

Revised 6/13/2017

See Sheet 1A For Index of Sheets
See Sheet 1B For Conventional Symbols

Beltway)

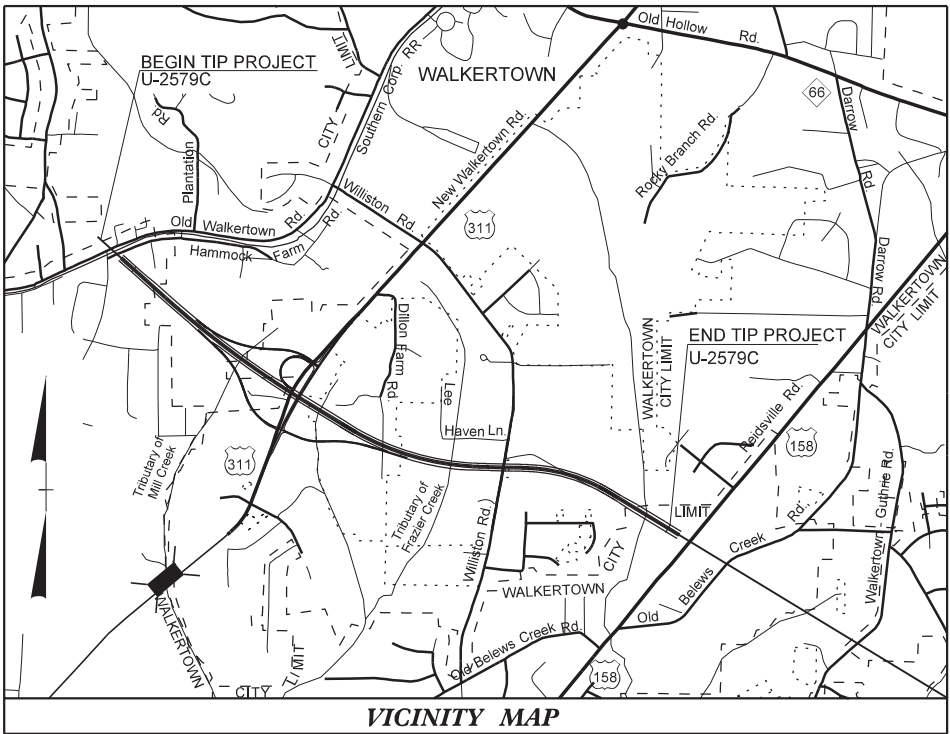
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

FORSYTH COUNTY

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-2579C	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
34839.1.9	N/A	PE	
34839.2.6	N/A	R/W	
34839.2.GV18	N/A	R/W	
34839.2.16	N/A	UTIL	
34839.3.GV6	NHP-0918(062)	CONSTR.	

LOCATION: WINSTON - SALEM NORTHERN BELTWAY (EASTERN SECTION)
FROM US 311 TO US 158 (FUTURE I-74)
TYPE OF WORK: WIDENING, GRADING, PAVING, DRAINAGE, SIGNING, SIGNALS,
ITS, CULVERTS AND STRUCTURES.

WETLAND AND SURFACE WATER IMPACTS PERMIT



VICINITY MAP

BEGIN CONSTRUCTION
-L- POT STA. 366 + 00.00

TO
SR 2211
BAUX MOUNTAIN
ROAD

BEGIN TIP PROJECT U-2579C

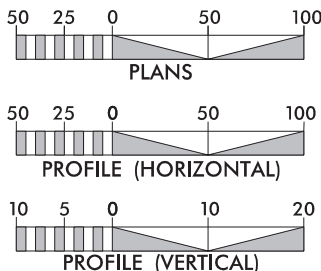
END BRIDGE
-Y1- POC STA. 30 + 34.05

END BRIDGE
-L- POT STA. 474 + 91.29 (LT)
-L- POT STA. 474 + 03.61 (RT)
BEGIN BRIDGE
-L- POT STA. 472 + 36.29 (LT)
-L- POT STA. 472 + 48.61 (RT)

END TIP PROJECT U-2579C
BEGIN TIP PROJECT U-2579B
-L- POT STA. 478 + 00.00

THIS IS A CONTROLLED-ACCESS PROJECT WITH ACCESS BEING LIMITED TO INTERCHANGES

GRAPHIC SCALES



DESIGN DATA

ADT 2017 = 65,592
ADT 2037 = 93,112
K = 10 %
D = 60 %
T = 18 % *
V = 70 MPH
*(TTST=12% + DUAL=6%)
FUNC CLASS = INTERSTATE

PROJECT LENGTH

LENGTH OF ROADWAY PROJECT U-2579C = 1.989 Miles
LENGTH OF STRUCTURE PROJECT U-2579C = 0.040 Mile
TOTAL LENGTH OF TIP PROJECT U-2579C = 1.949 Miles

PLANS PREPARED BY:

&

8601 SIX FORKS RD, SUITE 260
RALEIGH, NC 27615
919-926-4100

FOR THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
2012 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
OCTOBER 28, 2015

LETTING DATE:
OCTOBER 17, 2017

JASON TALLEY, PE
PROJECT ENGINEER
JARED BOND, PE
PROJECT DESIGN ENGINEER
TATIA L. WHITE, PE, PLS
NCDOT CONTACT

NOTE:
SITE 8 AND SITE 10 OMITTED

PERMIT DRAWING
SHEET 1 OF 40

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

HYDRAULICS
ENGINEER



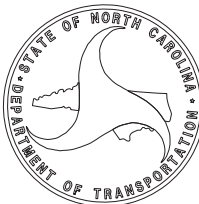
SIGNATURE:

ROADWAY
DESIGN
ENGINEER



SIGNATURE:

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

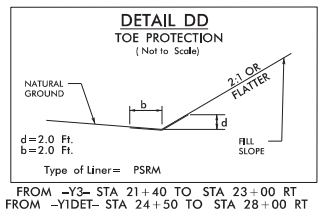
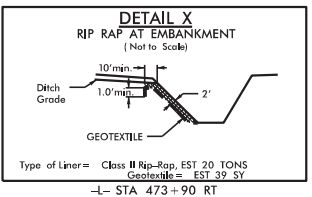
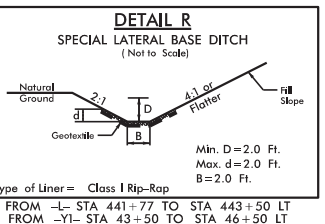
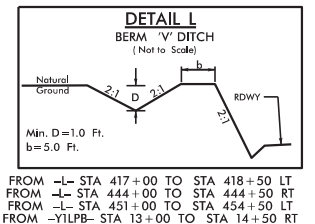
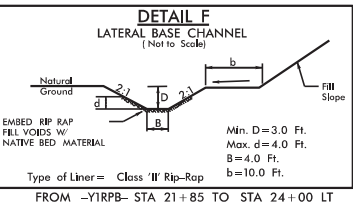
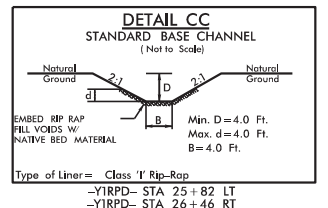
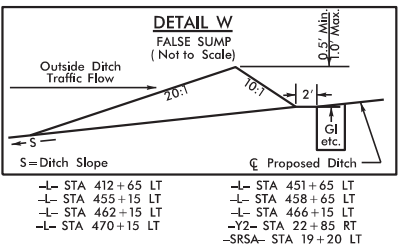
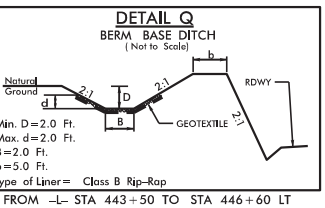
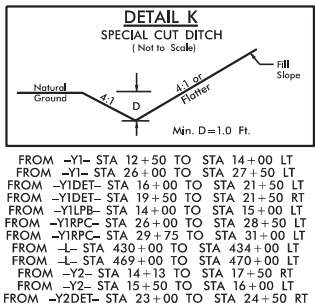
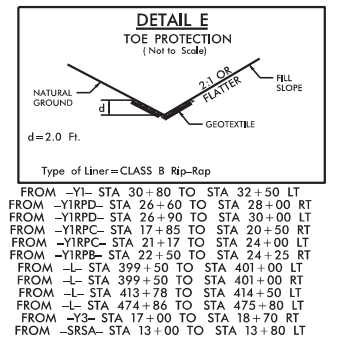
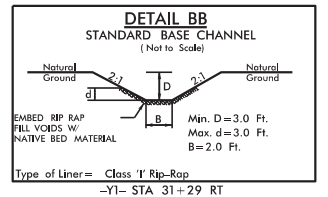
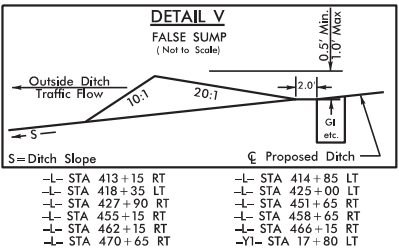
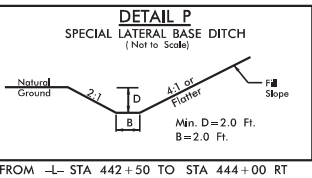
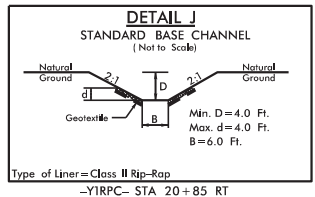
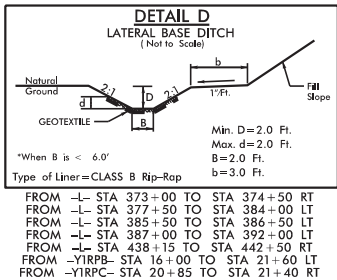
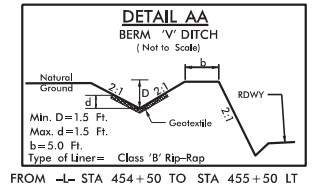
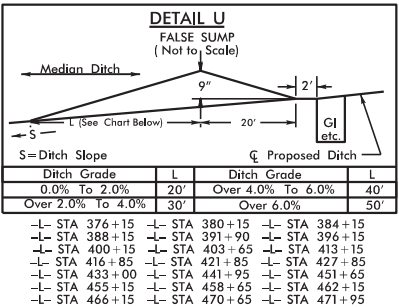
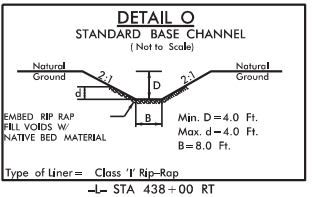
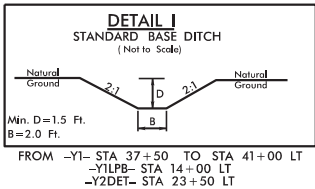
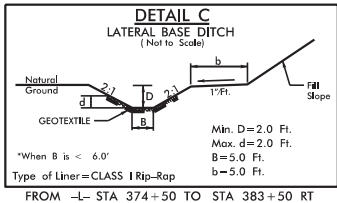
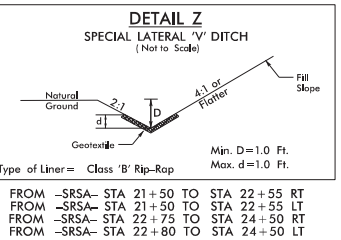
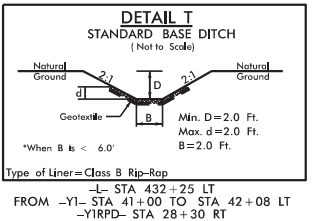
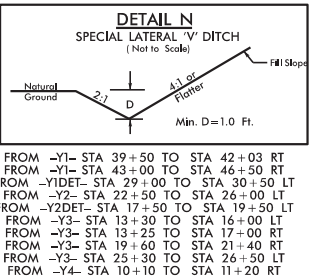
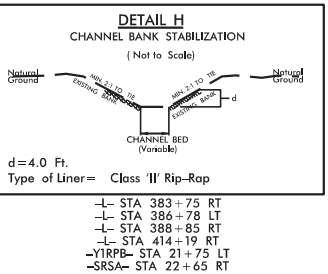
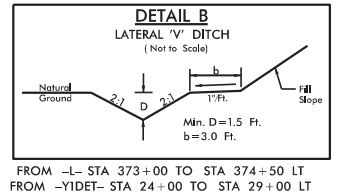
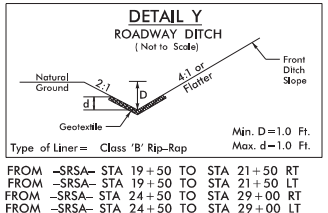
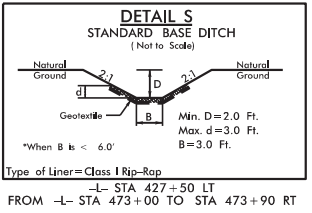
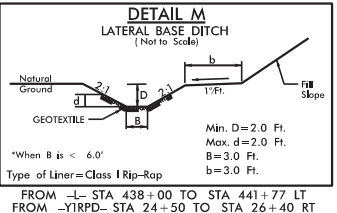
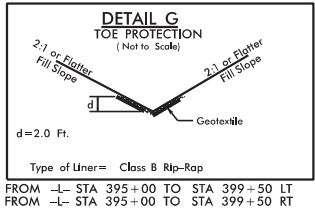
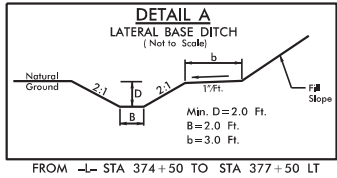


