

NOTE: SEE SHEET 3 FOR PLAN SHEET LAYOUT AT TIME OF INVESTIGATION

STATE OF NORTH CAROLINA

DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

GEOTECHNICAL ENGINEERING UNIT

**ROADWAY
SUBSURFACE INVESTIGATION**

PROJ. REFERENCE NO. 41141.1.1 F.A. PROJ. N/A

COUNTY MECKLENBURG

PROJECT DESCRIPTION SUGAR CREEK ROAD AND NCRR/NSRR

CROSSING NO. 715 352H GRADE SEPARATION

RECOMMENDATIONS

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-5008	1	36
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
WBS 41141.1.1		P.E.	
WBS 41141.2.2		R/W & UTIL.	

CAUTION NOTICE

THE SUBSURFACE INFORMATION AND THE SUBSURFACE INVESTIGATION ON WHICH IT IS BASED WERE MADE FOR THE PURPOSE OF STUDY, PLANNING, AND DESIGN, AND NOT FOR CONSTRUCTION OR PAY PURPOSES. THE VARIOUS FIELD BORING LOGS, ROCK CORES, AND SOIL TEST DATA AVAILABLE MAY BE REVIEWED OR INSPECTED IN RALEIGH BY CONTACTING THE N.C. DEPARTMENT OF TRANSPORTATION, GEOTECHNICAL ENGINEERING UNIT AT 1991 707-6850. NEITHER THE SUBSURFACE PLANS AND REPORTS, NOR THE FIELD BORING LOGS, ROCK CORES, OR SOIL TEST DATA ARE PART OF THE CONTRACT.

GENERAL SOIL AND ROCK STRATA DESCRIPTIONS AND INDICATED BOUNDARIES ARE BASED ON A GEOTECHNICAL INTERPRETATION OF ALL AVAILABLE SUBSURFACE DATA AND MAY NOT NECESSARILY REFLECT THE ACTUAL SUBSURFACE CONDITIONS BETWEEN BORINGS OR BETWEEN SAMPLED STRATA WITHIN THE BOREHOLE. THE LABORATORY SAMPLE DATA AND THE IN SITU (IN-PLACE) TEST DATA CAN BE RELIED ON ONLY TO THE DEGREE OF RELIABILITY INHERENT IN THE STANDARD TEST METHOD. THE OBSERVED WATER LEVELS OR SOIL MOISTURE CONDITIONS INDICATED IN THE SUBSURFACE INVESTIGATIONS ARE AS RECORDED AT THE TIME OF THE INVESTIGATION. THESE WATER LEVELS OR SOIL MOISTURE CONDITIONS MAY VARY CONSIDERABLY WITH TIME ACCORDING TO CLIMATIC CONDITIONS INCLUDING TEMPERATURES, PRECIPITATION, AND WIND, AS WELL AS OTHER NON-CLIMATIC FACTORS.

THE BIDDER OR CONTRACTOR IS CAUTIONED THAT DETAILS SHOWN ON THE SUBSURFACE PLANS ARE PRELIMINARY ONLY AND IN MANY CASES THE FINAL DESIGN DETAILS ARE DIFFERENT. FOR BIDDING AND CONSTRUCTION PURPOSES, REFER TO THE CONSTRUCTION PLANS AND DOCUMENTS FOR FINAL DESIGN INFORMATION ON THIS PROJECT. THE DEPARTMENT DOES NOT WARRANT OR GUARANTEE THE SUFFICIENCY OR ACCURACY OF THE INVESTIGATION MADE, NOR THE INTERPRETATIONS MADE, OR OPINION OF THE DEPARTMENT AS TO THE TYPE OF MATERIALS AND CONDITIONS TO BE ENCOUNTERED. THE BIDDER OR CONTRACTOR IS CAUTIONED TO MAKE SUCH INDEPENDENT SUBSURFACE INVESTIGATIONS AS HE DEEMS NECESSARY TO SATISFY HIMSELF AS TO CONDITIONS TO BE ENCOUNTERED ON THIS PROJECT. THE CONTRACTOR SHALL HAVE NO CLAIM FOR ADDITIONAL COMPENSATION OR FOR AN EXTENSION OF TIME FOR ANY REASON RESULTING FROM THE ACTUAL CONDITIONS ENCOUNTERED AT THE SITE DIFFERING FROM THOSE INDICATED IN THE SUBSURFACE INFORMATION.

CONTENTS

LINE	STATION	PLAN	PROFILE	XSECT
-L-	10+00 - 40+50	4-6	9	14-18
-Y1-	10+00 - 12+71.42	4	-	19-20
-Y2-	10+00 - 14+55.24	4	-	-
-Y3-	10+00 - 19+67.74	7, 8	10	21-25
-Y3REV-	10+00 - 19+52.92	4, 7	-	-
-Y4-	10+00 - 17+73.87	5, 7	11	26-31
-Y5-	10+00 - 19+09.76	5-6	12	32-33
-Y6-	10+14.86 - 12+50	8	-	-
-Y7-	10+00 - 19+92.03	6	13	34-35
-Y8-	10+25 - 14+83.09	6	-	-
SOIL TEST RESULTS				36

ID: U-5008

CONTRACT:

DRAWN BY: R. Rahie

NOTE - THE INFORMATION CONTAINED HEREIN IS NOT IMPLIED OR GUARANTEED BY THE N.C. DEPARTMENT OF TRANSPORTATION AS BEING ACCURATE NOR IT IS CONSIDERED TO BE PART OF THE PLANS, SPECIFICATIONS, OR CONTRACT FOR THE PROJECT.

NOTE - BY HAVING REQUESTED THIS INFORMATION THE CONTRACTOR SPECIFICALLY WAIVES ANY CLAIMS FOR INCREASED COMPENSATION OR EXTENSION OF TIME BASED ON DIFFERENCES BETWEEN THE CONDITIONS INDICATED HEREIN AND THE ACTUAL CONDITIONS AT THE PROJECT SITE.

PERSONNEL

S. Gollamudi

S. Protopappas

C. Baldwin

S. Gower

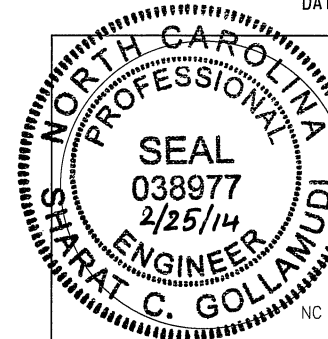
W. Trapp

INVESTIGATED BY AMEC E&I, Inc.

CHECKED BY S. Johnson

SUBMITTED BY S. Gollamudi

DATE February, 2014



AMEC E&I, Inc.
4021 STIRRUP CREEK DRIVE, SUITE 100
DURHAM, NORTH CAROLINA 27703
(919) 381-8900

G. Shoratchand
SIGNATURE

NC Engineering F-1253 NC Geology C-247

See Sheet 1-A For Index of Sheets

STATE OF NORTH CAROLINA
RAIL DIVISION



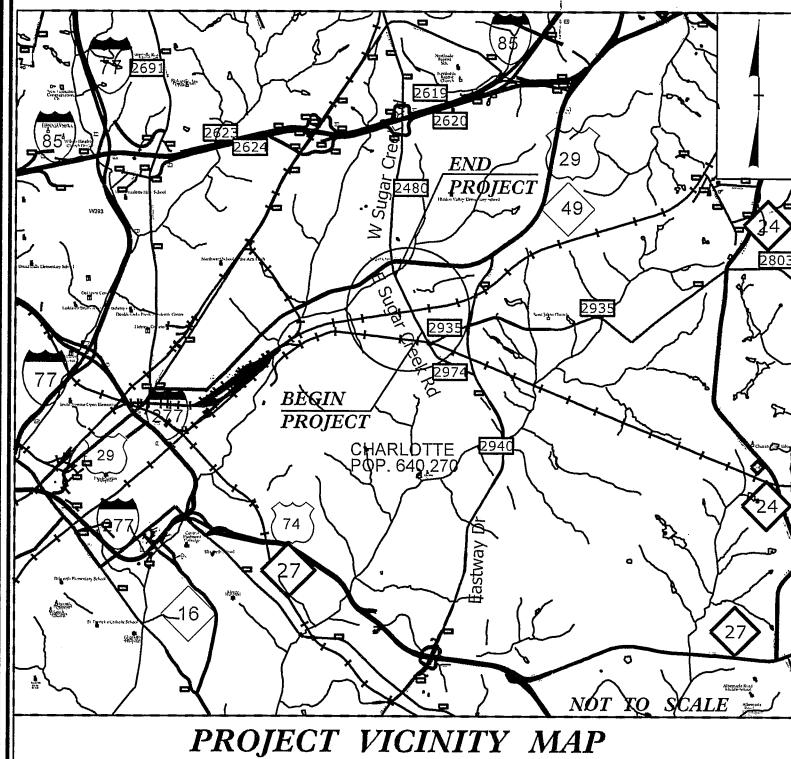
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WBS 41141.1.1		PE	
WBS 41141.2.2		ROW/UTIL	



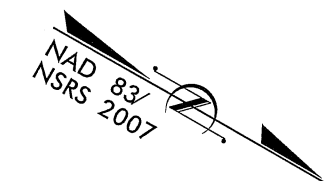
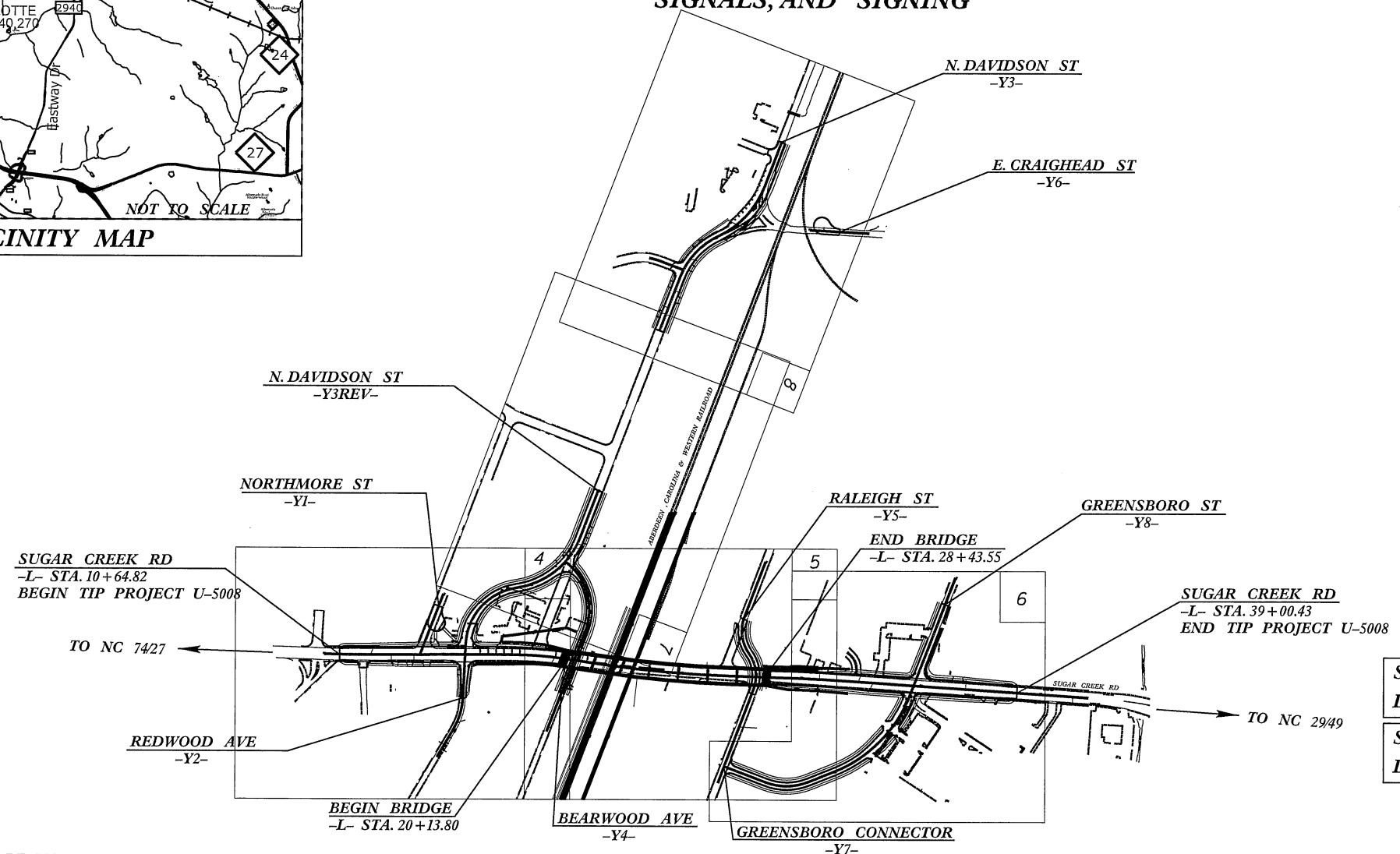
MECKLENBURG COUNTY

LOCATION: SUGAR CREEK ROAD AND NCRR/NSRR
CROSSING NO. 715 352H GRADE SEPARATION

TYPE OF WORK: GRADING, DRAINAGE, PAVING, STRUCTURE, CURB & GUTTER,
SIGNALS, AND SIGNING



PROJECT VICINITY MAP



SUBMITTAL: 25% PRELIMINARY PLANS
DATE: AUGUST 27, 2012

SUBMITTAL: 25% PRELIMINARY PLANS
DATE: JUNE 8, 2012

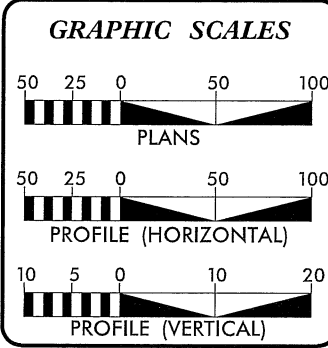
INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III
THIS PROJECT IS WITHIN MUNICIPAL BOUNDARIES OF CHARLOTTE

TIP PROJECT: U-5008

CONTRACT:



DESIGN DATA

ADT 2010 =	24,300
ADT 2035 =	30,300
DHV =	8 %
D =	55 %
T =	12 % *
V =	50 MPH
* TTST =	4% DUAL = 8%
FUNC CLASS =	URBAN COLLECTOR SUBREGIONAL TIER

PROJECT LENGTH

LENGTH OF ROADWAY TIP PROJECT U-5008 =	.381 MI
LENGTH OF STRUCTURE TIP PROJECT U-5008 =	.156 MI
TOTAL LENGTH OF TIP PROJECT U-5008 =	.537 MI
DESIGN EXCEPTIONS REQUIRED:	DESIGN SPEED

Prepared In the Office of:

1025 Wade Avenue
Raleigh, NC 27609
Tel: 919-788-9977
Fax: 919-788-9999
License: C-2197

FOR THE NORTH CAROLINA DEPT. OF TRANSPORTATION

2012 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: June 2013	STEVE THOMAS, PE PROJECT ENGINEER
LETTING DATE: November 2014	DAVID CLODGO, PE PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

SIGNATURE: _____ P.E.

ROADWAY DESIGN ENGINEER

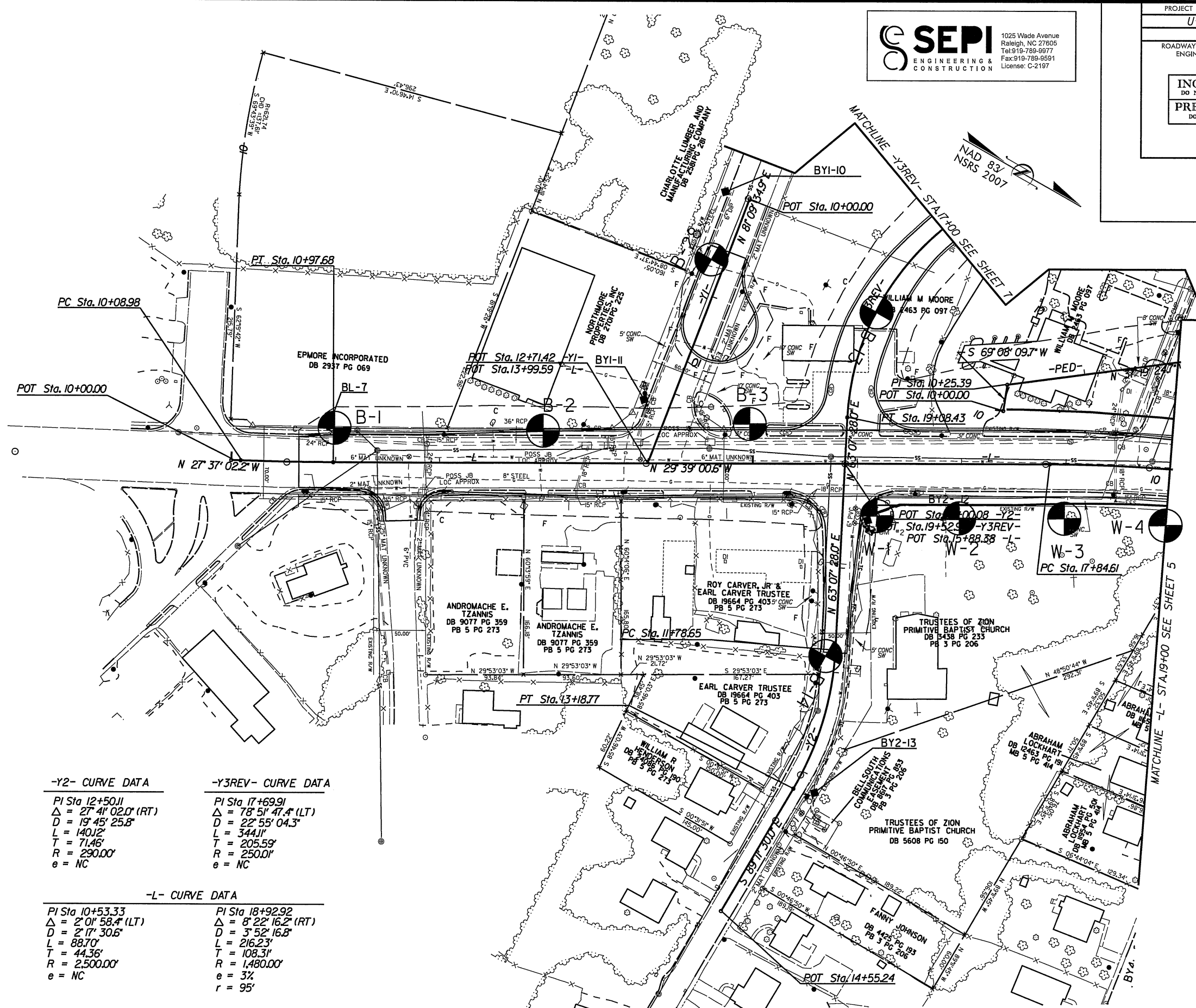
SIGNATURE: _____ P.E.

