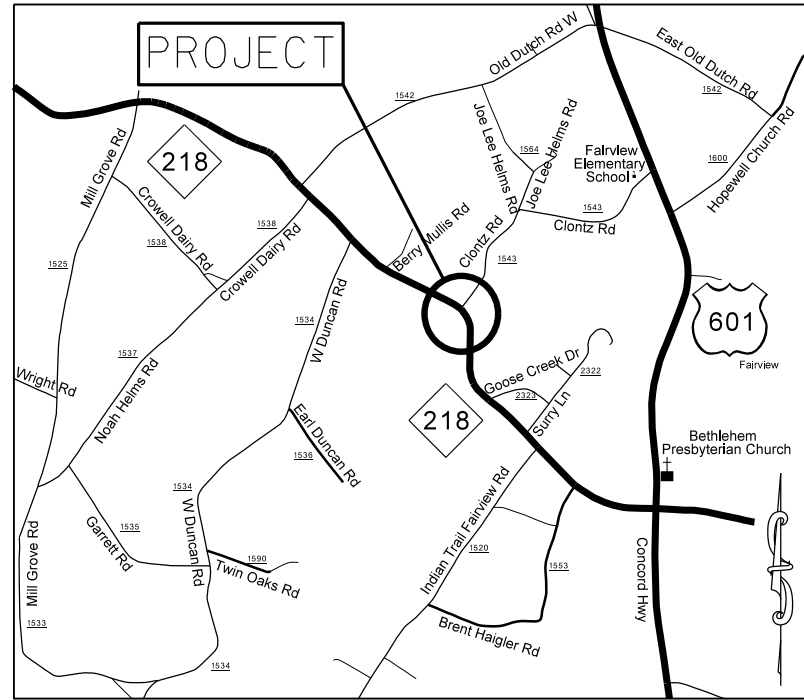


TIP: SS-4910BO

PROJECT: 43991.3.1



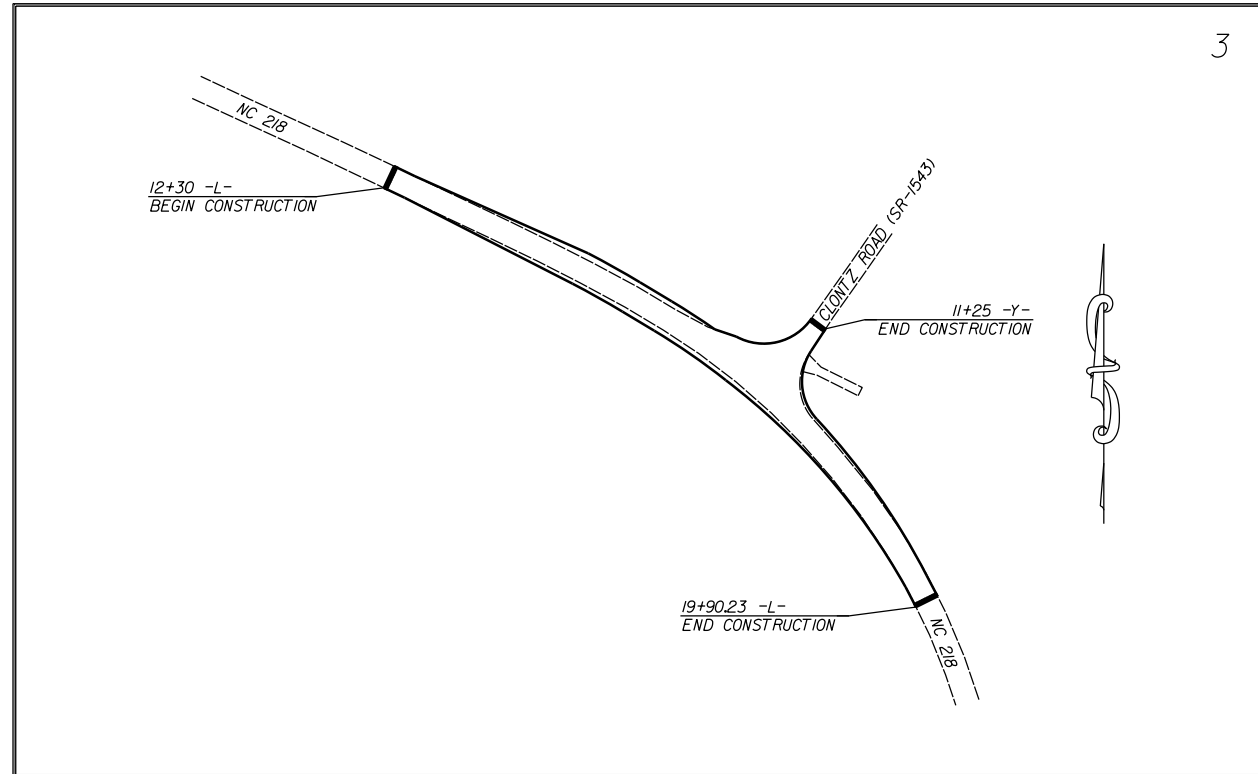
VICINITY MAP NOT TO SCALE

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
UNION COUNTY

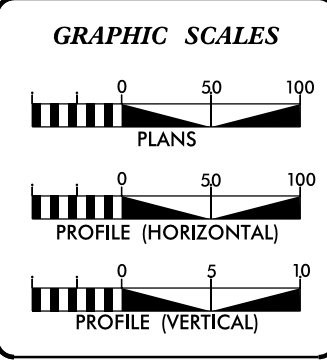
LOCATION: LEFT TURN LANE ON NC 218 AND CLONTZ ROAD (SR 1543),
AND RUMBLE STRIPS ON NC 218 FROM
MILL GROVE ROAD (SR 1525) TO US 601

TYPE OF WORK: GRADING, PAVING, MILLING, DRAINAGE,
THERMOPLASTIC PAVEMENT MARKING,
RUMBLE STRIPS.

STATE	STATE PROJECT REFERENCE NO.	BIFFY NO.	TOTAL SHEETS
N.C.	43991.3.1	1	
STATE PROJ. NO.	P.A. PROJ. NO.	DESCRIPTION	
43991.1.FR1	HSIP-0218(14)	P.E.	
43991.2.1	HSIP-0218(14)	R/W	
43991.3.1	HSIP-0218(14)	CONST.	



3



DESIGN DATA

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

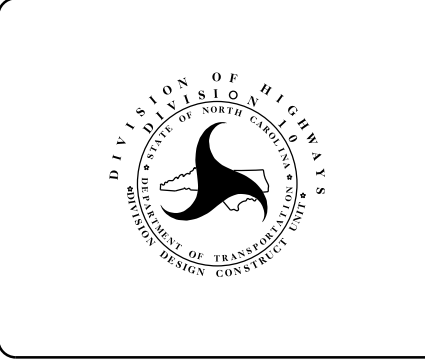
PROJECT LENGTH

LENGTH OF ROADWAY PROJECT 43991.3.1	=	0.14	MILES
TOTAL LENGTH OF STATE PROJECT 43991.3.1	=	0.14	MILES

Prepared in the Office of:
DIVISION OF HIGHWAYS
DIVISION TEN
DIVISION DESIGN / CONSTRUCT UNIT

2012 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: _____	RANDY BOWERS <small>PROJECT ENGINEER</small>
LETTING DATE: <u>March 16, 2016</u>	DONALD HARWARD <small>PROJECT DESIGN ENGINEER</small>

