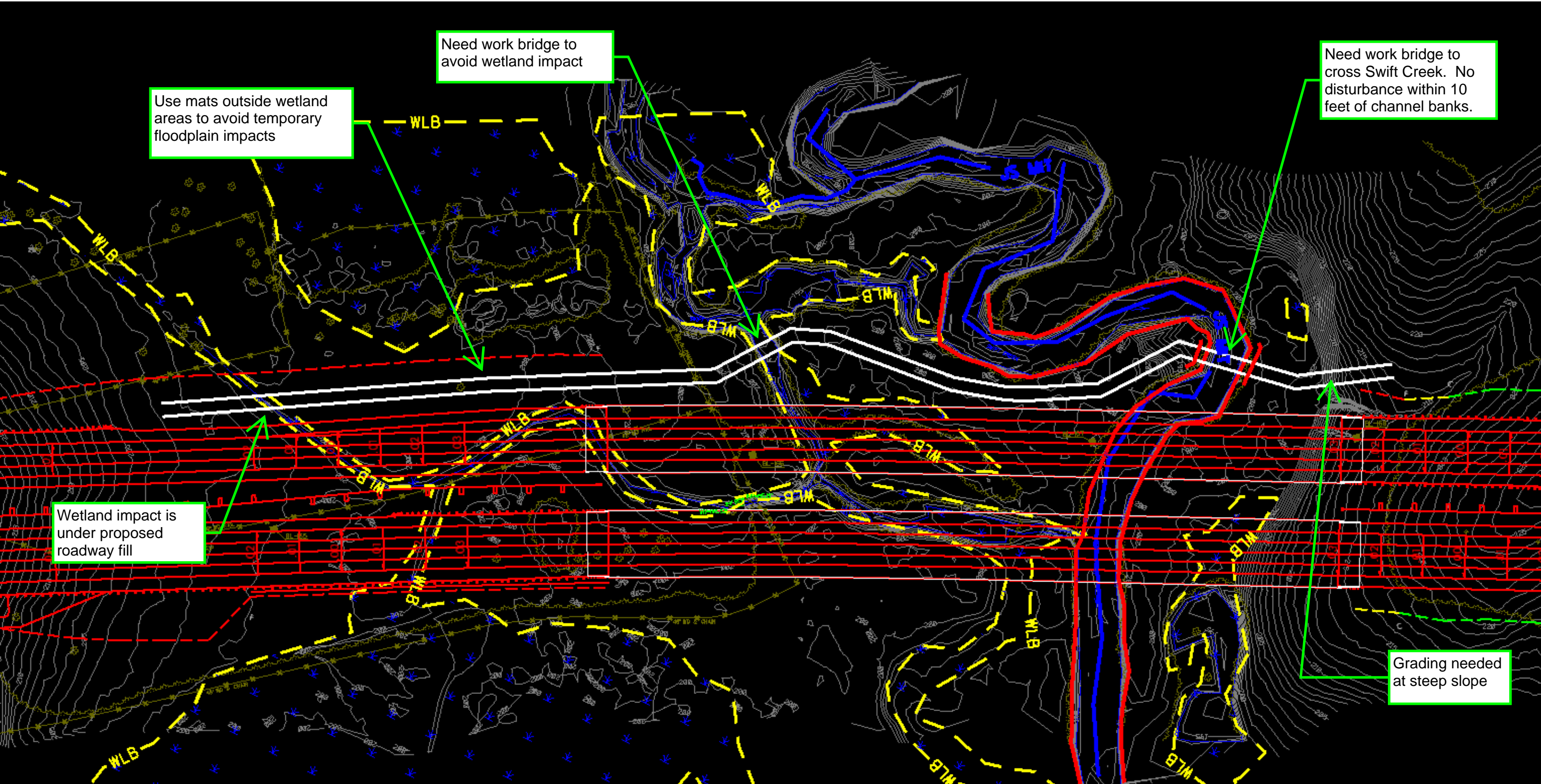


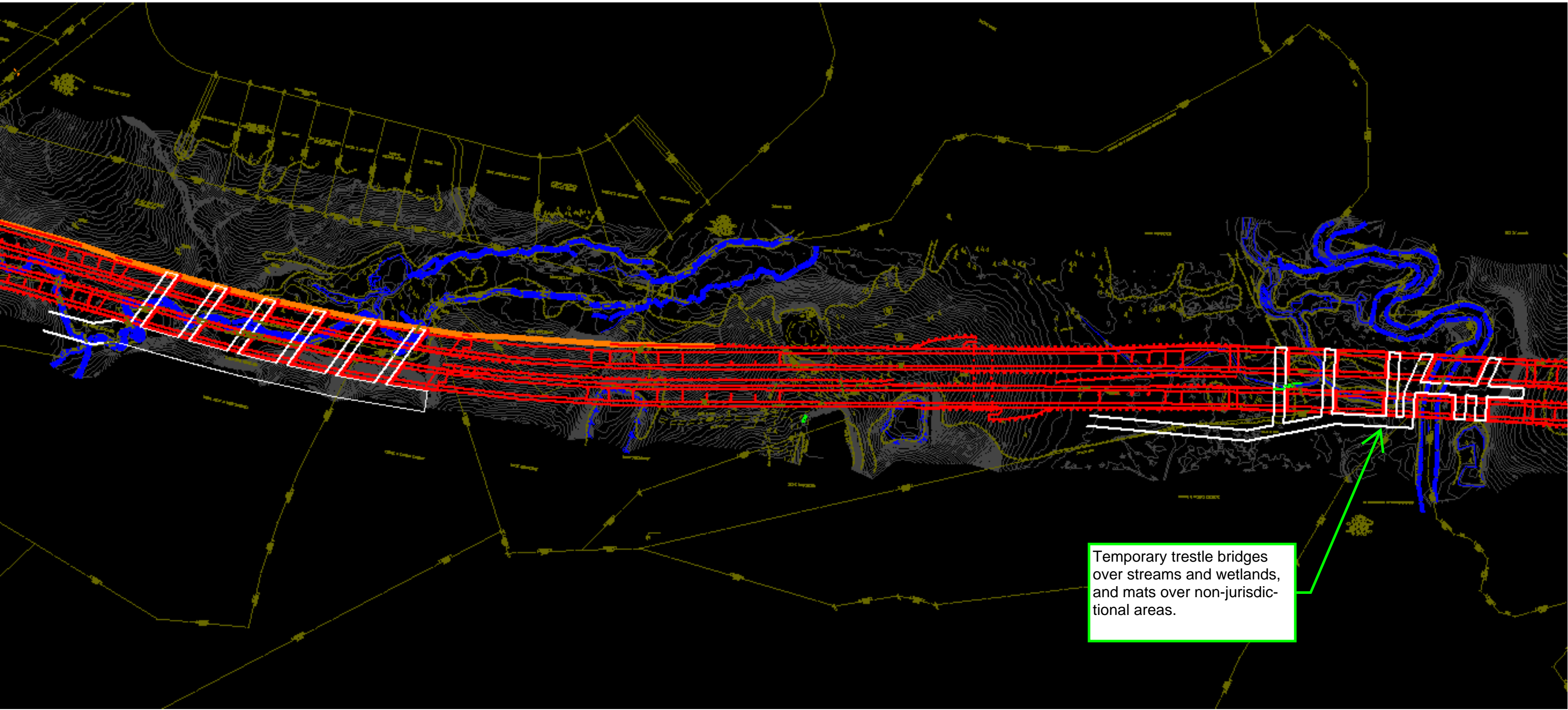
# TEMPORARY CROSSING OF SWIFT CREEK

Presented at 4B Meeting on  
May 9, 2019



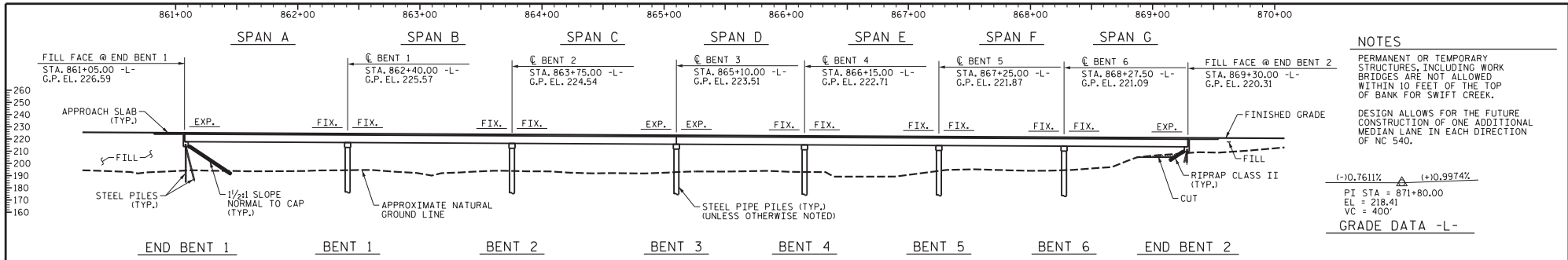