NC DEPARTMENT OF TRANSPORTATION
RAIL DIVISION

ENGINEERING AND SAFETY BRANCH
CAPITAL VEH
1848 MAIL CENTER
RALEIGH, NC 27615

25-SEP-2013 10:45
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roya.rdhie AT DG713738

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION



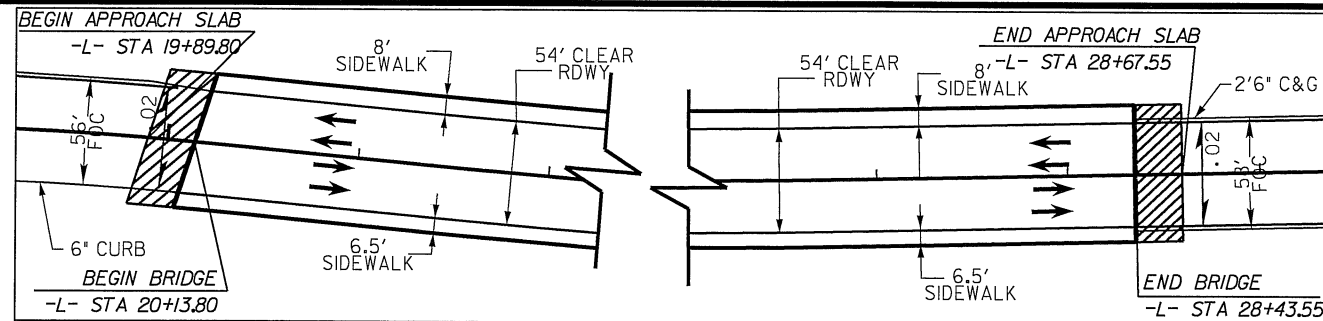
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 $\Delta = 27' 41'' 02.0''$ (RT)
D = 19' 45' 25.8"
L = 140.12'
T = 71.46'
R = 250.00'
e = NC

-Y3REV- CURVE DATA
PI Sta 17+69.91
 $\Delta = 78' 51'' 47.4''$ (LT)
D = 22' 55' 04.3"
L = 344.11'
T = 205.59'
R = 250.00'
e = NC

-L- CURVE DATA
PI Sta 10+53.33
 $\Delta = 2' 01'' 58.4''$ (LT)
D = 2' 17' 30.6"
L = 88.70'
T = 44.36'
R = 2,500.00'
e = NC

-L- CURVE DATA
PI Sta 18+92.92
 $\Delta = 8' 22'' 16.2''$ (RT)
D = 3' 52' 16.8"
L = 216.23'
T = 108.31'
R = 1,480.00'
e = 3%
r = 95'

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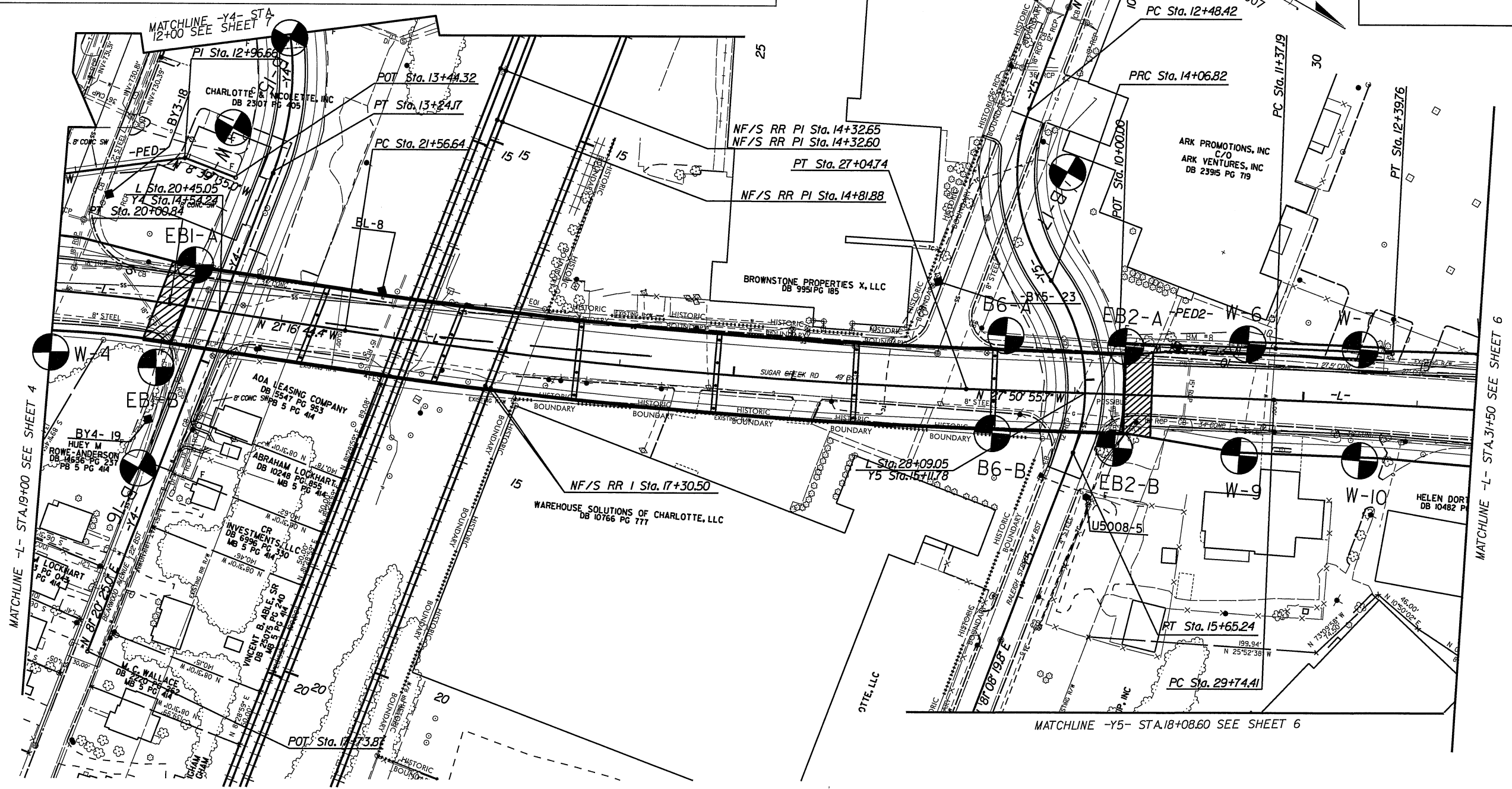


Sketch showing Dimensions of Pavement and Shoulder in Relation to Proposed Bridge Width

SEPI
ENGINEERING & CONSTRUCTION

1025 Wade Avenue
Raleigh, NC 27605
Tel: 919-789-9877
Fax: 919-789-9551
License: C-2197

PROJECT REFERENCE NO. U-5008	SHEET NO. 5
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR A/W ACQUISITION PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	



-Y4- CURVE DATA

PI Sta 11+94.56
$\Delta = 69^\circ 18' 55.3''$ (RT)
$D = 22^\circ 55' 05.9''$
$L = 302.45'$
$T = 172.84'$
$R = 250.00'$
$e = NC$

-L- CURVE DATA

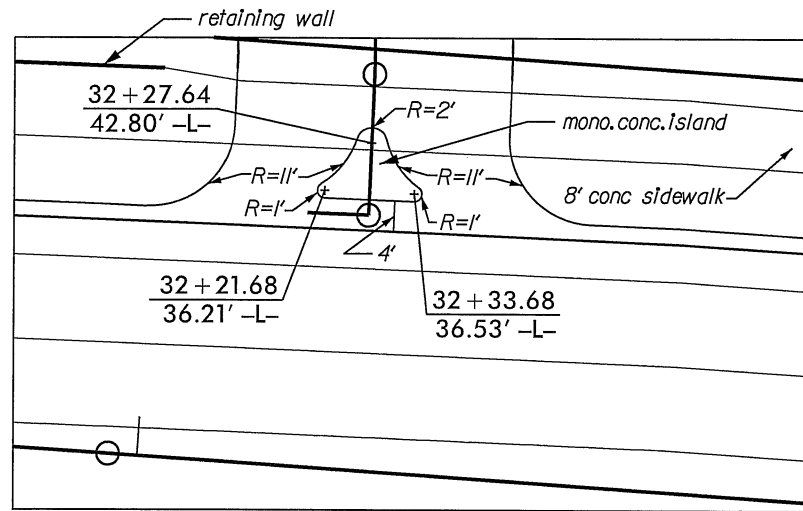
PI Sta 18+92.92	PI Sta 24+30.99	PI Sta 30+85.30
$\Delta = 8^\circ 22' 16.2''$ (RT)	$\Delta = 6^\circ 34' 11.2''$ (LT)	$\Delta = 2^\circ 07' 03.0''$ (RT)
$D = 3^\circ 52' 16.8''$	$D = 1^\circ 11' 55.2''$	$D = 0^\circ 57' 17.7''$
$L = 216.23'$	$L = 548.10'$	$L = 221.74'$
$T = 108.31'$	$T = 274.35'$	$T = 110.88'$
$R = 1,480.00'$	$R = 4,780.00'$	$R = 6,000.00'$
$e = 3\%$	$e = NC$	$e = NC$
$r = 95'$		

-Y5- CURVE DATA

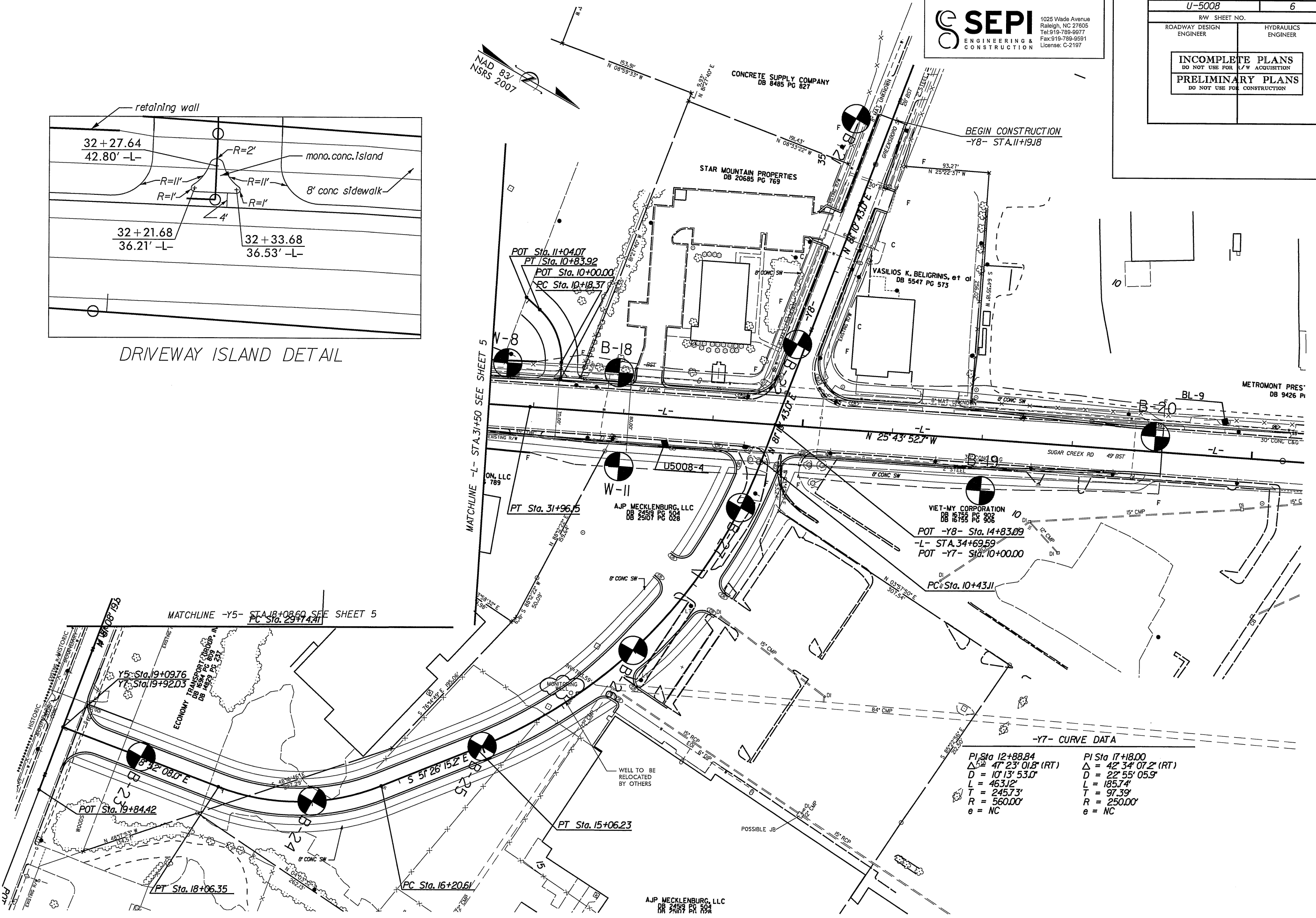
PI Sta 13+34.72	PI Sta 14+93.12
$\Delta = 56^\circ 28' 22.2''$ (LT)	$\Delta = 56^\circ 25' 09.9''$ (RT)
$D = 35^\circ 39' 11.6''$	$D = 35^\circ 36' 48.3''$
$L = 158.39'$	$L = 158.42'$
$T = 86.30'$	$T = 86.30'$
$R = 160.70'$	$R = 160.88'$
$e = NC$	$e = NC$

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PROJECT REFERENCE NO.	SHEET NO.
U-5008	6
RAW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION	
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	



DRIVEWAY ISLAND DETAIL



-Y7- CURVE DATA

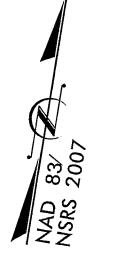
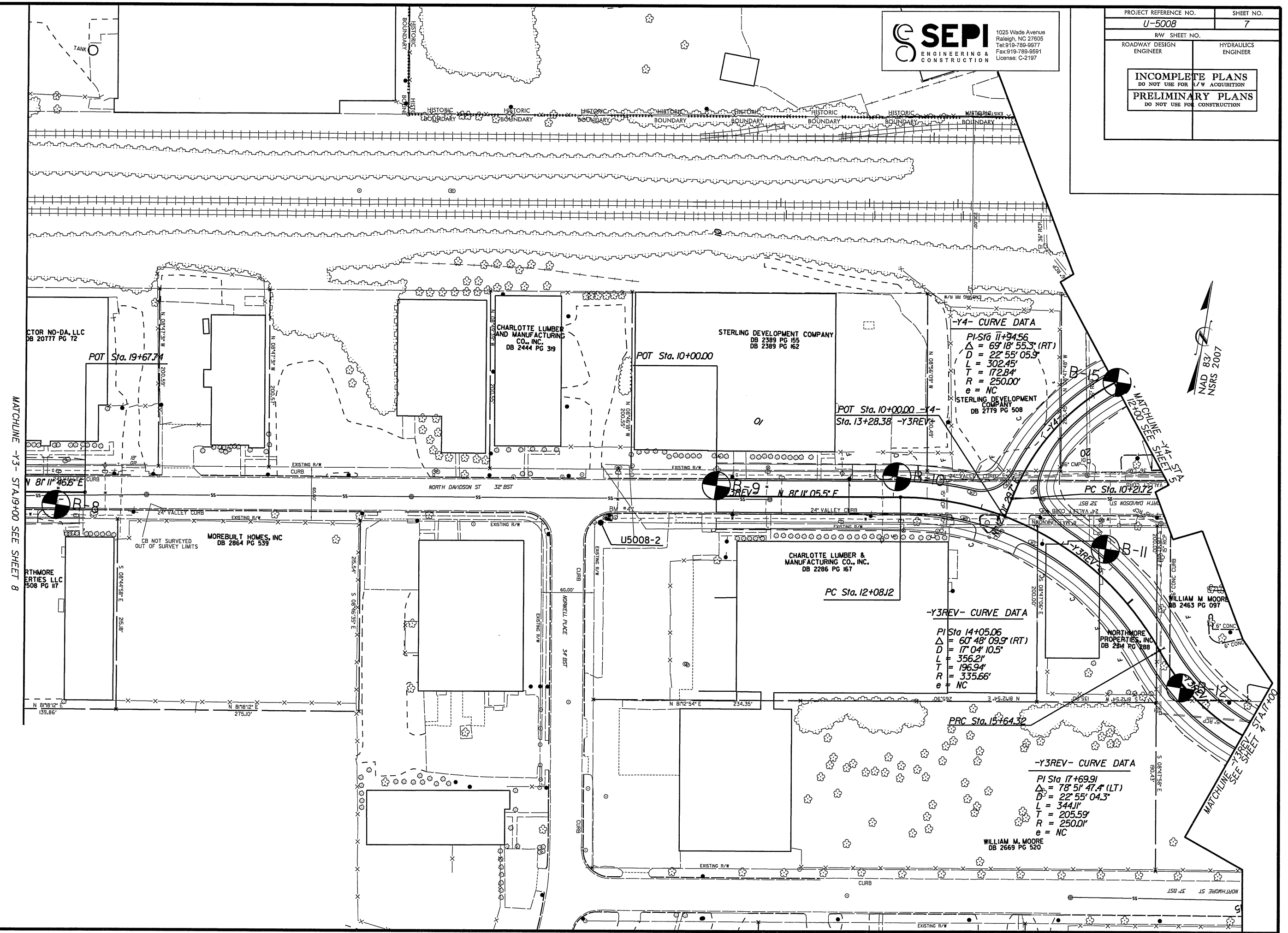
PI Sta 12+88.84	PI Sta 17+18.00
$\Delta = 47^{\circ} 23' 01.8''$ (RT)	$\Delta = 42^{\circ} 34' 07.2''$ (RT)
D = 10' 13" 53.0"	D = 22' 55" 05.9"
L = 463.12'	L = 185.74'
T = 245.73'	T = 97.39'
R = 560.00'	R = 250.00'
e = NC	e = NC

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PROJECT REFERENCE NO.	SHEET NO.
U-5008	7
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	



