

## Turchy, Michael A

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**From:** Bridges, Martin A CIV <Martin.A.Bridges@uscg.mil>  
**Sent:** Thursday, June 7, 2018 10:52 AM  
**To:** Rivenbark, Chris  
**Cc:** Pitts, Hal R CIV; Turchy, Michael A  
**Subject:** RE: [External] RE: Permit Determination Request for B-2500 II B, near Rodanthe, Pamlico Sound, NC

Ok, thanks Chris.

I will add to folder. Have a good day.

R,  
Marty

Marty Bridges  
Bridge Branch  
Fifth Coast Guard District  
431 Crawford St  
Portsmouth, Va 23704  
(757) 398-6422  
Martin.A.Bridges@uscg.mil

-----Original Message-----

From: Rivenbark, Chris <crivenbark@ncdot.gov>  
Sent: Thursday, June 7, 2018 10:27 AM  
To: Bridges, Martin A CIV <Martin.A.Bridges@uscg.mil>  
Cc: Pitts, Hal R CIV <Hal.R.Pitts@uscg.mil>; Turchy, Michael A <maturchy@ncdot.gov>  
Subject: [Non-DoD Source] RE: [External] RE: Permit Determination Request for B-2500 II B, near Rodanthe, Pamlico Sound, NC

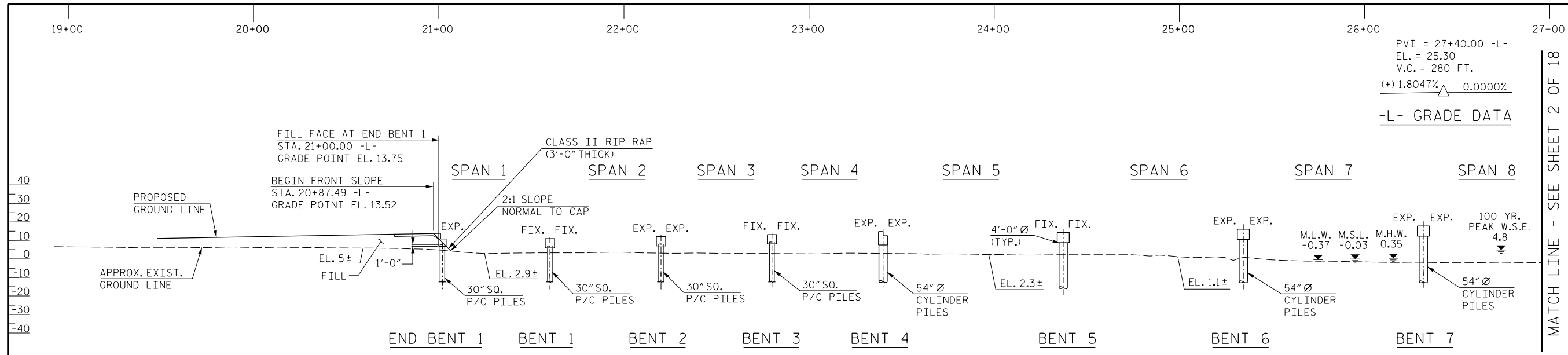
Good morning Marty,

We spoke to Mr. Pitts earlier this week and he asked if any design changes have occurred since the submittal of the our permit determination request. As bridge design has progressed, and bridge footings have been further minimized. The location, quantity, and navigable opening of the bridge bents remained unchanged, but the need to place every 4th pile on footings has been eliminated. All bents will now be pile bents and other aspects of the structure remain unchanged.

The drawings have been updated to reflect this change and are attached to this email.

Please let us know if you have any questions.

Chris Rivenbark  
NCDOT- Environmental Analysis Unit  
(919) 707-6152



**NOTE:**  
FOR GENERAL NOTES, SEE SHEET S-33.

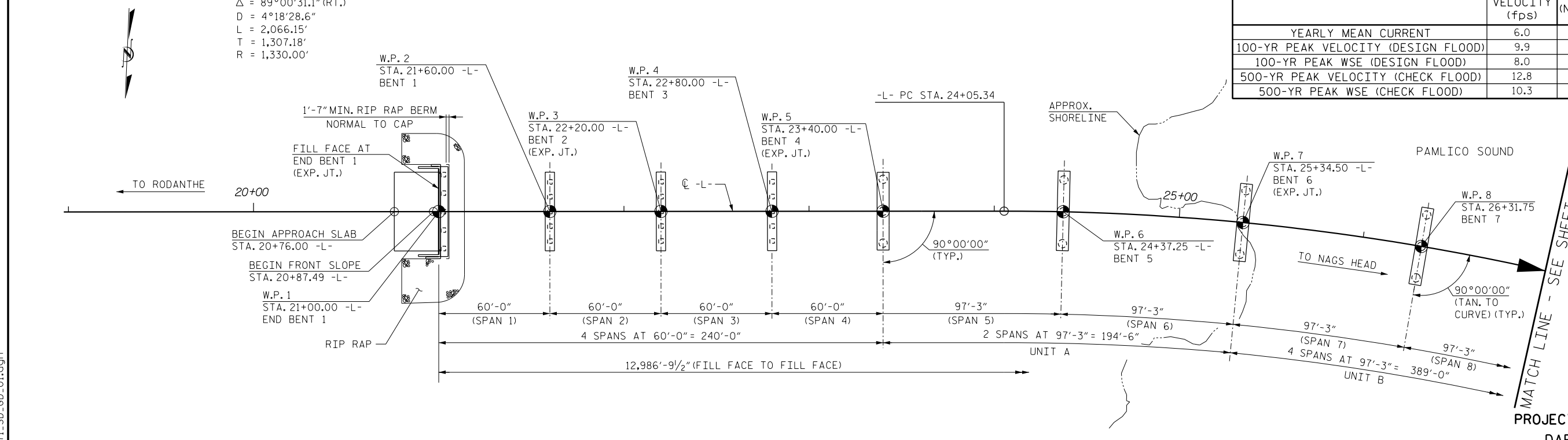
MATCH LINE - SEE SHEET 2 OF 18

**HORIZONTAL CURVE DATA -L-**

P.I. STA. 37+12.52  
 $\Delta = 89^{\circ}00'31.1''$  (RT.)  
 $D = 4^{\circ}18'28.6''$   
 $L = 2,066.15'$   
 $T = 1,307.18'$   
 $R = 1,330.00'$

**HYDRAULIC DATA**

FLOW EVENT	MAIN SPAN		TRANSITION SPAN	
	FLOW VELOCITY (fps)	WSE (NAVD88)	FLOW VELOCITY (fps)	WSE (NAVD88)
YEARLY MEAN CURRENT	6.0	0.4	1.0	0.4
100-YR PEAK VELOCITY (DESIGN FLOOD)	9.9	3.2	4.0	1.0
100-YR PEAK WSE (DESIGN FLOOD)	8.0	4.8	1.5	1.0
500-YR PEAK VELOCITY (CHECK FLOOD)	12.8	3.6	5.2	1.1
500-YR PEAK WSE (CHECK FLOOD)	10.3	5.4	1.9	1.1



MATCH LINE - SEE SHEET 2 OF 18

PROJECT NO. B-2500B  
 DARE COUNTY  
 STATION: 86+00.00 -L-

SHEET 1 OF 18 BRIDGE NO. 71

STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH  
**GENERAL DRAWING**  
 FOR BRIDGE  
 ON NC 12  
 OVER  
 PAMLICO SOUND

**RK&K**  
 RUMMEL, KLEPPER & KAHL, LLP  
 900 RIDGEFIELD DRIVE SUITE 350  
 RALEIGH, NC 27609-3960 (919) 878-9560  
 NC LICENSE NUMBER: F-0112

**PRELIMINARY  
PLANS  
DO NOT USE FOR  
CONSTRUCTION**

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			S-3
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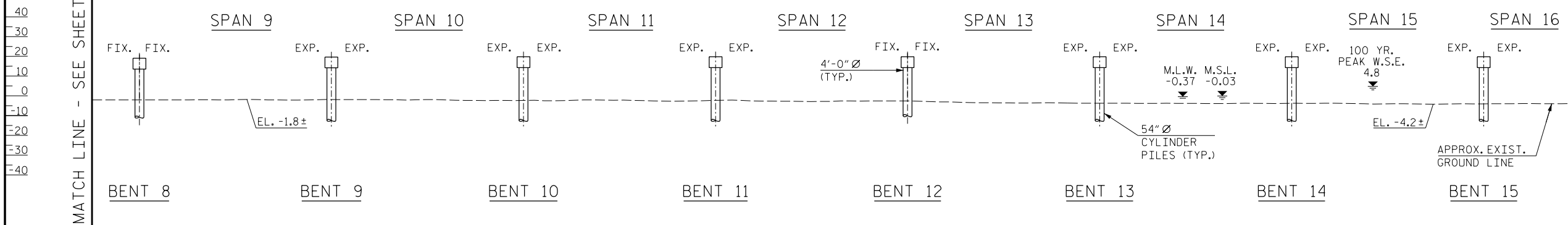
DRAWN BY : B. A. HAAG DATE : JUN 2018  
 CHECKED BY : D. B. PETERSON DATE : JUN 2018  
 DESIGN ENGINEER OF RECORD : D. B. PETERSON DATE : JUN 2018

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 EL. = 25.30  
 V.C. = 280 FT.

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-L- GRADE DATA

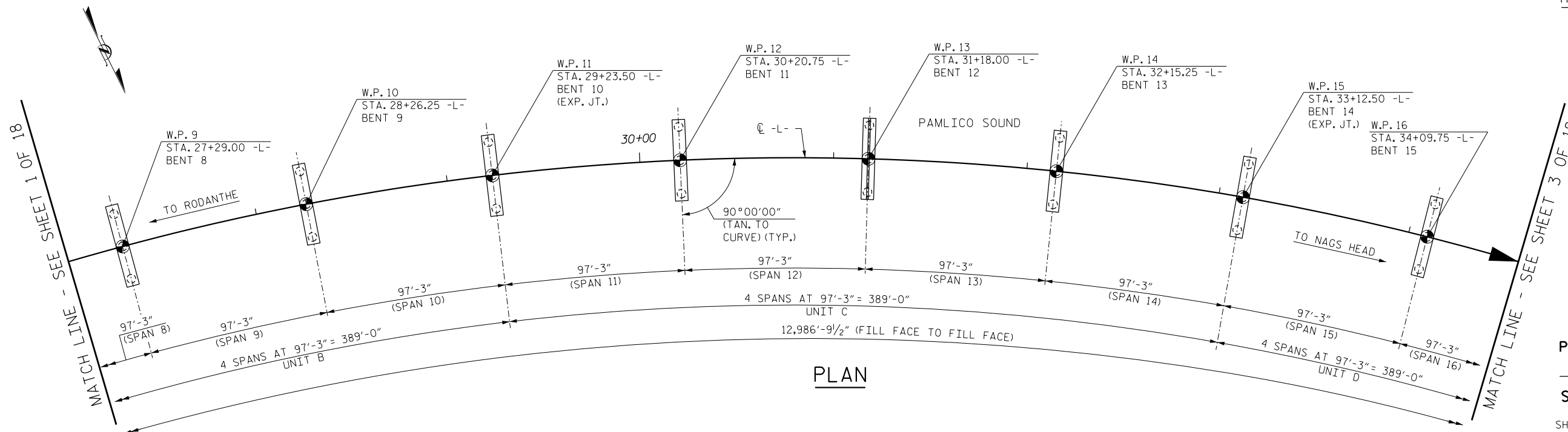
NOTE:  
 FOR GENERAL NOTES,  
 SEE SHEET S-33.



