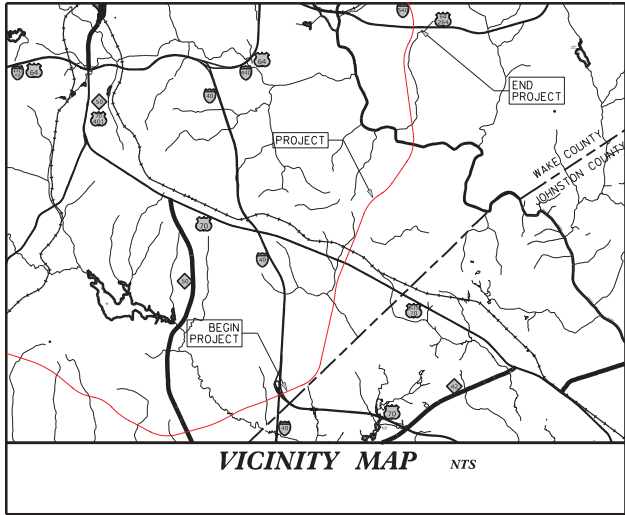


09/08/99

See Sheet 1A For Index of Sheets



STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

WAKE COUNTY

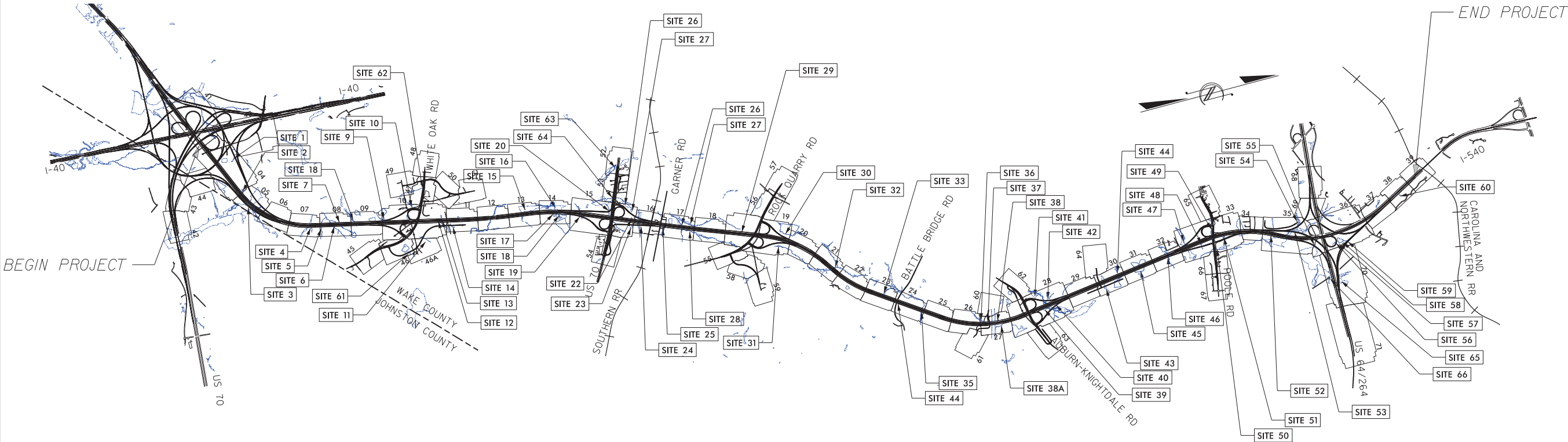
LOCATION: COMPLETE 540 - EAST OF I-40 TO SOUTH  
OF US 64 /264

TYPE OF WORK: GRADING, DRAINAGE, PAVING, AND STURCTURES

WETLAND AND SURFACE WATER IMPACTS PERMIT

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R-2829	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	

PERMIT DRAWING  
SHEET 1 OF 108



INCOMPLETE PLANS  
DO NOT USE FOR R/W ACQUISITION  
DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED

GRAPHIC SCALES



PROJECT LENGTH

Prepared In the Office of:  
**DIVISION OF HIGHWAYS**  
1000 Birch Ridge Dr., Raleigh NC, 27610

2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:

LETTING DATE:

PROJECT ENGINEER

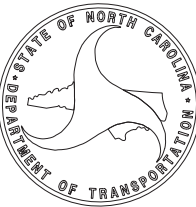
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

SIGNATURE: P.E.

ROADWAY DESIGN  
ENGINEER

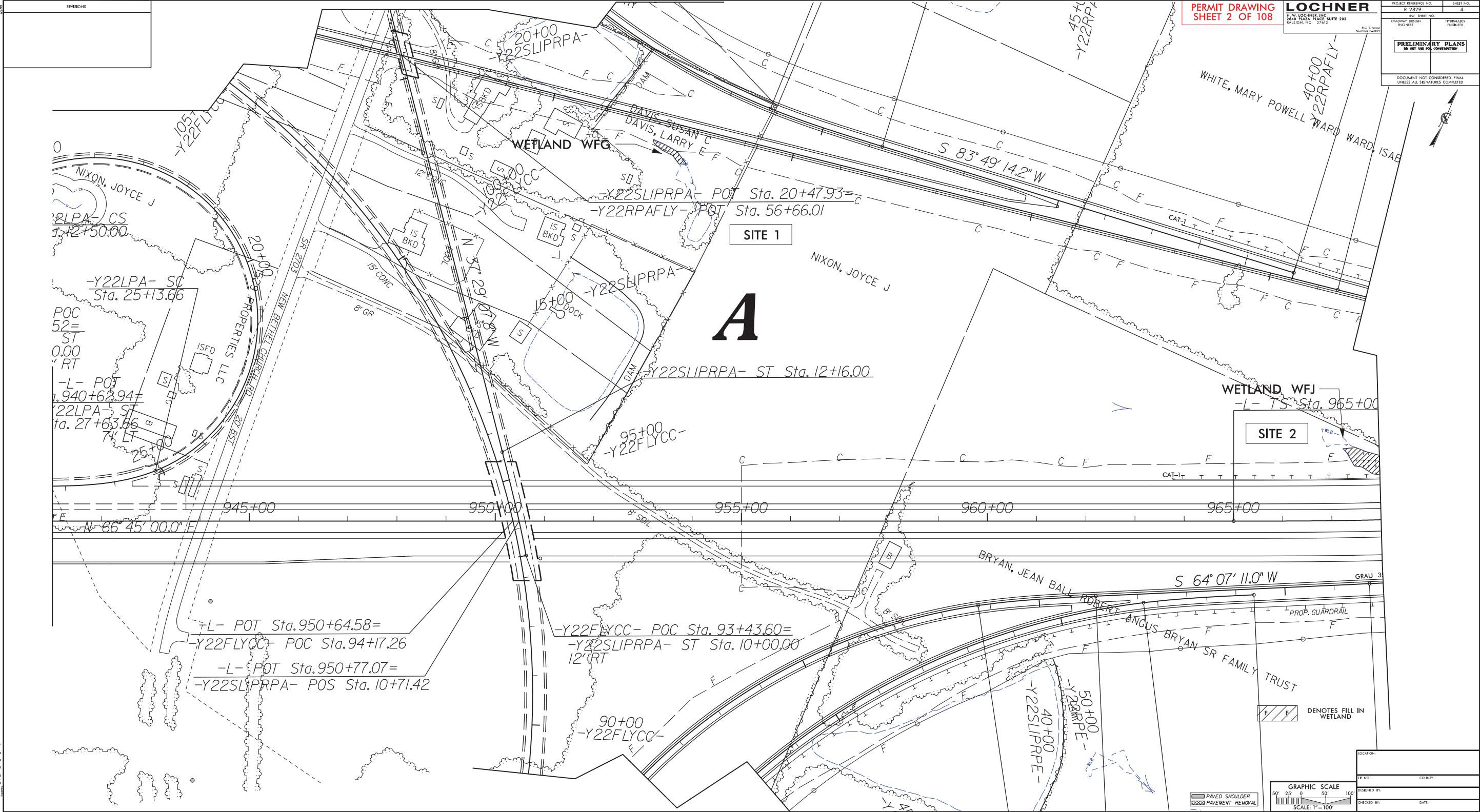
SIGNATURE: P.E.



TIP PROJECT: R-2829

CONTRACT:

7/30/2018  
R2829\_Hyd\_prm\_wet\_psh\_01.dgn  
jnarvey



REVISIONS

PERMIT DRAWING  
SHEET 2 OF 108

**LOCHNER**  
11 W. LOCHNER, INC.  
2840 PLAZA PLACE, SUITE 202  
RALEIGH, NC 27612  
NC State  
Number E-2022

PROJECT REFERENCE NO. 8-2829	SHEET NO. 4
ENV. SHEET NO. ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

GRAPHIC SCALE  
50' 25' 0' 50' 100'  
SCALE: 1"=100'

PAVED SHOULDER  
PAVEMENT REMOVAL

LOCATION:  
TP NO.:  
COUNTY:  
DESIGNED BY:  
CHECKED BY:  
DATE:



**REVISIONS**

NO.	DESCRIPTION	DATE

**PROJECT INFORMATION**

PROJECT REFERENCE NO. E-2829  
SHEET NO. 3  
DRAWN BY: J.W. LOCHNER, INC.  
CHECKED BY: J.W. LOCHNER, INC.  
DATE: 12/12/12

**TITLE**

PERMIT DRAWING  
SHEET 3 OF 108

**LEGEND**

- PAVED SHOULDER
- PAVEMENT REMOVAL

**SCALE**

GRAPHIC SCALE  
1" = 100'

**NOTES**

1. ALL DIMENSIONS ARE IN FEET AND DECIMALS THEREOF.  
2. THE LOCATION OF THE PROPOSED ROAD IS SHOWN ON THIS SHEET.  
3. THE EXISTING ROAD IS SHOWN ON THIS SHEET.  
4. THE PROPOSED ROAD IS SHOWN ON THIS SHEET.  
5. THE EXISTING ROAD IS SHOWN ON THIS SHEET.





51499

7/20/2018  
8:00:00 PM  
7/20/2018 - hyd\_prm\_wet\_psh\_05a.dgn  
hwy

**LOCHNER**

H. W. LOCHNER, INC.  
2840 PLAZA PLACE, SUITE 202  
RALEIGH, NC 27612

NC License  
Number F-0159

PROJECT REFERENCE NO. SHEET NO.

R-2829 5

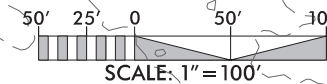
RW SHEET NO.

ROADWAY DESIGN  
ENGINEER

HYDRAULICS  
ENGINEER

**PRELIMINARY PLANS**  
DO NOT USE FOR CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED



PAVEMENT REMOVAL  
PAVED SHOULDER

**PERMIT DRAWING**  
**SHEET 5 OF 108**

DENOTES FILL IN  
WETLAND

DENOTES IMPACTS IN  
SURFACE WATER

WETLAND WFN(1)

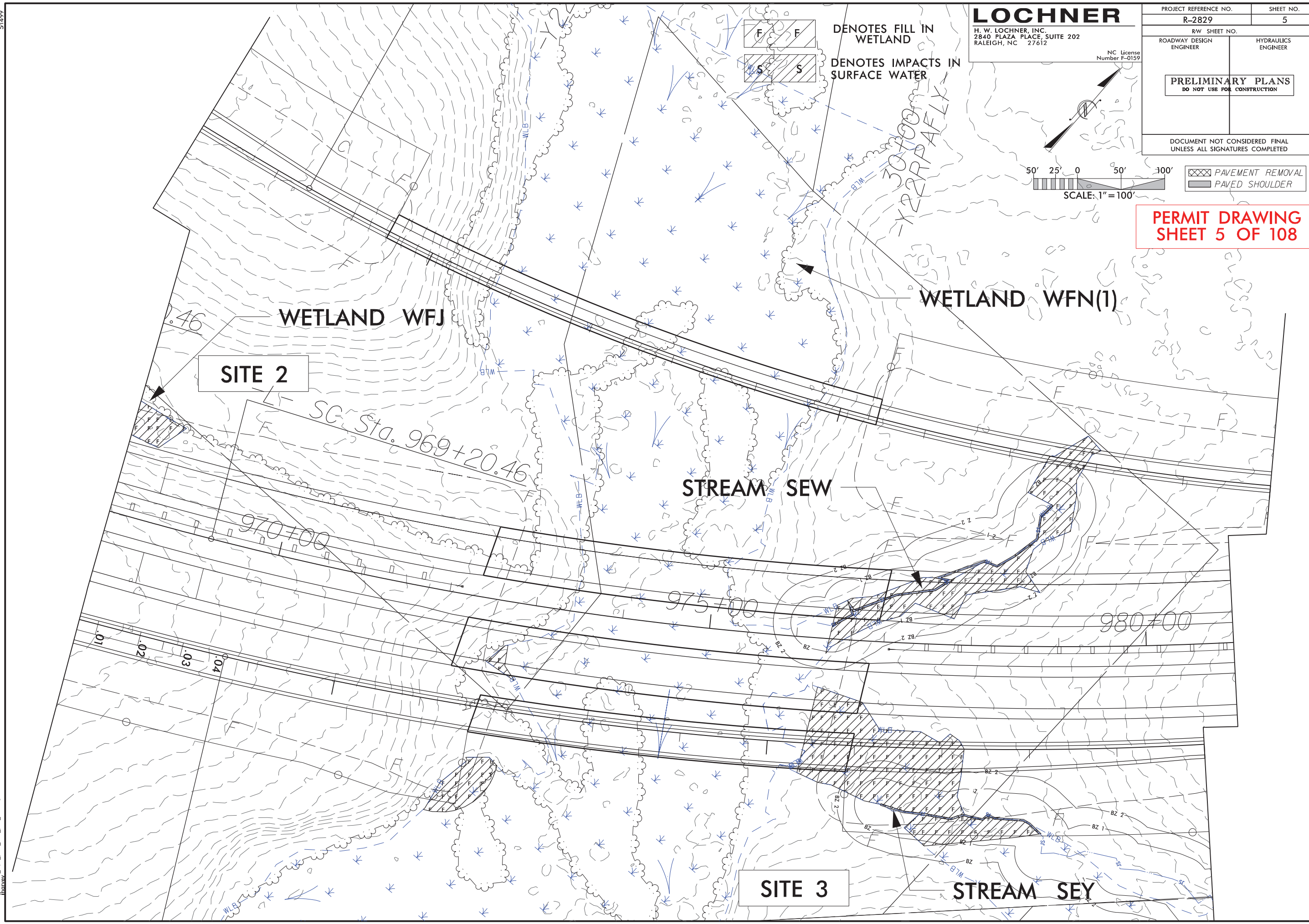
WETLAND WFJ

SITE 2

STREAM SEW

SITE 3

STREAM SEY



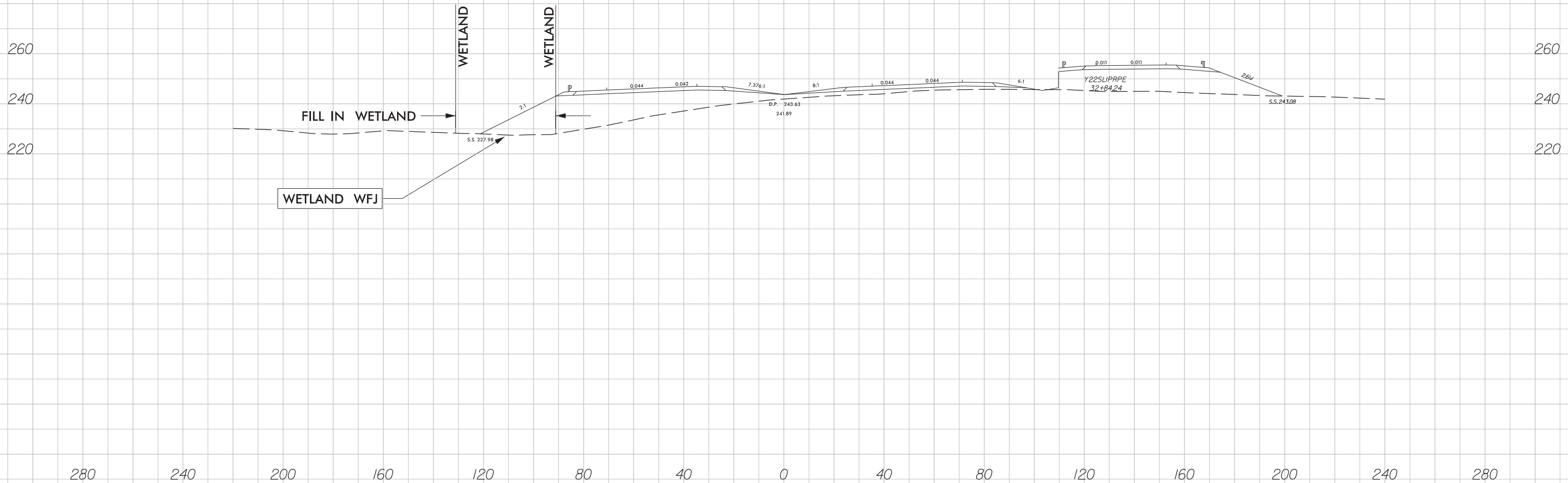
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PROJ. REFERENCE NO.	SHEET NO.
R-2829	

PERMIT DRAWING  
SHEET 6 OF 108

CROSS SECTION  
SITE 2, WETLAND WFJ  
STATION 968+00 -L-



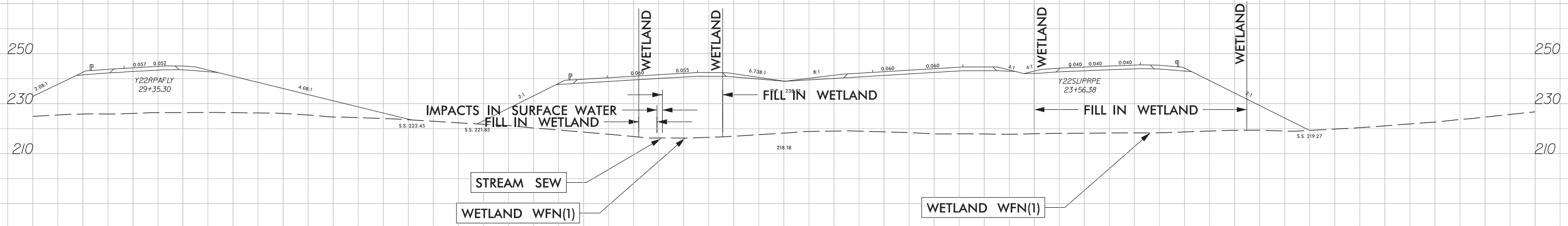




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R-2829	

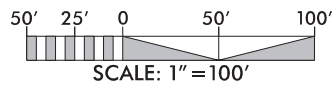
PERMIT DRAWING  
SHEET 7 OF 108

CROSS SECTION  
SITE 3, WETLAND WFN(1)  
STATION 977+00 -L-



51499

7/2/2018  
2020\_hyd\_perm\_wet\_psh\_07.dgn  
lbrw



**LOCHNER**

H. W. LOCHNER, INC.  
2840 PLAZA PLACE, SUITE 202  
RALEIGH, NC 27612

NC License  
Number F-0159



PROJECT REFERENCE NO.		SHEET NO.	
R-2829		7	
R/W SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
<div>PRELIMINARY PLANS</div> <div>DO NOT USE FOR CONSTRUCTION</div>			
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			

**PERMIT DRAWING  
SHEET 8 OF 108**

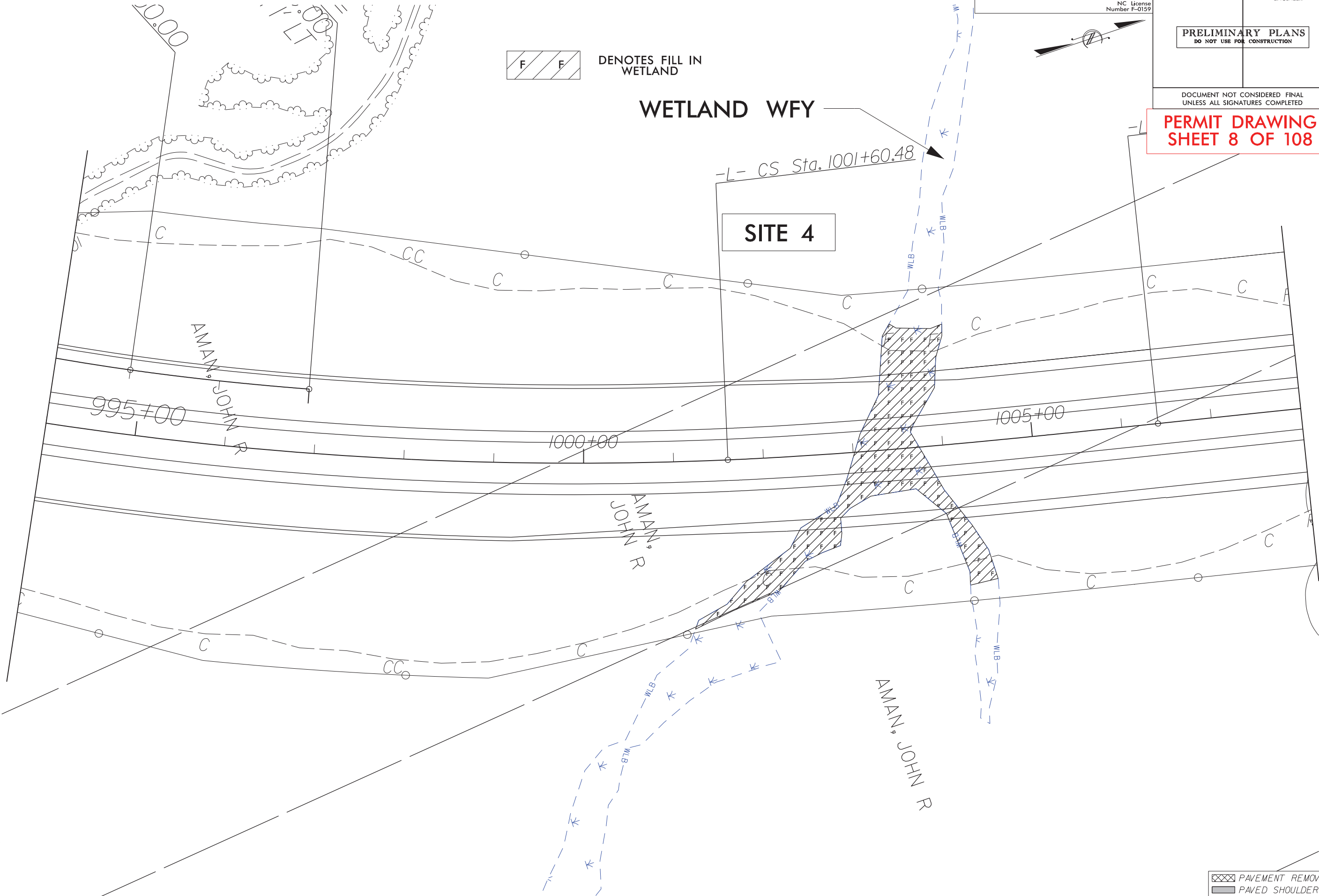


DENOTES FILL IN  
WETLAND

**WETLAND WFY**

**SITE 4**

-L- CS Sta. 1001+60.48



XXXX PAVEMENT REMOVAL  
■■■■ PAVED SHOULDER

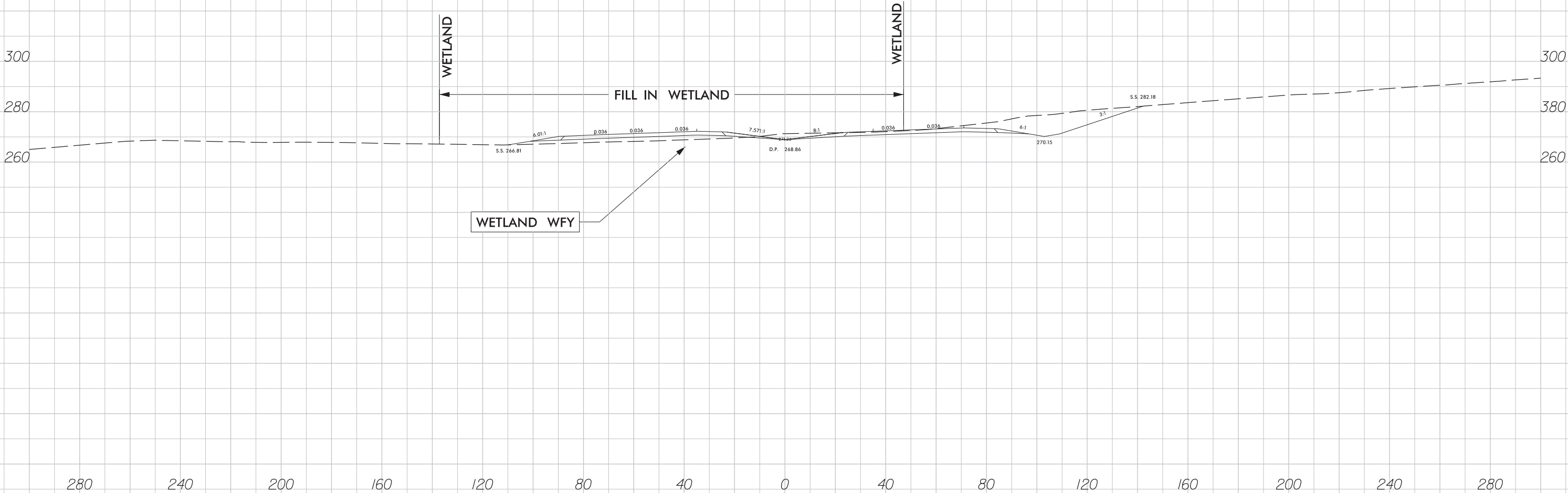






PERMIT DRAWING  
SHEET 10 OF 108

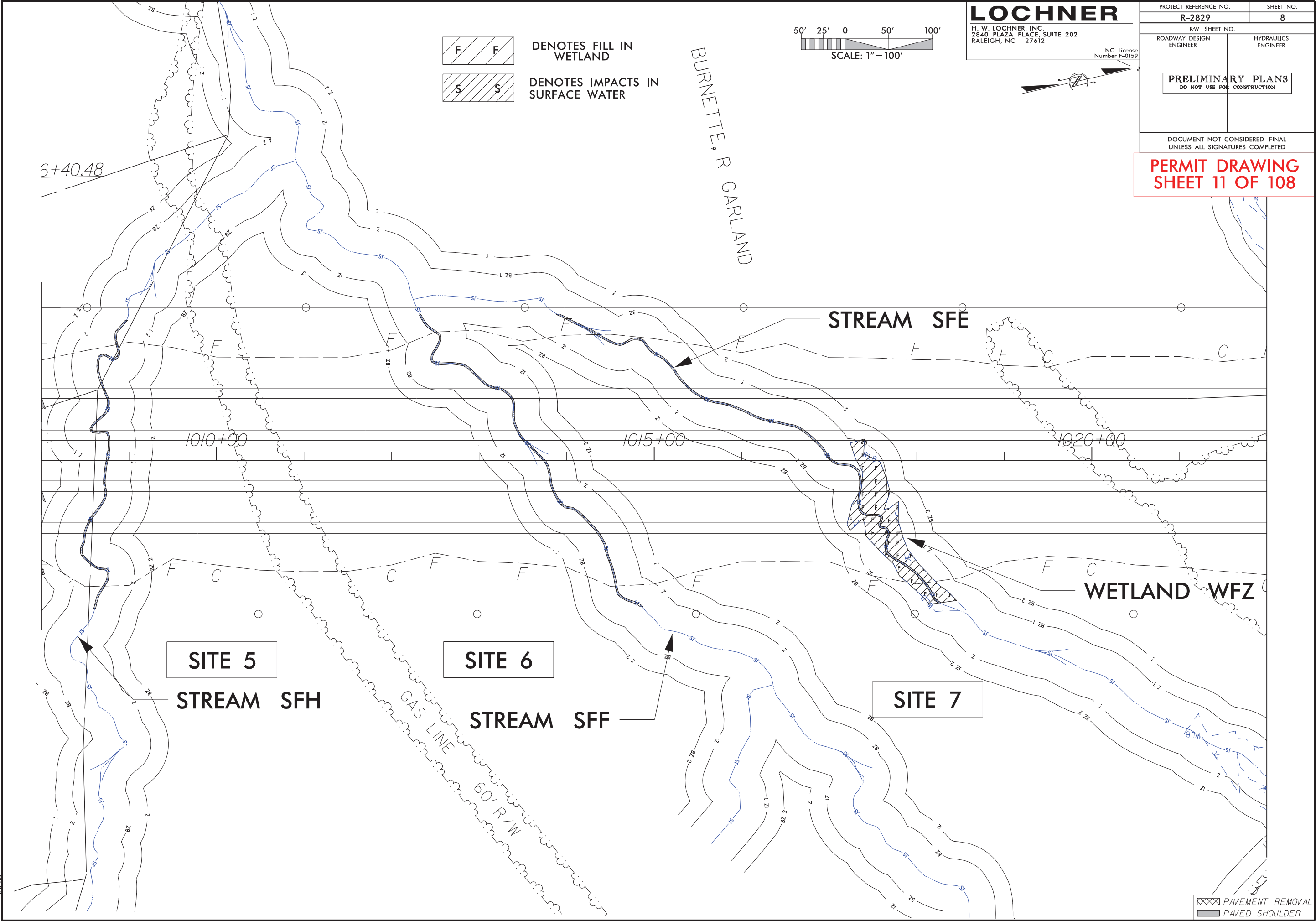
CROSS SECTION  
SITE 4, WETLAND WFY  
STATION 1003+50 -L-





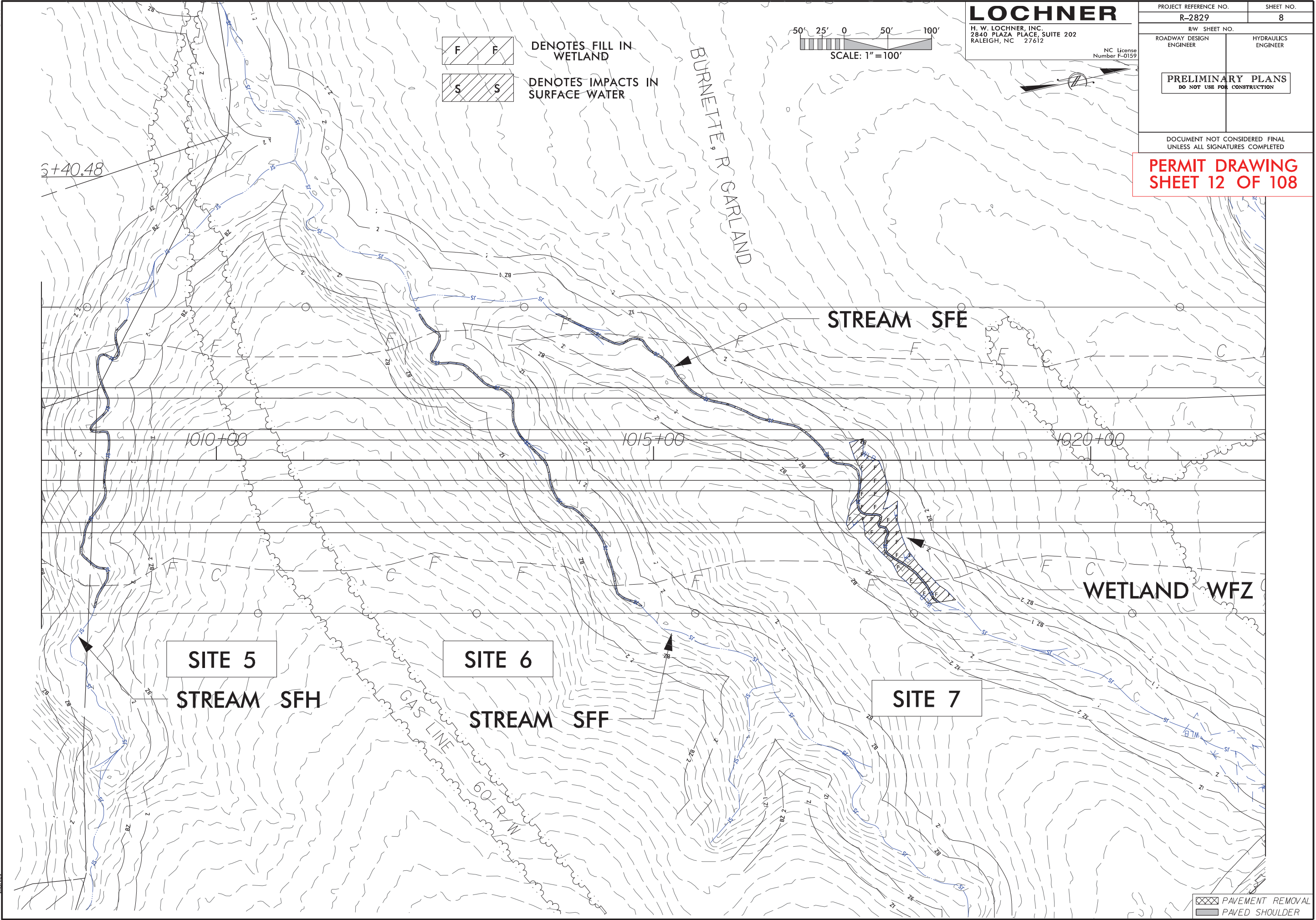
51499

7/20/2018  
20207\_hyd\_perm\_wet\_psh\_08.dgn  
lbrw



51499

7/20/2018  
8:20:29 - hyd\_prm\_wet\_psh\_08a.dgn  
lhorsey



PROJECT REFERENCE NO.		SHEET NO.	
R-2829		8	
R/W SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
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DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			

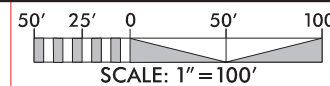
PERMIT DRAWING  
SHEET 12 OF 108





PERMIT DRAWING  
SHEET 13 OF 108

PROJ. REFERENCE NO.	SHEET NO.
R-2829	



# LOCHNER

H. W. LOCHNER, INC.  
2840 PLAZA PLACE, SUITE 202  
RALEIGH, NC 27612

NC License  
Number F-0159

PROJECT REFERENCE NO.

R-2829

SHEET NO.

---

R/W SHEET NO.

ROADWAY DESIGN  
ENGINEERHYDRAULICS  
ENGINEER

**PRELIMINARY PLANS**  
**DO NOT USE FOR CONSTRUCTION**

DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED

## POND PAD

$$\frac{-L_{\text{POT Sta. } 1033+09.61 - Y_{\text{23RPB- ST Sta. } 10+00.00}}{71.00' \text{ LT}}$$

## SITE 9

WETLAND WGD

## SITE 8

WETLAND WGC

STREAM SFB

**WETLAND WGB**

N 16° 47' 39.6" E

BURNETT, R GARLAND

~~$$L - POT \text{ Sta. } 1030 + 20.79 =$$
  
 $323 \text{ RPC} - ST \text{ Sta. } 10 + 00.00$   
 $7:00' RT$~~ 

-Y23RPC- TS Sta. 13+68.78

15+00  
-Y23RPC-

YI

DENOTES FILL IN  
WETLAND

DENOTES IMPACTS IN  
SURFACE WATER

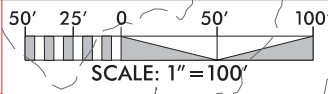
A rectangular block with diagonal hatching (lines from top-left to bottom-right). Two points are marked with the letter 'P' inside the block.