MATCHLINE -Y3- STA.19+00 SEE SHEET 8

MATCHLINE -Y3- SEE SHEET 7

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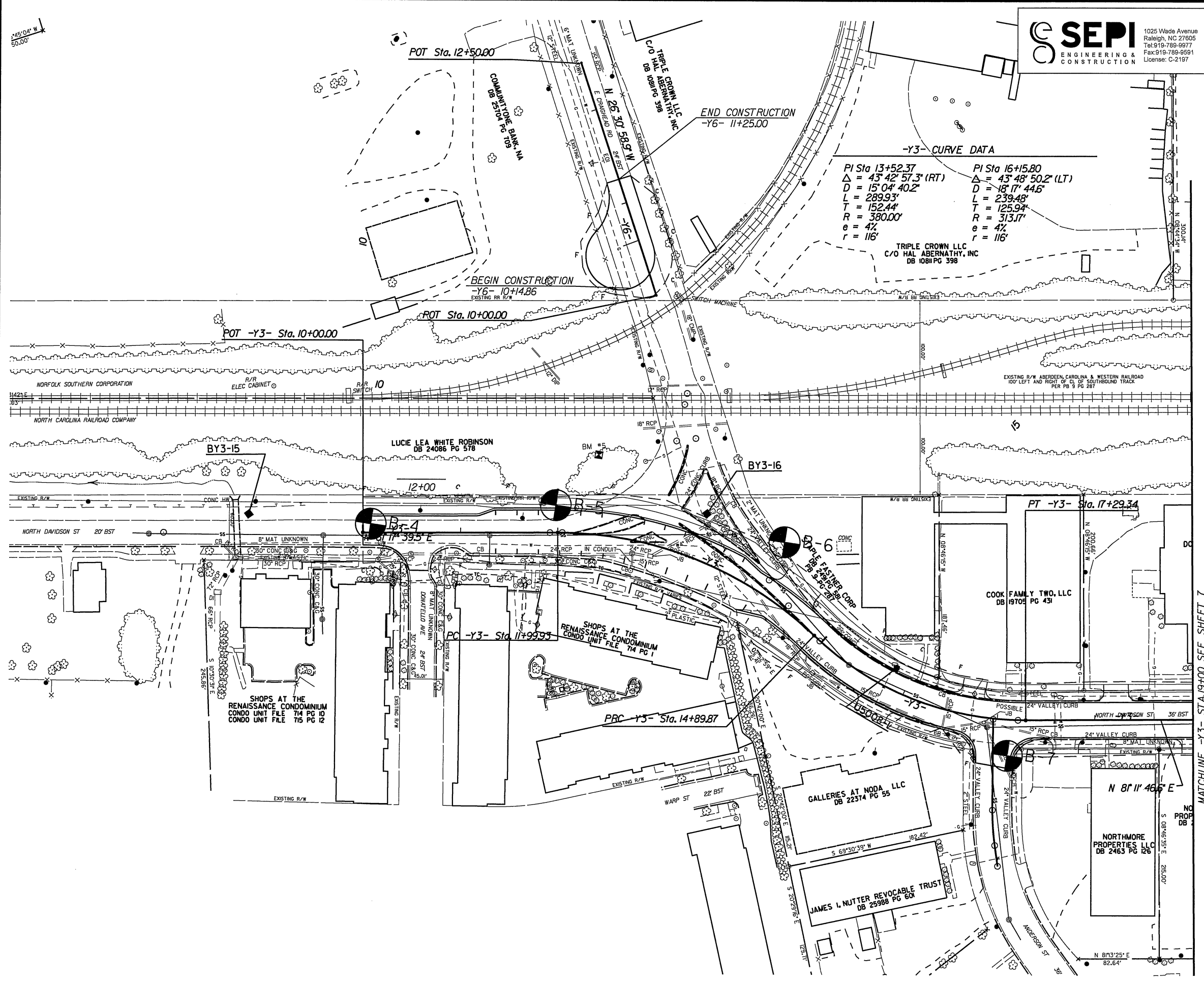
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SEPI
ENGINEERING &
CONSTRUCTION
1025 Wade Avenue
Raleigh, NC 27605
Tel: 919-789-9977
Fax: 919-789-9591
License: C-2197

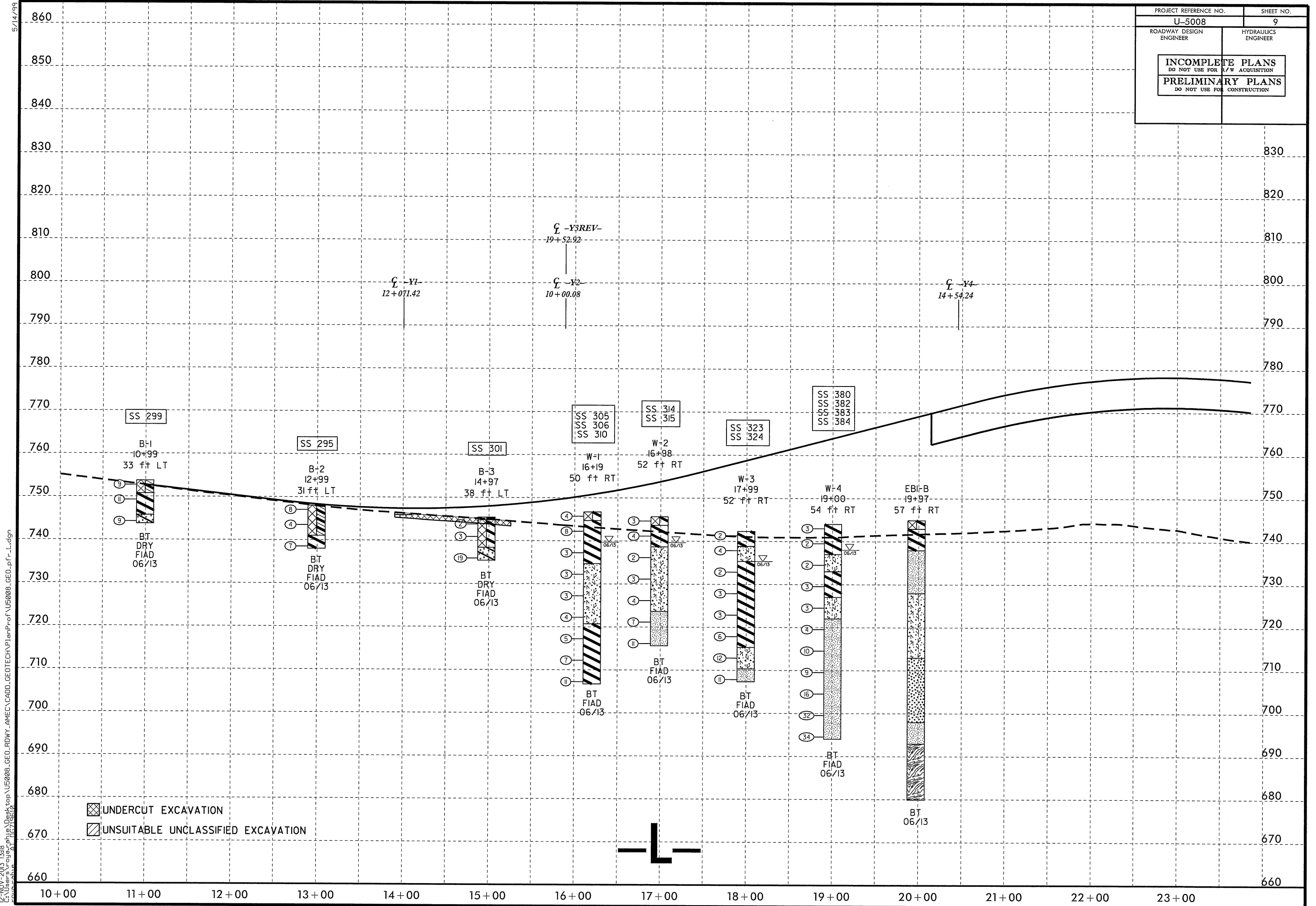
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U-5008		8	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER			HYDRAULICS ENGINEER
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PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION			



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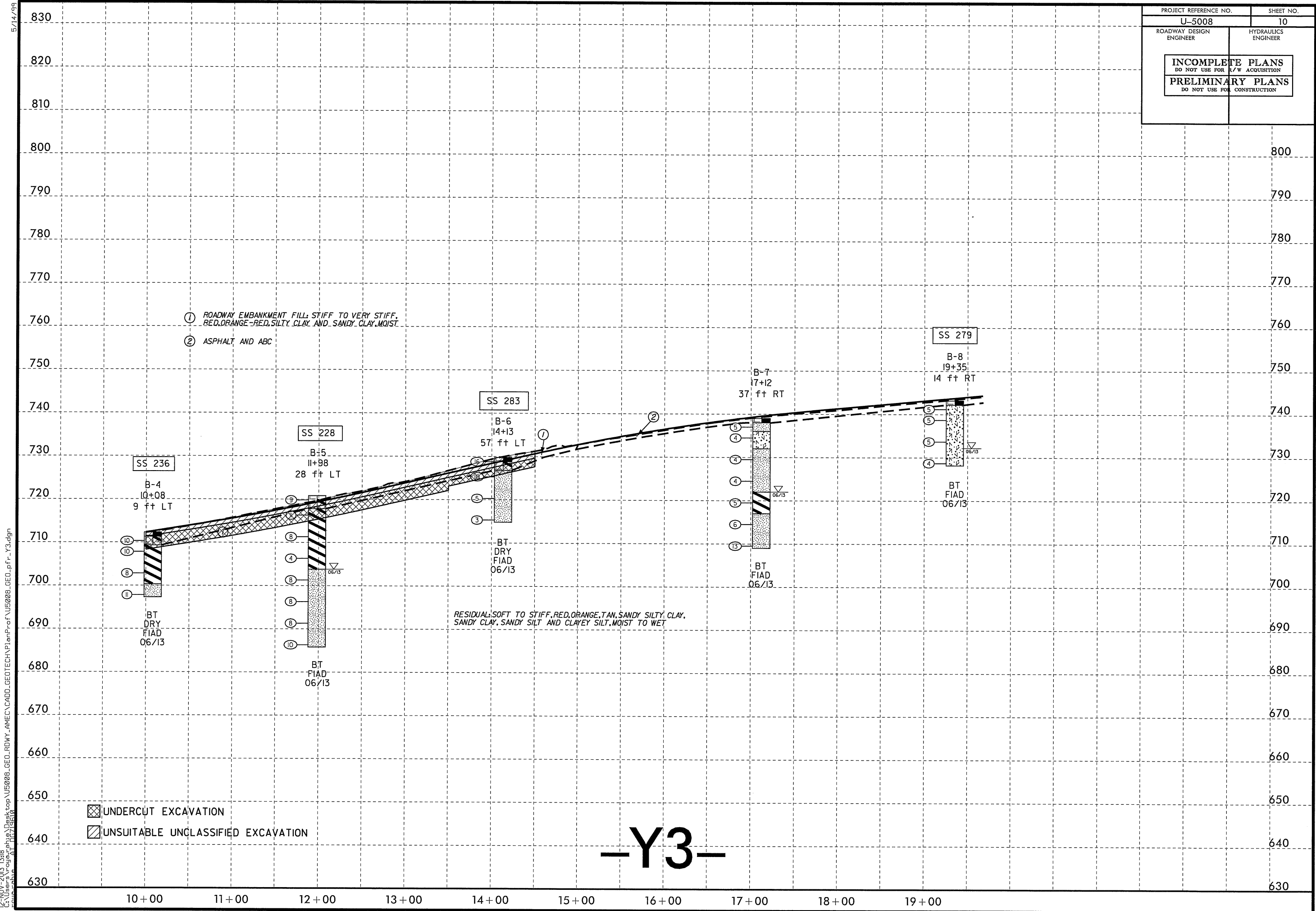


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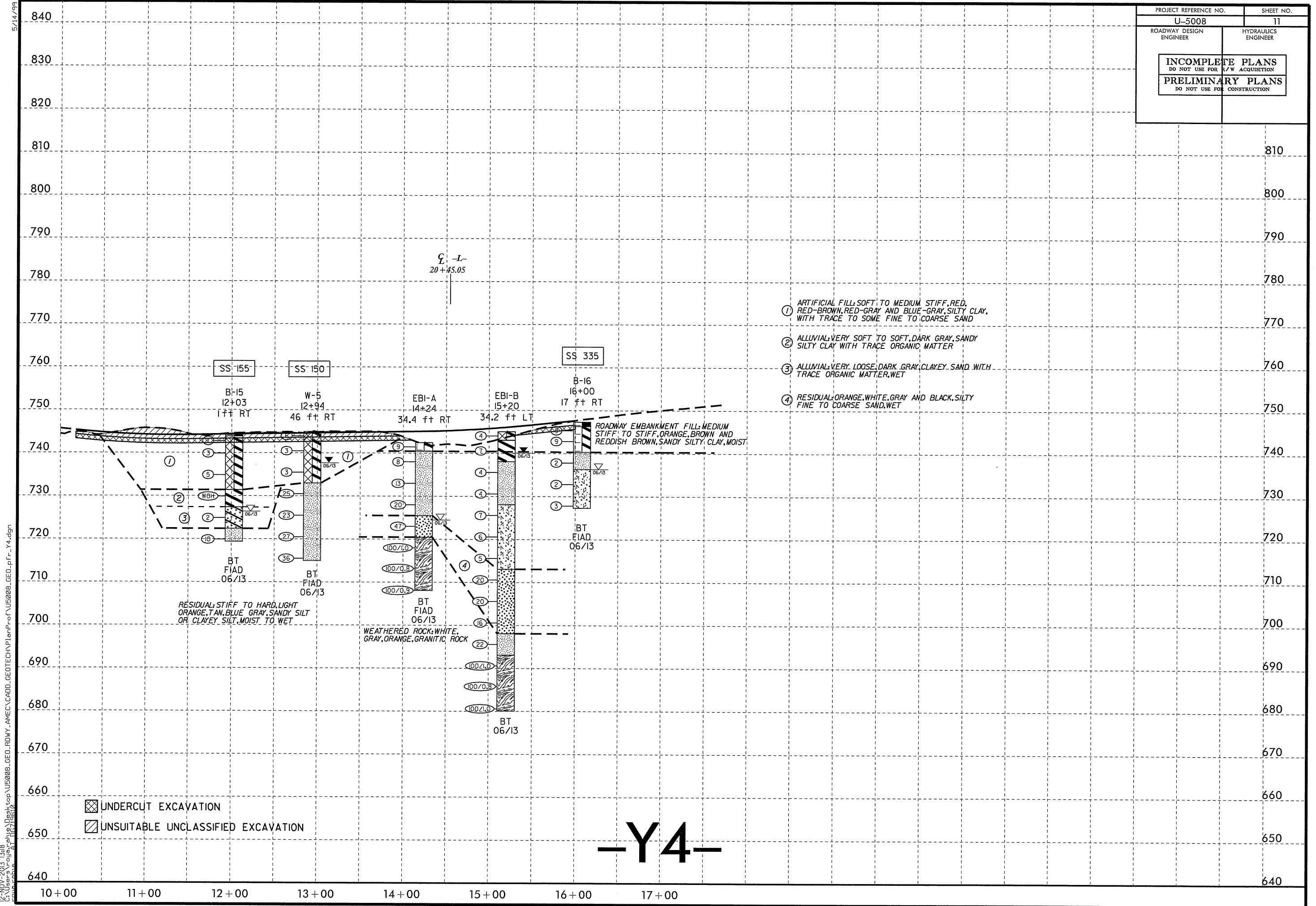
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INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	



- UNDERCUT EXCAVATION
- UNSUITABLE UNCLASSIFIED EXCAVATION

-Y3-

PROJECT REFERENCE NO.	SHEET NO.
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INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