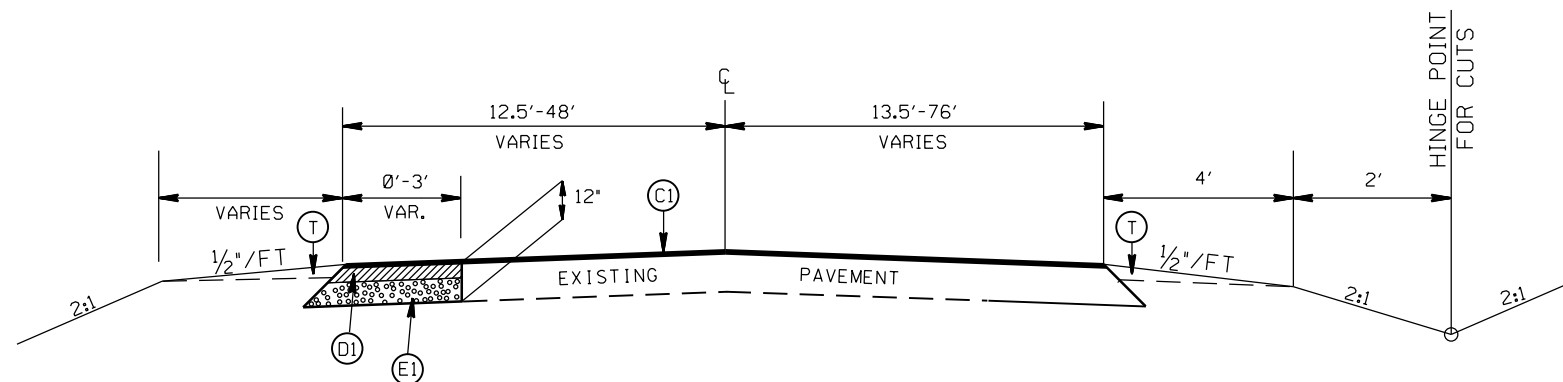


DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

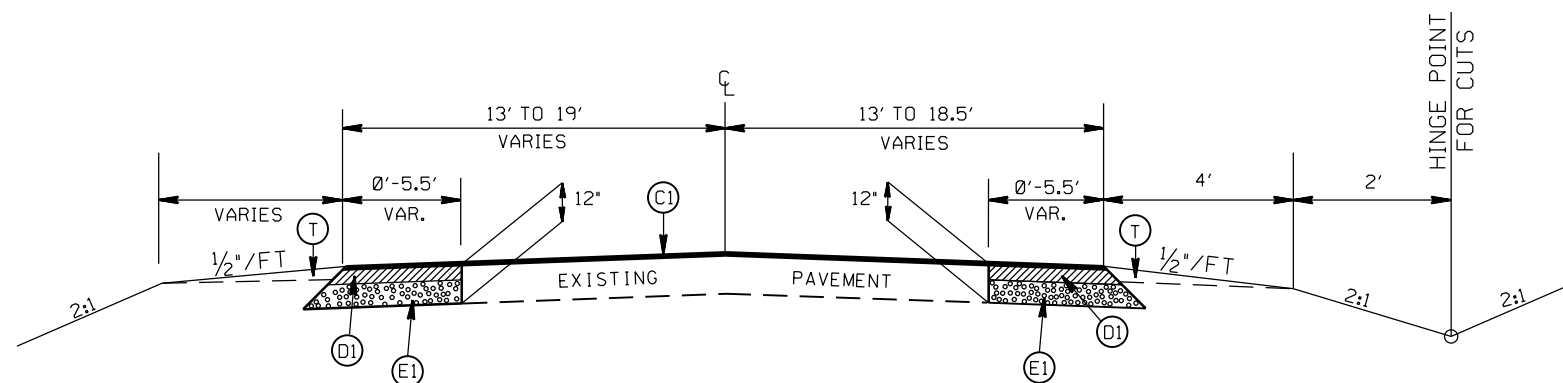
DocuSigned by:
Randy Bowers 2/17/2016

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APPROVED BY: _____
DDC ENGINEER DATE

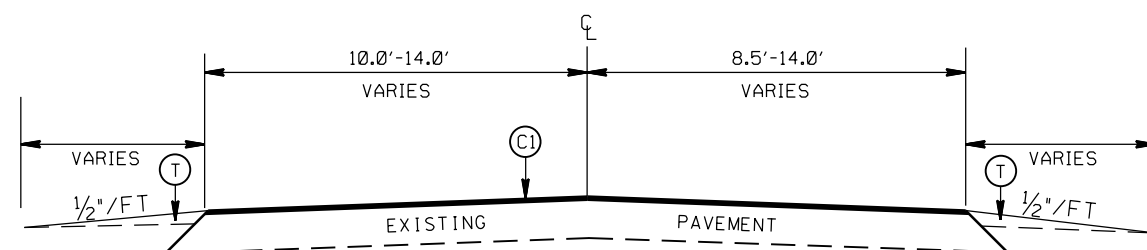
STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	43991.3.1	2	
F.A. PROJECT NO.			



TYPICAL SECTION NO. 3
STA. 11+53.35 TO 12+00.00 -Y-



TYPICAL SECTION NO. 2
STA. 12+55.00 TO 19+65.00 -L-



TYPICAL SECTION NO. 1
STA. 12+30.00 TO 12+55.00 -L-
STA. 19+65.00 TO 19+90.00 -L-
STA. 11+25.00 TO 11+53.35 -Y-

PAVEMENT SCHEDULE

(C1)	PROP. APPROX. 1½" ASPHALT CONC. SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
(D1)	PROP. APPROX. 2.5" ASPHALT CONC. BINDER COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.
(E1)	PROP. APPROX. 8.0" ASPHALT CONC. BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.
(T)	EARTH MATERIAL

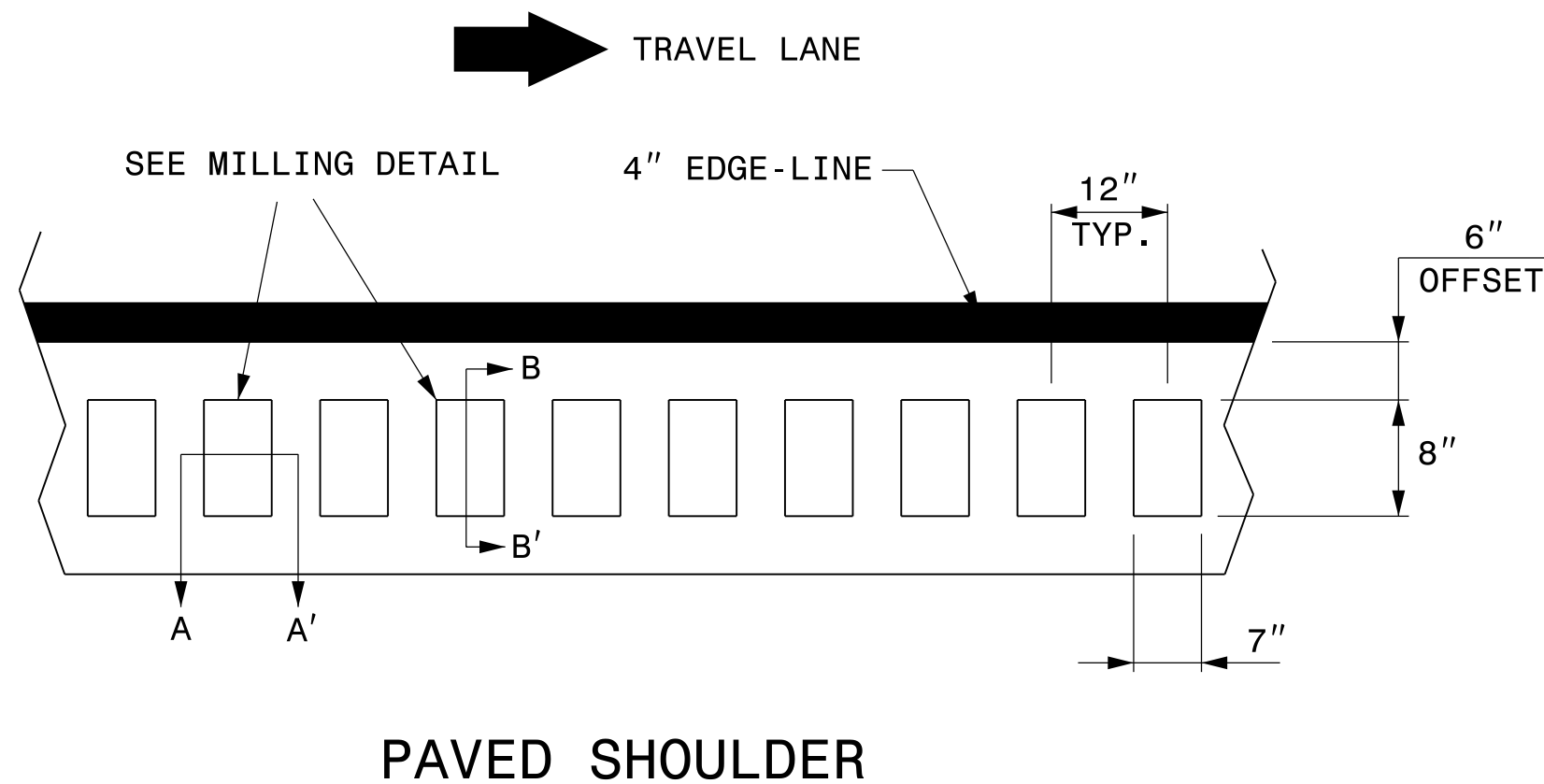
LEFT TURN LANE ON
NC 218 AND CLONTZ
ROAD (SR 1543)

SCALE	-NA-
DATE	7/15
DWG. BY	DLS
DESIGN BY	JDH
APPROVED	RWB

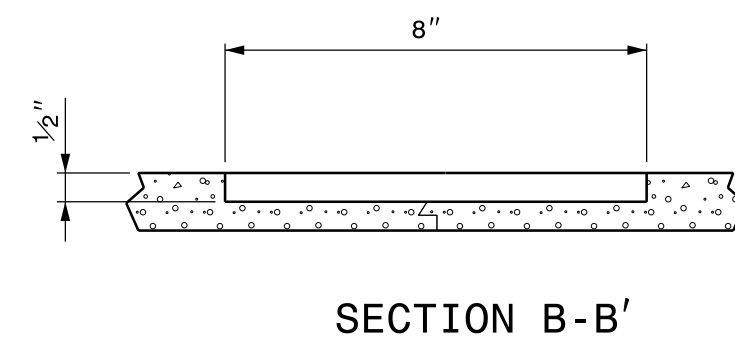
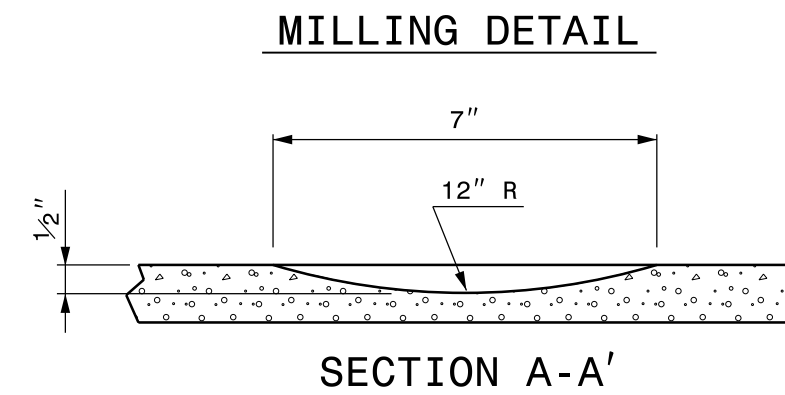


REVISIONS	

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	43991.3.1	2A	
F.A. PROJECT NO.			