DENOTES IMPACTS IN  
SURFACE WATER  
(POND)

 PAVEMENT REMOVAL  
 PAVED SHOULDER

51499

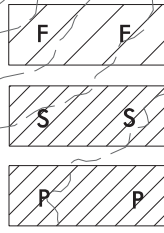
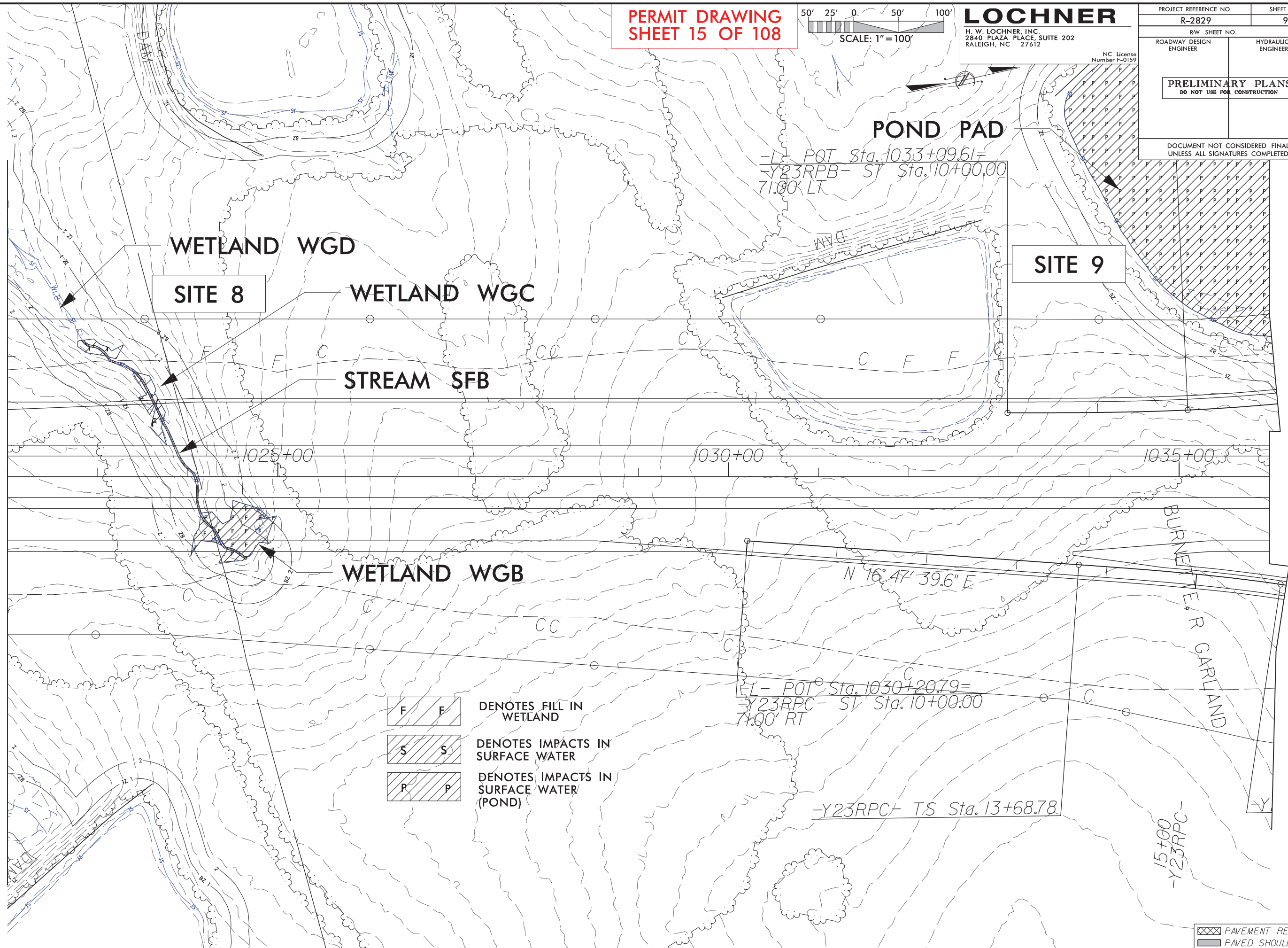
PERMIT DRAWING  
SHEET 15 OF 108



**LOCHNER**  
H. W. LOCHNER, INC.  
2840 PLAZA PLACE, SUITE 202  
RALEIGH, NC 27612

NC License  
Number F-0159

PROJECT REFERENCE NO. R-2829		SHEET NO. 9	
R/W SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
<div>PRELIMINARY PLANS</div> <div>DO NOT USE FOR CONSTRUCTION</div>			
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			



F F DENOTES FILL IN WETLAND  
S S DENOTES IMPACTS IN SURFACE WATER  
P P DENOTES IMPACTS IN SURFACE WATER (POND)

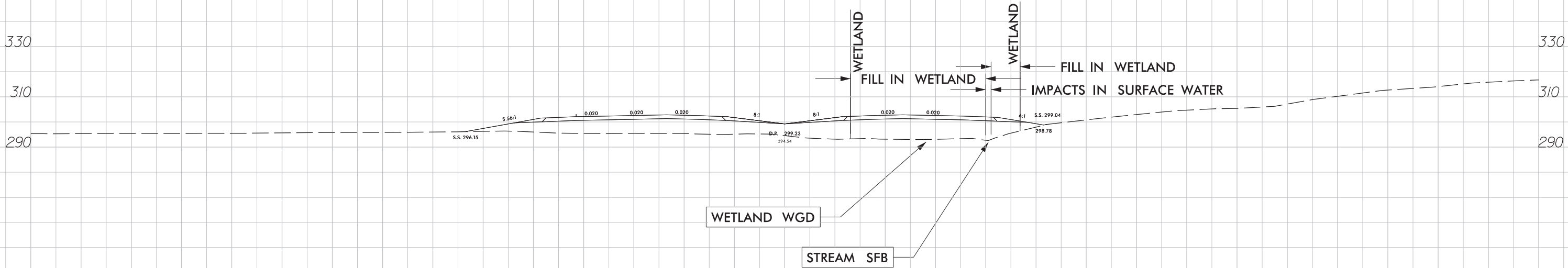


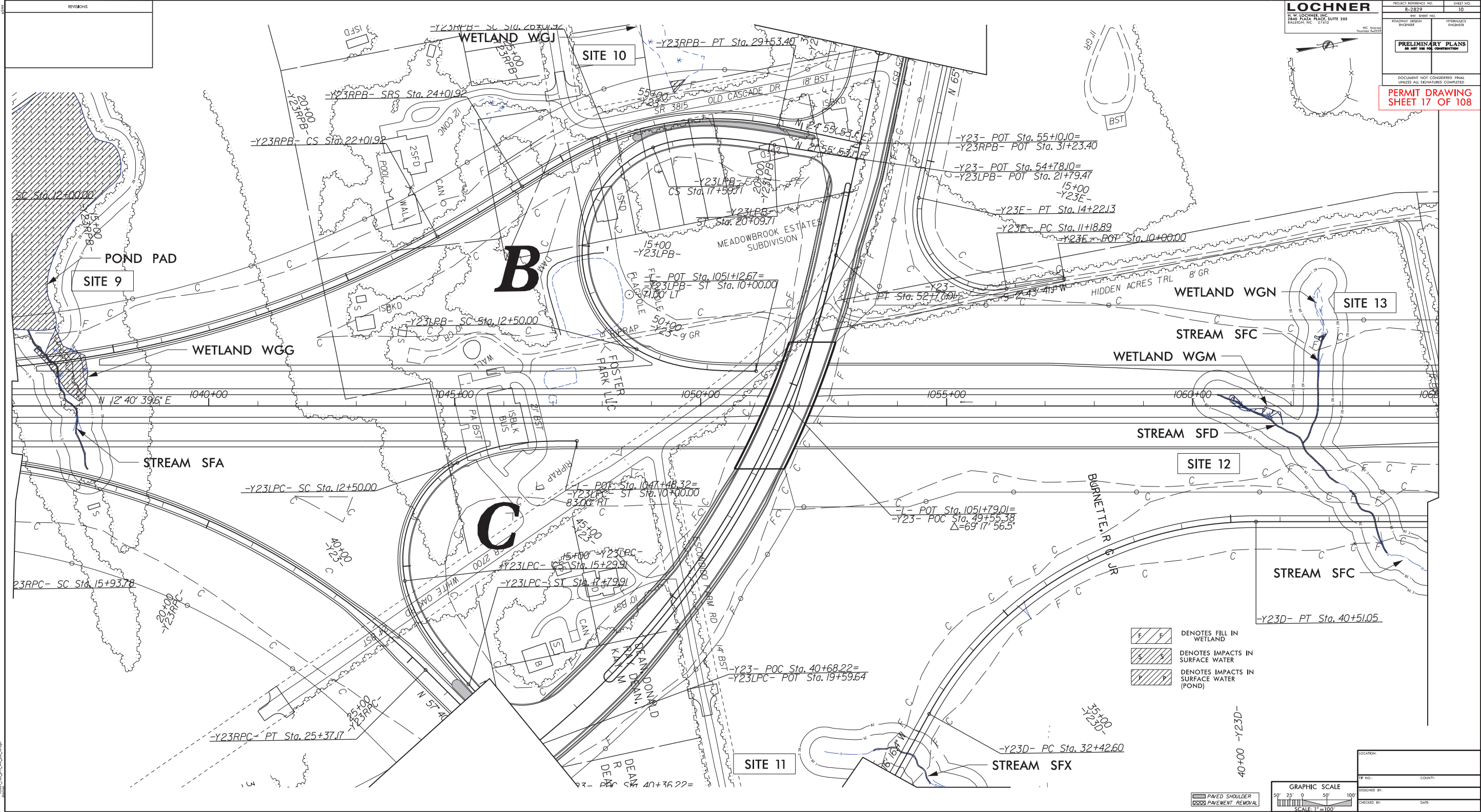
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8/2/2019  
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lhw





CROSS SECTION  
SITE 8, WETLAND WGD  
STATION 1024+50 -L-



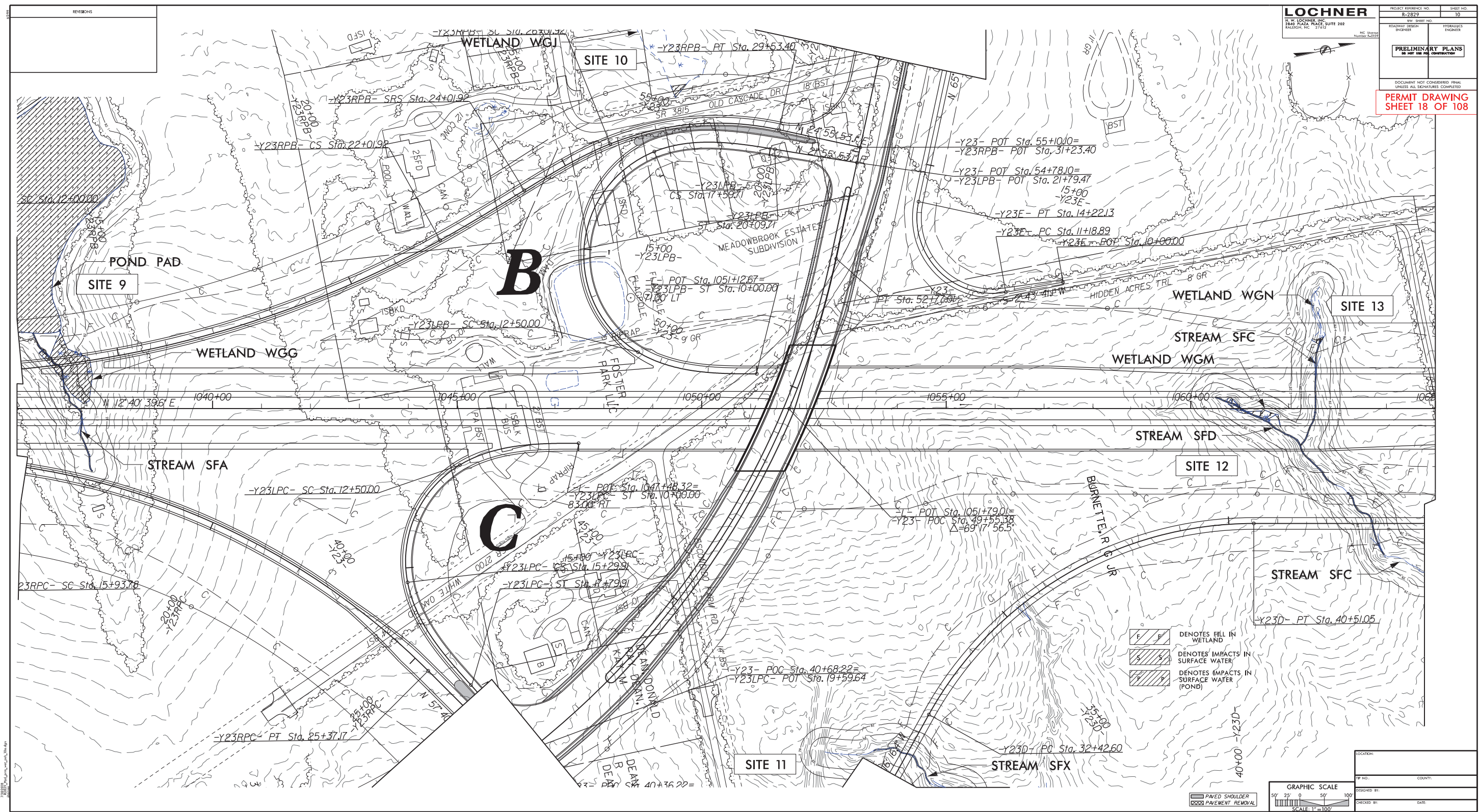


**LOCHNER**  
11 W. LOCHNER, INC.  
2800 PLAZA PLACE, SUITE 202  
RALEIGH, NC 27612  
NC State  
Number R-2022

PROJECT REFERENCE NO.	SHEET NO.
8-2829	10
REV. SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
<b>PERMIT DRAWING</b> <b>SHEET 17 OF 108</b>	

2/23/2022  
2/23/2022  
2/23/2022



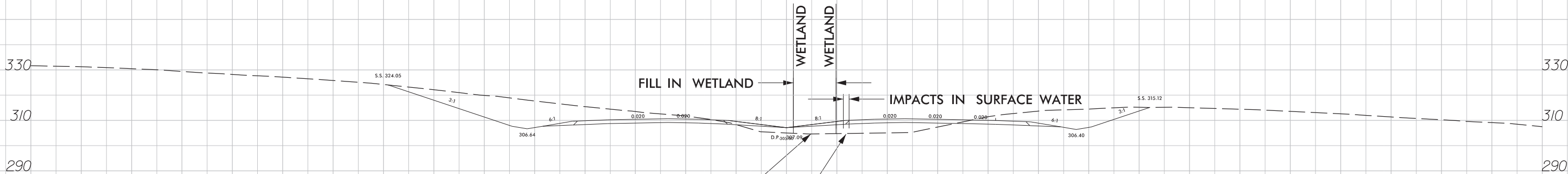




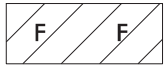


PERMIT DRAWING  
SHEET 19 OF 108

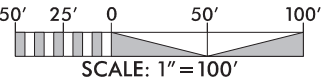
CROSS SECTION  
SITE 12, WETLAND WGM  
STATION 1061+50 -L-



51499



DENOTES FILL IN WETLAND



**LOCHNER**

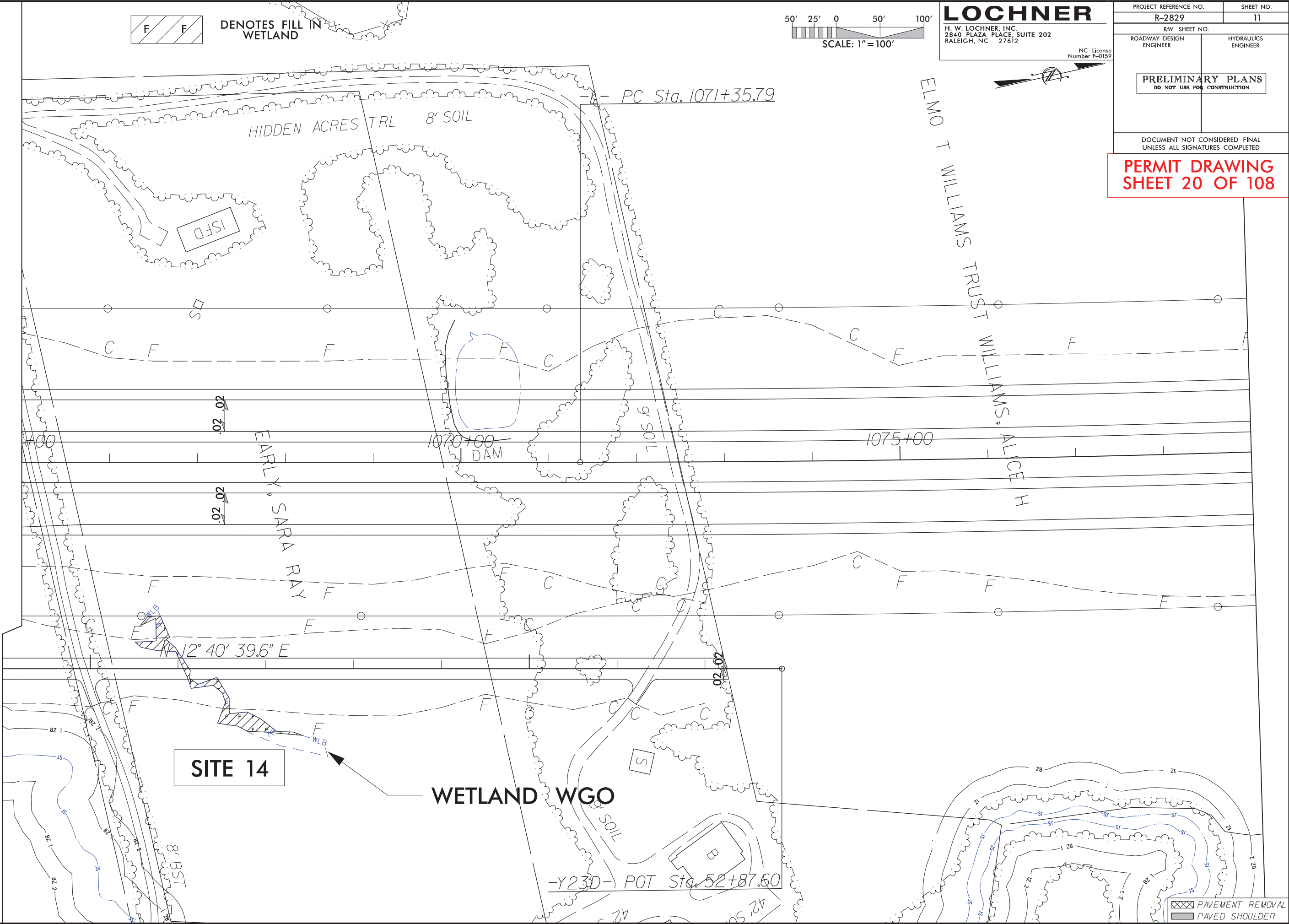
H. W. LOCHNER, INC.  
2840 PLAZA PLACE, SUITE 202  
RALEIGH, NC 27612

NC License  
Number F-0159



PROJECT REFERENCE NO.		SHEET NO.	
R-2829		11	
R/W SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
<div>PRELIMINARY PLANS</div> <div>DO NOT USE FOR CONSTRUCTION</div>			
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			

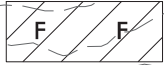
PERMIT DRAWING  
SHEET 20 OF 108



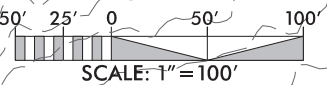
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lhw

51499

7/20/2018  
2020\_Hyd\_prm\_wet\_psh\_11a.dgn  
thruway



DENOTES FILL IN  
WETLAND



**LOCHNER**

H. W. LOCHNER, INC.  
2840 PLAZA PLACE, SUITE 202  
RALEIGH, NC 27612

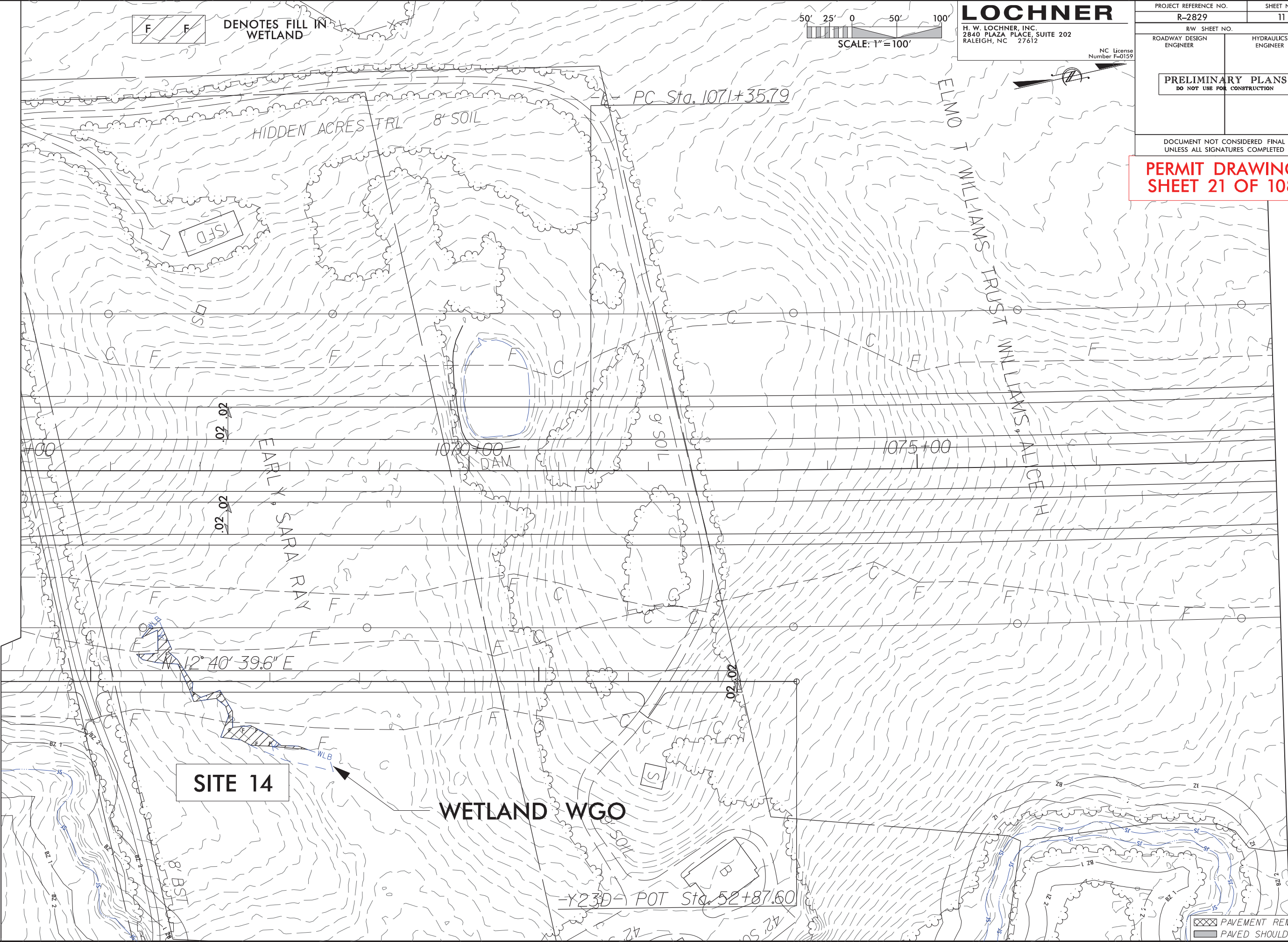
NC License  
Number F-0159



PROJECT REFERENCE NO. R-2829		SHEET NO. 11	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
<div>PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION</div>			

DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED

**PERMIT DRAWING  
SHEET 21 OF 108**

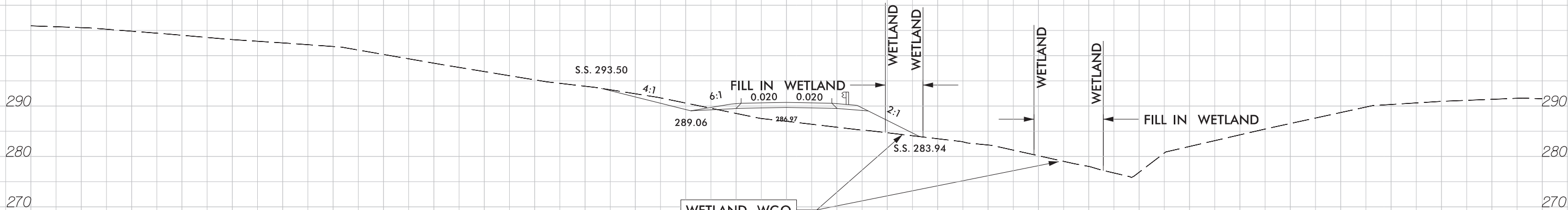






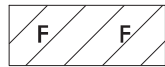
PERMIT DRAWING  
SHEET 22 OF 108

CROSS SECTION  
SITE 14, WETLAND WGO  
STATION 46 + 50 -Y23D-



51499

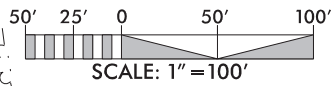
7/2/2018  
2020\_hyd\_prm\_wet\_psh\_13.dgn  
lbrwv



DENOTES FILL IN  
WETLAND



DENOTES IMPACTS IN  
SURFACE WATER



**LOCHNER**

H. W. LOCHNER, INC.  
2840 PLAZA PLACE, SUITE 202  
RALEIGH, NC 27612

NC License  
Number F-0159



PROJECT REFERENCE NO.

R-2829

SHEET NO.

13

R/W SHEET NO.

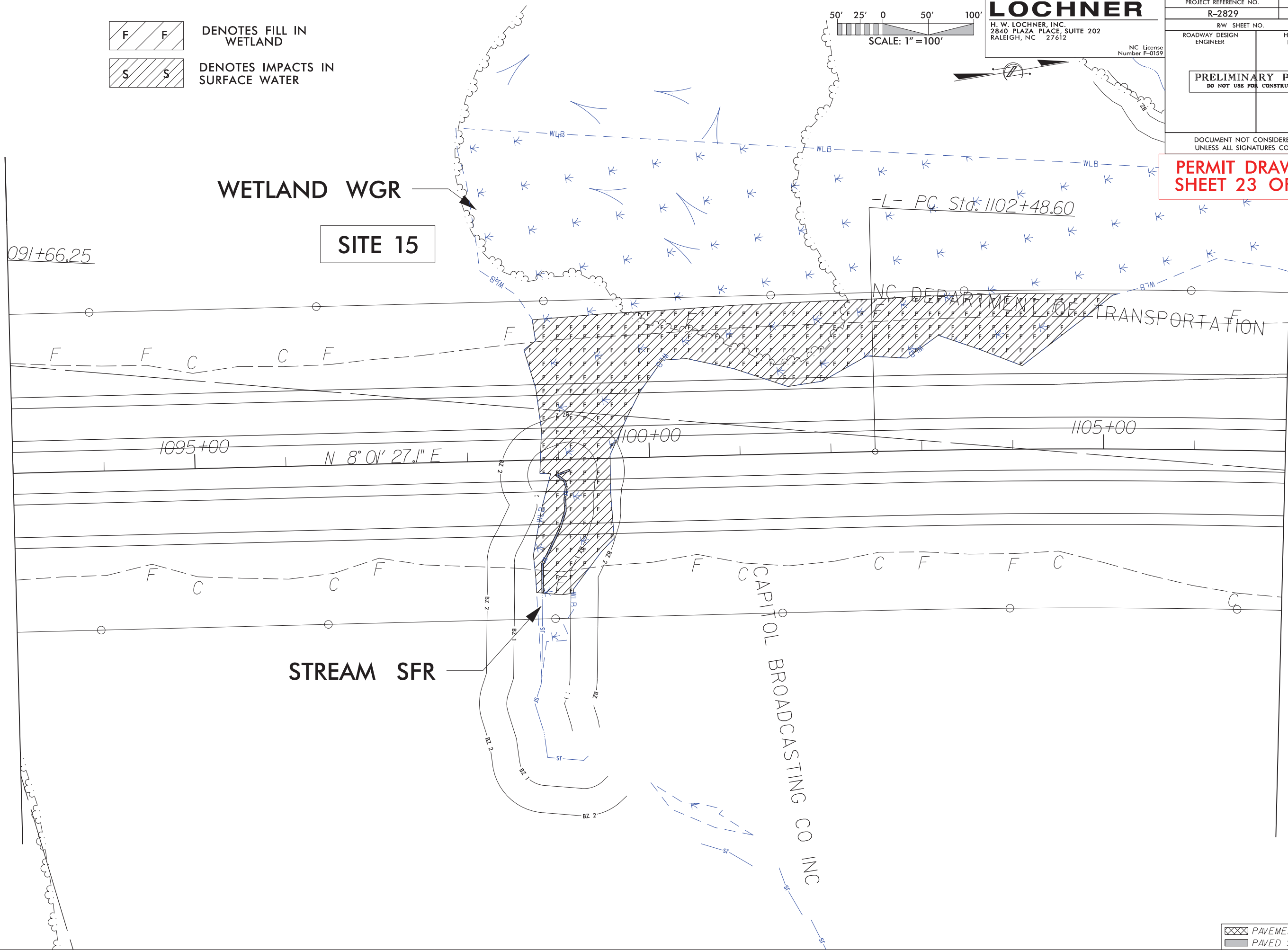
ROADWAY DESIGN  
ENGINEER

HYDRAULICS  
ENGINEER

**PRELIMINARY PLANS**  
DO NOT USE FOR CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED

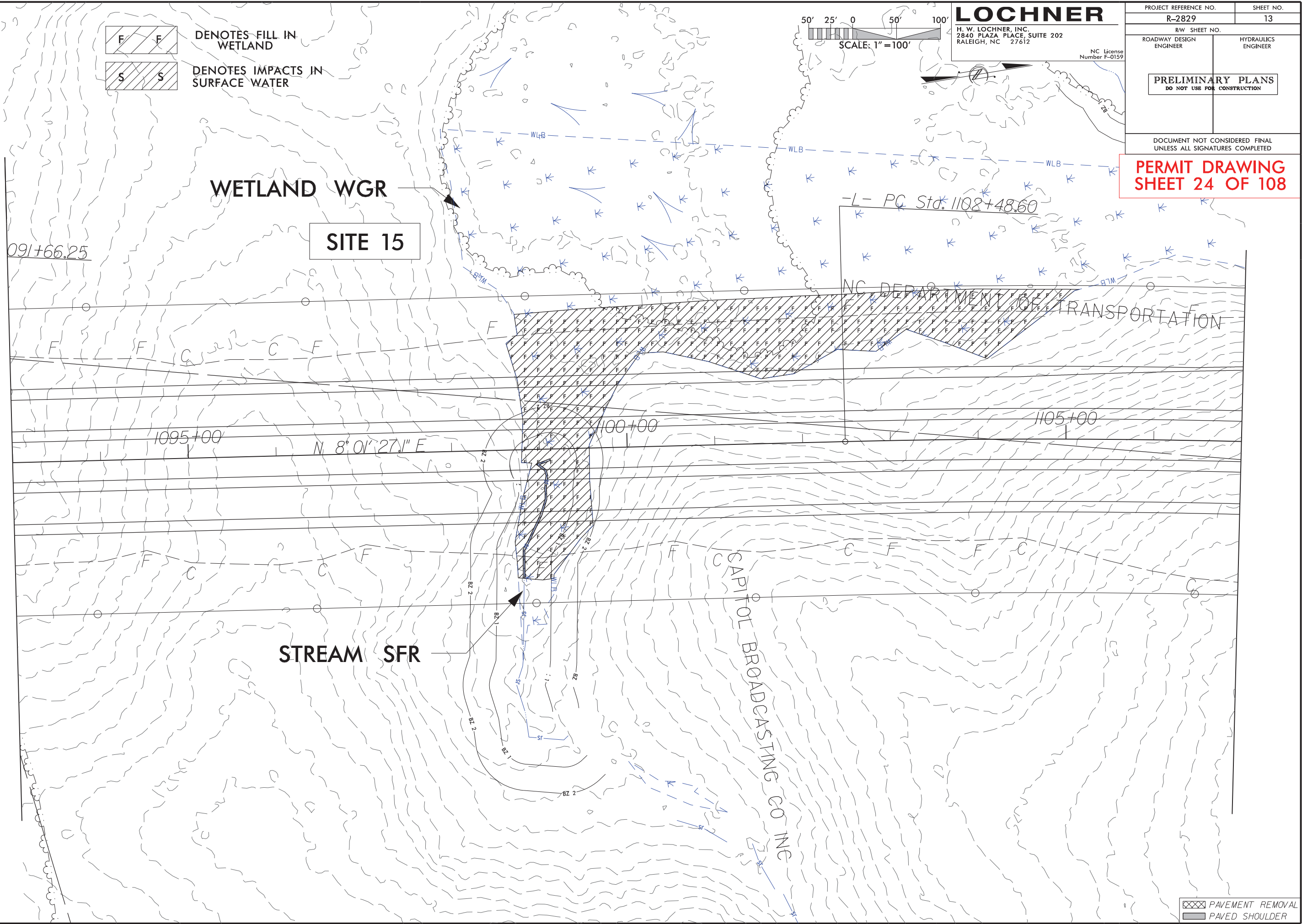
**PERMIT DRAWING**  
**SHEET 23 OF 108**



PAVEMENT REMOVAL  
PAVED SHOULDER

51499

7/20/2018  
2020\_Hyd\_prm\_wet\_psh\_13a.dgn  
lbrwv



**LOCHNER**

H. W. LOCHNER, INC.  
2840 PLAZA PLACE, SUITE 202  
RALEIGH, NC 27612

NC License  
Number F-0159

PROJECT REFERENCE NO.		SHEET NO.	
R-2829		13	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
<div>PRELIMINARY PLANS</div> <div>DO NOT USE FOR CONSTRUCTION</div>			
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			

**PERMIT DRAWING  
SHEET 24 OF 108**

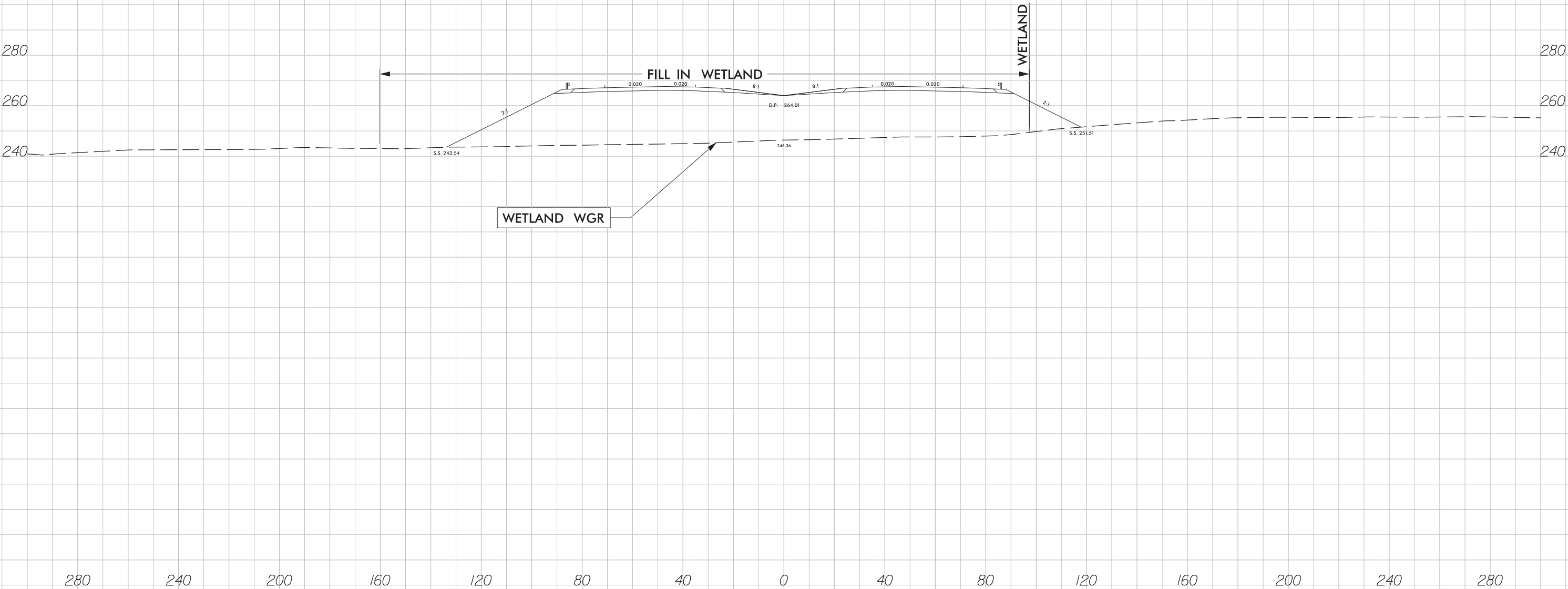
XX PAVEMENT REMOVAL  
PAVED SHOULDER





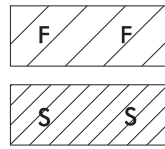
PERMIT DRAWING  
SHEET 25 OF 108

CROSS SECTION  
SITE 15, WETLAND WGR  
STATION 1099 + 50 -L-

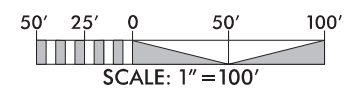


51499

7/2/2018  
2020 Hyd perm wet psh 14.dgn  
lhw



DENOTES FILL IN WETLAND  
DENOTES IMPACTS IN SURFACE WATER

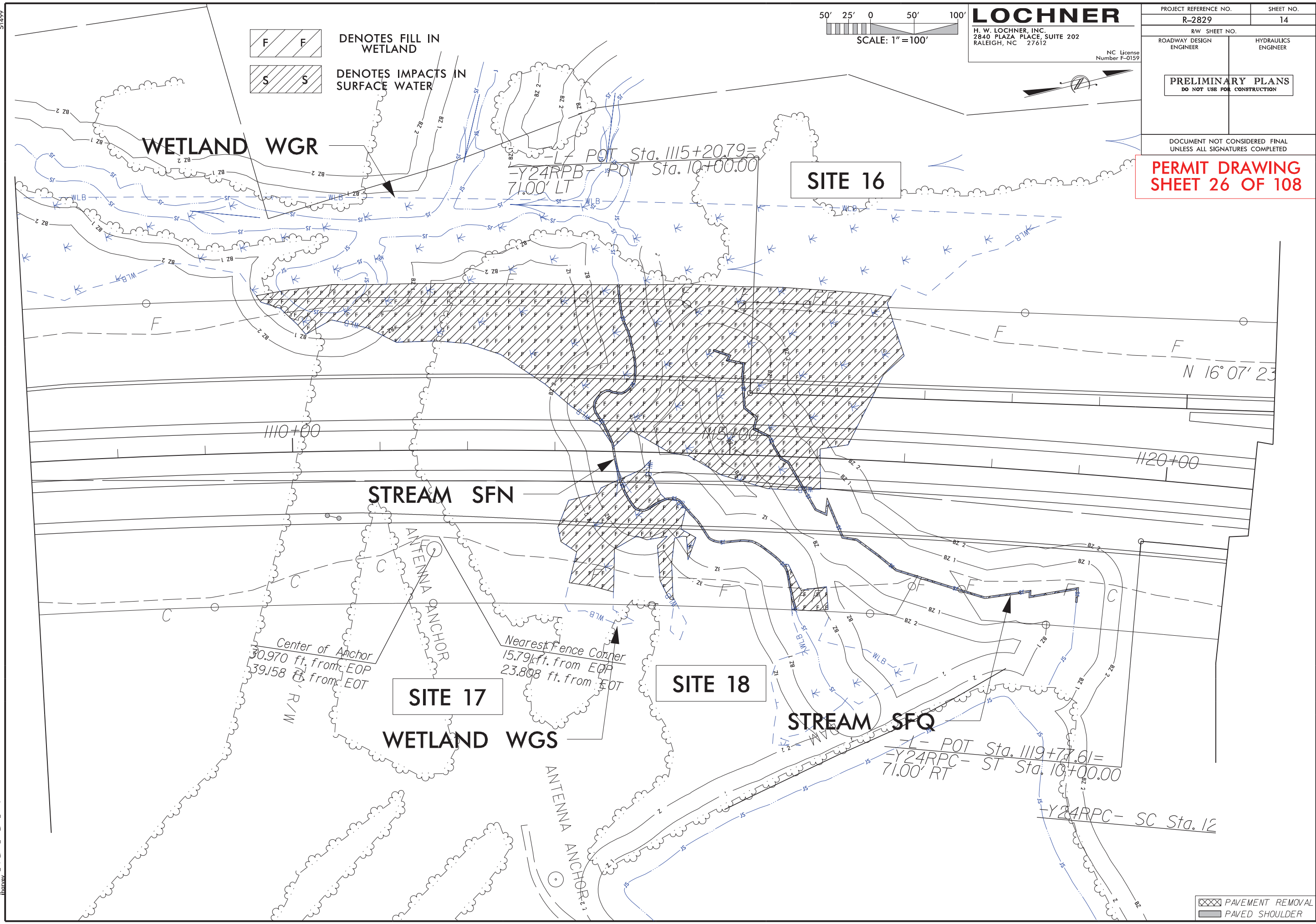


**LOCHNER**  
H. W. LOCHNER, INC.  
2840 PLAZA PLACE, SUITE 202  
RALEIGH, NC 27612  
NC License Number F-0159



PROJECT REFERENCE NO. <b>R-2829</b>		SHEET NO. <b>14</b>	
R/W SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
<div><b>PRELIMINARY PLANS</b> <b>DO NOT USE FOR CONSTRUCTION</b></div>			
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			

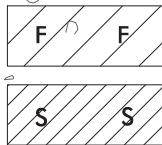
**PERMIT DRAWING**  
**SHEET 26 OF 108**



PAVEMENT REMOVAL  
PAVED SHOULDER

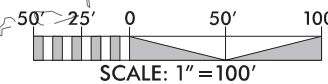
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7/20/2018  
2020 Hyd\_prm\_wet\_psh\_14a.dgn  
lhorsey