TIP PROJECT: U-2579C

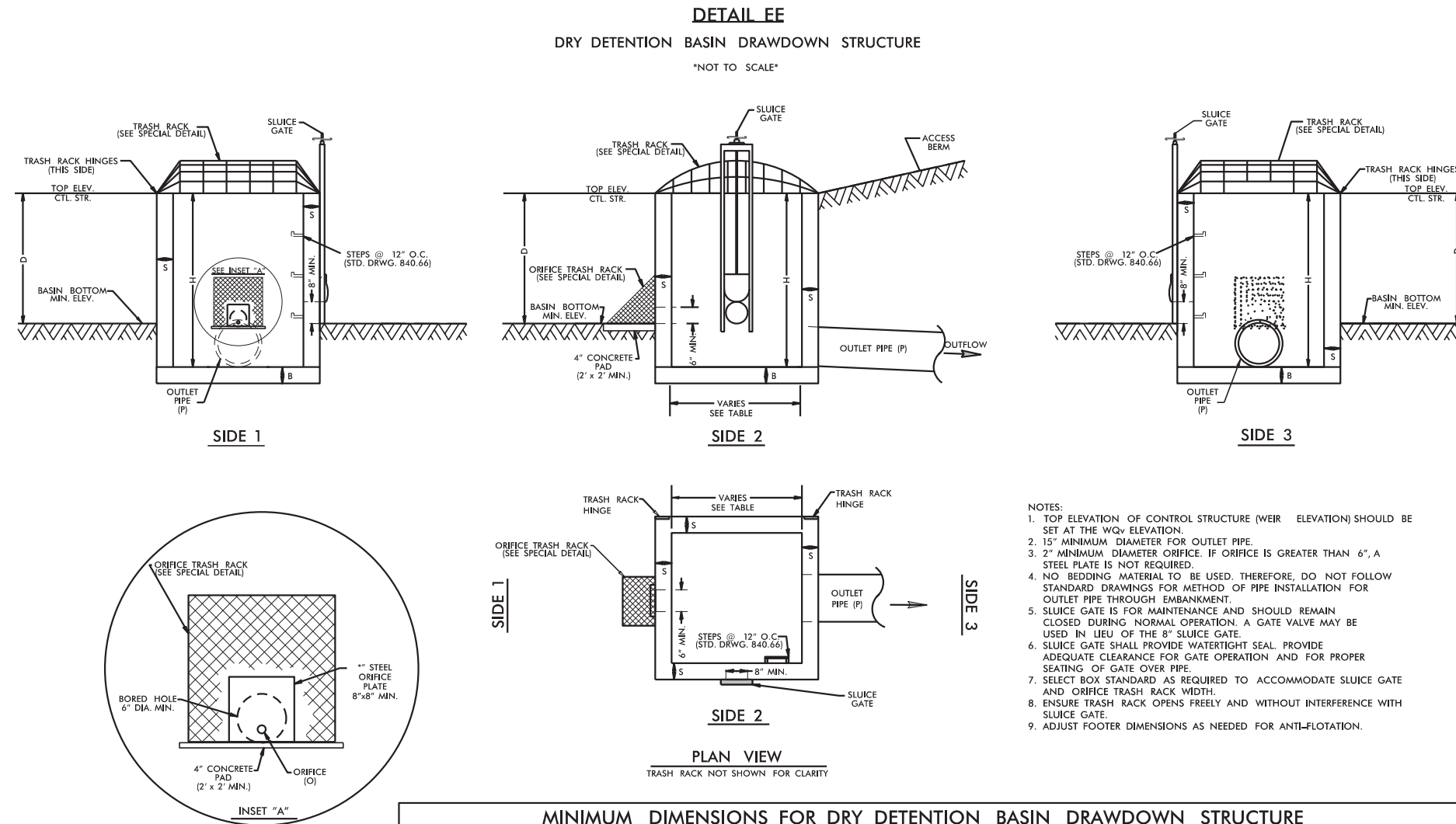
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U-2579C	2D-1
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DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

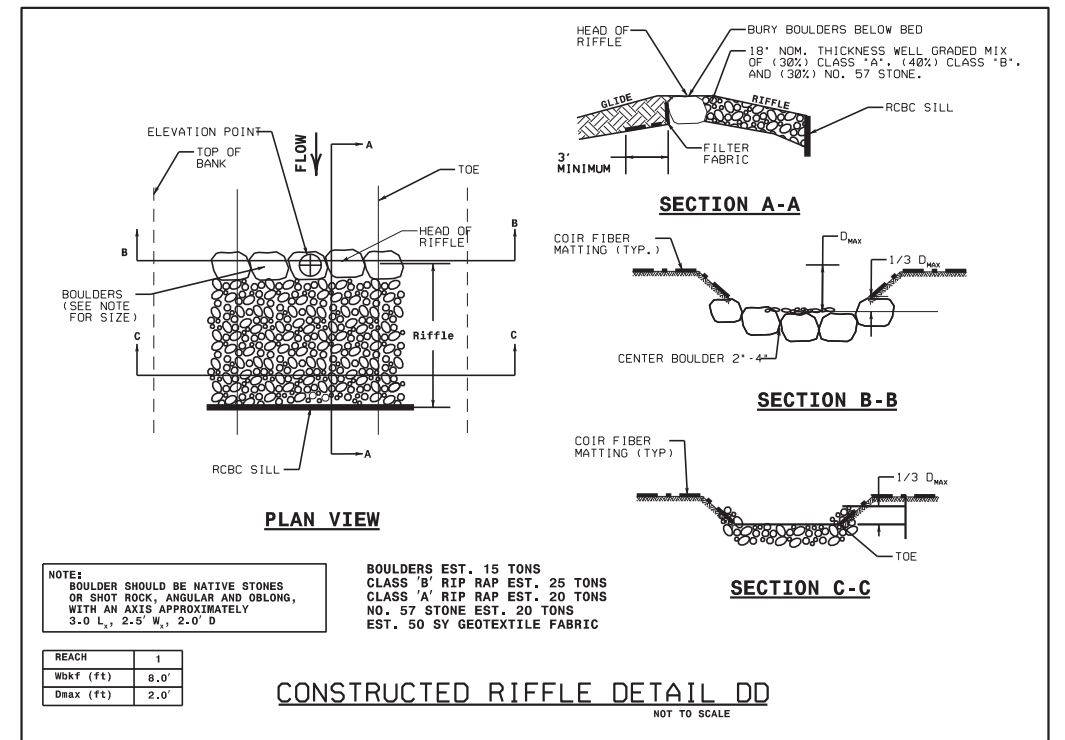
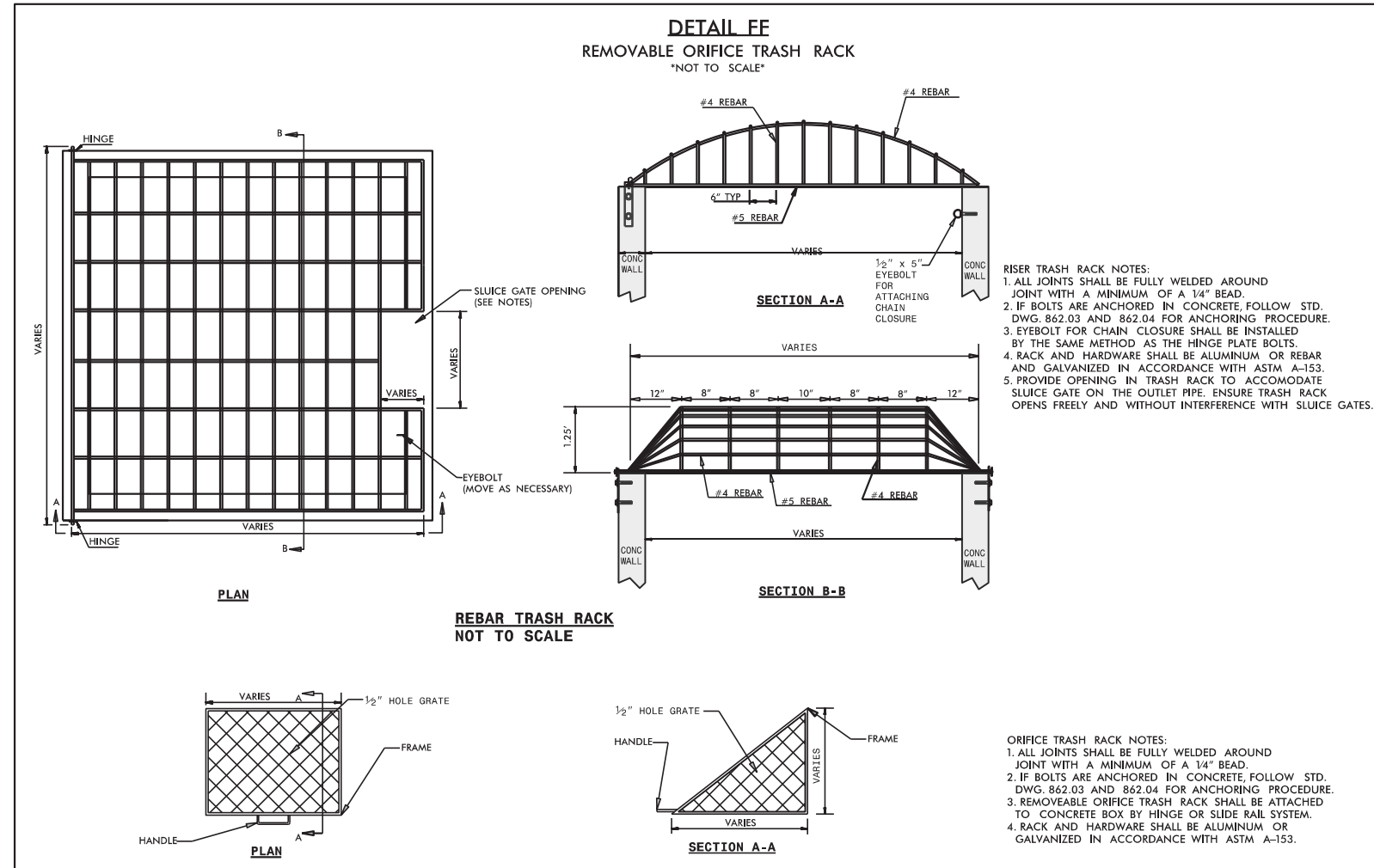
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SHEET 2 OF 40