ELEVATION

HORIZONTAL CURVE DATA -L-

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 $R = 1,330.00'$



PLAN

PROJECT NO. B-2500B

DARE COUNTY

STATION: 86+00.00 -L-

SHEET 2 OF 18

STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH  
 GENERAL DRAWING  
 FOR BRIDGE  
 ON NC 12  
 OVER  
 PAMLICO SOUND

PRELIMINARY  
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**RK&K**  
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 900 RIDGEFIELD DRIVE SUITE 350  
 RALEIGH, NC 27609-3960 (919) 878-9560  
 NC LICENSE NUMBER: F-0112

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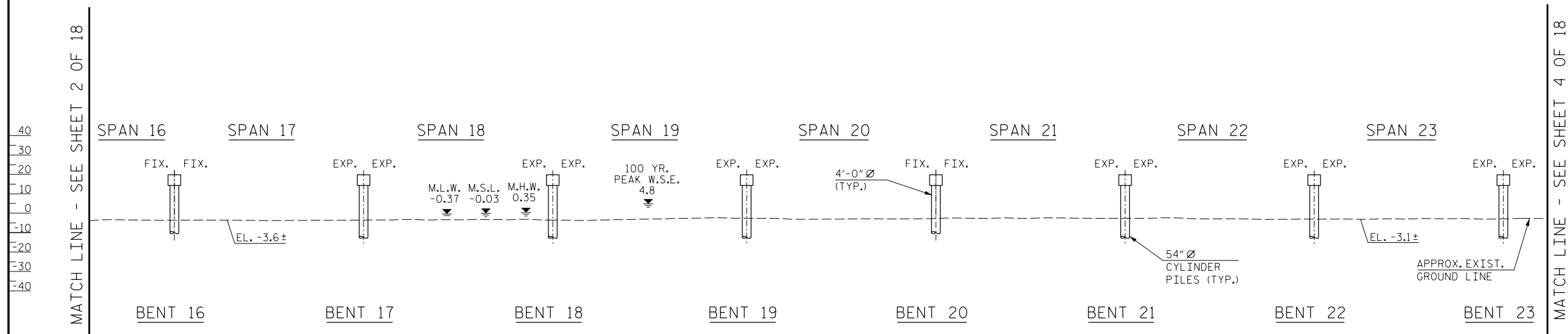
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6/6/2018  
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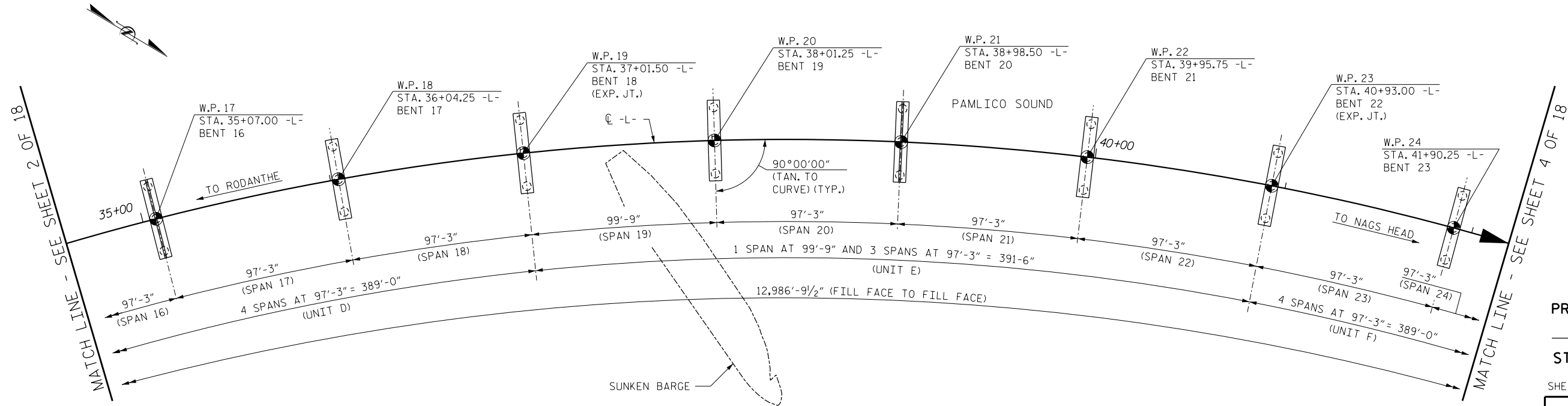
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SEE SHEET S-33.



**ELEVATION**

**HORIZONTAL CURVE DATA -L-**  
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**PLAN**

**PROJECT NO. B-2500B**  
**DARE COUNTY**  
**STATION: 86+00.00 -L-**

SHEET 3 OF 18

STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH  
**GENERAL DRAWING**  
 FOR BRIDGE  
 ON NC 12  
 OVER  
 PAMLICO SOUND

**PRELIMINARY  
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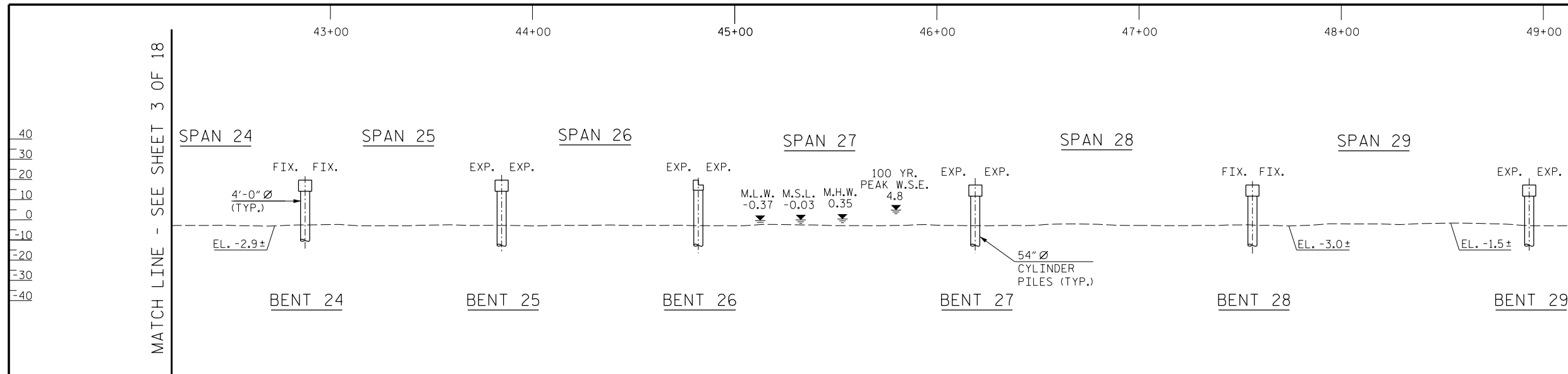
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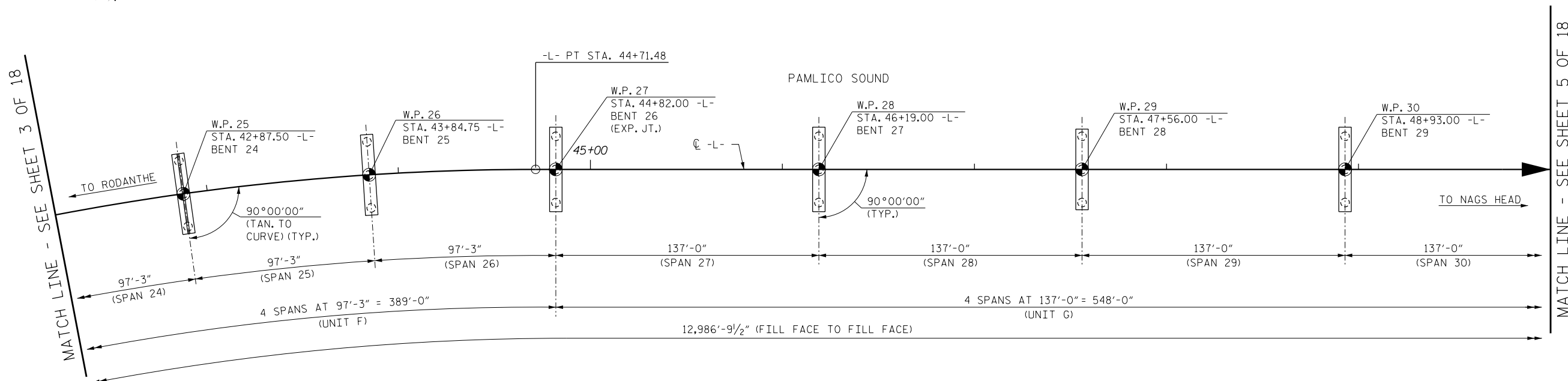
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**ELEVATION**

**HORIZONTAL CURVE DATA -L-**

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Δ	89°00'31.1" (RT.)
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T	1,307.18'
R	1,330.00'



**PLAN**

PROJECT NO. B-2500B  
 DARE COUNTY  
 STATION: 86+00.00 -L-

SHEET 4 OF 18

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**PRELIMINARY  
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STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH  
**GENERAL DRAWING  
 FOR BRIDGE  
 ON NC 12  
 OVER  
 PAMLICO SOUND**