DENOTES FILL IN  
WETLAND

DENOTES IMPACTS IN  
SURFACE WATER



**LOCHNER**

H. W. LOCHNER, INC.  
2840 PLAZA PLACE, SUITE 202  
RALEIGH, NC 27612

NC License  
Number F-0159

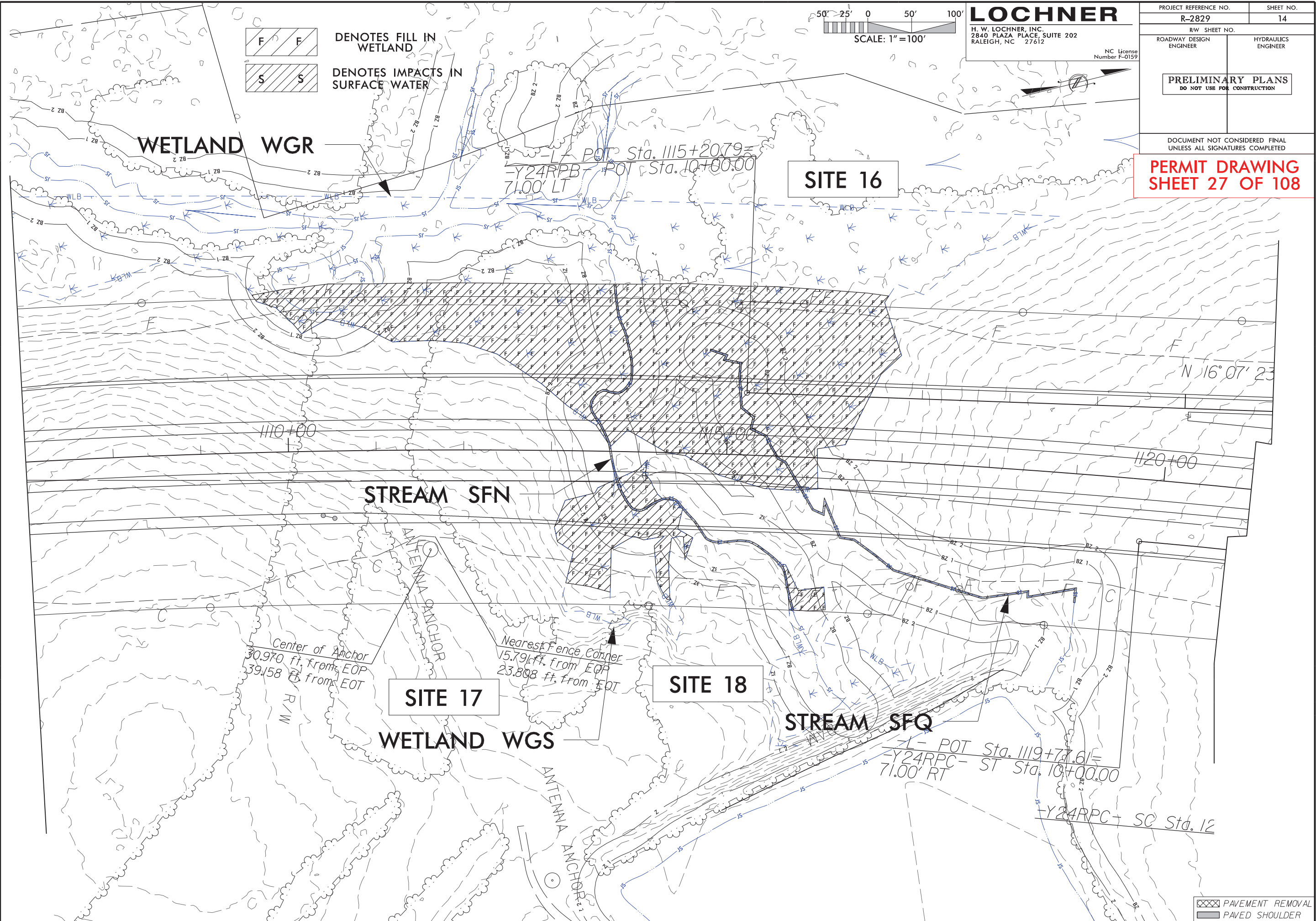


PROJECT REFERENCE NO.		SHEET NO.
R-2829		14
RW SHEET NO.		
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER

**PRELIMINARY PLANS**  
DO NOT USE FOR CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED

**PERMIT DRAWING  
SHEET 27 OF 108**



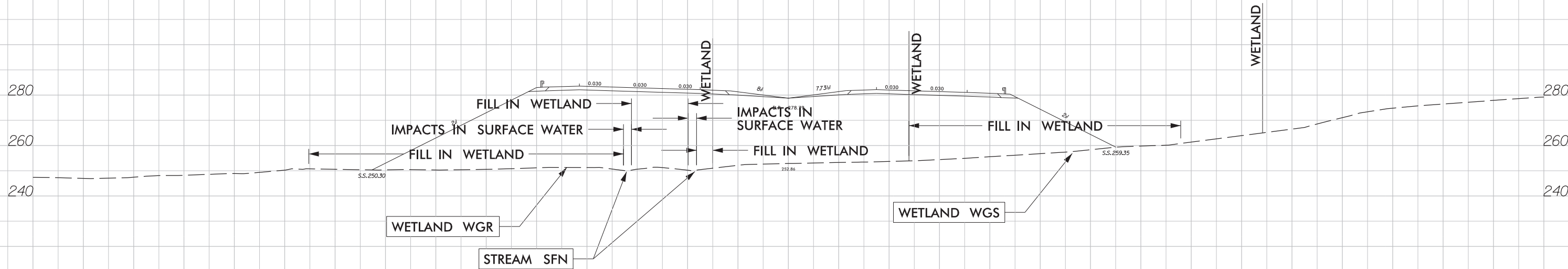
PAVEMENT REMOVAL  
PAVED SHOULDER

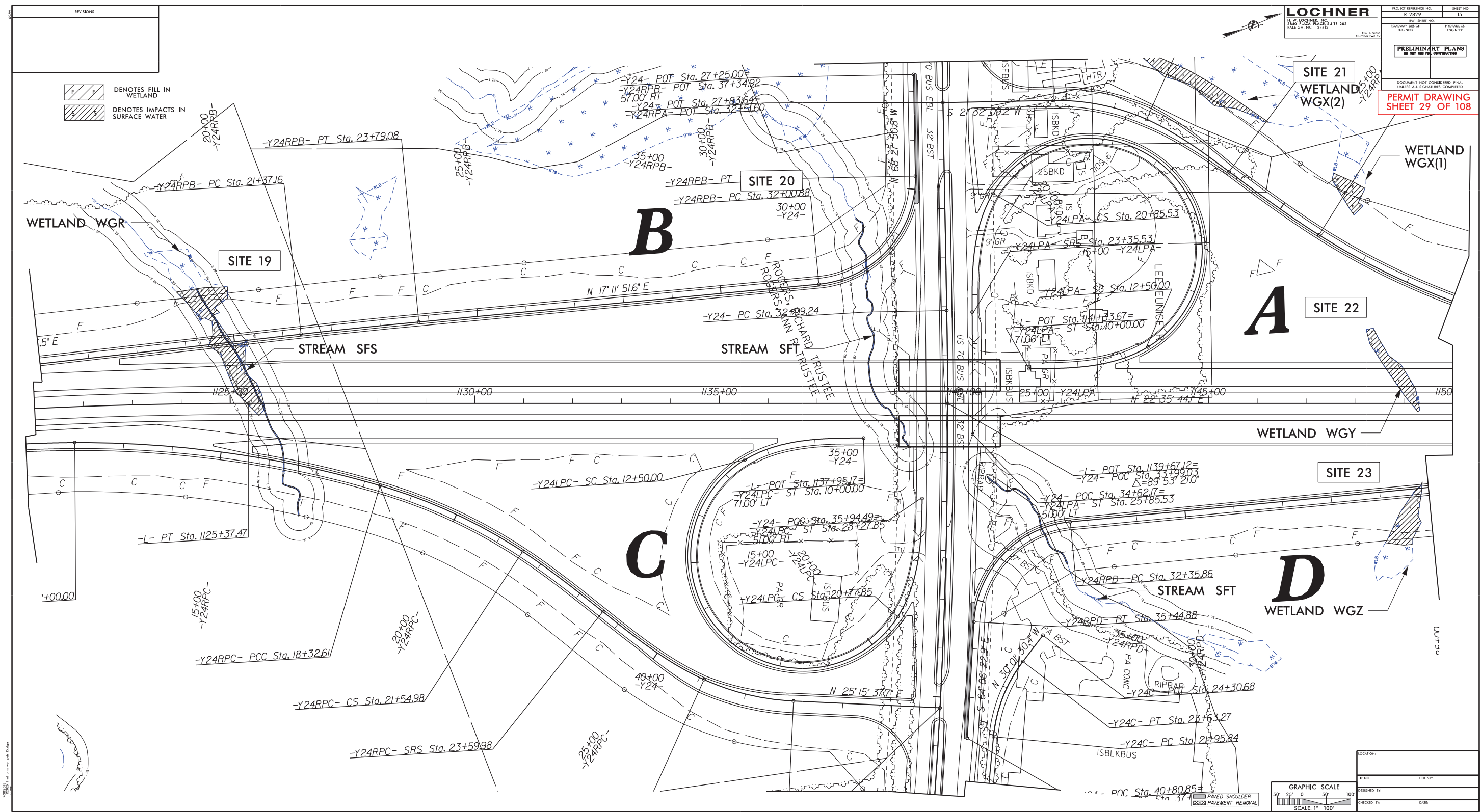




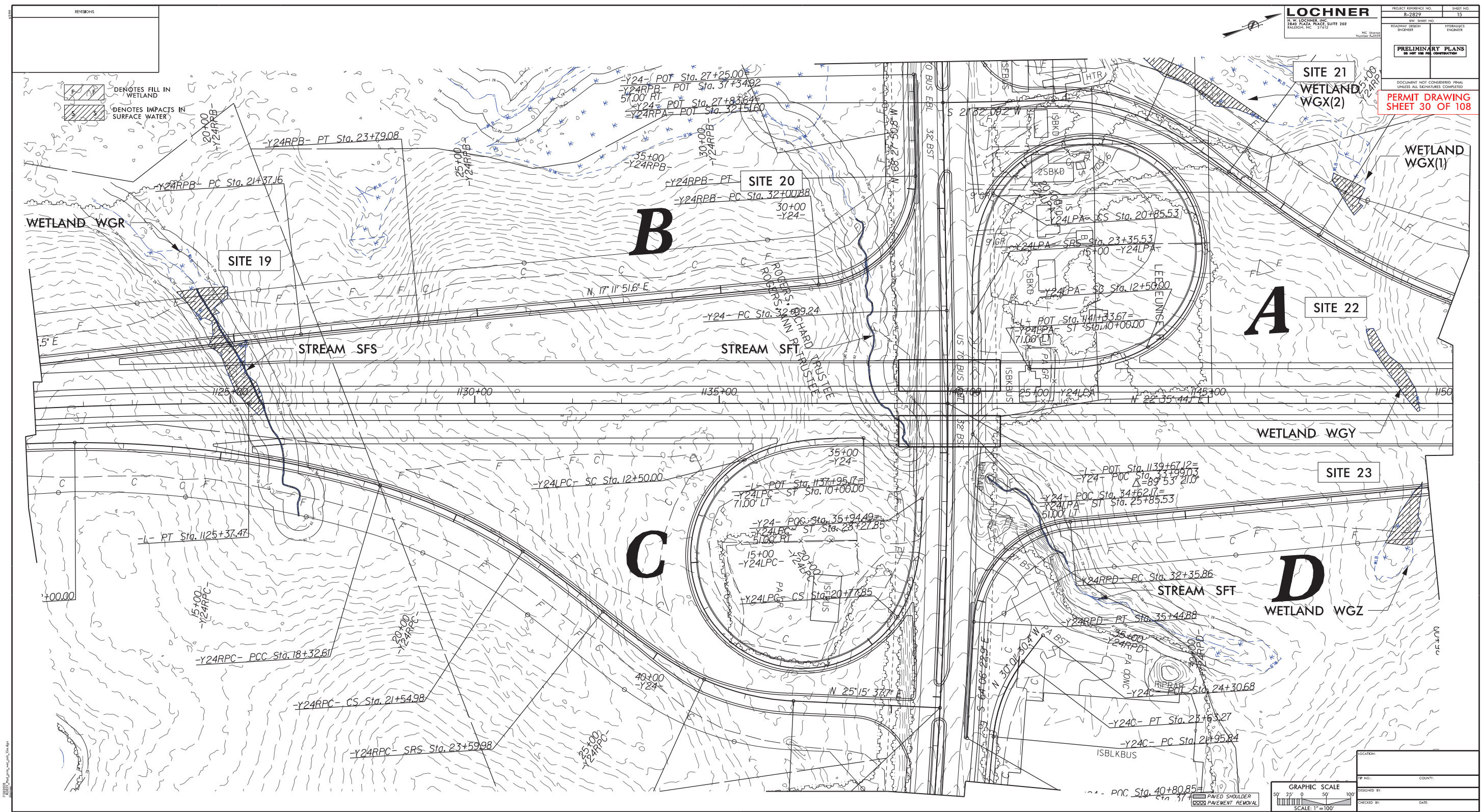
PERMIT DRAWING  
SHEET 28 OF 108

CROSS SECTION  
SITE 16, WETLAND WGR  
SITE 17, WETLAND WGS  
STATION 1113 + 50 -L-







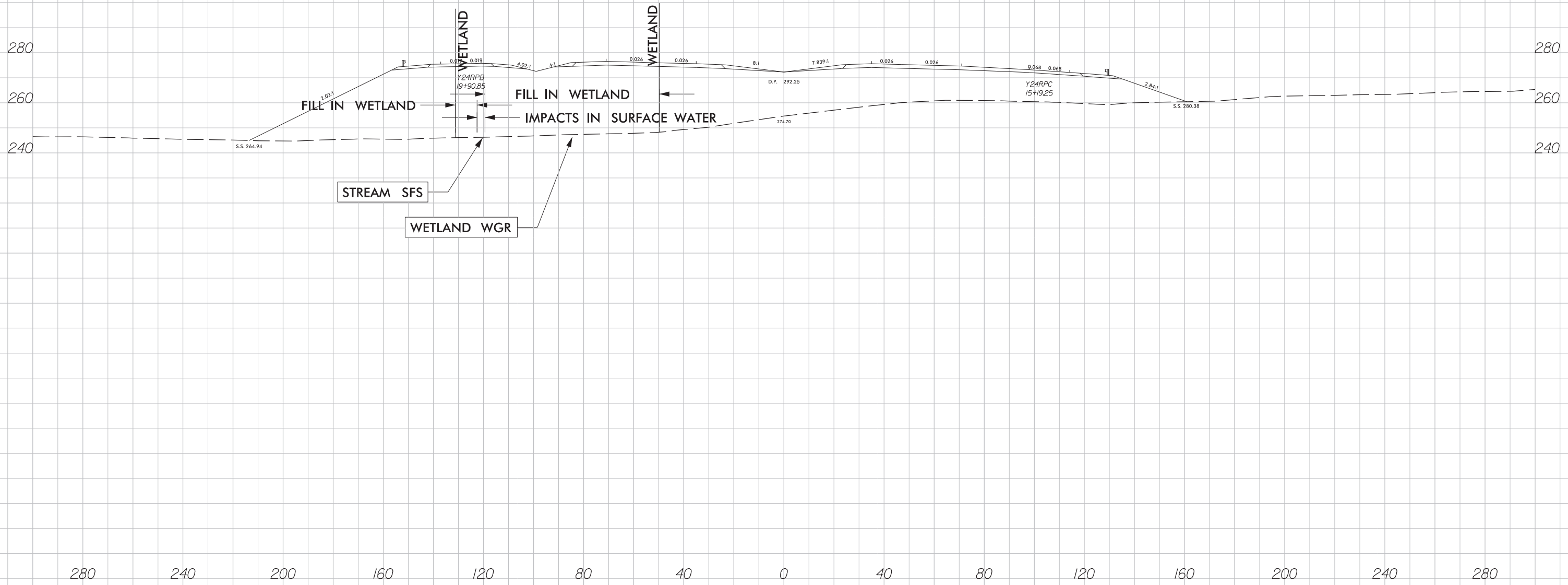






PERMIT DRAWING  
SHEET 31 OF 108

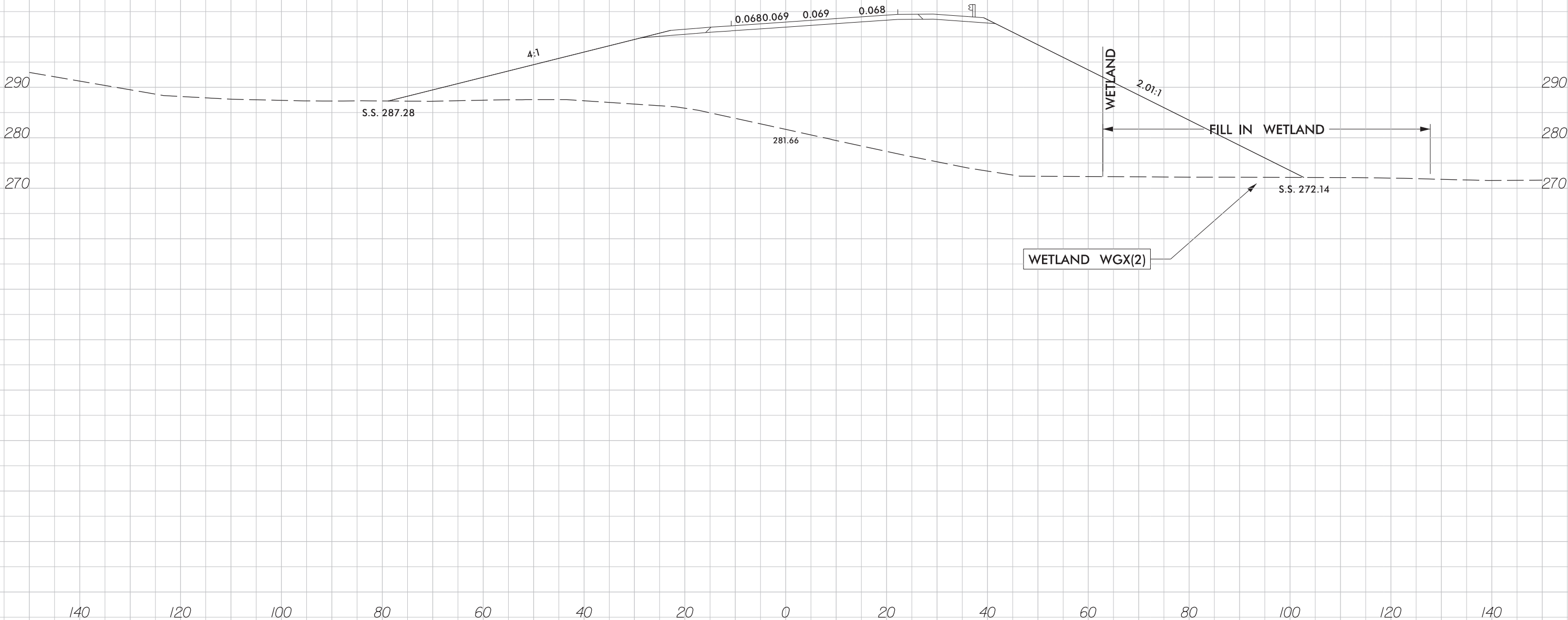
CROSS SECTION  
SITE 19, WETLAND WGR  
STATION 1125+00 -L-





PERMIT DRAWING  
SHEET 32 OF 108

CROSS SECTION  
SITE 21, WETLAND WGX(2)  
STATION 28+00 -Y24RPA-

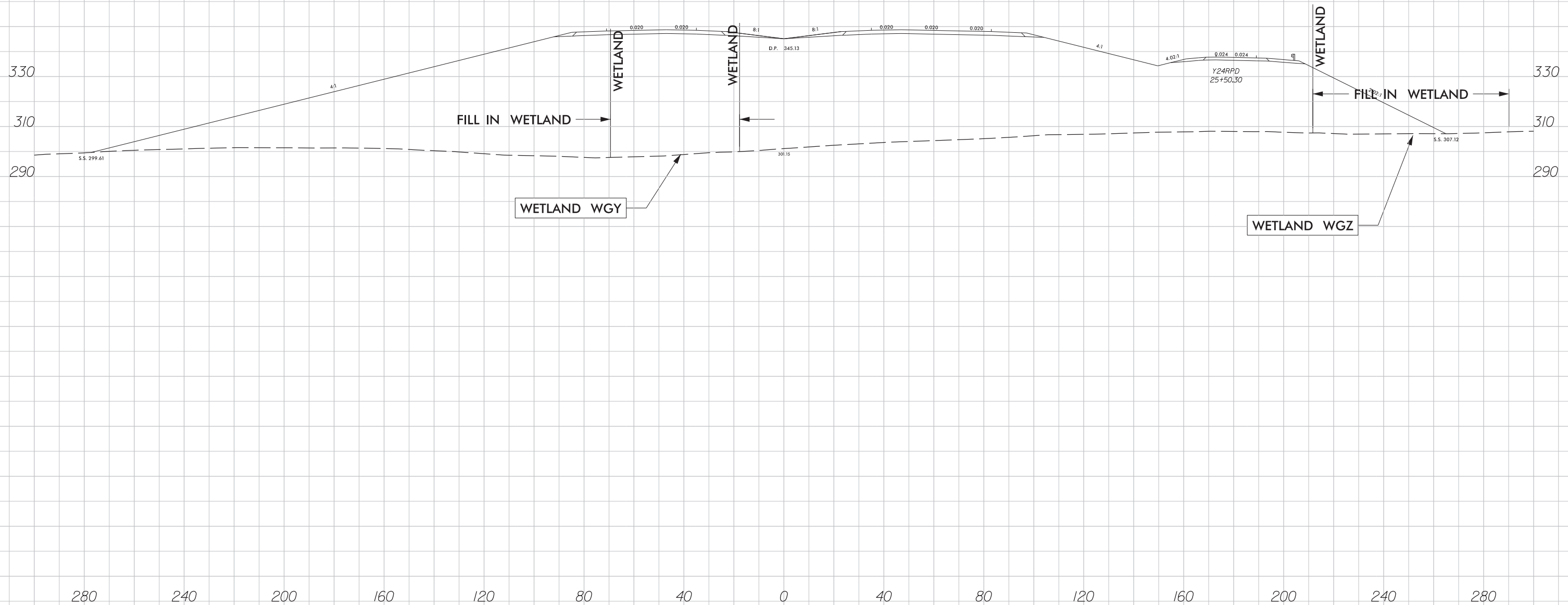


WETLAND WGX(2)

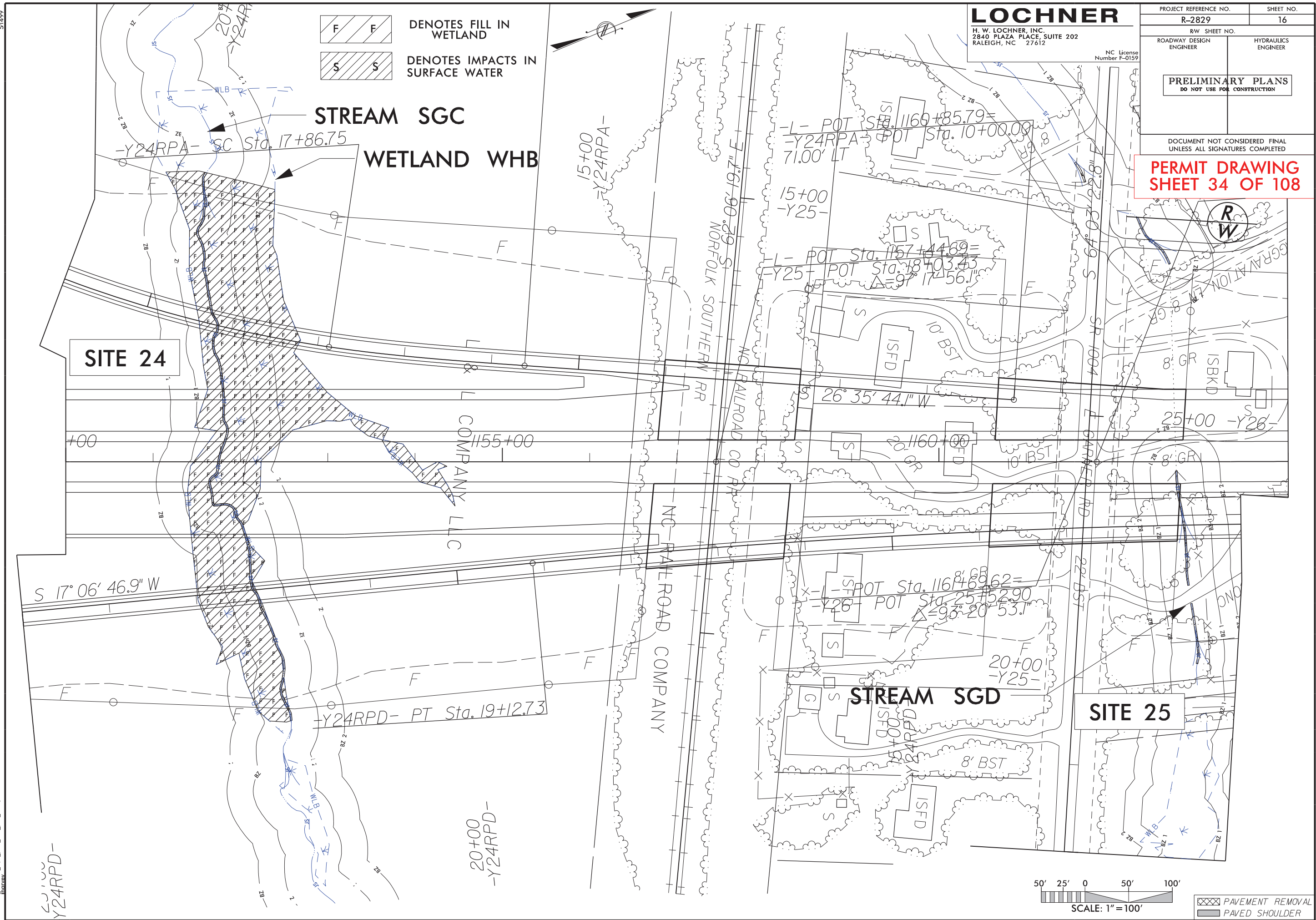


PERMIT DRAWING  
SHEET 33 OF 108

CROSS SECTION  
SITE 24, WETLAND WGY  
SITE 23, WETLAND WGZ  
STATION 1149+00 -L-

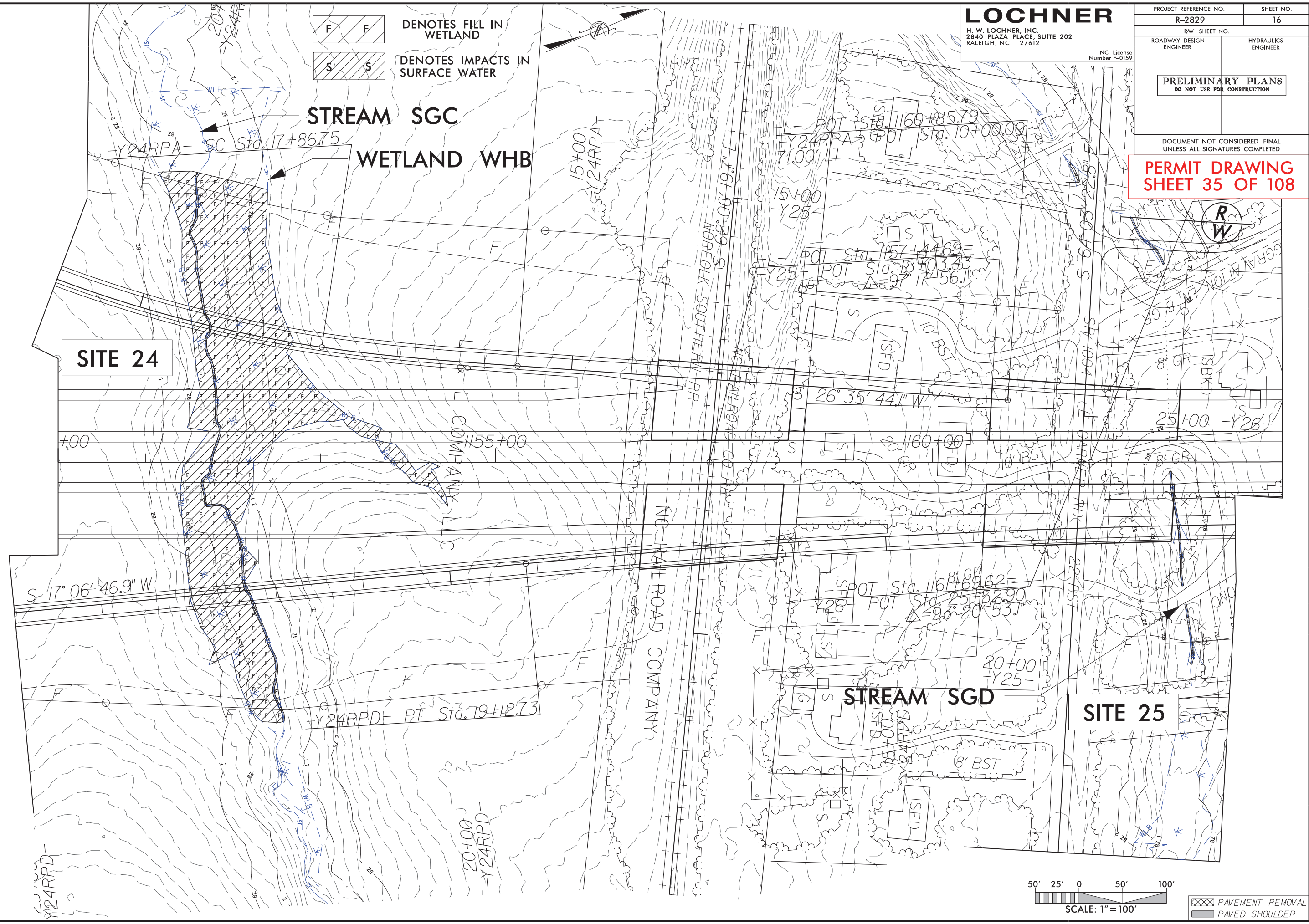








51499  
7/20/2018  
2020\_Hyd\_prm\_wet\_psh\_16a.dgn  
lbrw



**LOCHNER**  
H. W. LOCHNER, INC.  
2840 PLAZA PLACE, SUITE 202  
RALEIGH, NC 27612  
NC License  
Number F-0159

PROJECT REFERENCE NO. R-2829		SHEET NO. 16	
RW SHEET NO.		HYDRAULICS ENGINEER	
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION			
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			

**PERMIT DRAWING  
SHEET 35 OF 108**

**R  
W**

**SITE 25**

**SITE 24**

**STREAM SGC  
WETLAND WHB**

**STREAM SGD**

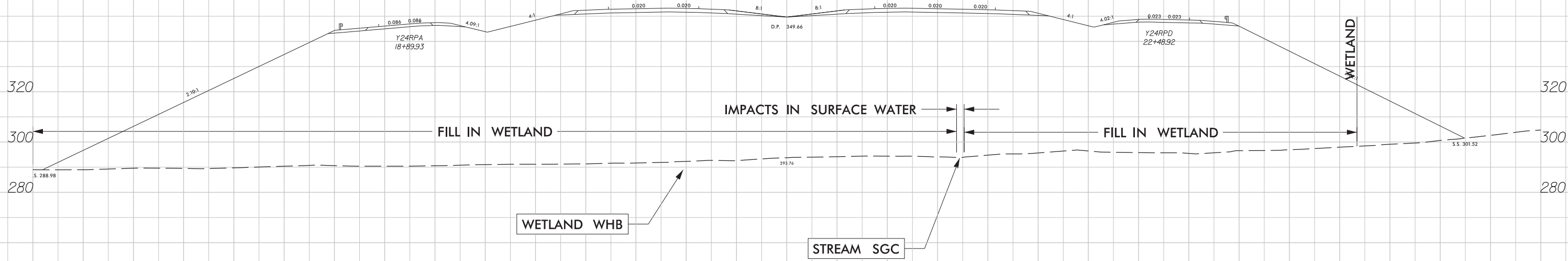
50' 25' 0 50' 100'  
SCALE: 1" = 100'

XX PAVEMENT REMOVAL  
P PAVED SHOULDER

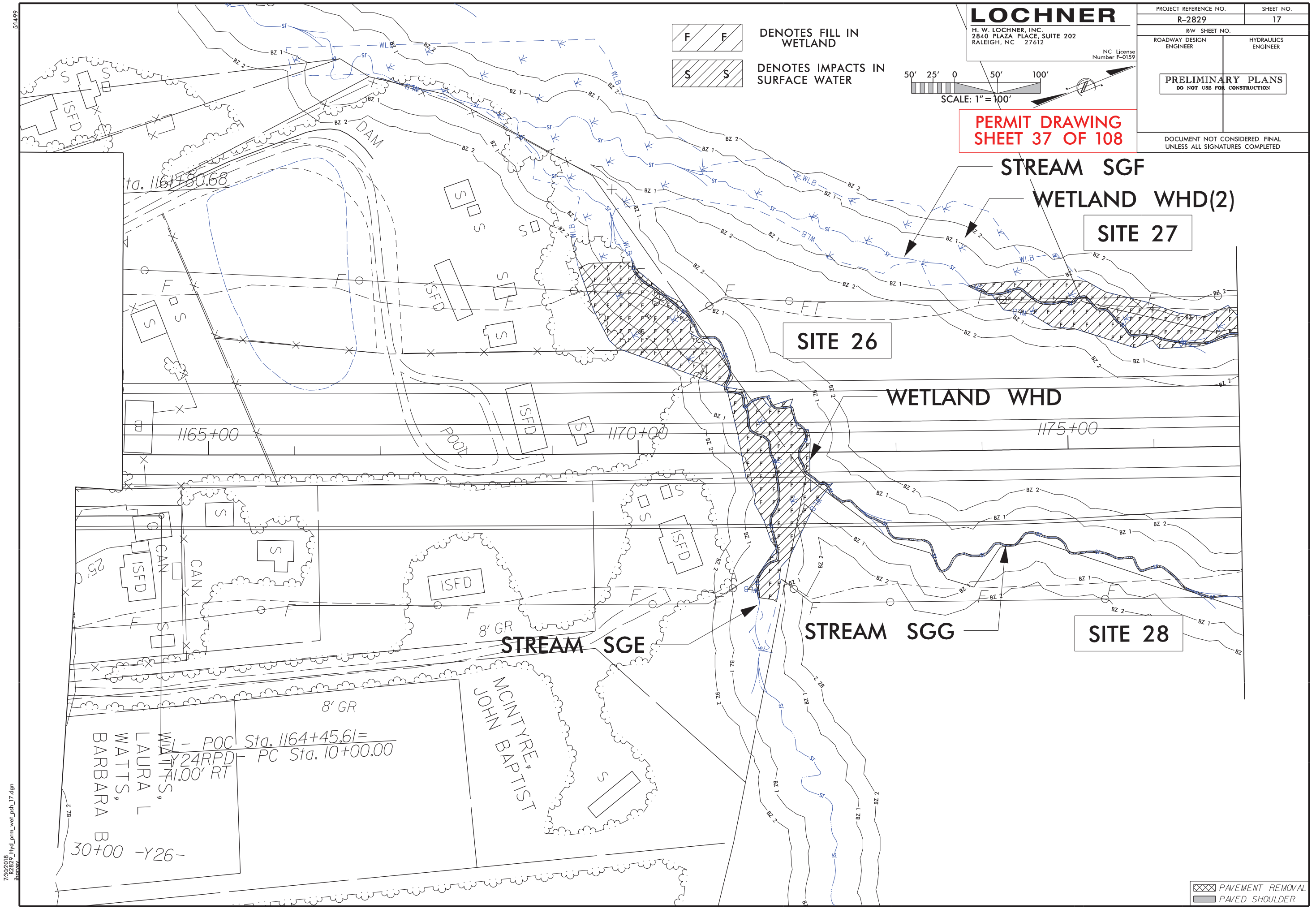


PERMIT DRAWING  
SHEET 36 OF 108

CROSS SECTION  
SITE 24, WETLAND WHB  
STATION 1152+00 -L-











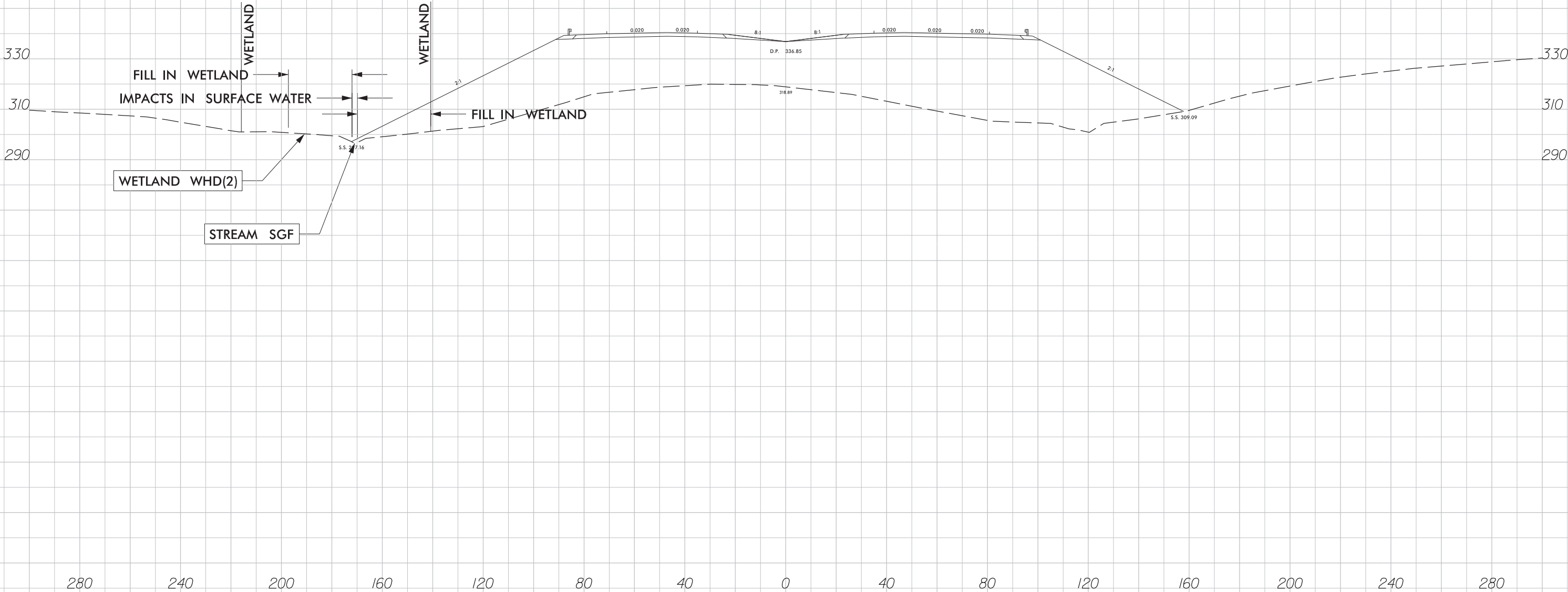
PERMIT DRAWING  
SHEET 39 OF 108





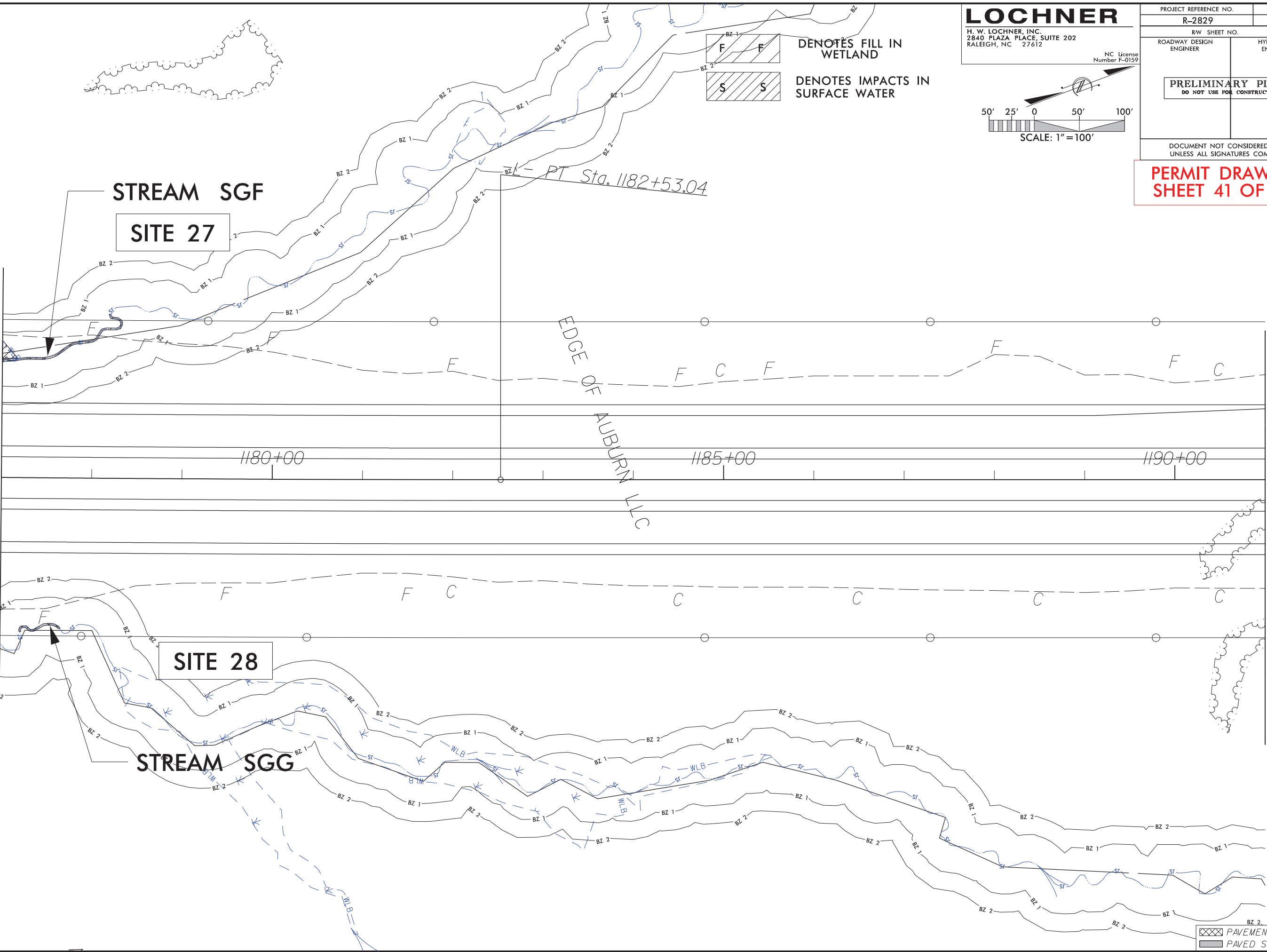
PERMIT DRAWING  
SHEET 40 OF 108

CROSS SECTION  
SITE 27, WETLAND WHD(2)  
STATION 1175+00 -L-



51499

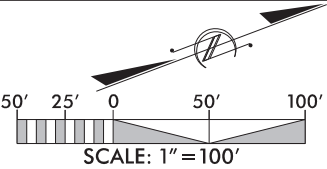
7/20/2018  
20207\_Hyd\_perm\_wet\_psh\_18.dgn  
lbrw



