_39+53.91.dgn
$$$$USERNAME$$$$

8/17/99

REVISIONS

07-AUG-2025 14:50
C:\Projects\Secondary\Watauga\SR1132_Upper_Crab_Orchard\EC Work\Plan Sheets\SR1132_Hyd_prm_WETPIPE_41+70.68.dgn
$$$$USERNAME$$$$

SR 1153 UPPER CRAB ORCHARD RD
WET PIPE SURVEY STA. 41+70.68

PROJECT REFERENCE NO.	SHEET NO.
11C.095115	SHEET 3 OF 5
R/W SHEET NO.	2
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

STREAM NAME: UN-NAMED TRIBUTARY TO CRABORCHARD CREEK (INDEX 8-12-3)

RATING: C;Tr

EXISTING PIPE SIZE: 18" X 36' CMP

NEW PIPE SIZE: 18" x 50'

PIPE TO BE LAID ON A 86°SKEW WITH 5.5% FALL

1ft Stream

40+00 41+00 42+00 43+00

SR 1132

UPPER CRAB ORCHARD RD.

50'

8'

18" CMP

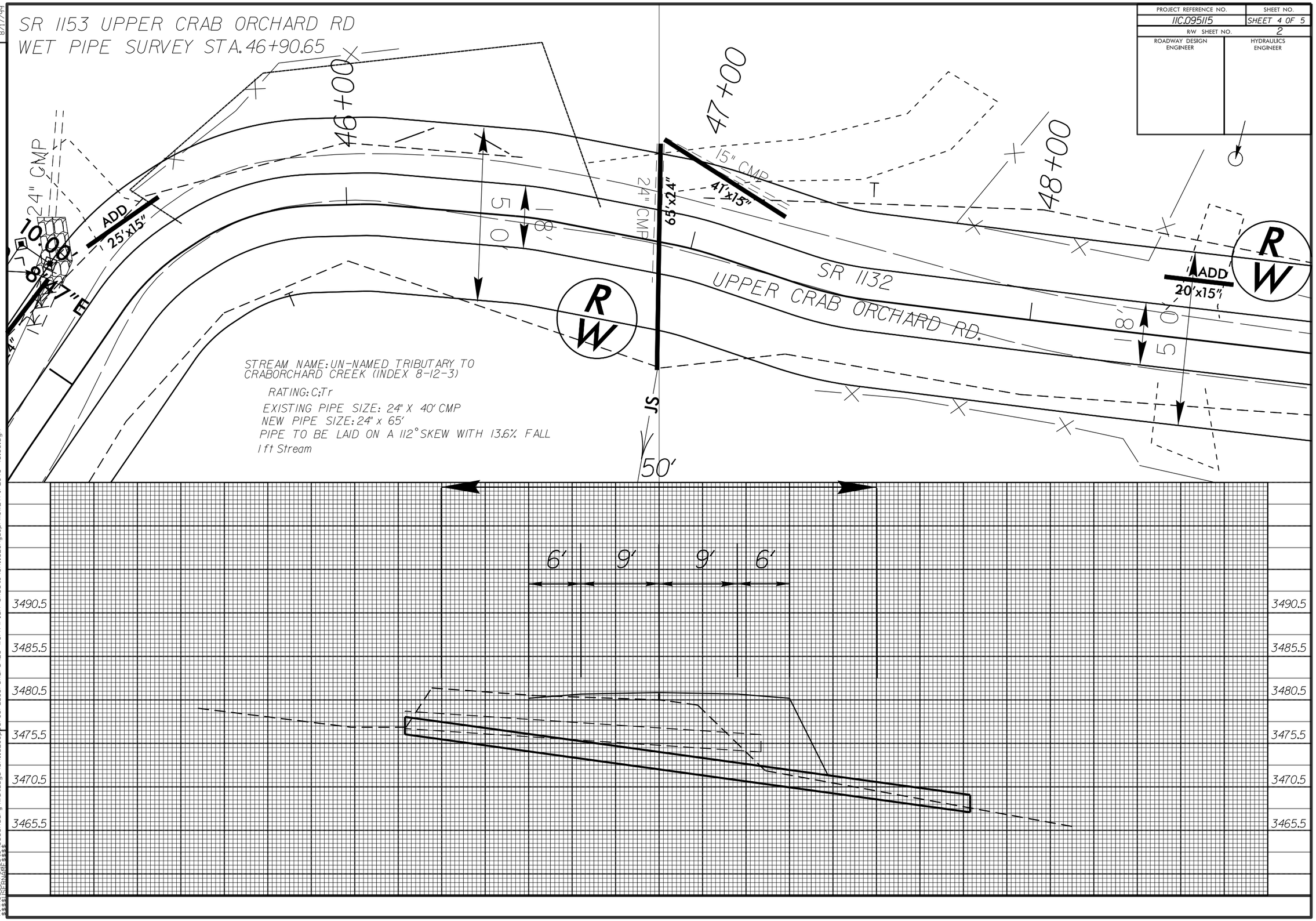
50'x18"

50'

6' 9' 9' 6'