PAVED SHOULDER



NOTE:

- 1) USING A VACUUM, REMOVE ALL DEBRIS FROM THE MILLINGS JUST PRIOR TO PLACING ANY PAVEMENT MARKINGS.

LEFT TURN LANE ON
NC 218 AND CLONTZ
ROAD (SR 1543)

SCALE	-NA-
DATE	FEB 2016
DWG. BY	TBL
DESIGN BY	JDH
APPROVED	RWB



REVISIONS	

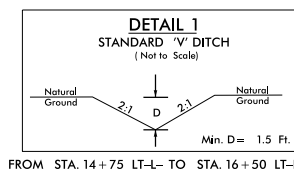
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N.C.	43991.3.1	3	
F.A. PROJECT NO.			



PI Sta 14+70.26 -L-
 $\Delta = 5' 49' 46.7''$ (RT)
 $D = 5' 30' 33.2''$
 $L = 105.82'$
 $T = 52.95'$
 $R = 1040.00'$

PI Sta 11+49.60 -Y-
 $\Delta = 6' 18' 08.8''$ (RT)
 $D = 5' 12' 31.5''$
 $L = 121.00'$
 $T = 60.56'$
 $R = 1100.00'$

PI Sta 18+38.62 -L-
 $\Delta = 40' 19' 39.2''$ (RT)
 $D = 7' 38' 22.0''$
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 $T = 275.41'$
 $R = 750.00'$



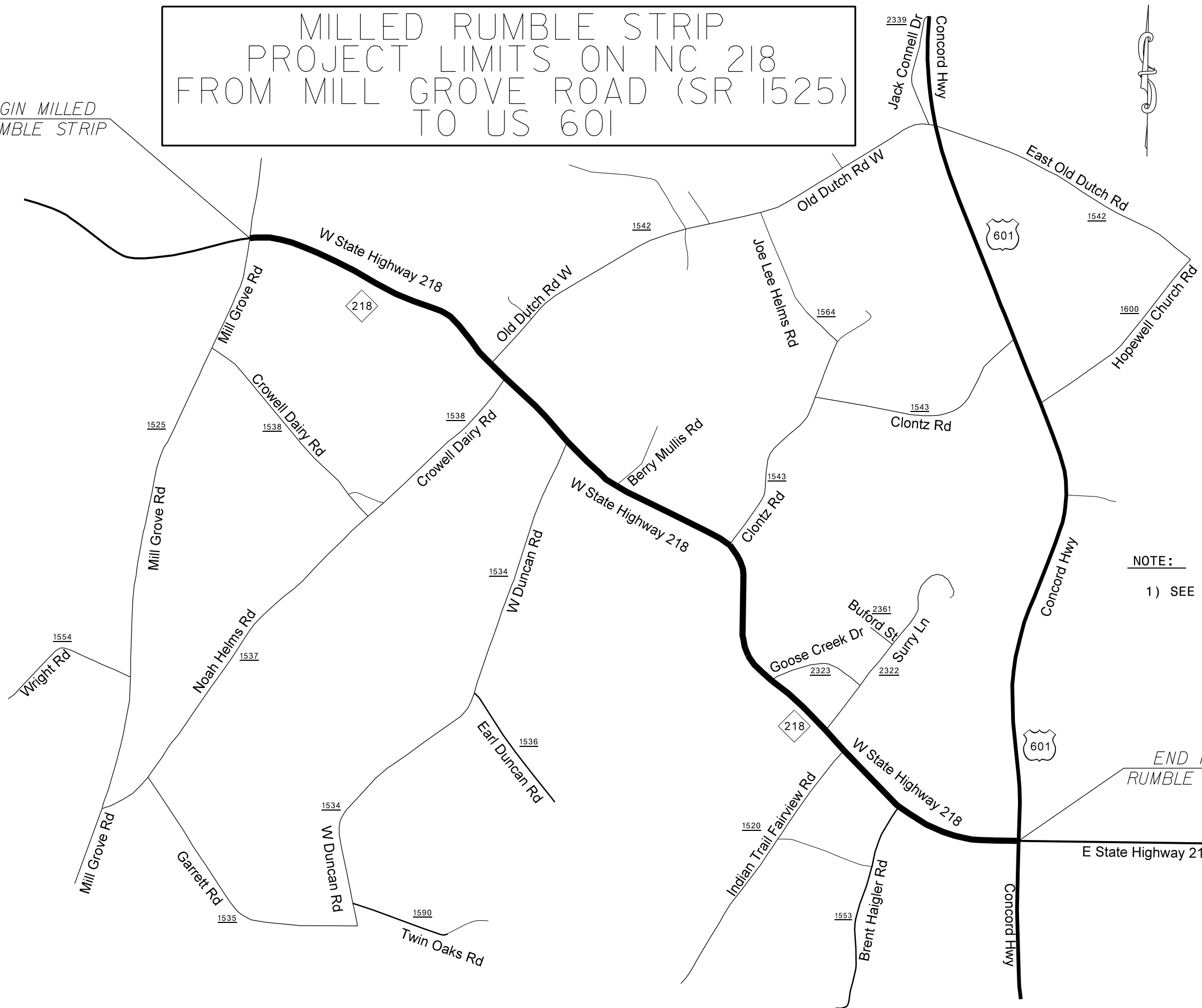
LEFT TURN LANE ON NC 218 AND CLONTZ ROAD (SR 1543)		REVISIONS	
SCALE	1"=50'		
DATE	8-2015		
DWG. BY	TBL		
DESIGN BY	JDH		
APPROVED	RWB		



STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	43991.3.1	4	
F.A. PROJECT NO.			

MILLED RUMBLE STRIP
PROJECT LIMITS ON NC 218
FROM MILL GROVE ROAD (SR 1525)
TO US 601

BEGIN MILLED
RUMBLE STRIP




NOTE:

- 1) SEE DETAIL 2A FOR CONSTRUCTION OF RUMBLE STRIPS.

END MILLED
RUMBLE STRIP

LEFT TURN LANE ON
NC 218 AND CLONTZ
ROAD (SR 1543)

SCALE	1"=50'		REVISIONS
DATE	8-2015		
DWG. BY	TBL		
DESIGN BY	JDH		
APPROVED	RWB		

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	43991.3J	PMP-1	
F.A. PROJECT NO.			