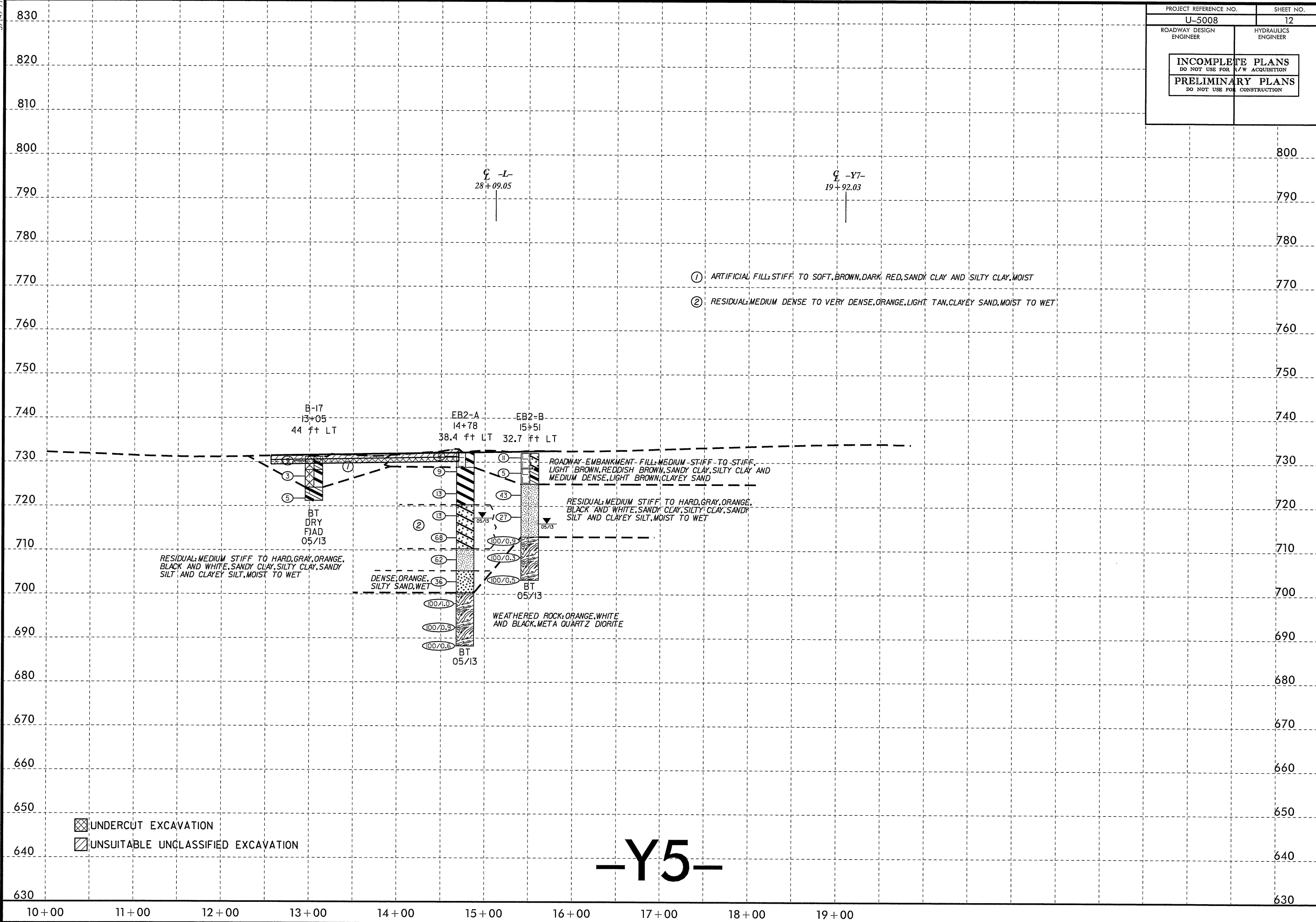


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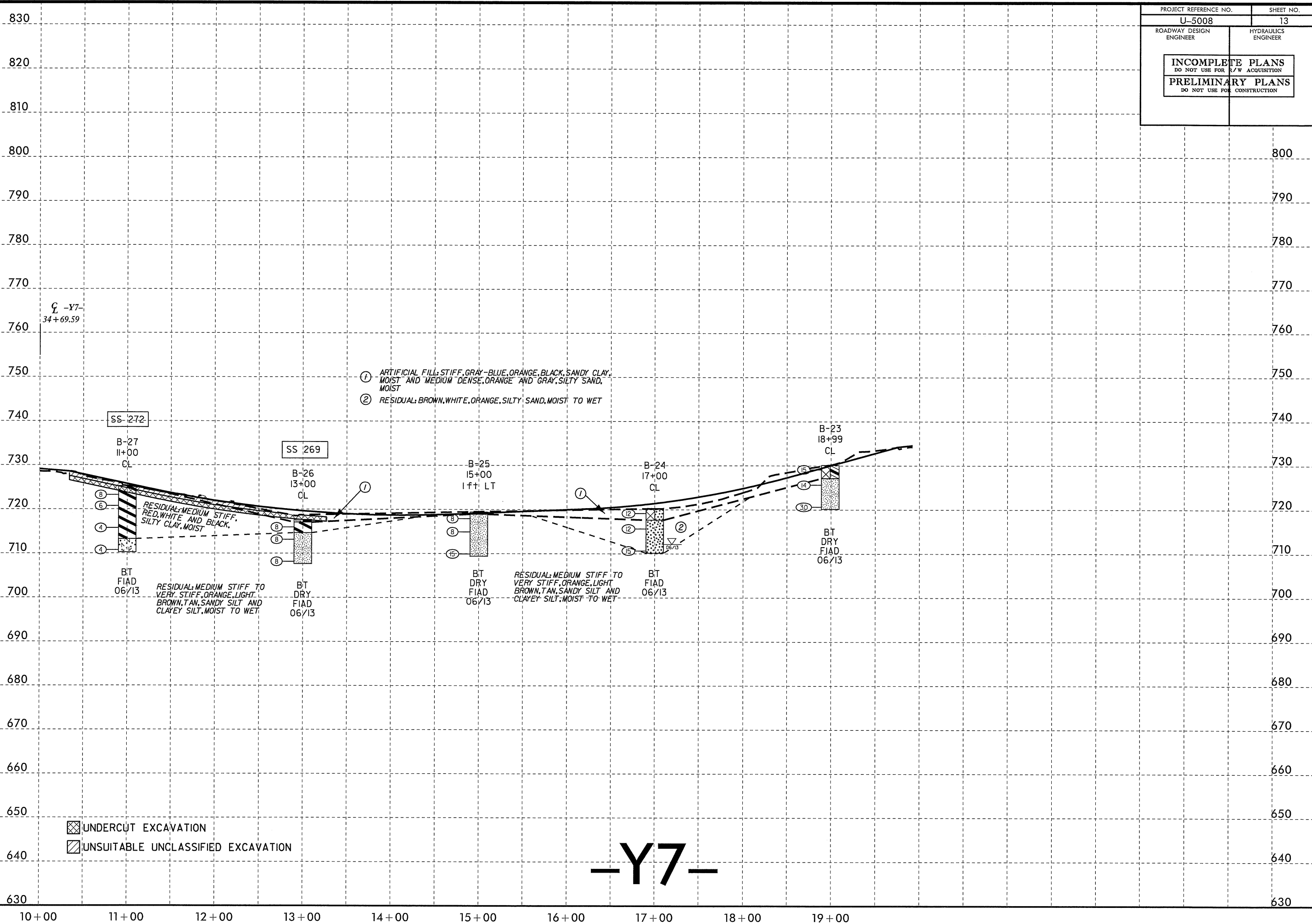
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ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
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PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	





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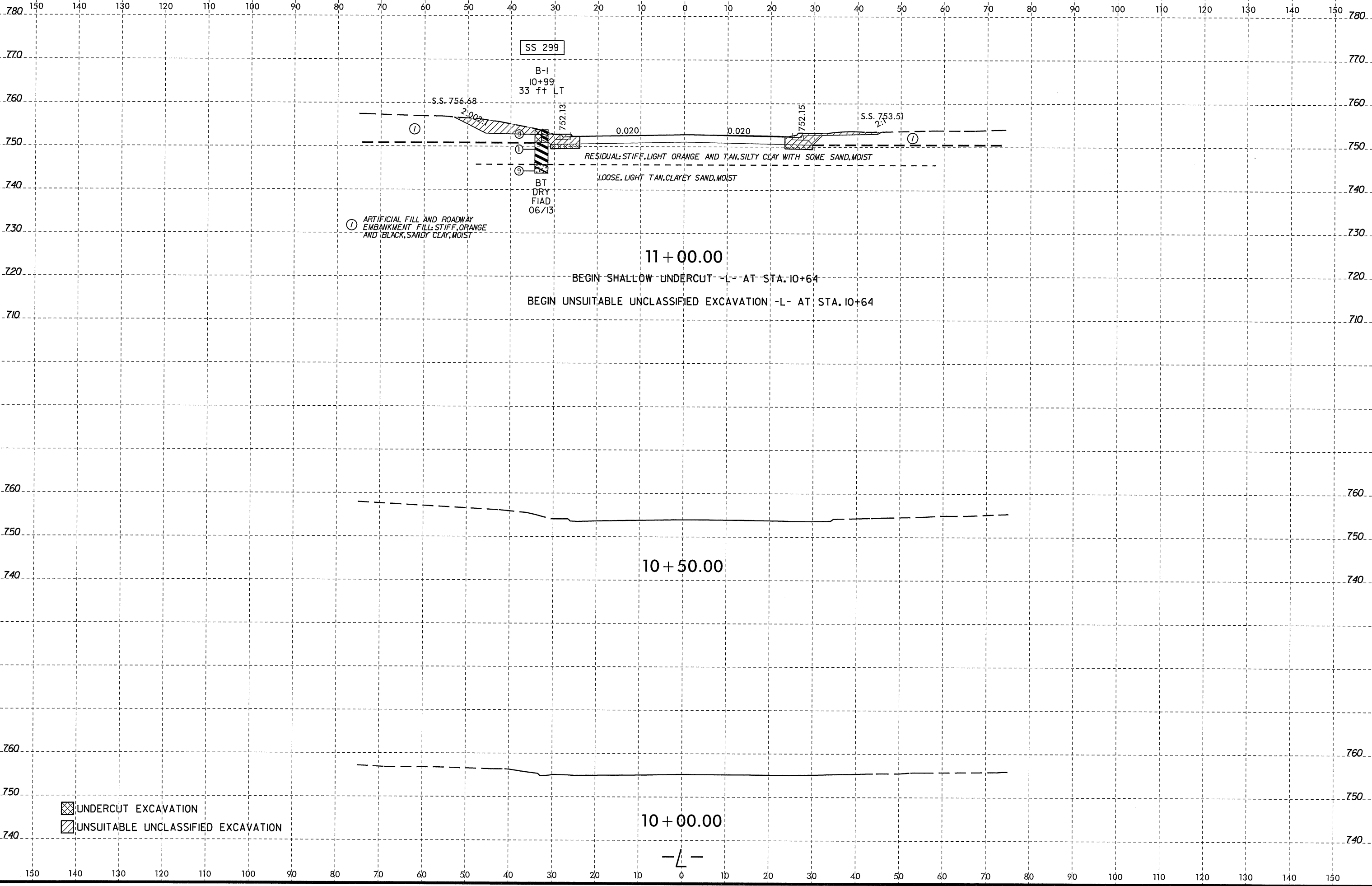
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 UNDERCUT EXCAVATION
 UNSUITABLE UNCLASSIFIED EXCAVATION

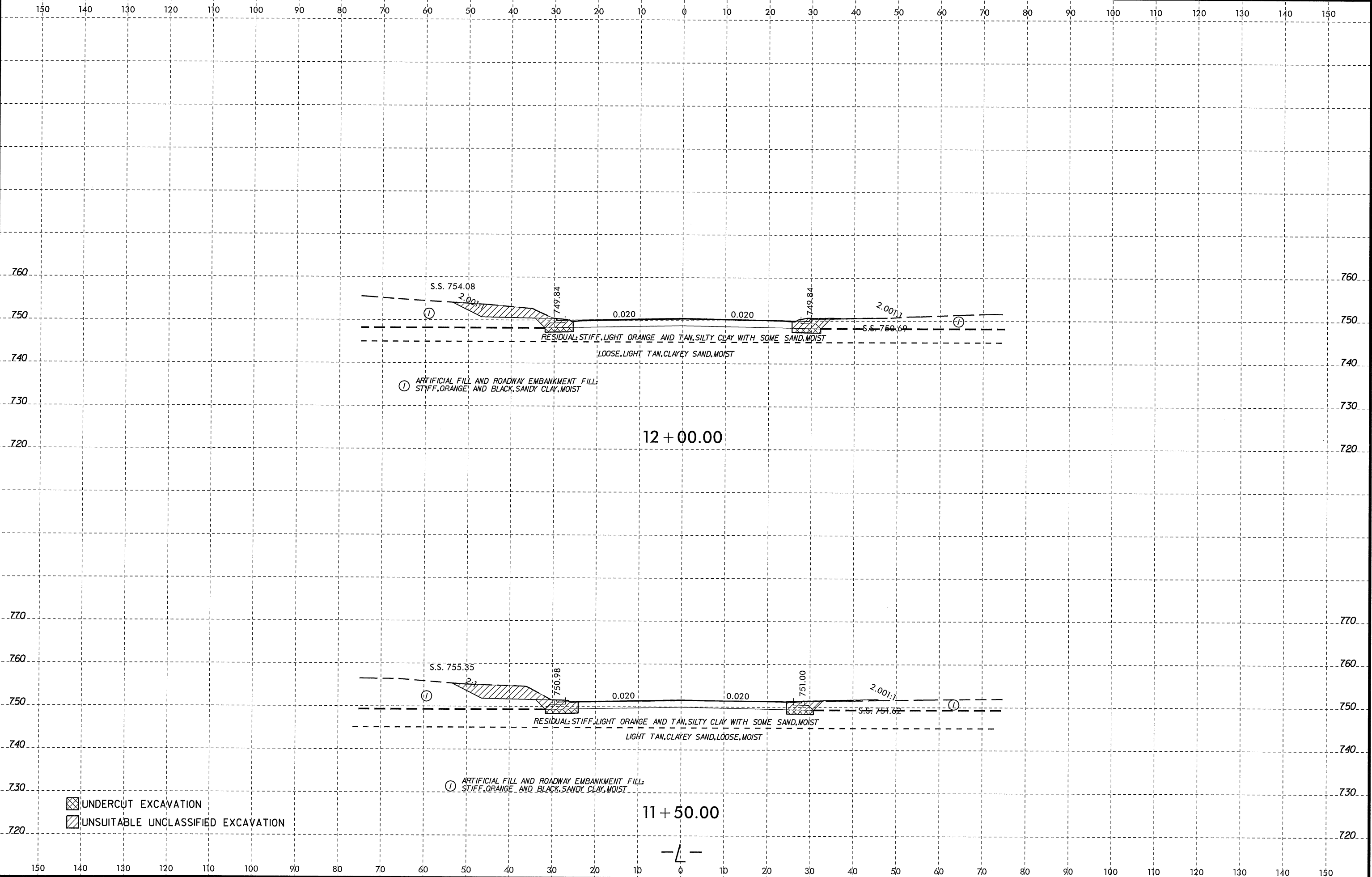
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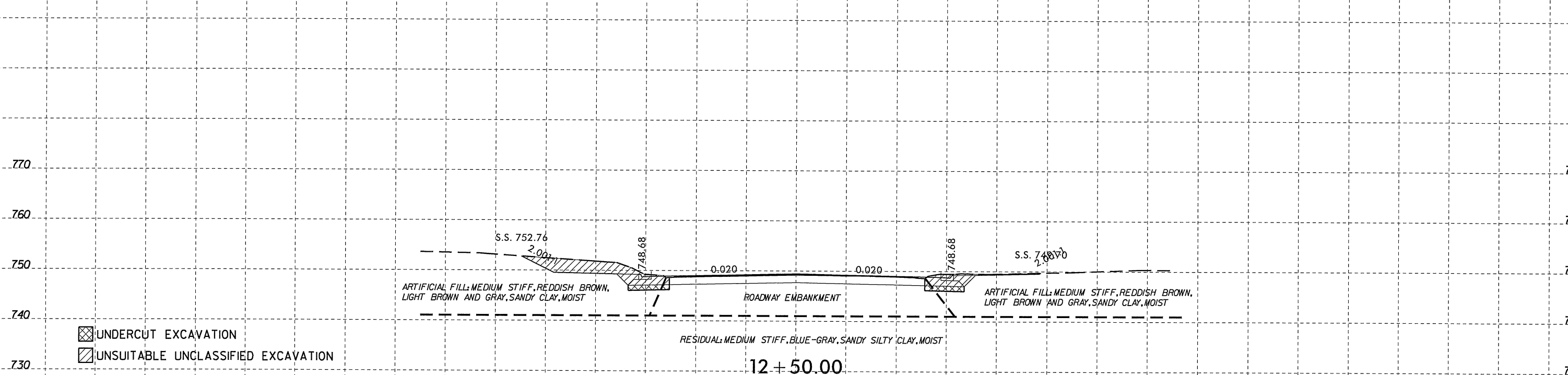
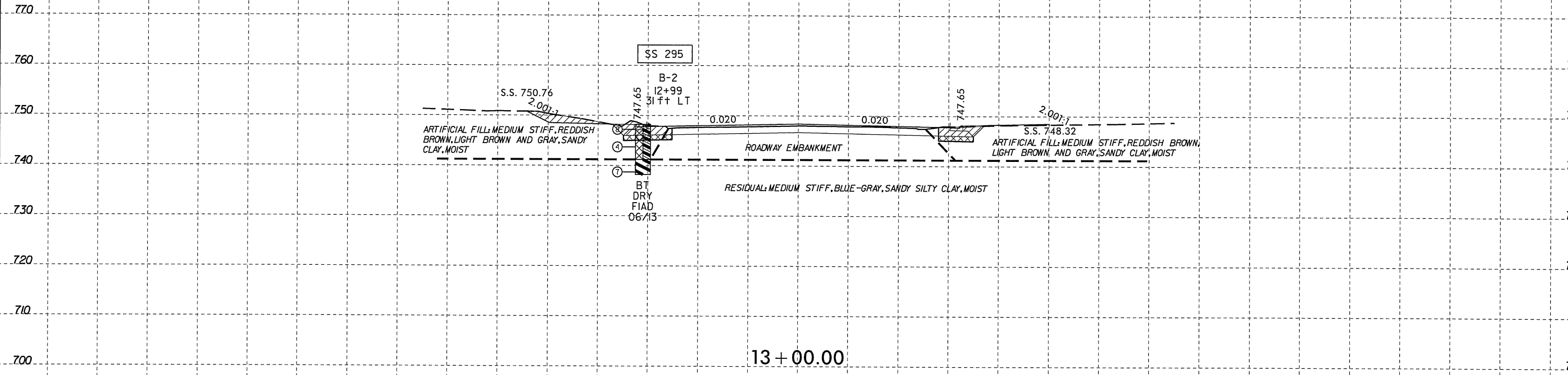
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-  UNDERCUT EXCAVATION
-  UNSUITABLE UNCLASSIFIED EXCAVATION

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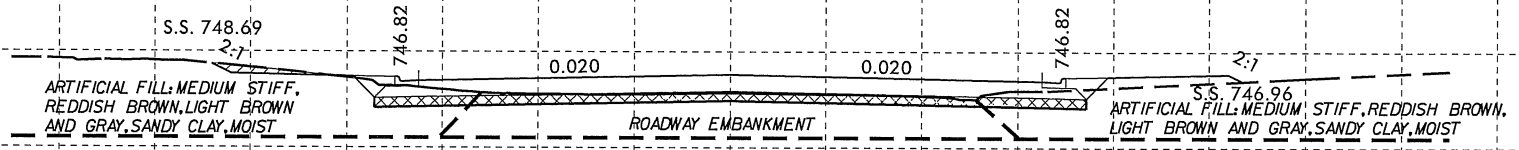
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END UNSUITABLE UNCLASSIFIED EXCAVATION -L- AT STA. 14+75

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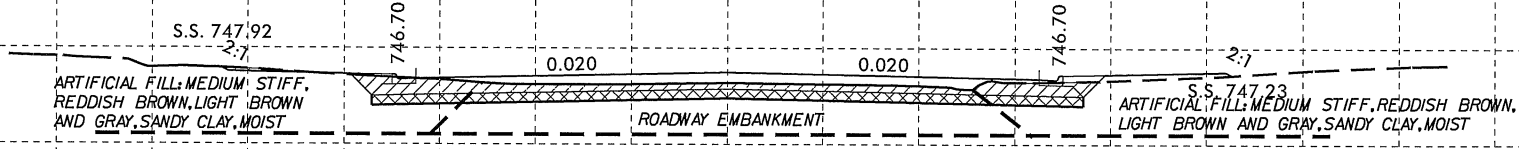


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730 730

14 + 50.00

760 760



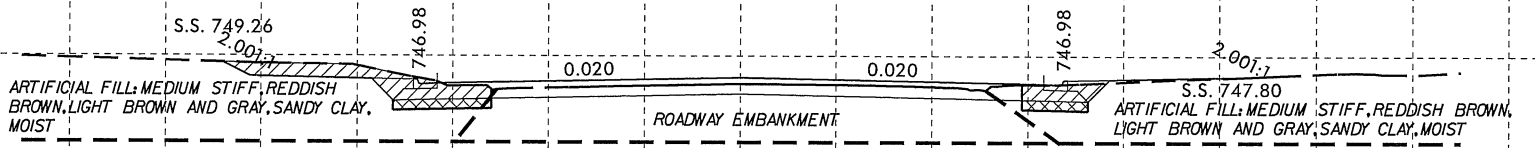
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740 740