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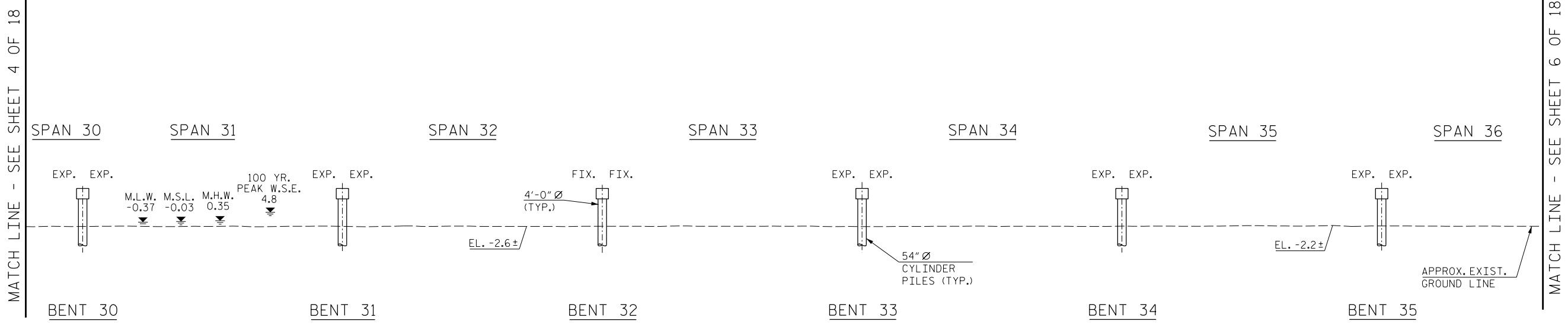
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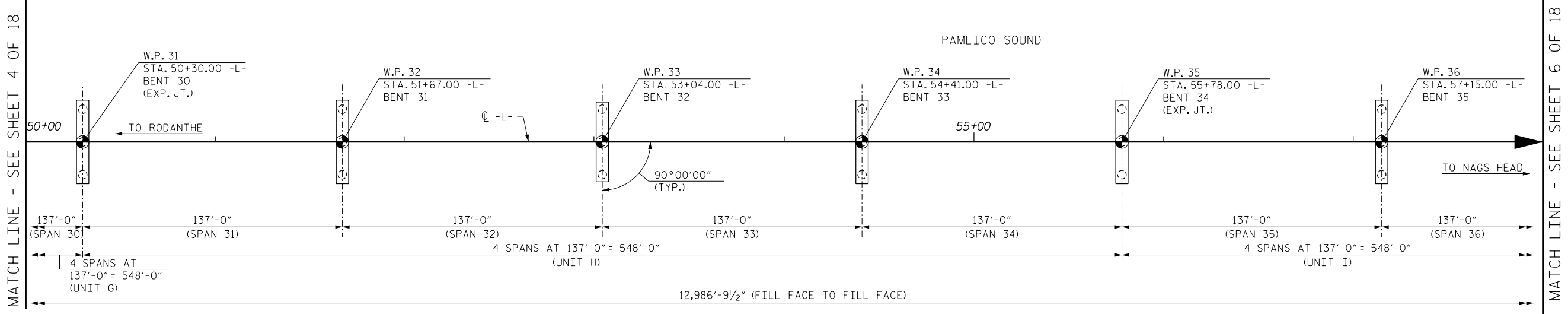
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**NOTE:**  
FOR GENERAL NOTES,  
SEE SHEET S-33.

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**ELEVATION**



**PLAN**

PROJECT NO. B-2500B  
DARE \_\_\_\_\_ COUNTY \_\_\_\_\_  
STATION: 86+00.00 -L-

SHEET 5 OF 18

STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
RALEIGH  
**GENERAL DRAWING**  
FOR BRIDGE  
ON NC 12  
OVER  
PAMLICO SOUND

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900 RIDGEFIELD DRIVE SUITE 350  
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NC LICENSE NUMBER: F-0112

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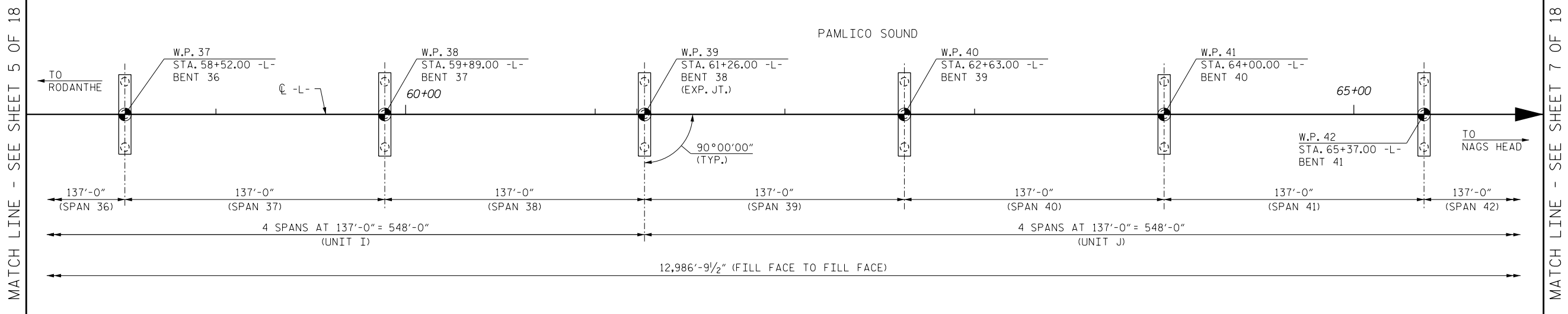
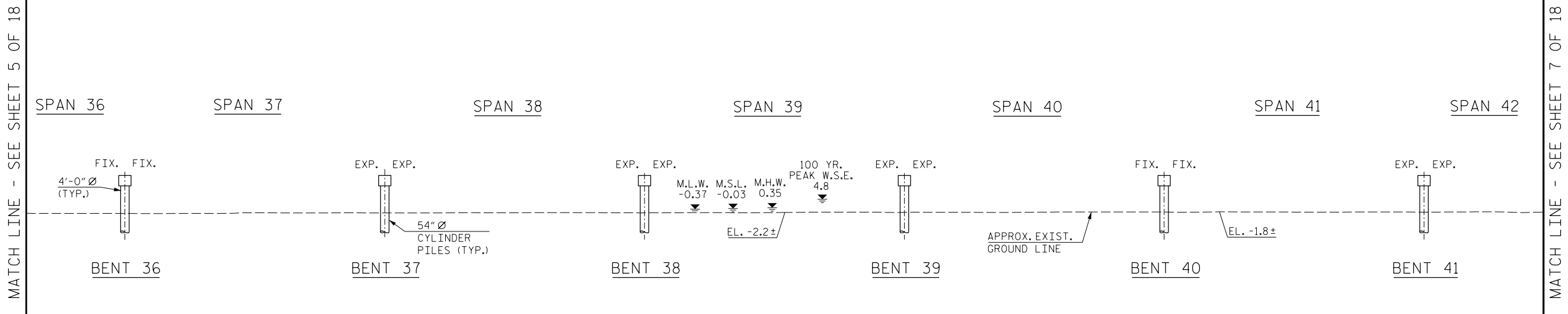
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**NOTE:**  
FOR GENERAL NOTES,  
SEE SHEET S-33.

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PROJECT NO. B-2500B  
DARE COUNTY  
STATION: 86+00.00 -L-

SHEET 6 OF 18

STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
RALEIGH  
**GENERAL DRAWING  
FOR BRIDGE  
ON NC 12  
OVER  
PAMLICO SOUND**

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NC LICENSE NUMBER: F-0112

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PLANS  
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REVISIONS						SHEET NO.
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6/6/2018  
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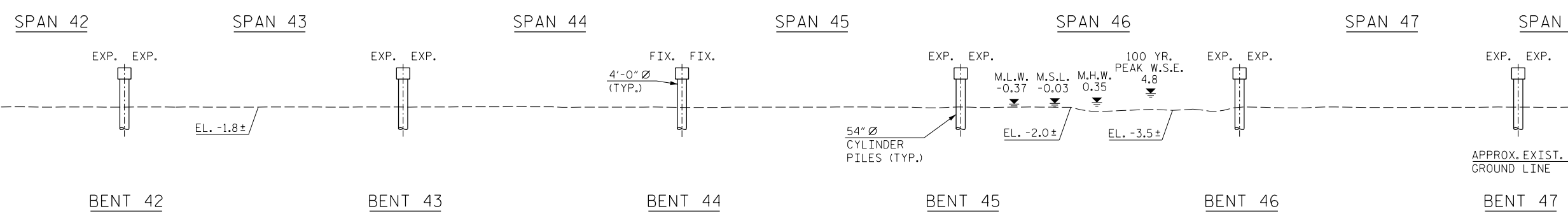
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**NOTE:**  
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SEE SHEET S-33.

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MATCH LINE - SEE SHEET 6 OF 18

MATCH LINE - SEE SHEET 8 OF 18

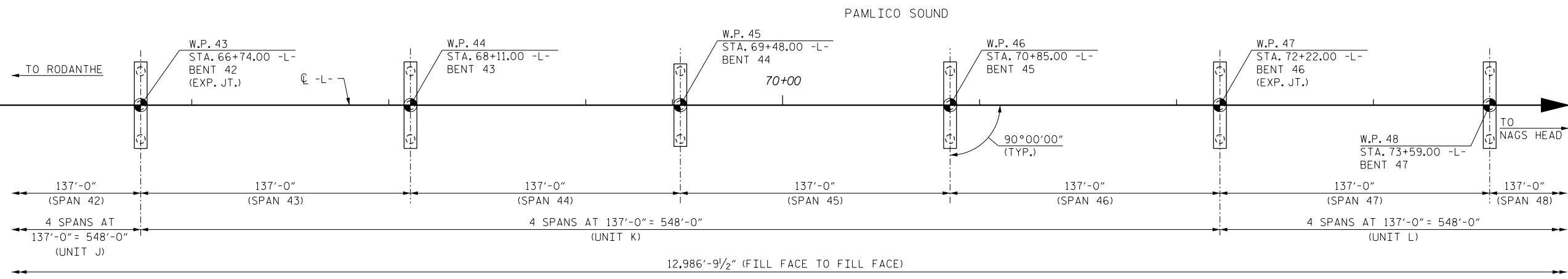


**ELEVATION**



MATCH LINE - SEE SHEET 6 OF 18

MATCH LINE - SEE SHEET 8 OF 18



**PLAN**

PROJECT NO. B-2500B  
DARE COUNTY  
STATION: 86+00.00 -L-

SHEET 7 OF 18

STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
RALEIGH  
**GENERAL DRAWING  
FOR BRIDGE  
ON NC 12  
OVER  
PAMLICO SOUND**

**RK&K**  
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900 RIDGEFIELD DRIVE SUITE 350  
RALEIGH, NC 27609-3960 (919) 878-9560  
NC LICENSE NUMBER: F-0112

**PRELIMINARY  
PLANS  
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REVISIONS						SHEET NO.
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DESIGN ENGINEER OF RECORD : D.B. PETERSON DATE : JUN 2018



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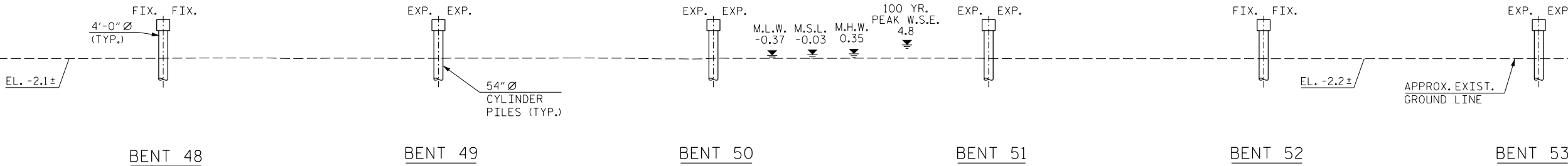
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MATCH LINE - SEE SHEET 7 OF 18