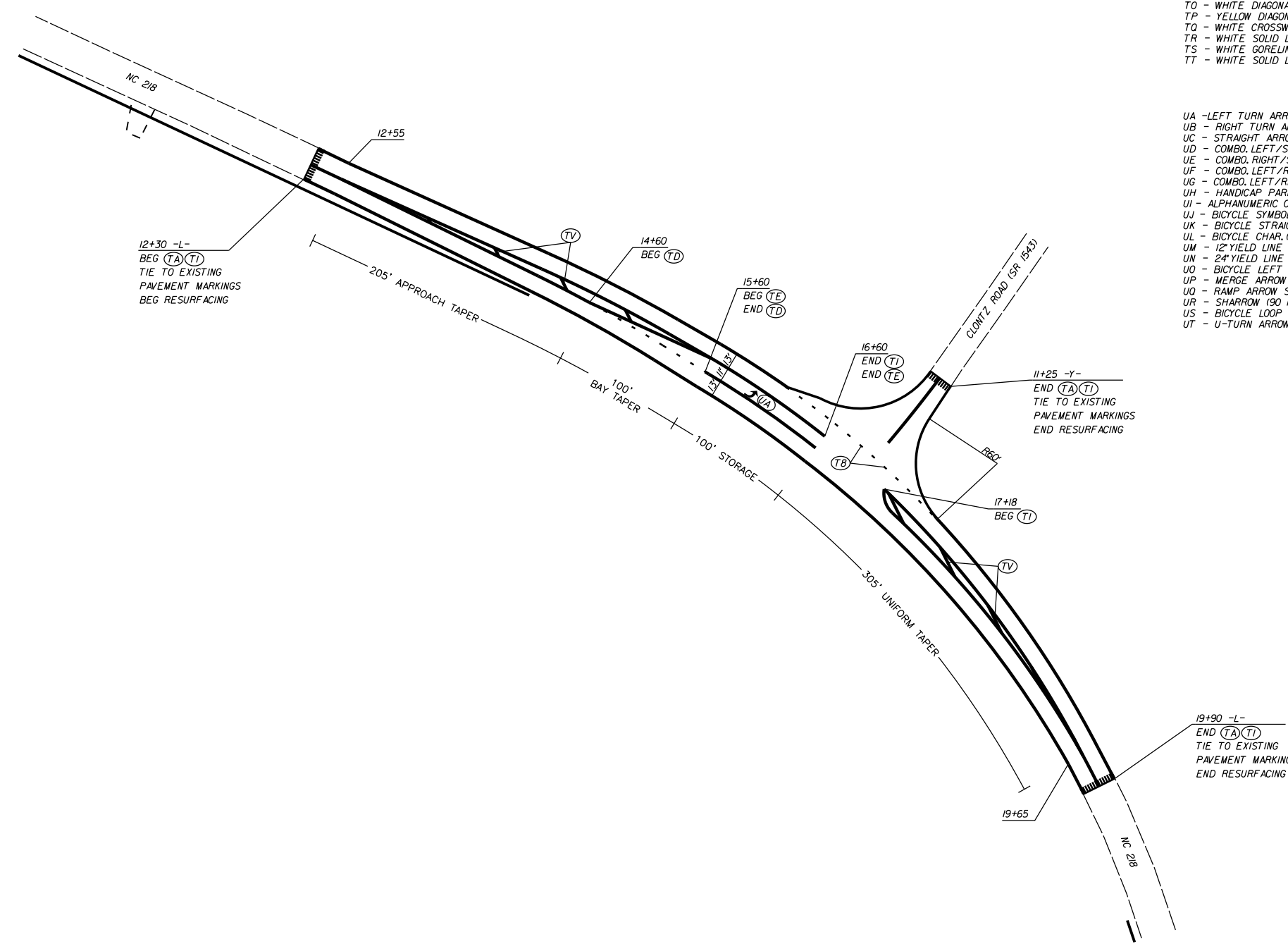
PAVEMENT MARKING SCHEDULE

PAVEMENT MARKING LINES

- | | |
|--|---|
| TA - WHITE EDGELINE (4',.90 MIL) | TU - WHITE DIAGONAL (12',.90 MIL) |
| TB - YELLOW EDGELINE (4',.90 MIL) | TV - YELLOW DIAGONAL (12',.90 MIL) |
| TC - 10FT. WHITE SKIP (4',.120 MIL) | T1 - WHITE LINE, RR X (16',.120 MIL) |
| TD - 3FT.-9FT./SP WHITE MINISKIP (4',.120 MIL) | T2 - WHITE STOPBAR (24',.120 MIL) |
| TE - WHITE SOLID LANE LINE (4',.120 MIL) | T3 - WHITE CROSSWALK LINE (24',.120 MIL) |
| TF - 10FT. YELLOW SKIP (4',.120 MIL) | T4 - WHITE RUMBLE STRIP (4",.240 MIL) |
| TH - YELLOW SINGLE CENTER (4',.120 MIL) | T5 - YELLOW RUMBLE STRIP (4",.240 MIL) |
| TI - YELLOW DOUBLE CENTER (4',.120 MIL) | T6 - WHITE EDGELINE (6',.90 MIL) |
| TJ - 10FT. WHITE SKIP (6',.120 MIL) | T7 - YELLOW EDGELINE (6',.90 MIL) |
| TK - 3FT.-9FT./SP WHITE MINISKIP (6',.120 MIL) | T8 - 2FT.-6FT./SP WHITE MINISKIP (4',.120 MIL) |
| TL - WHITE SOLID LANE LINE (6',.120 MIL) | T9 - 2FT.-6FT./SP YELLOW MINISKIP (4',.120 MIL) |
| TM - 10FT. YELLOW SKIP (6',.120 MIL) | T10 - 3FT.-3FT./SP WHITE MINISKIP (12',.120 MIL) |
| TN - WHITE GORELINE (8',.90 MIL) | T11 - 2FT.-6FT./SP WHITE MINISKIP (6',.120 MIL) |
| TO - WHITE DIAGONAL (8',.90 MIL) | T12 - 2FT.-6FT./SP YELLOW MINISKIP (6',.120 MIL) |
| TP - YELLOW DIAGONAL (8',.90 MIL) | T13 - 3FT.-9FT./SP WHITE MINISKIP (8',.120 MIL) |
| TQ - WHITE CROSSWALK LINE (8',.120 MIL) | T14 - 3FT.-9FT./SP WHITE MINISKIP (12',.120 MIL) |
| TR - WHITE SOLID LANE LINE (8',.120 MIL) | T15 - YELLOW SINGLE CENTER (6',.120 MIL) |
| TS - WHITE GORELINE (12',.90 MIL) | T16 - YELLOW DOUBLE CENTER (6',.120 MIL) |
| TT - WHITE SOLID LANE LINE (12',.120 MIL) | T17 - 3FT.-3FT./SP WHITE MINISKIP ENTRANCE LINE (8',.120 MIL) |

PAVEMENT MARKING SYMBOLS

- | | |
|--|--|
| UA - LEFT TURN ARROW (90 MIL) | UU - FISH-HOOK STRAIGHT ARROW (90 MIL) |
| UB - RIGHT TURN ARROW (90 MIL) | UV - FISH-HOOK LEFT/STRAIGHT ARROW (90 MIL) |
| UC - STRAIGHT ARROW (90 MIL) | UW - FISH-HOOK RIGHT/STRAIGHT ARROW (90 MIL) |
| UD - COMBO. LEFT/STRAIGHT ARROW (90 MIL) | UX - FISH-HOOK LEFT/RIGHT ARROW (90 MIL) |
| UE - COMBO. RIGHT/STRAIGHT ARROW (90 MIL) | UY - FISH-HOOK LEFT/RIGHT/STRAIGHT ARROW (90 MIL) |
| UF - COMBO. LEFT/RIGHT ARROW (90 MIL) | UZ - FISH-HOOK W/CIRCLE STRAIGHT ARROW (90 MIL) |
| UG - COMBO. LEFT/RIGHT/STRAIGHT ARROW (90 MIL) | WA - FISH-HOOK W/CIRCLE LEFT ARROW (90 MIL) |
| UH - HANDICAP PARKING (90 MIL) | WB - FISH-HOOK W/CIRCLE LEFT/STRAIGHT ARROW (90 MIL) |
| UI - ALPHANUMERIC CHAR. (120 MIL) | WC - FISH-HOOK W/CIRCLE LEFT/RIGHT/STRAIGHT ARROW (90 MIL) |
| UJ - BICYCLE SYMBOL (90 MIL) | MA - PERMANENT RAISED MARKER (YELLOW & YELLOW) |
| UK - BICYCLE STRAIGHT ARROW (90 MIL) | MB - PERMANENT RAISED MARKER (CRYSTAL & YELLOW) |
| UL - BICYCLE CHAR. (120 MIL) | MC - PERMANENT RAISED MARKER (YELLOW & RED) |
| UM - 12" YIELD LINE TRIANGLE (90 MIL) | MD - PERMANENT RAISED MARKER (YELLOW) |
| UN - 24" YIELD LINE TRIANGLE (90 MIL) | ME - SNOWPLOWABLE MARKER (YELLOW & YELLOW) |
| UO - BICYCLE LEFT ARROW (90 MIL) | MF - SNOWPLOWABLE MARKER (CRYSTAL & RED) |
| UP - MERGE ARROW (90 MIL) | MG - SNOWPLOWABLE MARKER (YELLOW & RED) |
| UQ - RAMP ARROW SYMBOL (90 MIL) | ML - PERMANENT RAISED MARKER (CRYSTAL & CRYSTAL) |
| UR - SHARROW (90 MIL) | MO - SNOWPLOWABLE MARKER (CRYSTAL & CRYSTAL) |
| US - BICYCLE LOOP DETECTOR (90 MIL) | |
| UT - U-TURN ARROW (90 MIL) | |



LEFT TURN LANE ON
NC 218 AND CLONTZ
ROAD (SR 1543)

SCALE	1"=50'		REVISIONS	
DATE	8-2015			
DWG. BY	TBL			
DESIGN BY	JDH			
APPROVED	RWB			

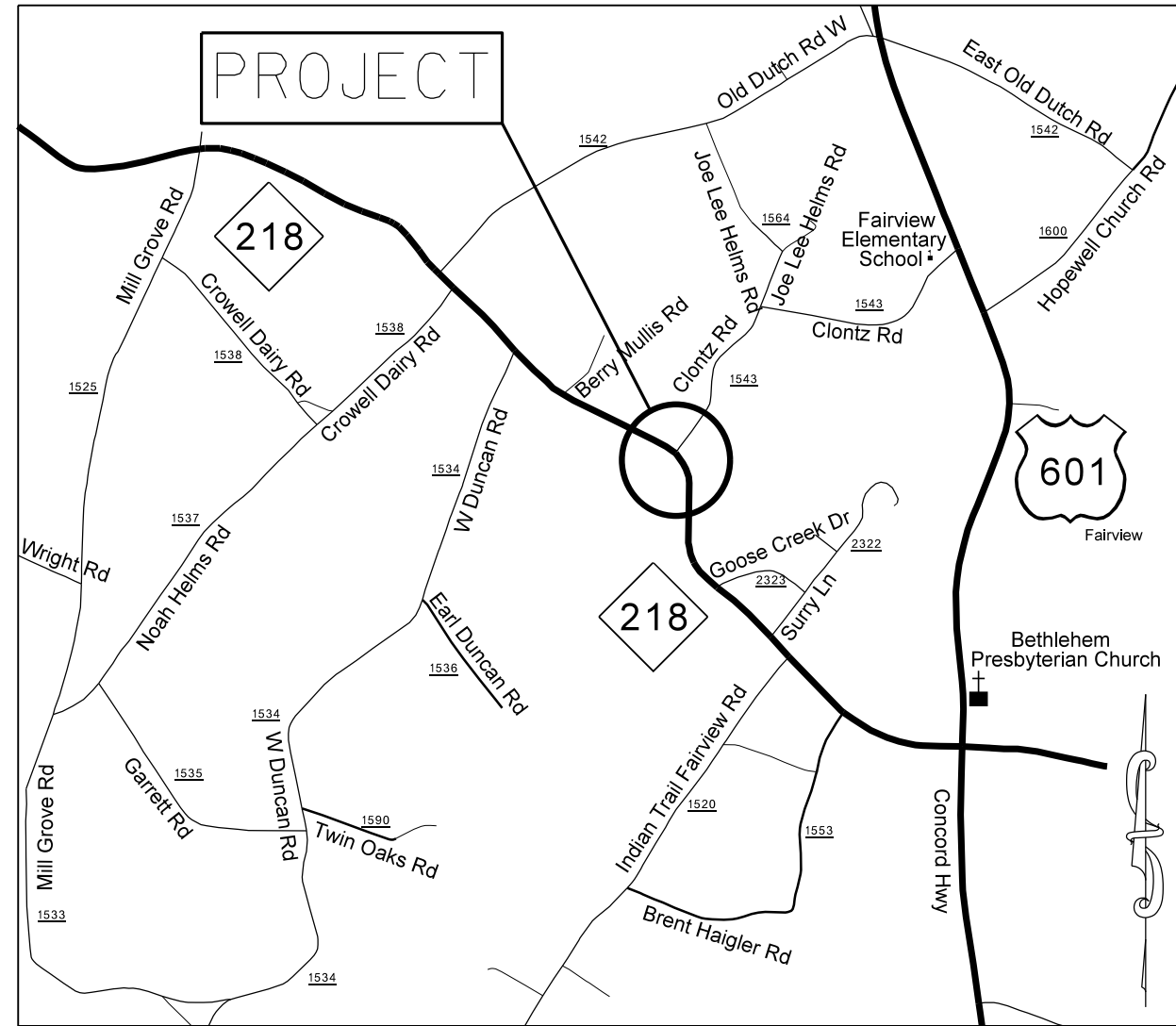
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	43991.3.1	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
**PLAN FOR PROPOSED
HIGHWAY EROSION CONTROL**