Revised 6/13/2017

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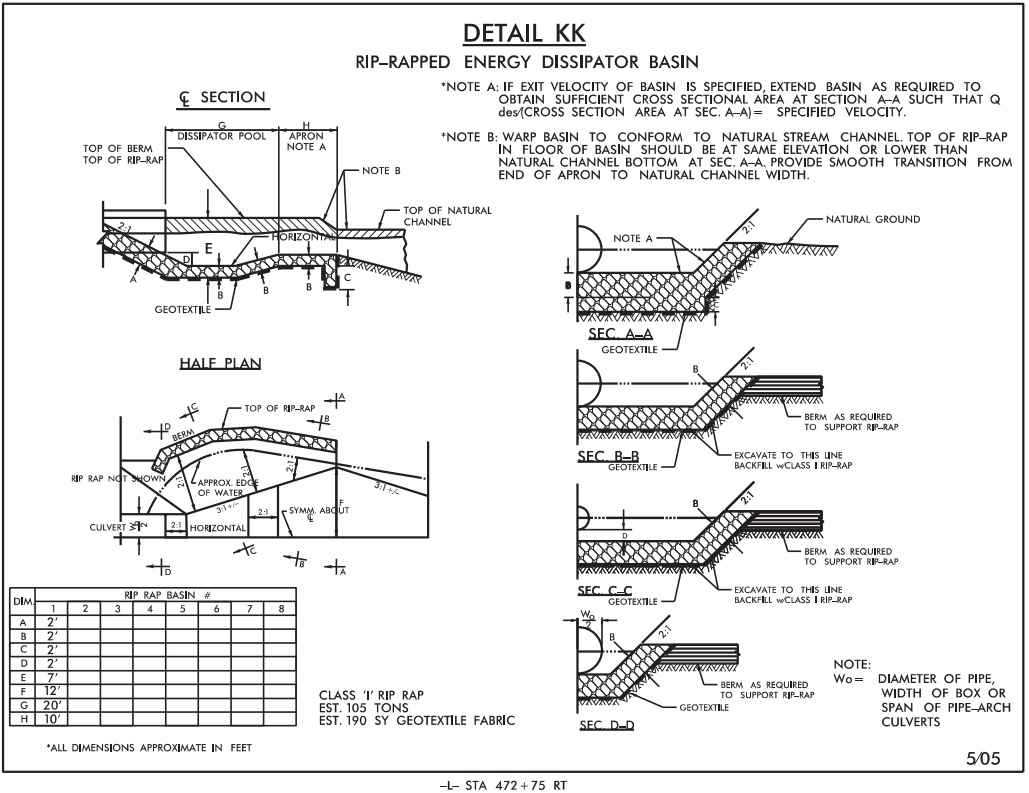
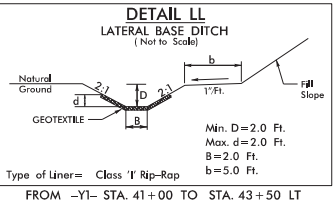
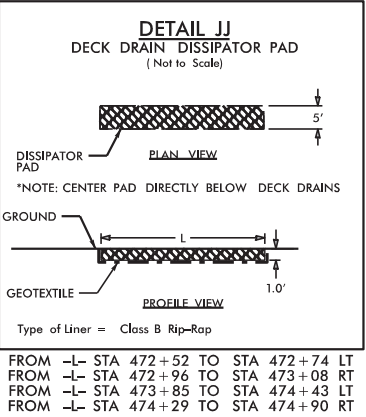
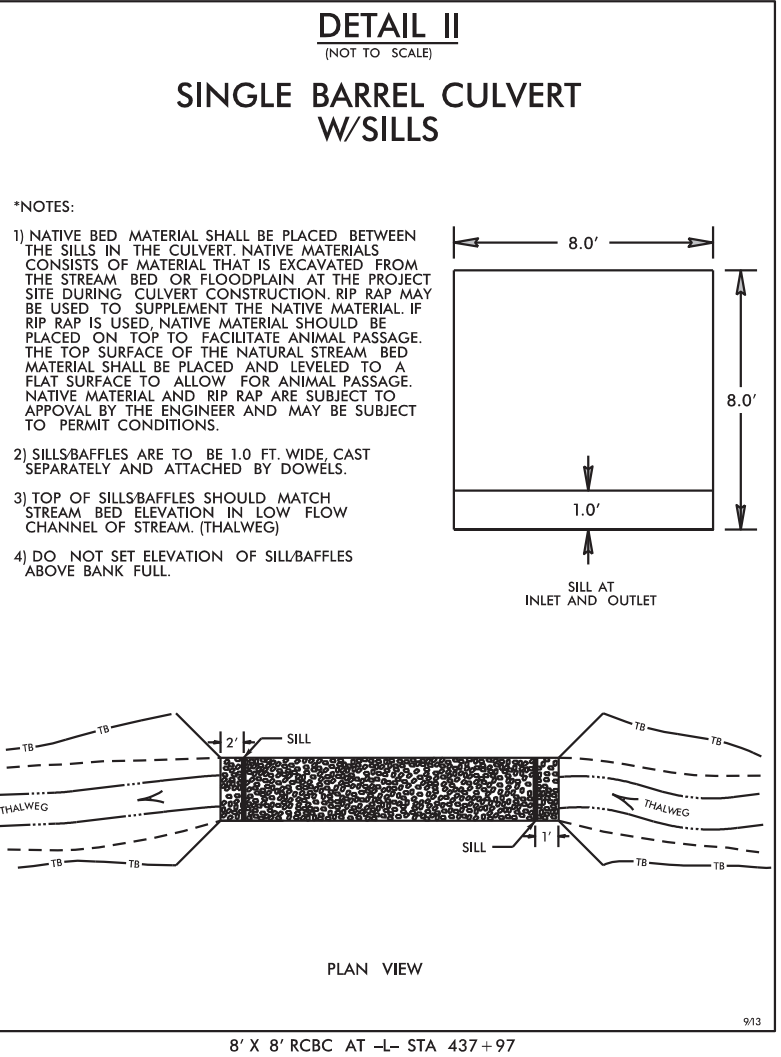
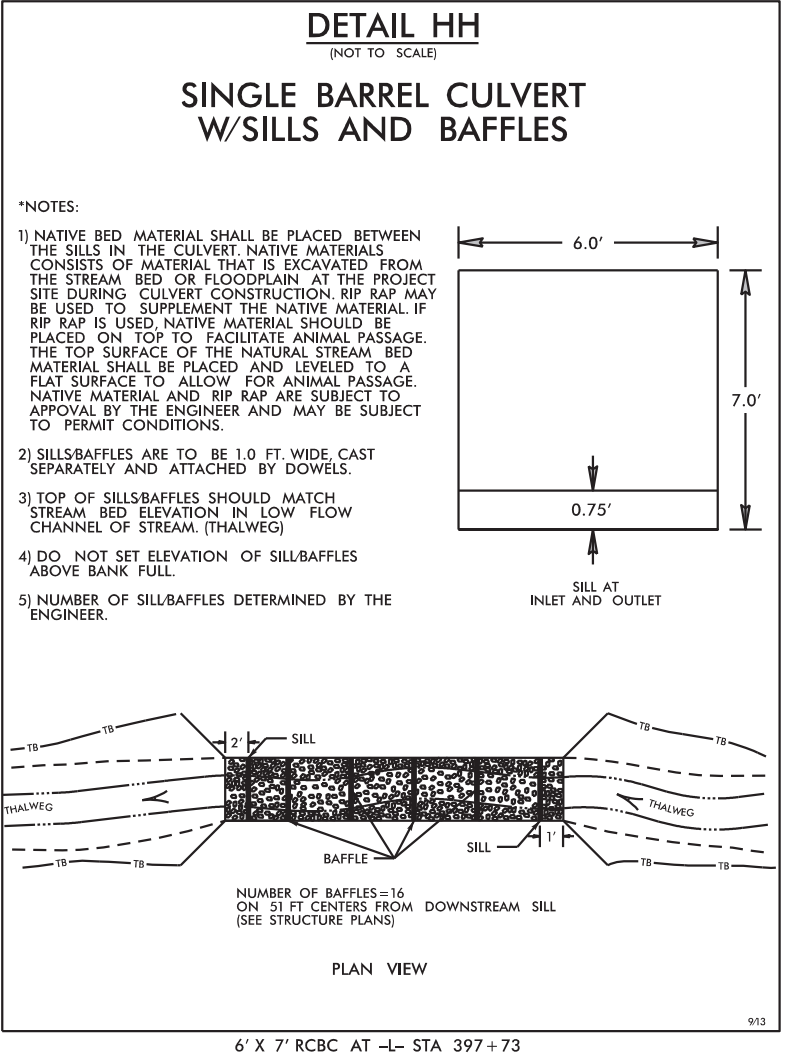
Revised 6/13/2017



Revised 6/13/2017

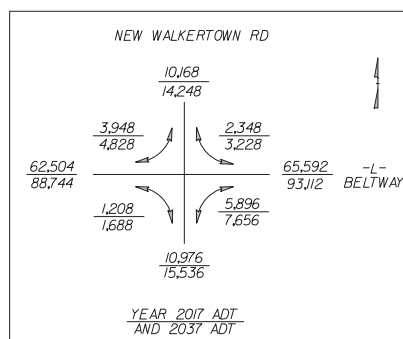
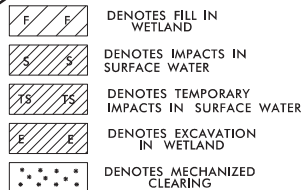
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5/27/2017
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Winston Salem

Northern Beltway)

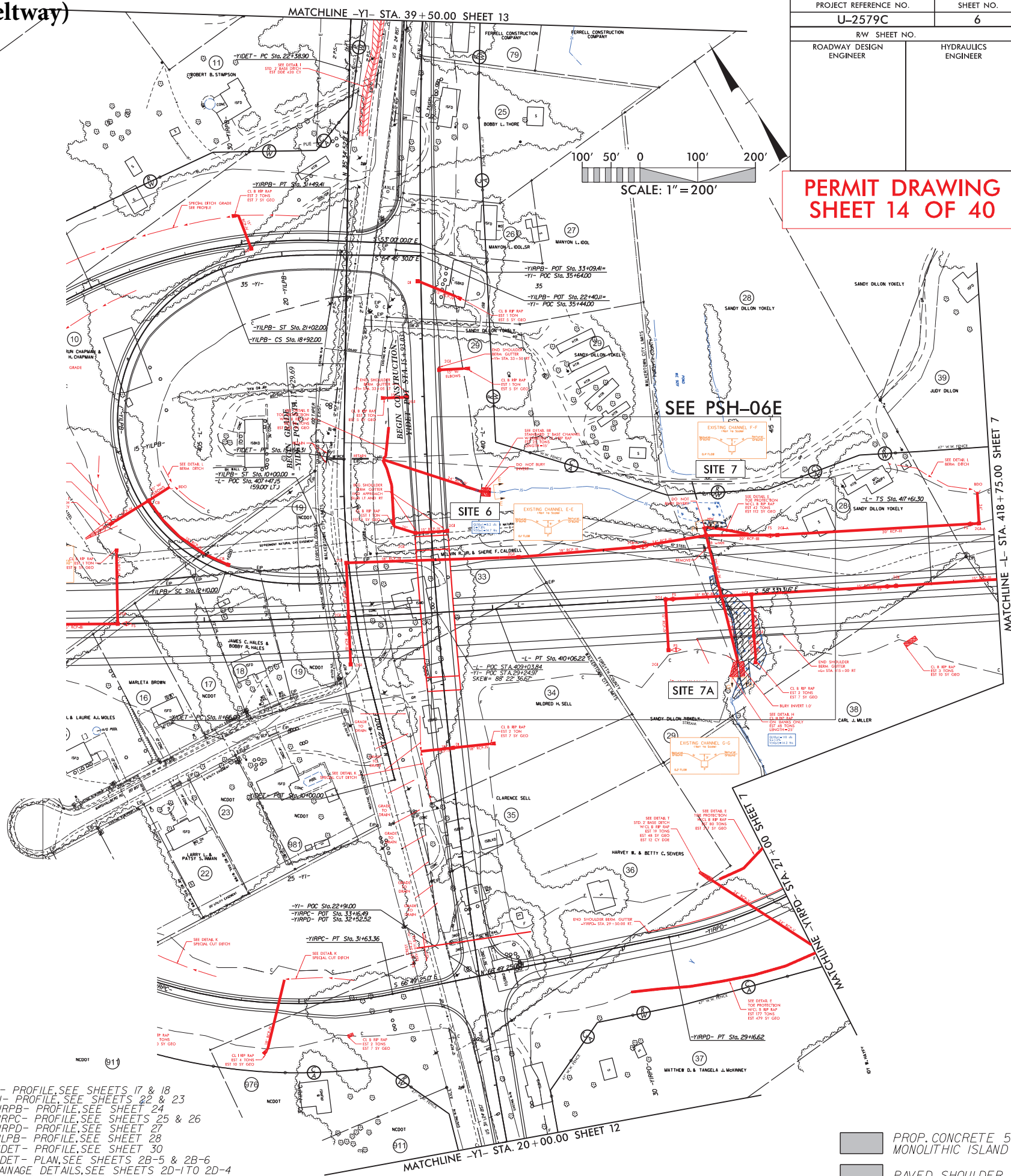


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U-2579C	2D-4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
PERMIT DRAWING SHEET 5 OF 40	

PERMIT DRAWING
SHEET 14 OF 40



NOTE:
 FOR -L- PROFILE, SEE SHEETS 17 & 18
 FOR -YI- PROFILE, SEE SHEETS 22 & 23
 FOR -YIRPB- PROFILE, SEE SHEET 24
 FOR -YIRPD- PROFILE, SEE SHEETS 25 & 26
 FOR -YIRPD- PROFILE, SEE SHEET 27
 FOR -YILPB- PROFILE, SEE SHEET 28
 FOR -YIDET- PROFILE, SEE SHEET 30
 FOR -YIDET- PLAN, SEE SHEETS 2B-5 & 2B-6
 FOR DRAINAGE DETAILS, SEE SHEETS 2D-1 TO 2D-4
 FOR BRIDGE SKETCH, SEE SHEET 2B-1
 FOR STRUCTURE PLANS, SEE SHEETS SI-1 TO SI-7
 FOR CULVERT PLANS, SEE SHEETS CI-1 TO CI-2



 PROP. CONCRETE 5
MONOLITHIC ISLAND

 PAVED SHOULDER

Revised 6/13/2017

8/17/99

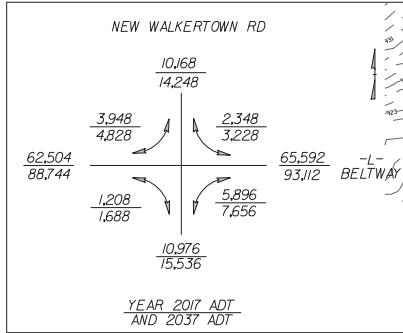
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Revised 6/13/2017