MATCH LINE - SEE SHEET 9 OF 18

SPAN 48 SPAN 49 SPAN 50 SPAN 51 SPAN 52 SPAN 53



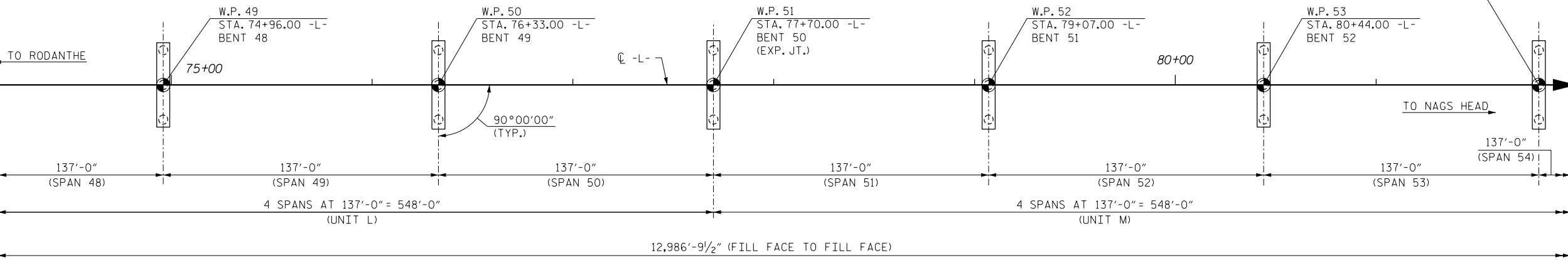
ELEVATION



MATCH LINE - SEE SHEET 7 OF 18

MATCH LINE - SEE SHEET 9 OF 18

PAMLICO SOUND



PLAN

PROJECT NO. B-2500B  
DARE COUNTY  
 STATION: 86+00.00 -L-

SHEET 8 OF 18

STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH  
**GENERAL DRAWING  
 FOR BRIDGE  
 ON NC 12  
 OVER  
 PAMLICO SOUND**

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 900 RIDGEFIELD DRIVE SUITE 350  
 RALEIGH, NC 27609-3960 (919) 878-9560  
 NC LICENSE NUMBER: F-0112

**PRELIMINARY  
 PLANS  
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REVISIONS						SHEET NO.
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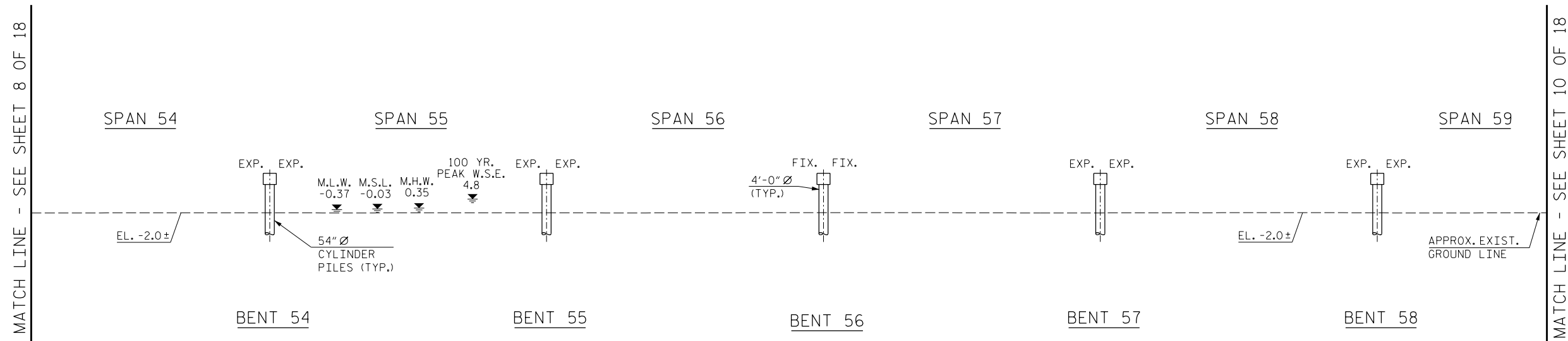
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DRAWN BY : B. A. HAAG DATE : JUN 2018  
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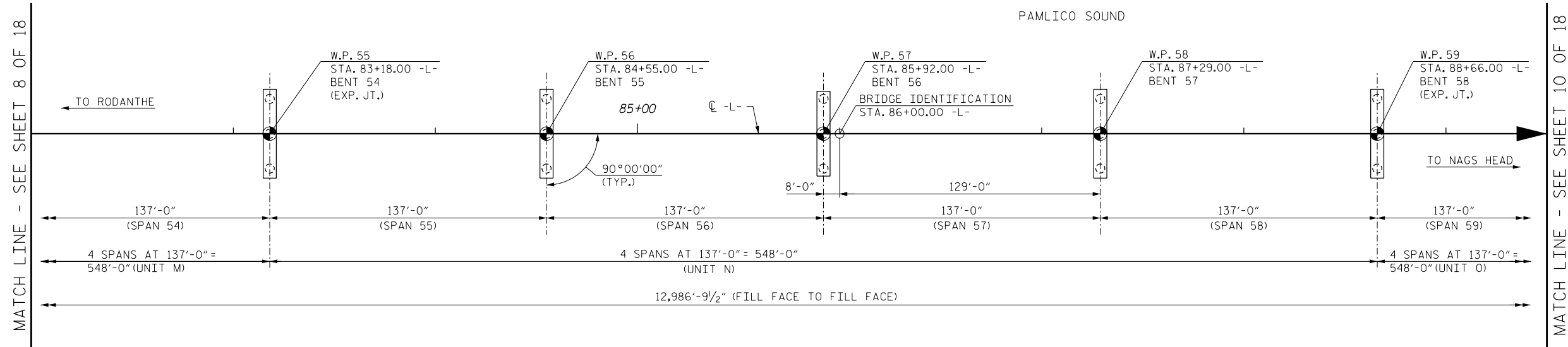
82+00 83+00 84+00 85+00 86+00 87+00 88+00 89+00

NOTE:  
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ELEVATION



PLAN

PROJECT NO. B-2500B  
DARE COUNTY  
STATION: 86+00.00 -L-

SHEET 9 OF 18

STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
RALEIGH  
GENERAL DRAWING  
FOR BRIDGE  
ON NC 12  
OVER  
PAMLICO SOUND

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RALEIGH, NC 27609-3960 (919) 878-9560  
NC LICENSE NUMBER: F-0112

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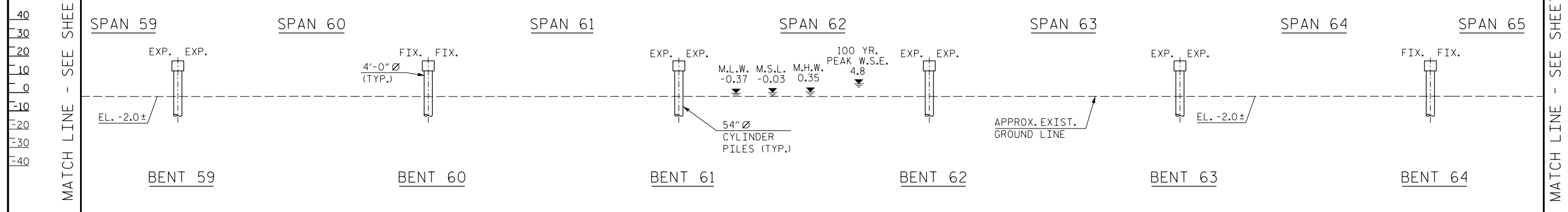
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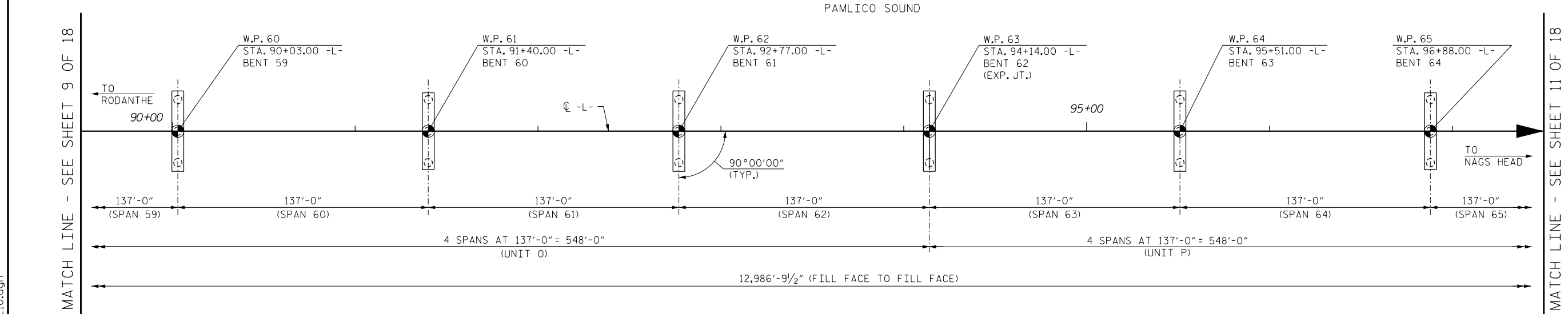
6/6/2018  
DRAWN BY : B. A. HAAG DATE : JUN 2018  
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DESIGN ENGINEER OF RECORD : D. B. PETERSON DATE : JUN 2018

