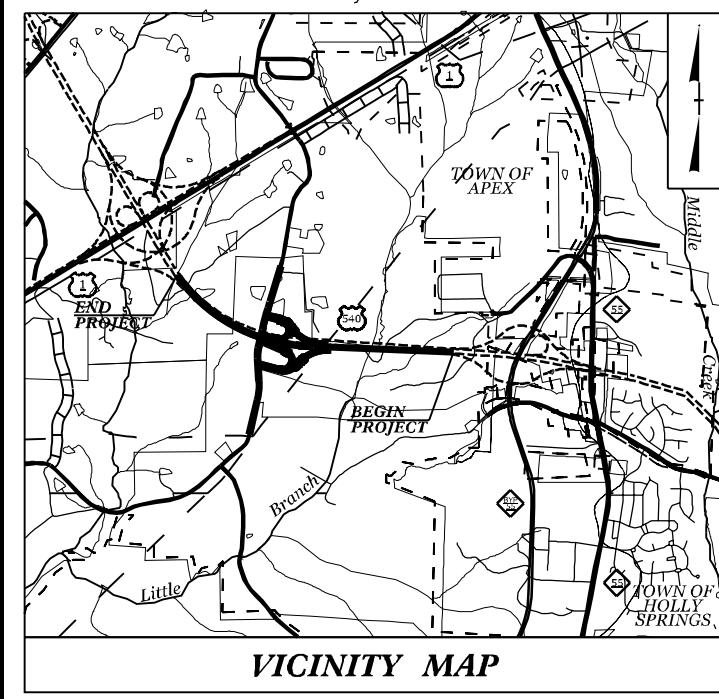


See Sheet 1-A For Index of Sheets
See Sheet 1-B For Conventional Symbols

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
WAKE COUNTY

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R-2635D	1	
STATE PROJ. NO.	P.A. PROJ. NO.	DESCRIPTION	
35520.1.S5		P.E.	
35520.2.S5		RIGHT-OF-WAY	
35520.2.S5		UTILITIES	
35520.3.S5		CONSTRUCTION	

PROJECT: R-2635D



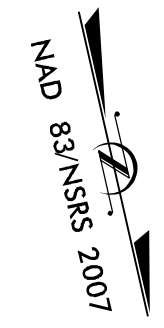
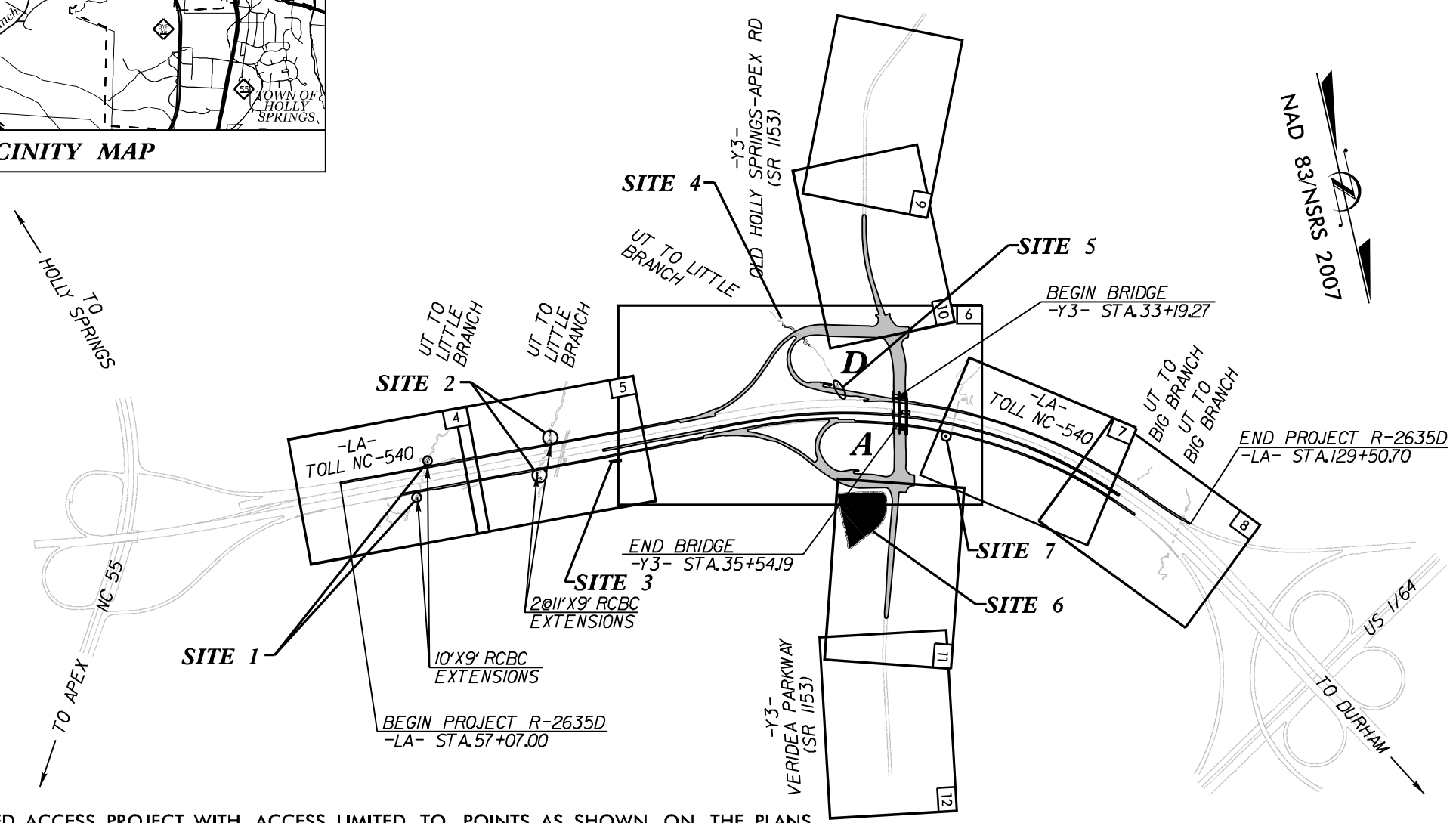
WETLAND AND SURFACE WATER IMPACTS PERMIT
LOCATION: TRIANGLE EXPRESSWAY (TOLL NC-540) / VERIDEA PARKWAY (SR 1153) INTERCHANGE
TYPE OF WORK: GRADING, PAVING, GUARDRAIL, DRAINAGE, STRUCTURE, WALLS, CULVERT EXTENSIONS, SIGNING, AET INFRASTRUCTURE, & ITS



FINAL ROADWAY PLANS

PROJECT # R-2635D
SUBMITTAL # S-024R3
SUBMITTAL DATE: 1/6/2016

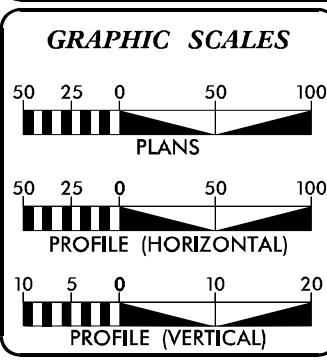
VICINITY MAP



PERMIT DRAWING
SHEET 1 OF 17

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

THIS IS A CONTROLLED-ACCESS PROJECT WITH ACCESS LIMITED TO POINTS AS SHOWN ON THE PLANS



DESIGN DATA

ADT 2015 =	37,500
ADT 2035 =	72,400
DHV =	10 %
D =	65 %
T =	18 % *
V =	70 MPH
* TTST =	12% DUAL = 6%
FUNC CLASS =	URBAN FREEWAY REGIONAL TIER

PROJECT LENGTH

LENGTH OF ROADWAY PROJECT R-2635D	=	1.372 MILES
TOTAL LENGTH OF PROJECT R-2635D	=	1.372 MILES

PLANS PREPARED FOR THE NCDOT BY: **Kimley»Horn**

2012 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: JUNE 26, 2015

LETTING DATE: JUNE 26, 2015

JEFFREY W. MOORE, P.E.
PROJECT ENGINEER

CHADWICK W. BECK, P.E.
PROJECT DESIGN ENGINEER

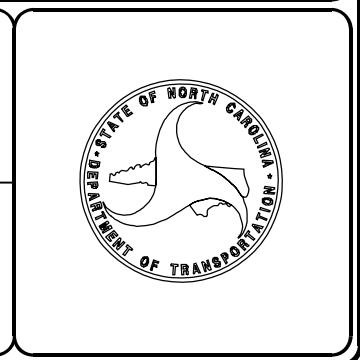
K. ZAK HAMIDI, P.E.
NCDOT CONTACT

HYDRAULICS ENGINEER

SIGNATURE: _____ P.E.

ROADWAY DESIGN ENGINEER

SIGNATURE: _____ P.E.



K:\RAL_Roadway\012593013 - R-2635D - Access 540\Hydraulics\PERMITS_Environment\Drawings\R-2635D_hyd_prm_wet_tsh.dgn 1/5/2016

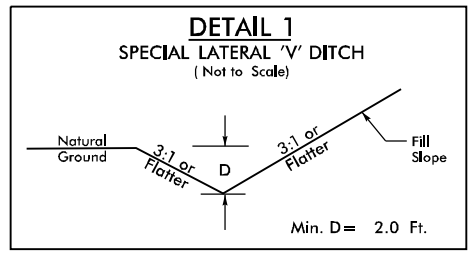
CONTRACT: C203635

FINAL ROADWAY PLANS	PROJECT REFERENCE NO. R-2635D	SHEET NO. 2D-1
	ROADWAY DESIGN ENGINEER	HYDRAULIC DESIGN ENGINEER

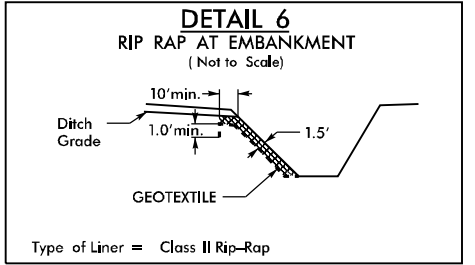
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



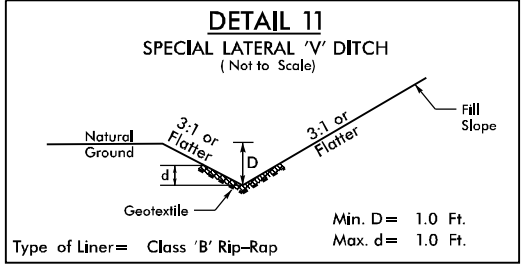
PERMIT DRAWING SHEET 2 OF 17



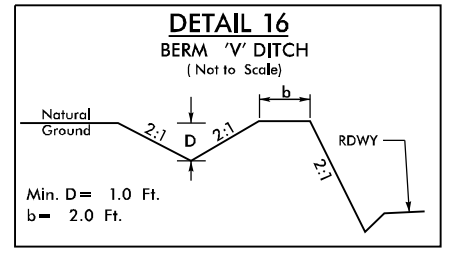
FROM STA. 59+70 TO STA. 61+50 -LA- (LT)



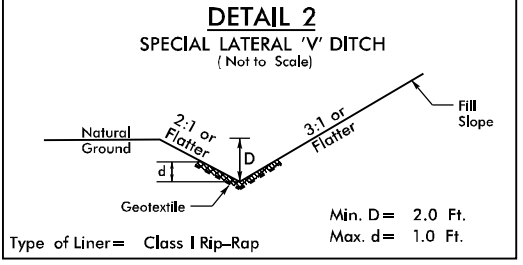
STA. 22+30 -Y3RPD- (LT)
STA. 23+50 -Y3RPD- (RT)
Type of Liner = Class II Rip-Rap