EROSION AND SEDIMENT CONTROL MEASURES

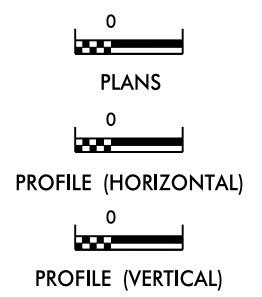
Std. #	Description	Symbol
1630.03	Temporary Silt Ditch	
1630.05	Temporary Diversion	
1605.01	Temporary Silt Fence	
1606.01	Special Sediment Control Fence	
1622.01	Temporary Berms and Slope Drains	
1630.02	Silt Basin Type B	
1633.01	Temporary Rock Silt Check Type-A	
	Temporary Rock Silt Check Type-A with Matting and Polyacrylamide (PAM)	
1633.02	Temporary Rock Silt Check Type-B	
	Wattle / Coir Fiber Wattle	
	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	
1632.02	Type B	
1632.03	Type C	
	Skimmer Basin	
	Tiered Skimmer Basin	
	Infiltration Basin	

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



PROJECT: 43991.3.1 TIP: SS-4910BO

GRAPHIC SCALE



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:
ROADSIDE ENVIRONMENTAL UNIT
1 South Wilmington St.
Raleigh, NC 27611
2012 STANDARD SPECIFICATIONS
DONALD HARWARD 3028
EROSION CONTROL DESIGNER LEVEL III-A CERTIFICATION #

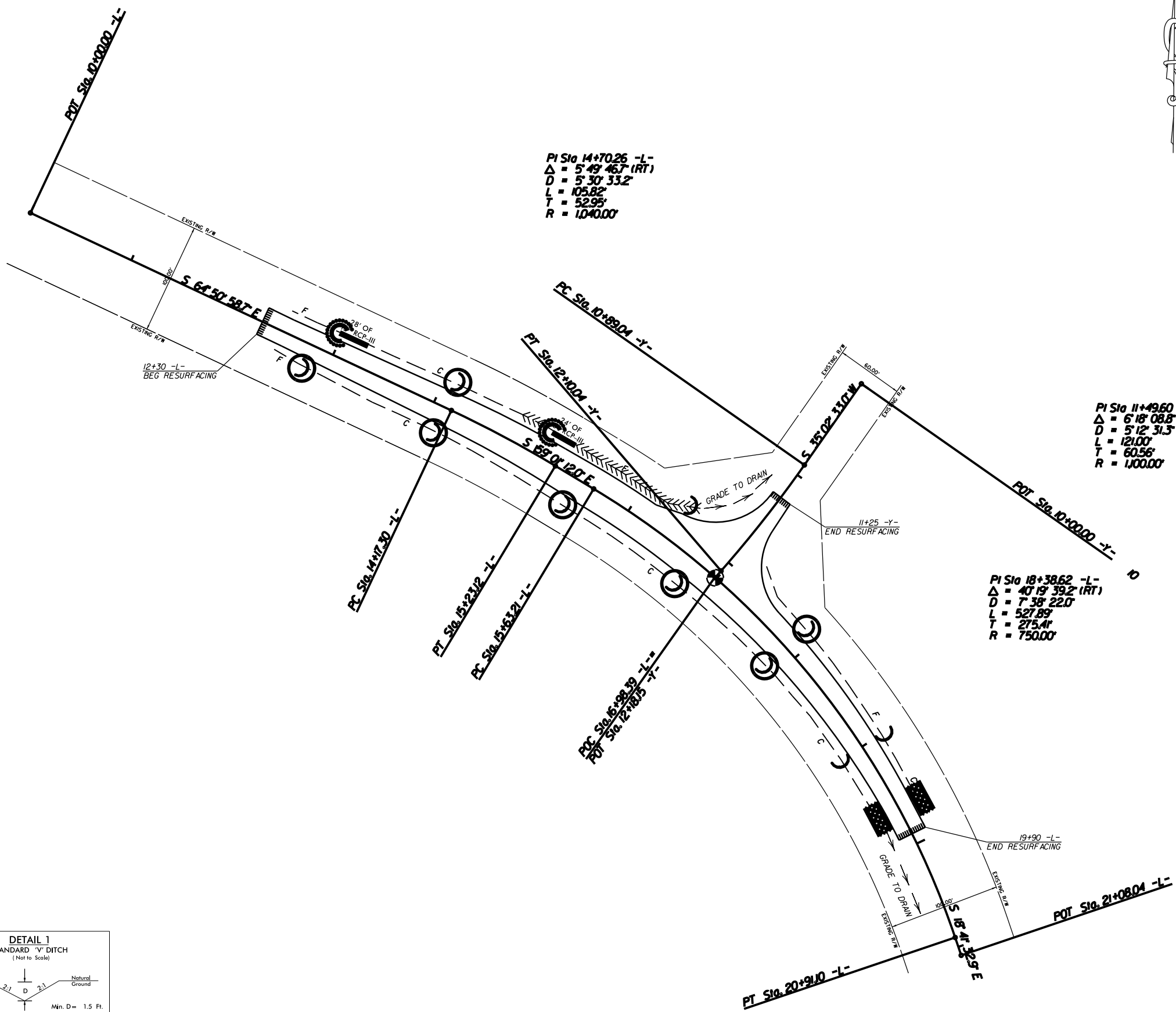
Roadway Standard Drawings

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 revision 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	

NC218.ctb:AF:010000V452/9827/218.ctb:clontz_erosion_title sheet.dgn

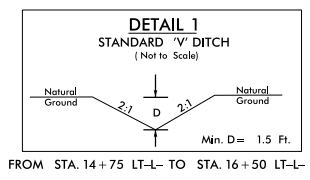
STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	43991.31	EC-2	
F.A. PROJECT NO.			



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 $\Delta = 5^\circ 49' 46.7$ (RT)
 $D = 5^\circ 30' 33.2$
 $L = 105.82$
 $T = 52.95$
 $R = 1040.00$

PI Sta 11+49.60 -Y-
 $\Delta = 6^\circ 18' 08.8$ (RT)
 $D = 5^\circ 12' 31.5$
 $L = 121.00$
 $T = 60.56$
 $R = 1000.00$

PI Sta 18+38.62 -L-
 $\Delta = 40^\circ 19' 39.2$ (RT)
 $D = 7^\circ 38' 22.0$
 $L = 527.89$
 $T = 275.41$
 $R = 750.00$



LEFT TURN LANE ON
 NC 218 AND CLONTZ
 ROAD (SR 1543)