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ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER	

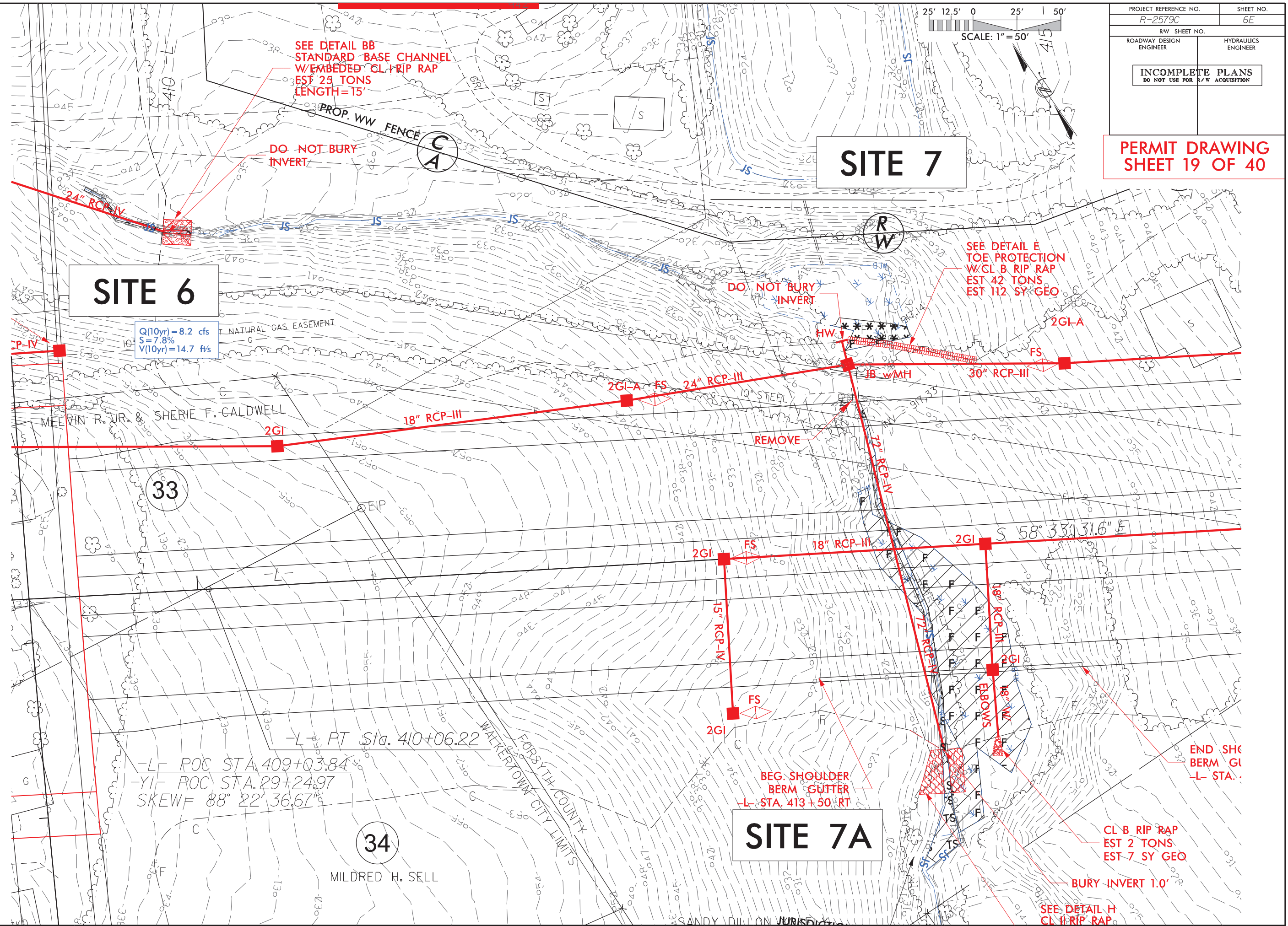
PERMIT DRAWING
SHEET 15 OF 40

- F F DENOTES FILL IN WETLAND
- S S DENOTES IMPACTS IN SURFACE WATER
- TS TS DENOTES TEMPORARY IMPACTS IN SURFACE WATER
- E E DENOTES EXCAVATION IN WETLAND
- DENOTES MECHANIZED CLEARING



NOTE:
FOR -L- PROFILE, SEE SHEETS 17 & 18
FOR -YI- PROFILE, SEE SHEETS 22 & 23
FOR -YIRPB- PROFILE, SEE SHEETS 24
FOR -YIRPC- PROFILE, SEE SHEETS 25 & 26
FOR -YILPB- PROFILE, SEE SHEET 28
FOR -YILPC- PROFILE, SEE SHEET 30
FOR -YIDET- PLAN, SEE SHEETS 2B-5 & 2B-6
FOR DRAINAGE DETAILS, SEE SHEETS 2D-1 TO 2D-4
FOR BRIDGE SKETCH, SEE SHEET 2B-1
FOR STRUCTURE PLANS, SEE SHEETS SI-1 TO SI-7
FOR CULVERT PLANS, SEE SHEETS CI-1 TO CI-7

- PROP. CONCRETE 5' MONOLITHIC ISLAND
- PAVED SHOULDER



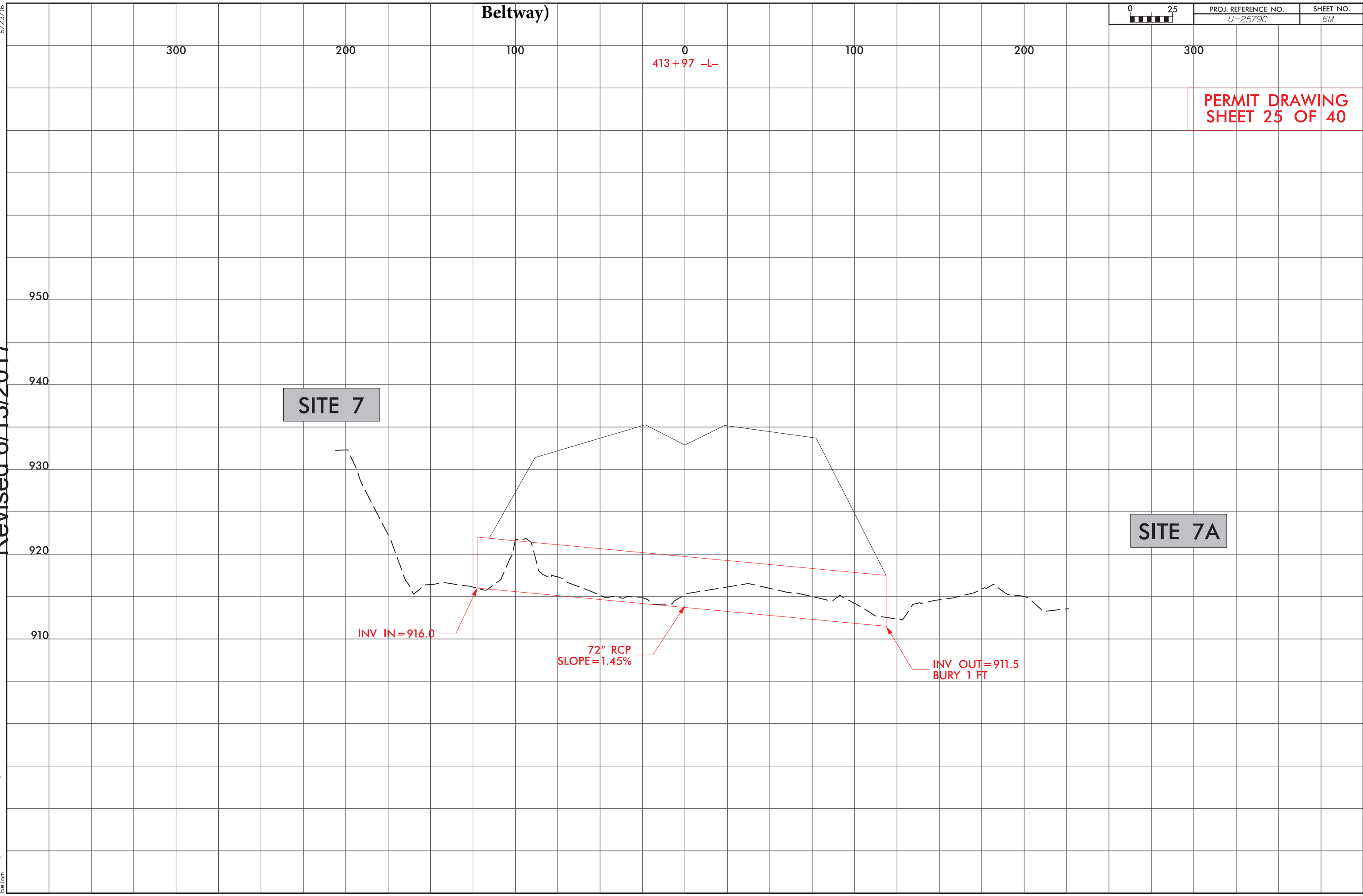
Beltway)

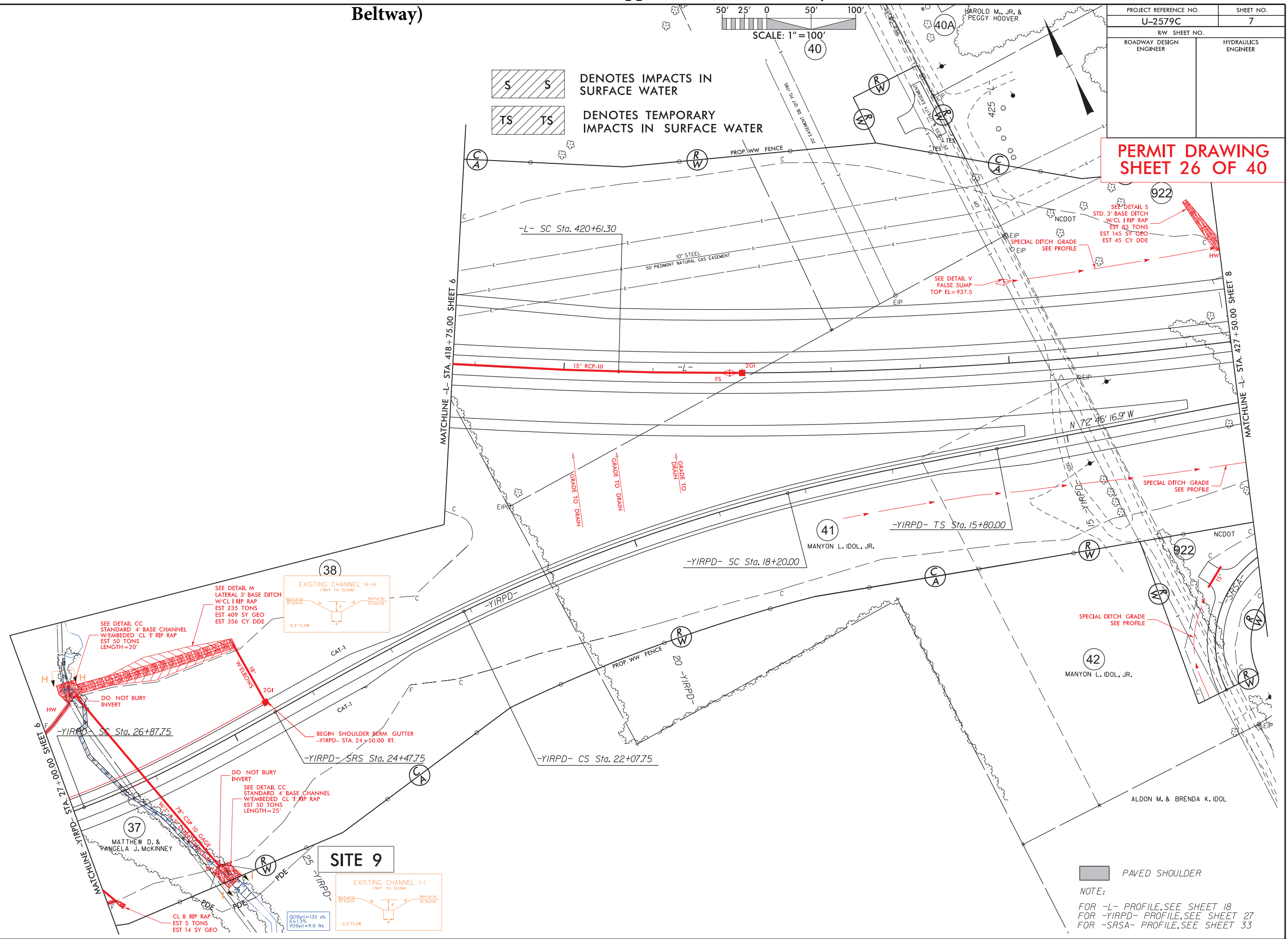
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	U-2579C	6M