**LOCHNER**

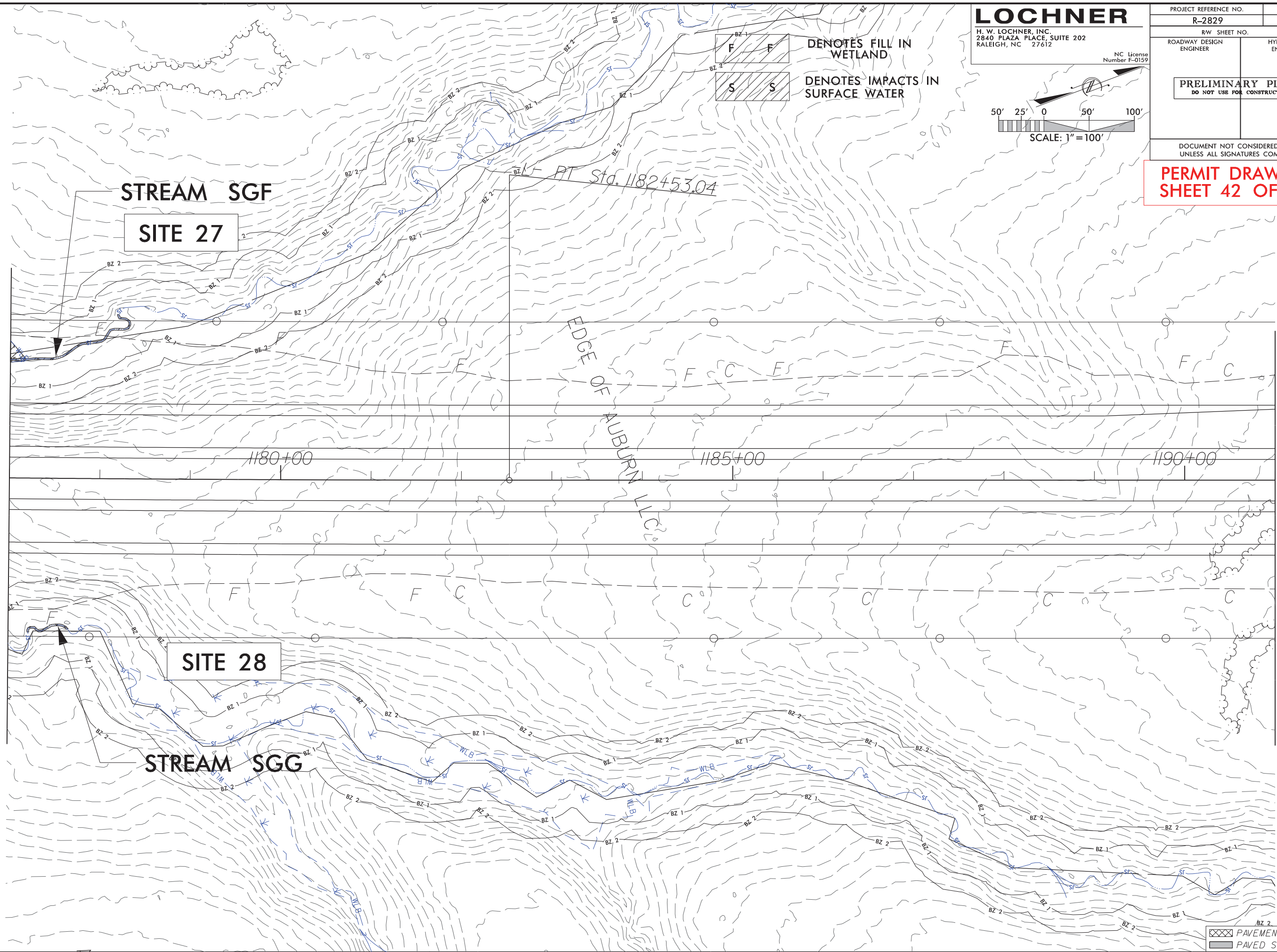
H. W. LOCHNER, INC.  
2840 PLAZA PLACE, SUITE 202  
RALEIGH, NC 27612

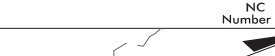
NC License  
Number F-0159



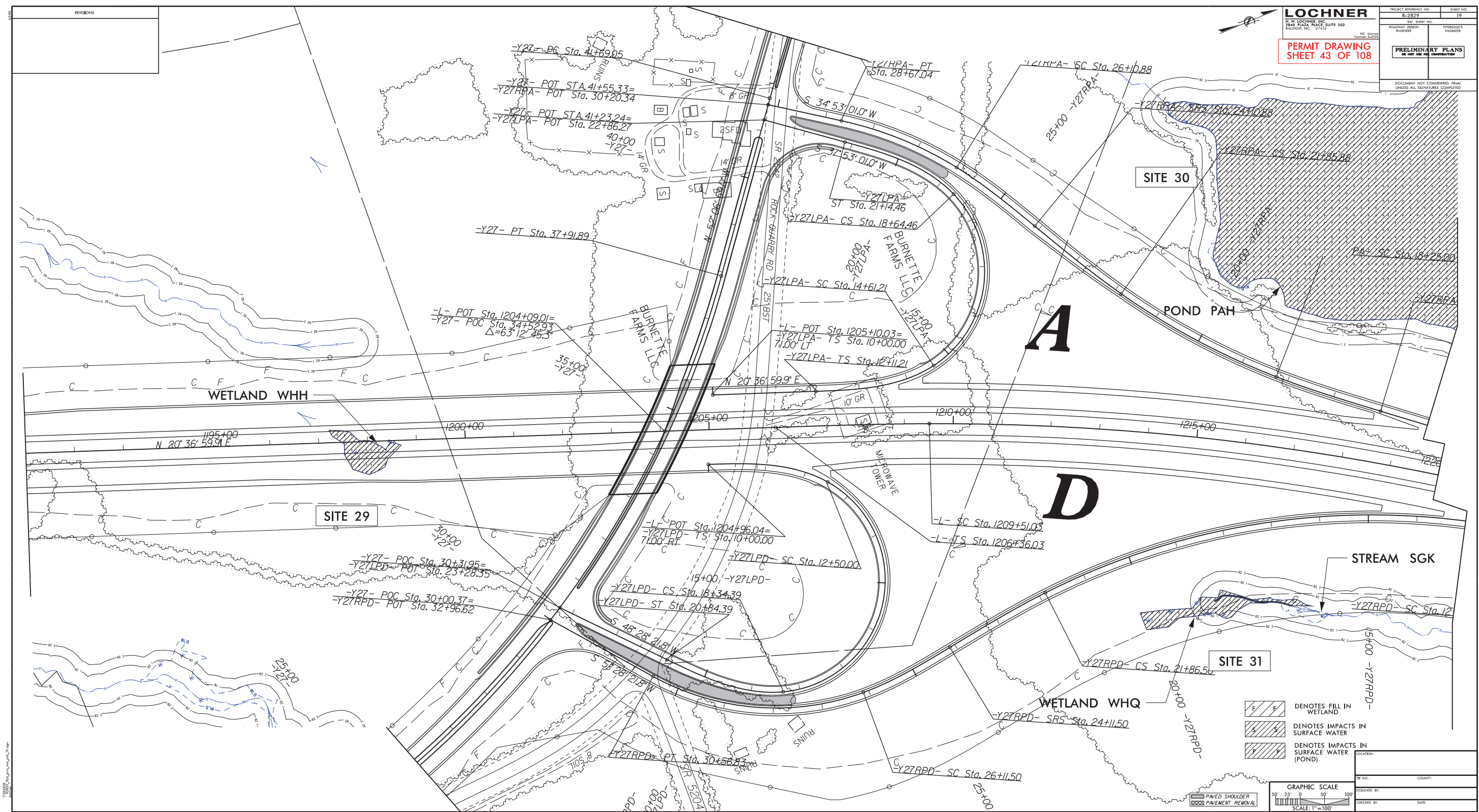
PROJECT REFERENCE NO.		SHEET NO.
R-2829		18
RW SHEET NO.		
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION		
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED		

**PERMIT DRAWING**  
**SHEET 41 OF 108**

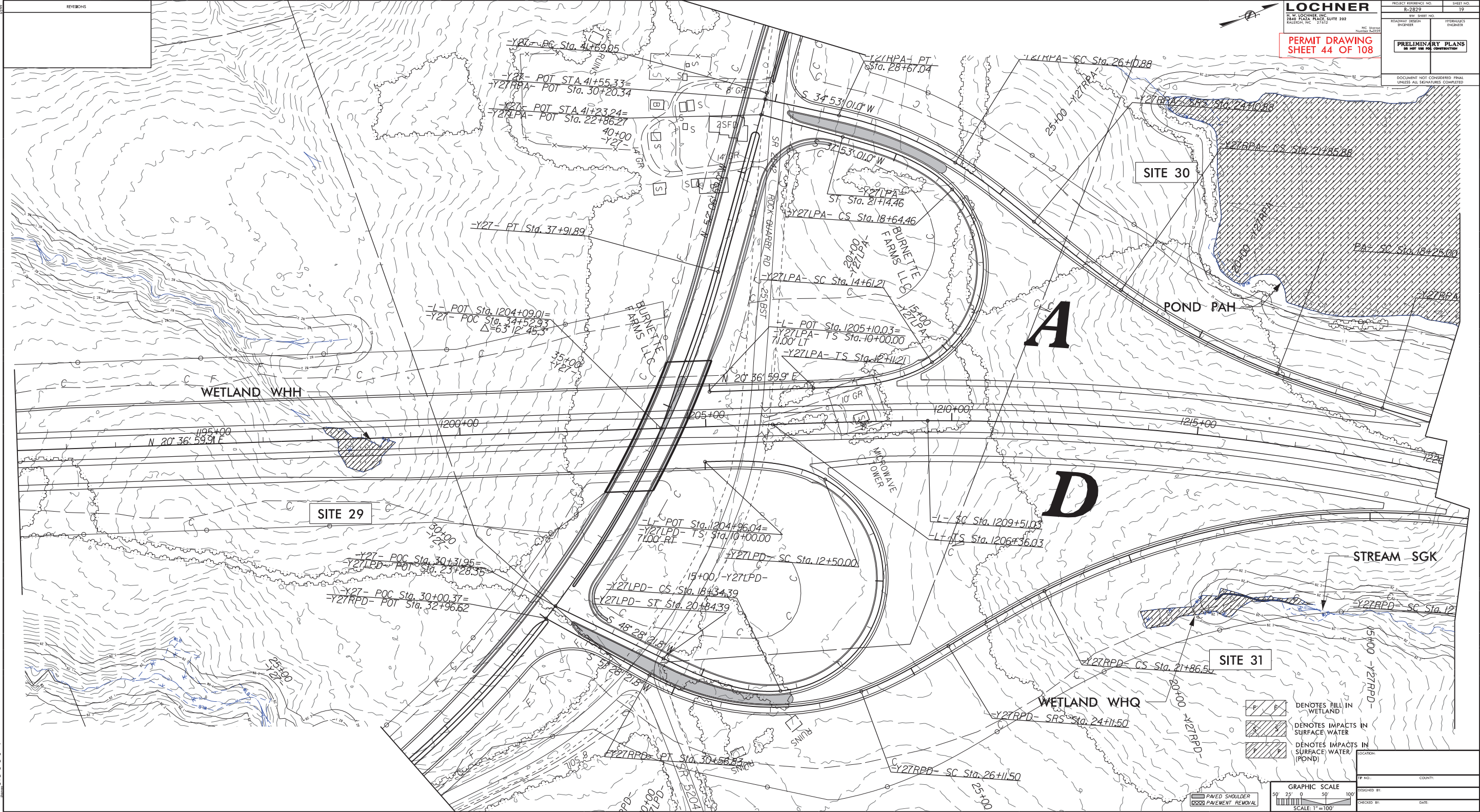


<h1 style="margin: 0;">LOCHNER</h1>		PROJECT REFERENCE NO. <div style="border: 1px solid black; padding: 2px; display: inline-block;">R-2829</div>		SHEET NO. <div style="border: 1px solid black; padding: 2px; display: inline-block;">18</div>			
H. W. LOCHNER, INC. 2840 PLAZA PLACE, SUITE 202 RALEIGH, NC 27612		NC License Number F-0159					
 <p style="margin: 0;">SCALE: 1"=100'</p>		RW SHEET NO. <table border="1" style="width: 100%; height: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center; vertical-align: middle; padding: 20px;">           ROADWAY DESIGN ENGINEER         </td> <td style="width: 50%; text-align: center; vertical-align: middle; padding: 20px;">           HYDRAULICS ENGINEER         </td> </tr> </table>				ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER						
<div style="border: 1px solid black; padding: 10px; display: inline-block;"> <b>PRELIMINARY PLANS</b>          DO NOT USE FOR CONSTRUCTION       </div>							
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED							









LOCHNER

11 W. LOCHNER, INC.  
200 W. 11th St., Suite 202  
RALEIGH, NC 27612  
NC State  
Professional Engineer  
Number E-1022

PERMIT DRAWING  
SHEET 44 OF 108

PROJECT REFERENCE NO. 8-2829 SHEET NO. 12

ROADWAY DESIGN ENGINEER

HYDRAULICS ENGINEER

PRELIMINARY PLANS  
DO NOT USE FOR CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED

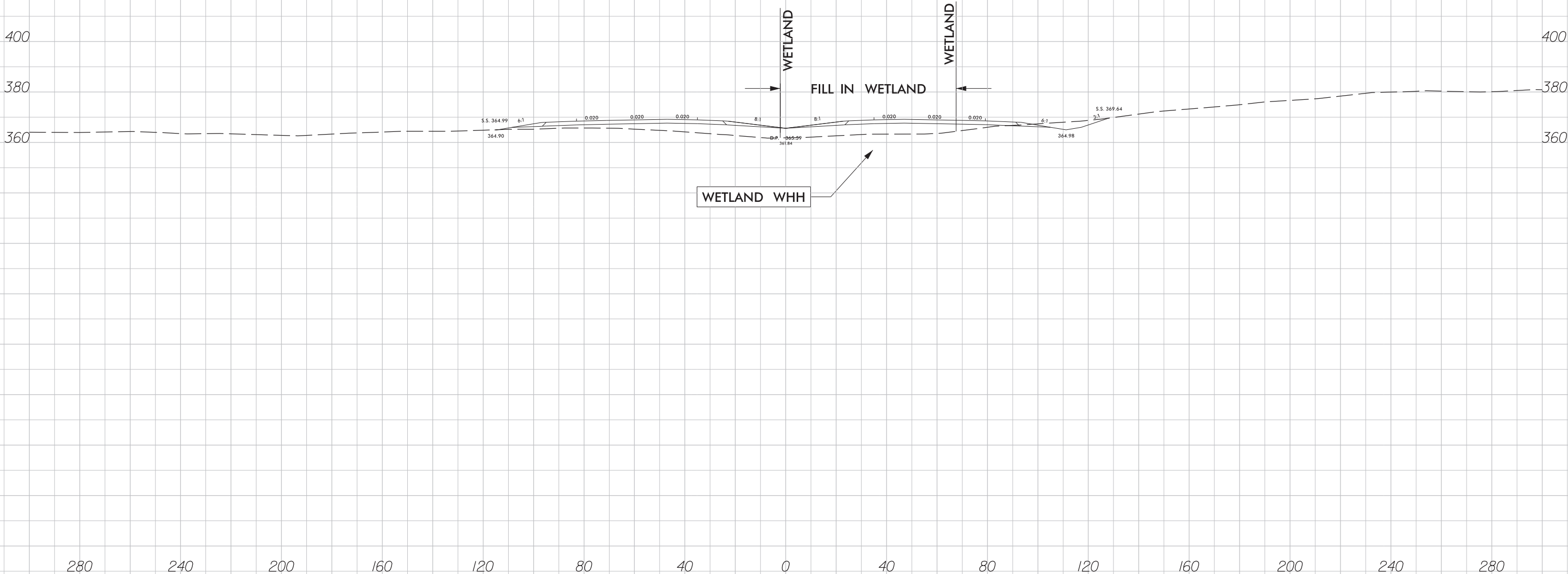
GRAPHIC SCALE  
50' 25' 0' 50' 100'  
SCALE: 1" = 100'

TP NO.: COUNTY: DESIGNED BY: CHECKED BY: DATE:



PERMIT DRAWING  
SHEET 45 OF 108

CROSS SECTION  
SITE 29, WETLAND WHH  
STATION 1198+00 -L-



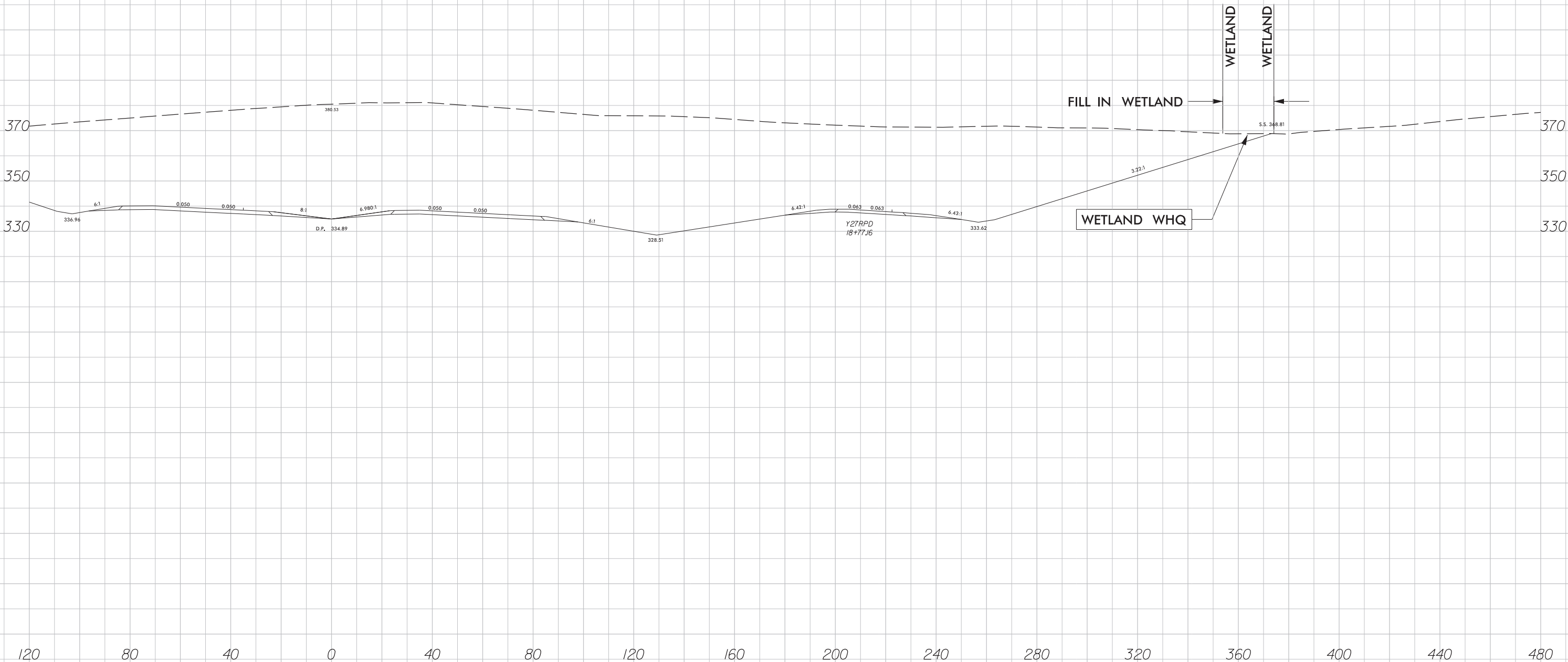




PROJ. REFERENCE NO.	SHEET NO.
R-2829	

PERMIT DRAWING  
SHEET 46 OF 108

CROSS SECTION  
SITE 31, WETLAND WHQ  
STATION 1215+00 -L-



51499

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H. W. LOCHNER, INC.  
2840 PLAZA PLACE, SUITE 202  
RALEIGH, NC 27612

NC License  
Number F-0159

PROJECT REFERENCE NO.

R-2829

SHEET NO.

21

RW SHEET NO.

ROADWAY DESIGN  
ENGINEER

HYDRAULICS  
ENGINEER

**PRELIMINARY PLANS**  
DO NOT USE FOR CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED

**PERMIT DRAWING**  
**SHEET 47 OF 108**

50' 25' 0 50' 100'  
SCALE: 1"=100'



DENOTES FILL IN  
WETLAND



DENOTES IMPACTS IN  
SURFACE WATER

**SITE 32**

**WETLAND WHP**

TS Sta. 1243+41.83

1235+00

1240+00

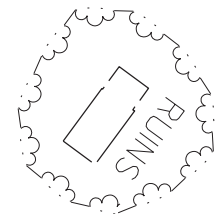
N 55°16'30.9"E

1245+00

**STREAM SGK**

-L- CS Sta. 1236+90.81

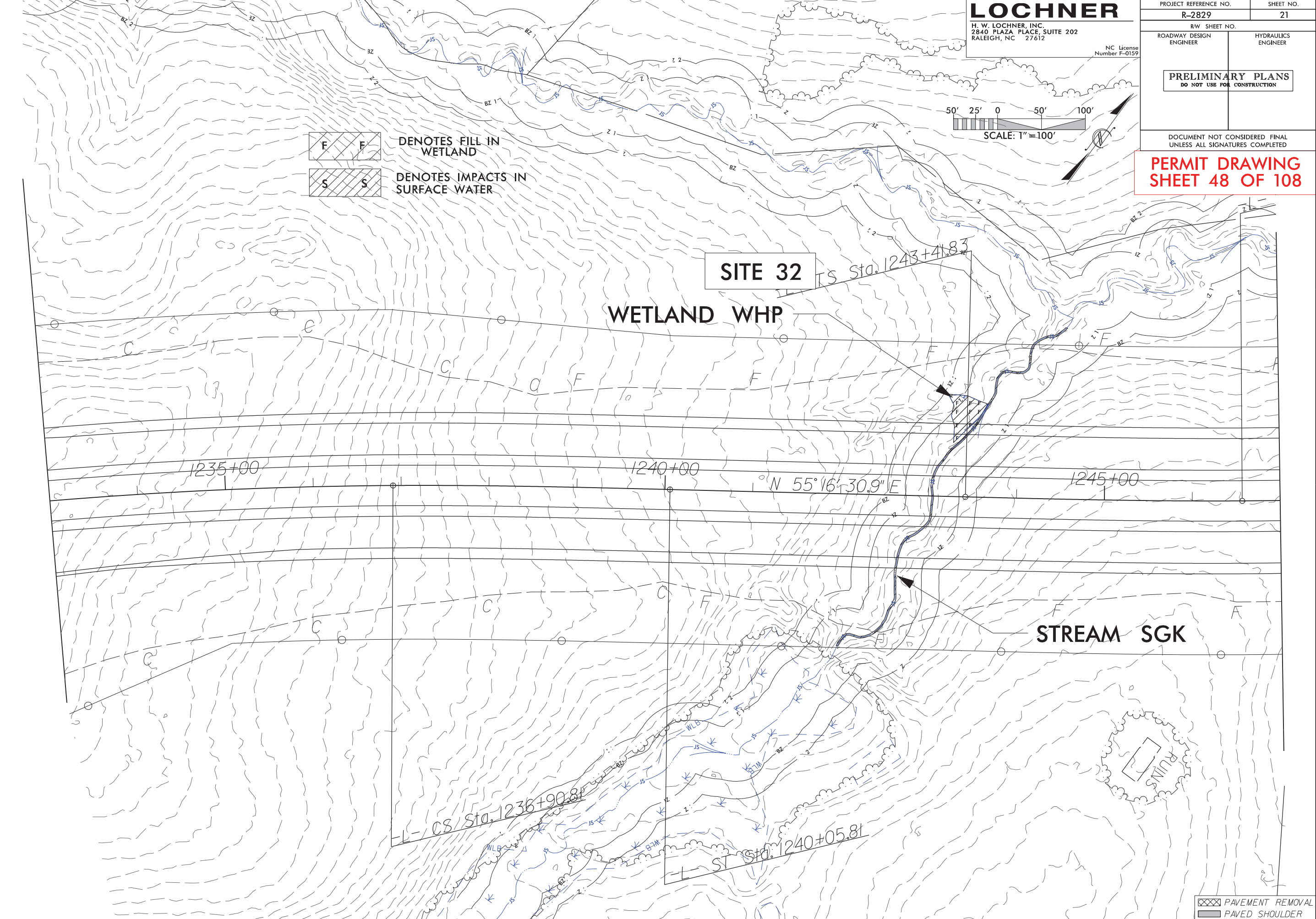
-L- ST Sta. 1240+05.81



PAVEMENT REMOVAL  
PAVED SHOULDER

7/2/2018  
20297\_hyd\_perm\_wet\_psh\_21.dgn  
lhw

51499  
7/20/2018  
2020\_Hyd\_prm\_wet\_psh\_21a.dgn  
lbrw



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2840 PLAZA PLACE, SUITE 202  
RALEIGH, NC 27612  
NC License  
Number F-0159

PROJECT REFERENCE NO.		SHEET NO.	
R-2829		21	
R/W SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
<div>PRELIMINARY PLANS</div> <div>DO NOT USE FOR CONSTRUCTION</div>			
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			

**PERMIT DRAWING**  
**SHEET 48 OF 108**

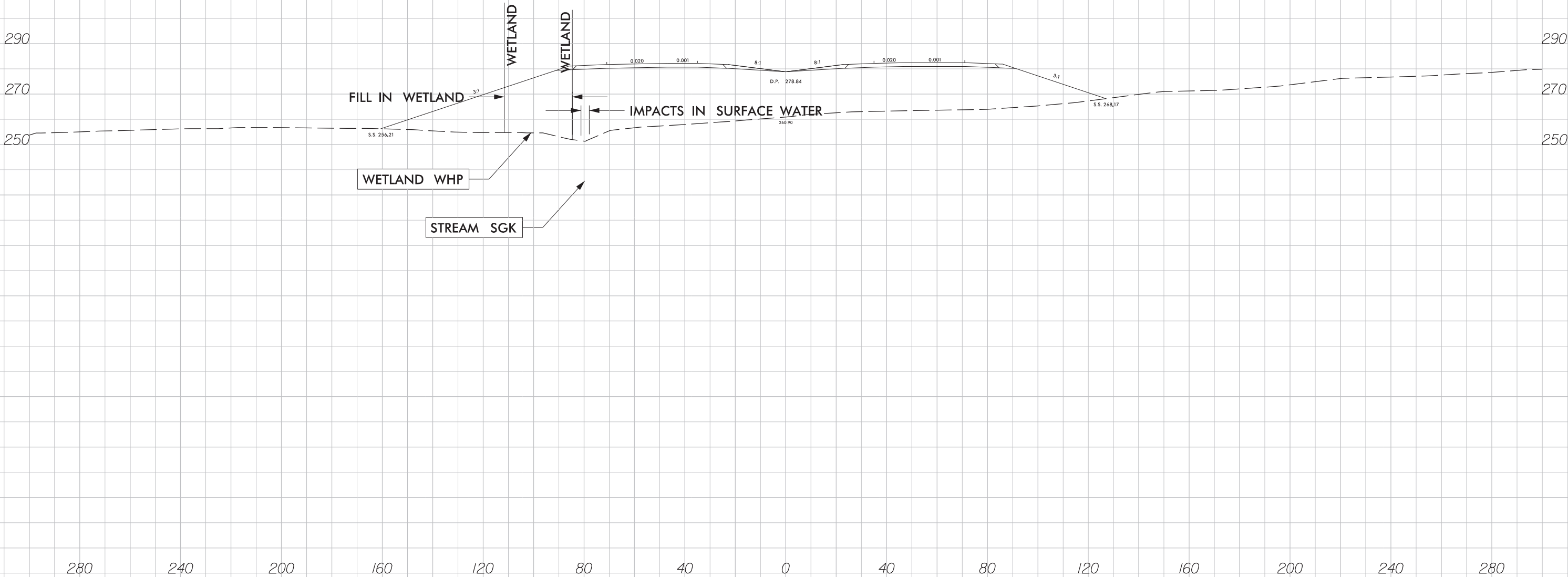
XXXX PAVEMENT REMOVAL  
■■■■ PAVED SHOULDER





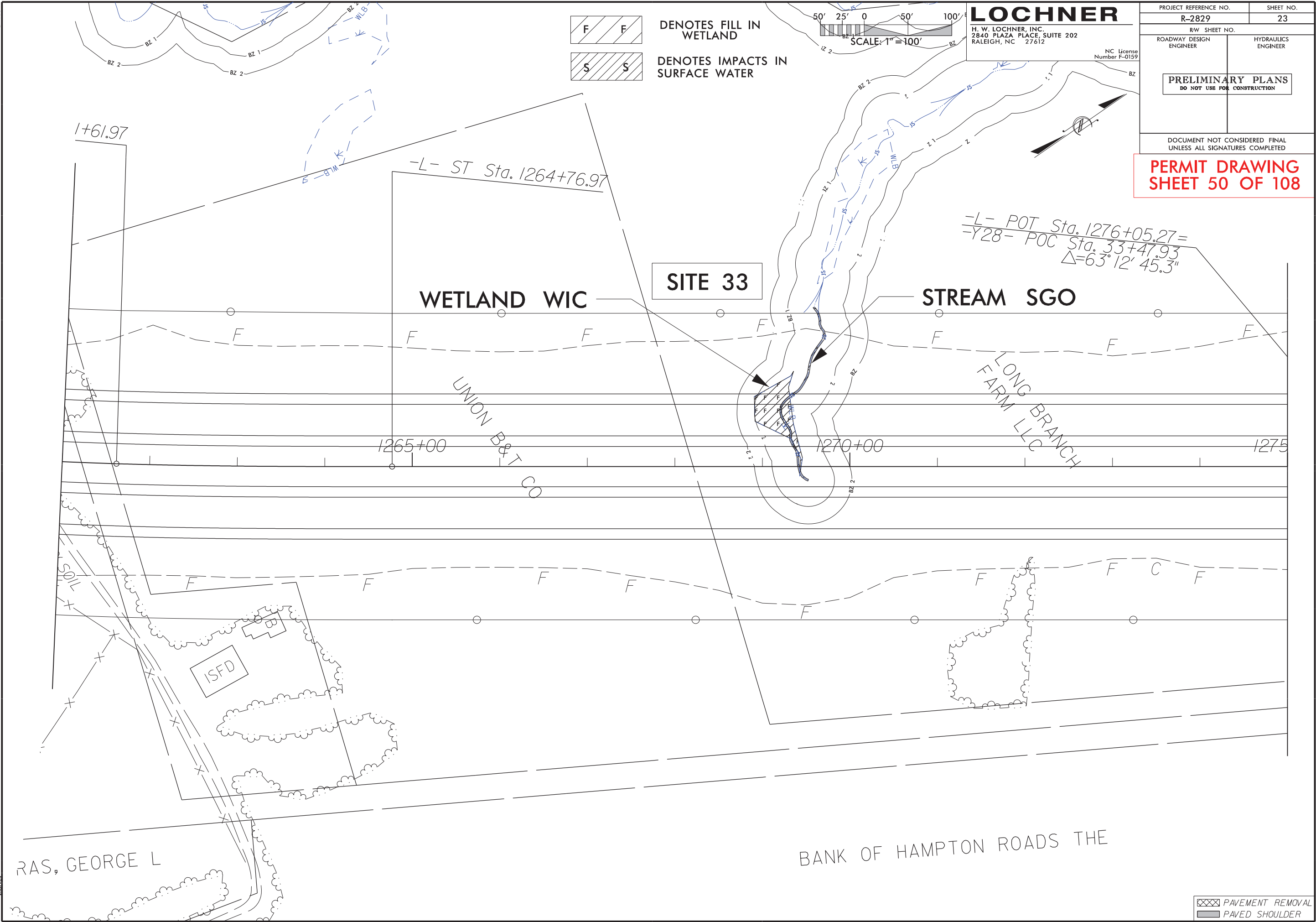
PERMIT DRAWING  
SHEET 49 OF 108

CROSS SECTION  
SITE 23, WETLAND WHP  
STATION 1243+50 -L-



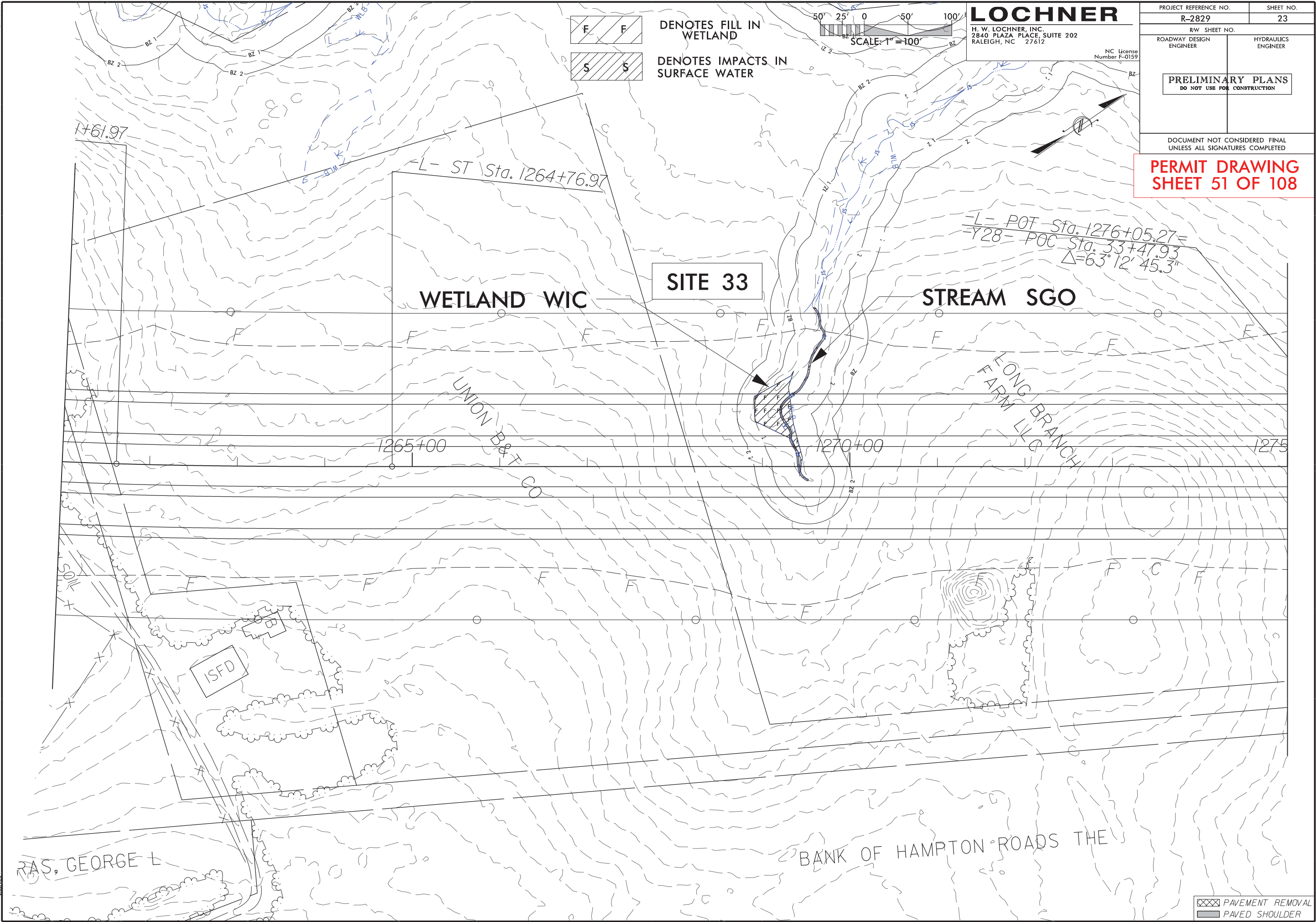
51499

7/2/2018  
2020\_hyd\_orm\_wet\_psh\_23.dgn  
lbrw



51499

7/20/2018  
2020 Hyd\_prm\_wet\_psh\_23a.dgn  
lhw



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H. W. LOCHNER, INC.  
2840 PLAZA PLACE, SUITE 202  
RALEIGH, NC 27612

NC License  
Number F-0159

PROJECT REFERENCE NO.

R-2829

SHEET NO.

23

RW SHEET NO.