SCALE	1"=50'
DATE	8-2015
DWG. BY	TBL
DESIGN BY	JDH
APPROVED	RWB



REVISIONS	

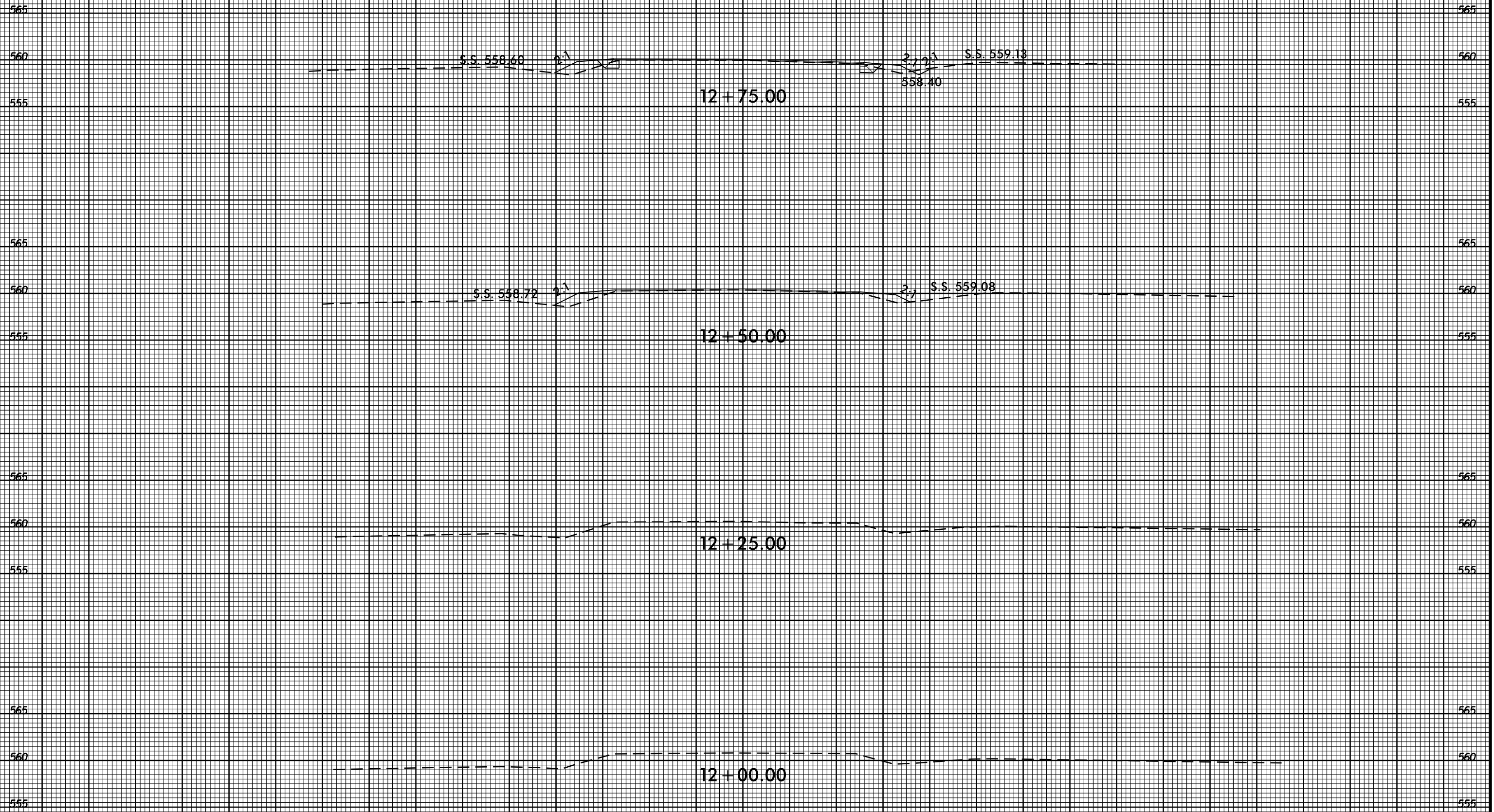
8/23/99



PROJ. REFERENCE NO.
43991.3.1

SHEET NO.
X-1

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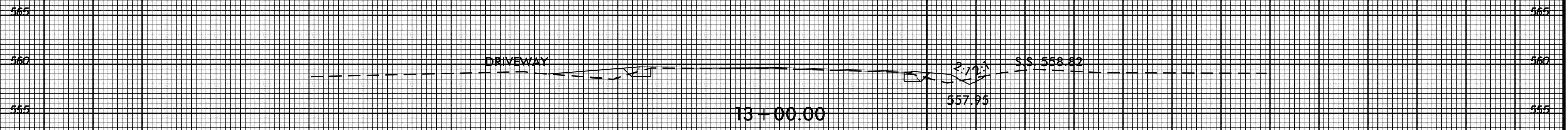
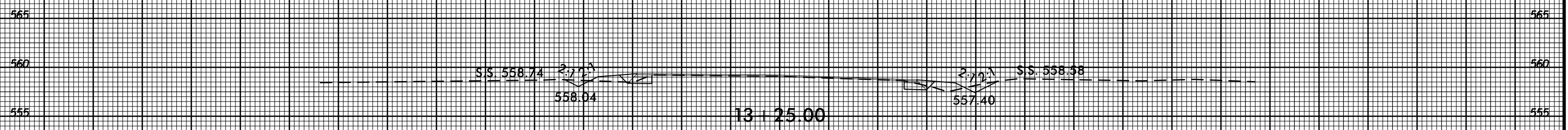
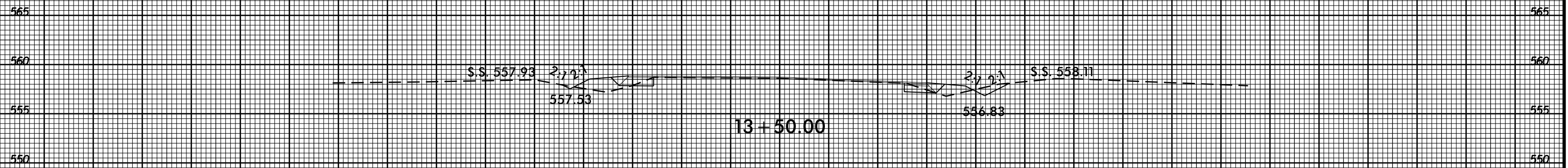
8/23/99



PROJ. REFERENCE NO.
43991.3.1

SHEET NO.
X-2

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—/—

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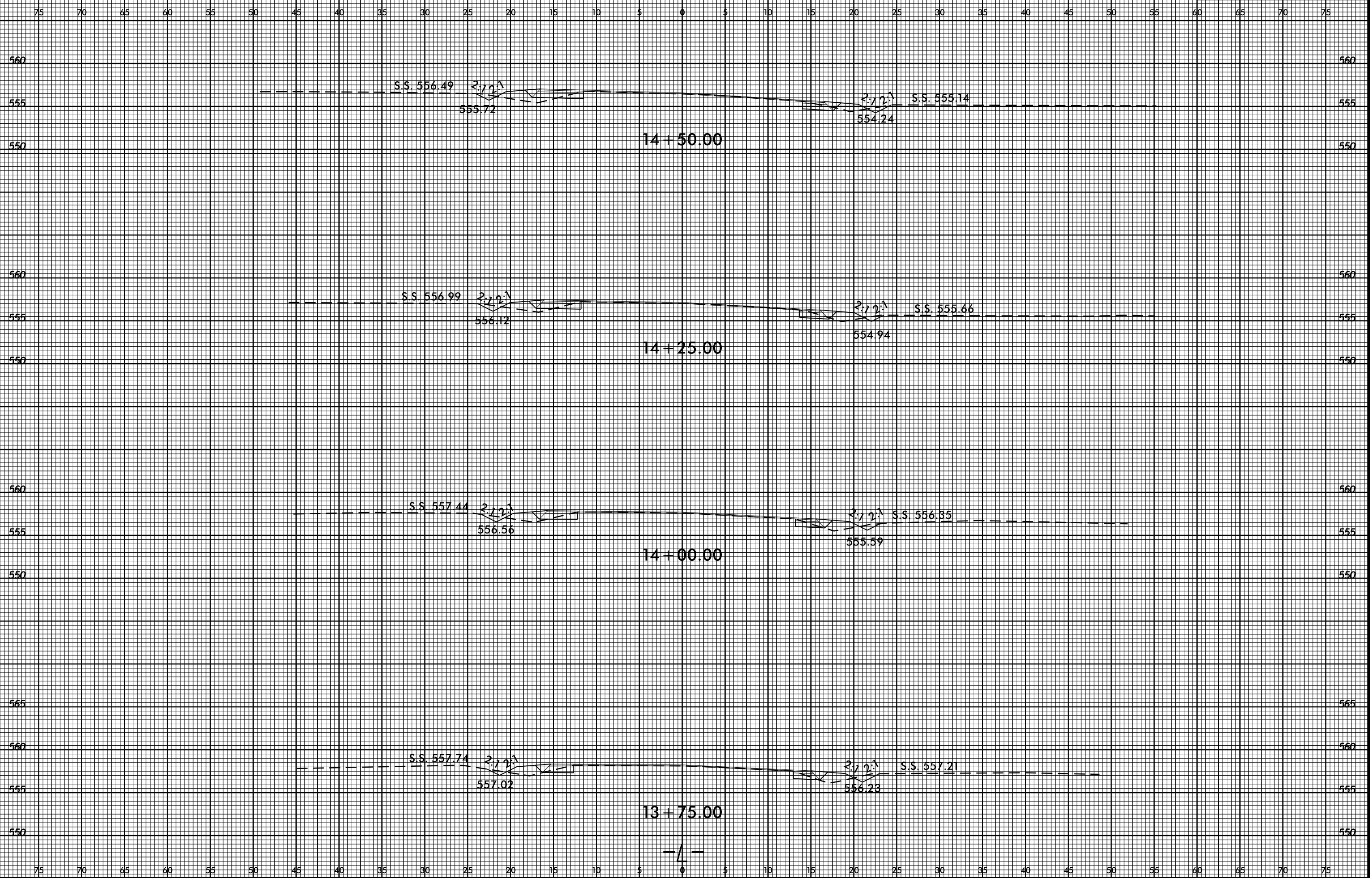
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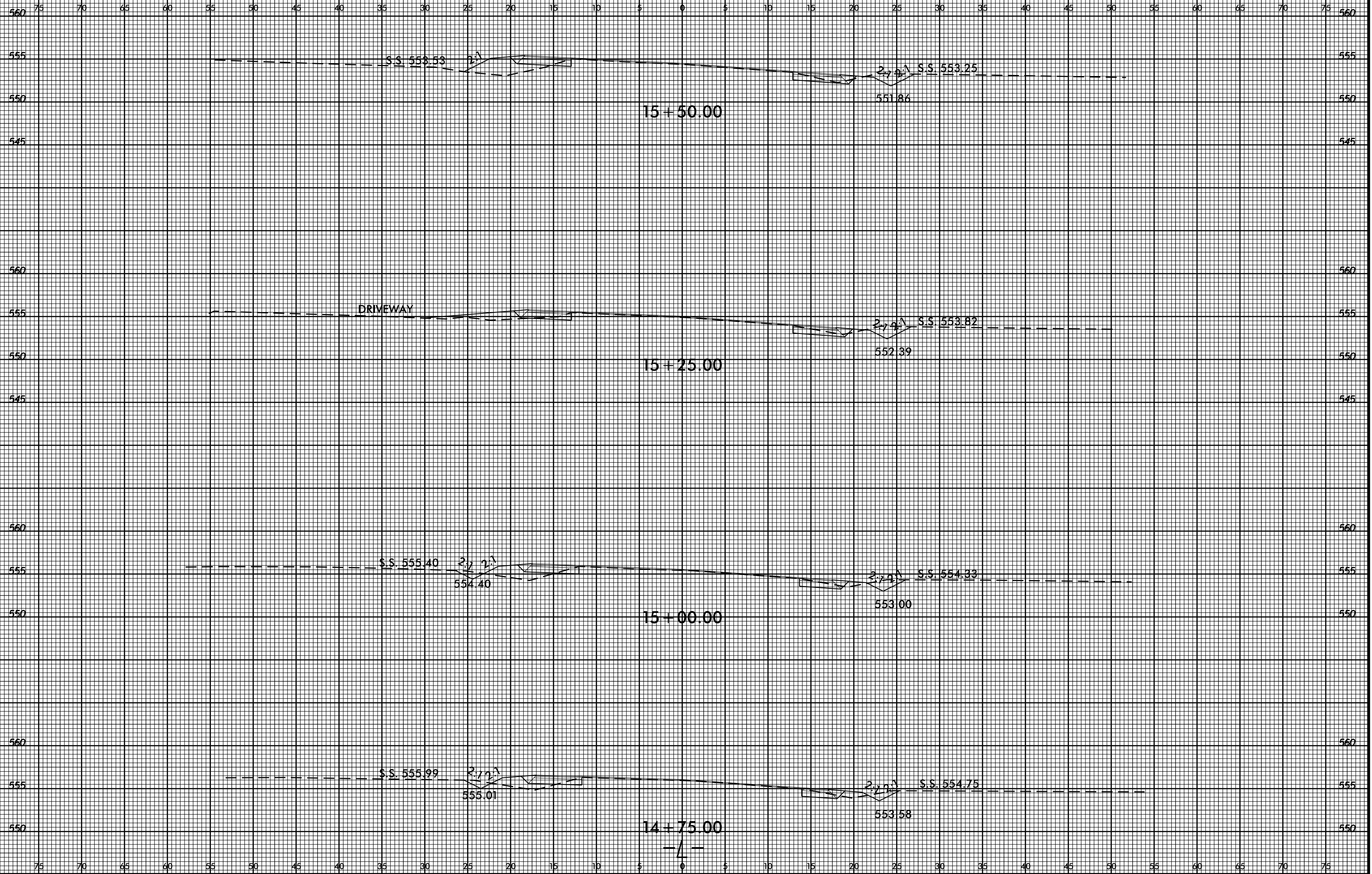