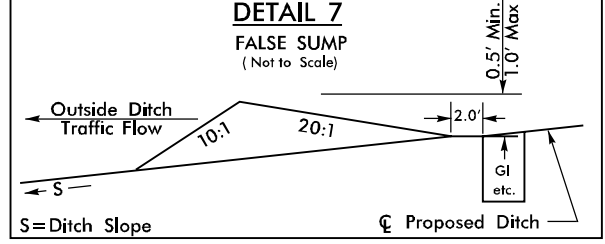
FROM STA. 113+50 TO STA. 114+50 -LA- (LT)
FROM STA. 24+50 TO STA. 27+50 -Y3RPD- (LT)
FROM STA. 19+23 TO STA. 21+00 -Y3- (RT)
FROM STA. 17+74 TO STA. 21+50 -Y3- (LT)
Type of Liner = Class 'B' Rip-Rap



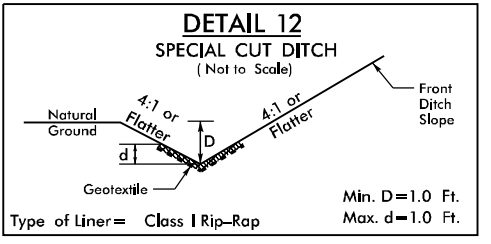
FROM STA. 14+00 TO STA. 15+00 -Y3RPA- (RT)



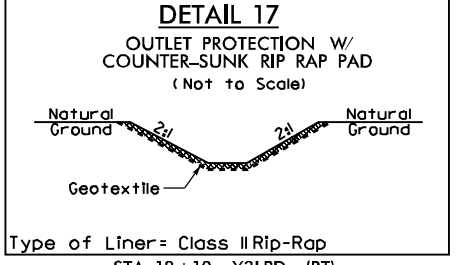
FROM STA. 62+90 TO STA. 63+50 -LA- (LT)
FROM STA. 81+77 TO STA. 83+00 -LA- (RT)
FROM STA. 23+00 TO STA. 24+50 -Y3RPD- (LT)
FROM STA. 23+50 TO STA. 29+50 -Y3RPD- (RT)
FROM STA. 11+00 TO STA. 11+50 -Y3RPD- (LT)
Type of Liner = Class I Rip-Rap



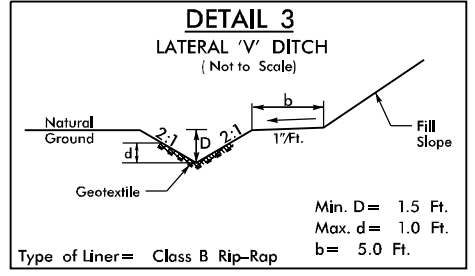
FROM STA. 72+54 TO STA. 72+69 -LA- (RT)
FROM STA. 120+04 TO STA. 120+19 -LA- (RT)
FROM STA. 109+31 TO STA. 109+46 -LA- (LT)
FROM STA. 18+54 TO STA. 18+69 -Y3LPD- (LT)
FROM STA. 22+04 TO STA. 22+19 -Y3LPD- (LT)
FROM STA. 23+42 TO STA. 23+57 -Y3LPD- (RT)
FROM STA. 12+80 TO STA. 12+95 -Y3LPA- (RT)
FROM STA. 13+56 TO STA. 13+71 -Y3LPA- (RT)
FROM STA. 14+56 TO STA. 14+71 -Y3LPA- (LT)
FROM STA. 15+81 TO STA. 15+96 -Y3LPA- (LT)
FROM STA. 11+81 TO STA. 11+96 -Y3RPD- (LT)



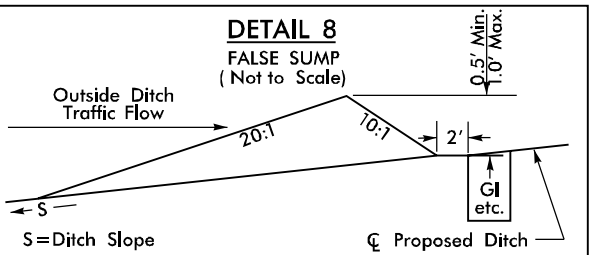
FROM STA. 19+50 TO STA. 20+00 -Y3RPD- (RT)
FROM STA. 23+00 TO STA. 23+38 -Y3LPD- (LT)
Type of Liner = Class I Rip-Rap



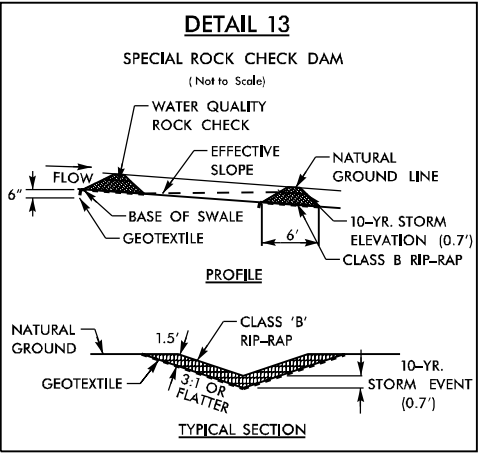
STA. 18+10 -Y3LPD- (RT)



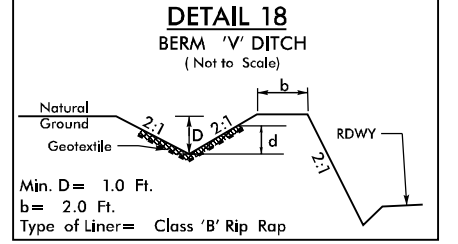
FROM STA. 73+45 TO STA. 75+00 -LA- (RT)
FROM STA. 81+50 TO STA. 85+38.23 -LA- (LT)
FROM STA. 10+00 TO STA. 11+00 -Y3RPD- (LT)
Type of Liner = Class B Rip-Rap



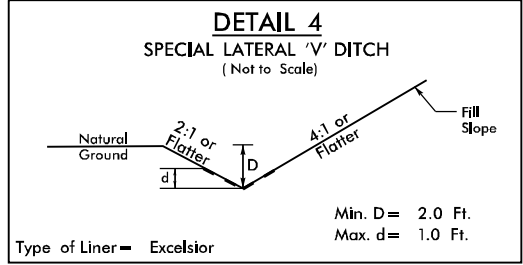
FROM STA. 73+04 TO STA. 73+19 -LA- (LT)
FROM STA. 83+31 TO STA. 83+46 -LA- (RT)
FROM STA. 96+49 TO STA. 96+64 -LA- (RT)
FROM STA. 108+31 TO STA. 108+46 -LA- (RT)
FROM STA. 20+04 TO STA. 20+19 -Y3RPD- (LT)
FROM STA. 18+54 TO STA. 18+69 -Y3RPD- (LT)
FROM STA. 15+56 TO STA. 15+71 -Y3RPA- (RT)
FROM STA. 17+06 TO STA. 17+21 -Y3RPA- (RT)
FROM STA. 17+06 TO STA. 17+21 -Y3RPA- (LT)
FROM STA. 20+27 TO STA. 20+45 -Y3RPA- (RT)



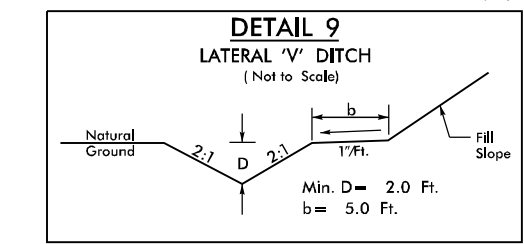
FROM STA. 64+00 TO STA. 66+00 -LA- (RT)



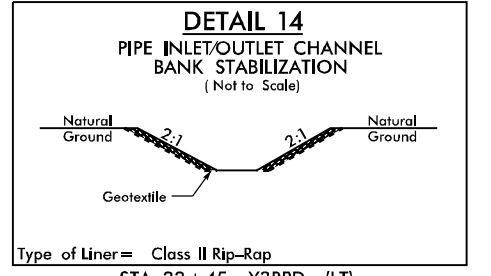
FROM STA. 15+00 TO STA. 17+25 -Y3RPA- (RT)
FROM STA. 17+25 TO STA. 19+00 -Y3RPA- (RT)
Type of Liner = Class 'B' Rip-Rap



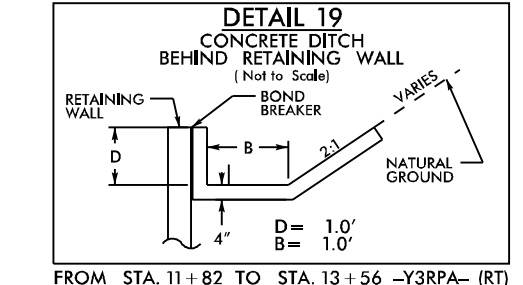
FROM STA. 72+50 TO STA. 73+00 -LA- (LT)
FROM STA. 17+74 TO STA. 19+23 -Y3- (RT)
Type of Liner = Excelsior



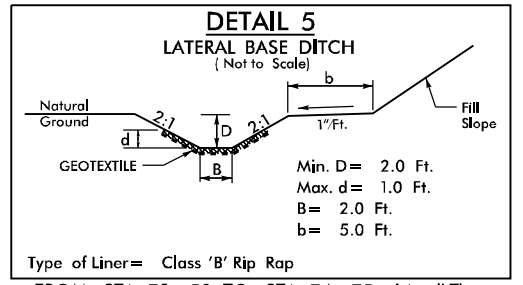
FROM STA. 75+00 TO STA. 79+00 -LA- (RT)



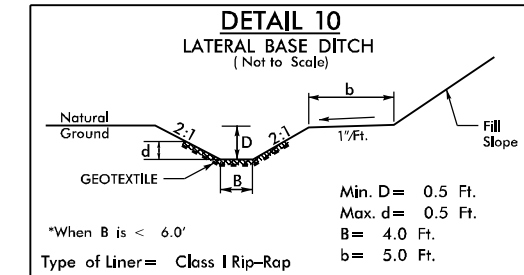
STA. 22+45 -Y3RPD- (LT)
STA. 25+92 -Y3LPD- (RT)
Type of Liner = Class II Rip-Rap



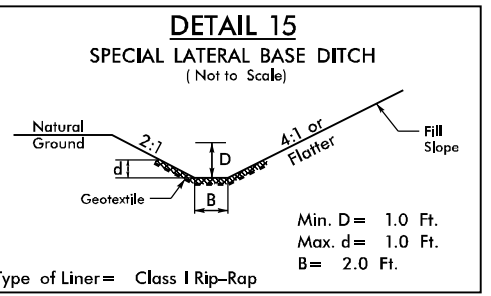
FROM STA. 11+82 TO STA. 13+56 -Y3RPA- (RT)



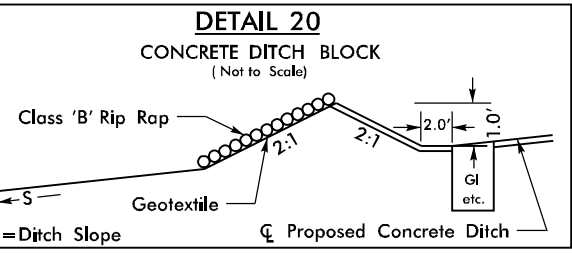
FROM STA. 73+50 TO STA. 74+75 -LA- (LT)
Type of Liner = Class 'B' Rip-Rap



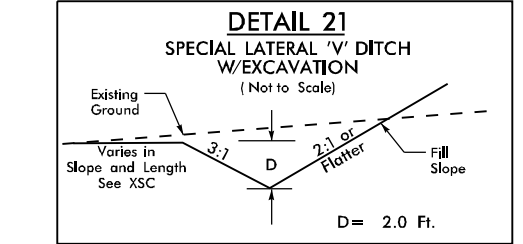
FROM STA. 80+75 TO STA. 81+77 -LA- (RT)
*When B is < 6.0'
Type of Liner = Class I Rip-Rap



FROM STA. 22+30 TO STA. 23+00 -Y3RPD- (LT)
Type of Liner = Class I Rip-Rap



STA. 11+82 -Y3RPA- (RT)
STA. 13+56 -Y3RPA- (RT)



FROM STA. 28+70 TO STA. 31+00 -Y3- (RT)