ROADWAY DESIGN  
ENGINEER

HYDRAULICS  
ENGINEER

**PRELIMINARY PLANS**  
DO NOT USE FOR CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED

**PERMIT DRAWING**  
**SHEET 51 OF 108**

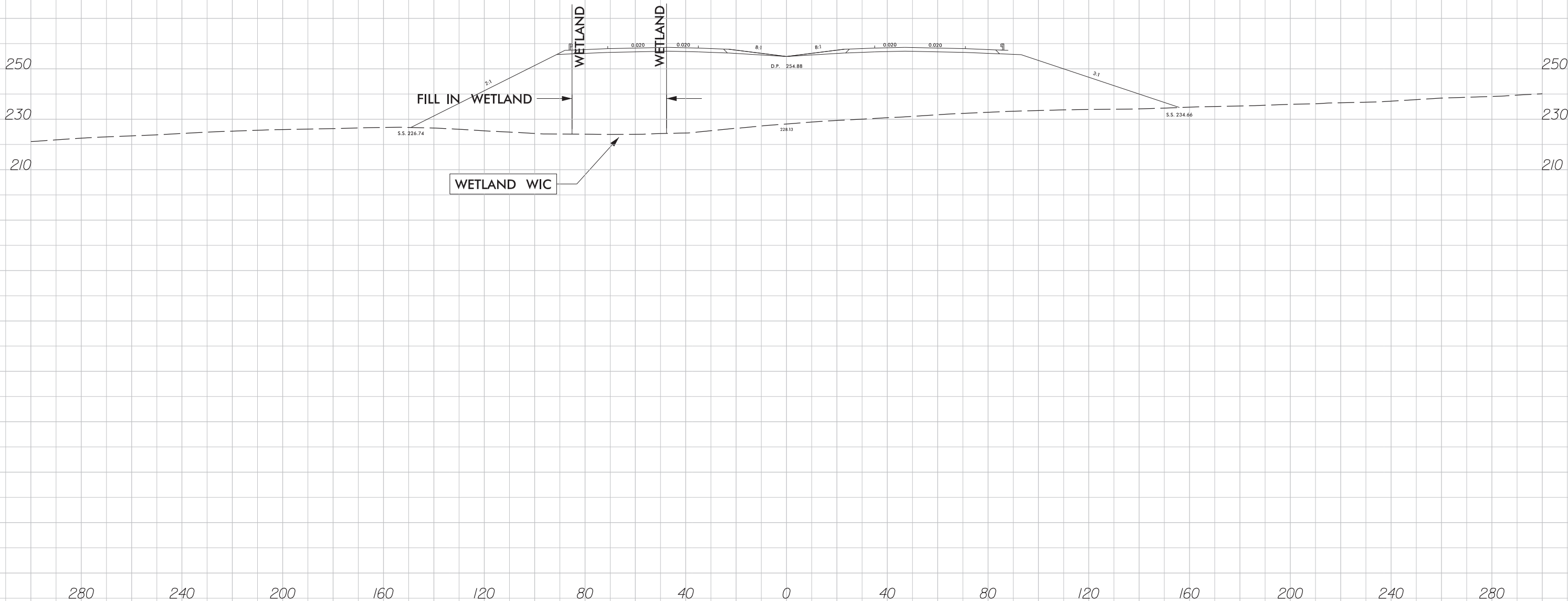




PROJ. REFERENCE NO.	SHEET NO.
R-2829	

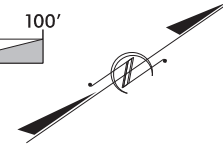
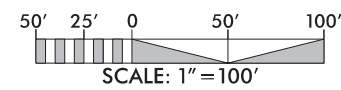
PERMIT DRAWING  
SHEET 52 OF 108

CROSS SECTION  
SITE 33, WETLAND WIC  
STATION 1269+00 -L-



51499

7/20/2018  
2020\_hyd\_perm\_wet\_psh\_24.dgn  
lbrw



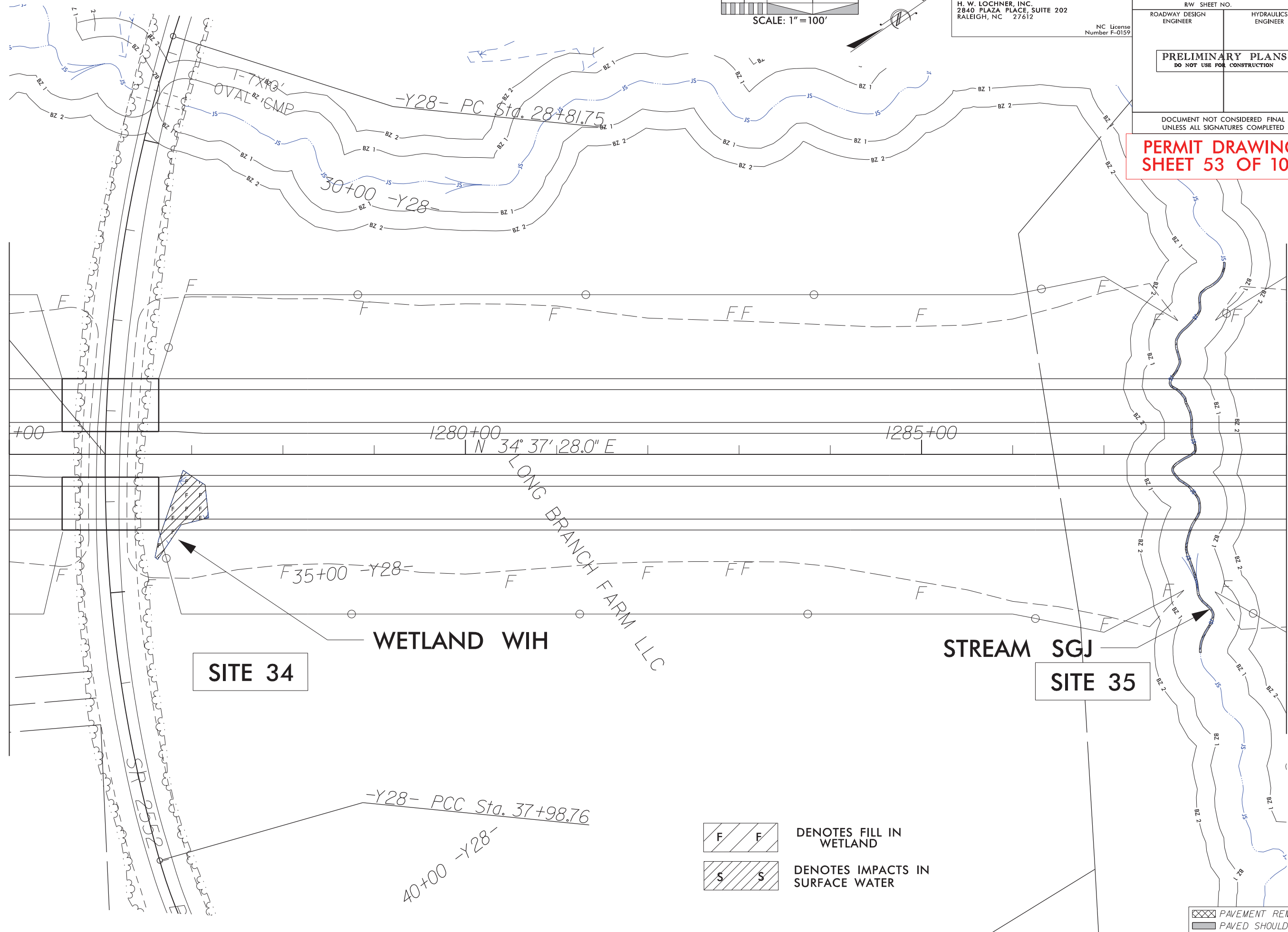
**LOCHNER**

H. W. LOCHNER, INC.  
2840 PLAZA PLACE, SUITE 202  
RALEIGH, NC 27612

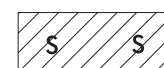
NC License  
Number F-0159

PROJECT REFERENCE NO.		SHEET NO.	
R-2829		24	
R/W SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
<div>PRELIMINARY PLANS</div> <div>DO NOT USE FOR CONSTRUCTION</div>			
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			

**PERMIT DRAWING  
SHEET 53 OF 108**



DENOTES FILL IN  
WETLAND

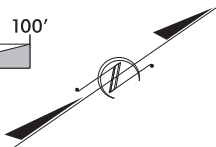
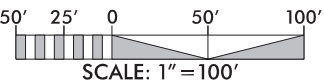


DENOTES IMPACTS IN  
SURFACE WATER

- PAVEMENT REMOVAL
- PAVED SHOULDER

51499

7/20/2018  
8/2/2019 - hyd\_prm\_wet\_psh\_24a.dgn  
jhanway



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H. W. LOCHNER, INC.  
2840 PLAZA PLACE, SUITE 202  
RALEIGH, NC 27612

NC License  
Number F-0159

PROJECT REFERENCE NO.

R-2829

SHEET NO.

24

R/W SHEET NO.

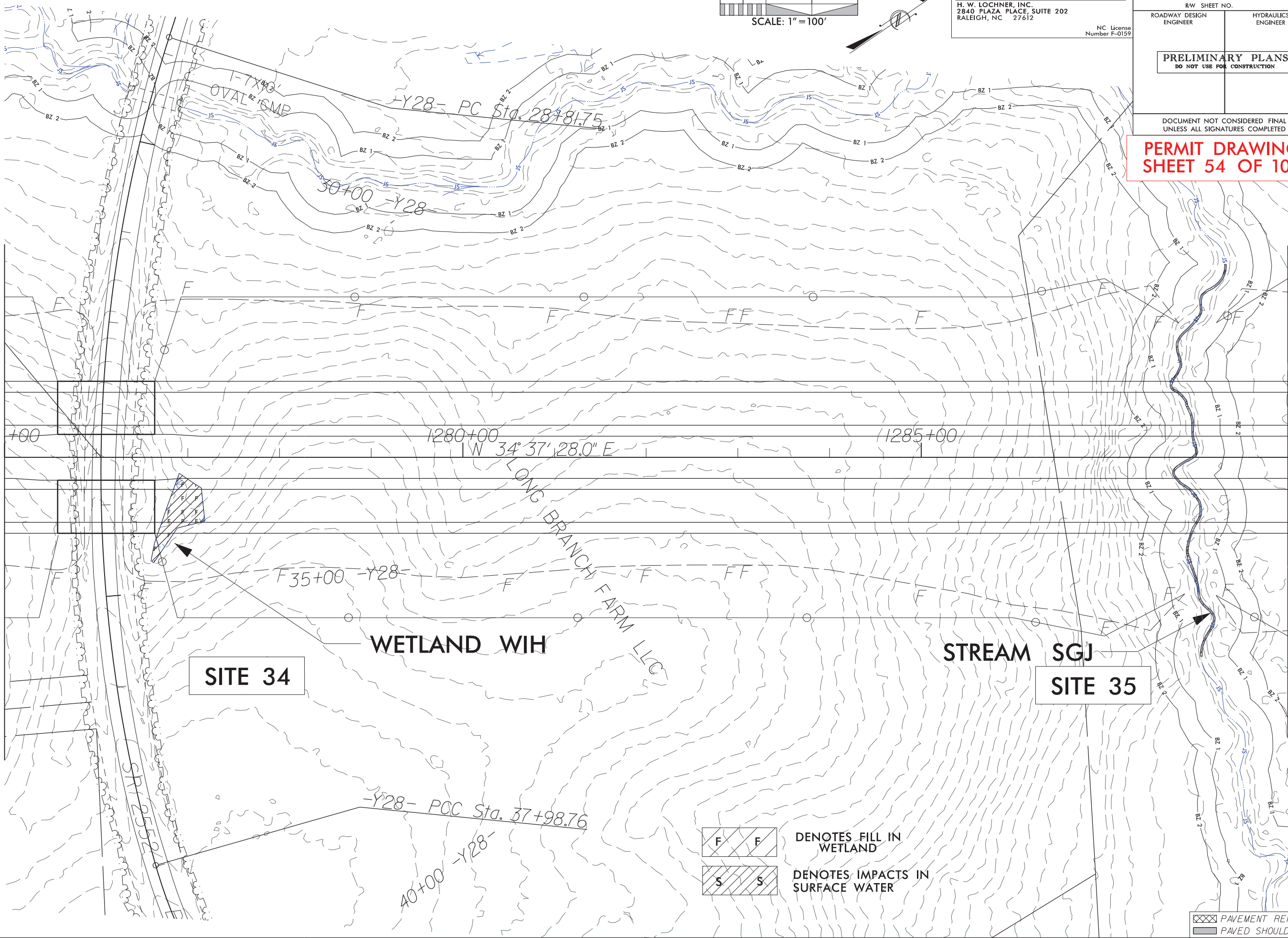
ROADWAY DESIGN  
ENGINEER

HYDRAULICS  
ENGINEER

**PRELIMINARY PLANS**  
DO NOT USE FOR CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED

**PERMIT DRAWING**  
**SHEET 54 OF 108**



DENOTES FILL IN  
WETLAND



DENOTES IMPACTS IN  
SURFACE WATER

XX PAVEMENT REMOVAL  
SS PAVED SHOULDER

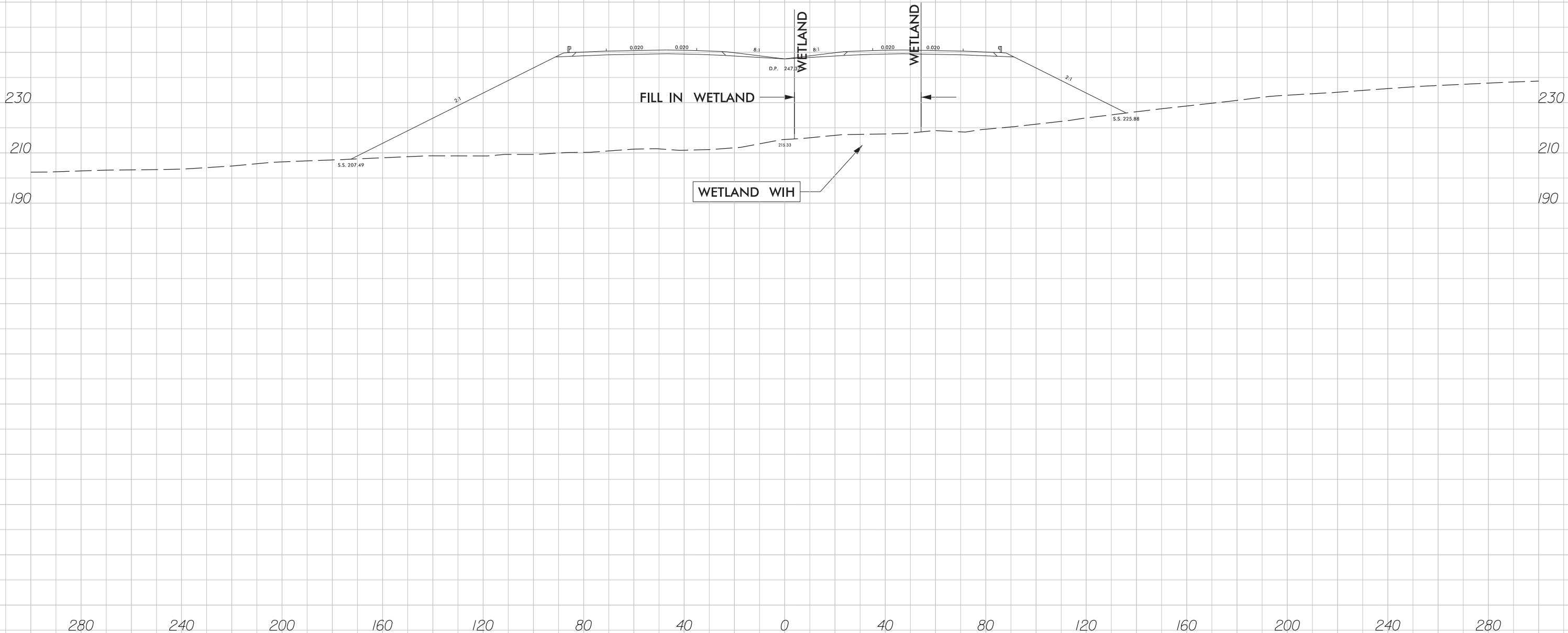




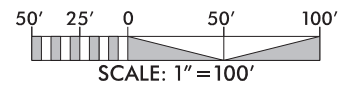
PROJ. REFERENCE NO.	SHEET NO.
R-2829	

PERMIT DRAWING  
SHEET 55 OF 108

CROSS SECTION  
SITE 34, WETLAND WIH  
STATION 1277+00 -L-



51499



**LOCHNER**

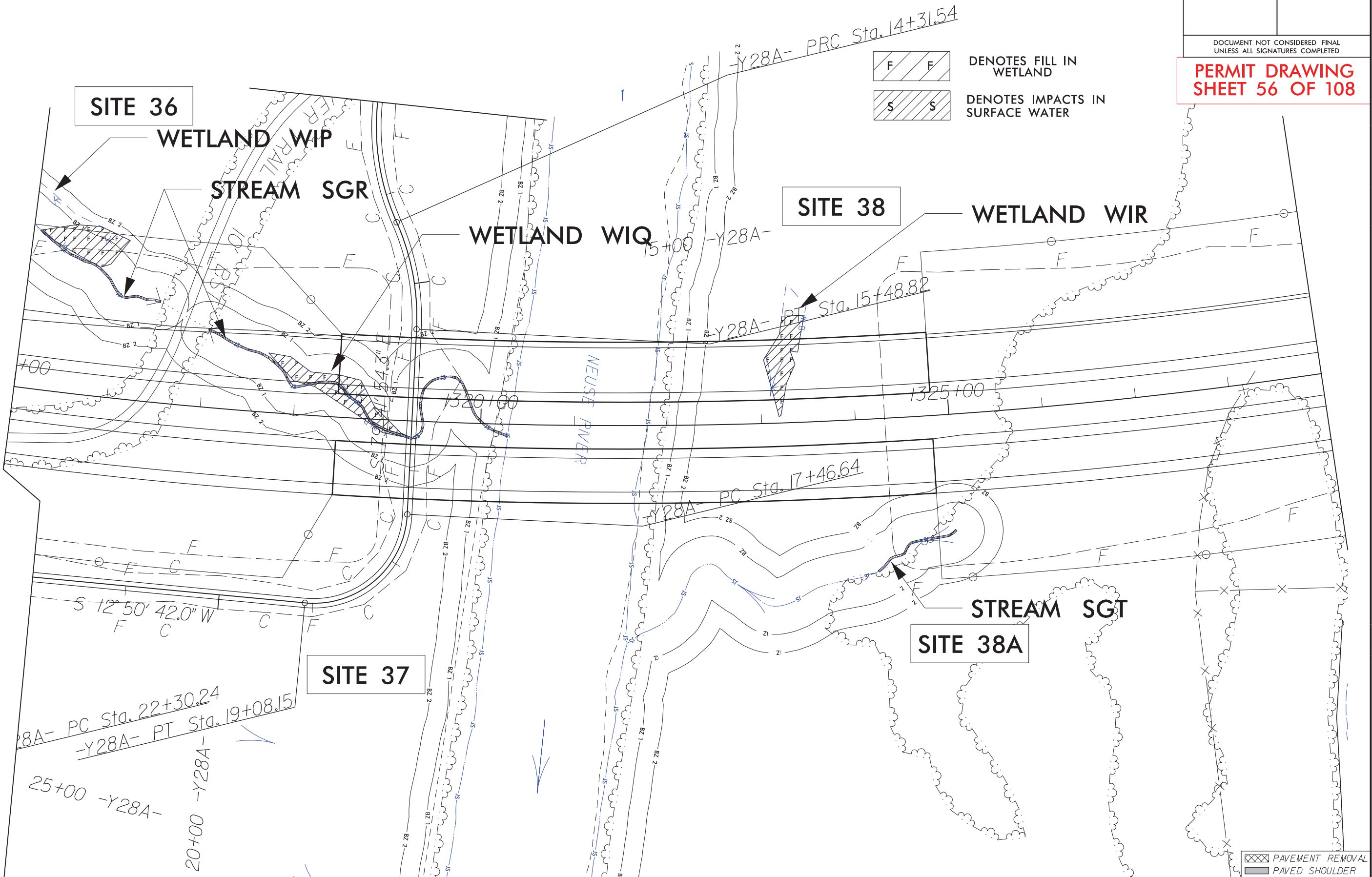
H. W. LOCHNER, INC.  
2840 PLAZA PLACE, SUITE 202  
RALEIGH, NC 27612

NC License  
Number F-0159



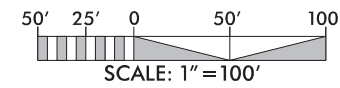
PROJECT REFERENCE NO.		SHEET NO.
R-2829		27
RW SHEET NO.		
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER
<div>PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION</div>		
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED		

**PERMIT DRAWING  
SHEET 56 OF 108**



7/2/2018  
10:27  
2027\_hyd\_perm\_wet\_psh\_27.dgn  
lhw

51499



**LOCHNER**

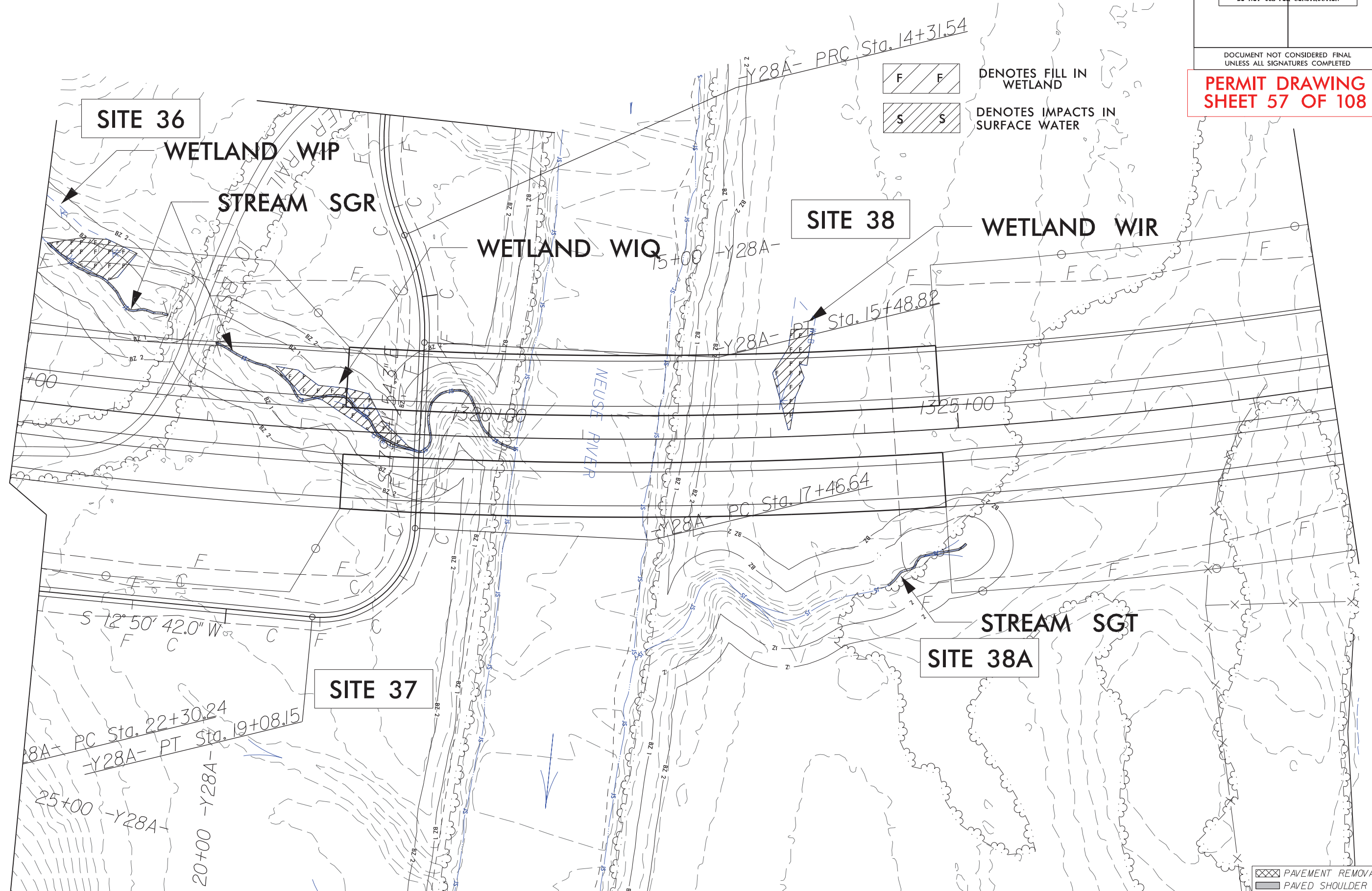
H. W. LOCHNER, INC.  
2840 PLAZA PLACE, SUITE 202  
RALEIGH, NC 27612

NC License  
Number F-0159



PROJECT REFERENCE NO.		SHEET NO.	
R-2829		27	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
<div>PRELIMINARY PLANS</div> <div>DO NOT USE FOR CONSTRUCTION</div>			
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			

**PERMIT DRAWING**  
**SHEET 57 OF 108**



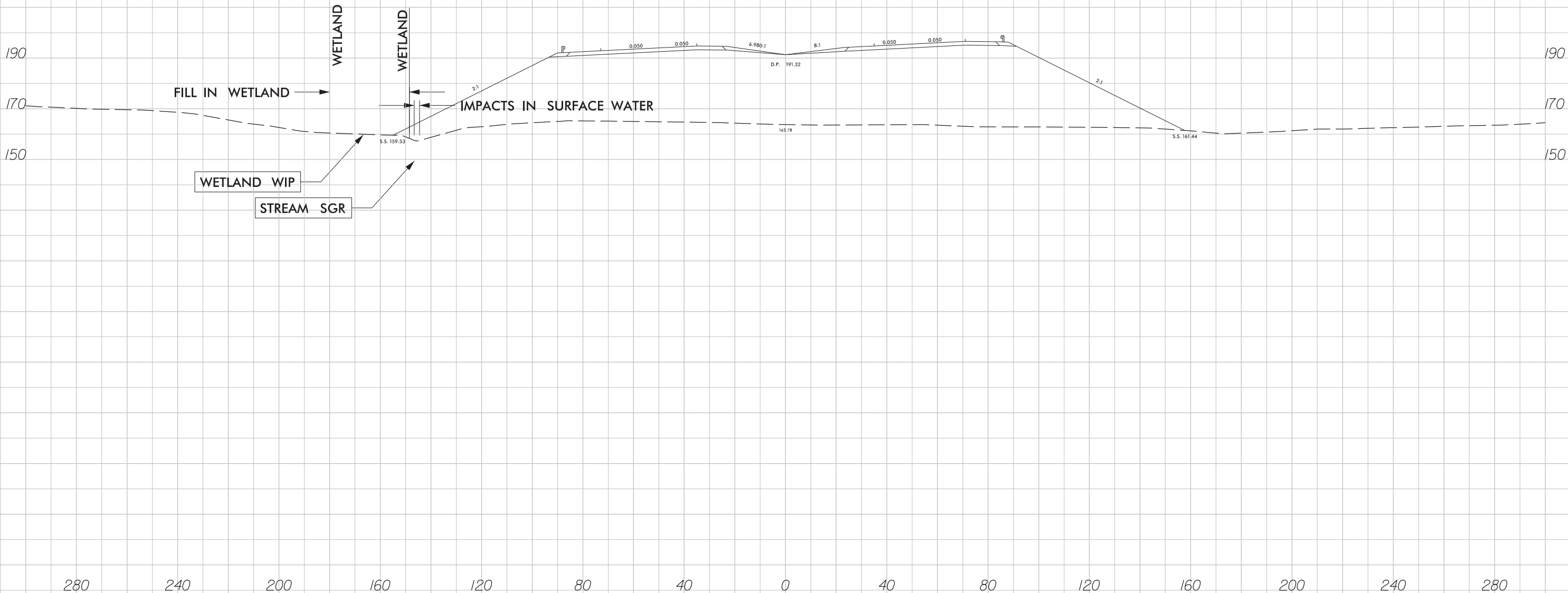
7/20/2018  
2020 Hyd\_prm\_wet\_psh\_27a.dgn  
hwy





PERMIT DRAWING  
SHEET 58 OF 108

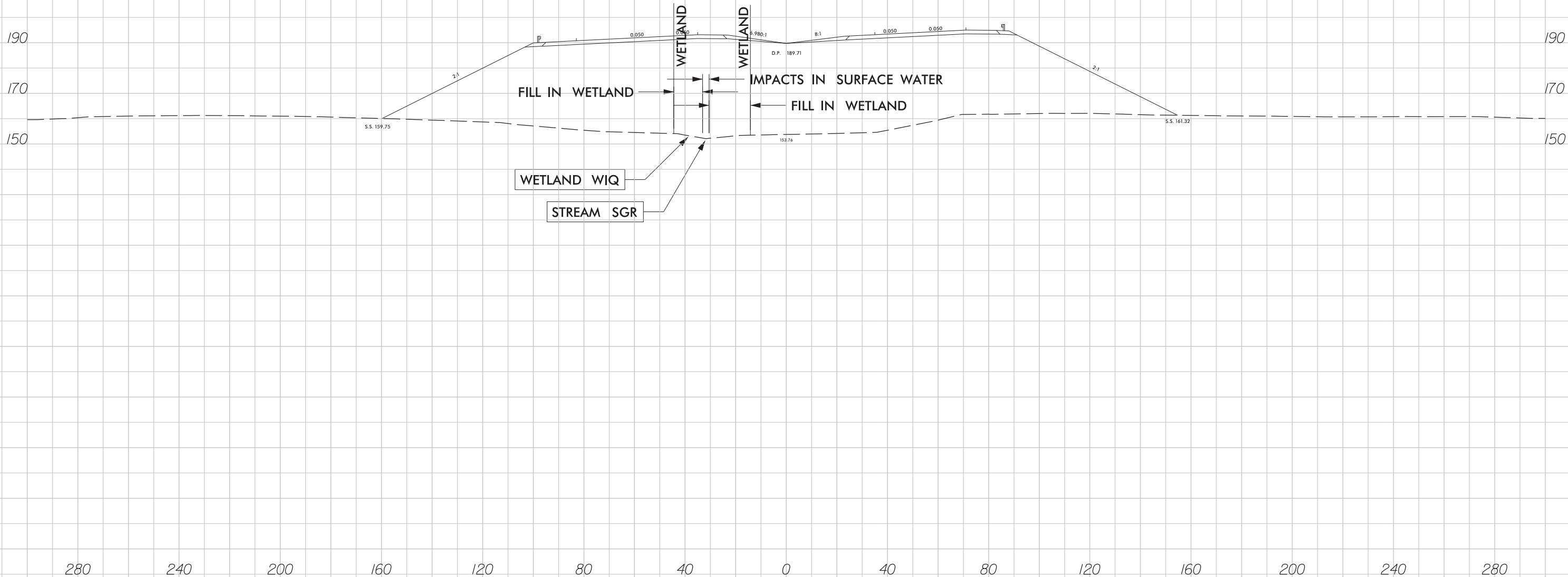
CROSS SECTION  
SITE 36, WETLAND WIP  
STATION 1315 + 50 -L-





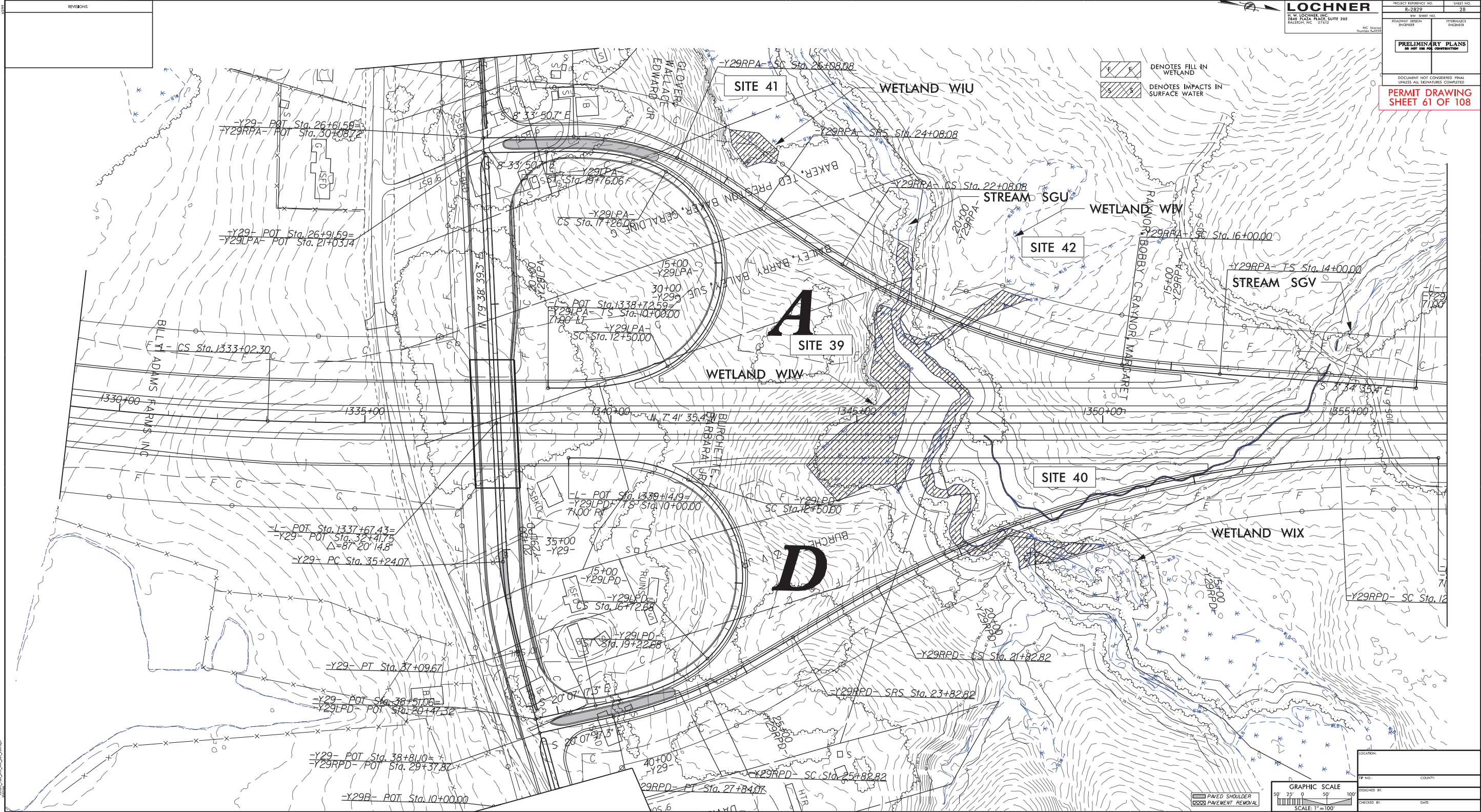
PERMIT DRAWING  
SHEET 59 OF 108

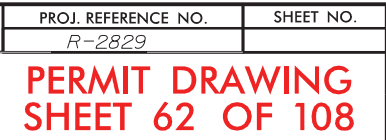
CROSS SECTION  
SITE 37, WETLAND WIQ  
STATION 1318 + 50 -L-



[illegible]





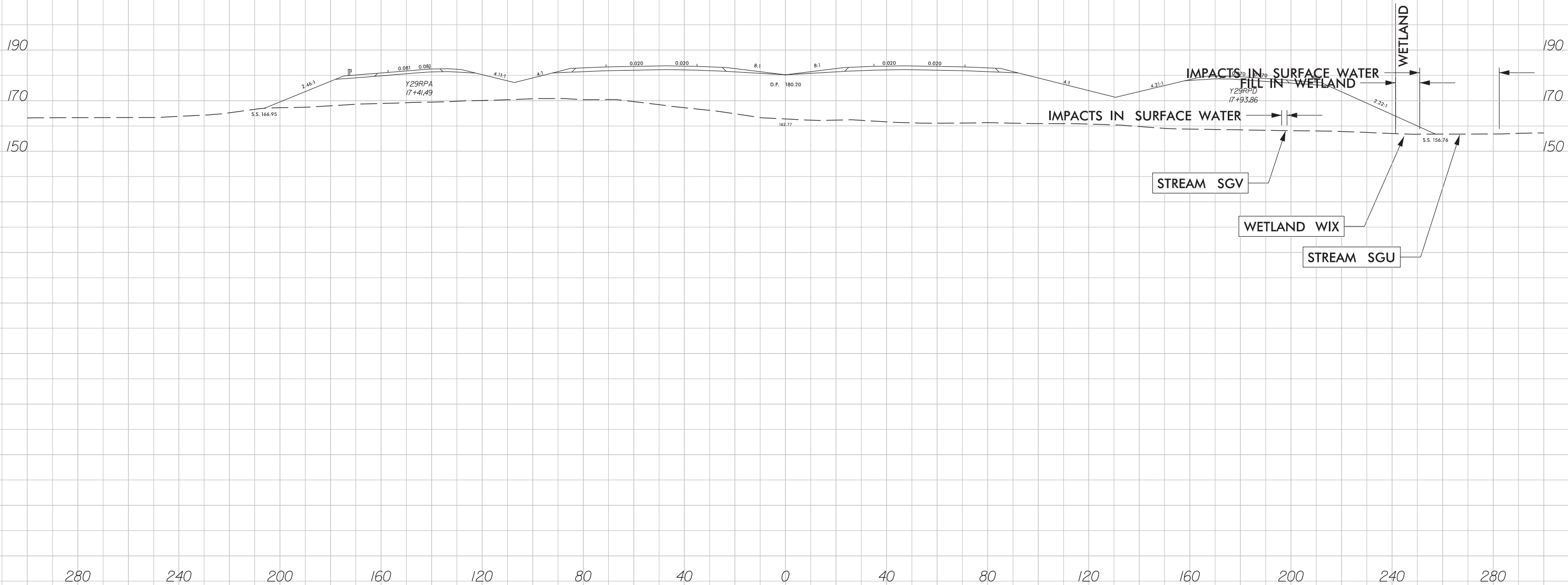


PERMIT DRAWING  
SHEET 62 OF 108



CROSS SECTION  
SITE 40, WETLAND WIX  
STATION 1349+00 -L-

PERMIT DRAWING  
SHEET 63 OF 108

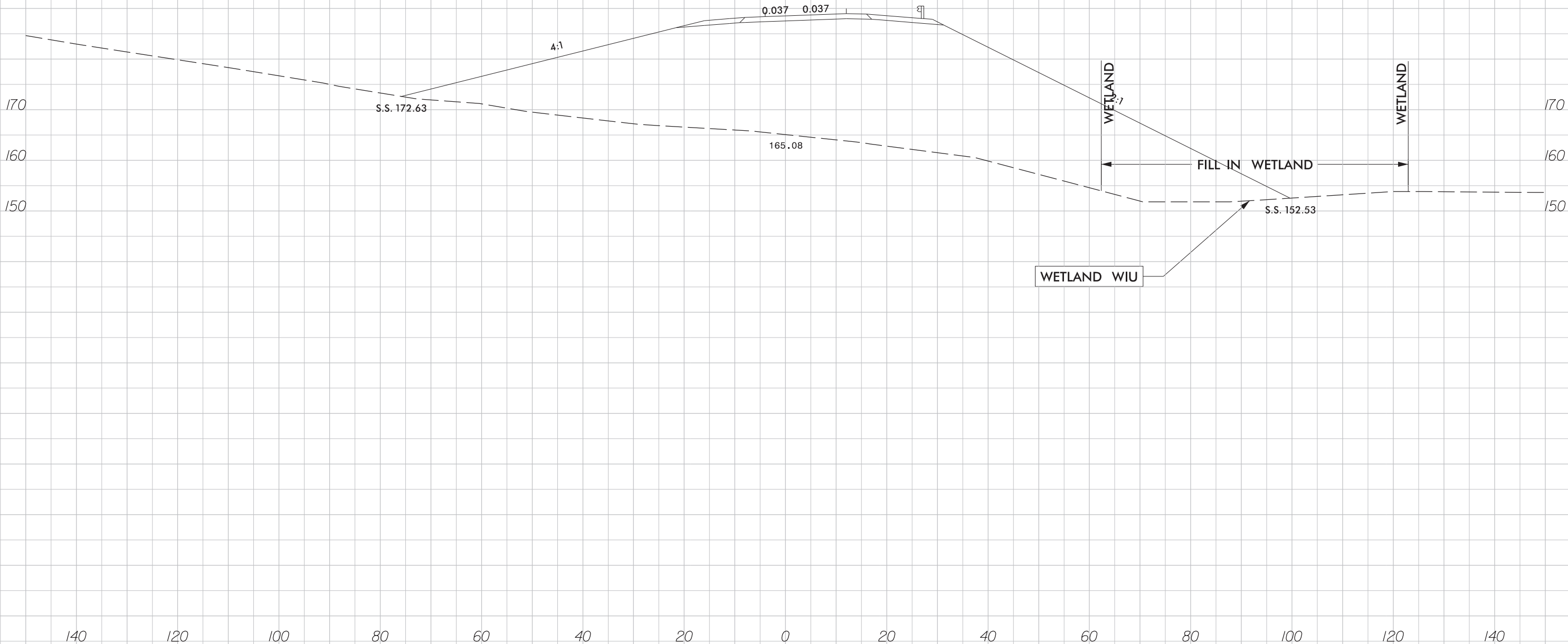






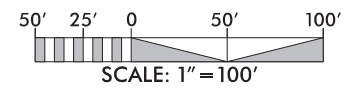
PERMIT DRAWING  
SHEET 64 OF 108

CROSS SECTION  
SITE 41, WETLAND WIU  
STATION 25+00 -Y29RPA-



51499

7/2/2018  
2020\_hyd\_perm\_wet\_psh\_30.dgn  
lbrw



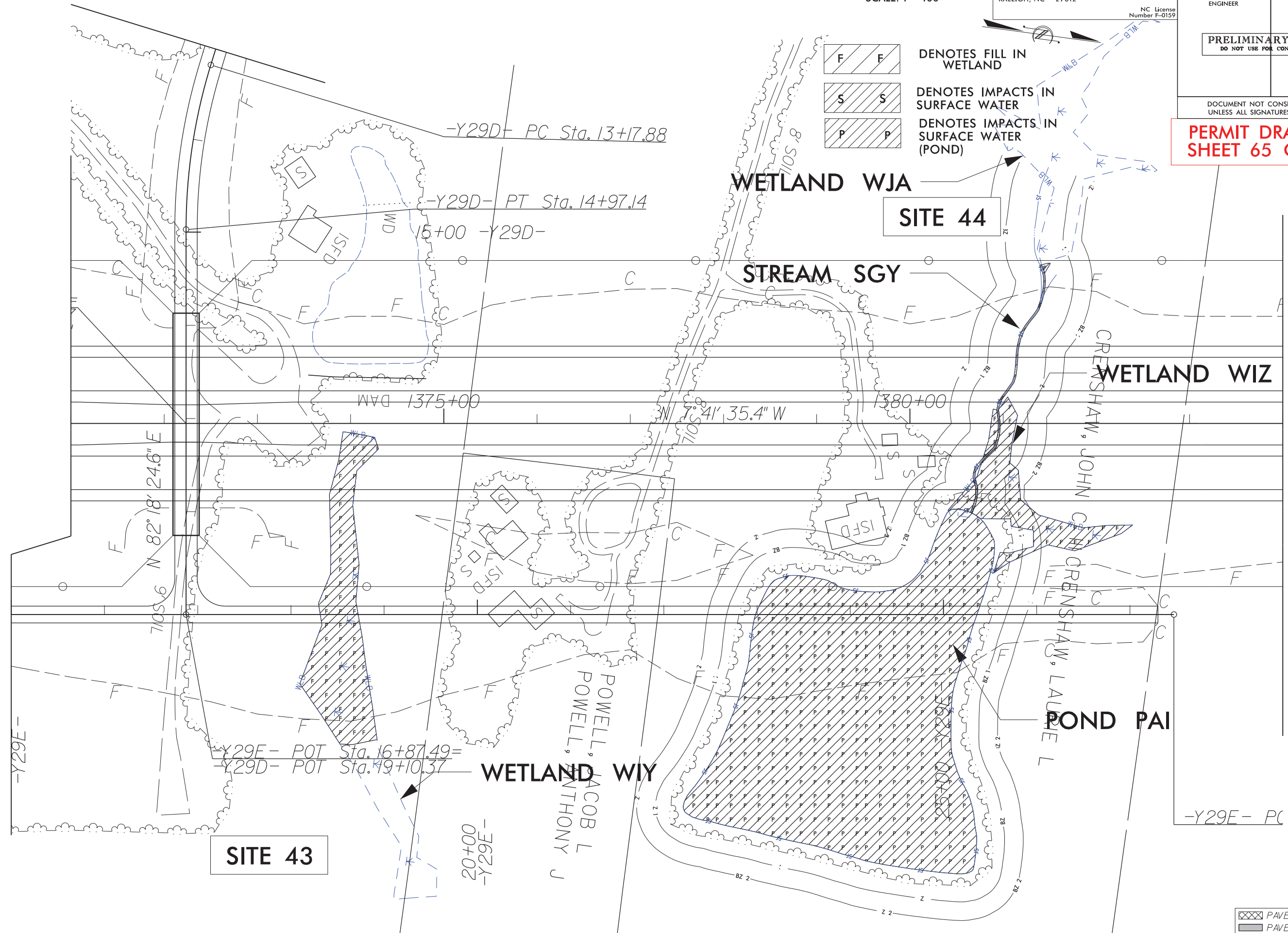
**LOCHNER**

H. W. LOCHNER, INC.  
2840 PLAZA PLACE, SUITE 202  
RALEIGH, NC 27612

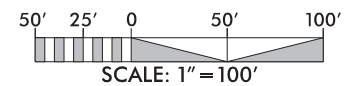
NC License  
Number F-0159

PROJECT REFERENCE NO.		SHEET NO.	
R-2829		30	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
<div>PRELIMINARY PLANS</div> <div>DO NOT USE FOR CONSTRUCTION</div>			
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			