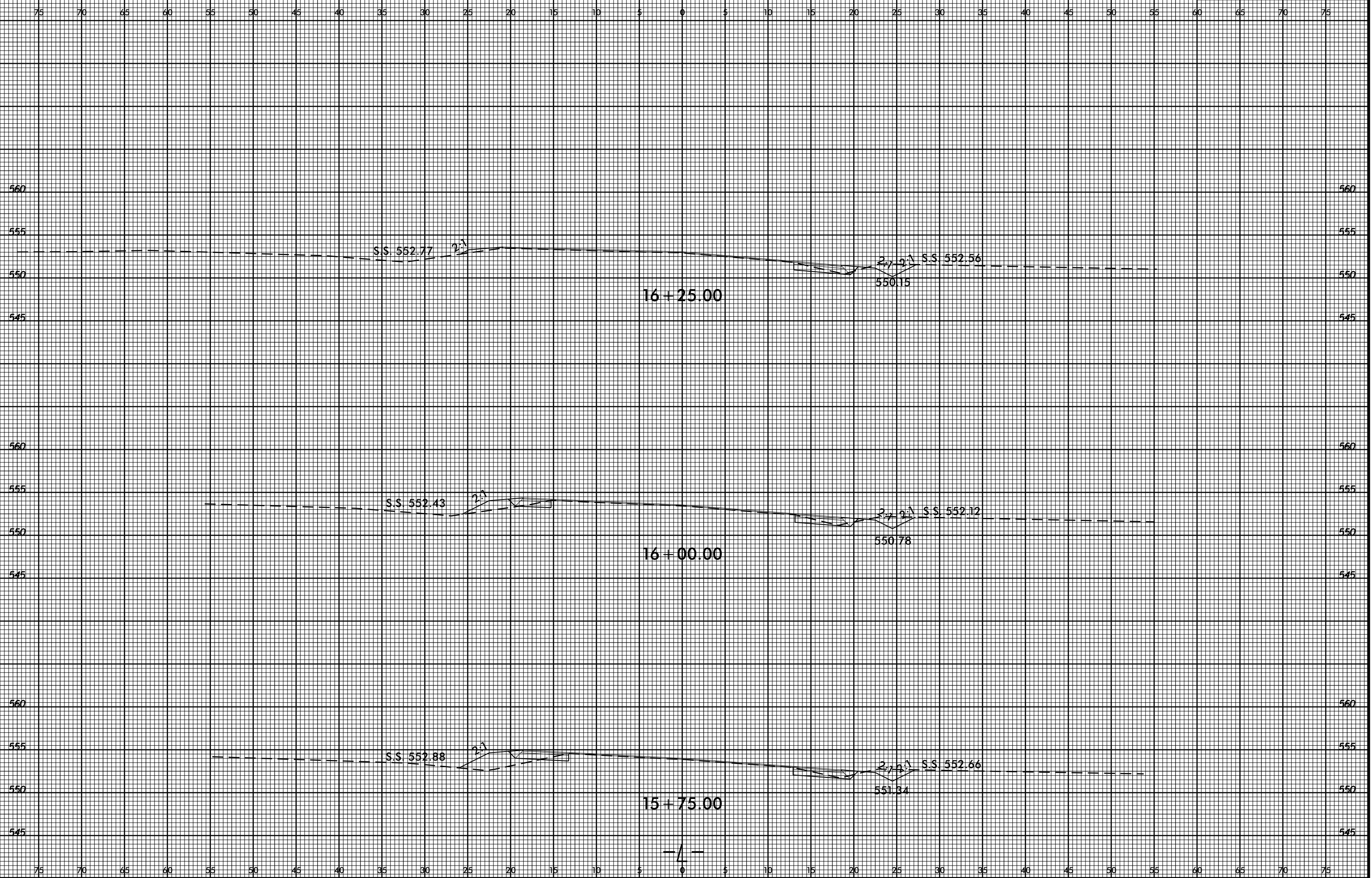
PROJ. REFERENCE NO.
43991.3.1

SHEET NO.
X-3

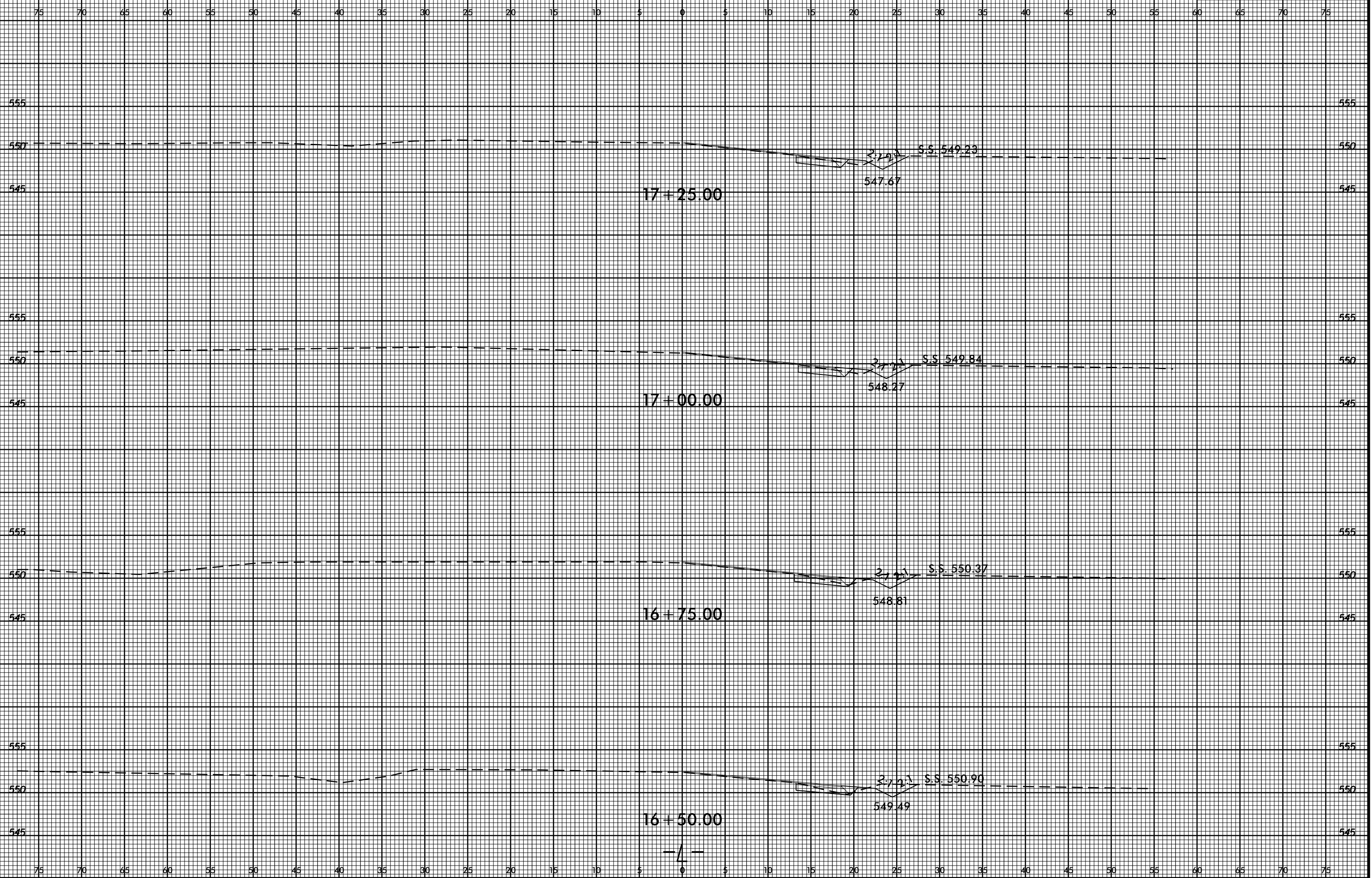


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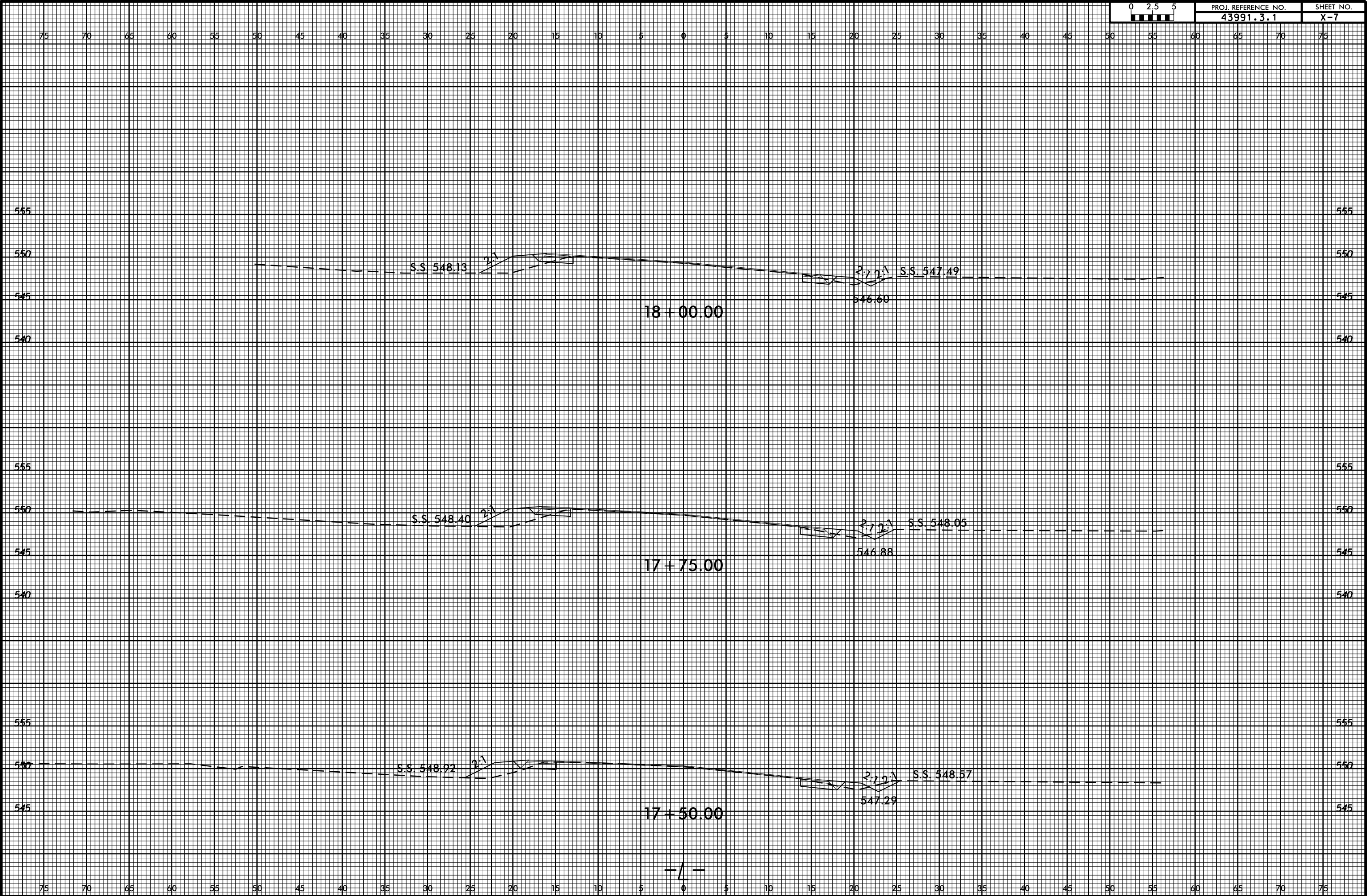