PERMIT DRAWING
SHEET 25 OF 40

Revised 6/13/2017

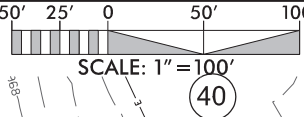
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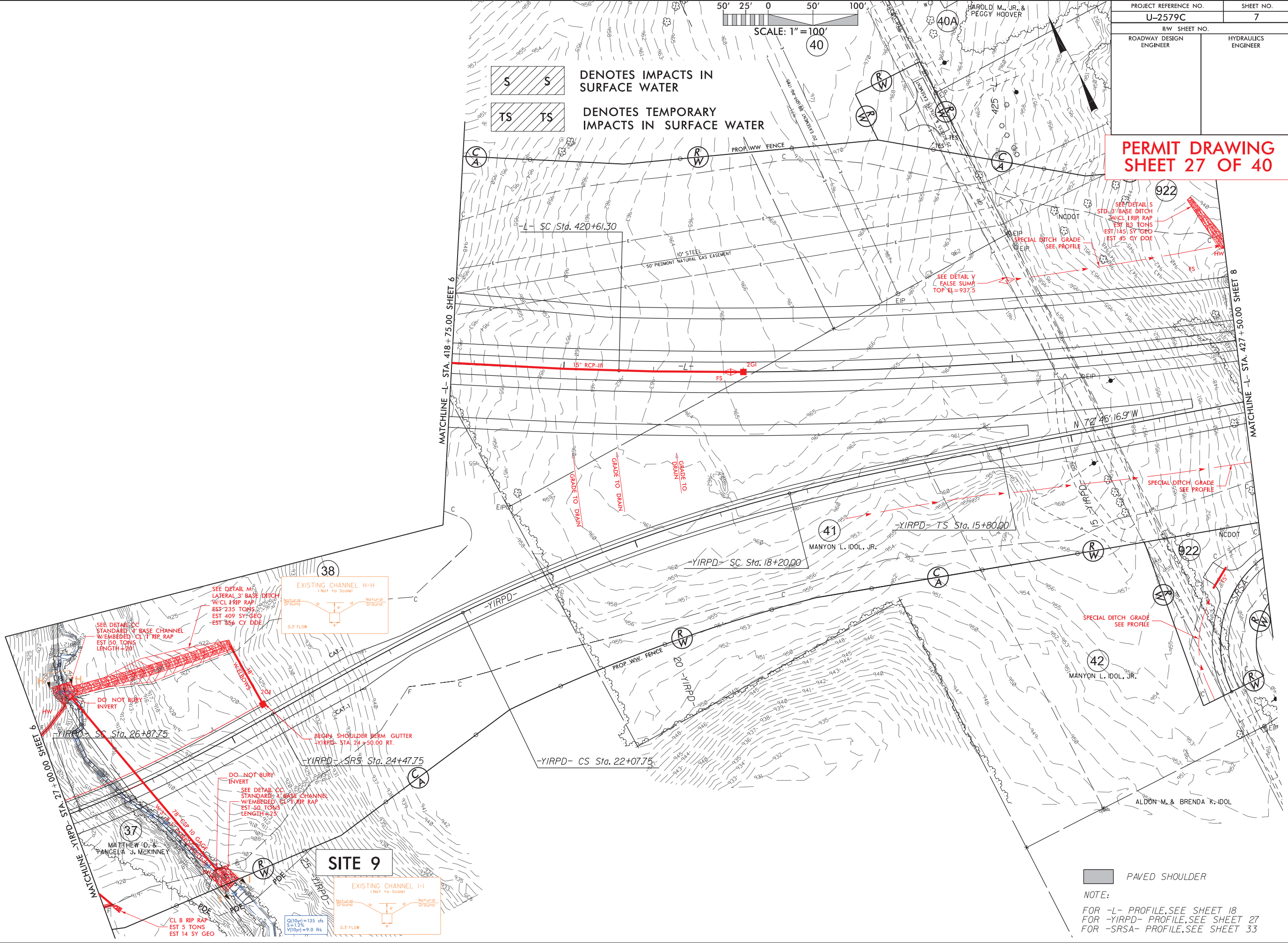
Revised 6/13/2017

8/17/99
5/11/2017
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PROJECT REFERENCE NO.		SHEET NO.
U-2579C		7
RW SHEET NO.		
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER	

PERMIT DRAWING
SHEET 27 OF 40



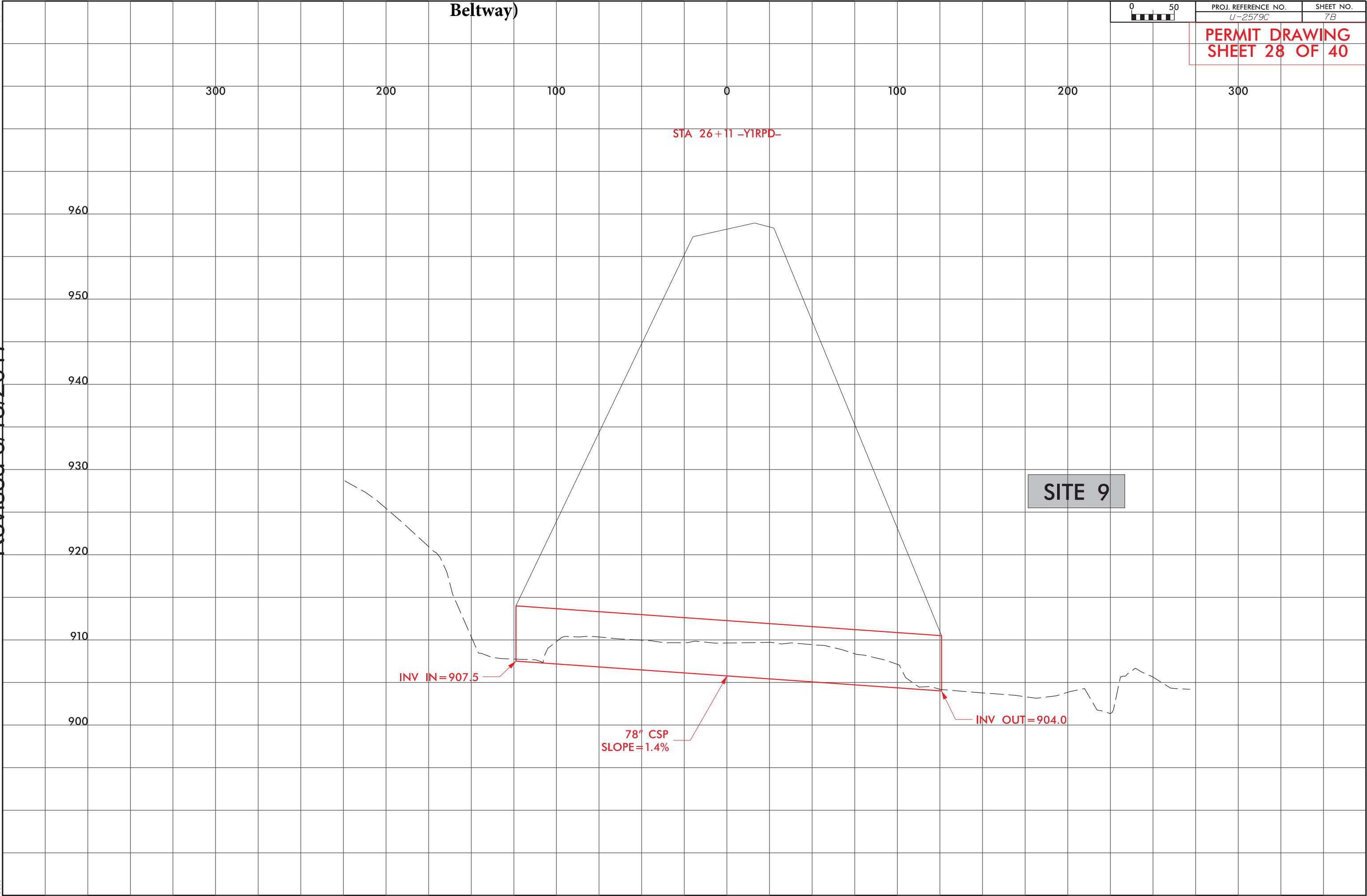


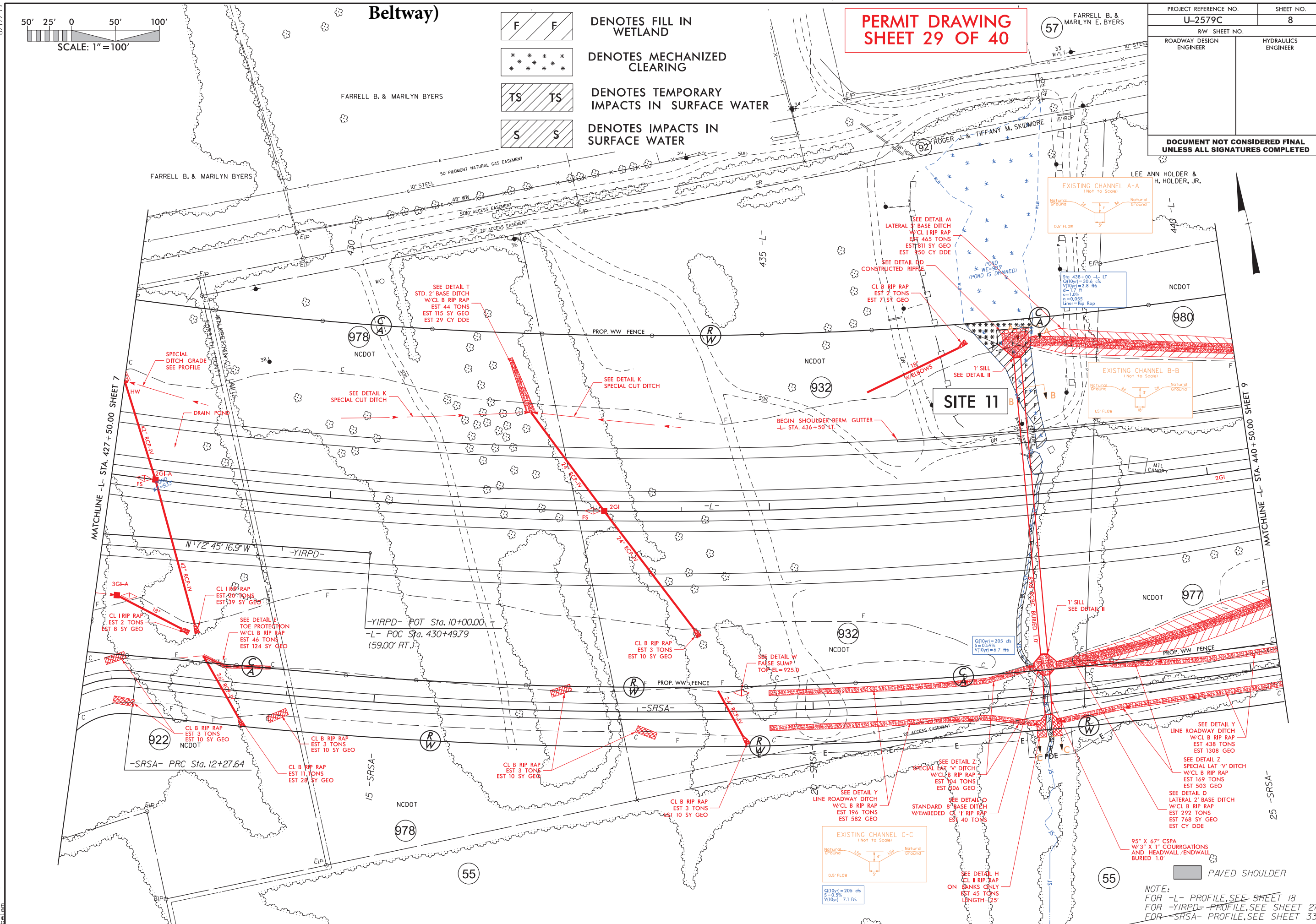
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U-2579C	7B