K:\RAL_Roadway\0125930\3 - R-2635D - Access 540\Hydraulics\PERMITS - Environmental\Drawings\R-2635D_hyd_prm_wet_hydro_details.dgn 12/17/2015

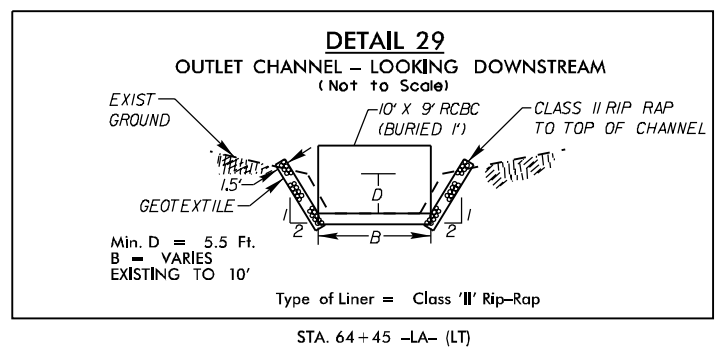
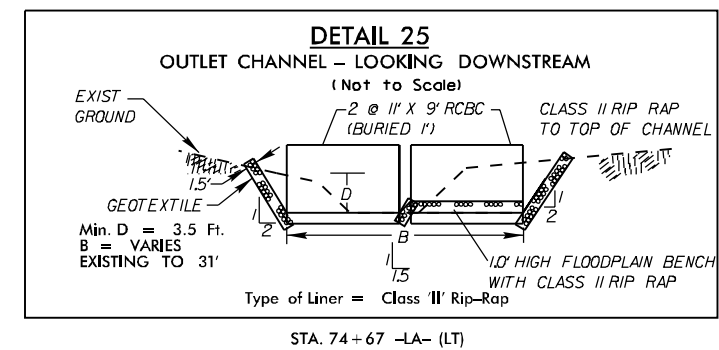
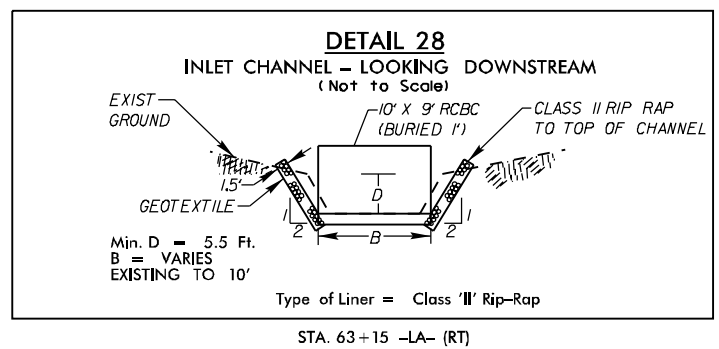
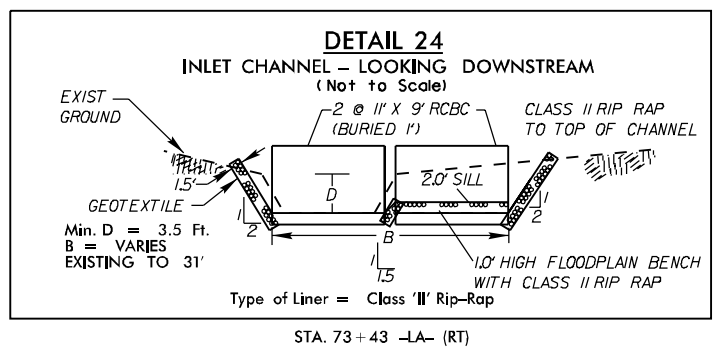
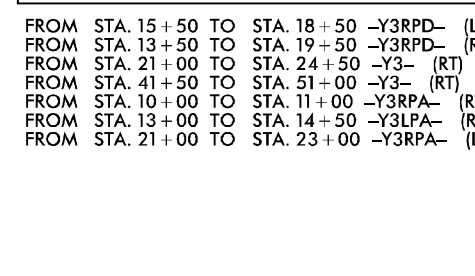
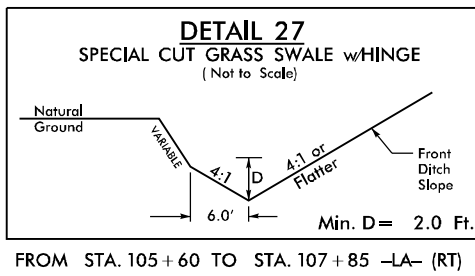
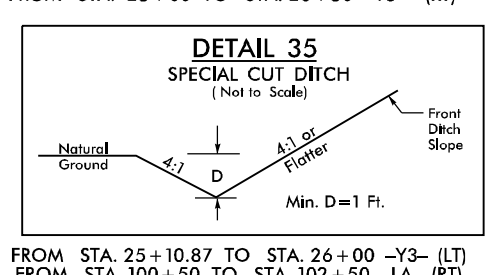
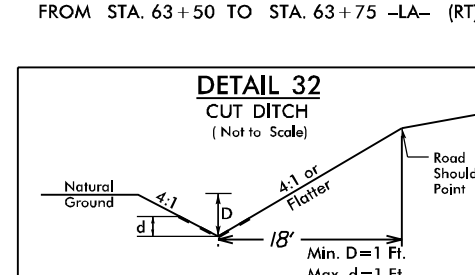
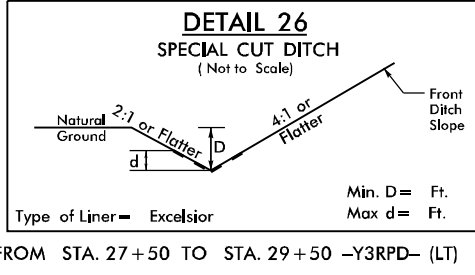
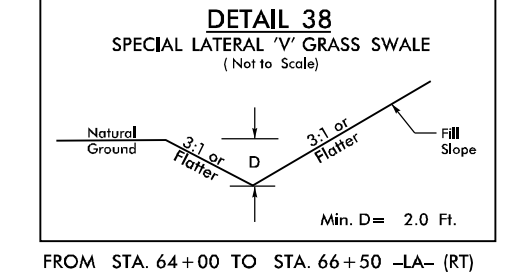
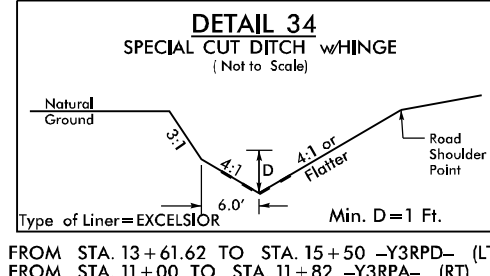
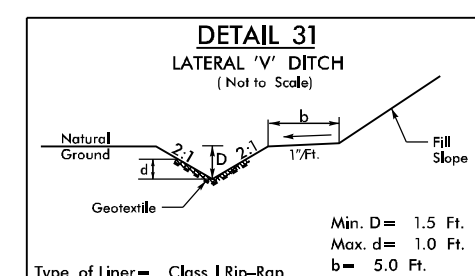
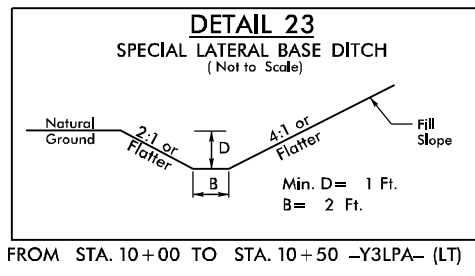
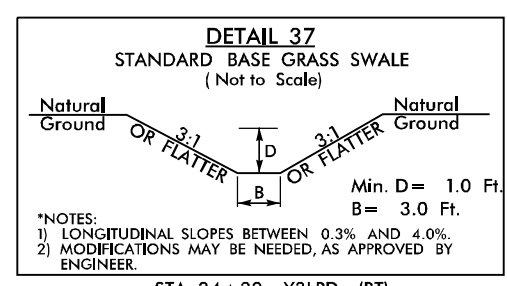
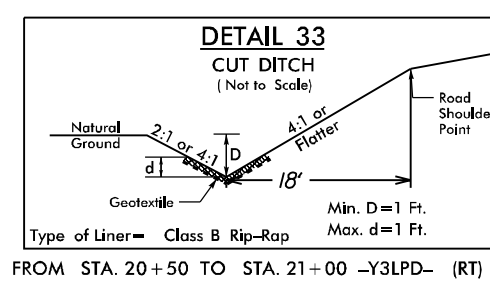
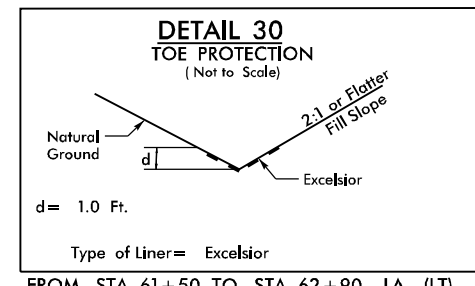
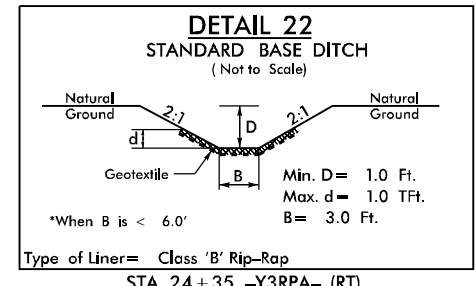
FINAL ROADWAY PLANS	PROJECT REFERENCE NO.	SHEET NO.
	R-2635D	2D-2

ROADWAY DESIGN ENGINEER	HYDRAULIC DESIGN ENGINEER
-------------------------	---------------------------

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



PERMIT DRAWING SHEET 3 OF 17



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DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

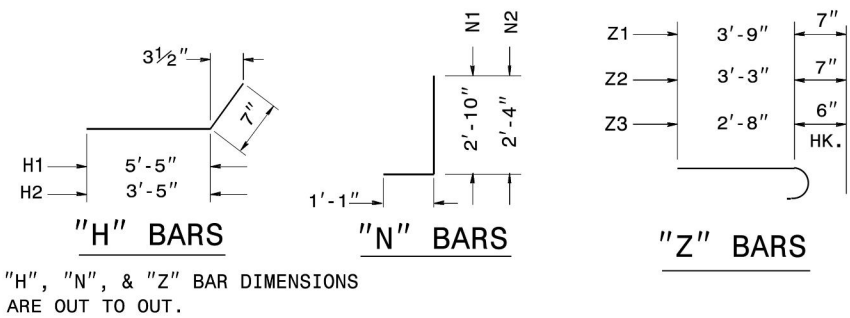
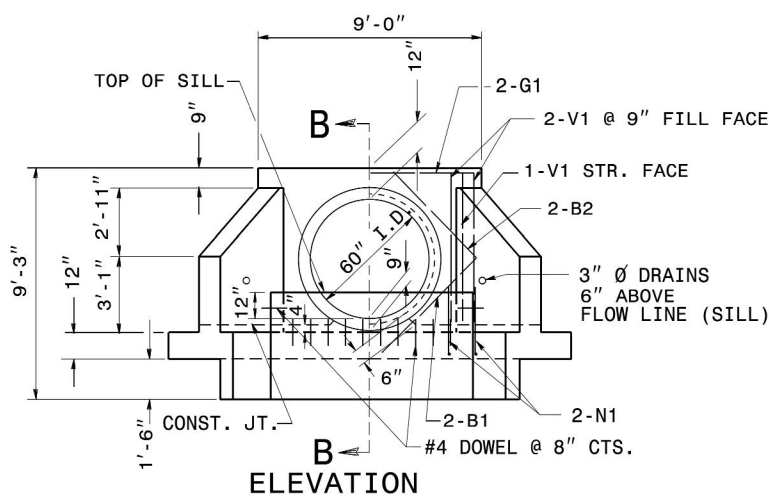
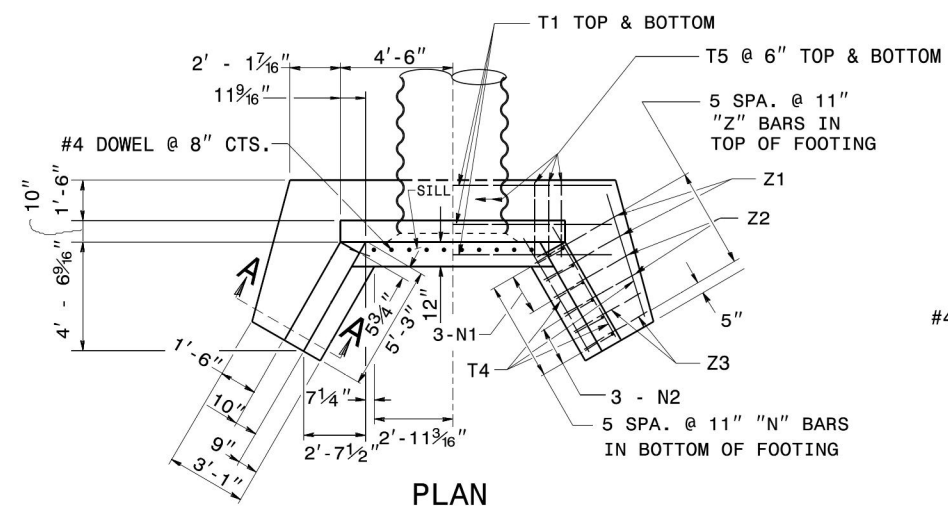