**PERMIT DRAWING  
SHEET 65 OF 108**



PAVEMENT REMOVAL  
PAVED SHOULDER



**LOCHNER**

H. W. LOCHNER, INC.  
2840 PLAZA PLACE, SUITE 202  
RALEIGH, NC 27612

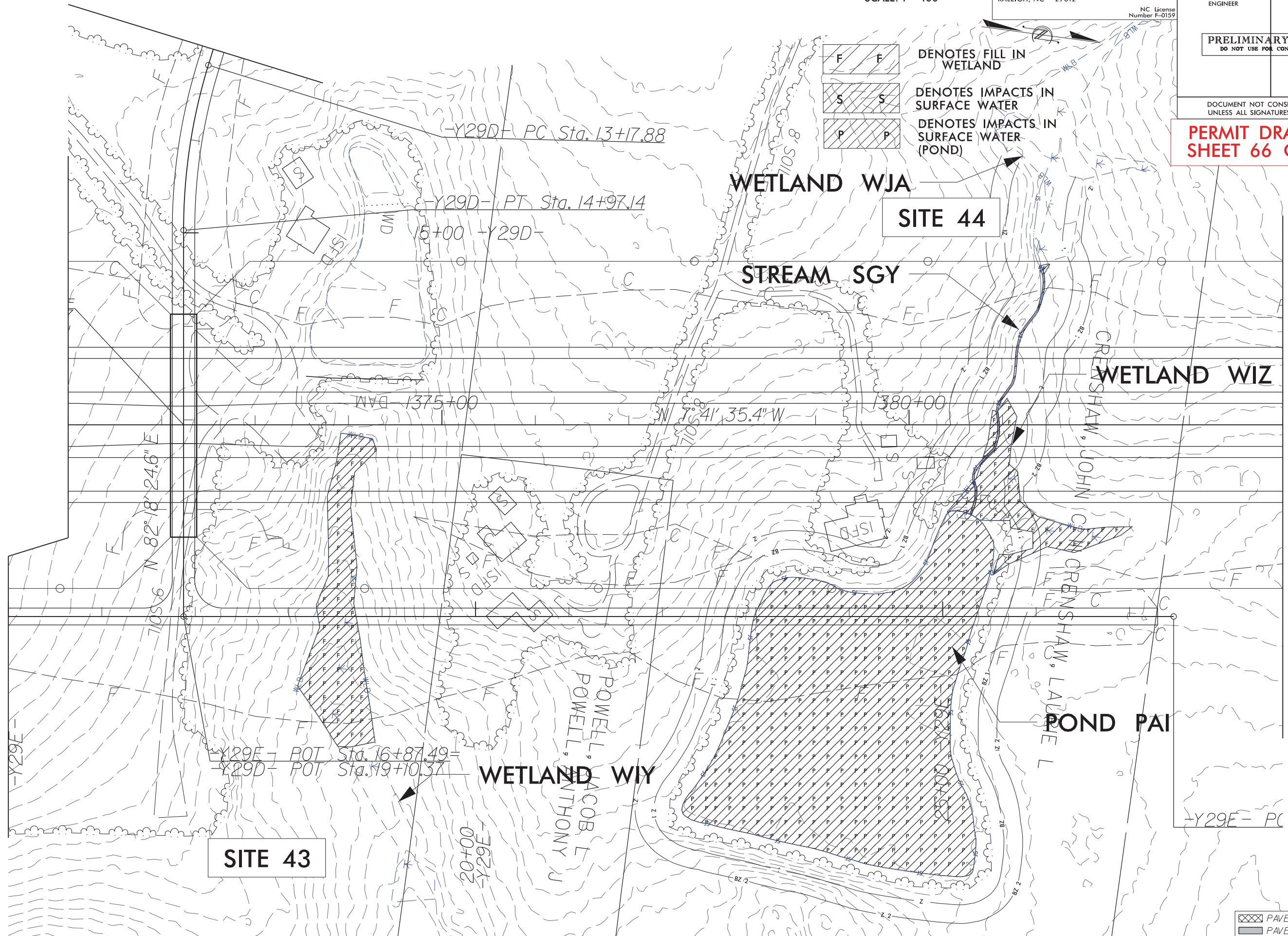
NC License  
Number F-0159

PROJECT REFERENCE NO.		SHEET NO.
R-2829		30
RW SHEET NO.		
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER

**PRELIMINARY PLANS**  
DO NOT USE FOR CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED

**PERMIT DRAWING**  
**SHEET 66 OF 108**

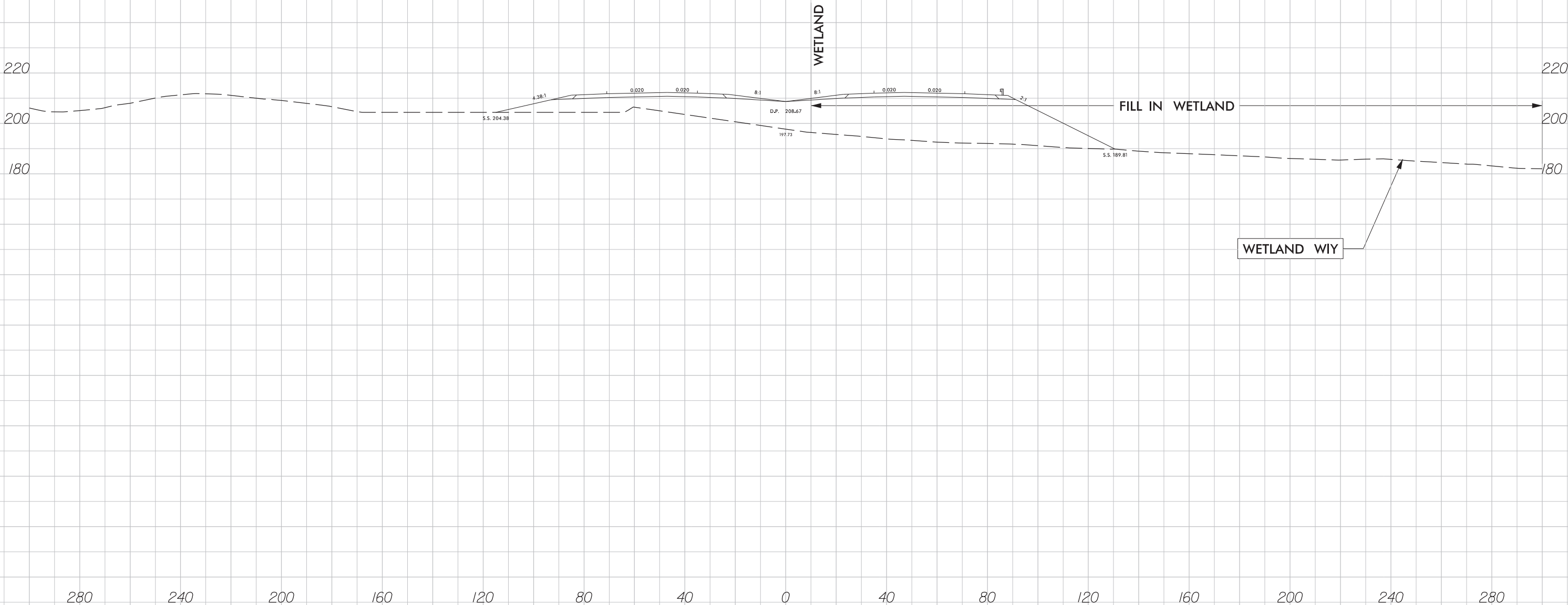






PERMIT DRAWING  
SHEET 67 OF 108

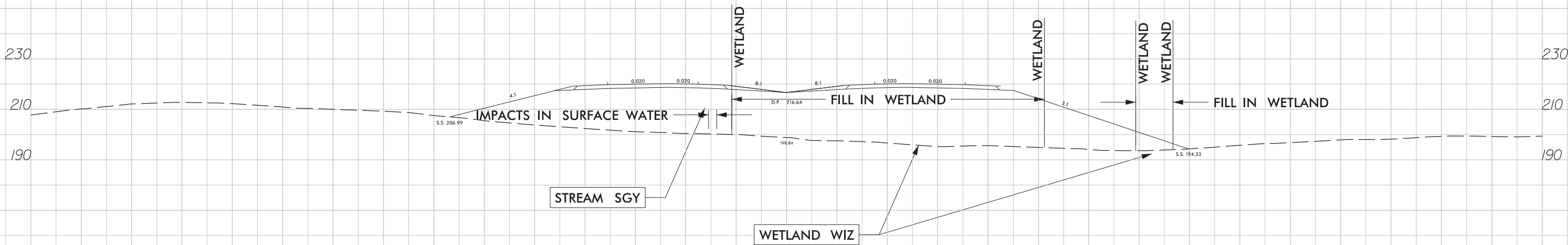
CROSS SECTION  
SITE 43, WETLAND WIY  
STATION 1374+00 -L-





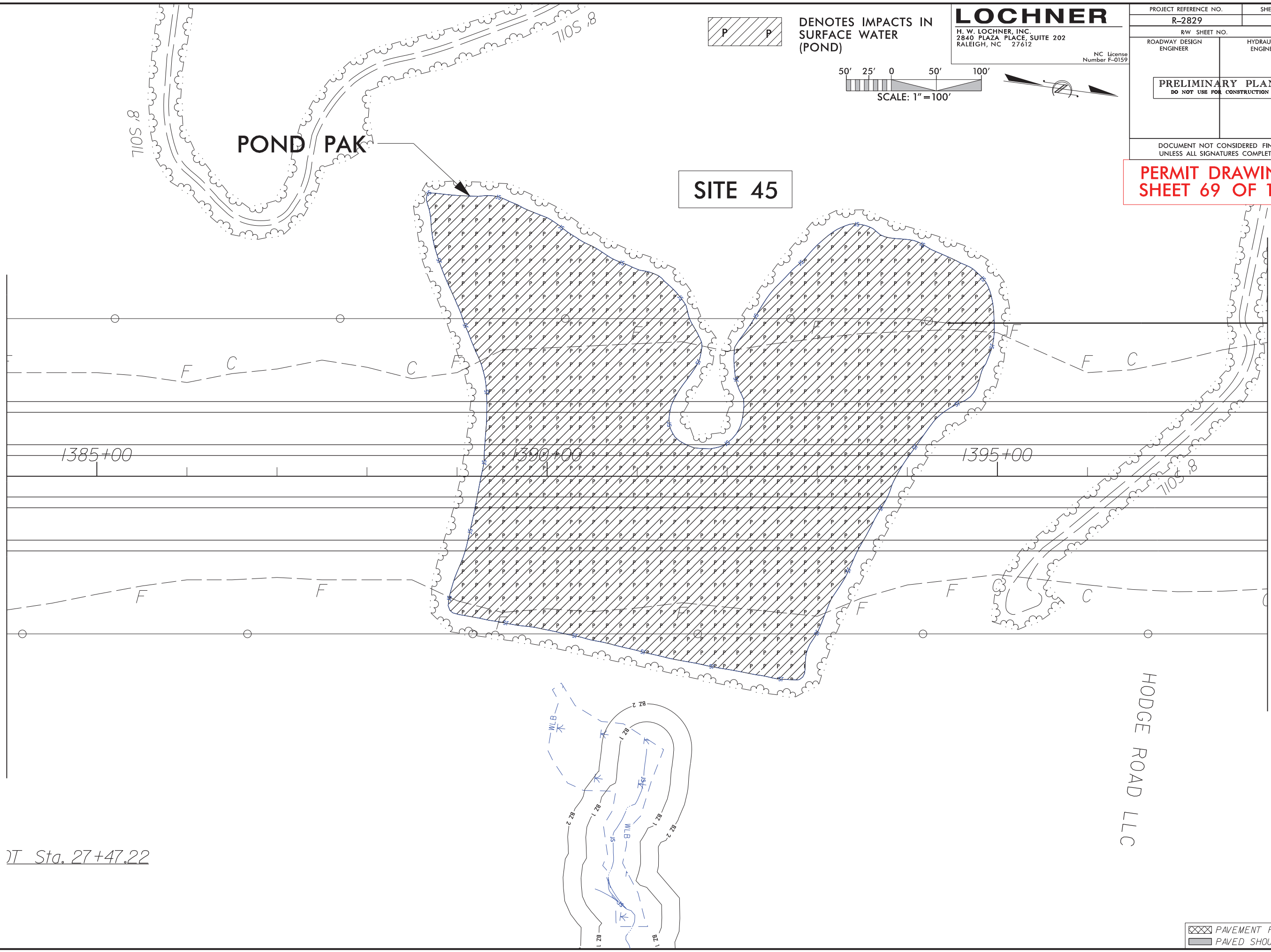
PERMIT DRAWING  
SHEET 68 OF 108

CROSS SECTION  
SITE 44, WETLAND WIZ  
STATION 1381+00 -L-



51499

7/2/2018  
20207\_hyd\_perm\_wet\_psh\_31.dgn  
lbrwax

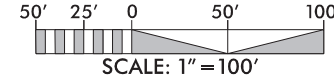


DENOTES IMPACTS IN  
SURFACE WATER  
(POND)

**LOCHNER**

H. W. LOCHNER, INC.  
2840 PLAZA PLACE, SUITE 202  
RALEIGH, NC 27612

NC License  
Number F-0159



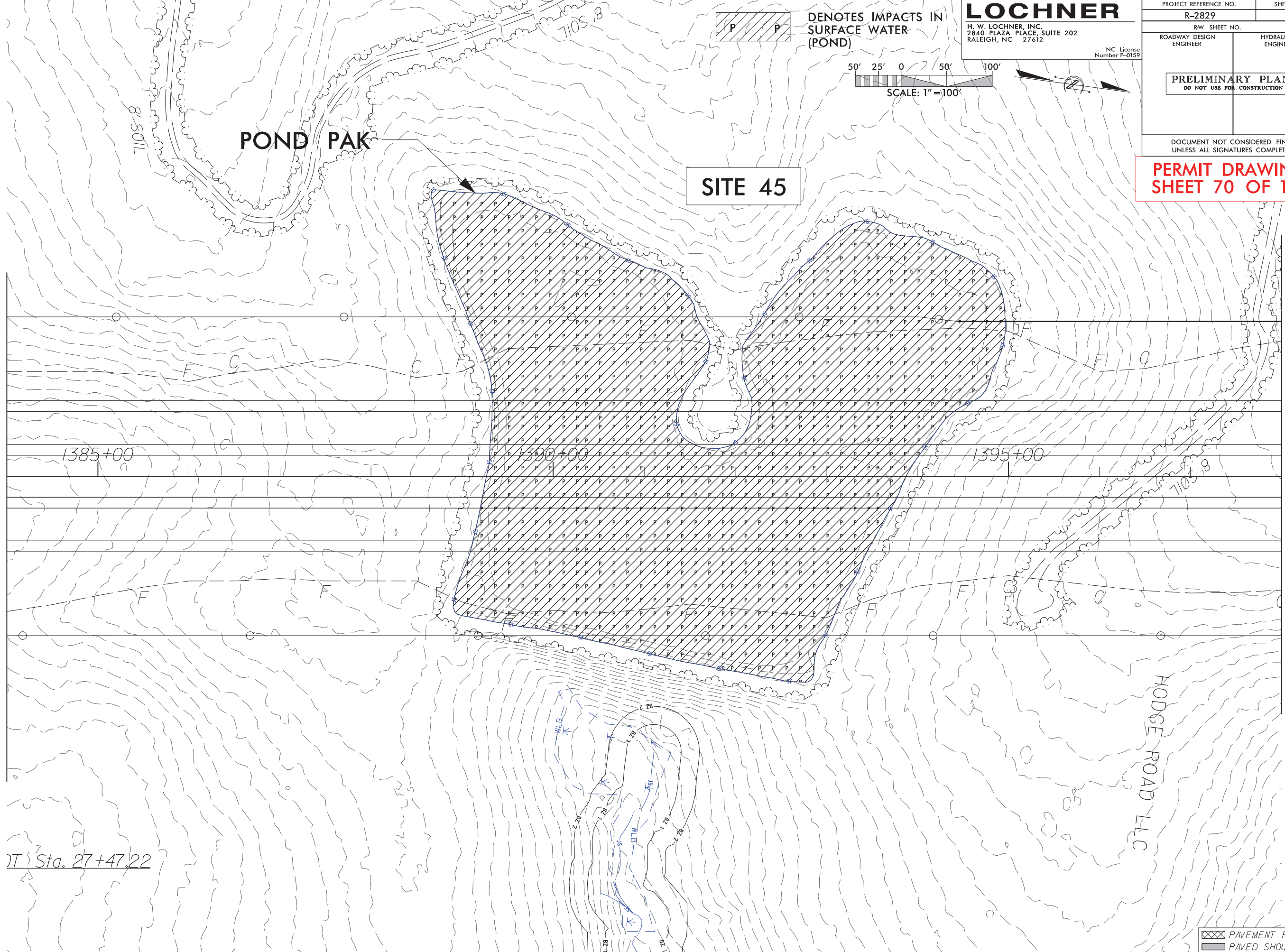
PROJECT REFERENCE NO.		SHEET NO.	
R-2829		31	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
<div>PRELIMINARY PLANS</div> <div>DO NOT USE FOR CONSTRUCTION</div>			
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			

**PERMIT DRAWING**  
**SHEET 69 OF 108**

XX PAVEMENT REMOVAL  
PAVED SHOULDER



51499  
7/20/2018  
2020\_Hyd\_prm\_wet\_psh\_31a.dgn  
lhorvay



P P

DENOTES IMPACTS IN  
SURFACE WATER  
(POND)

**LOCHNER**  
H. W. LOCHNER, INC.  
2840 PLAZA PLACE, SUITE 202  
RALEIGH, NC 27612  
NC License  
Number F-0159

50' 25' 0 50' 100'  
SCALE: 1"=100'



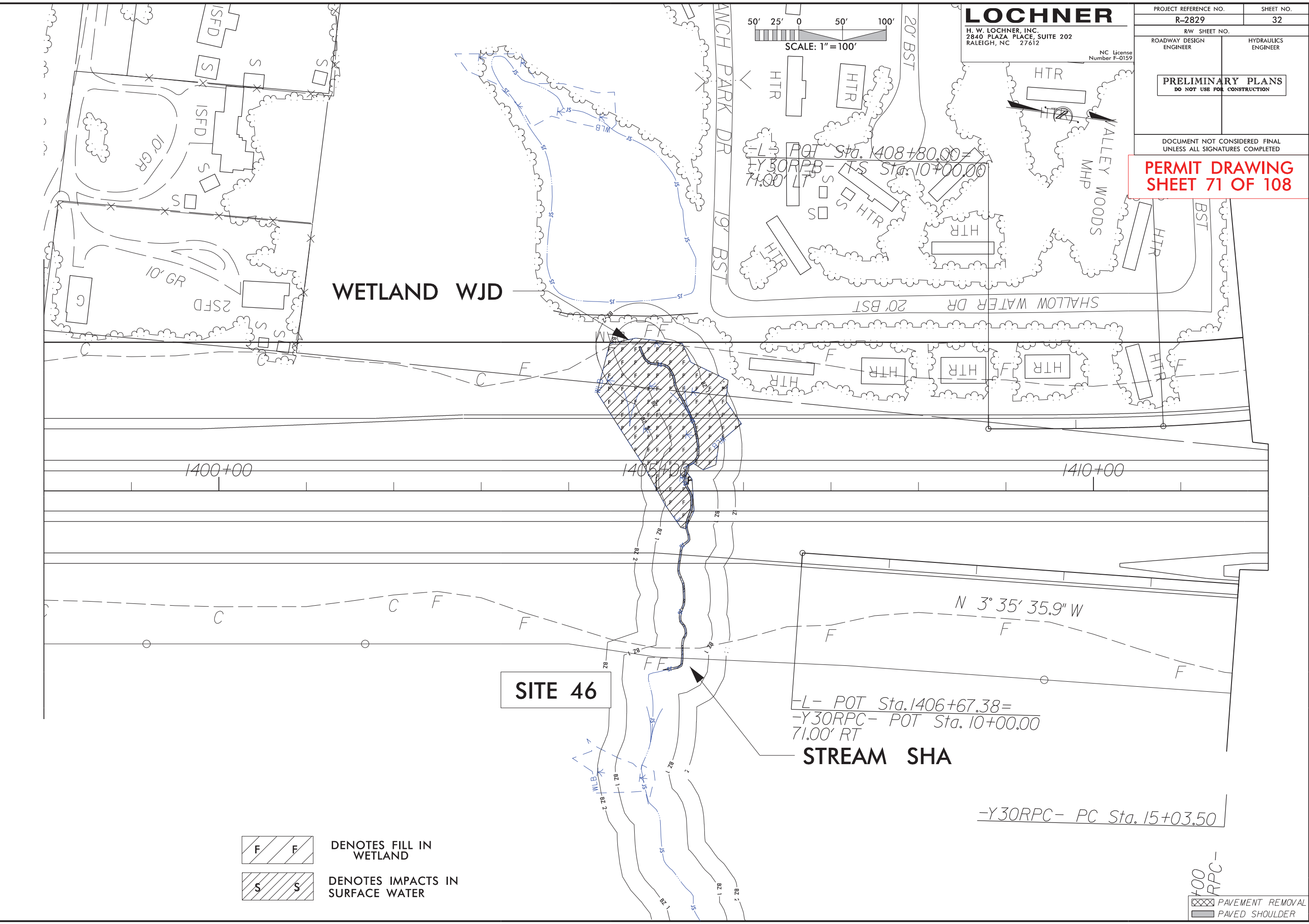
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R-2829		31	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
<div>PRELIMINARY PLANS</div> <div>DO NOT USE FOR CONSTRUCTION</div>			
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			

**PERMIT DRAWING  
SHEET 70 OF 108**

IT Sta. 27+47.22

X X X PAVEMENT REMOVAL  
PAVED SHOULDER

51499 7/20/2018 12:07 PM hyd\_perm\_wet\_psh\_32.dgn



PERMIT DRAWING  
SHEET 71 OF 108

PROJECT REFERENCE NO.		SHEET NO.	
R-2829		32	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
<div>PRELIMINARY PLANS</div> <div>DO NOT USE FOR CONSTRUCTION</div>			
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			

**LOCHNER**  
H. W. LOCHNER, INC.  
2840 PLAZA PLACE, SUITE 202  
RALEIGH, NC 27612  
NC License  
Number F-0159

50' 25' 0 50' 100'  
SCALE: 1"=100'

SITE 46

-L- POT Sta. 1406+67.38=  
-Y30RPC- POT Sta. 10+00.00  
71.00' RT

STREAM SHA

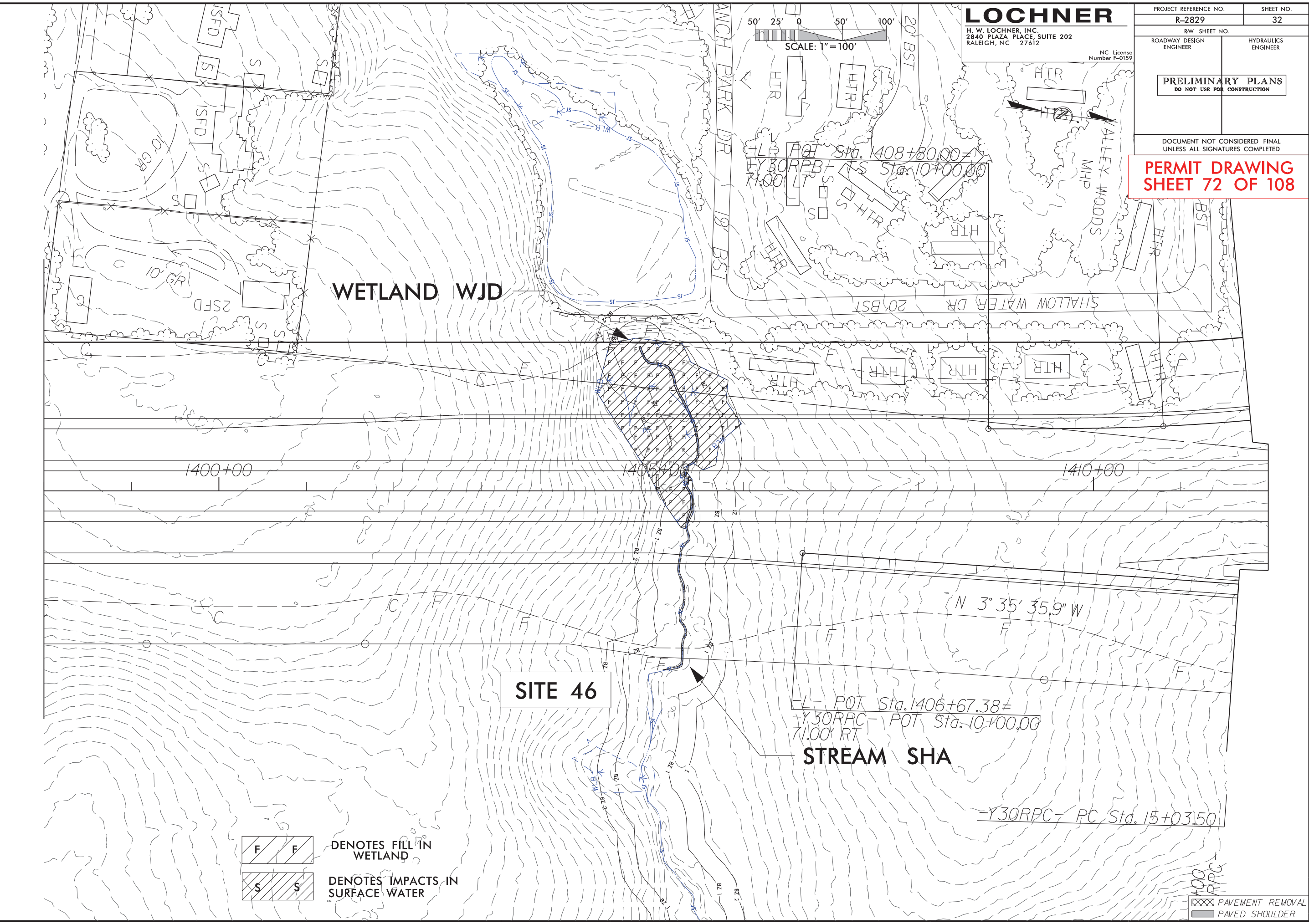
-Y30RPC- PC Sta. 15+03.50

F F DENOTES FILL IN WETLAND  
S S DENOTES IMPACTS IN SURFACE WATER

400 RPC-  
PAVEMENT REMOVAL  
PAVED SHOULDER



51499  
7/20/2018  
82029 - Hyd\_prm\_wet\_psh\_32a.dgn  
thorway



**LOCHNER**  
H. W. LOCHNER, INC.  
2840 PLAZA PLACE, SUITE 202  
RALEIGH, NC 27612  
NC License Number F-0159

PROJECT REFERENCE NO.  
**R-2829**

SHEET NO.  
**32**

RW SHEET NO.

ROADWAY DESIGN ENGINEER

HYDRAULICS ENGINEER

**PRELIMINARY PLANS**  
DO NOT USE FOR CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED

**PERMIT DRAWING**  
**SHEET 72 OF 108**

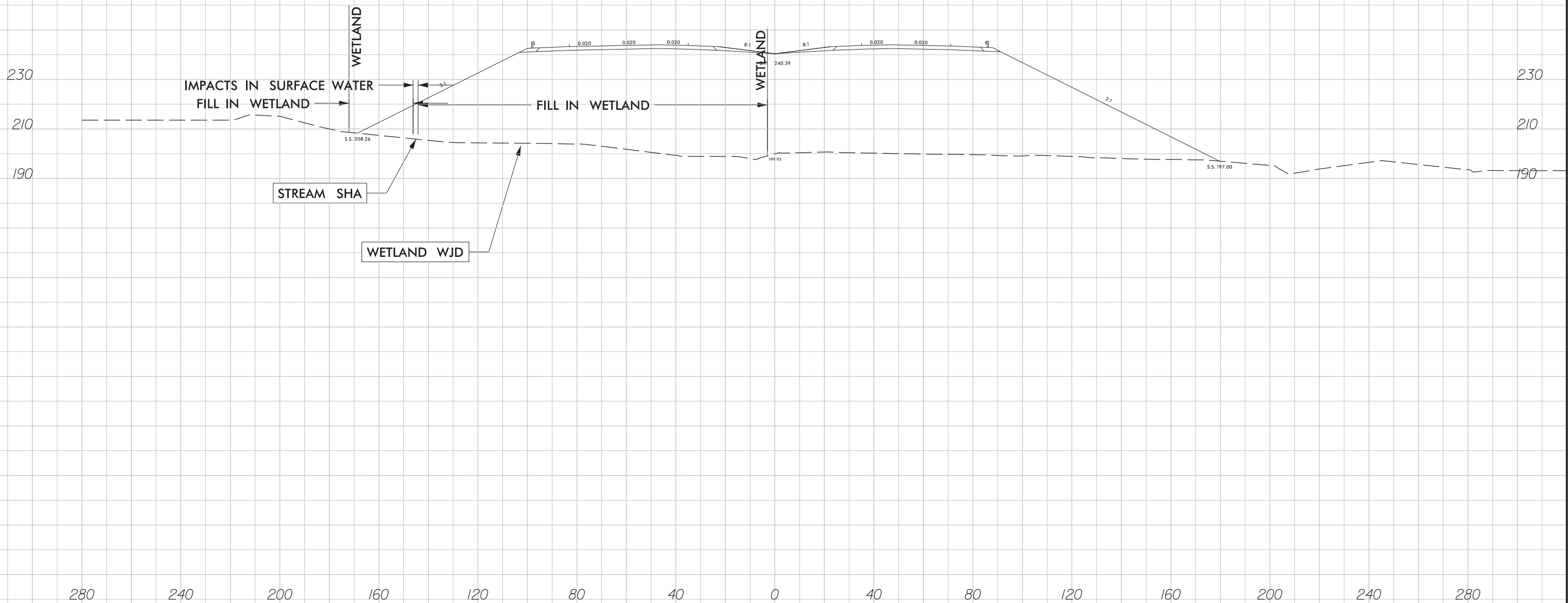


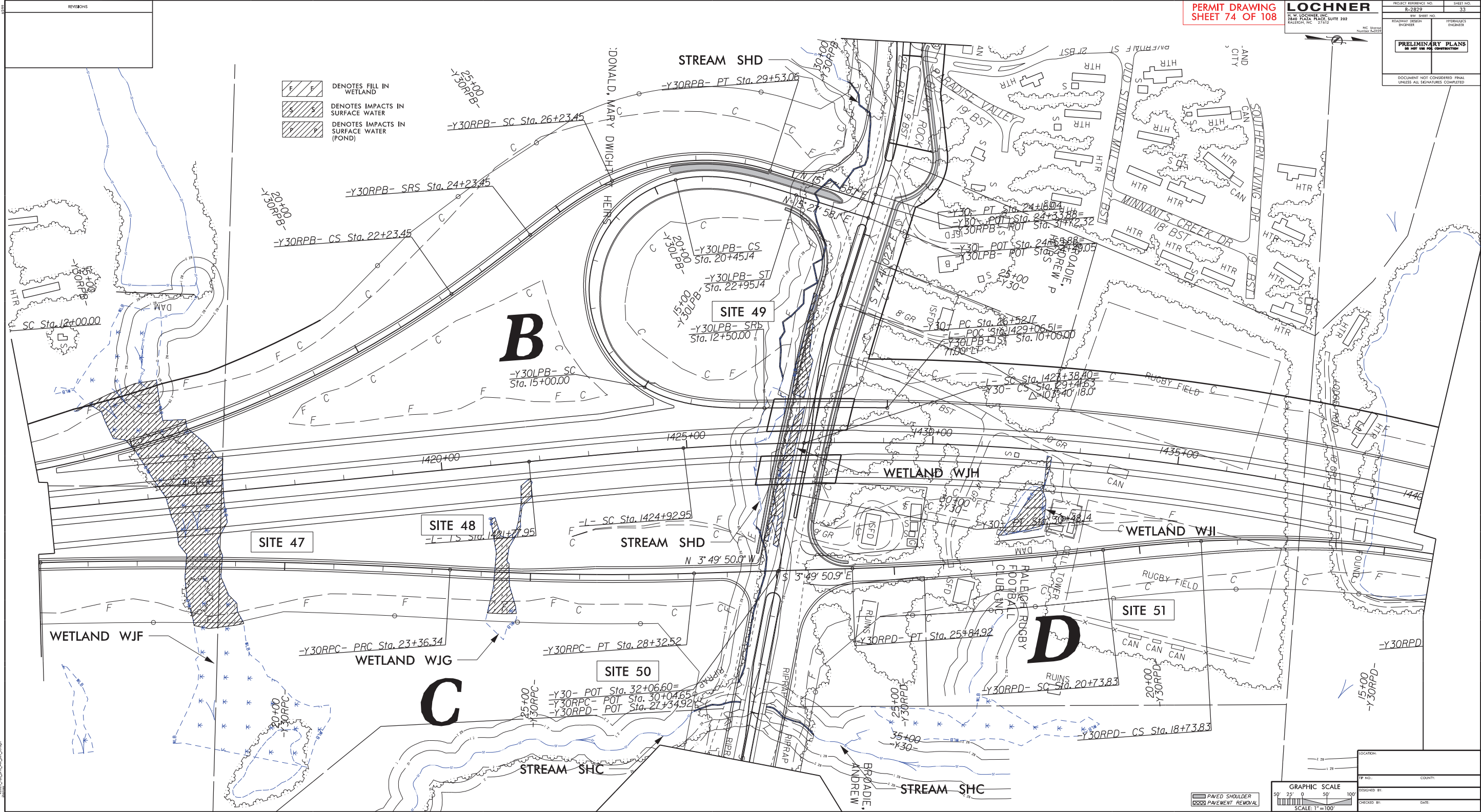


PROJ. REFERENCE NO.	SHEET NO.
R-2829	

PERMIT DRAWING  
SHEET 73 OF 108

CROSS SECTION  
SITE 46, WETLAND WJD  
STATION 1405+00 -L-







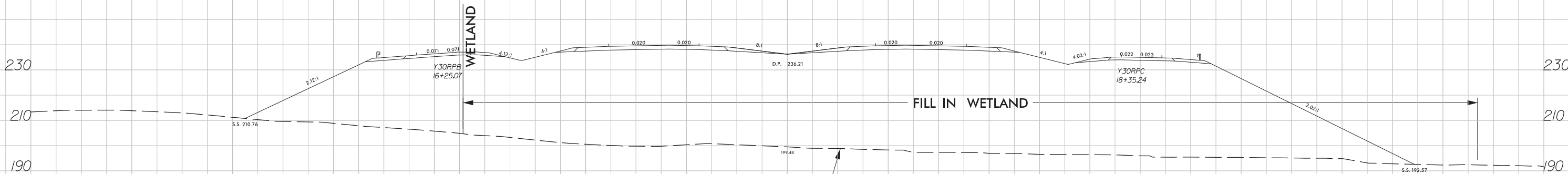






PERMIT DRAWING  
SHEET 76 OF 108

CROSS SECTION  
SITE 47, WETLAND WJF  
STATION 1415 + 00 -L-

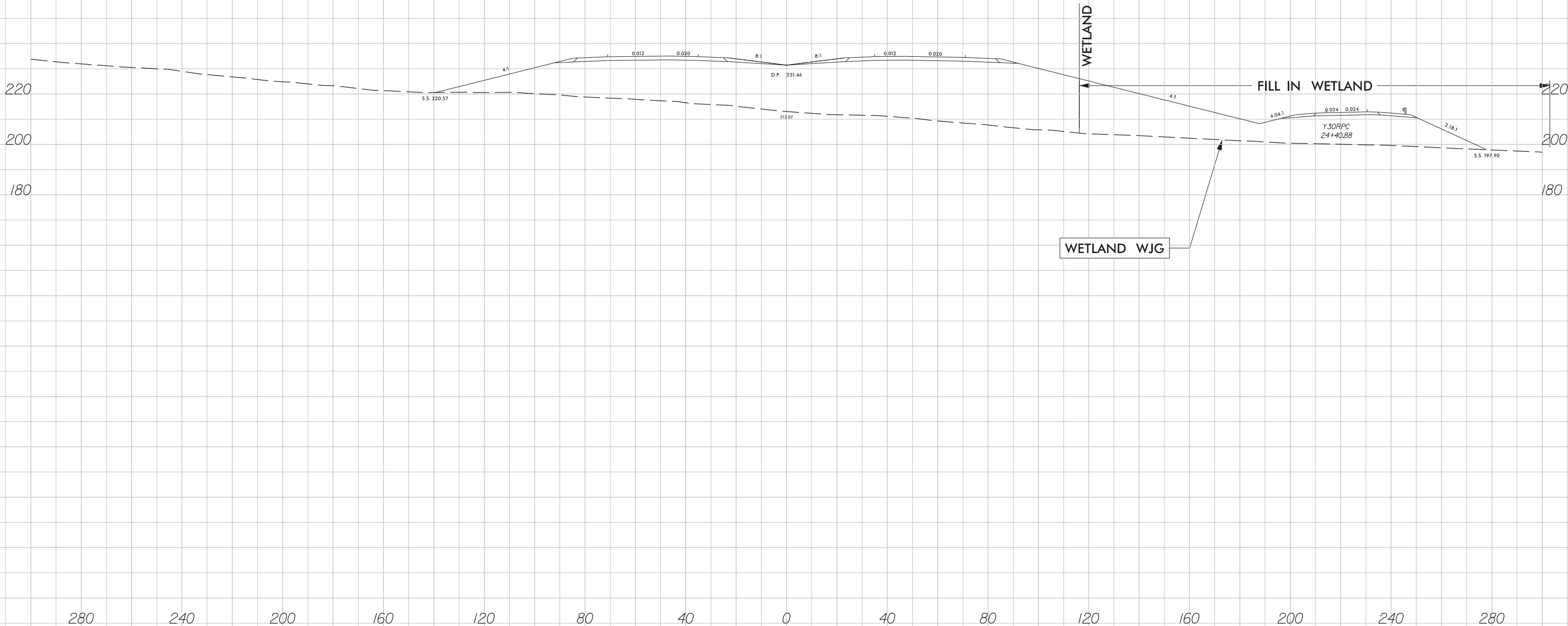


WETLAND WJF



PERMIT DRAWING  
SHEET 77 OF 108

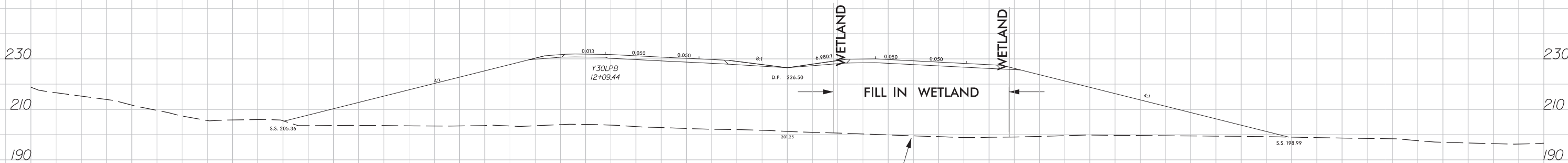
CROSS SECTION  
SITE 48, WETLAND WJG  
STATION 1421+00 -L-