90+00 91+00 92+00 93+00 94+00 95+00 96+00 97+00

NOTE:  
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**ELEVATION**



**PLAN**

PROJECT NO. B-2500B  
DARE COUNTY  
STATION: 86+00.00 -L-

SHEET 10 OF 18

STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
RALEIGH  
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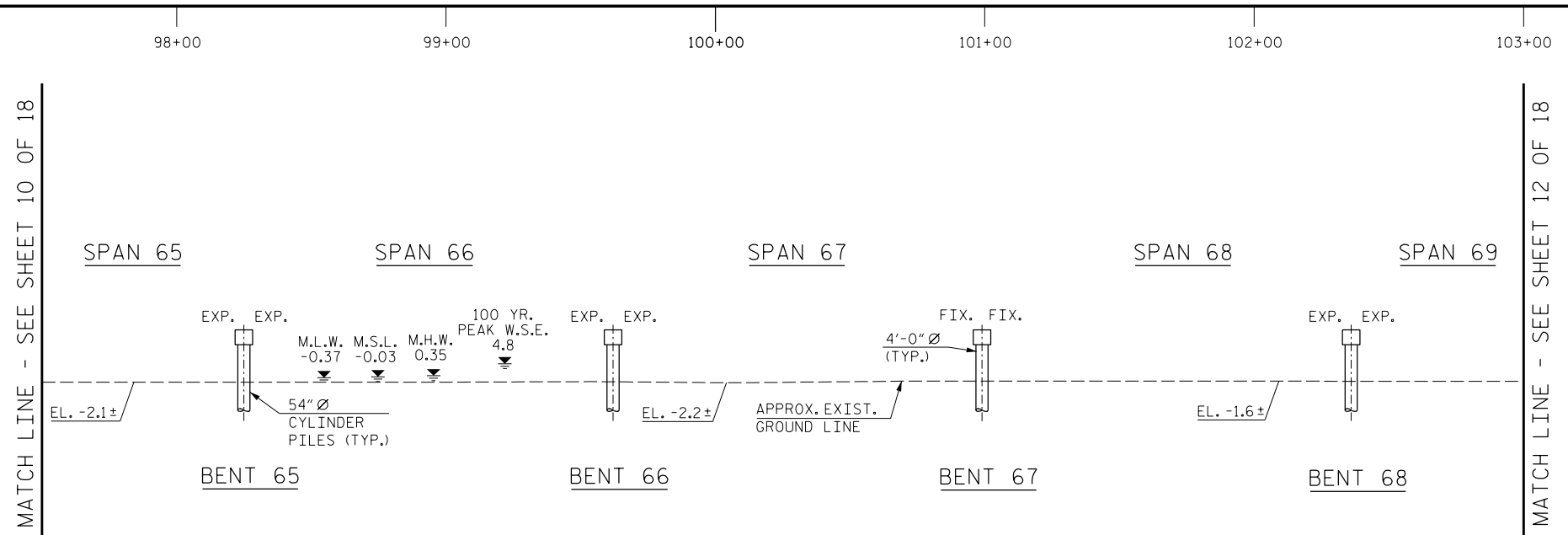
**PRELIMINARY  
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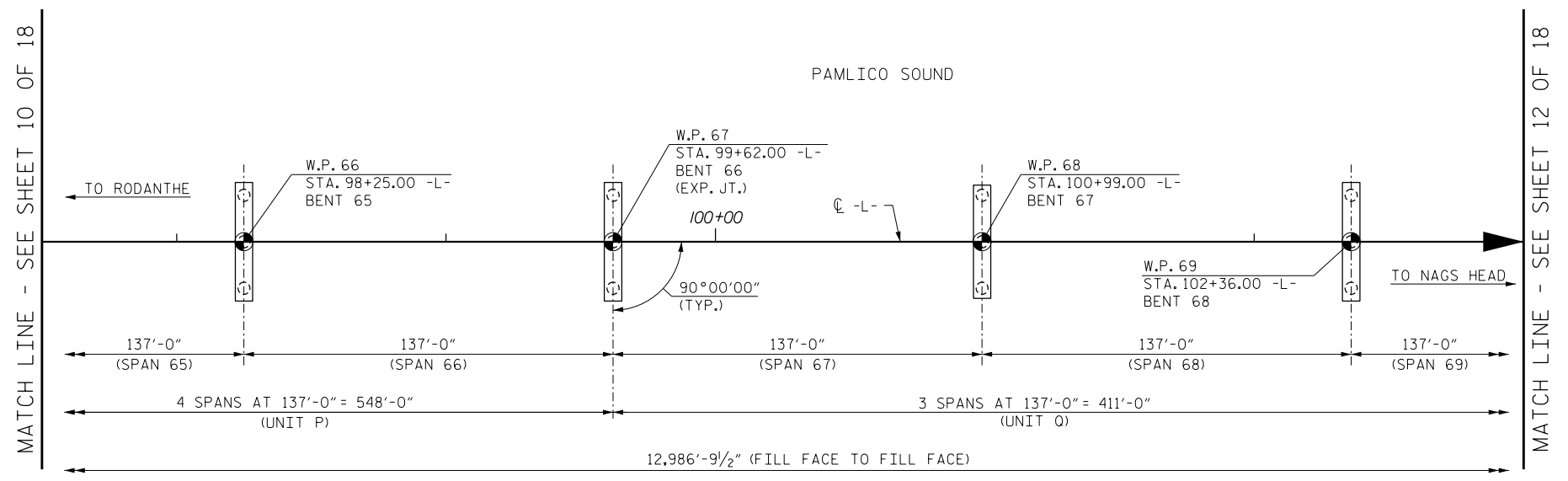
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6/6/2018  
DRAWN BY : B.A. HAAG DATE : JUN 2018  
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DESIGN ENGINEER OF RECORD : D.B. PETERSON DATE : JUN 2018



ELEVATION



PLAN

NOTE:  
FOR GENERAL NOTES,  
SEE SHEET S-33.

MATCH LINE - SEE SHEET 10 OF 18

MATCH LINE - SEE SHEET 12 OF 18

MATCH LINE - SEE SHEET 10 OF 18

MATCH LINE - SEE SHEET 12 OF 18

PROJECT NO. B-2500B  
DARE COUNTY  
 STATION: 86+00.00 -L-

SHEET 11 OF 18

STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH  
**GENERAL DRAWING  
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 PAMLICO SOUND**

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 NC LICENSE NUMBER: F-0112

**PRELIMINARY  
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REVISIONS						SHEET NO.
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1			3			TOTAL SHEETS
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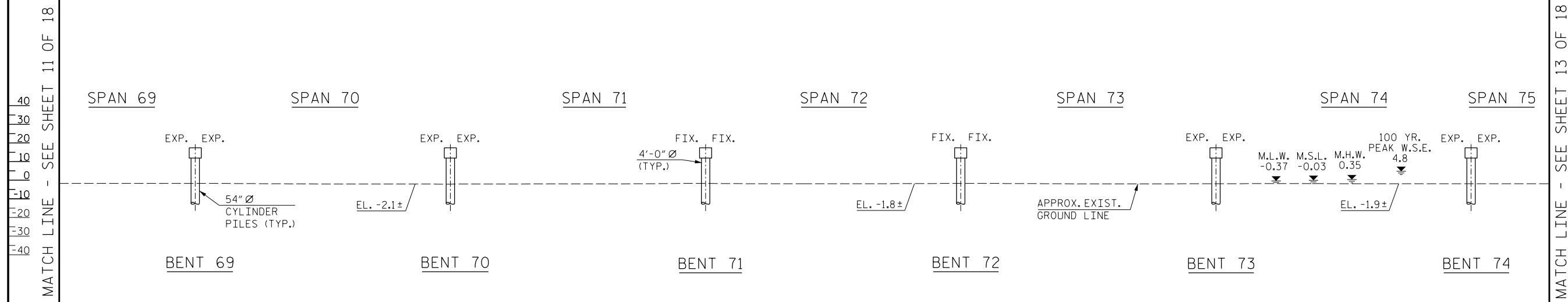
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 UNLESS ALL SIGNATURES COMPLETED**

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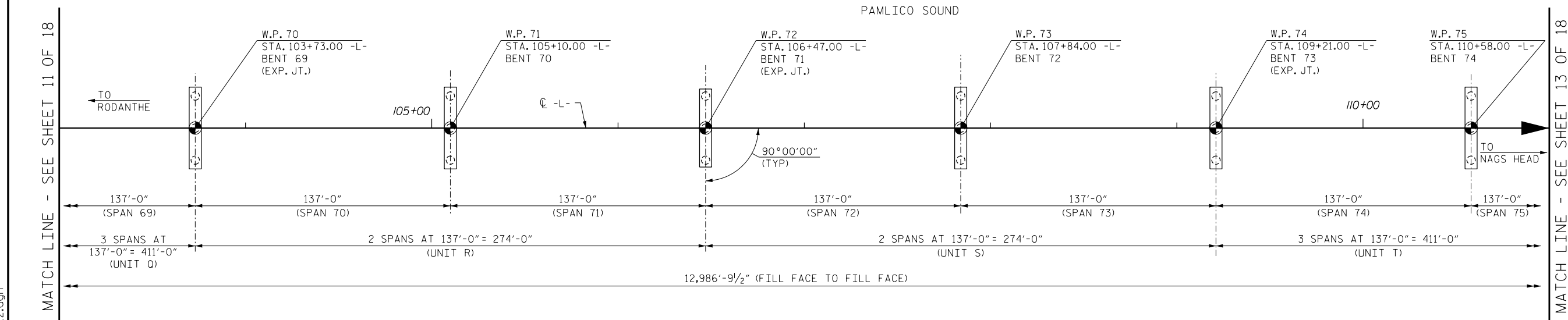
6/6/2018  
 DRAWN BY : B. A. HAAG DATE : JUN 2018  
 CHECKED BY : D. B. PETERSON DATE : JUN 2018  
 DESIGN ENGINEER OF RECORD : D. B. PETERSON DATE : JUN 2018

103+00 104+00 105+00 106+00 107+00 108+00 109+00 110+00 111+00

NOTE:  
FOR GENERAL NOTES,  
SEE SHEET S-33.



**ELEVATION**



**PLAN**

PROJECT NO. B-2500B  
DARE COUNTY  
STATION: 86+00.00 -L-

SHEET 12 OF 18

STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
RALEIGH  
**GENERAL DRAWING  
FOR BRIDGE  
ON NC 12  
OVER  
PAMLICO SOUND**

**RK&K**  
RUMMEL, KLEPPER & KAHL, LLP  
900 RIDGEFIELD DRIVE SUITE 350  
RALEIGH, NC 27609-3960 (919) 878-9560  
NC LICENSE NUMBER: F-0112

**PRELIMINARY  
PLANS  
DO NOT USE FOR  
CONSTRUCTION**

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-14
1			3			TOTAL SHEETS
2			4			43

6/6/2018 R:\Structures\DGN\FINAL\B2500B\_71\_SD\_GD\_12.dgn

DRAWN BY : B. A. HAAG DATE : JUN 2018  
CHECKED BY : D. B. PETERSON DATE : JUN 2018  
DESIGN ENGINEER OF RECORD : D. B. PETERSON DATE : JUN 2018

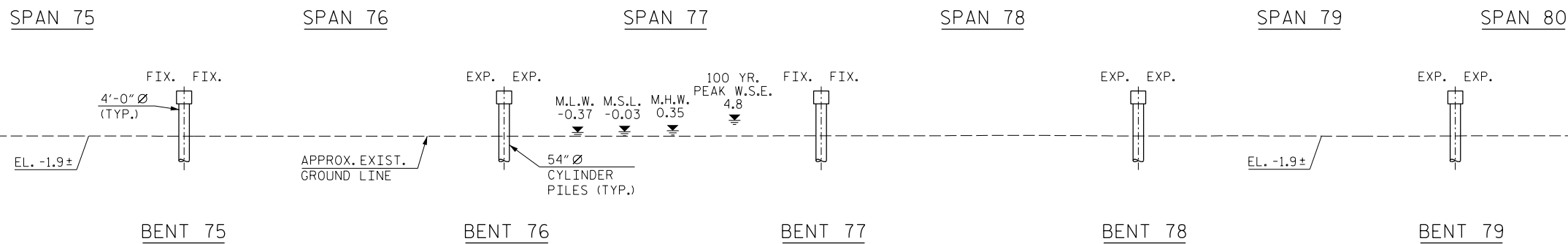
**DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED**

111+00 112+00 113+00 114+00 115+00 116+00 117+00 118+00

NOTE:  
FOR GENERAL NOTES,  
SEE SHEET S-33.