PERMIT DRAWING SHEET 4 OF 17

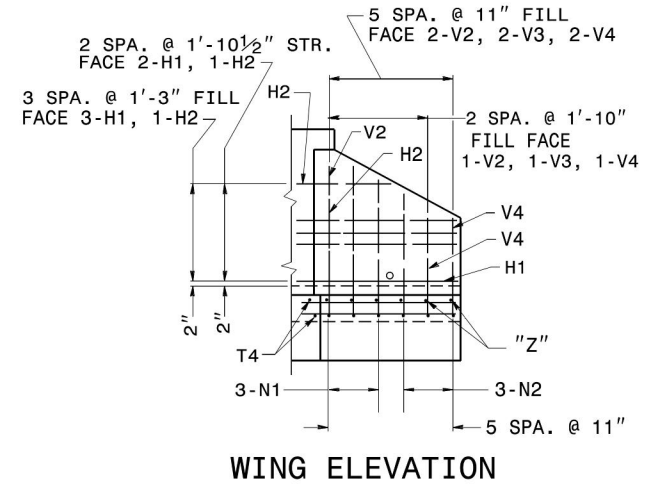
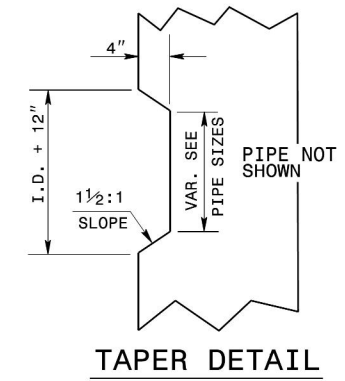
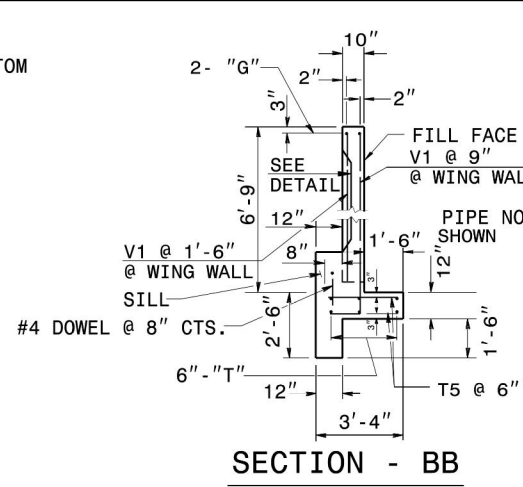
STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

ENGLISH STANDARD DRAWING FOR REINFORCED CONCRETE ENDWALL SILL FOR SINGLE 60" PIPE - 90° SKEW

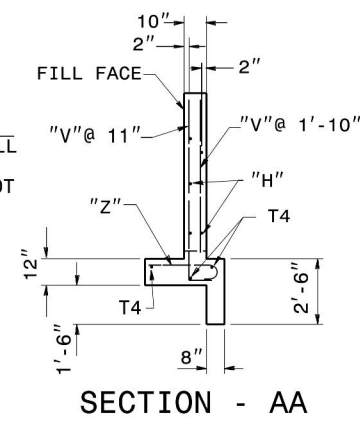
SHEET 1 OF 1 838D27



"H", "N", & "Z" BAR DIMENSIONS ARE OUT TO OUT.



SEE STD. # 838.45 FOR GENERAL NOTES.



BILL OF MATERIAL FOR ENDWALL					
REINF. STEEL		1 PIPE			
BAR	SIZE	LENGTH	NO.	WEIGHT	
B1	#4	5'-6"	4	15	
B2	#4	4'-6"	4	12	
G1	#7	8'-8"	2	35	
H1	#4	6'-0"	10	40	
H2	#4	4'-0"	4	11	
N1	#5	3'-11"	10	41	
N2	#4	3'-5"	6	14	
T1	#4	12'-8"	6	51	
T4	#4	5'-6"	6	22	
T5	#4	2'-6"	36	60	
V1	#4	6'-3"	6	25	
V2	#4	5'-1"	6	20	
V3	#4	3'-11"	6	16	
V4	#4	2'-9"	6	11	
Z1	#5	4'-4"	4	18	
Z2	#4	3'-10"	4	10	
Z3	#4	3'-2"	4	8	
DOWEL #4		1'-0"	12	8	
REINF. STEEL LBS.				417	
CON./C.S. CU. YDS				6.5	

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

ENGLISH STANDARD DRAWING FOR REINFORCED CONCRETE ENDWALL SILL FOR SINGLE 60" PIPE - 90° SKEW

SHEET 1 OF 1 838D27

CONTRACT STANDARDS & DEVELOPMENT UNIT STANDARDS AND SPECIAL DESIGN Office 919-250-4128 FAX 919-250-4119

DETAIL OF REINFORCED CONCRETE ENDWALL SILL

ORIGINAL BY: _____ DATE: _____
 MODIFIED BY: nbritt DATE: 08-25-05
 CHECKED BY: _____ DATE: _____
 FILE SPEC.: details/nbritt/english/rural/r3421concrendwallsill.dgn

K:\RAL_Roadway\012593013 - R-2635D - Access 540\Hydraulics\PERMITS_Environmental\Drawings\R-2635D_hyd_prm_wet_hydro_details.dgn 12/17/2015

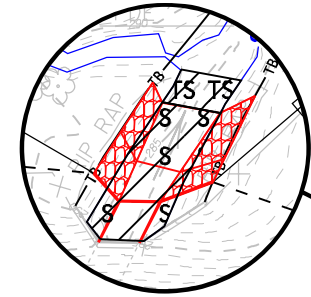
FINAL ROADWAY PLANS	PROJECT REFERENCE NO. R-2635D	SHEET NO. 4
	ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



PERMIT DRAWING SHEET 6 OF 17

SITE 1 - IMPACT ZOOM-IN (SCALE: 1" = 50')

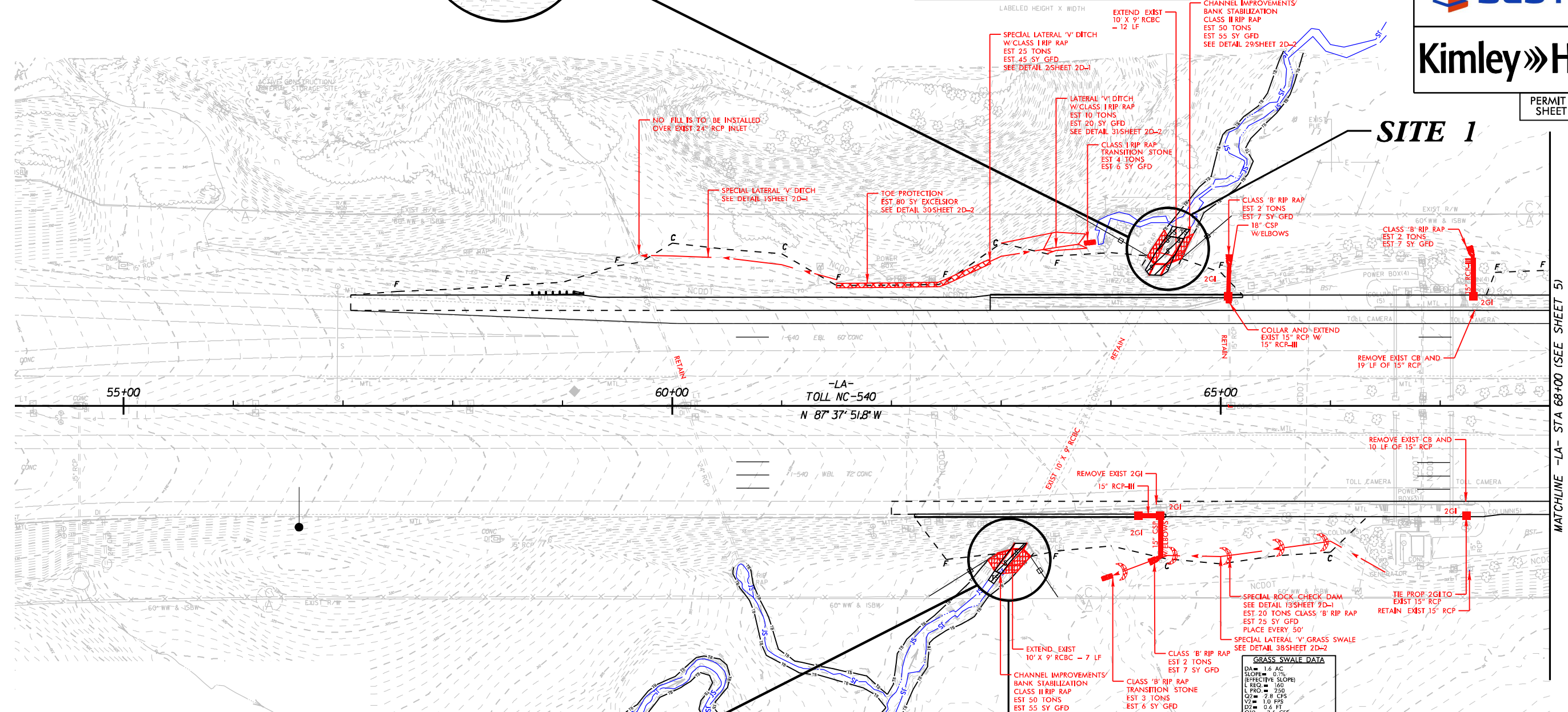


HIGHWAY 55 C&D LANDFILL, LLC

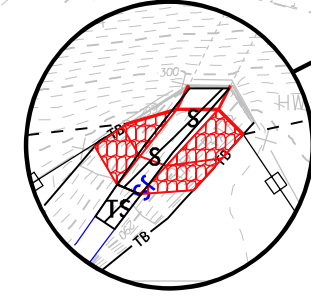
CULVERT #3 ONE BARREL

	NORTH	EAST	ELEV.
CUL1	705572.34	2045026.53	288.14
CUL2	705572.82	2045015.67	288.14
CUL3	705334.57	2044883.79	284.47
CUL4	705333.95	2044894.47	284.41
CE1	705572.36	2045020.67	297.30
CE2	705334.45	2044889.04	293.33
HW1	705572.37	2045020.76	299.30
HW2	705334.40	2044889.55	295.47

NAD 83/NSRS 2007



SITE 1 - IMPACT ZOOM-IN (SCALE: 1" = 50')



HIGHWAY 55 C&D LANDFILL, LLC

DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "R2635D-43" WITH NAD 83/NA 2011 STATE PLANE GRID COORDINATES OF NORTHING: 705617.3920(±) EASTING: 2041588.2019(±) ELEVATION: 320.64(±)

THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.9998902757

THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "R2635D-43" TO -LA- STATION 57+00.00 IS S 87° 14' 23.49" E 4049.68'

ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES VERTICAL DATUM USED IS NAVD 88

GRASS SWALE DATA

DA	1.6 AC
SLOPE	0.1%
L REQ	160
L PRO	250
Q	2.8 CFS
V	1.0 FPS
D	0.6 FT
GDU	3.6 CFS
V10	1.0 FPS
D10	0.7 FT

STA. 64+00 -LA- (RT)

- DENOTES TEMPORARY IMPACTS IN SURFACE WATER
- DENOTES IMPACTS IN SURFACE WATER

SEE SHEET 13 FOR -LA- PROFILE

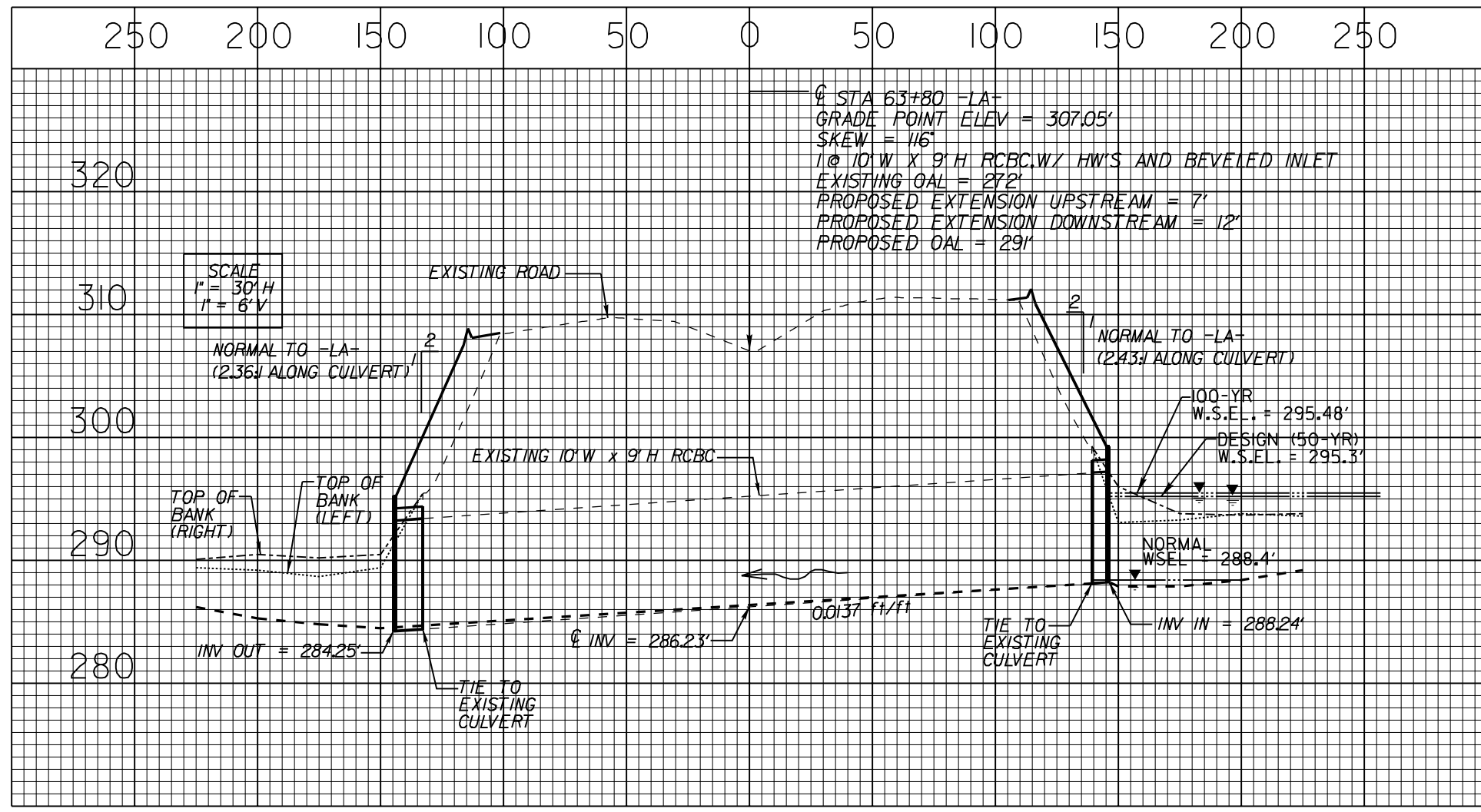
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FINAL ROADWAY PLANS	PROJECT REFERENCE NO. R-2635D	SHEET NO.
	ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED



PERMIT DRAWING
SHEET 7 OF 17



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FINAL ROADWAY PLANS	PROJECT REFERENCE NO. R-2635D	SHEET NO. 5
	ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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UNLESS ALL SIGNATURES COMPLETED



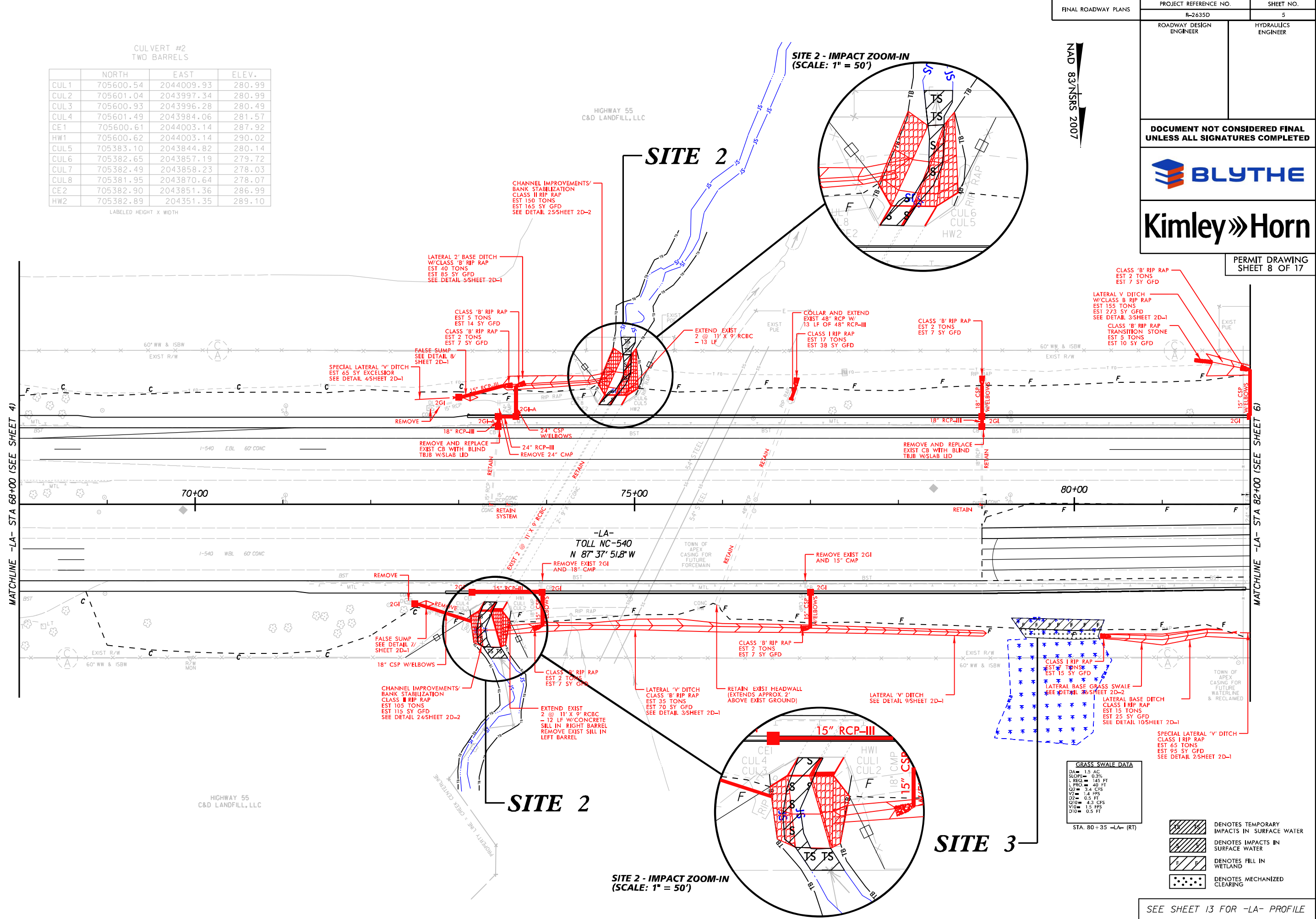
PERMIT DRAWING
SHEET 8 OF 17

CULVERT #2
TWO BARRELS

	NORTH	EAST	ELEV.
CUL1	705600.54	2044009.93	280.99
CUL2	705601.04	2043997.34	280.99
CUL3	705600.93	2043996.28	280.49
CUL4	705601.49	2043984.06	281.57
CE1	705600.61	2044003.14	287.92
HW1	705600.62	2044003.14	290.02
CUL5	705383.10	2043844.82	280.14
CUL6	705382.65	2043857.19	279.72
CUL7	705382.49	2043858.23	278.03
CUL8	705381.95	2043870.64	278.07
CE2	705382.90	2043851.36	286.99
HW2	705382.89	204351.35	289.10

LABELLED HEIGHT X WIDTH

NAD 83/NRS 2007



SITE 2 - IMPACT ZOOM-IN
(SCALE: 1" = 50')

SITE 2

SITE 3

SITE 2 - IMPACT ZOOM-IN
(SCALE: 1" = 50')

GRASS SWALE DATA

DA	= 1.5 AC
SLOPE	= 0.3%
L REQ	= 145 FT
L PRO	= 40 FT
GZ	= 3.4 CFS
VZ	= 1.4 FPS
DZ	= 0.5 FT
Q10	= 4.3 CFS
V10	= 1.5 FPS
D10	= 0.5 FT

STA. 80+35 -LA- (RT)

- DENOTES TEMPORARY IMPACTS IN SURFACE WATER
- DENOTES IMPACTS IN SURFACE WATER
- DENOTES FILL IN WETLAND
- DENOTES MECHANIZED CLEARING

SEE SHEET 13 FOR -LA- PROFILE

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FINAL ROADWAY PLANS	PROJECT REFERENCE NO. R-2635D	SHEET NO. 5
	ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