730 730

14 + 00.00

760 760



750 750

740 740

730 730

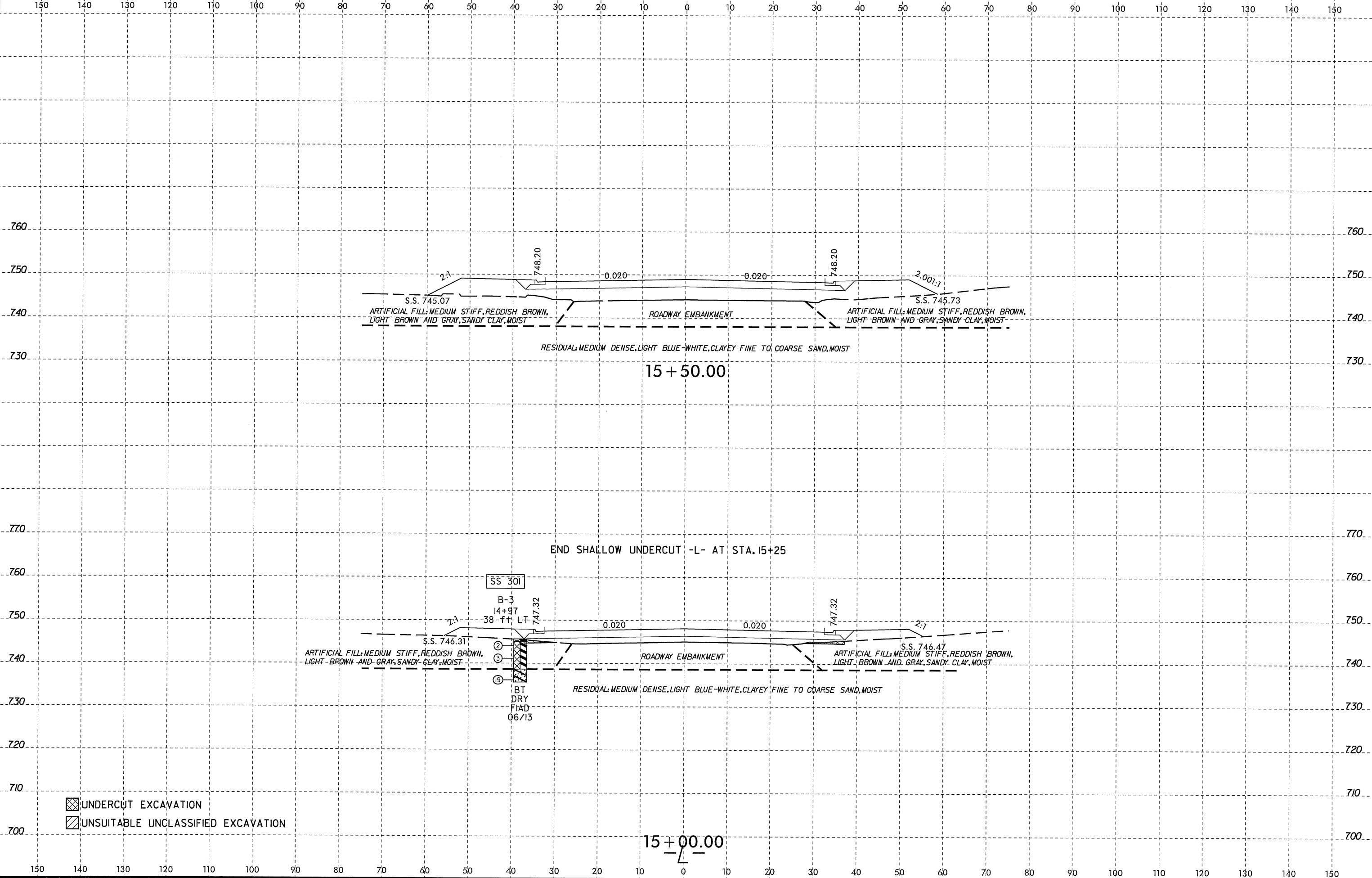
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- UNDERCUT EXCAVATION
- UNSUITABLE UNCLASSIFIED EXCAVATION

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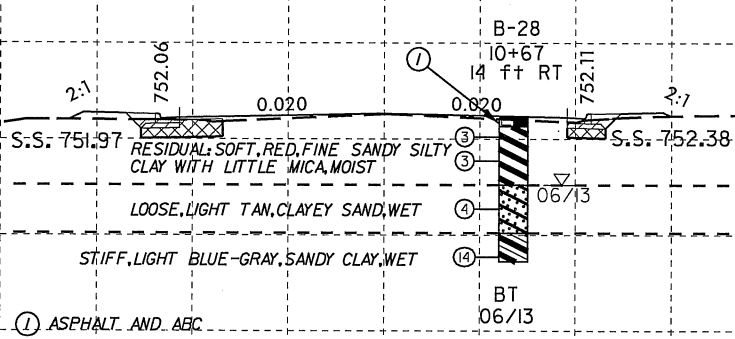
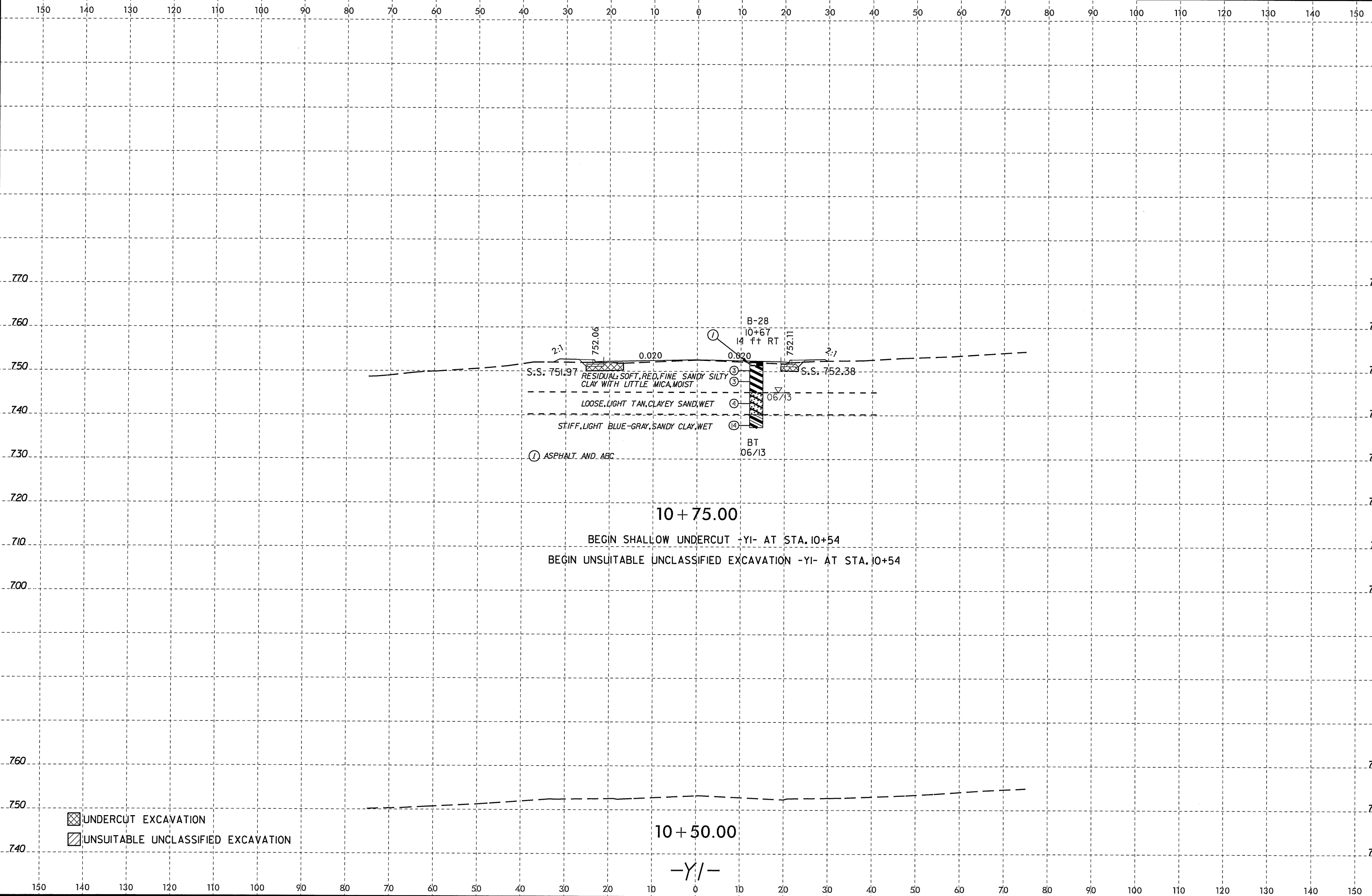
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8/23/99



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 06/13/10

8/23/99





10 + 75.00

BEGIN SHALLOW UNDERCUT -YI- AT STA. 10+54

BEGIN UNSUITABLE UNCLASSIFIED EXCAVATION -YI- AT STA. 10+54

10 + 50.00

-YI-

-  UNDERCUT EXCAVATION
-  UNSUITABLE UNCLASSIFIED EXCAVATION

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8/23/99

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770 770

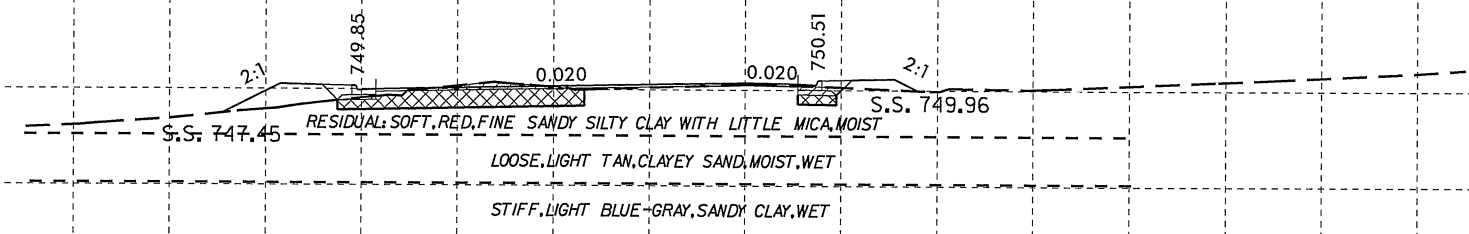
760 760

750 750

740 740

730 730

END UNSUITABLE UNCLASSIFIED -YI- AT STA. 11+62
 END SHALLOW UNDERCUT -YI- AT STA. 11+62



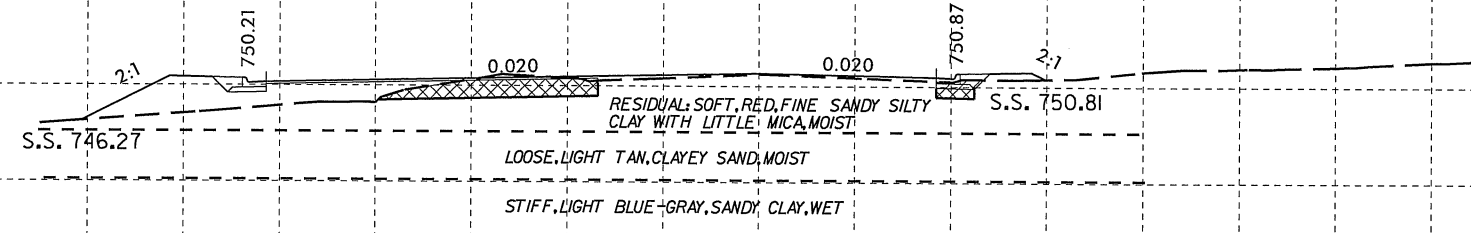
11 + 50.00

760 760

750 750

740 740

730 730



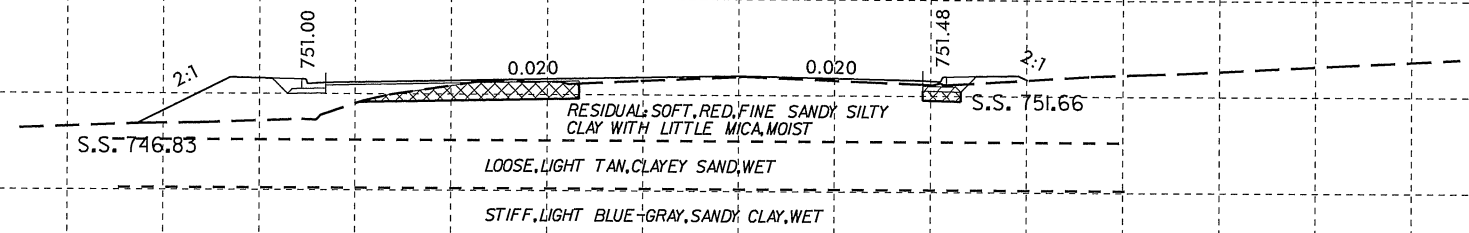
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760 760