# TEMPORARY CROSSING OF SWIFT CREEK

Revised Approach  
for Access



Temporary trestle bridges  
over streams and wetlands,  
and mats over non-jurisdic-  
tional areas.

# Swift Creek (Bridge #10)



**NOTES**

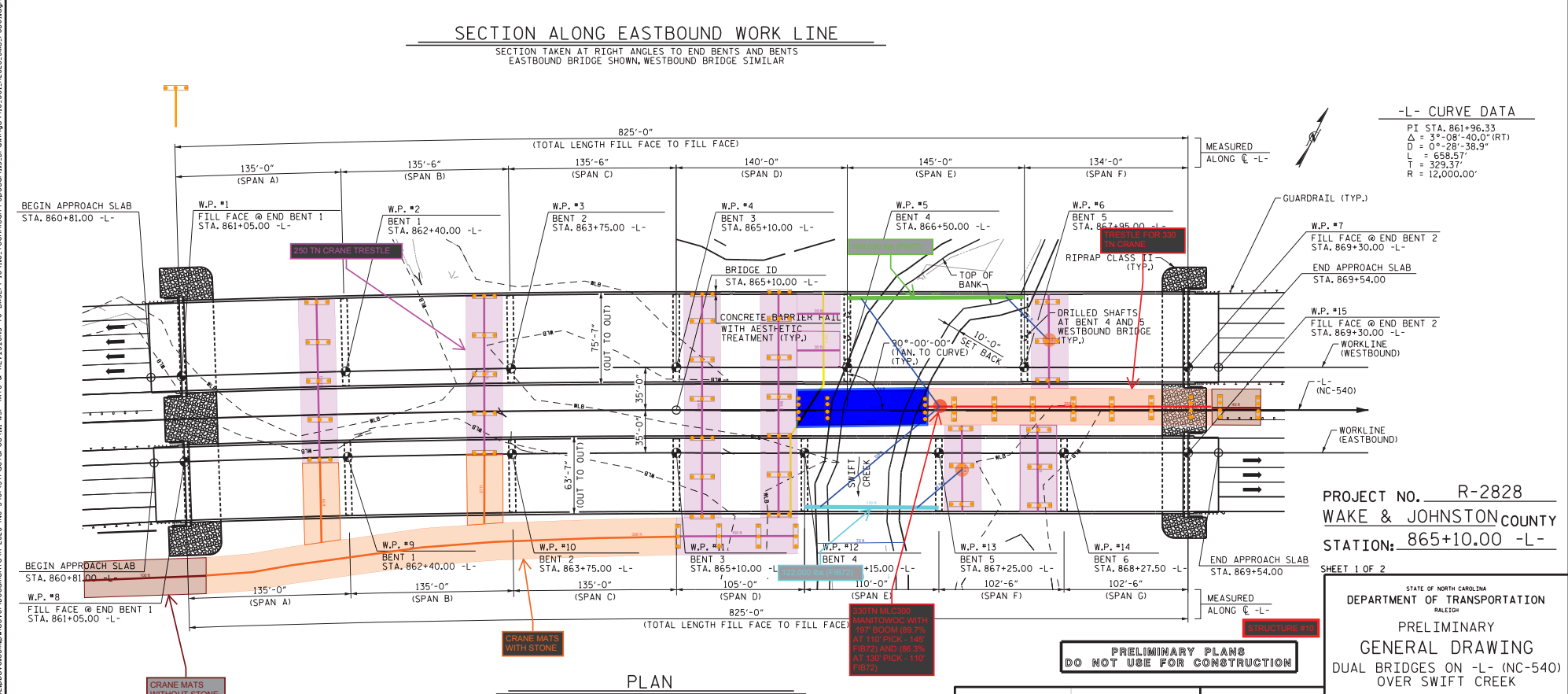
PERMANENT OR TEMPORARY STRUCTURES, INCLUDING WORK BRIDGES ARE NOT ALLOWED WITHIN 10 FEET OF THE TOP OF BANK FOR SWIFT CREEK.