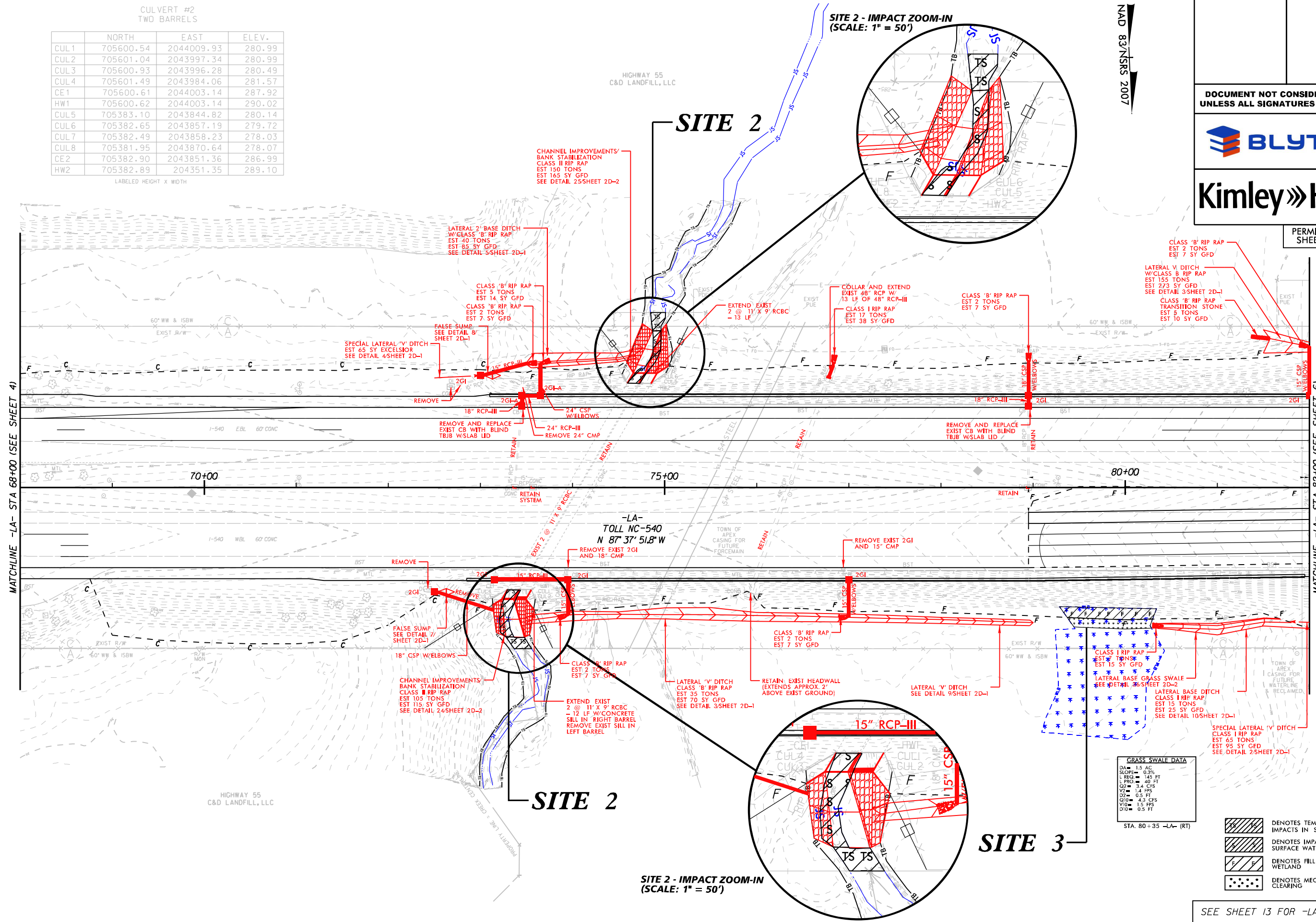
PERMIT DRAWING SHEET 9 OF 17

CULVERT #2
TWO BARRELS

	NORTH	EAST	ELEV.
CUL1	705600.54	2044009.93	280.99
CUL2	705601.04	2043997.34	280.99
CUL3	705600.93	2043996.28	280.49
CUL4	705601.49	2043984.06	281.57
CE1	705600.61	2044003.14	287.92
HW1	705600.62	2044003.14	290.02
CUL5	705383.10	2043844.82	280.14
CUL6	705382.65	2043857.19	279.72
CUL7	705382.49	2043858.23	278.03
CUL8	705381.95	2043870.64	278.07
CE2	705382.90	2043851.36	286.99
HW2	705382.89	204351.35	289.10

LABELLED HEIGHT X WIDTH

NAD 83/NSRS 2007



SITE 2

SITE 3

SITE 2 - IMPACT ZOOM-IN (SCALE: 1" = 50')

SITE 2 - IMPACT ZOOM-IN (SCALE: 1" = 50')

GRASS SWALE DATA

DA	1.5 AC
SLOPE	0.3%
L PRO	145 FT
GZ	3.4 CFS
VZ	1.4 FPS
DZ	0.5 FT
Q10	4.3 CFS
V10	1.5 FPS
D10	0.5 FT

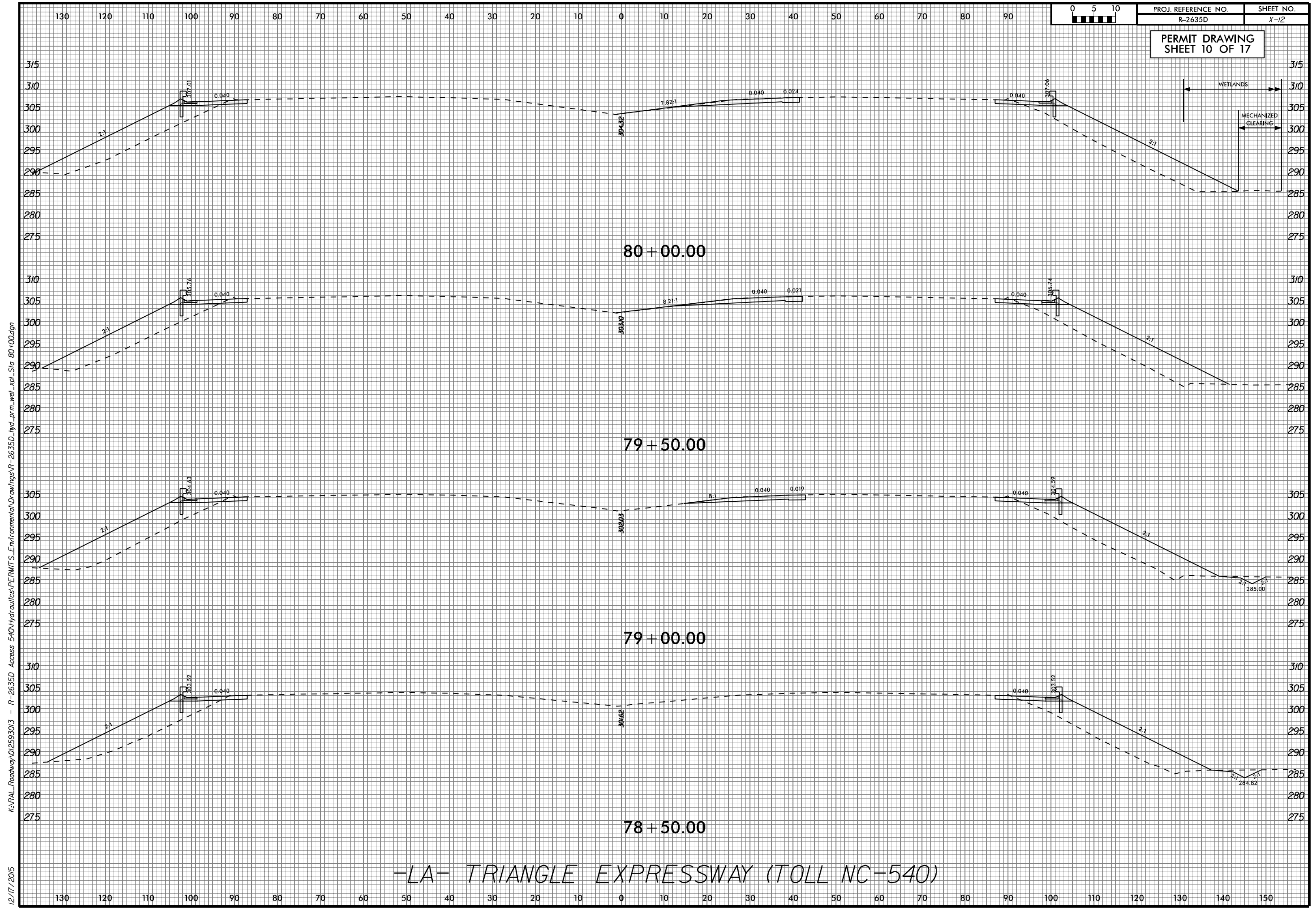
- DENOTES TEMPORARY IMPACTS IN SURFACE WATER
- DENOTES IMPACTS IN SURFACE WATER
- DENOTES FILL IN WETLAND
- DENOTES MECHANIZED CLEARING

SEE SHEET 13 FOR -LA- PROFILE

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PERMIT DRAWING SHEET 10 OF 17



-LA- TRIANGLE EXPRESSWAY (TOLL NC-540)

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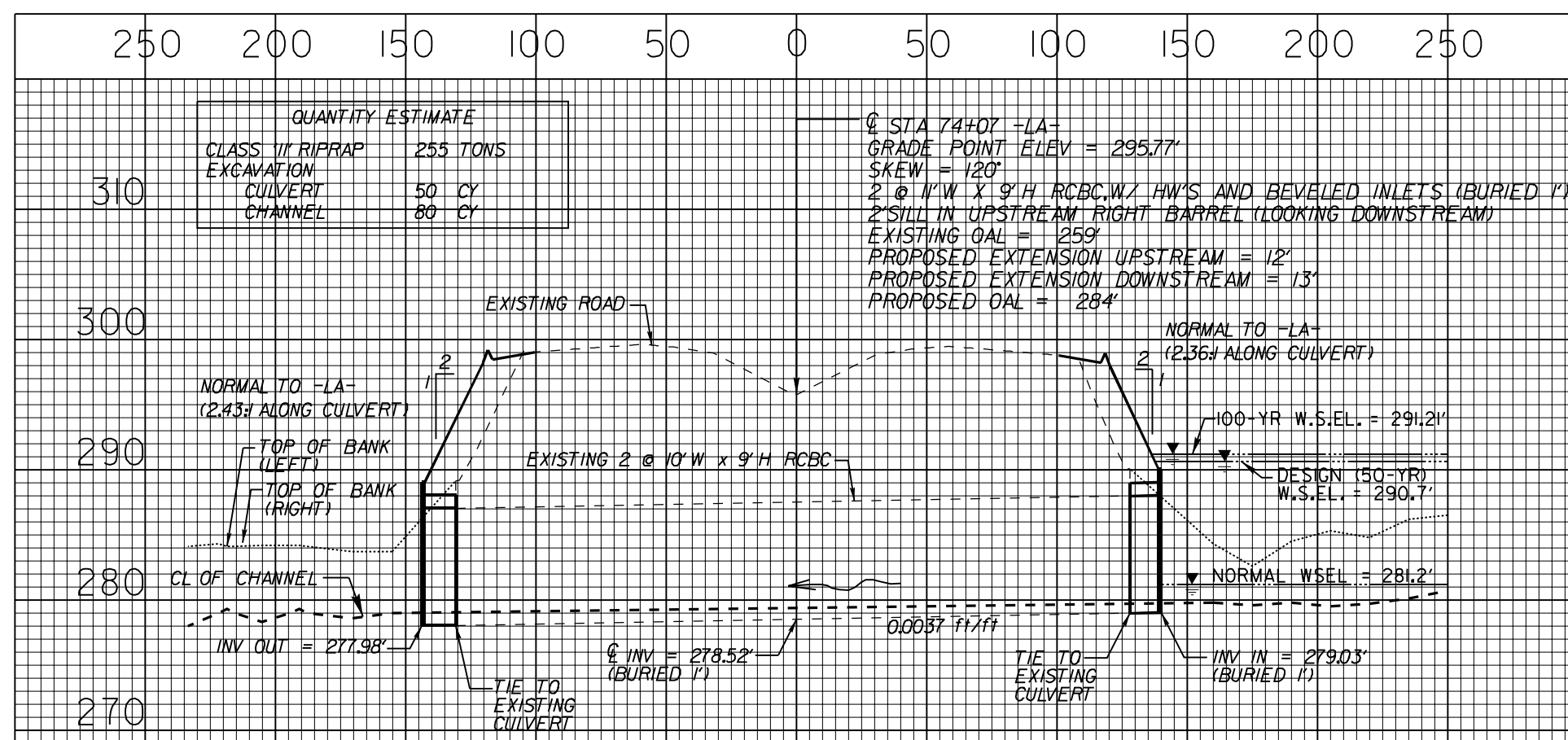
FINAL ROADWAY PLANS		PROJECT REFERENCE NO. R-2635D	SHEET NO.
		ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