PERMIT DRAWING
SHEET 28 OF 40

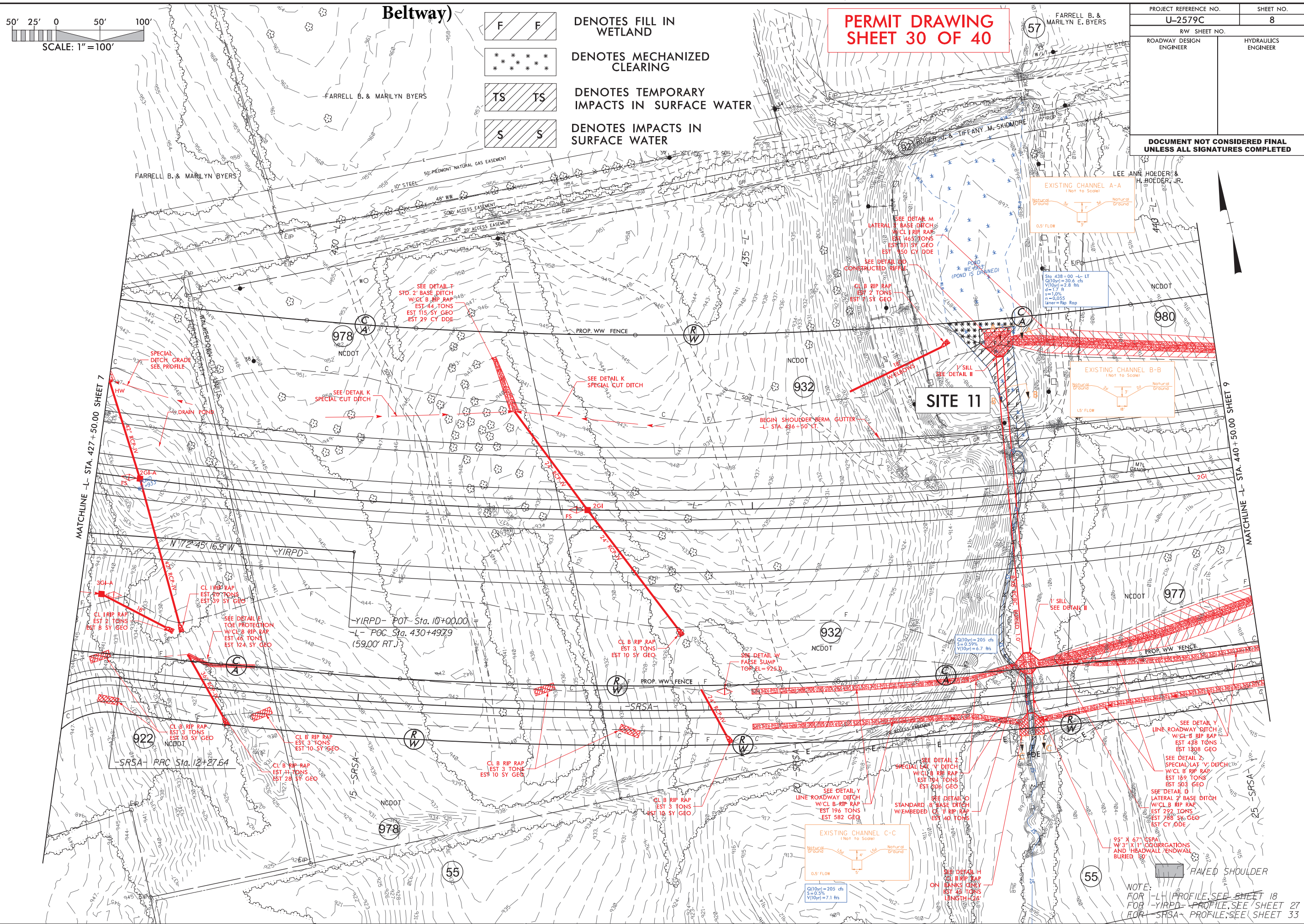
Revised 6/13/2017

5/11/2017
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5/19/2017
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PROJ. REFERENCE NO.	SHEET NO.
U-2579C	X-149

PERMIT DRAWING
SHEET 31 OF 40

SITE 11

MECHANIZED
CLEARING

FILL IN WETLAND

WETLAND

438 + 00.00

437 + 50.00

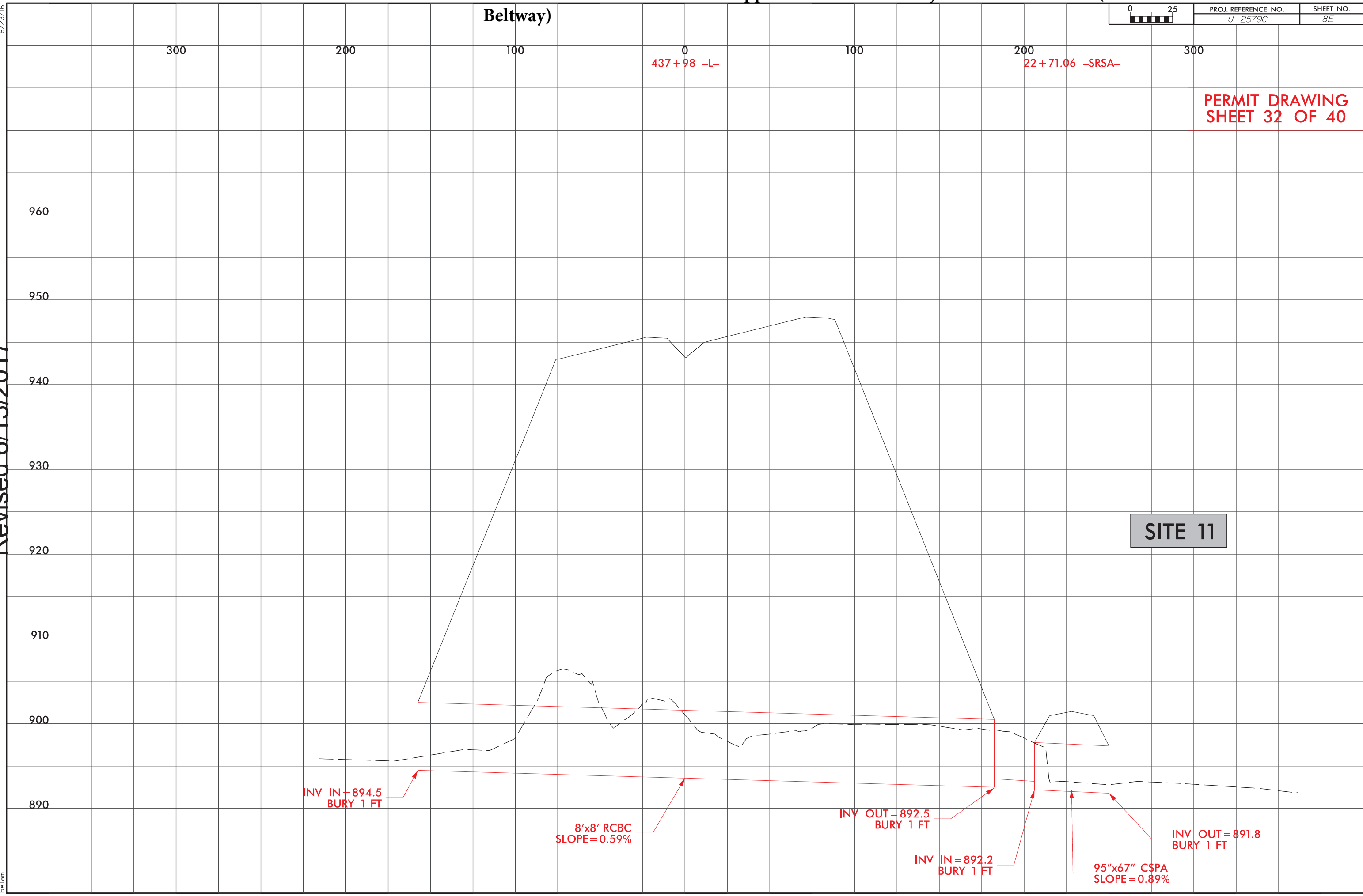
Revised 6/13/2017

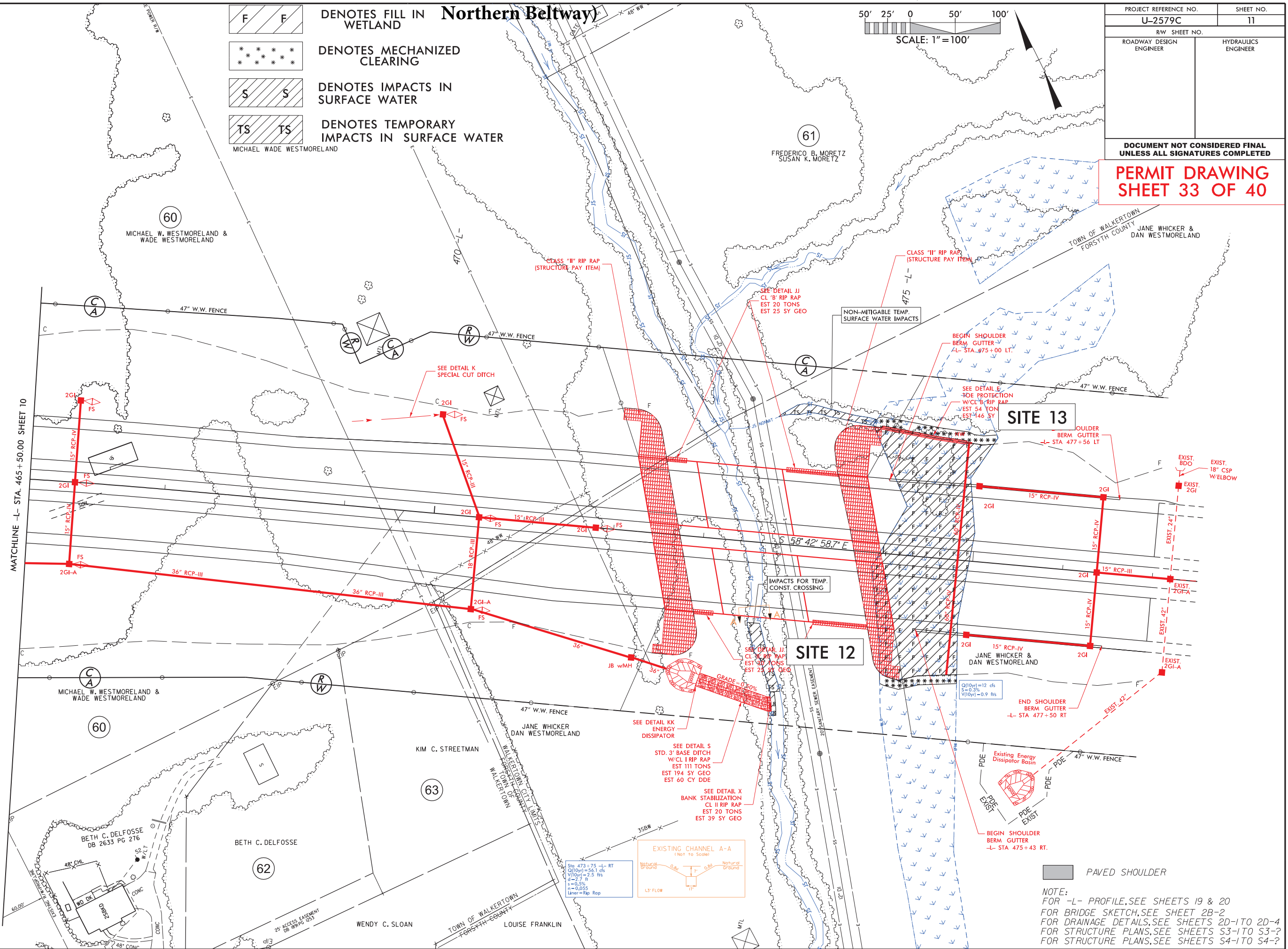
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Beltway

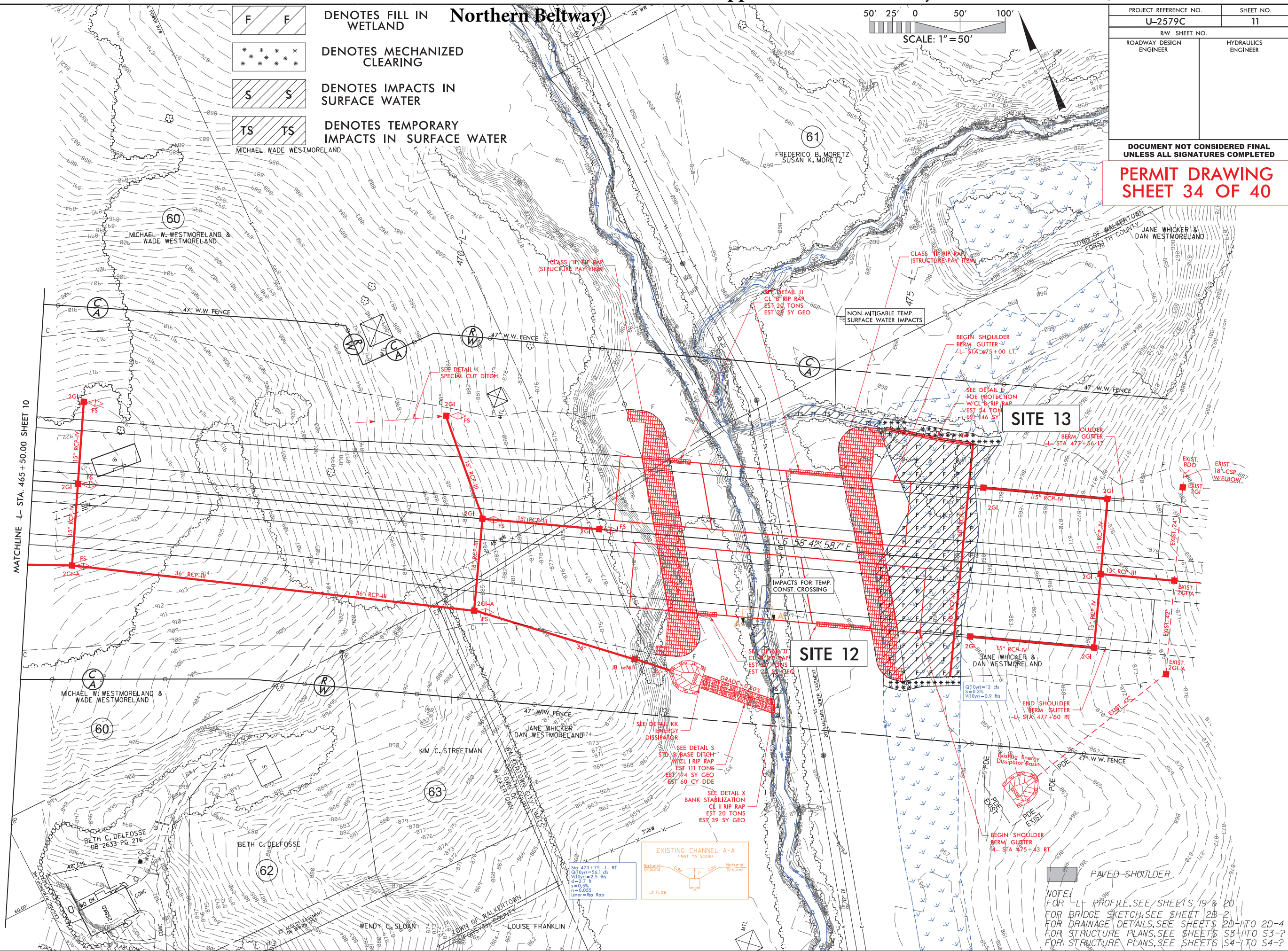
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U-2579C	8E