40  
30  
20  
10  
0  
-10  
-20  
-30  
-40

MATCH LINE - SEE SHEET 12 OF 18



**ELEVATION**

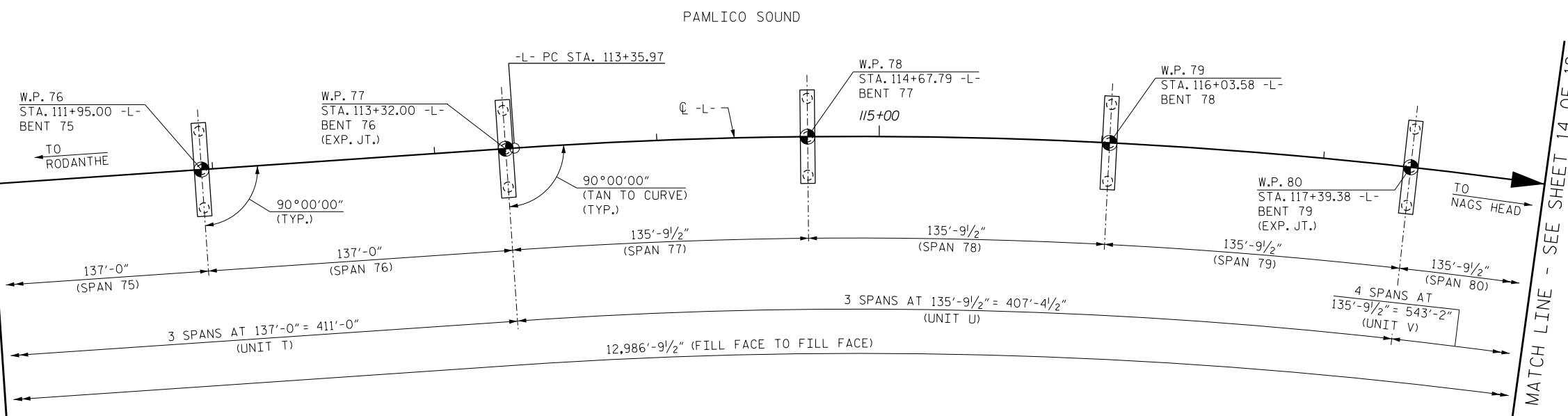
MATCH LINE - SEE SHEET 14 OF 18



**HORIZONTAL CURVE DATA -L-**

P.I. STA. 119+66.46  
 $\Delta = 31^\circ 18' 28.4''$  (RT.)  
 $D = 2^\circ 32' 47.3''$   
 $L = 1,229.46'$   
 $T = 630.50'$   
 $R = 2,250.00'$

MATCH LINE - SEE SHEET 12 OF 18



**PLAN**

MATCH LINE - SEE SHEET 14 OF 18

PROJECT NO. B-2500B  
DARE COUNTY  
 STATION: 86+00.00 -L-

SHEET 13 OF 18

STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH  
**GENERAL DRAWING**  
 FOR BRIDGE  
 ON NC 12  
 OVER  
 PAMLICO SOUND

**RK&K**  
 RUMMEL, KLEPPER & KAHL, LLP  
 900 RIDGEFIELD DRIVE SUITE 350  
 RALEIGH, NC 27609-3960 (919) 878-9560  
 NC LICENSE NUMBER: F-0112

**PRELIMINARY  
PLANS  
DO NOT USE FOR  
CONSTRUCTION**

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-15
1			3			TOTAL SHEETS
2			4			43

**DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED**

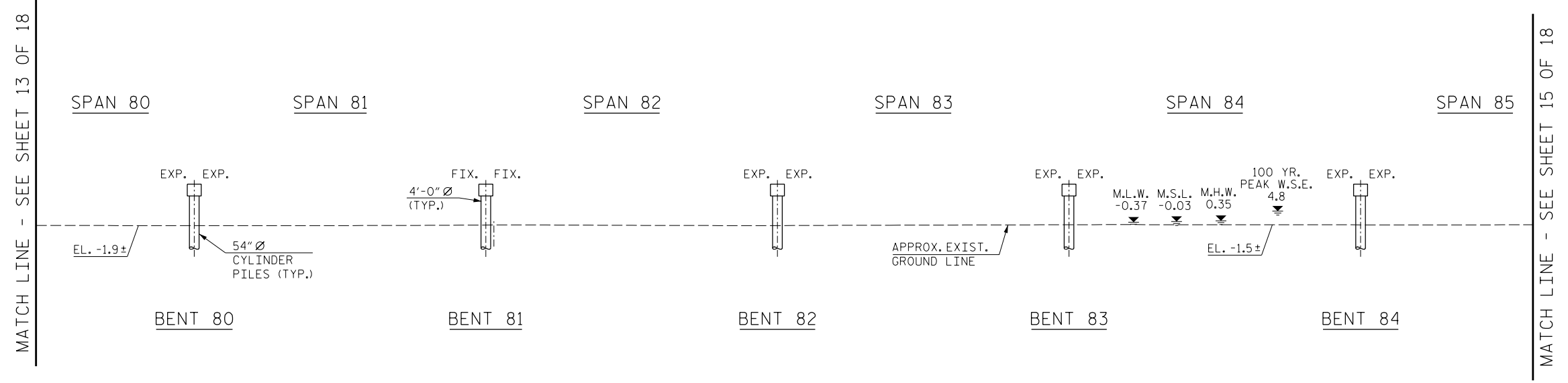
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6/6/2018  
 DRAWN BY : B.A. HAAG DATE : JUN 2018  
 CHECKED BY : D.B. PETERSON DATE : JUN 2018  
 DESIGN ENGINEER OF RECORD : D.B. PETERSON DATE : JUN 2018

118+00 119+00 120+00 121+00 122+00 123+00 124+00 125+00

**NOTE:**  
FOR GENERAL NOTES, SEE SHEET S-33.

40  
30  
20  
10  
0  
-10  
-20  
-30  
-40



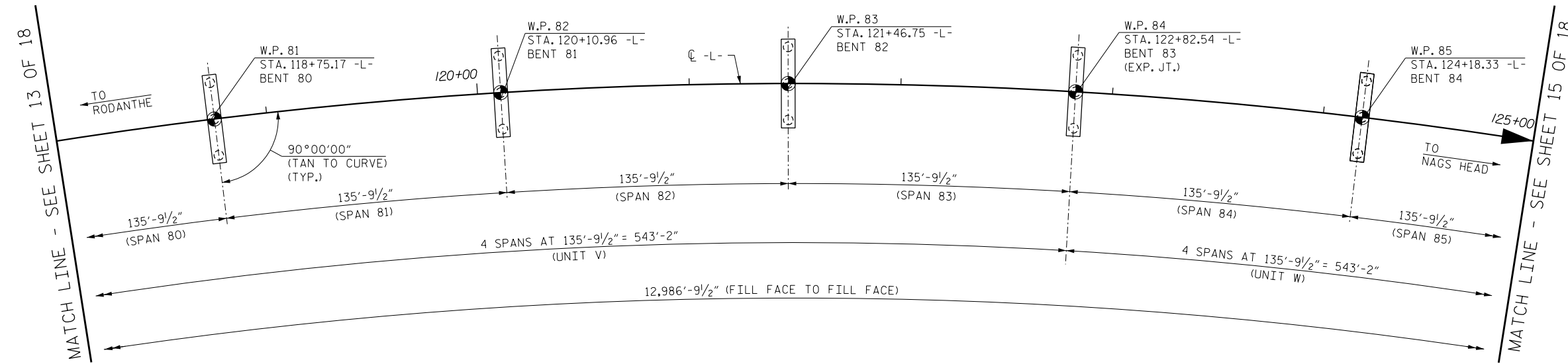
**ELEVATION**

**HORIZONTAL CURVE DATA -L-**

P.I. STA. 119+66.46  
 $\Delta = 31^\circ 18' 28.4''$  (RT.)  
 $D = 2^\circ 32' 47.3''$   
 $L = 1,229.46'$   
 $T = 630.50'$   
 $R = 2,250.00'$



PAMLICO SOUND



**PLAN**

PROJECT NO. B-2500B  
DARE COUNTY  
 STATION: 86+00.00 -L-

SHEET 14 OF 18

STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH  
**GENERAL DRAWING**  
 FOR BRIDGE  
 ON NC 12  
 OVER  
 PAMLICO SOUND

**RK&K**  
 RUMMEL, KLEPPER & KAHL, LLP  
 900 RIDGEFIELD DRIVE SUITE 350  
 RALEIGH, NC 27609-3960 (919) 878-9560  
 NC LICENSE NUMBER: F-0112

**PRELIMINARY  
 PLANS  
 DO NOT USE FOR  
 CONSTRUCTION**

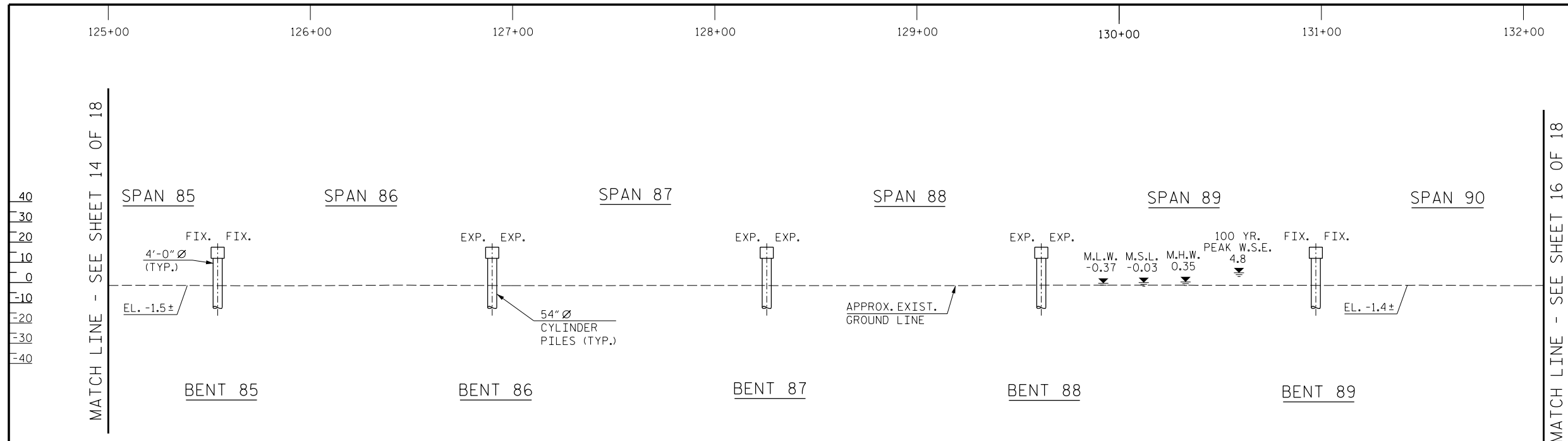
REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-16
1			3			TOTAL SHEETS
2			4			43

**DOCUMENT NOT CONSIDERED FINAL  
 UNLESS ALL SIGNATURES COMPLETED**

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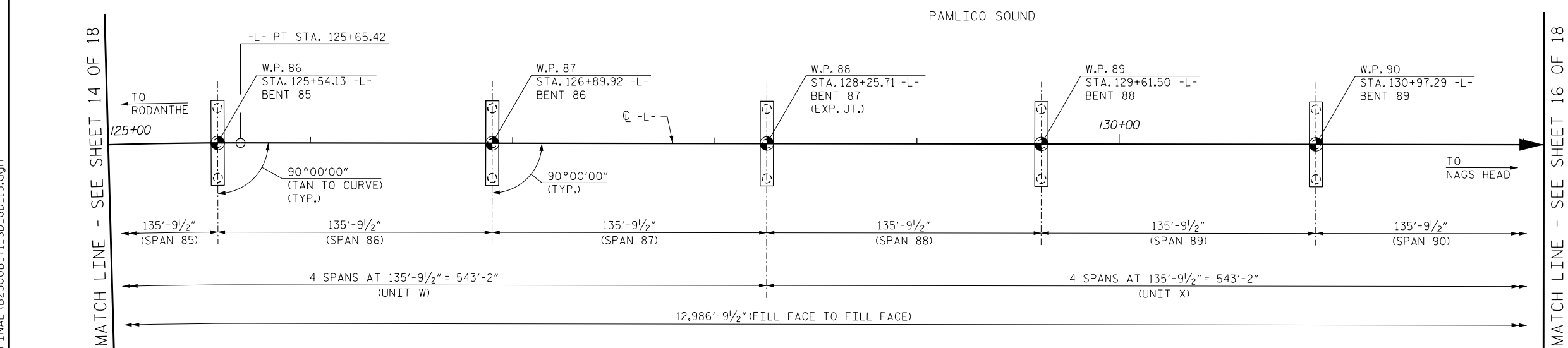
6/6/2018  
 DRAWN BY : B. A. HAAG DATE : JUN 2018  
 CHECKED BY : D. B. PETERSON DATE : JUN 2018  
 DESIGN ENGINEER OF RECORD : D. B. PETERSON DATE : JUN 2018

NOTE:  
FOR GENERAL NOTES,  
SEE SHEET S-33.