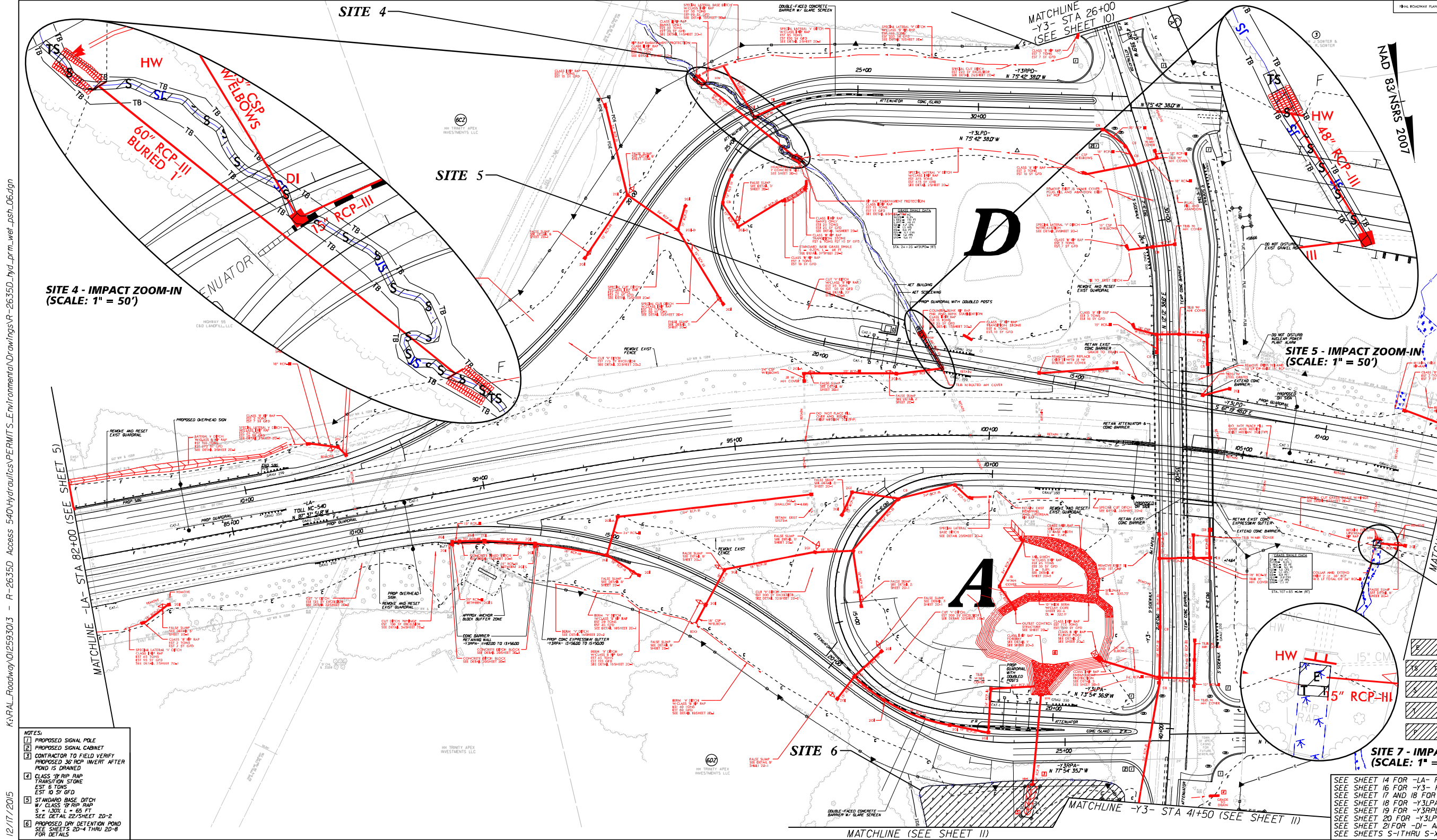


PERMIT DRAWING
SHEET 11 OF 17

SCALE
1" = 30' H
1" = 6' V



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PROJECT REFERENCE NO. 2635D SHEET NO. 12

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

BLYTHE

KimleyHorn

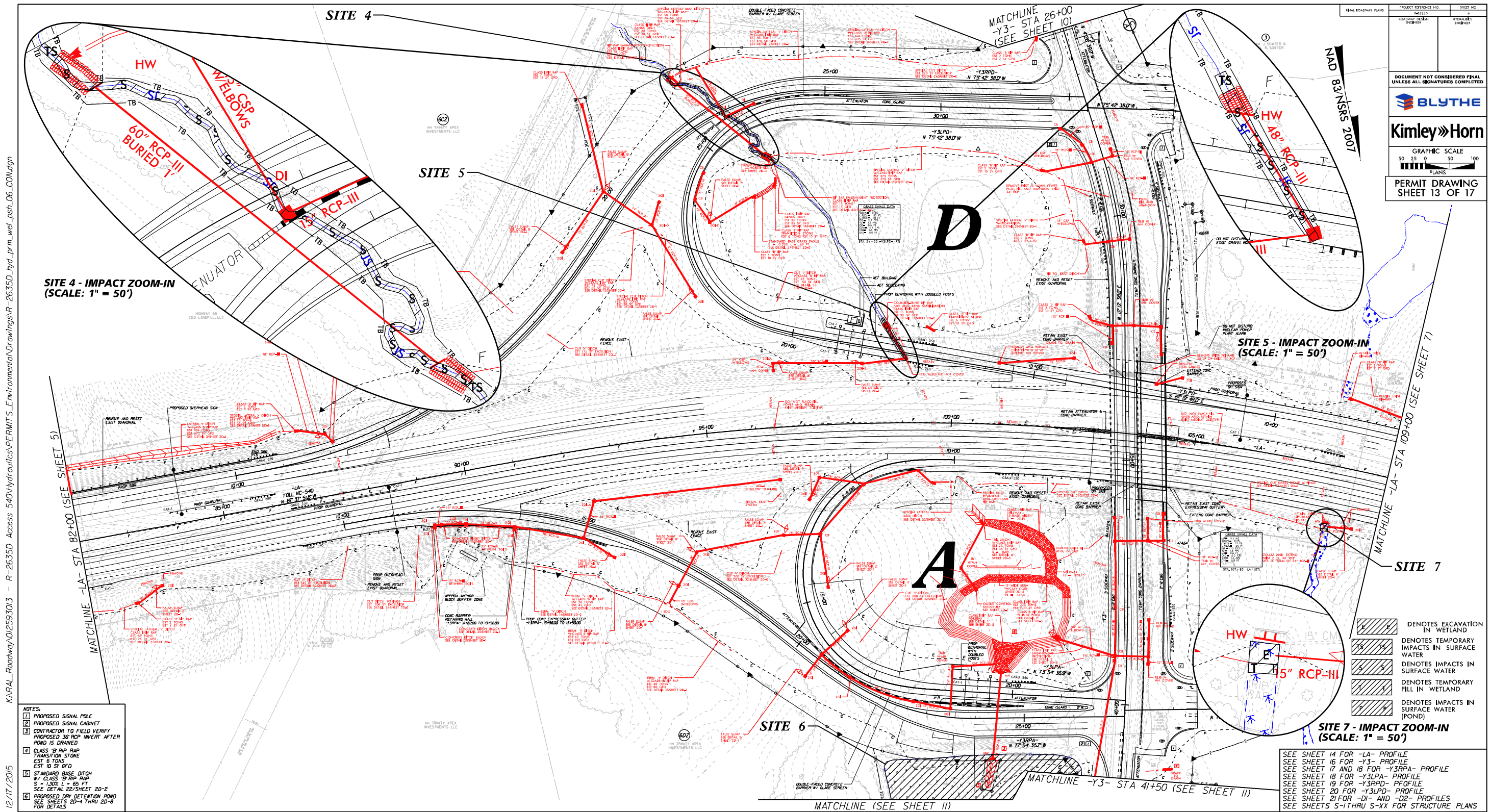
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PLANS

PERMIT DRAWING
SHEET 12 OF 17

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- NOTES:**
- PROPOSED SIGNAL POLE
 - PROPOSED SIGNAL CABINET
 - CONTRACTOR TO FIELD VERIFY PROPOSED 36\"/>

- DENOTES EXCAVATION IN WETLAND
 - DENOTES TEMPORARY IMPACTS IN SURFACE WATER
 - DENOTES IMPACTS IN SURFACE WATER
 - DENOTES TEMPORARY FILL IN WETLAND
 - DENOTES IMPACTS IN SURFACE WATER (POND)
- SITE 7 - IMPACT ZOOM-IN (SCALE: 1" = 50')**
- SEE SHEET 14 FOR -LA- PROFILE
SEE SHEET 16 FOR -Y3- PROFILE
SEE SHEET 17 AND 18 FOR -Y3RPA- PROFILE
SEE SHEET 18 FOR -Y3LPA- PROFILE
SEE SHEET 19 FOR -Y3RDP- PROFILE
SEE SHEET 20 FOR -Y3LDP- PROFILE
SEE SHEETS S-1THRU S-XX FOR STRUCTURE PLANS



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- NOTES:**
- 1 PROPOSED SIGNAL POLE
 - 2 PROPOSED SIGNAL CABINET
 - 3 CONTRACTOR TO FIELD VERIFY PROPOSED 36" RCP INVERT AFTER POND IS DRAINED
 - 4 CLASS 19" RCP RAMP TRANSITION STONE EST. 6 TONS EST. 0.57 GFD
 - 5 STANDARD BASE DITCH W/ CLASS 19" RCP RAMP S = 0.001 L = 65 FT SEE DETAIL 22/SHEET 20-2
 - 6 PROPOSED DRY DETENTION POND SEE SHEETS 20-4 THRU 20-8 FOR DETAILS

- DENOTES EXCAVATION IN WETLAND
 - DENOTES TEMPORARY IMPACTS IN SURFACE WATER
 - DENOTES IMPACTS IN SURFACE WATER
 - DENOTES TEMPORARY FILL IN WETLAND
 - DENOTES IMPACTS IN SURFACE WATER (POND)
- SITE 7 - IMPACT ZOOM-IN (SCALE: 1" = 50')**
- SEE SHEET 14 FOR -LA- PROFILE
 SEE SHEET 16 FOR -Y3- PROFILE
 SEE SHEET 17 AND 18 FOR -Y3RPA- PROFILE
 SEE SHEET 18 FOR -Y3LPA- PROFILE
 SEE SHEET 19 FOR -Y3RDP- PROFILE
 SEE SHEET 20 FOR -Y3LDP- PROFILE
 SEE SHEETS 5-THRU 5-XX FOR STRUCTURE PLANS