PERMIT DRAWING
SHEET 32 OF 40

Revised 6/13/2017

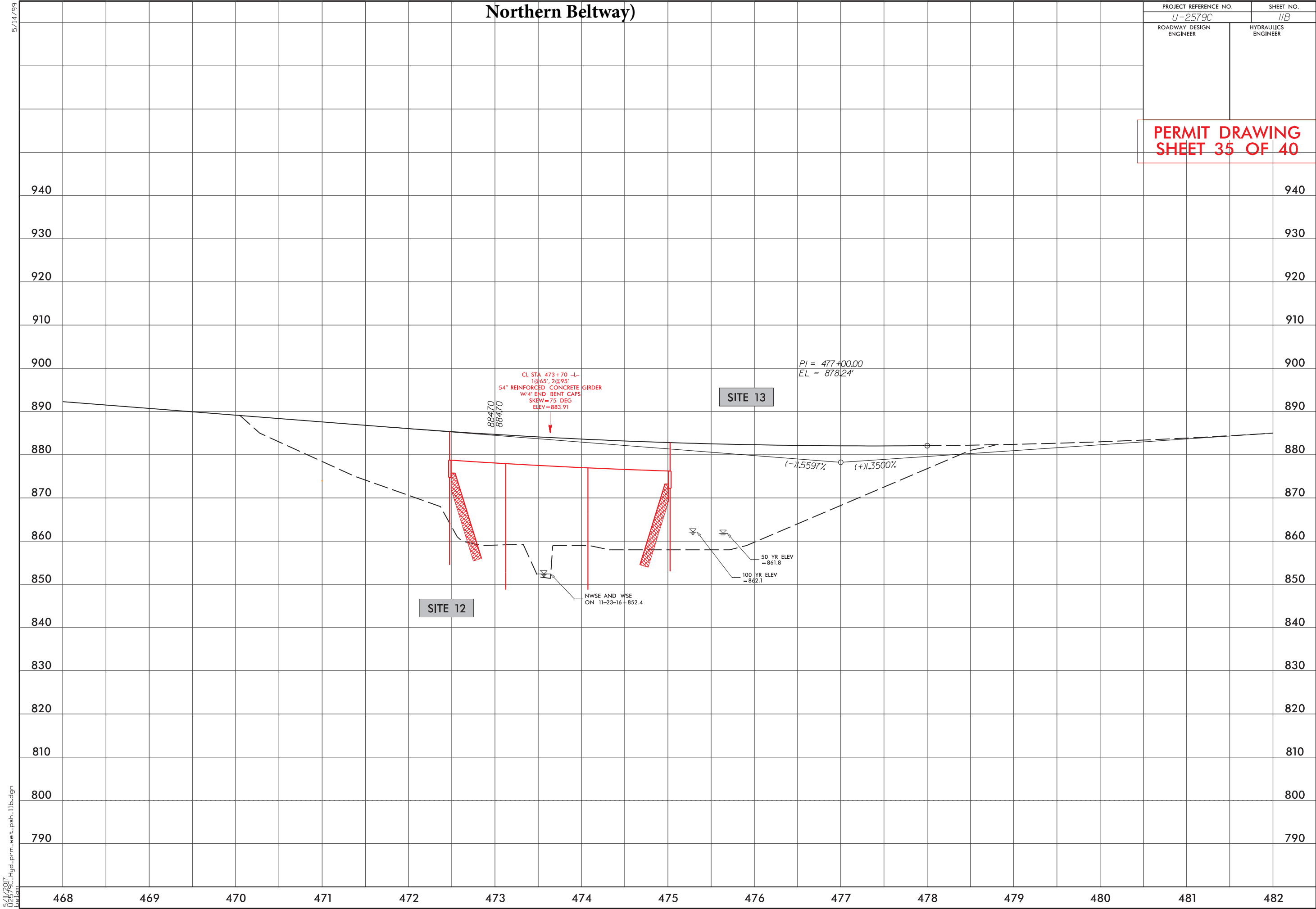






Revised 6/13/2017

PERMIT DRAWING
SHEET 35 OF 40

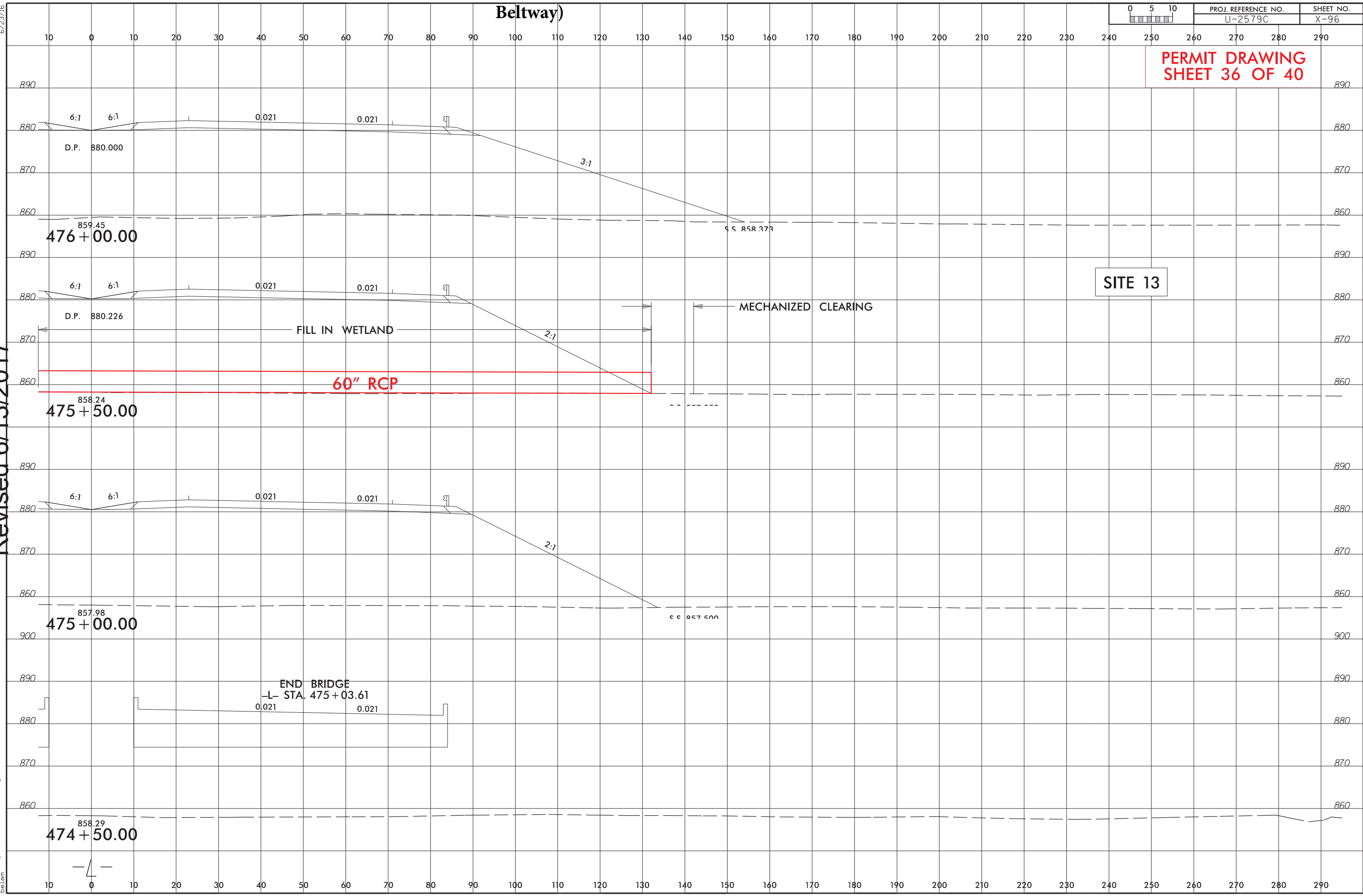


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	U-2579C	X-96

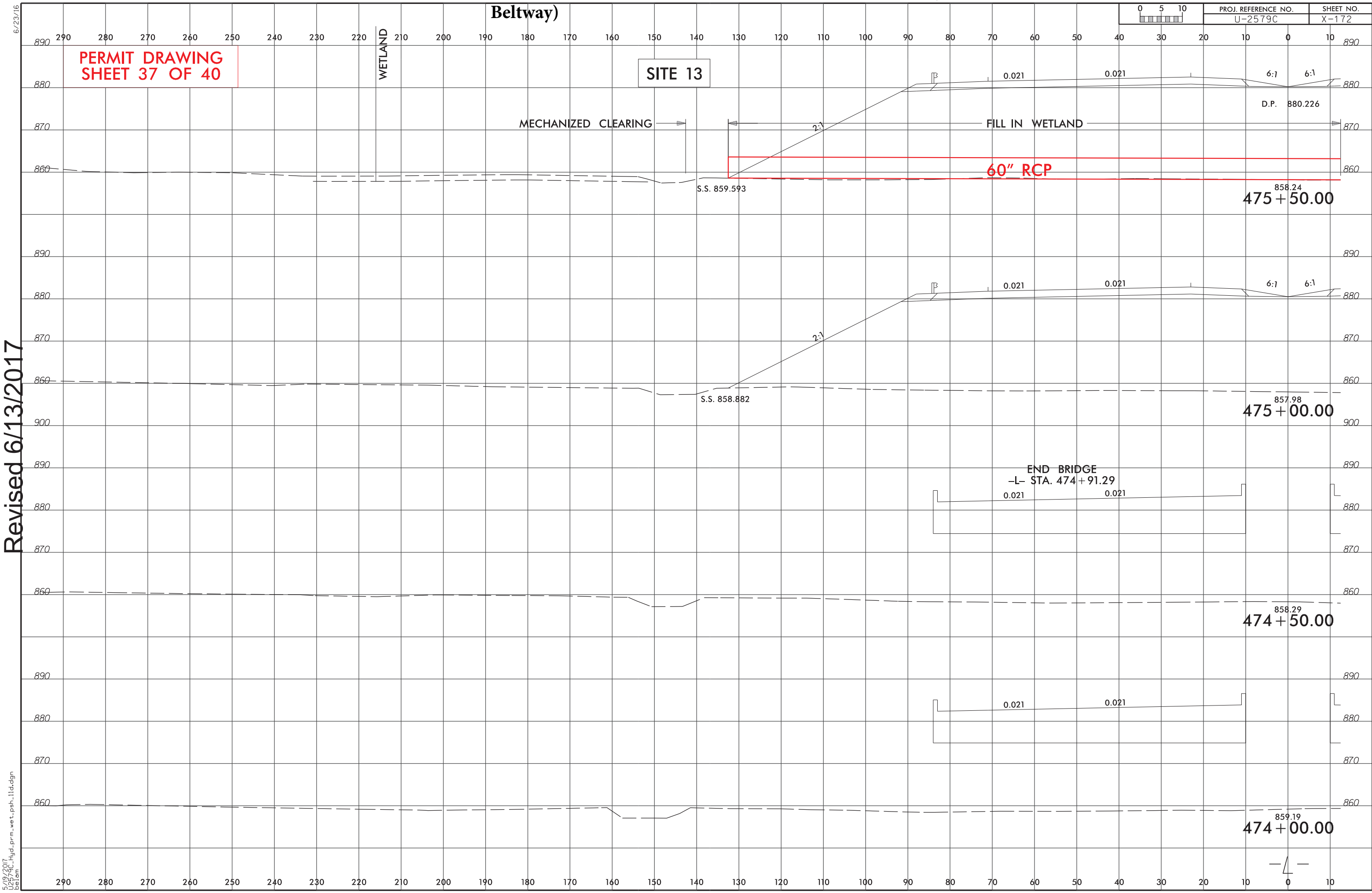
PERMIT DRAWING
SHEET 36 OF 40

Revised 6/13/2017

5/23/2017
U2579C_Hyd.prm_wet.psh_11c.dgn
Beltway



PROJ. REFERENCE NO.	SHEET NO.
U-2579C	X-172



PERMIT DRAWING
SHEET 37 OF 40

WETLAND

SITE 13

MECHANIZED CLEARING

FILL IN WETLAND

60" RCP

D.P. 880.226

858.24
475+50.00

857.98
475+00.00

END BRIDGE
-L- STA. 474+91.29

858.29
474+50.00

859.19
474+00.00

Revised 6/13/2017

5/19/2017
U2579C_Hyd.prm_wet_psh_11.dgn
Beltway

Revised 6/13/2017

8/17/99

5/31/2017 10:25:30 U:\Hyd_prm_wet_psh_13.dgn
belom

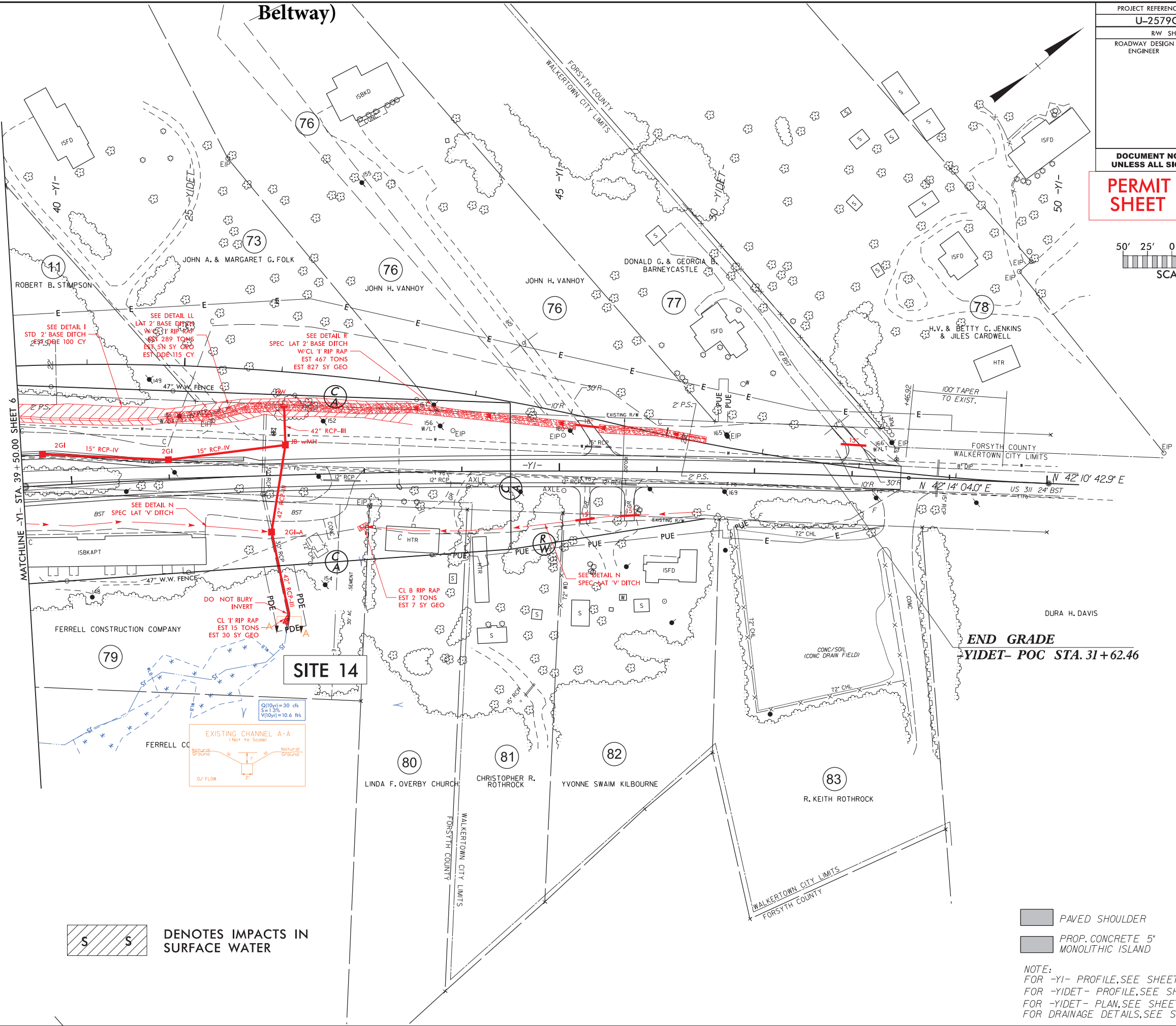
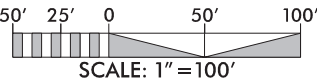
Action ID: SAW-2017-01232 Applicant: NCDOT Project Name: U-2579C (I-74/Winston Salem Northern

Beltway)

PROJECT REFERENCE NO.		SHEET NO.
U-2579C		13
RW SHEET NO.		
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

PERMIT DRAWING
SHEET 38 OF 40



 DENOTES IMPACTS IN
SURFACE WATER

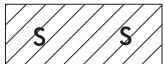
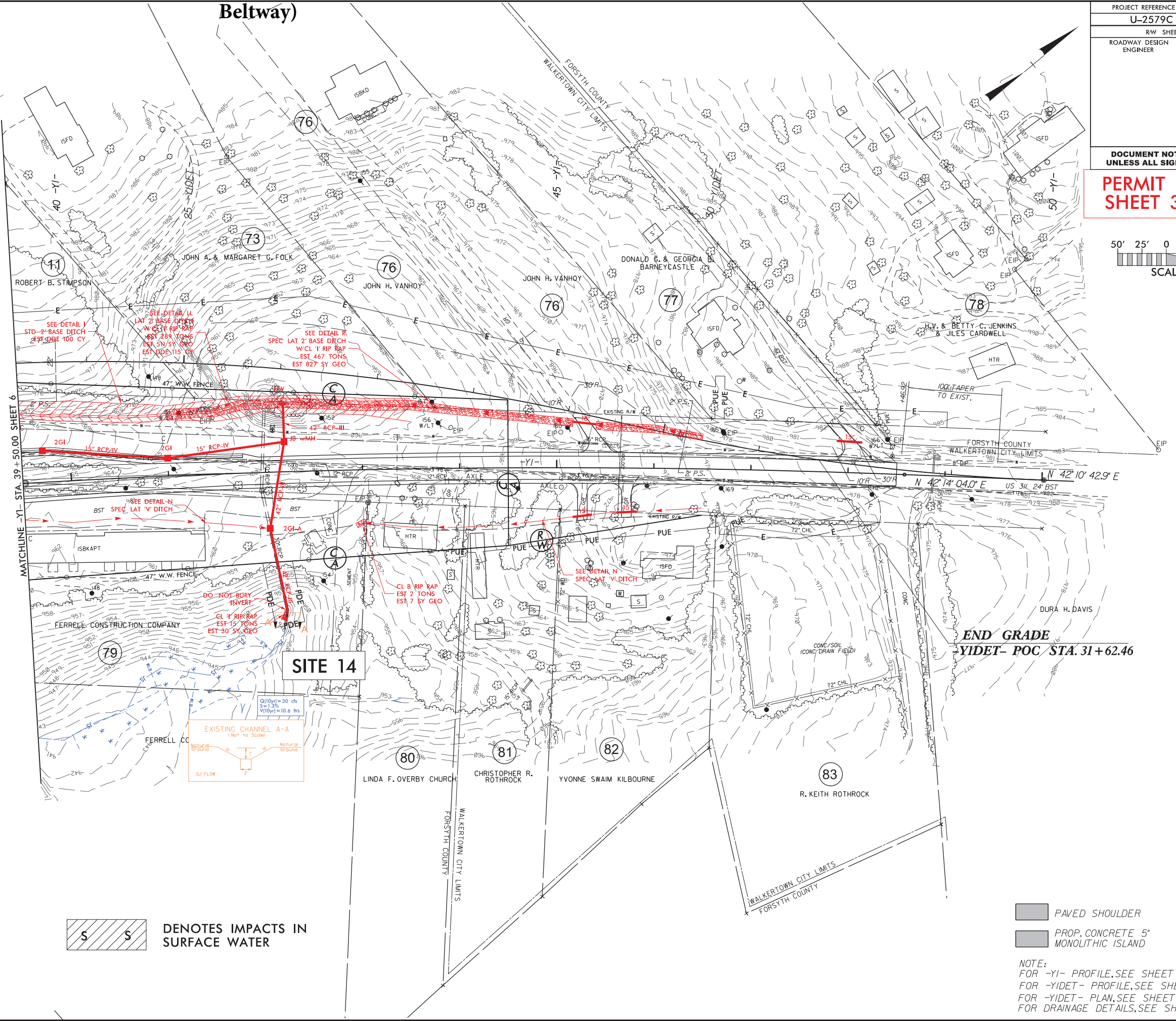
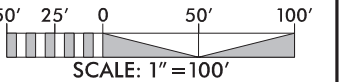
 PAVED SHOULDER
 PROP. CONCRETE 5"
MONOLITHIC ISLAND

NOTE:
FOR -YI- PROFILE, SEE SHEET 23
FOR -YIDET- PROFILE, SEE SHEET 30
FOR -YIDET- PLAN, SEE SHEET 2B-5 & 2B-6
FOR DRAINAGE DETAILS, SEE SHEETS 2D-1 TO 2D-4

PROJECT REFERENCE NO.	SHEET NO.
U-2579C	13
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

PERMIT DRAWING
SHEET 39 OF 40



DENOTES IMPACTS IN
SURFACE WATER

- PAVED SHOULDER
- PROP. CONCRETE 5' MONOLITHIC ISLAND

NOTE:
FOR -YI- PROFILE, SEE SHEET 23
FOR -YIDET- PROFILE, SEE SHEET 30