3482.3
3477.3
3462.3
3457.3
3452.3
3447.3

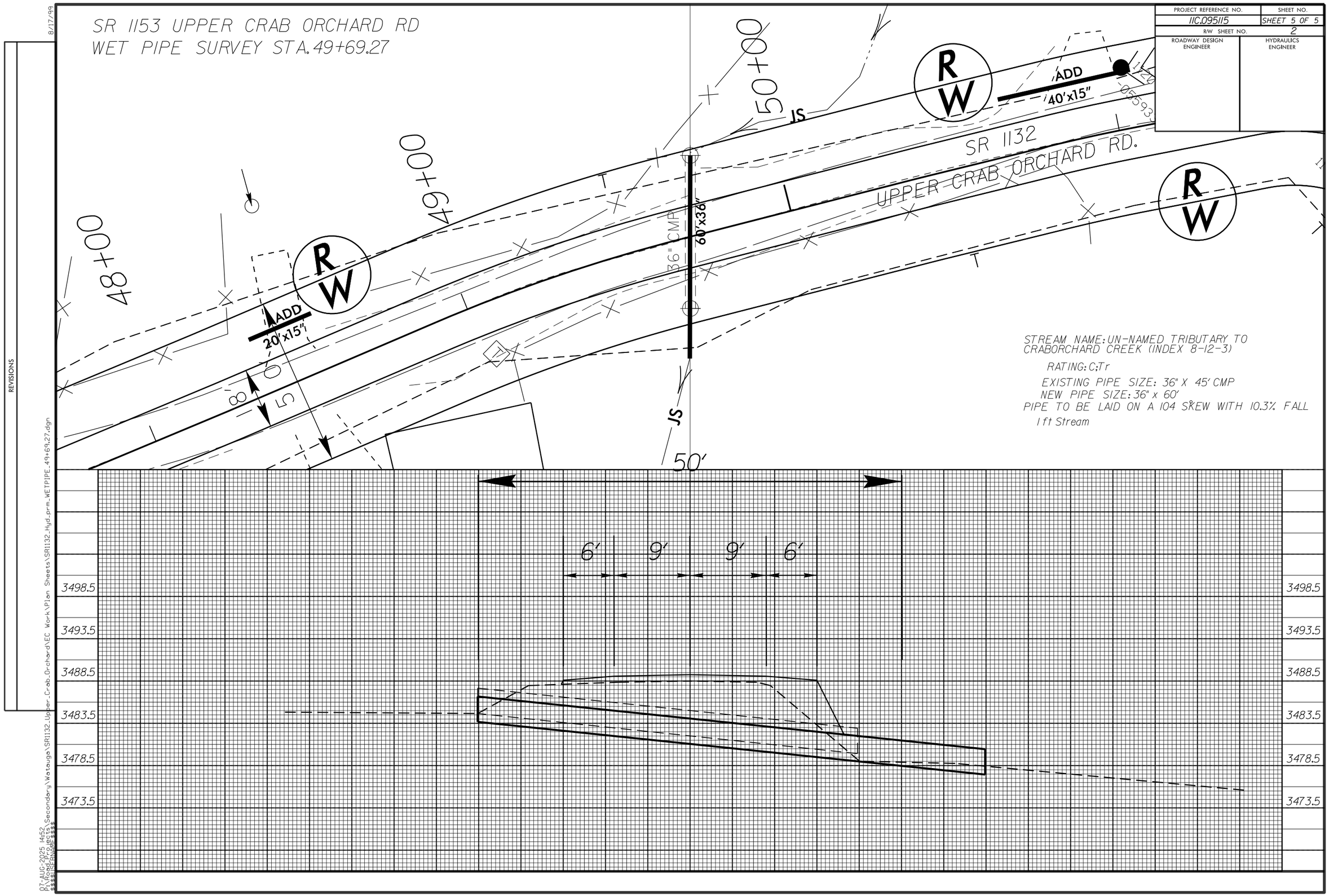
PROJECT REFERENCE NO.	SHEET NO.
11C.095115	SHEET 4 OF 5
R/W SHEET NO.	2
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



REVISIONS

8/17/99

07-AUG-2025 14:51
P:\Road_Projects\Secondary\Watauga\SR1132_Upper_Crab_Orchard\EC Work\Plan Sheets\SR1132_Hyd_prm_WETPIPE_46+90.65.dgn
$$$$USERNAME$$$$



SR 1153 UPPER CRAB ORCHARD RD
WET PIPE SURVEY STA. 49+69.27
PROJECT REFERENCE NO.
11C.095115
SHEET NO.
SHEET 5 OF 5
R/W SHEET NO.
2
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
48+00
49+00
50+00
JS
R W
ADD
40'x15"
ADD
20'x15"
SR 1132
UPPER CRAB ORCHARD RD.
36" CMP
60'x36"
8'
5'
50'
STREAM NAME: UN-NAMED TRIBUTARY TO CRABORCHARD CREEK (INDEX 8-12-3)
RATING: C;Tr
EXISTING PIPE SIZE: 36" X 45' CMP
NEW PIPE SIZE: 36" x 60'
PIPE TO BE LAID ON A 104 SKEW WITH 10.3% FALL
1 ft Stream
6'
9'
9'
6'
3498.5
3493.5
3488.5
3483.5
3478.5
3473.5
REVISIONS
8/17/99
07-AUG-2025 14:52
P:\Road_Projects\Secondary\Watauga\SR1132_Upper_Crab_Orchard\EC Work\Plan Sheets\SR1132_Hyd_prm_WETPIPE_49+69.27.dgn
$$$$USERNAME$$$$