750 750

740 740

730 730



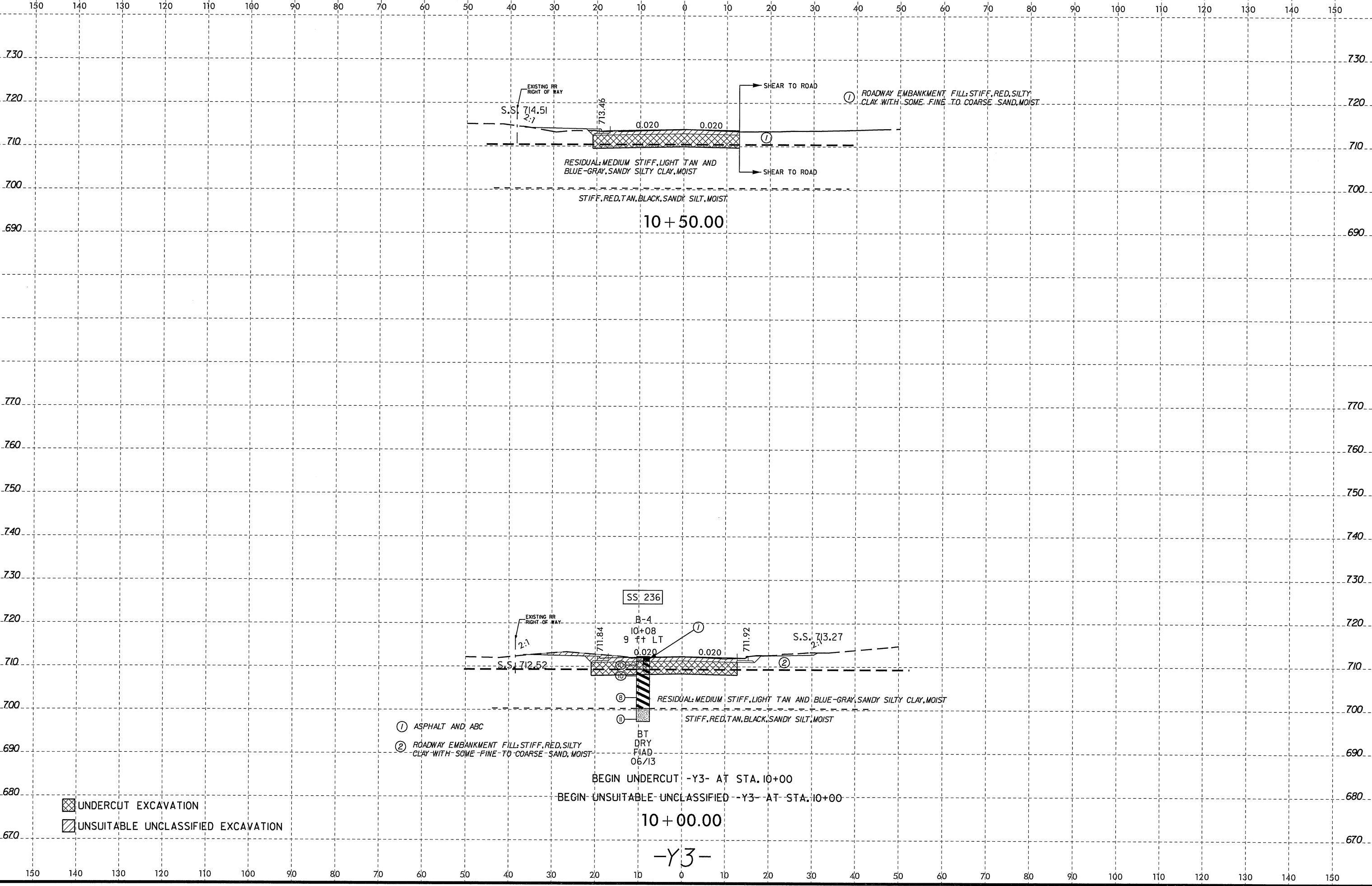
11 + 00.00

-YI-

- UNDERCUT EXCAVATION
- UNSUITABLE UNCLASSIFIED EXCAVATION

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8/23/99



EXISTING RR RIGHT OF WAY

S.S. 714.51 2:1

713.46

0.020 0.020

RESIDUAL: MEDIUM STIFF, LIGHT TAN AND BLUE-GRAY, SANDY SILTY CLAY, MOIST

STIFF, RED, TAN, BLACK, SANDY SILT, MOIST

ROADWAY EMBANKMENT FILL: STIFF, RED, SILTY CLAY WITH SOME FINE TO COARSE SAND, MOIST

SHEAR TO ROAD

10 + 50.00

SS 236

EXISTING RR RIGHT OF WAY

2:1

711.84

B-4

10+08

9 ft LT

0.020 0.020

711.92

S.S. 713.27

RESIDUAL: MEDIUM STIFF, LIGHT TAN AND BLUE-GRAY, SANDY SILTY CLAY, MOIST

STIFF, RED, TAN, BLACK, SANDY SILT, MOIST

- ① ASPHALT AND ABC
- ② ROADWAY EMBANKMENT FILL: STIFF, RED, SILTY CLAY WITH SOME FINE TO COARSE SAND, MOIST

BT
DRY
FIAD
06/13

BEGIN UNDERCUT -Y3- AT STA. 10+00

BEGIN UNSUITABLE UNCLASSIFIED -Y3- AT STA. 10+00

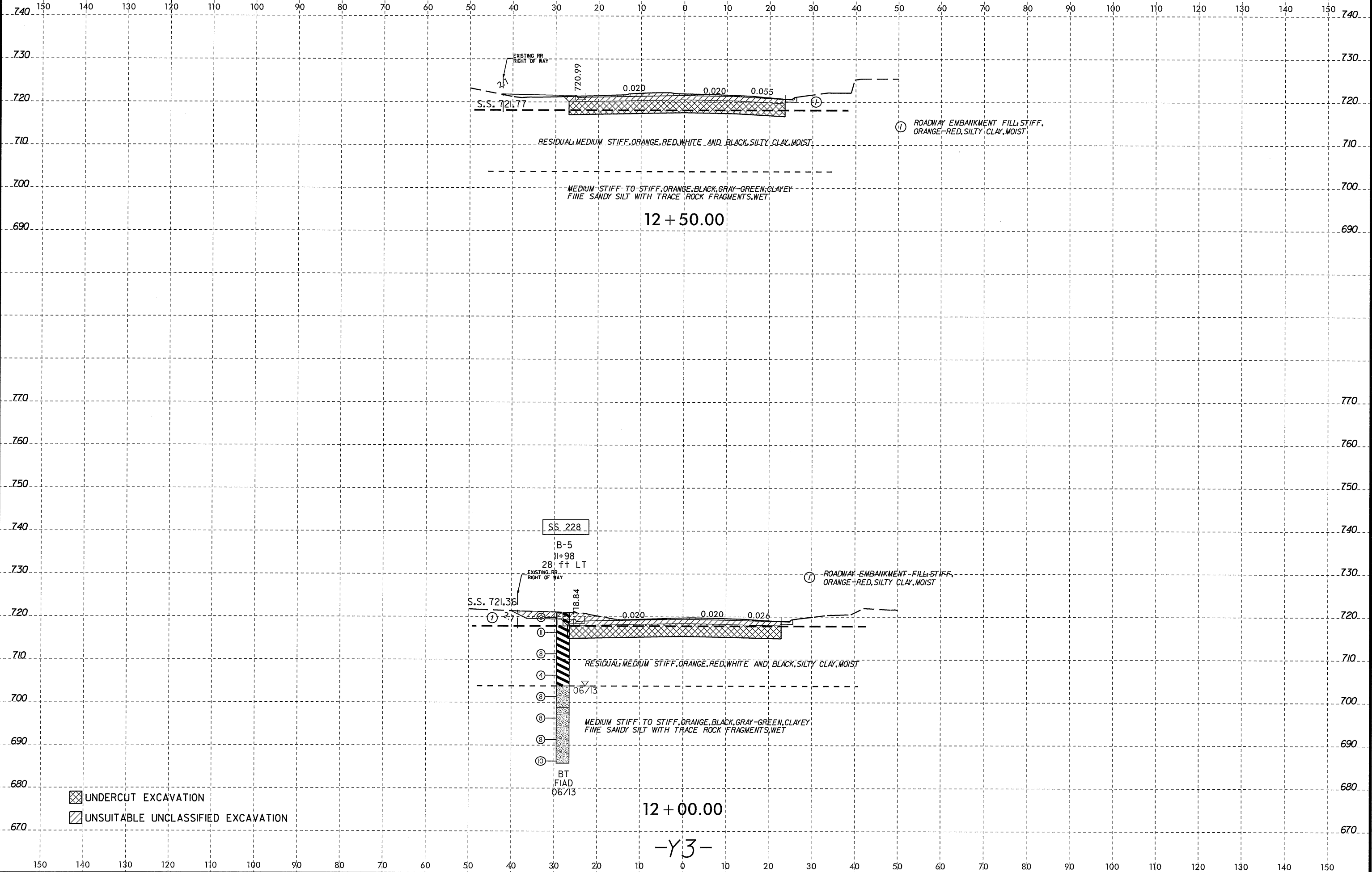
10 + 00.00

-Y3-

- UNDERCUT EXCAVATION
- UNSUITABLE UNCLASSIFIED EXCAVATION

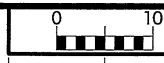
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 06/13/10

8/23/99



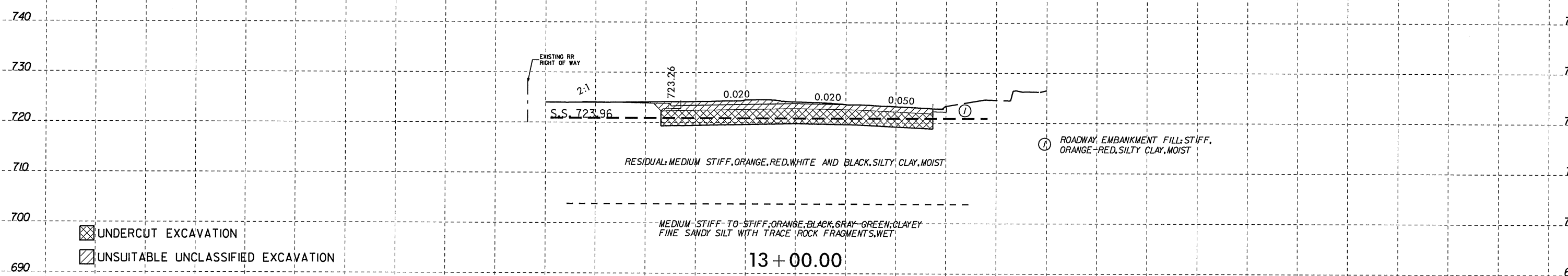
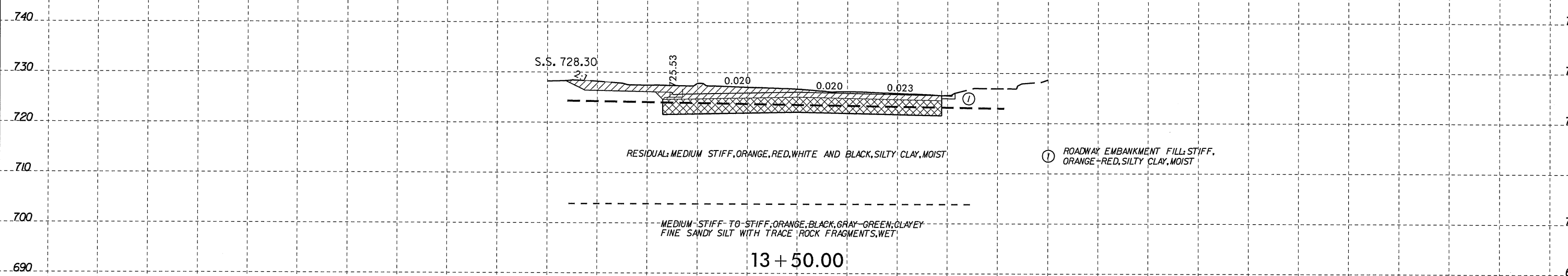
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 11/15/10

8/23/99



PROJ. REFERENCE NO.	SHEET NO.
U-5008	24

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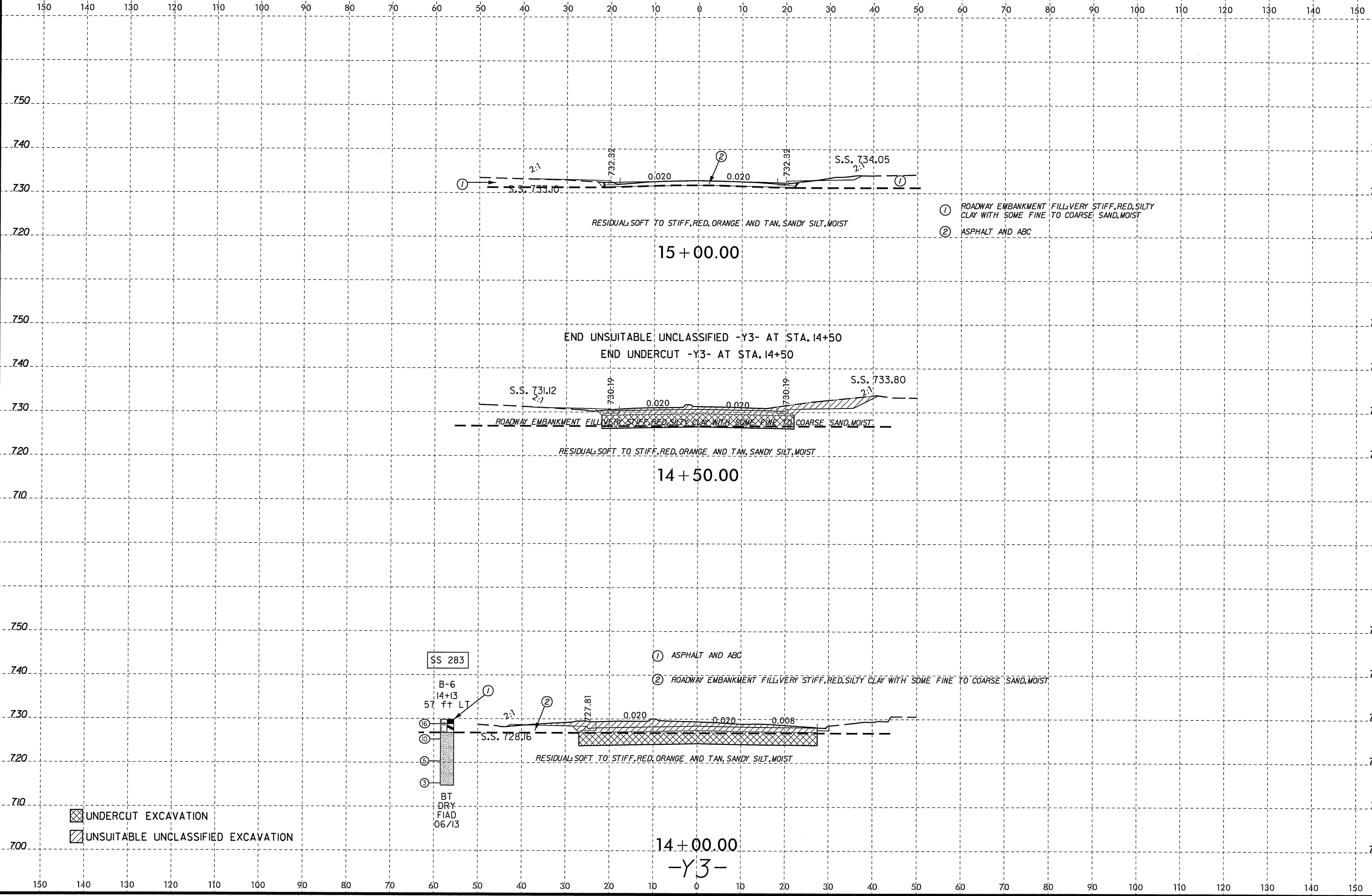
- UNDERCUT EXCAVATION
- UNSUITABLE UNCLASSIFIED EXCAVATION

-Y3-

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 11/16/10
 jph

8/22/99



RESIDUAL: SOFT TO STIFF, RED, ORANGE AND TAN, SANDY SILT, MOIST

15 + 00.00

END UNSUITABLE UNCLASSIFIED -Y3- AT STA. 14+50
END UNDERCUT -Y3- AT STA. 14+50

RESIDUAL: SOFT TO STIFF, RED, ORANGE AND TAN, SANDY SILT, MOIST

14 + 50.00

① ASPHALT AND ABC

② ROADWAY EMBANKMENT FILL: VERY STIFF, RED, SILTY CLAY WITH SOME FINE TO COARSE SAND, MOIST

RESIDUAL: SOFT TO STIFF, RED, ORANGE AND TAN, SANDY SILT, MOIST

14 + 00.00

-Y3-

UNDERCUT EXCAVATION
 UNSUITABLE UNCLASSIFIED EXCAVATION

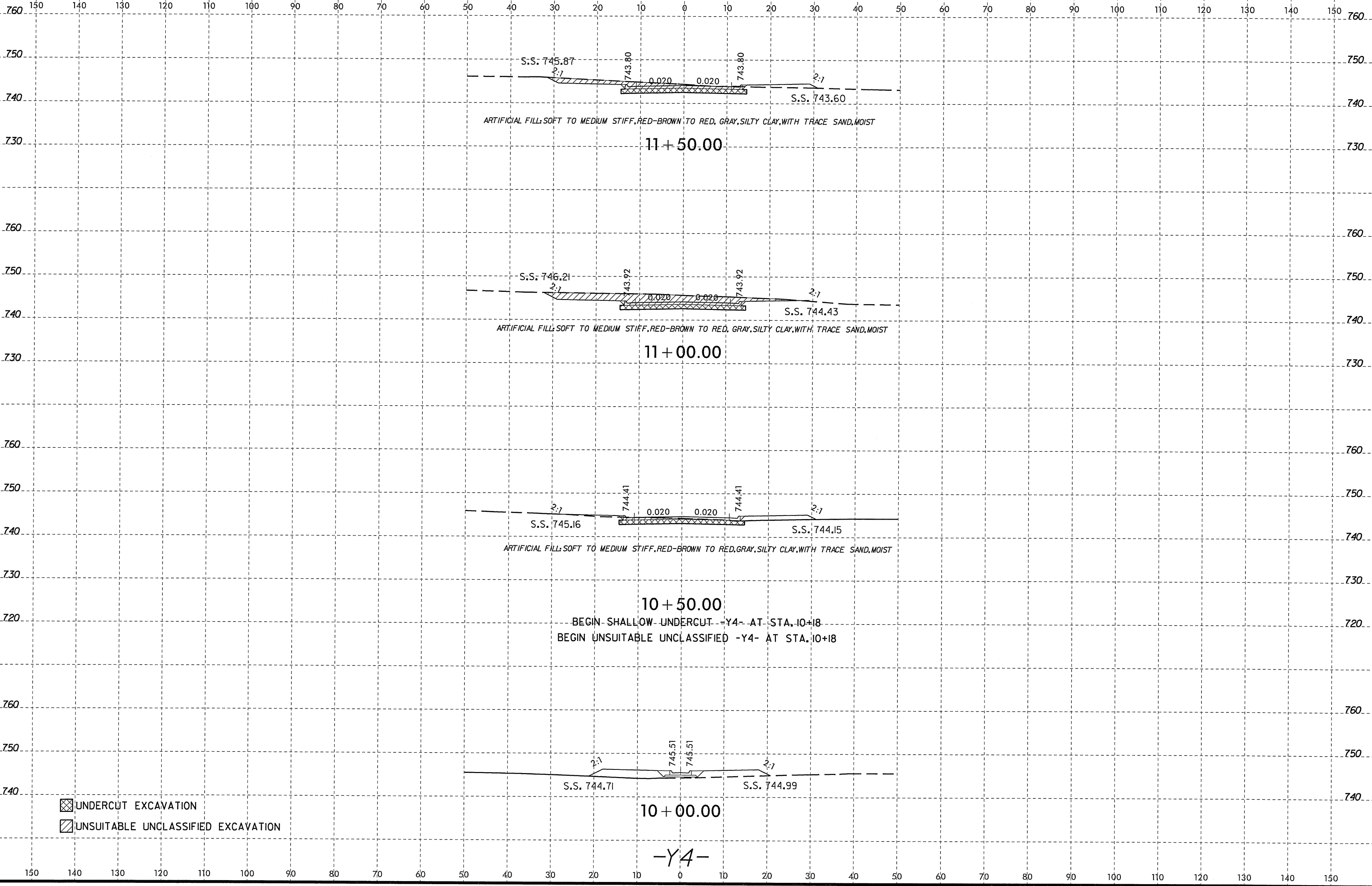
SS 283

B-6
14+13
57 ft LT

BT
DRY
FIAD
06/13

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8/23/99



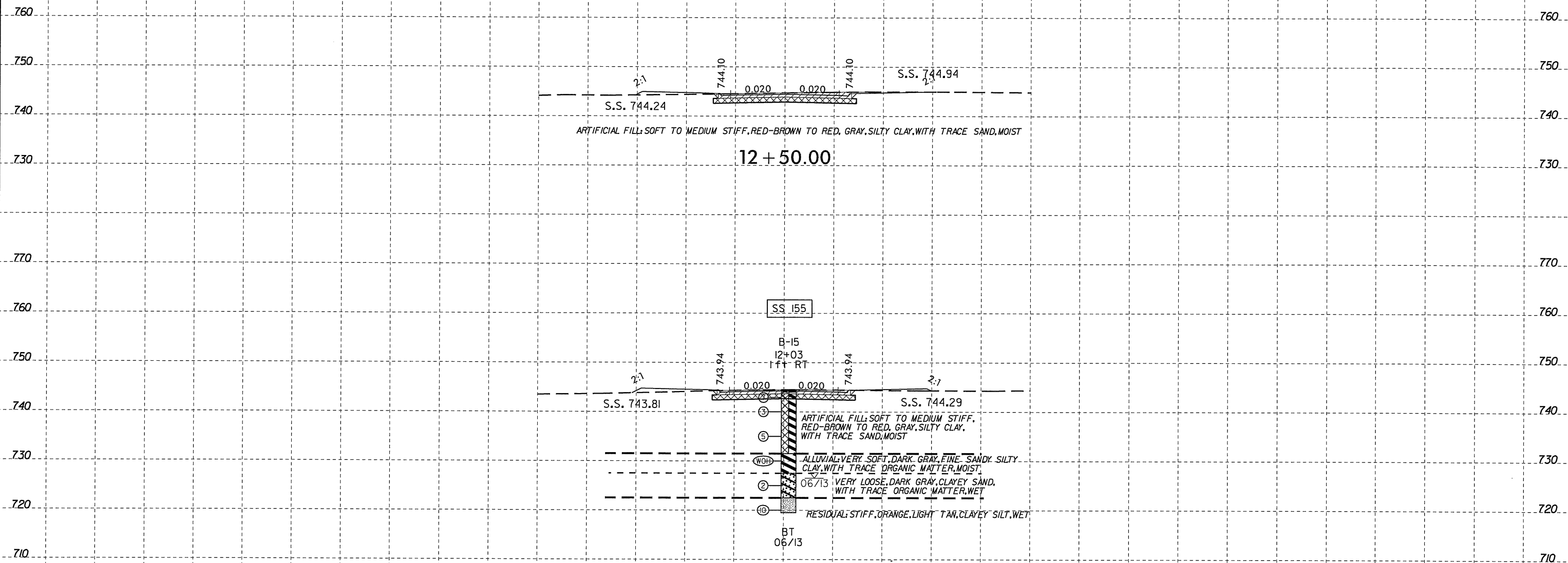
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8/23/99



PROJ. REFERENCE NO. U-5008 SHEET NO. 27

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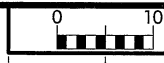
UNDERCUT EXCAVATION
UNSUITABLE UNCLASSIFIED EXCAVATION