PROJECT REFERENCE NO. 2635D SHEET NO. 13

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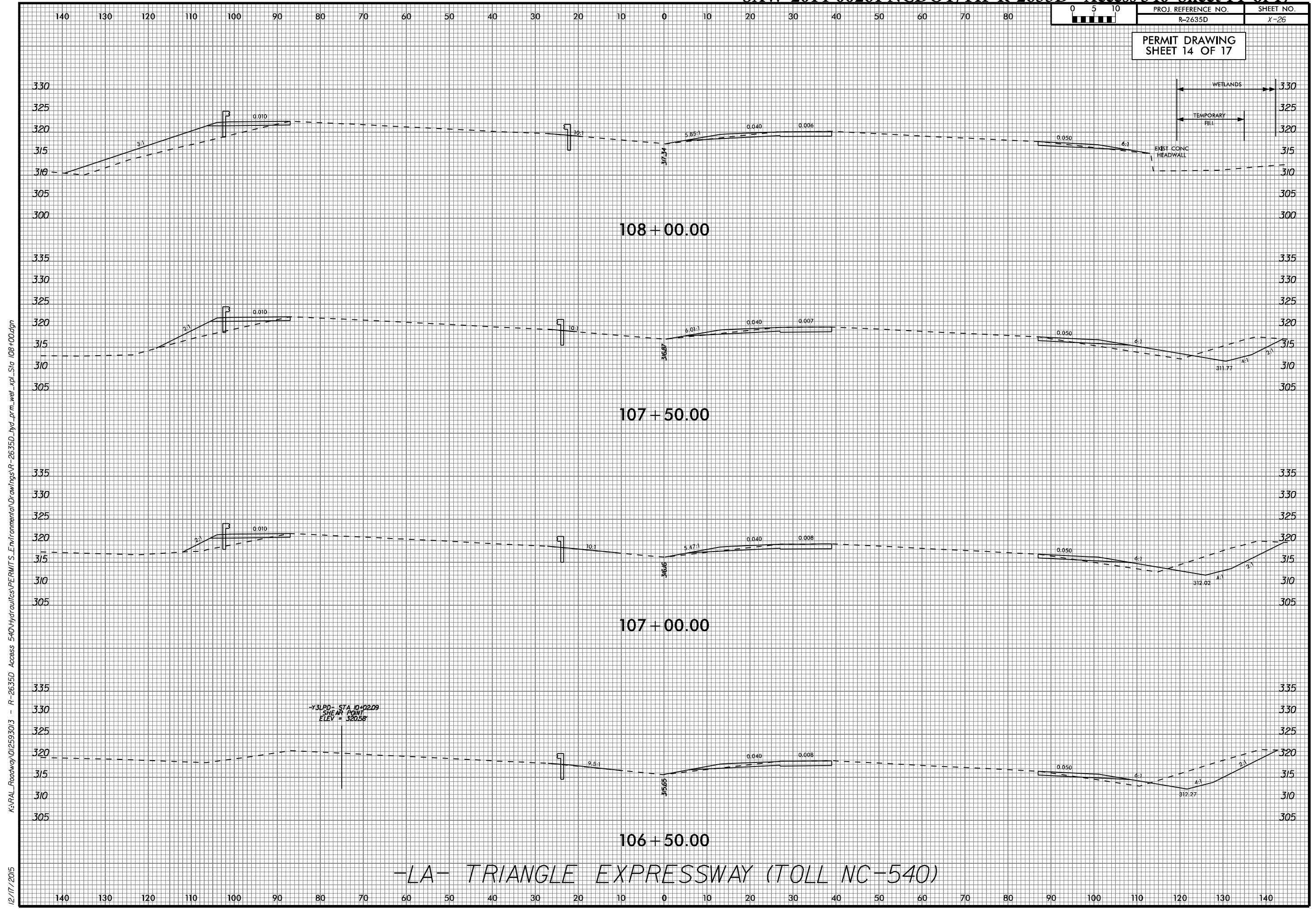
BLYTHE

KimleyHorn

GRAPHIC SCALE
 50 25 0 50 100
 FEET
 PLANS

PERMIT DRAWING SHEET 13 OF 17

PERMIT DRAWING
SHEET 14 OF 17



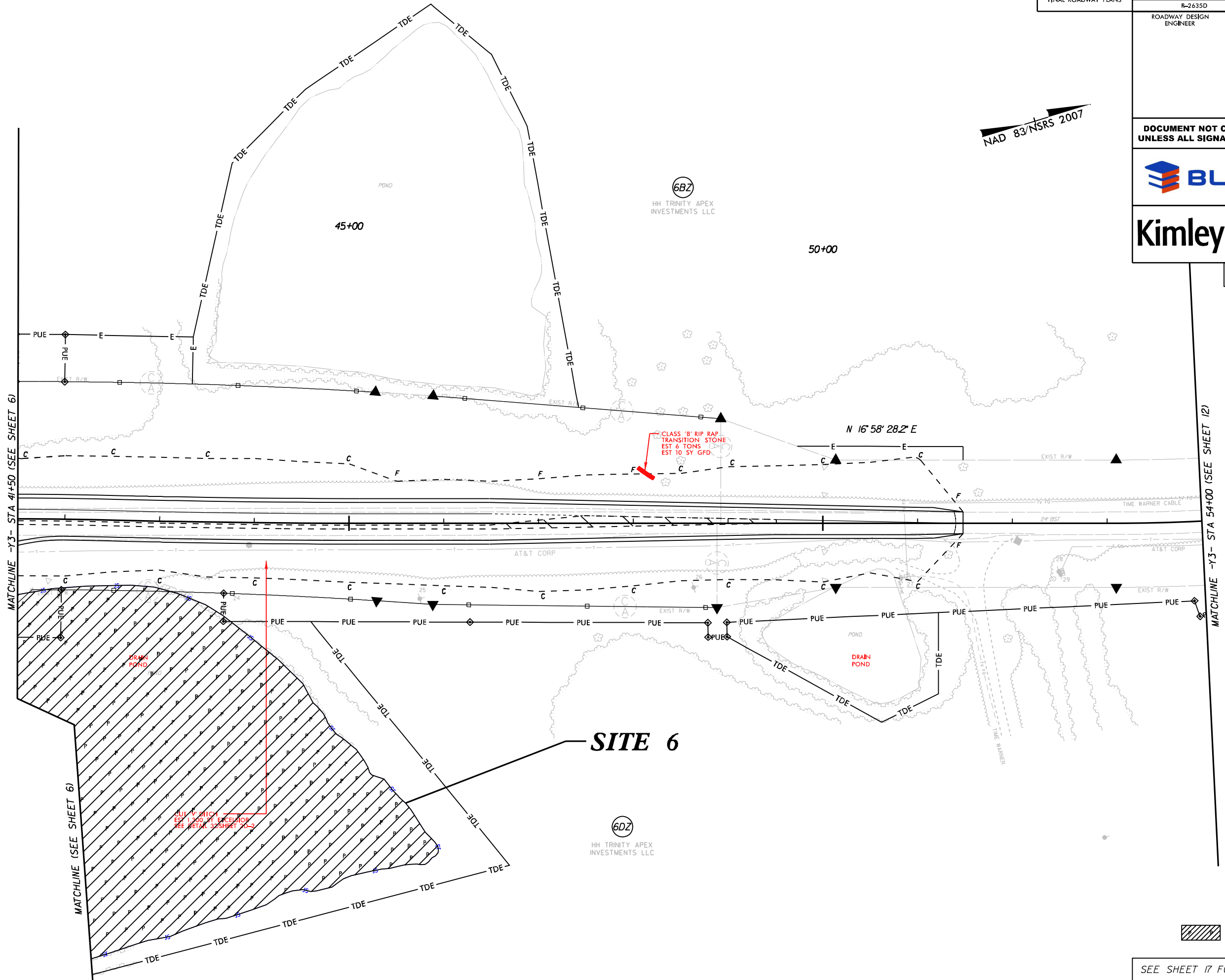
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FINAL ROADWAY PLANS		PROJECT REFERENCE NO. R-2635D	SHEET NO. 11
		ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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SHEET 15 OF 17



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DENOTES IMPACTS IN SURFACE WATER POND

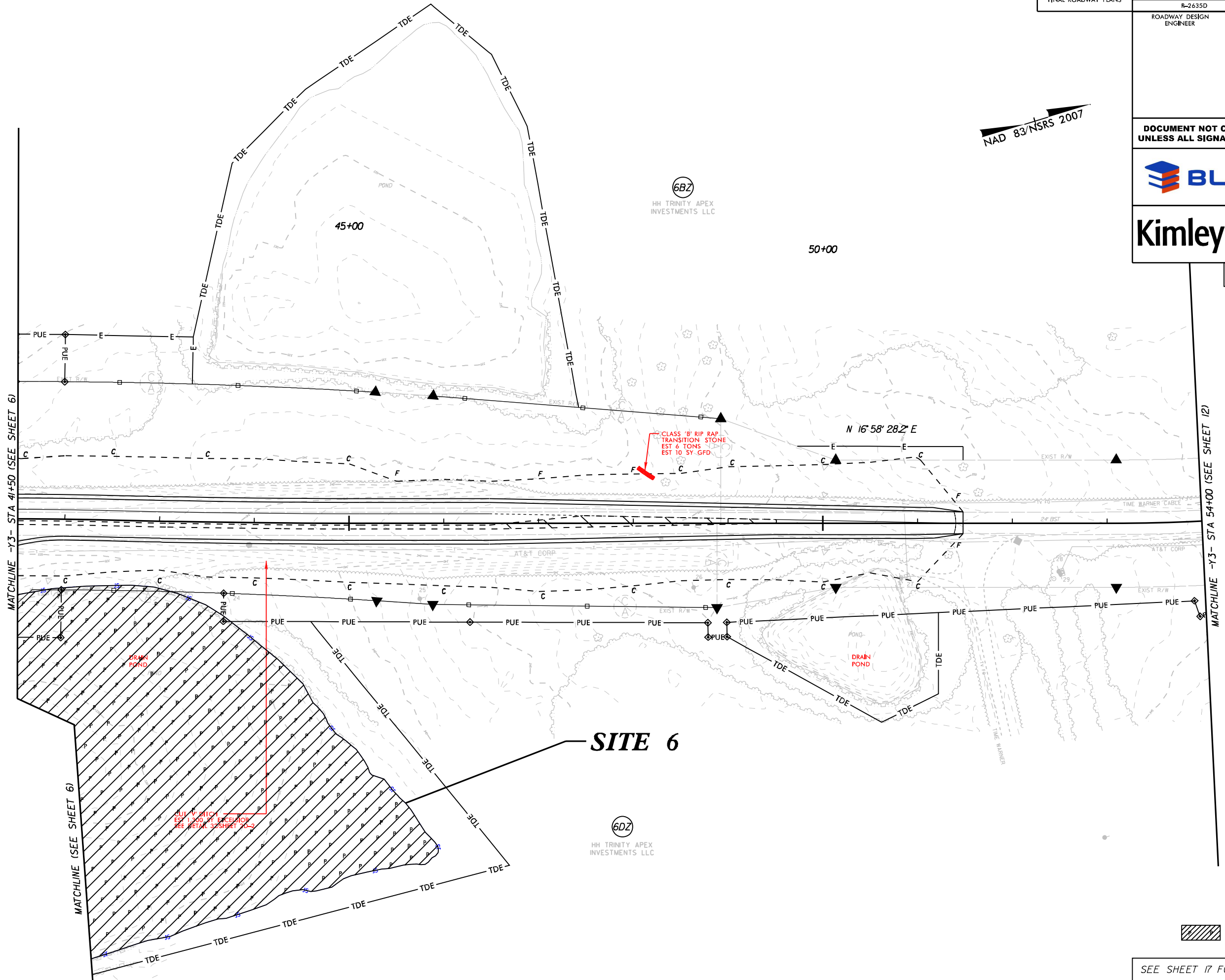
SEE SHEET 17 FOR -Y3- PROFILE

FINAL ROADWAY PLANS		PROJECT REFERENCE NO. R-2635D	SHEET NO. 11
		ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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PERMIT DRAWING
SHEET 16 OF 17



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12/17/2015

DENOTES IMPACTS IN SURFACE WATER POND

SEE SHEET 17 FOR -Y3- PROFILE

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)
1	62+88/64+72 -LA-	10'x9' RCBC						< 0.01	< 0.01	18	20	
1	62+88/64+72 -LA-	Bank Stabilization						0.01		55		
2	73+21/74+99 -LA-	2 @ 11'x9' RCBC						0.03	0.01	117	35	
3	79+29/80+34 -LA-	Fill Slope	0.03			0.02						
4	22+23/23+61 -Y3RPD-	60" RCP Buried 1'						0.03	< 0.01	275	20	
4	22+23/23+61 -Y3RPD-	Bank Stabilization						< 0.01		46		
5	17+60/18+27 -Y3LPD-	48" RCP						< 0.01	< 0.01	74	10	
5	17+60/18+27 -Y3LPD-	Bank Stabilization						< 0.01		14		
6	41+10/45+94 -Y3-	Pond						2.34				
7	107+85/108+03 -LA-	Excavation		< 0.01	< 0.01							
TOTALS*:			0.03	< 0.01	< 0.01	0.02		2.43	0.02	599	85	0

*Rounded totals are sum of actual impacts

NOTES:

Wetland Impact Totals in SF:
 Permanent Fill in Wetlands - 1198 SF
 Temporary Fill in Wetlands - 75 SF
 Excavation in Wetlands - 158 SF
 Mechanized Clearing in Wetlands - 877 SF

NC DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 12-21-2015
 WAKE COUNTY
 R-2635D
 SHEET 17 OF 17