PERMIT DRAWING  
SHEET 78 OF 108

CROSS SECTION  
SITE 49, WETLAND WJH  
STATION 1427+00 -L-



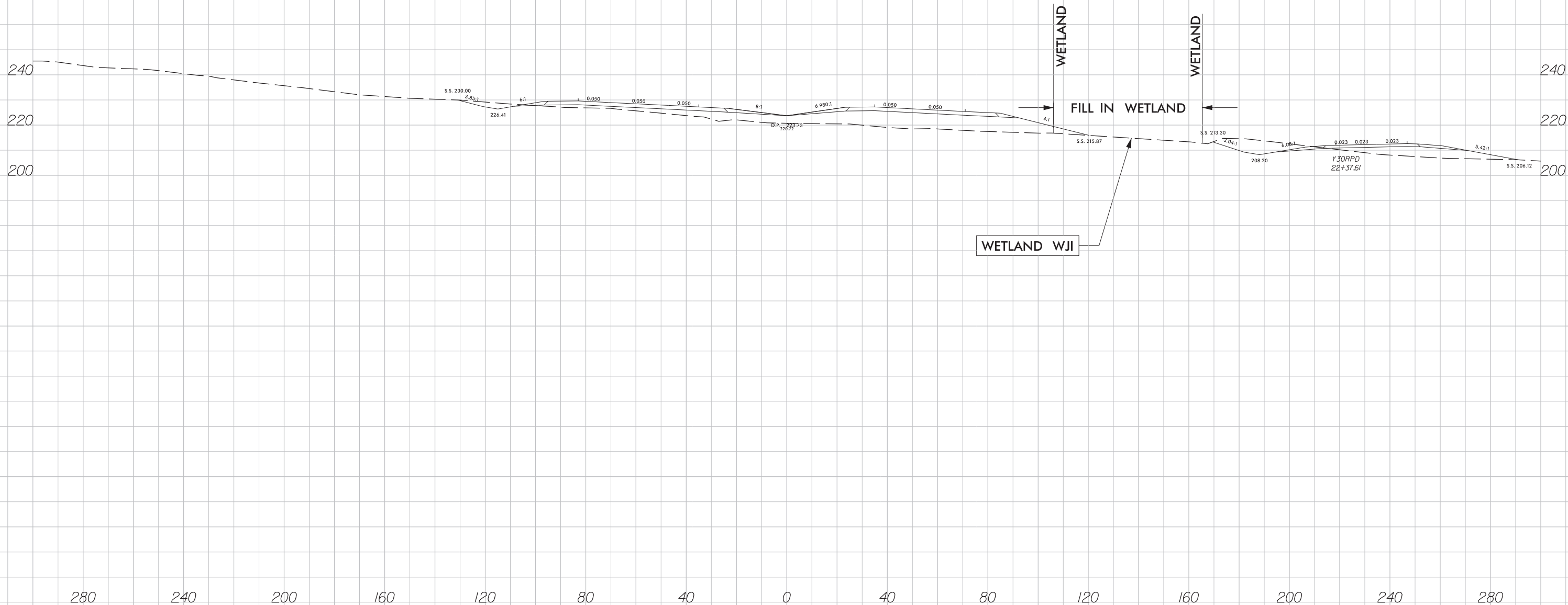
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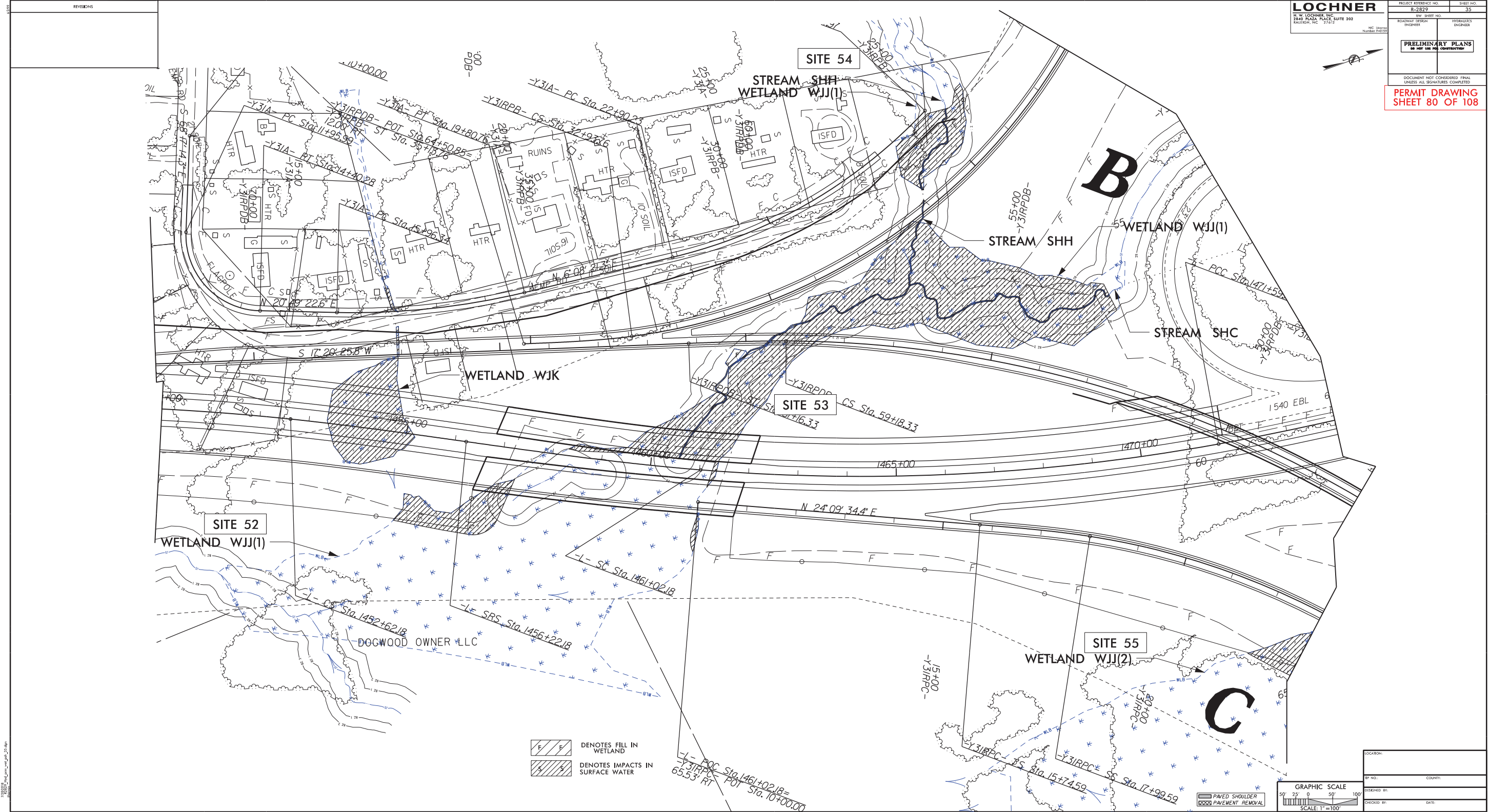




CROSS SECTION  
SITE 51, WETLAND WJI  
STATION 1432 + 00 -L-

PERMIT DRAWING  
SHEET 79 OF 108





REVISIONS

**LOCHNER**  
P. W. LOCHNER, INC.  
2840 PLAZA PLACE, SUITE 202  
RALEIGH, NC 27612  
NC 14410  
Number 2-0322

PROJECT REFERENCE NO.	8-2829	SHEET NO.	35
REV. SHEET NO.	INCORPORATED	HYDRAULICS	INCORPORATED
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION			
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			
PERMIT DRAWING SHEET 80 OF 108			

LOCATION:

TP NO.:

COUNTY:

DESIGNED BY:

CHECKED BY:

DATE:





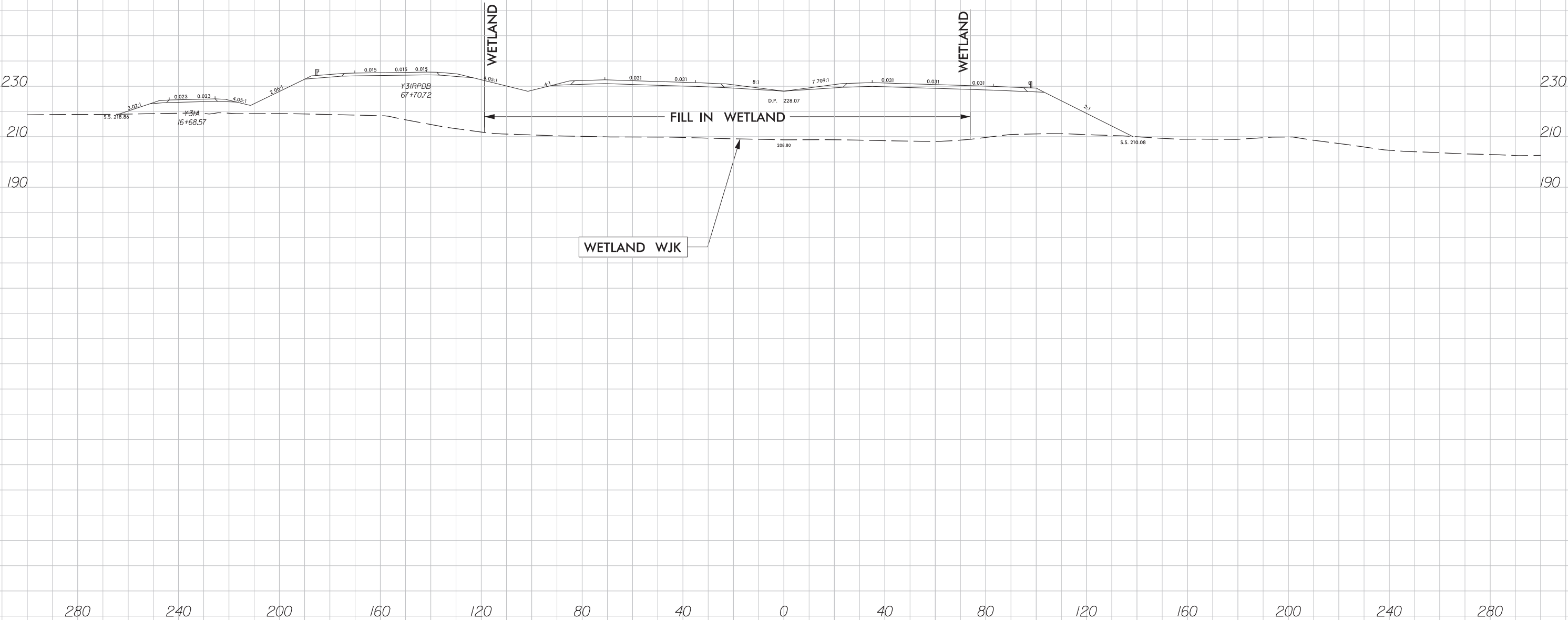




PROJ. REFERENCE NO.	SHEET NO.
R-2829	

PERMIT DRAWING  
SHEET 82 OF 108

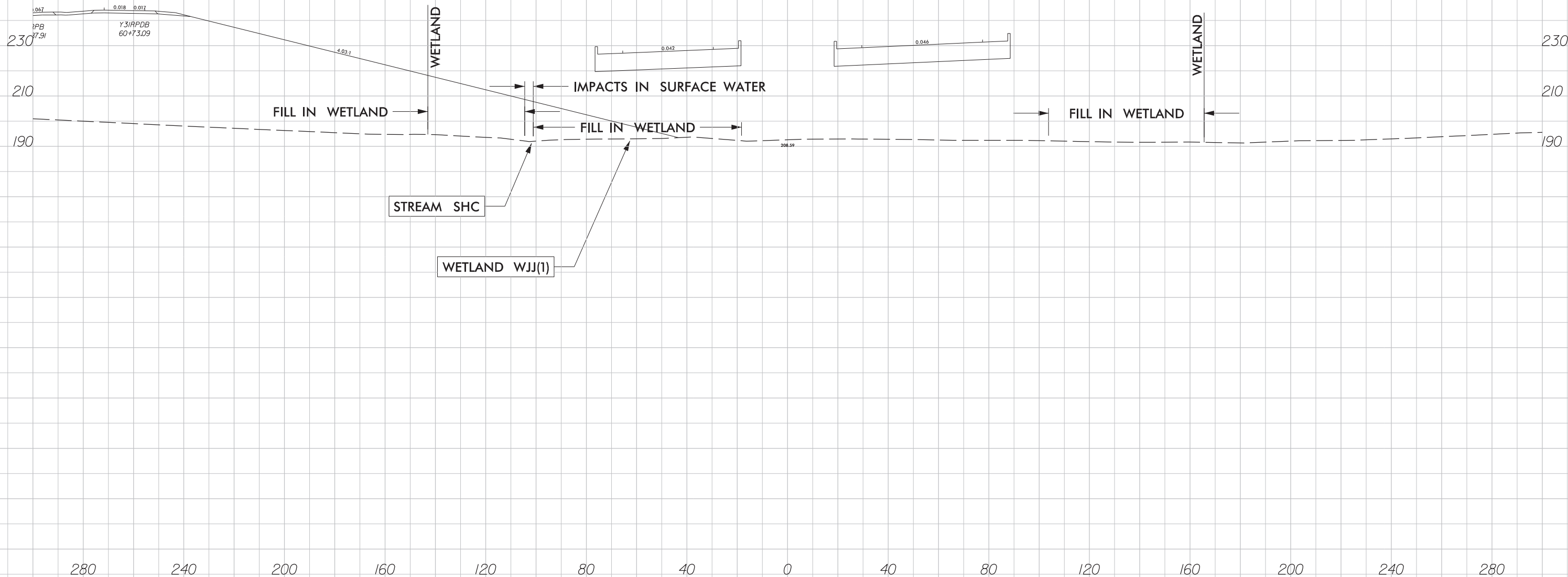
CROSS SECTION  
SITE 52, WETLAND WJK  
STATION 1454+00 -L-





PERMIT DRAWING  
SHEET 83 OF 108

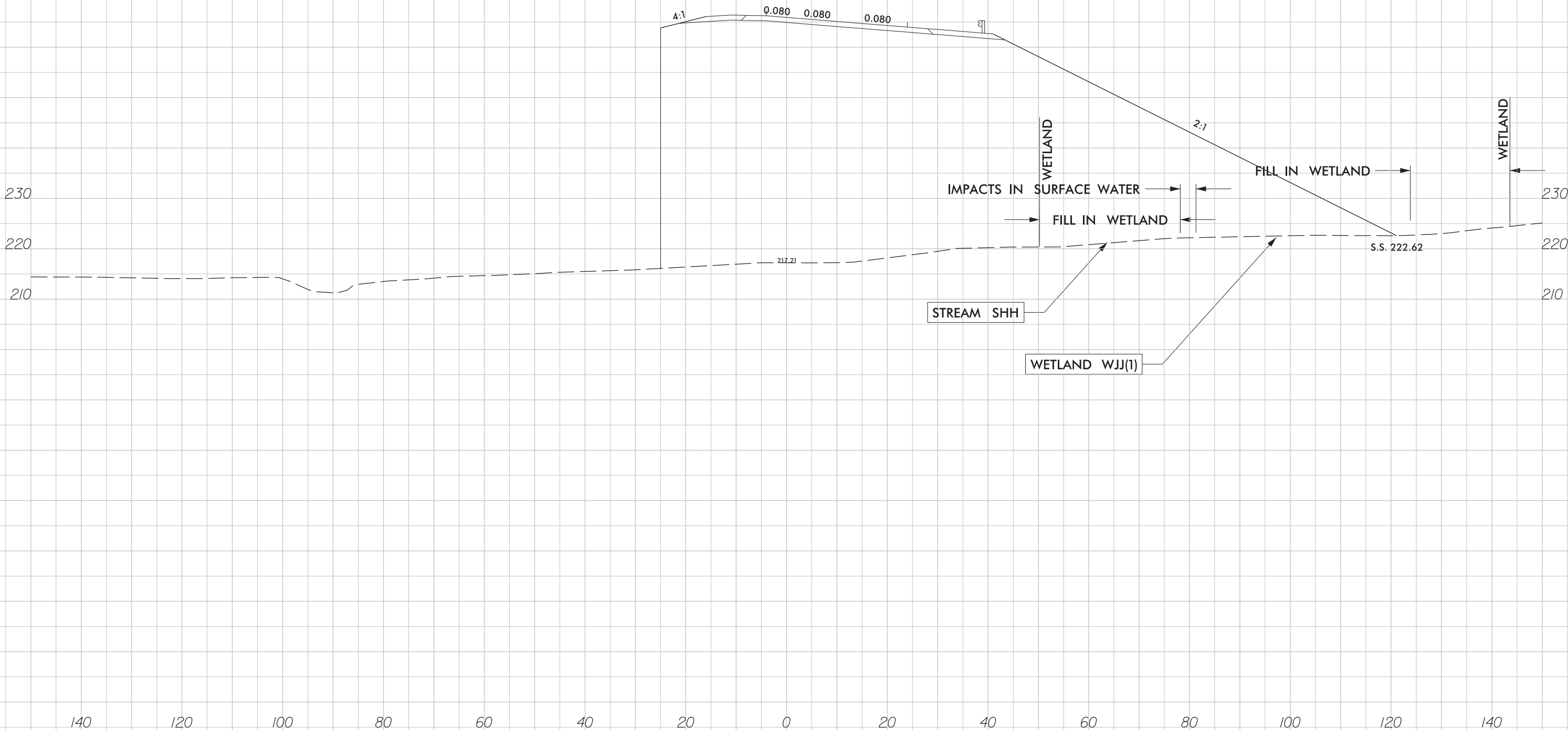
CROSS SECTION  
SITE 53, WETLAND WJJ(1)  
STATION 1461+00 -L-



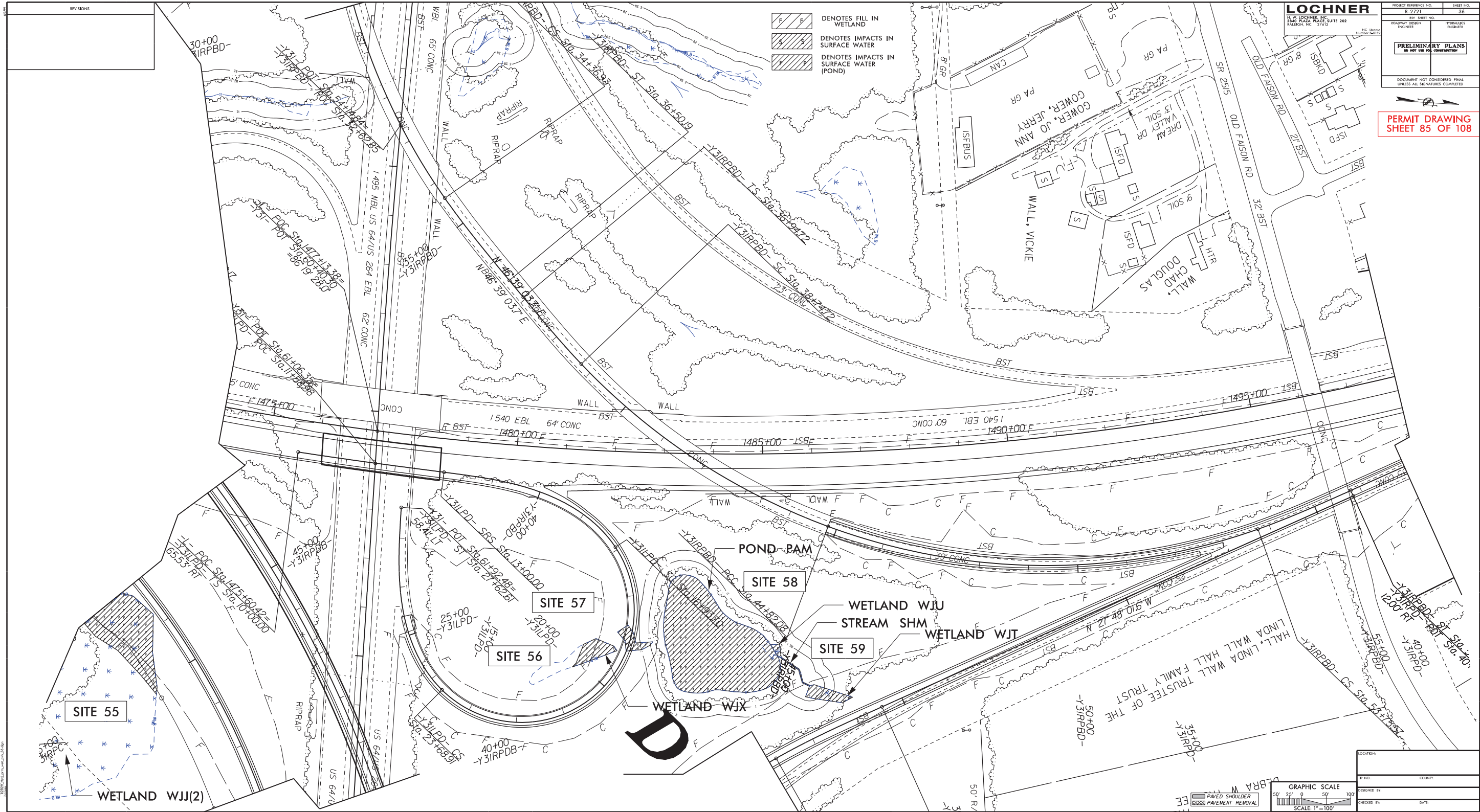


PERMIT DRAWING  
SHEET 84 OF 108

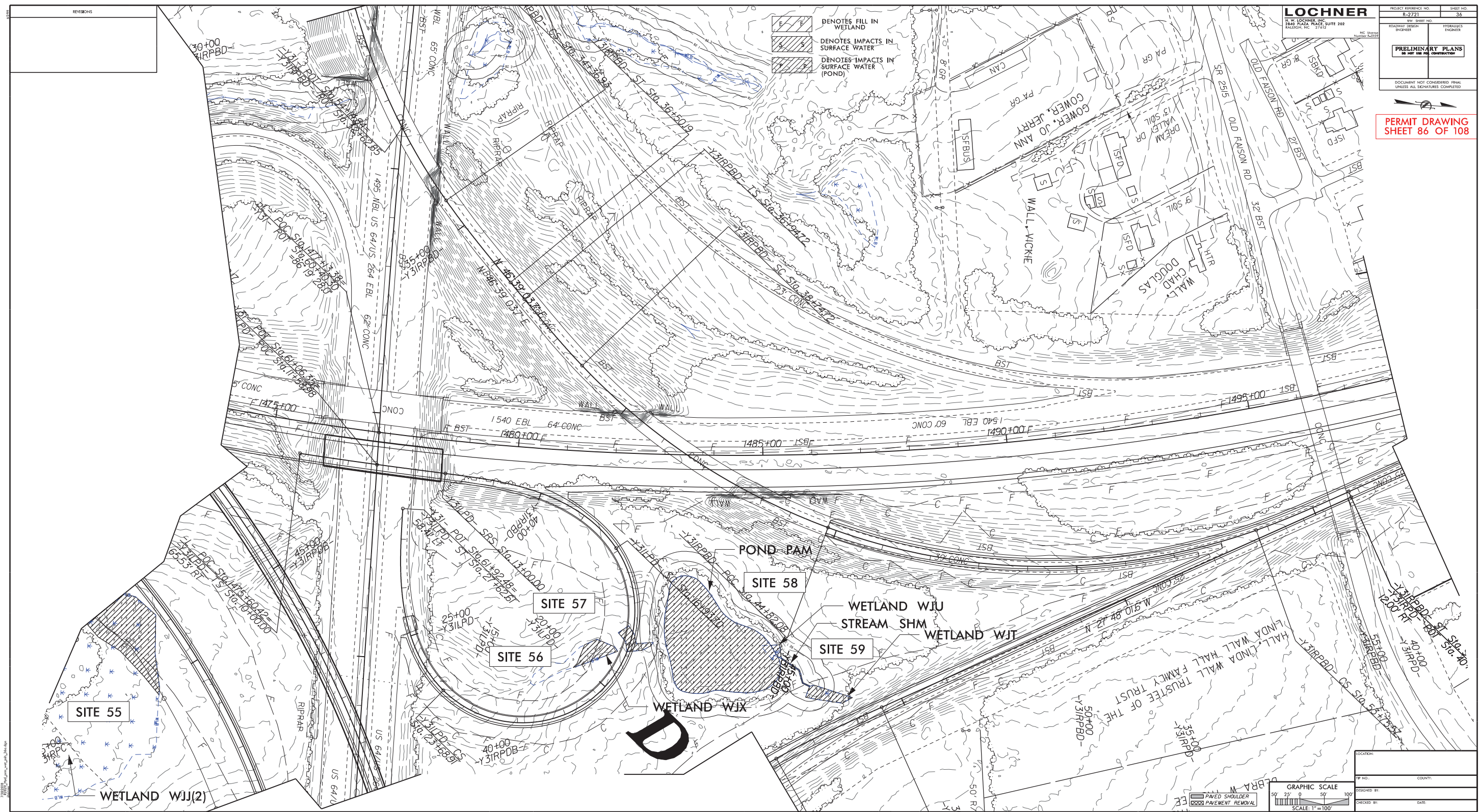
CROSS SECTION  
SITE 54, WETLAND WJJ(1)  
STATION 25+00 -Y31RPB-







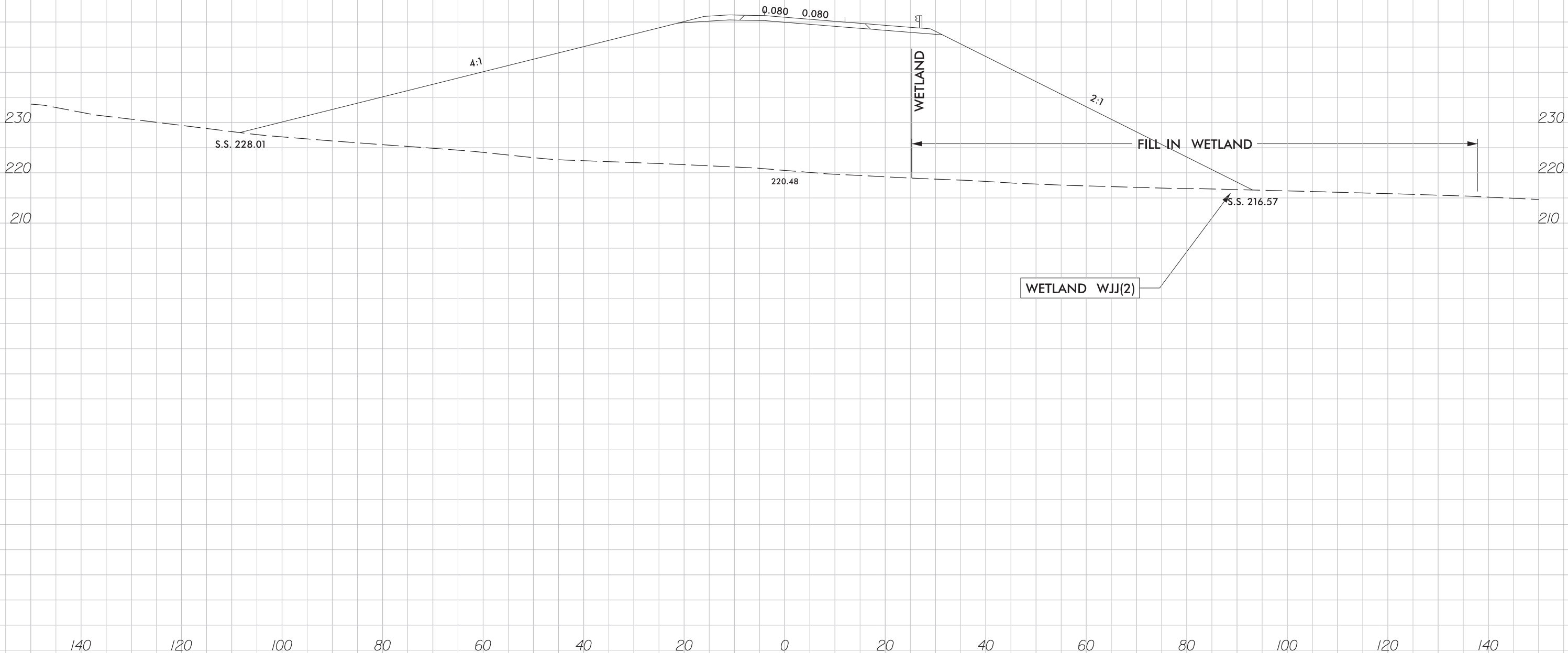






PERMIT DRAWING  
SHEET 87 OF 108

CROSS SECTION  
SITE 55, WETLAND WJJ(2)  
STATION 25+00 -Y31RPC-

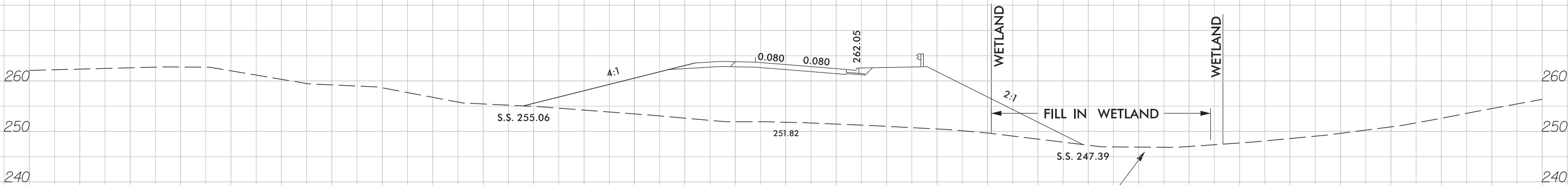






PERMIT DRAWING  
SHEET 88 OF 108

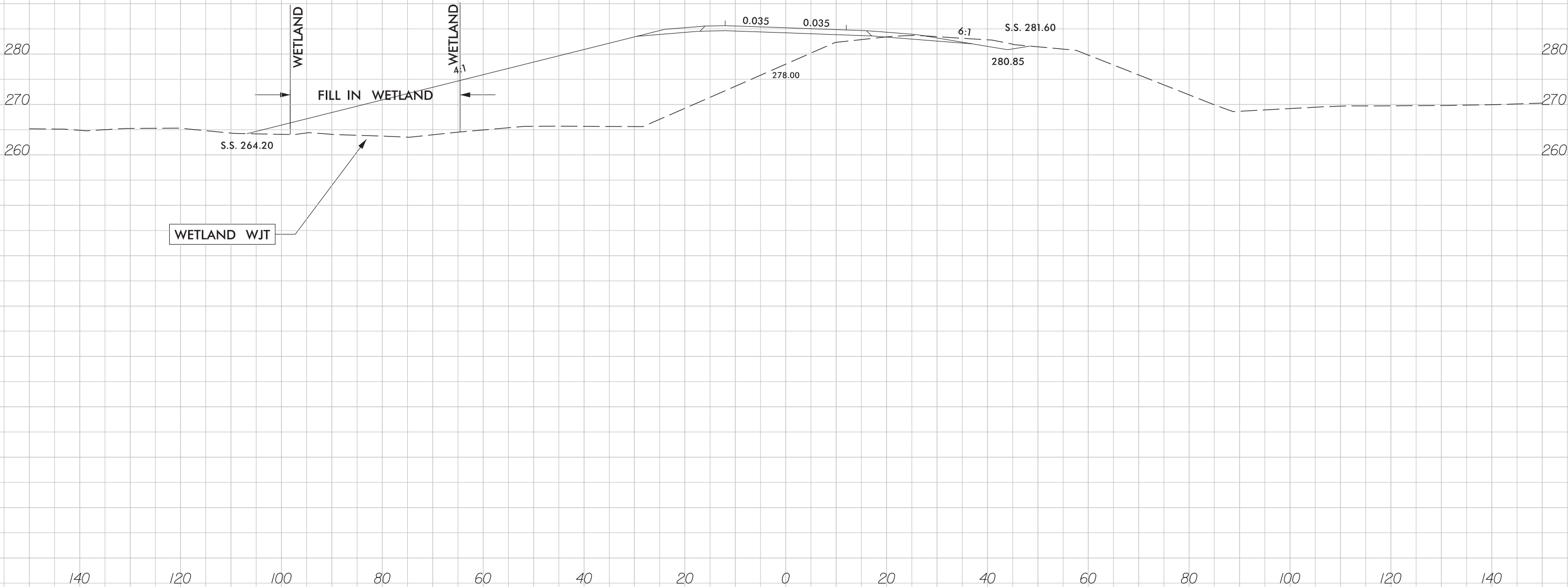
CROSS SECTION  
SITE 57, WETLAND WJX  
STATION 19+50 -Y31LPD-





PERMIT DRAWING  
SHEET 89 OF 108

CROSS SECTION  
SITE 59, WETLAND WJT  
STATION 18+50 -Y31RPD-







XX PAVEMENT REMOVAL  
PAVED SHOULDER

PROJECT REFERENCE NO.		SHEET NO.	
R-2829		38	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
<div>PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION</div>			
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			

PERMIT DRAWING  
SHEET 91 OF 108

**LOCHNER**  
H. W. LOCHNER, INC.  
2840 PLAZA PLACE, SUITE 202  
RALEIGH, NC 27612

NC License  
Number F-0159

F

F

50' 25' 0 50' 100'

SCALE: 1"=100'

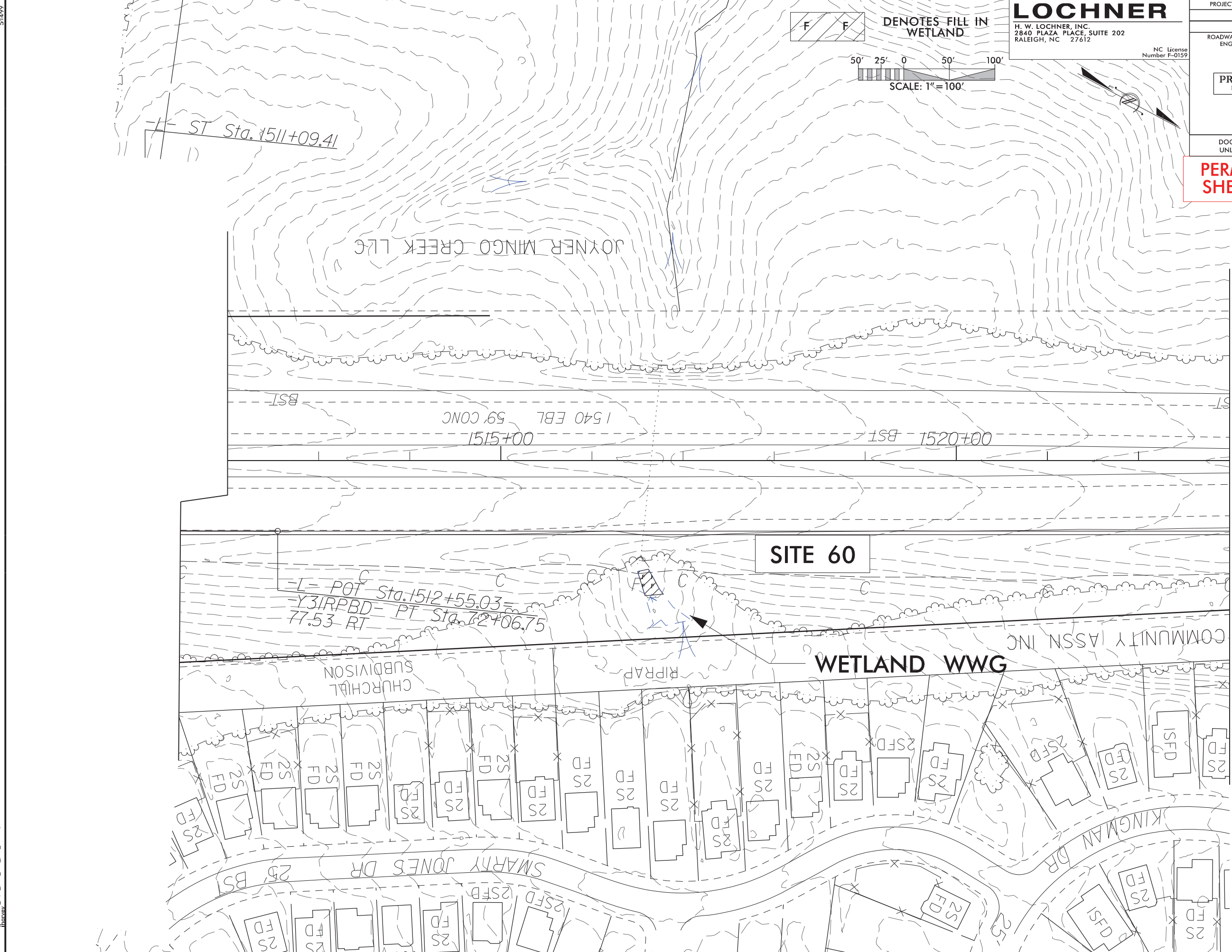
50' 25' 0 50' 100'

SCALE: 1"=100'

DENOTES FILL IN  
WETLAND

51499

7/20/2018  
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h.w.lochner



51499  
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thorway

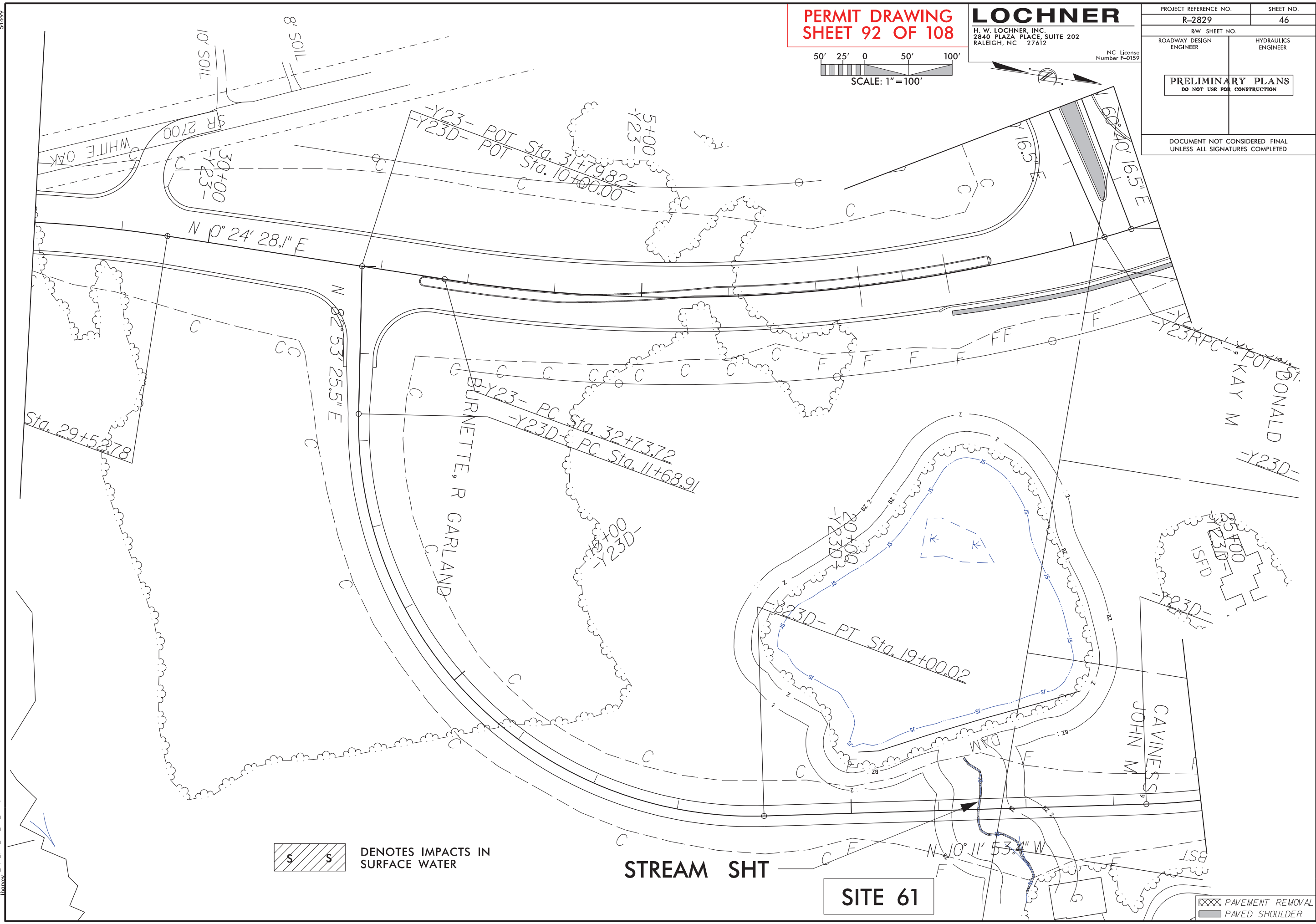
PERMIT DRAWING  
SHEET 92 OF 108

50' 25' 0 50' 100'