12 + 00.00

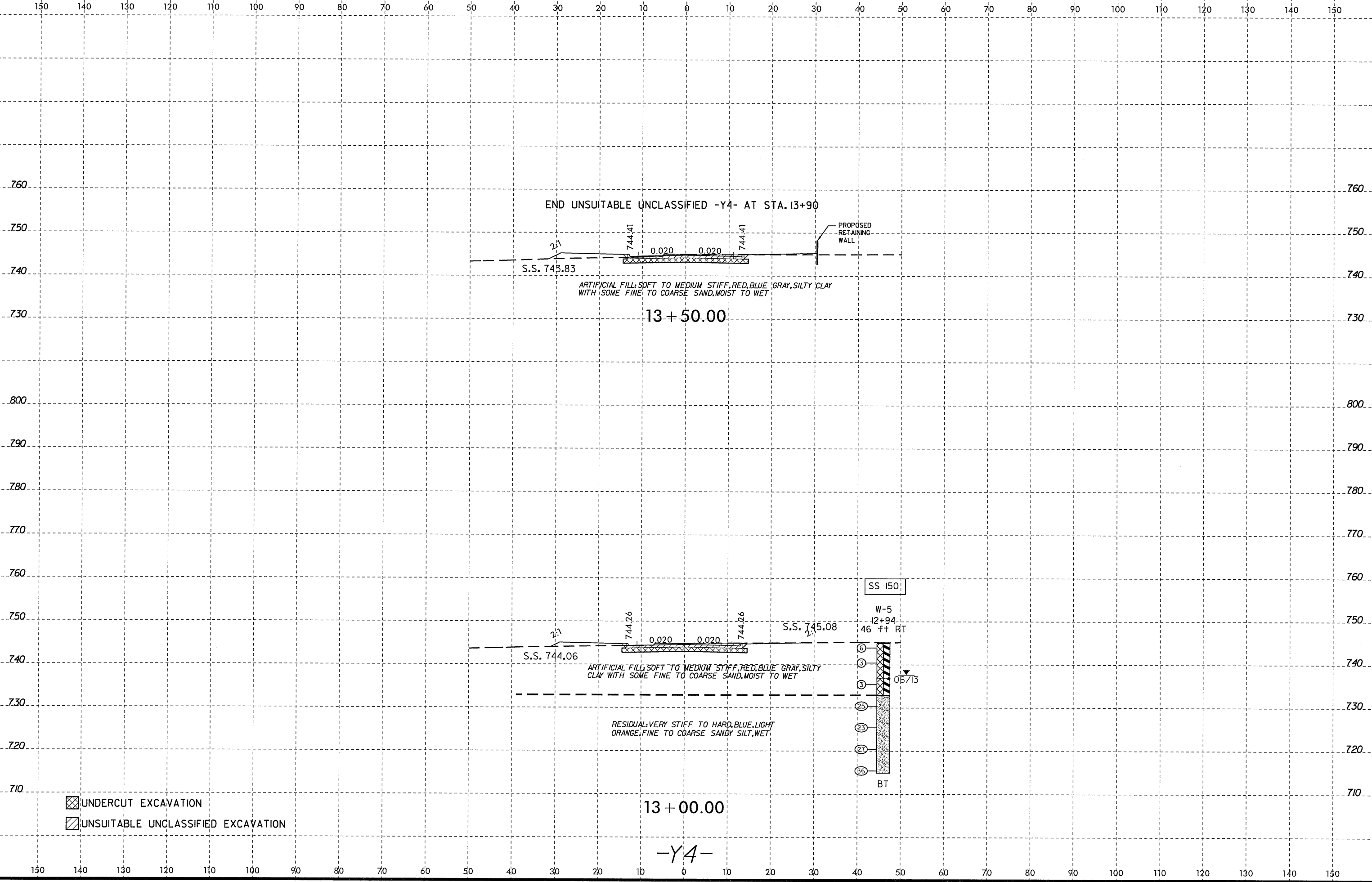
-Y4-

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8/23/99

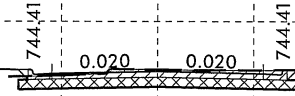


PROJ. REFERENCE NO.	SHEET NO.
U-5008	28



END UNSUITABLE UNCLASSIFIED -Y4- AT STA. 13+90

S.S. 743.83

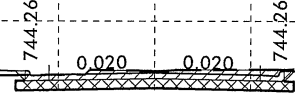


ARTIFICIAL FILL: SOFT TO MEDIUM STIFF, RED, BLUE GRAY, SILTY CLAY WITH SOME FINE TO COARSE SAND, MOIST TO WET

13 + 50.00

PROPOSED RETAINING WALL

S.S. 744.06



ARTIFICIAL FILL: SOFT TO MEDIUM STIFF, RED, BLUE GRAY, SILTY CLAY WITH SOME FINE TO COARSE SAND, MOIST TO WET

13 + 00.00

-Y4-

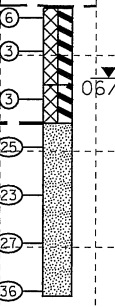
S.S. 745.08

SS 150'

W-5

12+94

46 ft RT



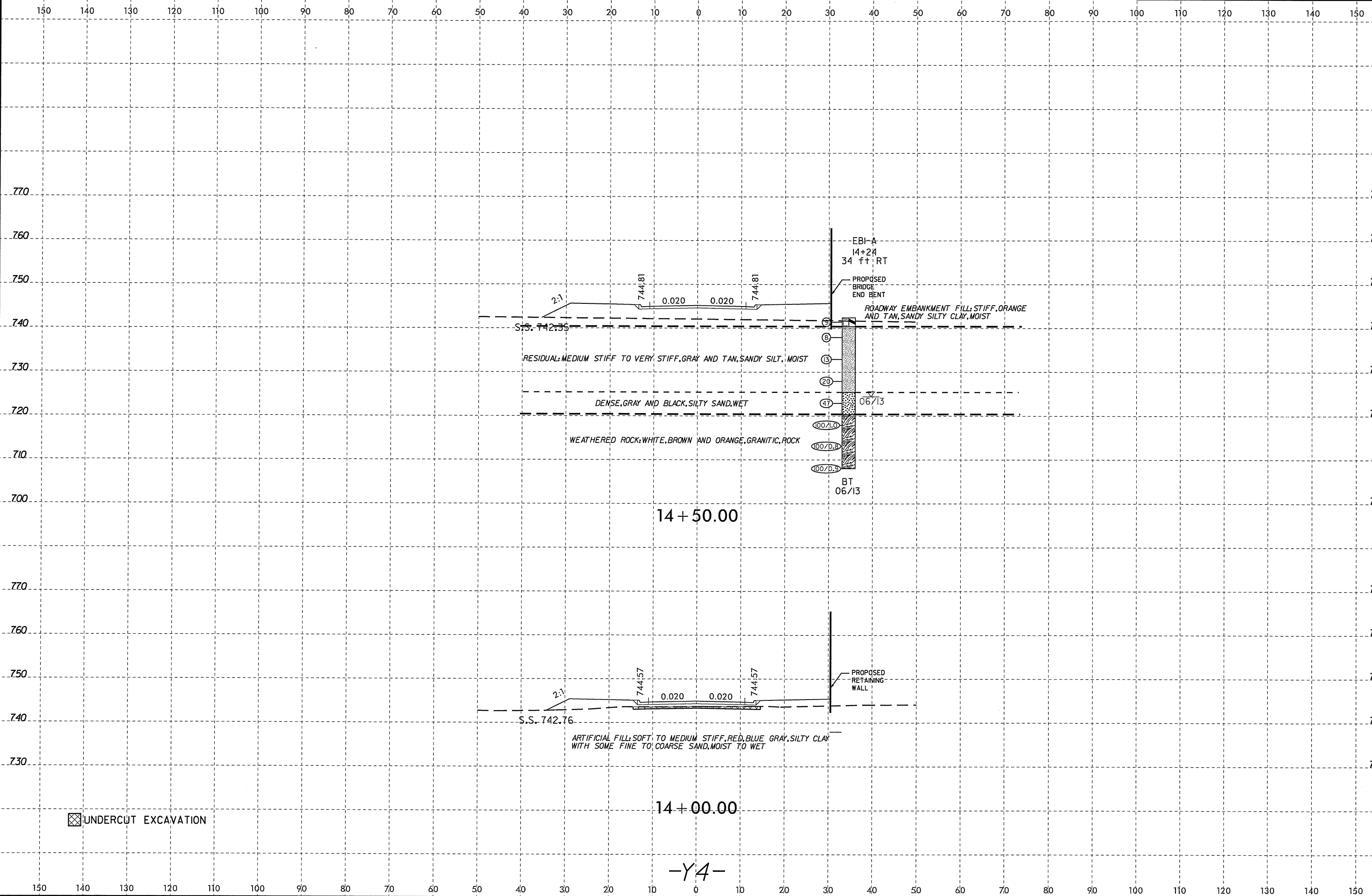
BT

- UNDERCUT EXCAVATION
- UNSUITABLE UNCLASSIFIED EXCAVATION

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8/23/99

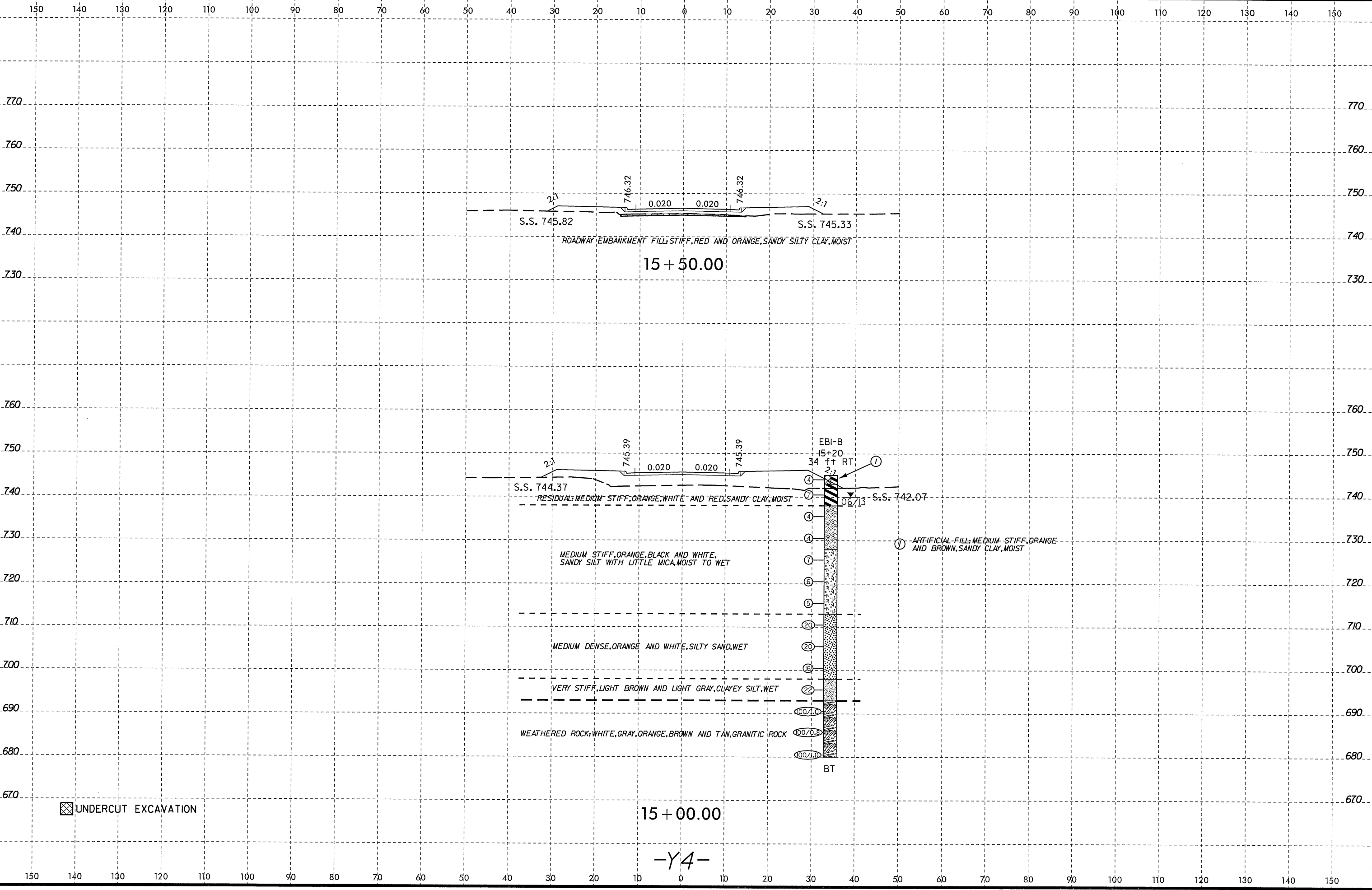


UNDERCUT EXCAVATION

-Y4-

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8/23/99

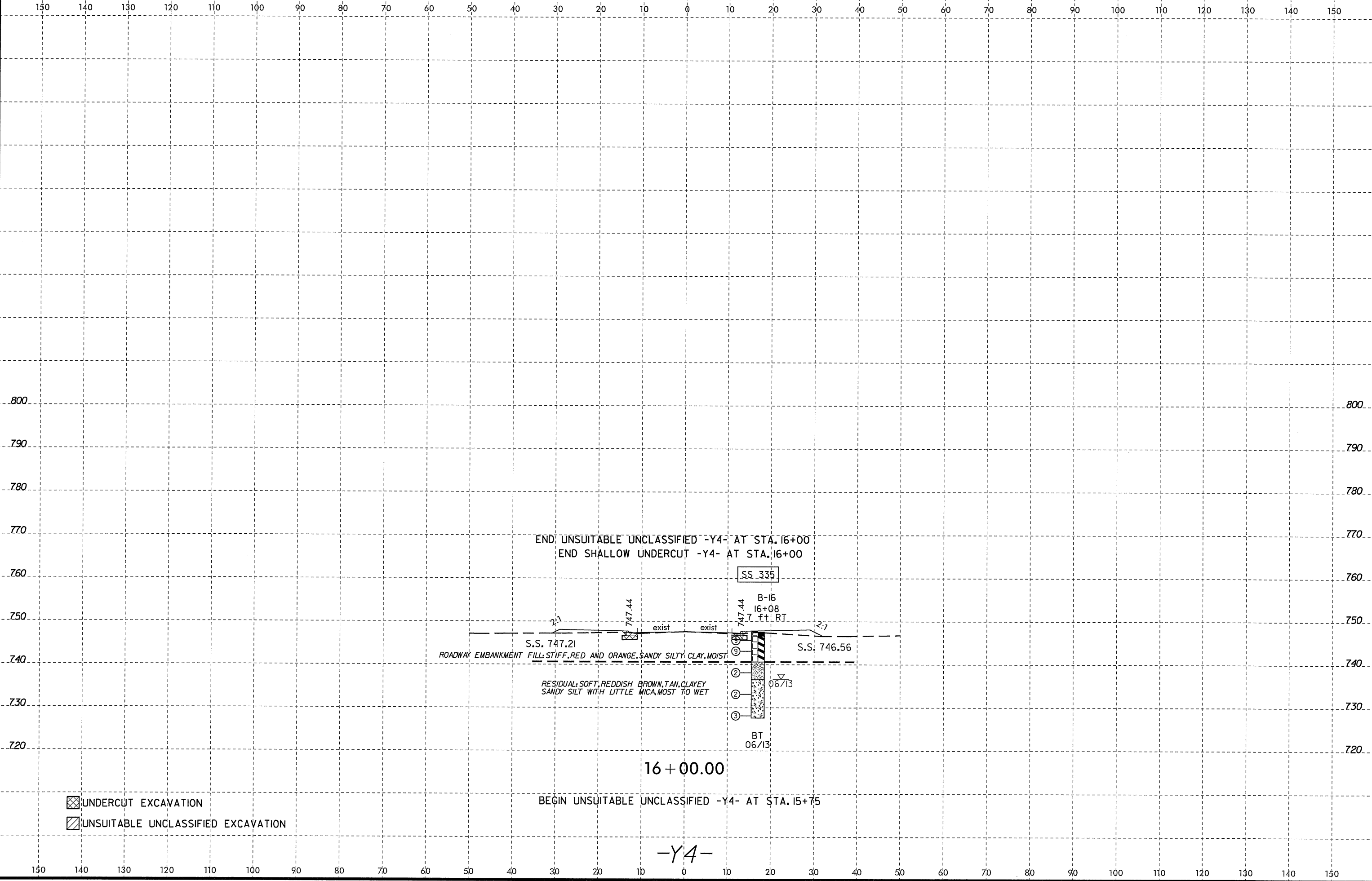


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UNDERCUT EXCAVATION

15 + 00.00

-Y4-



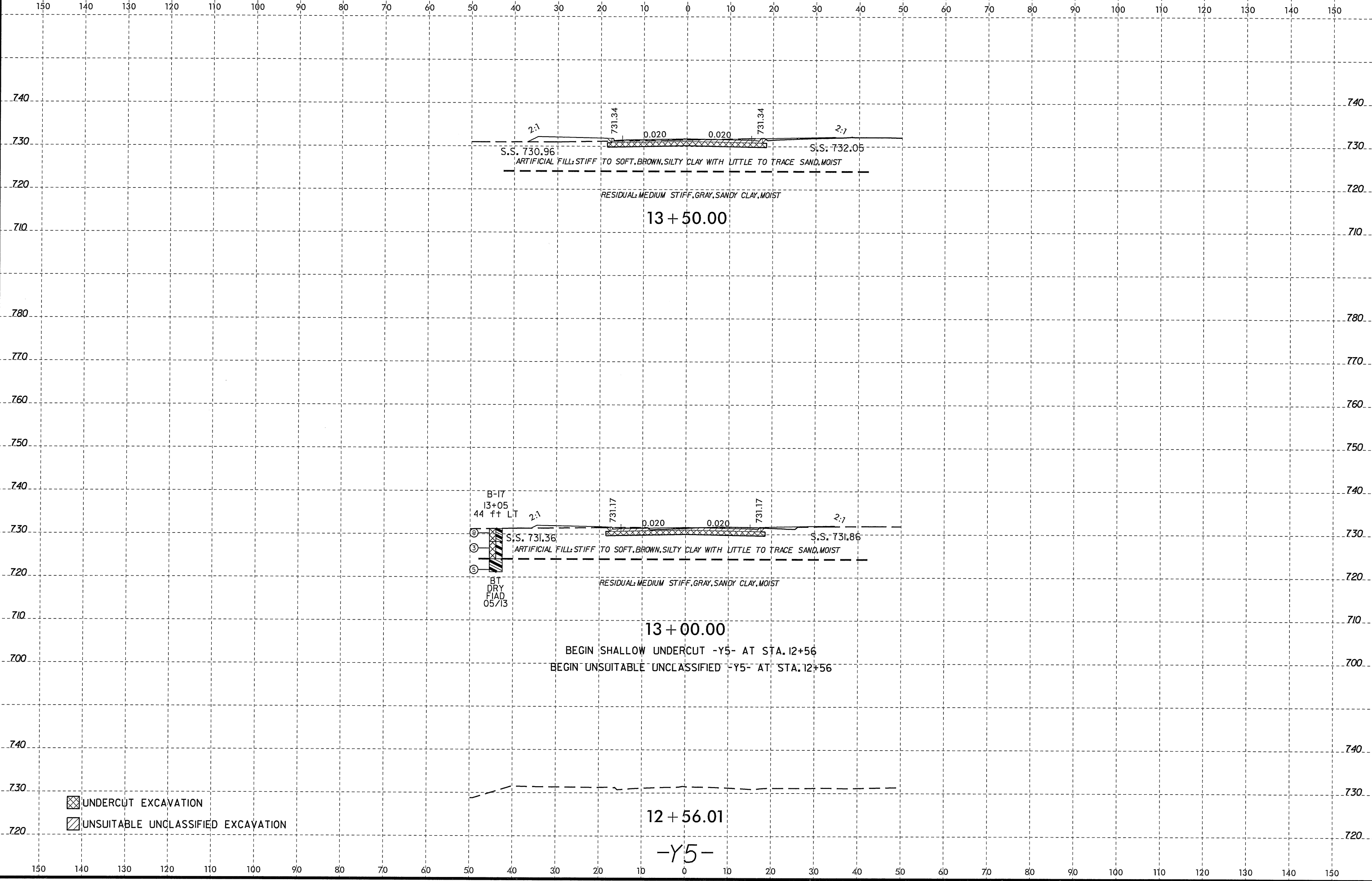
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- UNDERCUT EXCAVATION
- UNSUITABLE UNCLASSIFIED EXCAVATION