**ELEVATION**

HORIZONTAL CURVE DATA -L-  
 P.I. STA. 119+66.46  
 Δ = 31°18'28.4" (RT.)  
 D = 2°32'47.3"  
 L = 1,229.46'  
 T = 630.50'  
 R = 2,250.00'



**PLAN**

PROJECT NO. B-2500B  
DARE COUNTY  
 STATION: 86+00.00 -L-

SHEET 15 OF 18

STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH  
**GENERAL DRAWING  
 FOR BRIDGE  
 ON NC 12  
 OVER  
 PAMLICO SOUND**

**RK&K**  
 RUMMEL, KLEPPER & KAHL, LLP  
 900 RIDGEFIELD DRIVE SUITE 350  
 RALEIGH, NC 27609-3960 (919) 878-9560  
 NC LICENSE NUMBER: F-0112

**PRELIMINARY  
 PLANS  
 DO NOT USE FOR  
 CONSTRUCTION**

**DOCUMENT NOT CONSIDERED FINAL  
 UNLESS ALL SIGNATURES COMPLETED**

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-17
1			3			TOTAL SHEETS
2			4			228

R:\Structures\DGNA\FINAL\B2500B\_71\_SD\_GD\_15.dgn

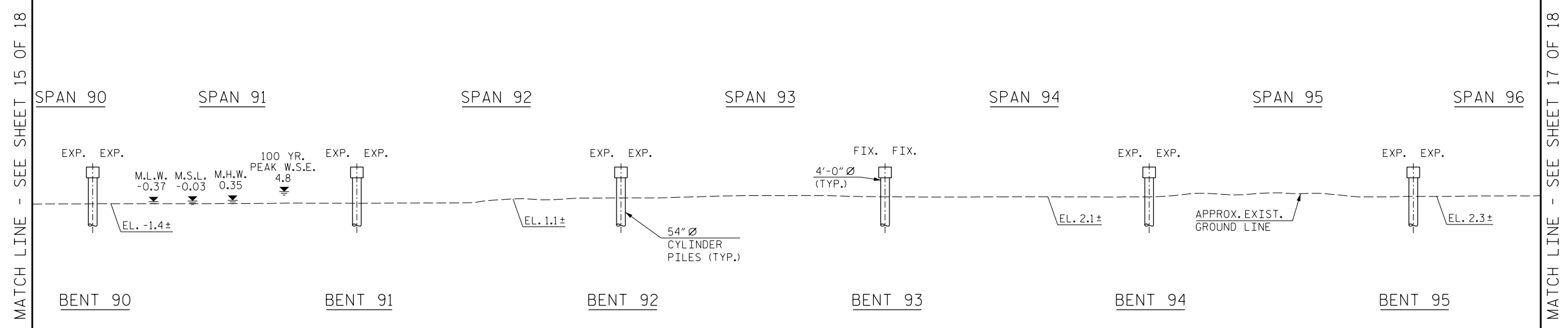
6/6/2018  
 DRAWN BY : B.A. HAAG DATE : FEB 2018  
 CHECKED BY : D.B. PETERSON DATE : FEB 2018  
 DESIGN ENGINEER OF RECORD : D.B. PETERSON DATE : FEB 2018



132+00 133+00 134+00 135+00 136+00 137+00 138+00 139+00

NOTE:  
FOR GENERAL NOTES,  
SEE SHEET S-33.

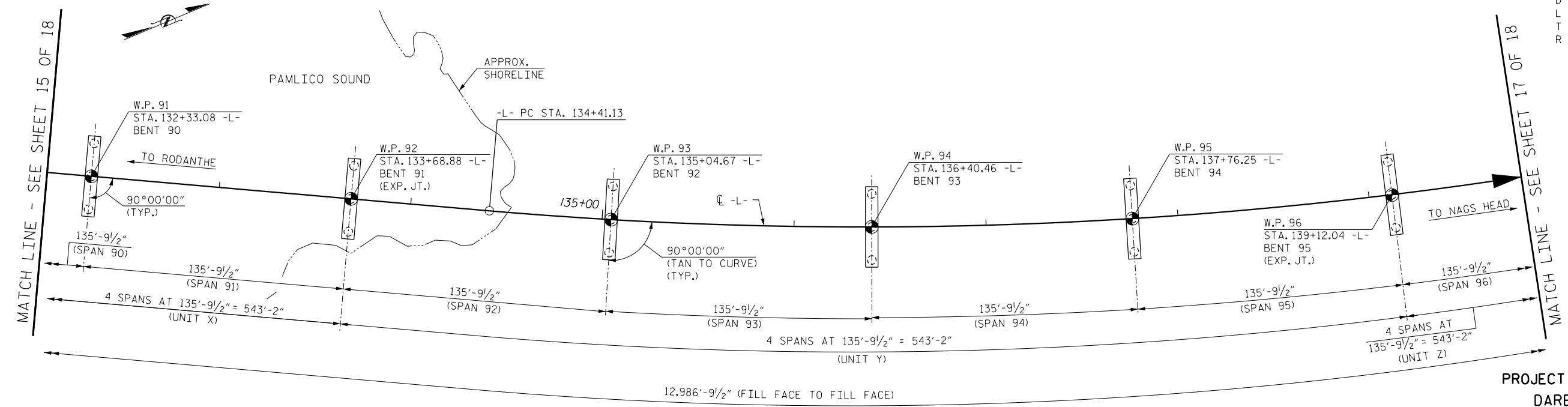
40  
30  
20  
10  
0  
-10  
-20  
-30  
-40



ELEVATION

HORIZONTAL CURVE DATA -L-

P.I. STA. 142+11.31  
 $\Delta = 37^\circ 38' 12.9''$  (LT.)  
 $D = 2^\circ 32' 06.8''$   
 $L = 1,484.57'$   
 $T = 770.18'$   
 $R = 2,260.00'$



PLAN

PROJECT NO. B-2500B  
 DARE COUNTY  
 STATION: 86+00.00 -L-

SHEET 16 OF 18

STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH  
 GENERAL DRAWING  
 FOR BRIDGE  
 ON NC 12  
 OVER  
 PAMLICO SOUND

PRELIMINARY  
 PLANS  
 DO NOT USE FOR  
 CONSTRUCTION

**RK&K**  
 RUMMEL, KLEPPER & KAHL, LLP  
 900 RIDGEFIELD DRIVE SUITE 350  
 RALEIGH, NC 27609-3960 (919) 878-9560  
 NC LICENSE NUMBER: F-0112

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-18
1			3			TOTAL SHEETS
2			4			43

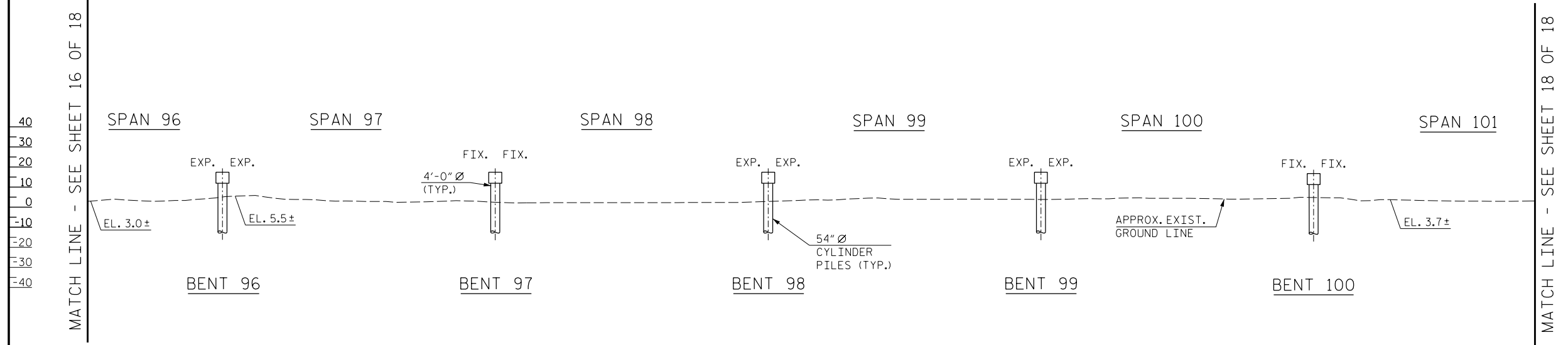
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R:\Structures\DGNA\FINAL\B2500B\_71\_SD\_GD\_16.dgn  
 6/6/2018  
 bhaag

DRAWN BY : B.A. HAAG DATE : JUN 2018  
 CHECKED BY : D.B. PETERSON DATE : JUN 2018  
 DESIGN ENGINEER OF RECORD : D.B. PETERSON DATE : JUN 2018

140+00 141+00 142+00 143+00 144+00 145+00 146+00 147+00

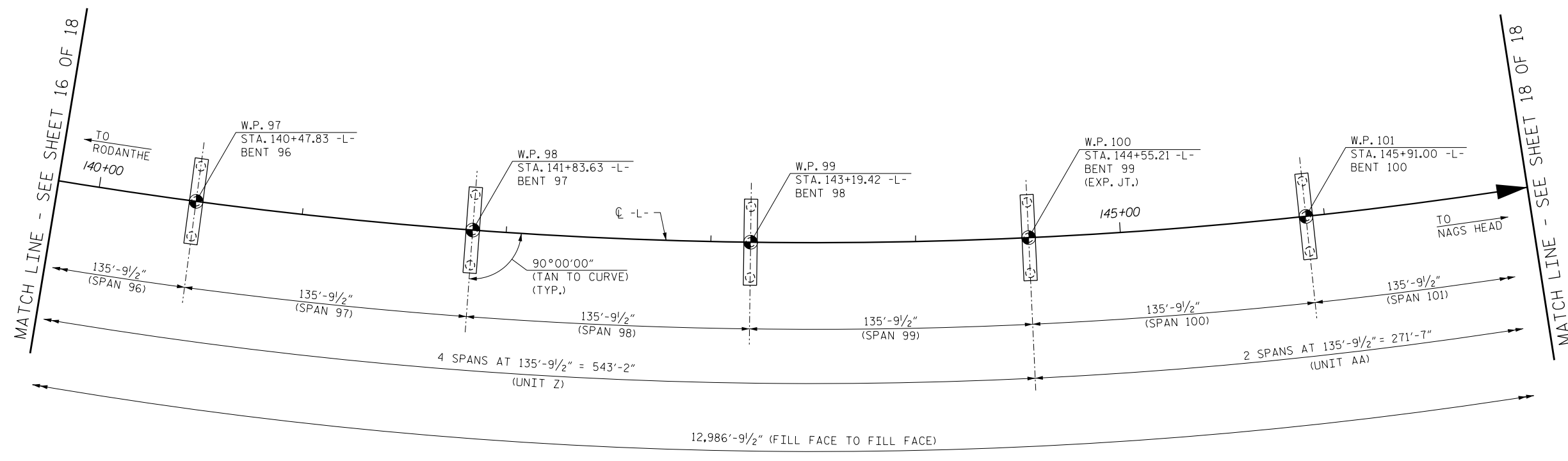
**NOTE:**  
FOR GENERAL NOTES,  
SEE SHEET S-33.