8/23/99



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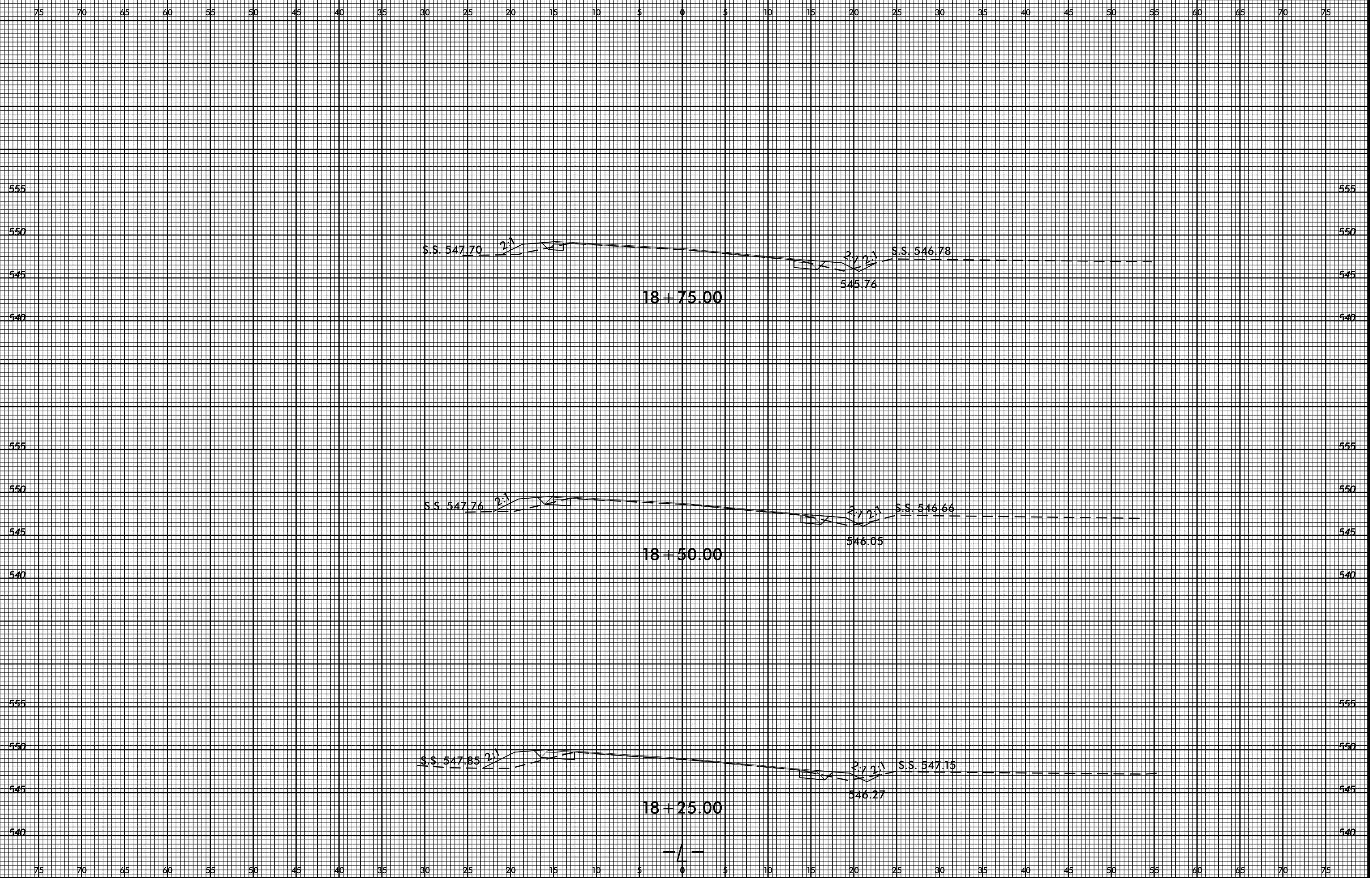


8/23/99



PROJ. REFERENCE NO.
43991.3.1

SHEET NO.
X-8



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