16 + 00.00

-Y4-

8/23/99



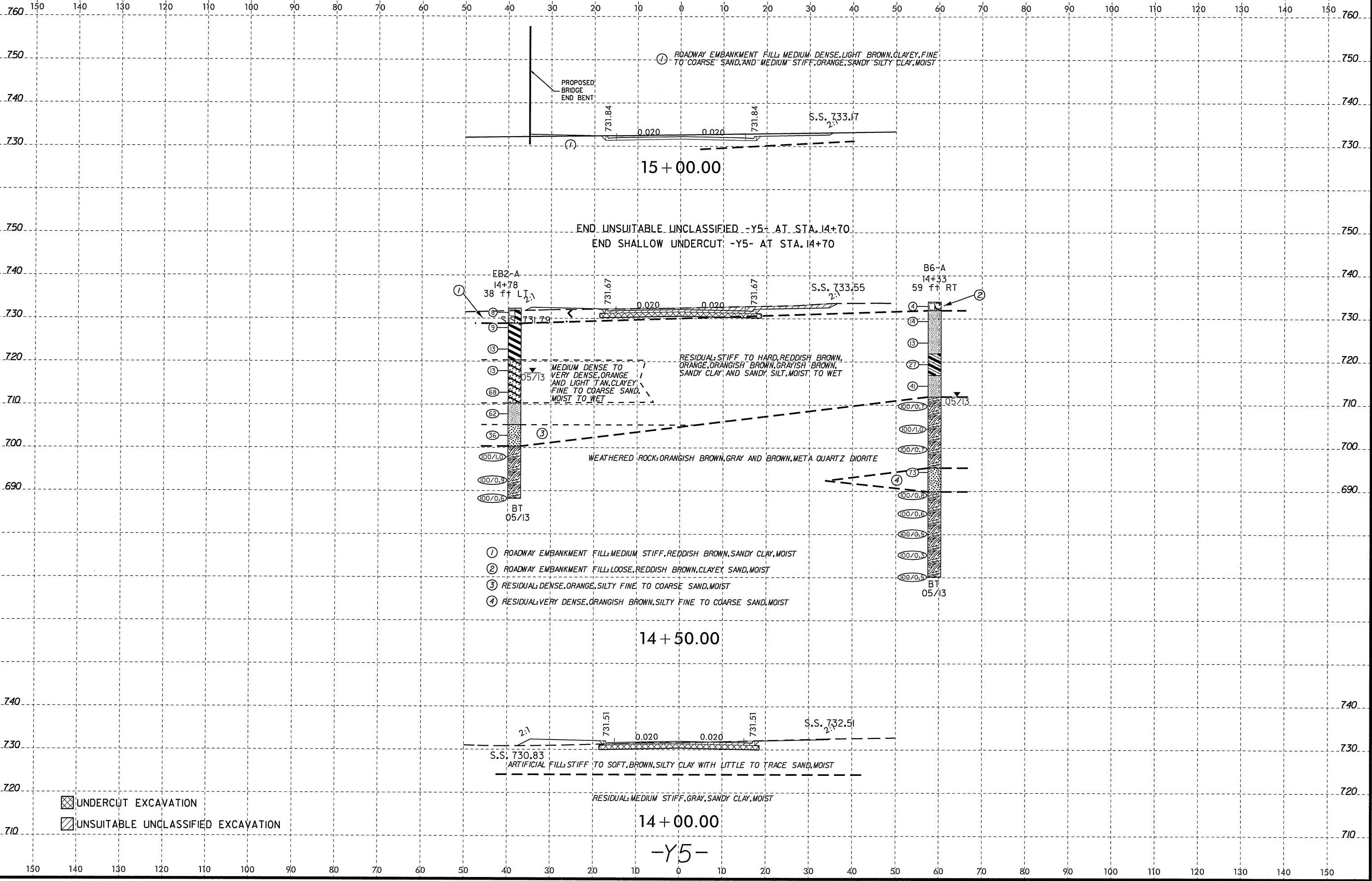
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 11/15/10

UNDERCUT EXCAVATION
 UNSUITABLE UNCLASSIFIED EXCAVATION

BEGIN SHALLOW UNDERCUT -Y5- AT STA. 12+56
 BEGIN UNSUITABLE UNCLASSIFIED -Y5- AT STA. 12+56

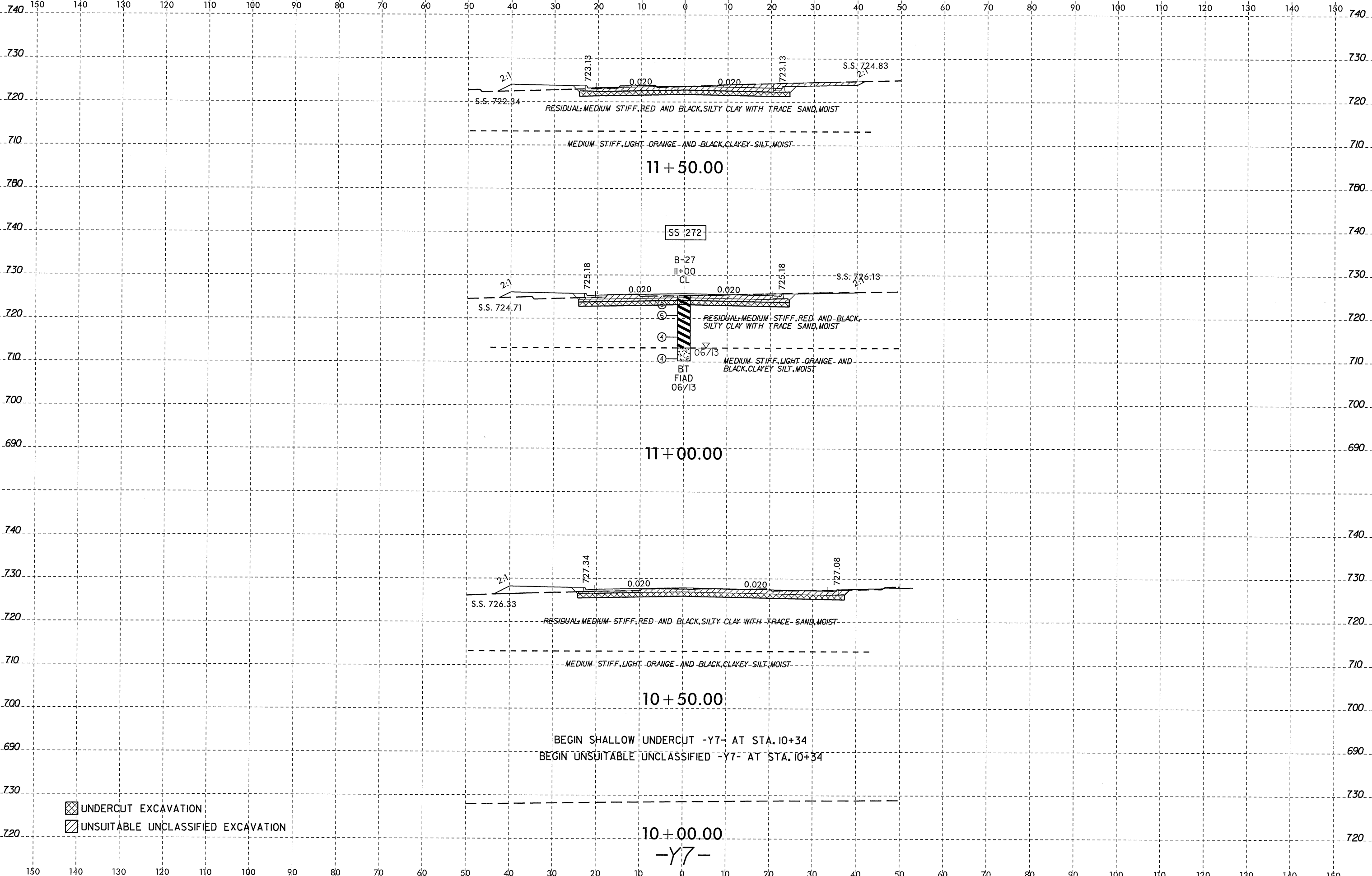
12 + 56.01
 -Y5-

B/23/99



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 11/15/10

8/23/99



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- UNDERCUT EXCAVATION
- UNSUITABLE UNCLASSIFIED EXCAVATION

BEGIN SHALLOW UNDERCUT -Y7- AT STA. 10+34
 BEGIN UNSUITABLE UNCLASSIFIED -Y7- AT STA. 10+34

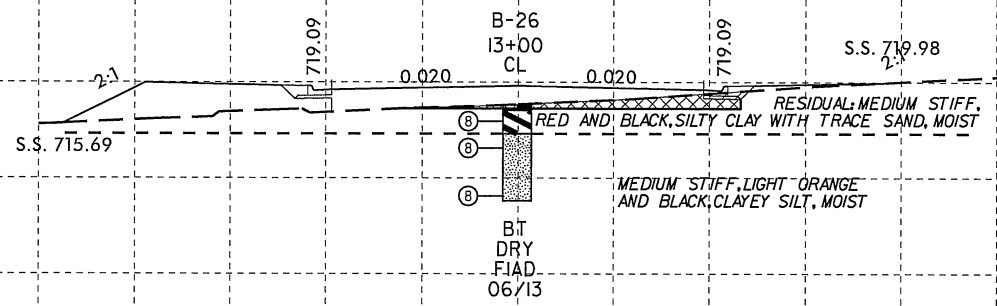
10+00.00
 -Y7-

8/23/99

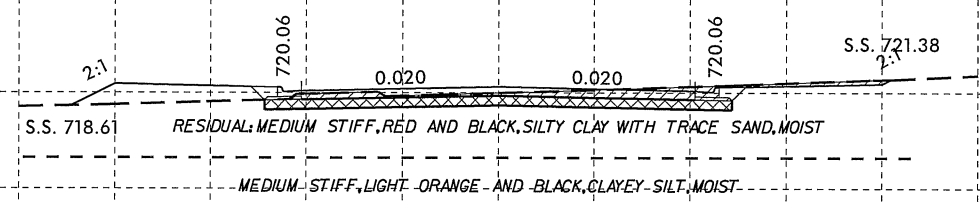


END UNSUITABLE UNCLASSIFIED -Y7- AT STA. 13+25
END SHALLOW UNDERCUT -Y7- AT STA. 13+25

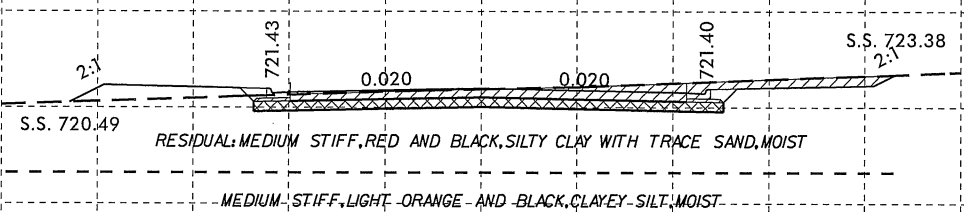
SS 269



13 + 00.00





12 + 50.00



12 + 00.00

-Y7-

-  UNDERCUT EXCAVATION
-  UNSUITABLE UNCLASSIFIED EXCAVATION

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SOIL TEST RESULTS

Boring	SAMPLE	OFFSET	STATION	DEPTH	AASHTO	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)			MOISTURE	ORGANIC	Alignment
								C.SAND	F.SAND	SILT	CLAY	10	40	200			
B-1	SS 299	33 LT	10+99	3.5-5.0	A-7-5(44)	83	50	15.6	7.2	32.4	44.8	100	88.5	78.6	28.6		L
B-2	SS 295	31 LT	12+99	0.0-1.5	A-7-6(10)	45	22	33.1	21.1	21.5	24.4	98.8	77.2	55.8	20.8		L
B-3	SS 301	38 LT	14+97	0.5-2.0	A-7-6(21)	53	26	9.3	12.3	45.5	32.9	95.5	91.9	77.0	30.9		L
B-4	SS 236	9 LT	10+08	1.0-2.5	A-7-6(27)	58	33	9.1	13.7	25.1	52.1	99.8	95.1	78.8	23.2		Y3
B-5	SS 228	28 LT	11+98	0.0-1.5	A-7-5(26)	62	30	11.7	11.6	32.2	44.5	100	93.8	78.6	27.2		Y3
B-6	SS 283	57 LT	14+13	1.0-2.5	A-7-5(24)	62	26	9.7	14.3	57.5	18.5	100	96.6	79.9	26.2		Y3
B-8	SS 279	14 RT	19+35	1.0-2.5	A-5(14)	49	10	3.8	11.3	66.5	18.3	99.8	96.5	91.8	28.8		Y3
B-10	SS 208	23 LT	12+04	0.8-2.3	A-5(2)	42	9	38.0	14.7	37.3	10.1	93.4	63.6	47.5	26.5		Y3REV
B-11	SS 162	26 LT	14+41	3.5-5.0	A-7-6(10)	47	23	35.2	12.6	32.7	19.5	98.9	73.2	53.6	24.7		Y3REV
B-13	SS 292	1 LT	18+03	3.5-5.0	A-7-5(10)	55	25	37.7	13.1	20.4	28.8	99.0	69.7	51.3	29.0		Y3REV
B-14	SS 332	9 RT	11+85	1.0-2.5	A-7-6(14)	47	24	22.3	13.8	33.8	30.1	99.6	85.9	65.9	25.4		Y2
B-15	SS 155	1 RT	12+03	0.6-2.1	A-7-5(28)	57	25	1.6	0.6	46.2	51.6	95.0	94.1	93.2	32.5		Y4
B-16	SS 335	17 RT	16+08	1.0-2.5	A-7-5 (17)	62	27	27.8	15.5	32.4	24.3	99.3	78.4	62.6	26.6		Y4
B-20	SS 249	17 LT	38+92	1.0-2.5	A-7-5 (24)	52	22	0.1	0.5	60.6	38.8	91.8	91.7	91.7	29.1		L
B-21	SS 240	38 RT	11+33	0.8-2.3	A-7-6 (12)	41	20	20.3	14.1	38.8	26.7	98.4	84.7	67.5	20.9		Y8
B-26	SS 269	CL	13+00	0.7-2.2	A-7-6 (21)	52	23	6.8	15.8	46.2	31.2	98.9	95.7	81.2	35.7		Y7
B-27	SS 272	CL	11+00	1.0-2.5	A-7-5 (50)	82	44	5	3.1	37.2	54.7	98.1	94.7	93.1	65.3		Y7
W-1	SS 305	50 RT	16+19	3.5-5.0	A-7-5(19)	65	27	26.2	8.4	38.5	26.9	98.0	78.0	65.8	29.2		L
W-1	SS 306	50 RT	16+19	8.5-10.0	A-7-5(4)	50	14	36.8	16.6	36.4	10.2	92.9	66.3	46.6	36.5		L
W-1	SS 310	50 RT	16+19	28.5-30.0	A-7-5 (10)	46	14	17.5	16.2	55.1	11.2	99.3	85.6	70.1	32.1		L
W-2	SS 314	52 RT	16+98	3.5-5.0	A-7-5(17)	60	23	23.4	9.5	41.0	26.1	97.8	79.9	67.8	35.6		L
W-2	SS 315	52 RT	16+98	8.5-10.0	A-5(6)	50	10	30.1	15.4	42.5	11.9	97.3	75.3	57.0	40.9		L
W-3	SS 323	52 RT	17+99	13.5-15.0	A-7-6(6)	41	14	26.9	20.6	43.6	8.9	96.9	77.2	58.0	38.1		L
W-3	SS 324	52 RT	17+99	18.5-20.0	A-7-5(6)	44	13	29.5	17.0	42.9	10.7	96.7	75.1	56.6	39.7		L
W-4	SS 380	54 RT	19+00	3.5-5.0	A-7-5(11)	51	18	27.7	12.6	40.2	19.5	98.5	77.6	61.9	34.1		L
W-4	SS 382	54 RT	19+00	13.5-15.0	A-7-5(10)	50	19	27.3	18.1	44.5	10.1	97.3	76.9	58.5	43.4		L
W-4	SS 383	54 RT	19+00	18.5-20.0	A-5(7)	42	10	15.9	22.6	51.5	10.0	100	92.6	67.6	41.6		L
W-4	SS 384	54 RT	19+00	23.5-25.0	A-4(3)	38	8	28.6	23.6	40.8	6.9	98.2	78.0	53.7	33.0		L
W-5	SS 150	46 RT	12+94	8.5-10.0	A-7-6 (19)	56	29	24.9	10.5	35	29.6	100	80.1	67.6	35.0		Y4
W-6	SS 26	48 LT	29+50	3.5-5.0	A-7-6 (15)	52	27	25.7	16.7	33.6	24	98.3	80.1	60.6	23.1		L
W-7	SS 35	47 LT	30+48	8.5 -10.0	A-7-6 (14)	44	15	5.3	20.3	54.2	20.2	100	97.7	82.2	31.8		L
B6-A	SS 2	48 LT	27+38	3.5-5.0	A-4(6)	38	10	16.8	26.7	45.9	10.6	100	90.9	64.9	22.3		L
B6-A	SS 3	48 LT	27+38	13.5-15.0	A-6(6)	39	11	15.4	29.3	44.0	11.3	99.6	91.7	63.5	16.7		L