**ELEVATION**

**HORIZONTAL CURVE DATA -L-**

P.I. STA. 142+11.31  
 $\Delta = 37^\circ 38' 12.9''$  (LT.)  
 $D = 2^\circ 32' 06.8''$   
 $L = 1,484.57'$   
 $T = 770.18'$   
 $R = 2,260.00'$



**PLAN**

PROJECT NO. B-2500B  
DARE COUNTY  
 STATION: 86+00.00 -L-

SHEET 17 OF 18

STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH  
**GENERAL DRAWING**  
 FOR BRIDGE  
 ON NC 12  
 OVER  
 PAMLICO SOUND

**RK&K**  
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 900 RIDGEFIELD DRIVE SUITE 350  
 RALEIGH, NC 27609-3960 (919) 878-9560  
 NC LICENSE NUMBER: F-0112

**PRELIMINARY  
 PLANS  
 DO NOT USE FOR  
 CONSTRUCTION**

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-19
1			3			TOTAL SHEETS
2			4			43

**DOCUMENT NOT CONSIDERED FINAL  
 UNLESS ALL SIGNATURES COMPLETED**

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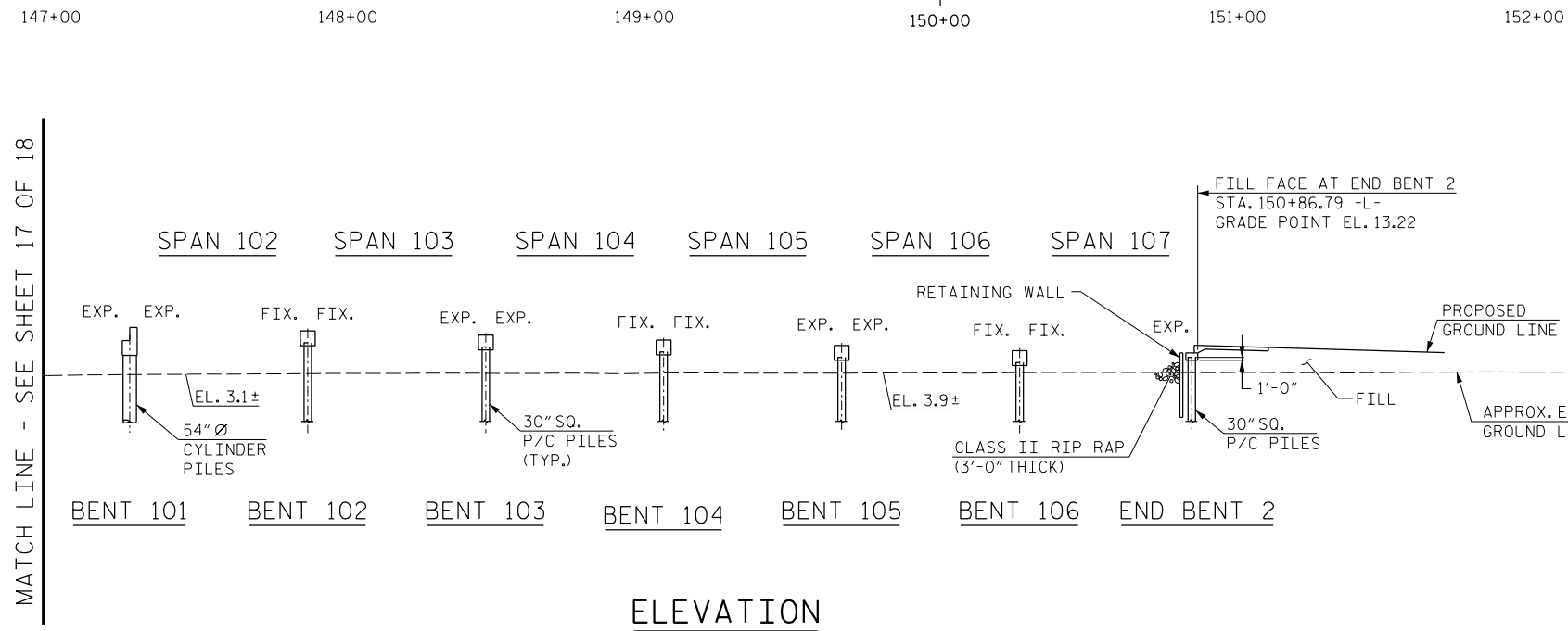
6/6/2018  
 DRAWN BY : B. A. HAAG DATE : JUN 2018  
 CHECKED BY : D. B. PETERSON DATE : JUN 2018  
 DESIGN ENGINEER OF RECORD : D. B. PETERSON DATE : JUN 2018

PVI = 146+75.00 -L-  
 EL. = 25.30  
 V.C. = 450 FT.

(+)0.0000% (-)2.9345%

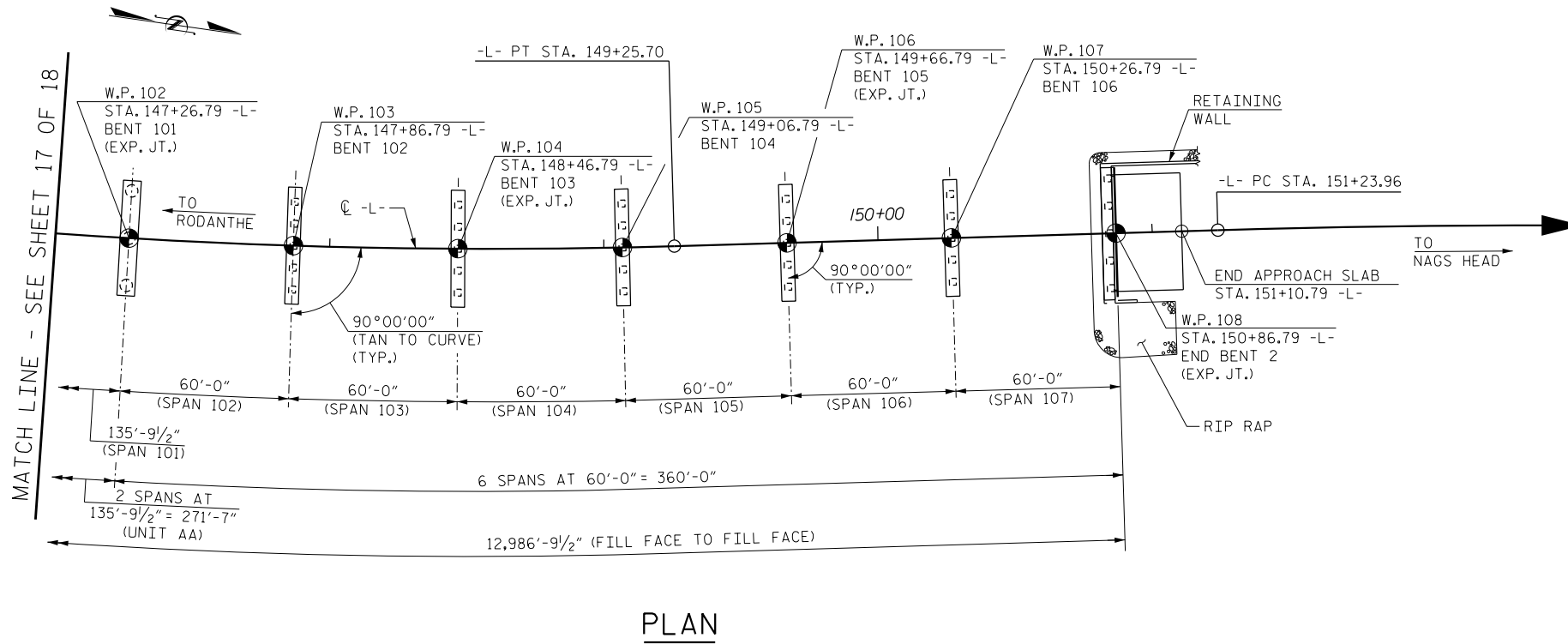
-L- GRADE DATA

NOTE:  
 FOR GENERAL NOTES,  
 SEE SHEET S-33.



HORIZONTAL CURVE DATA -L-

P.I. STA. 142+11.31  
 $\Delta = 37^\circ 38' 12.9''$  (LT.)  
 $D = 2^\circ 32' 06.8''$   
 $L = 1,484.57'$   
 $T = 770.18'$   
 $R = 2,260.00'$



PROJECT NO. B-2500B  
 DARE COUNTY  
 STATION: 86+00.00 -L-

SHEET 18 OF 18

STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH  
 GENERAL DRAWING  
 FOR BRIDGE  
 ON NC 12  
 OVER  
 PAMLICO SOUND

**RK&K**  
 RUMMEL, KLEPPER & KAHL, LLP  
 900 RIDGEFIELD DRIVE SUITE 350  
 RALEIGH, NC 27609-3960 (919) 878-9560  
 NC LICENSE NUMBER: F-0112

PRELIMINARY  
 PLANS  
 DO NOT USE FOR  
 CONSTRUCTION

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-20
1			3			TOTAL SHEETS
2			4			43

DOCUMENT NOT CONSIDERED FINAL  
 UNLESS ALL SIGNATURES COMPLETED

R:\Structures\DGN\FINAL\B2500B\_71\_SD\_GD\_18.dgn

6/6/2018  
 DRAWN BY : B.A. HAAG DATE : JUN 2018  
 CHECKED BY : D.B. PETERSON DATE : JUN 2018  
 DESIGN ENGINEER OF RECORD : D.B. PETERSON DATE : JUN 2018