FOR -YIDET- PLAN, SEE SHEET 2B-5 & 2B-6
FOR DRAINAGE DETAILS, SEE SHEETS 2D-1 TO 2D-4

Revised 6/13/2017

8/17/99

5/31/2017 Hyd.prm_wet.psh_13a.dgn

**Action ID: SAW-2017-01232 Applicant: NCDOT Project Name: U-2579C
(I-74/Winston Salem Northern Beltway)**

Revised 6/13/2017

WETLAND PERMIT IMPACT SUMMARY												
Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS					SURFACE WATER IMPACTS				
			Permanent Fill In Wetlands (ac)	Temp. Fill In Wetlands (ac)	Excavation in Wetlands (ac)	Mechanized Clearing in Wetlands (ac)	Hand Clearing in Wetlands (ac)	Permanent SW impacts (ac)	Temp. SW impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)
6	31+27-31+55 -Y1- RT	ROADWAY FILL						< 0.01		53		
		CHANNEL STABILIZATION (Downstream)						< 0.01		15		
7	412+70-413+13 -L- LT	ROADWAY FILL	< 0.01			< 0.01						
7A	412+78-413+69 -L- RT	72" RCP	0.14					0.01	< 0.01	205	40	
		BANK STABILIZATION (Downstream)						< 0.01		25		
9	25+72-26+61 -Y1RPD-	78" CSP						0.02	< 0.01	271	56	
		CHANNEL STABILIZATION						< 0.01		45		
11	437+58-238+22 -L-	8'x8' RCBC / 95" x 67" CSPA	0.08			0.03		0.04	< 0.01	317	23	
		BANK STABILIZATION (Downstream)						< 0.01		25		
12	473+37-473+94 -L- RT	BRIDGE (Temp. Const. Crossing)							0.02		80	
		BANK STABILIZATION						< 0.01		26		
13	474+89-476+00 -L-	ROADWAY FILL	0.57			0.05						
14	42+15 -Y1-	42" RCP CHANNEL STABILIZATION						< 0.01		15		
TOTALS*:			0.79			0.09		0.10	0.04	997	199	0

*Rounded totals are sum of actual impacts

NOTES:

Site 8 Omitted
 Site 9: Upstream Channel Stabilization = 0.003 AC / 20 LF, Downstream Channel Stabilization = 0.004 AC / 25 LF
 Site 10 Omitted
 Site 13: Non-Mitigable Temporary Surface Water Impacts = 0.019 AC / 110 LF

NC DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 May 11, 2017
 FORSYTH
 U-2579C
 34839.3.6