SCALE: 1" = 100'

LOCHNER  
H. W. LOCHNER, INC.  
2840 PLAZA PLACE, SUITE 202  
RALEIGH, NC 27612  
NC License  
Number F-0159

PROJECT REFERENCE NO. R-2829	SHEET NO. 46
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



STREAM SHT

SITE 61

 DENOTES IMPACTS IN  
SURFACE WATER

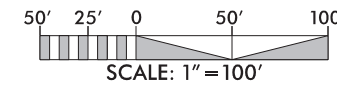
 PAVEMENT REMOVAL  
 PAVED SHOULDER



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2020 Hyd\_prm\_wet\_psh\_46a.dgn  
lhw

PERMIT DRAWING  
SHEET 93 OF 108

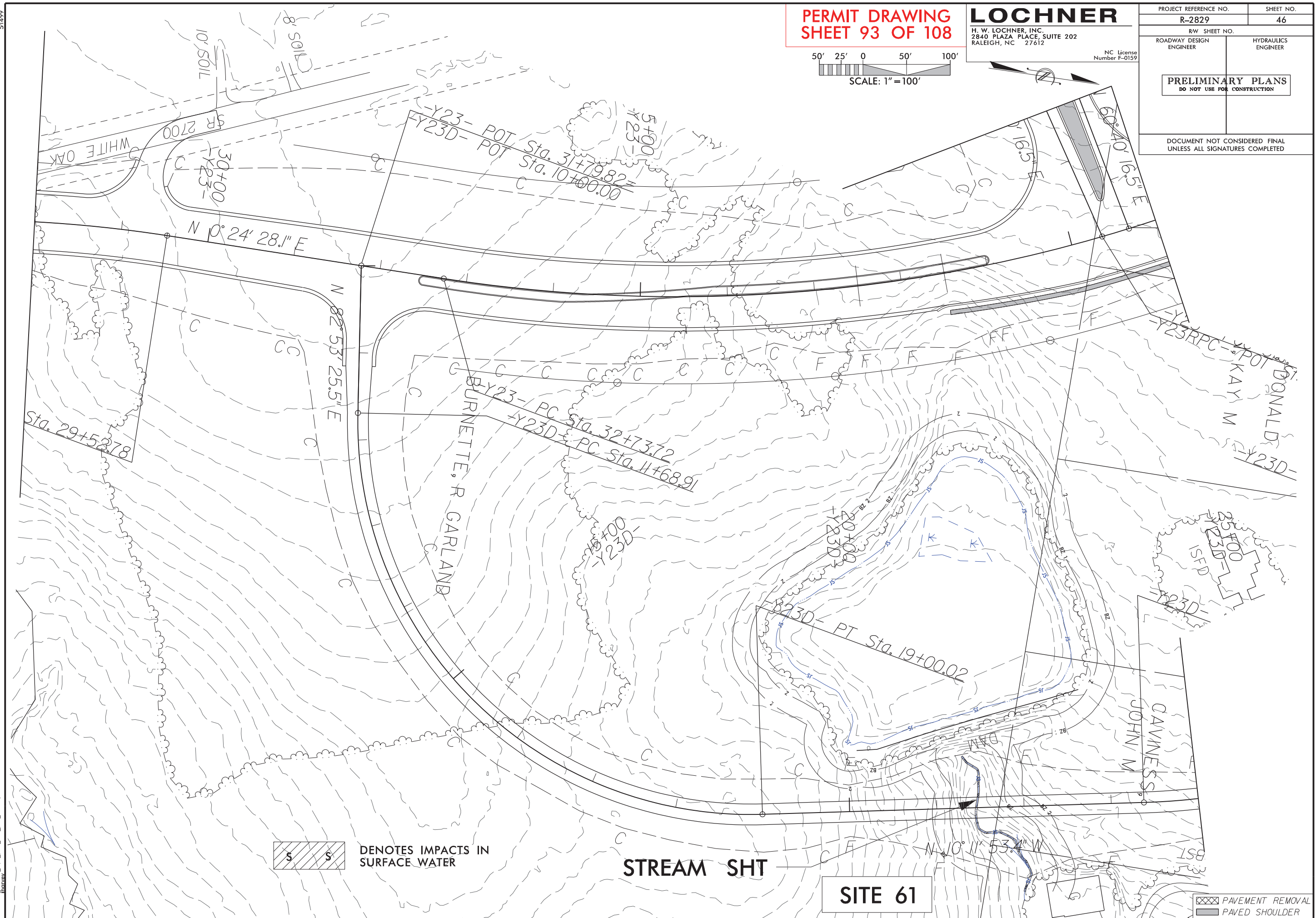


**LOCHNER**

H. W. LOCHNER, INC.  
2840 PLAZA PLACE, SUITE 202  
RALEIGH, NC 27612

NC License  
Number F-0159

PROJECT REFERENCE NO.		SHEET NO.	
R-2829		46	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
<div>PRELIMINARY PLANS</div> <div>DO NOT USE FOR CONSTRUCTION</div>			
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			





PAVEMENT REMOVAL  
PAVED SHOULDER

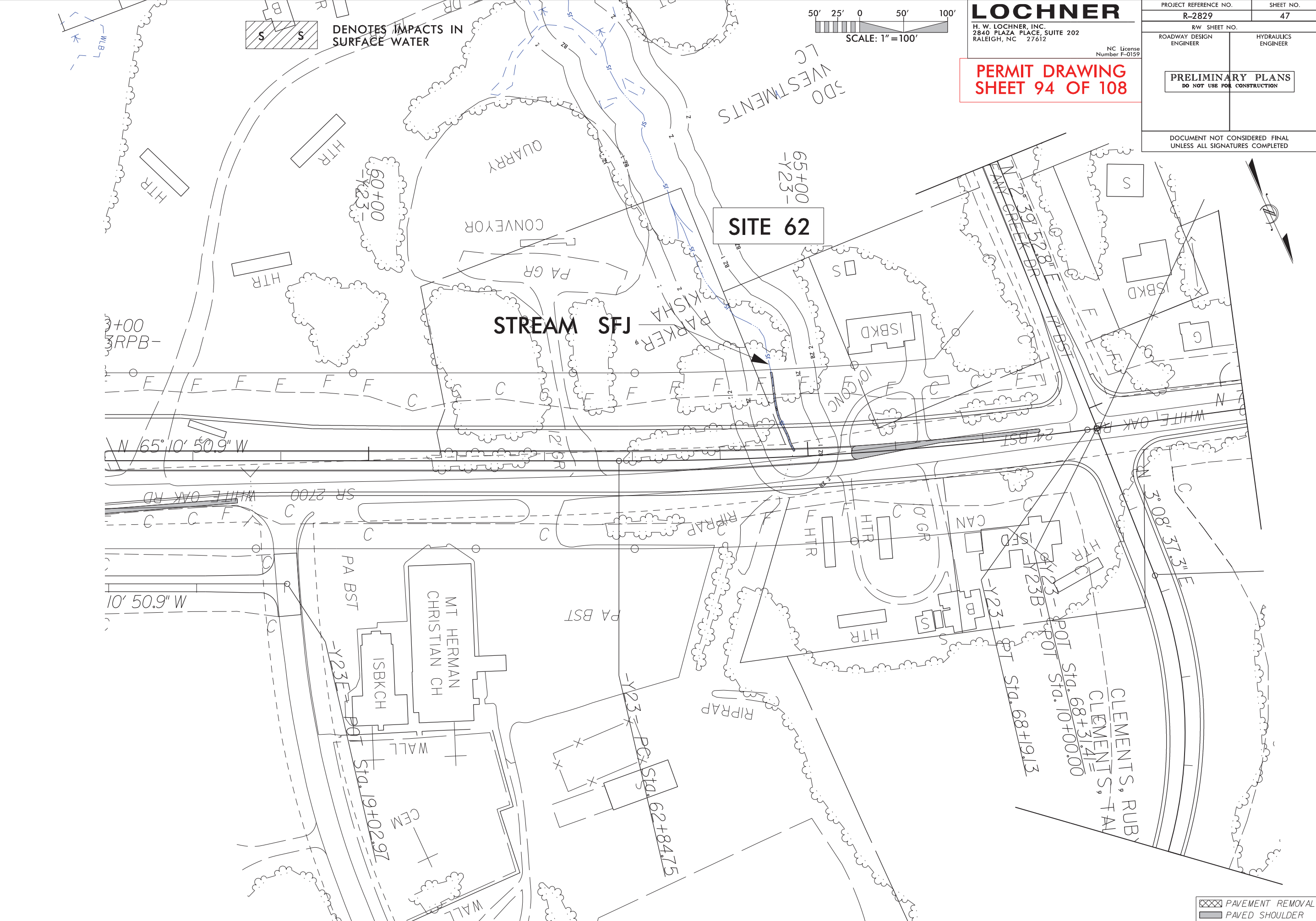
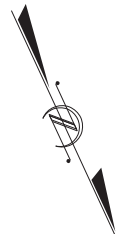
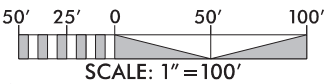
PROJECT REFERENCE NO.	SHEET NO.
R-2829	47
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

LOCHNER

H. W. LOCHNER, INC.  
2840 PLAZA PLACE, SUITE 202  
RALEIGH, NC 27612

NC License  
Number F-0159

PERMIT DRAWING  
SHEET 94 OF 108



SITE 62

STREAM SFJ

QUARRY

CONVEYOR

PA GR

PARKER

ISBKD

ISBKD

G

WHITE OAK RD

CLEMENTS, RUB

CLEMENTS, TAL

POT Sta. 68+31.41

POT Sta. 10+00.00

POT Sta. 68+19.13

POT Sta. 68+19.13

POT Sta. 68+19.13

POT Sta. 68+19.13

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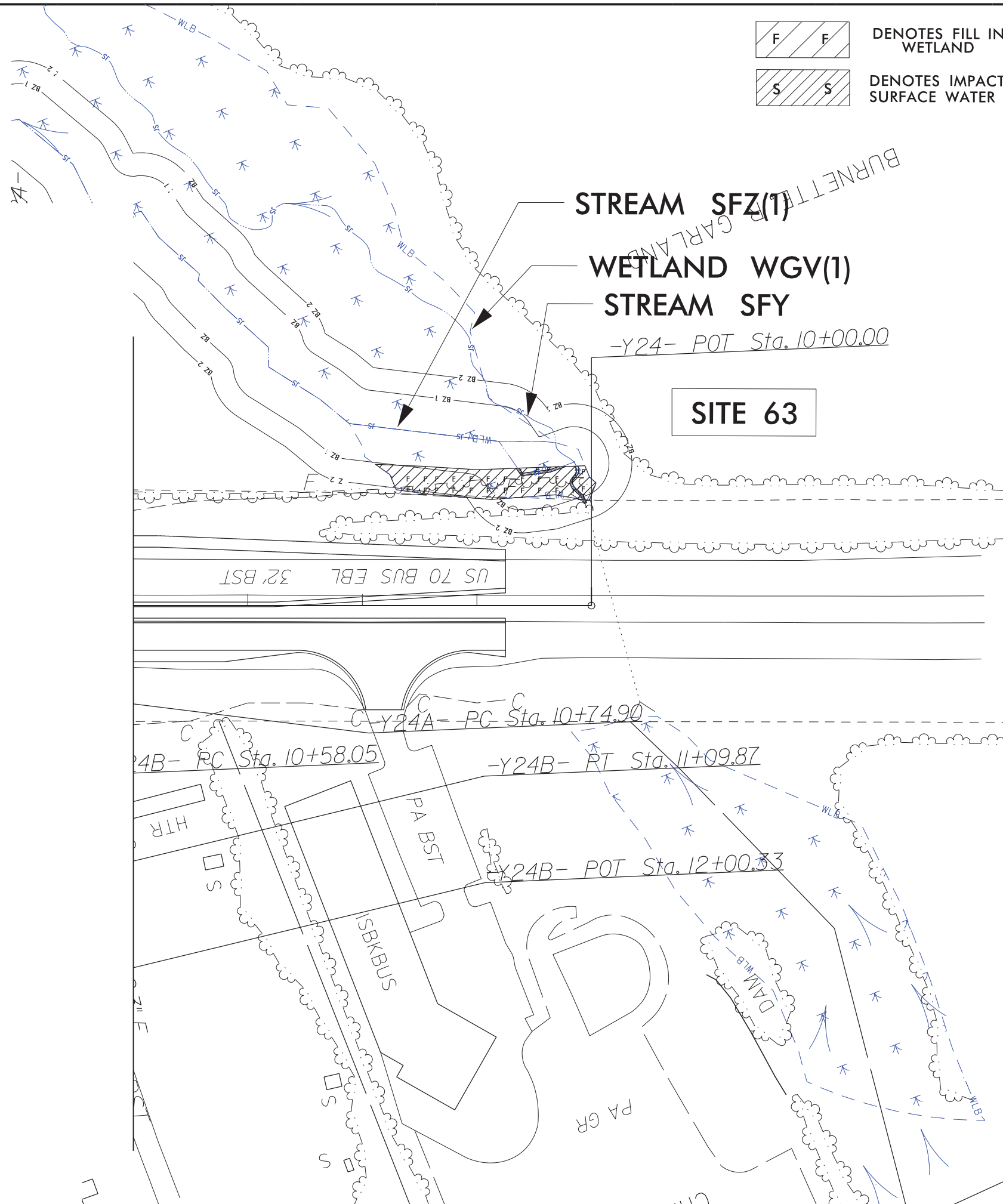
PAVEMENT REMOVAL  
PAVED SHOULDER

51499 7/20/2018 12:27 PM 7/20/2018 Hyd\_perm\_wet\_psh\_47.dgn

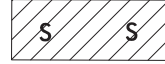


51499

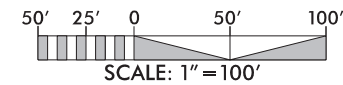
7/2/2018  
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lbrwv



DENOTES FILL IN  
WETLAND



DENOTES IMPACTS IN  
SURFACE WATER



**LOCHNER**  
H. W. LOCHNER, INC.  
2840 PLAZA PLACE, SUITE 202  
RALEIGH, NC 27612  
NC License  
Number F-0159

PROJECT REFERENCE NO. <b>R-2829</b>		SHEET NO. <b>52</b>	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
<div><b>PRELIMINARY PLANS</b> <b>DO NOT USE FOR CONSTRUCTION</b></div>			
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			

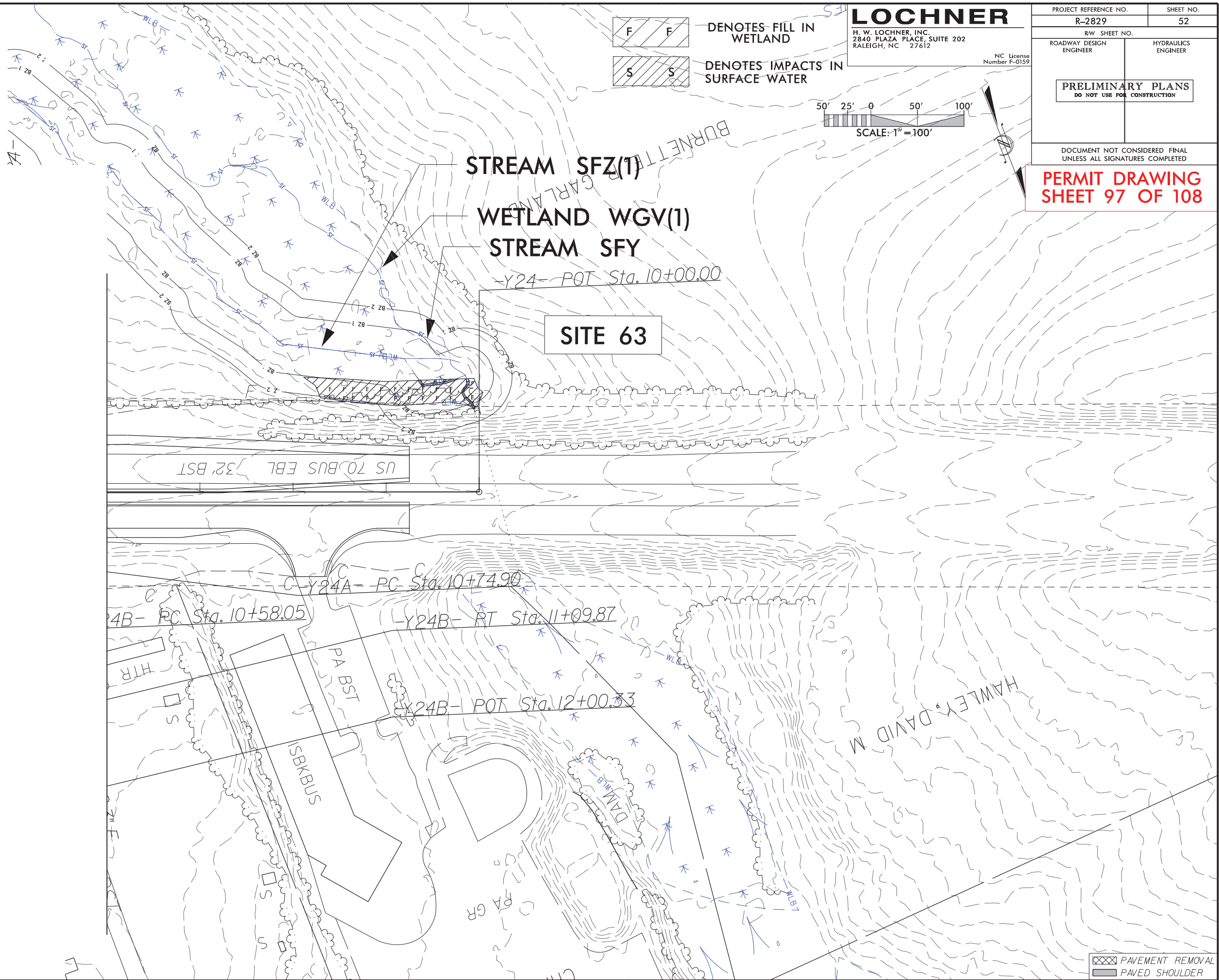
**PERMIT DRAWING**  
**SHEET 96 OF 108**

	PAVEMENT REMOVAL
	PAVED SHOULDER



51499

7/20/2018  
82029\_hyd\_prm\_wet\_psh\_52a.dgn  
jhorvay

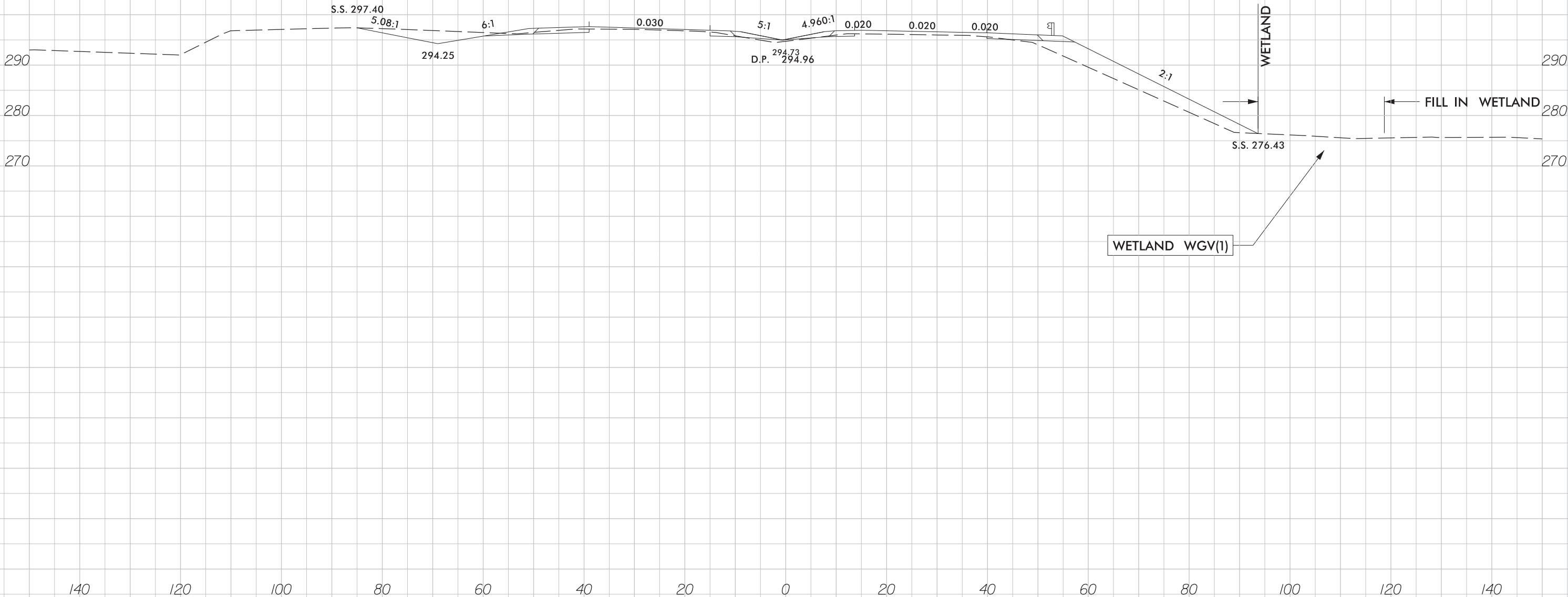




PROJ. REFERENCE NO.	SHEET NO.
R-2829	

PERMIT DRAWING  
SHEET 98 OF 108

CROSS SECTION  
SITE 63, WETLAND WGV(1)  
STATION 11+00 -Y24-



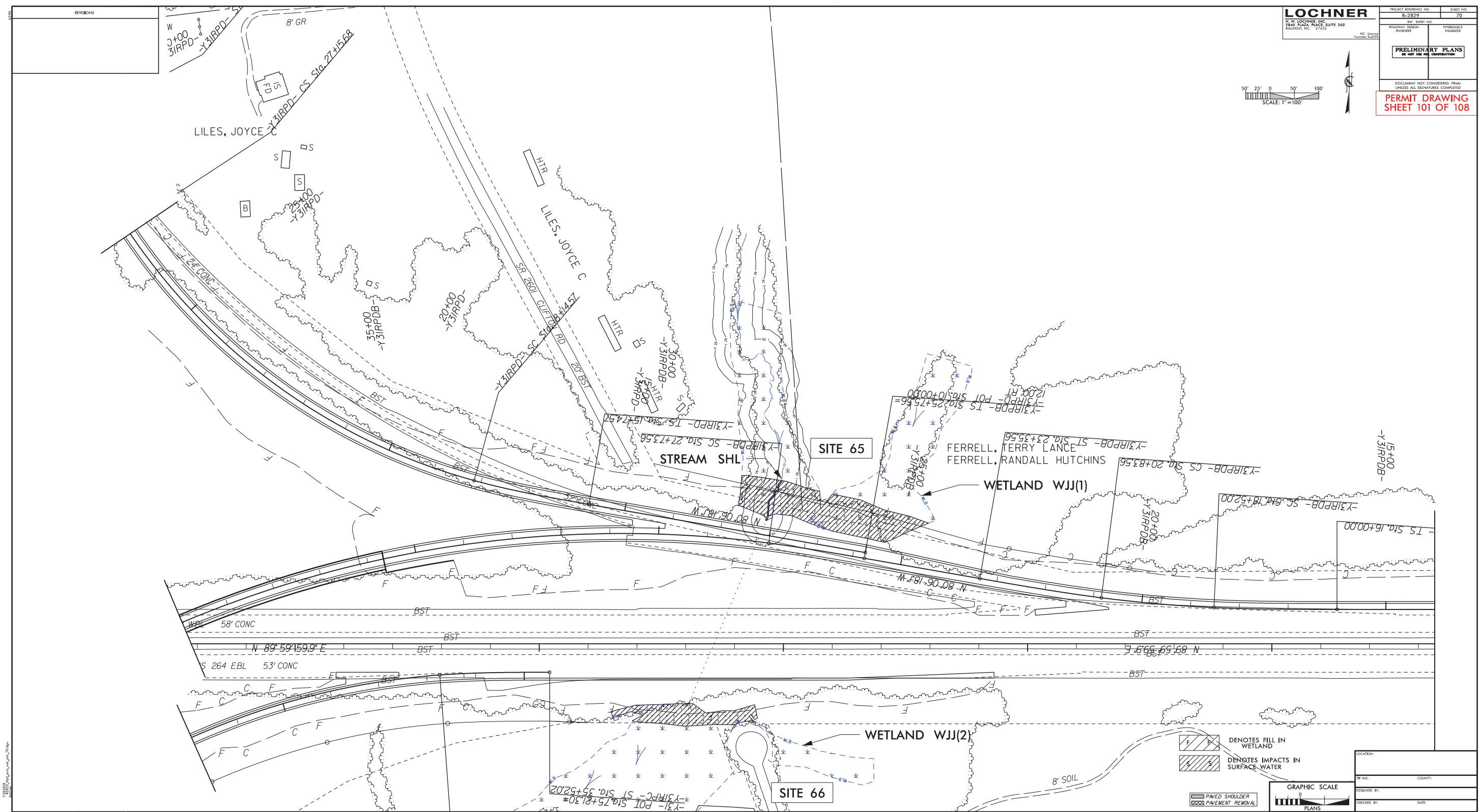
NC License  
Number F-0159

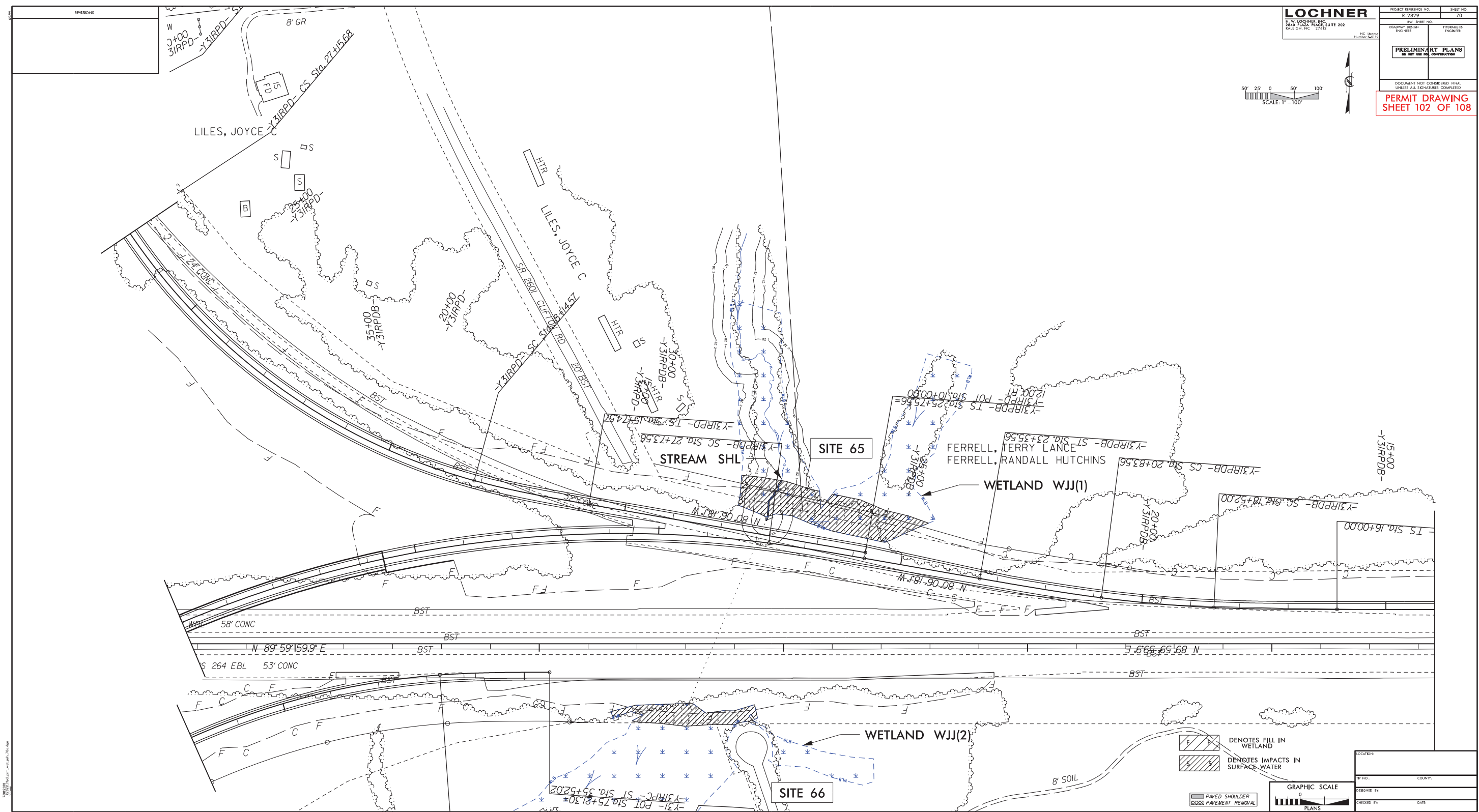




NC License  
Number F-0159







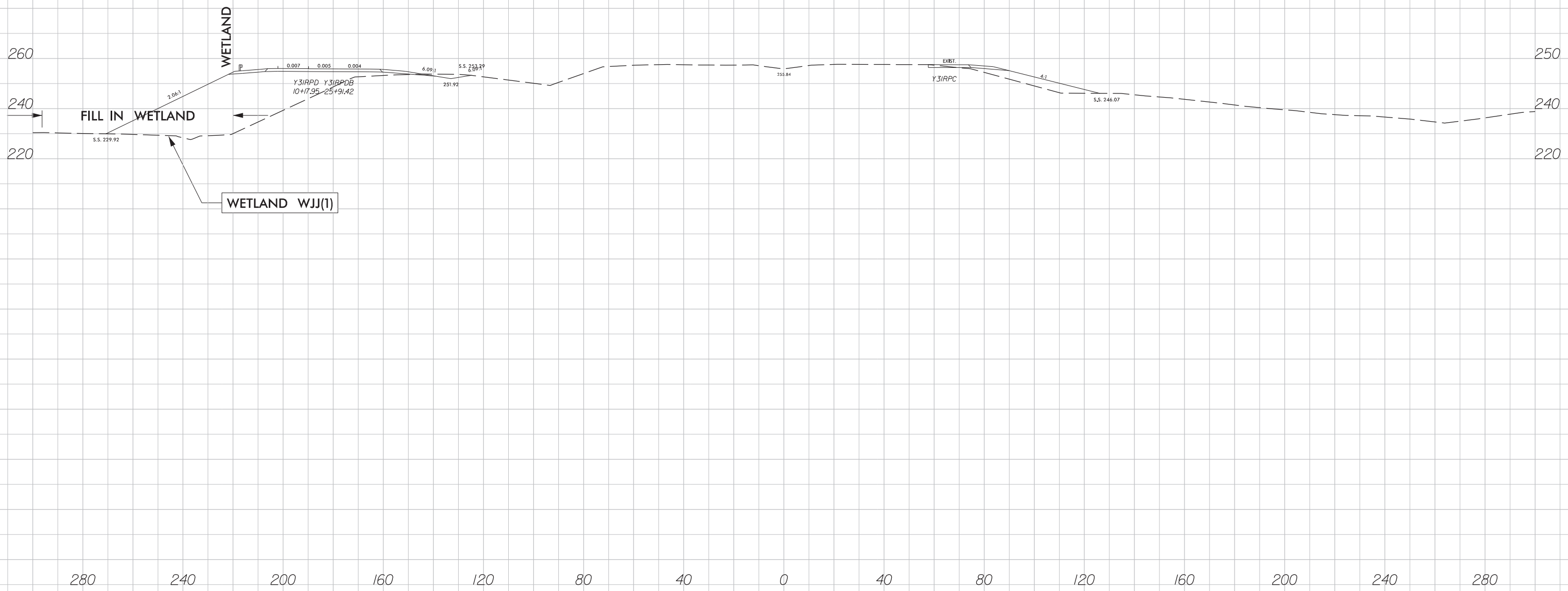




PROJ. REFERENCE NO.	SHEET NO.
R-2829	

PERMIT DRAWING  
SHEET 103 OF 108

CROSS SECTION  
SITE 65, WETLAND WJJ(1)  
STATION 81+50 -Y31-





PROJ. REFERENCE NO.	SHEET NO.
R-2829	

PERMIT DRAWING  
SHEET 104 OF 108

CROSS SECTION  
SITE 66, WETLAND WJJ(2)  
STATION 78+00 -Y31-



WETLAND AND SURACE WATER IMPACTS 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	52+07 to 52+83-Y22RPAFLY-LT	ROADWAY FILL	0.02									
2	967+25 to 968+60-L-LT	ROADWAY FILL	0.09									
3	972+15 to 979+51-L-	ROADWAY FILL	0.84					0.03		542		
4	1001+22 to 1004+47-L-	ROADWAY FILL	0.47									
5	1008+45 to 1008+98-L-	ROADWAY FILL						0.02		413		
6	1012+45 to 1014+87-L-	ROADWAY FILL						0.02		469		
7	1013+88 to 1018+45	ROADWAY FILL	0.14					0.03		612		
8	1022+78 to 1024+65-L-	ROADWAY FILL	0.03					0.02		322		
9	1035+69 to 1037+54-L-	ROADWAY FILL	0.16					0.02		326		
		ROADWAY FILL (POND)						0.03				
10	27+43 to 27+71-Y23RPB-LT	ROADWAY FILL	< 0.01									
11	31+20 to 31+54-Y23D-	ROADWAY FILL						< 0.01		155		
12	1060+50 to 1063+96-L-	ROADWAY FILL	0.02					0.02		468		
13	1062+24 to 1062+74-L-	ROADWAY FILL	< 0.01					0.01		227		
14	45+51 to 47+42-Y23D-	ROADWAY FILL	0.05									
15	1098+65 to 1105+15 -L-	ROADWAY FILL	1.38					< 0.01		155		
16	1109+60 to 1116+95 -L-	ROADWAY FILL	2.10					0.06		1191		
17	1113+04 to 1114+64 -L-RT	ROADWAY FILL	0.27									
18	1115+69 to 1116+20 -L-RT	ROADWAY FILL	0.03									
19	1123+94 to 1126+50 -L-	ROADWAY FILL	0.26					0.03		534		
20	1137+79 to 1142+13-L-	ROADWAY FILL						0.04		794		
21	26+25 to 28+85-Y24RPA-RT	ROADWAY FILL	0.21									
TOTALS*:			6.08					0.32		6208	0	0

\*Rounded totals are sum of actual impacts

NOTES:

NC DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
07/30/2018  
WAKE COUNTY  
R-2829



WETLAND AND SURACE WATER IMPACTS 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)
22	1148+23 to 1149+33-L-	ROADWAY FILL	0.21									
23	25+14 to 25+99-Y24RPD-	ROADWAY FILL	0.10									
24	1151+15 to 1154+48-L-	ROADWAY FILL	1.29					0.03		681		
25	11+51 to 11+73-Y24RPD-	ROADWAY FILL						0.01		293		
26	1169+32 to 1172+25-L-	ROADWAY FILL	0.56					0.02		492		
27	1173+86 to 1178+33-L-LT	ROADWAY FILL	0.29					0.03		513		
28	1171+26 to 1178+65-L-	ROADWAY FILL						0.04		798		
29	1197+22 to 1198+69-L-	ROADWAY FILL	0.14									
30	17+07 to 18+65-Y27RPA-LT	ROADWAY FILL (POND)						0.03				
31	16+34 to 20+18 -Y27RPD-LT	ROADWAY FILL	0.18					< 0.01		164		
32	1241+99 to 1244+54-L-	ROADWAY FILL	0.03					0.02		500		
33	1268+92 to 1269+72-L-	ROADWAY FILL	0.05					0.01		227		
34	1276+60 to 1277+19-L-RT	ROADWAY FILL	0.05									
35	1287+71 to 1288+33-L-	ROADWAY FILL						0.02		500		
36	1315+08 to 1316+47-L-LT	ROADWAY FILL	0.06					< 0.01		156		
37	1317+02 to 1320+29-L-	ROADWAY FILL	0.06					0.02		448		
38	1323+04 to 1323+50-L-LT	BRIDGE	0.05									
38A	1324+16 to 1325+00L-LRT	ROADWAY FILL						< 0.01		99		
39	1343+98 to 1346+17 -L-	ROADWAY FILL	0.78									
40	1347+59 to 1354+79-L-	ROADWAY FILL						0.04		970		
41	24+36 to 25+45-Y29RPA-RT	ROADWAY FILL	0.11									
42	1345+70 to 1350+04-L-	ROADWAY FILL	0.16					0.52		970		
TOTALS*:			4.12					0.82		6811	0	0

\*Rounded totals are sum of actual impacts

NOTES:

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WETLAND AND SURACE WATER IMPACTS SUMMARY												
			WETLAND IMPACTS					SURFACE WATER IMPACTS				
Site No.	Station (From/To)	Structure Size / Type	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)
43	18+10 to 18+94-Y29E-	ROADWAY FILL	0.31									
44	1377+57 to 1382+39-L-	ROADWAY FILL	0.18					0.01		289		
		ROADWAY FILL (POND)						1.79				
45	1388+72 to 1394+94-L-	ROADWAY FILL (POND)						4.85				
46	1404+33 to 1405+98-L-	ROADWAY FILL	0.43					0.02		428		
47	1412+68 to 1415+70-L-	ROADWAY FILL	1.29									
48	24+16 to 24+98-Y30RPC-	ROADWAY FILL	0.17									
49	21+94 to 34+46-Y30-RT	ROADWAY FILL	0.20					0.05		1096		
50	34+82 to 35+20-Y30-	ROADWAY FILL						0.01		212		
51	1431+44 to 1432+43-L-RT	ROADWAY FILL	0.11									
52	1453+37 to 1455+18-L-	ROADWAY FILL	0.61									
53	1454+97 to 1469+92-L-	ROADWAY FILL	3.12					0.07		1417		
54	23+91 to 26+31-Y31RPB-RT	ROADWAY FILL	0.33					< 0.01		202		
55	21+93 to 25+21-Y31RPC-RT	ROADWAY FILL	0.45									
56	19+77 to 20+82-Y31LPD-L5	ROADWAY FILL	0.05									
57	20+85 to 21+38-Y31LPD-LT	ROADWAY FILL	0.03									
58	26+28 to 28+11-Y31RPD-LT	ROADWAY FILL (POND)						0.87				
59	28+11 to 29+12-Y31RPD-LT	ROADWAY FILL	0.05					< 0.01		94		
60	1516+50 to 1516+78-L-RT	ROADWAY FILL	0.01									
61	21+30 to 22+07-Y23D-	ROADWAY FILL						0.01		214		
62	64+61 to 64+85-Y23-LT	ROADWAY FILL						< 0.01		94		
63	9+96 to 11+89-Y24-RT	ROADWAY FILL	0.10					< 0.01		31		
64	24+62 -Y24-LT	ROADWAY FILL						0.01		197		
TOTALS*:			7.45					7.70		4274	0	0

\*Rounded totals are sum of actual impacts

NOTES:

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