DESIGN ALLOWS FOR THE FUTURE CONSTRUCTION OF ONE ADDITIONAL MEDIAN LANE IN EACH DIRECTION OF NC 540.

GRADE DATA -L-

PI STA = 871+80.00  
EL = 218.41  
VC = 400'

(-10.7611%    (+)0.9974%



DESIGNED BY: J. SHERMAN    DATE: AUG 2018  
DRAWN BY: C. MAYHAY    DATE: AUG 2018  
CHECKED BY: M. WAGNER    DATE: AUG 2018  
DESIGN ENGINEER OF RECORD:    DATE:

PROJECT NO. R-2828  
WAKE & JOHNSTON COUNTY  
STATION: 865+10.00 -L-  
SHEET 1 OF 2

STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
RALEIGH

PRELIMINARY  
GENERAL DRAWING  
DUAL BRIDGES ON -L- (NC-540)  
OVER SWIFT CREEK

REVISIONS				SHEET NO.
NO.	BY:	DATE:	NO.	DATE:
1			3	
2			4	

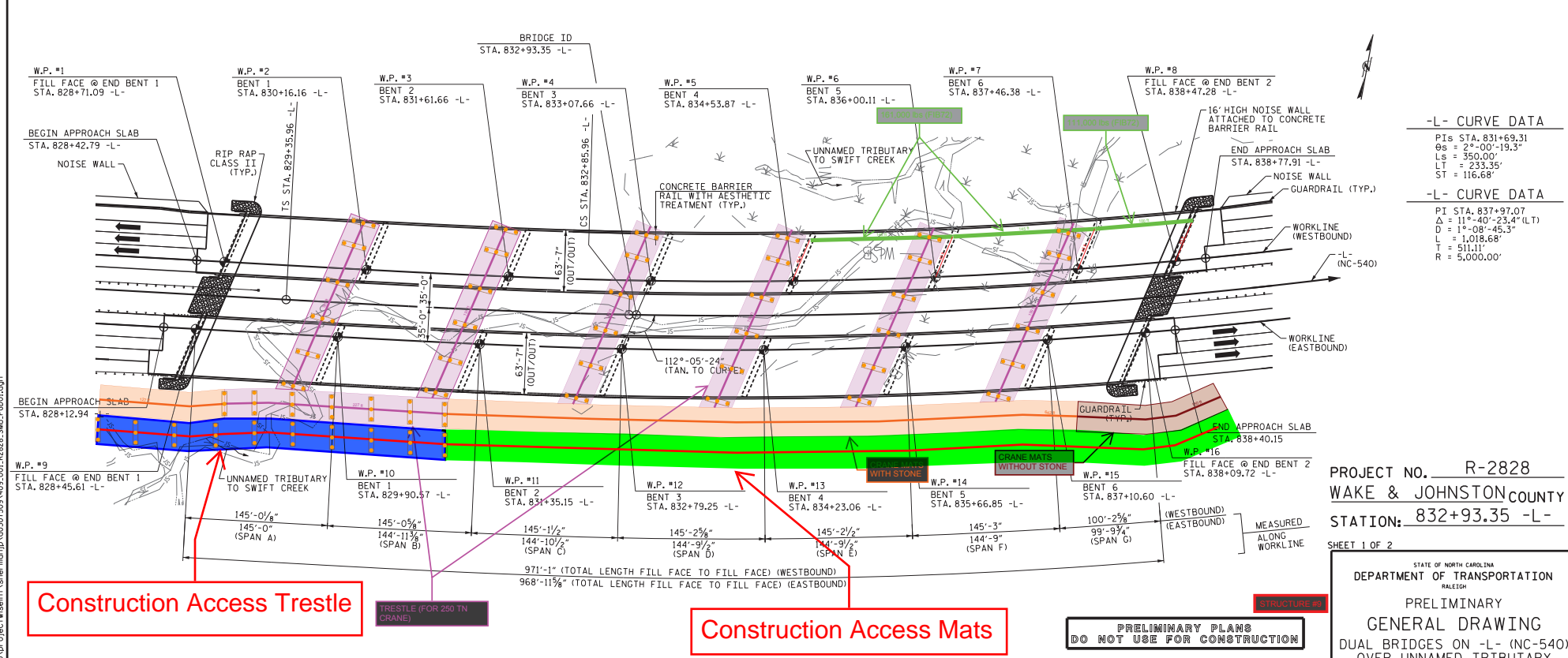
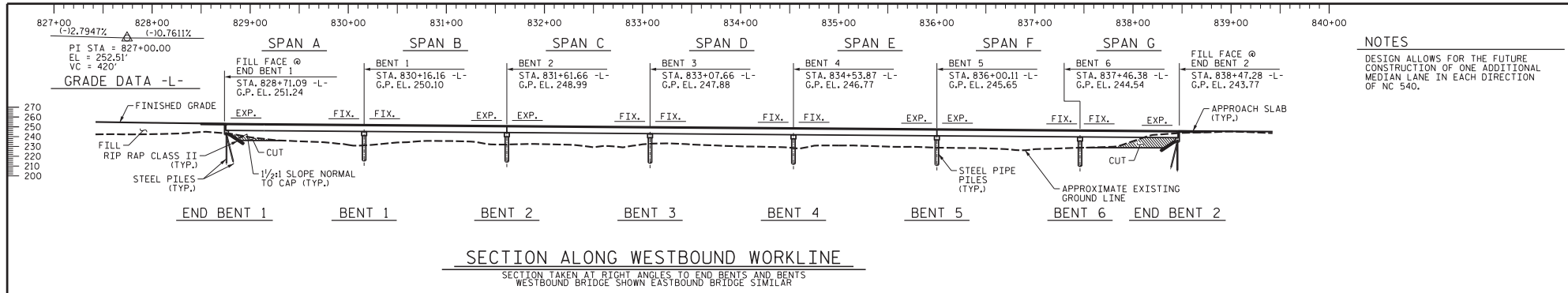
TOTAL SHEETS: XX

**PRELIMINARY PLANS  
DO NOT USE FOR CONSTRUCTION**

LANE BLYTHE WSP  
A JOINT VENTURE

10/8/2018 D:\Projects\102\bb\cc\comp\ss\8\Documents\SR-2828 NC 540\Structures\11\WSP - ITC & REVISIONS TO BASE\10\10\10\Technical\Proposals\US Drawings\101\_001\_R2828\_SML\_P10001.dgn

# Unnamed Tributary (Bridge #9)



**NOTES**  
DESIGN ALLOWS FOR THE FUTURE CONSTRUCTION OF ONE ADDITIONAL MEDIAN LANE IN EACH DIRECTION OF NC 540.

**-L- CURVE DATA**  
PI = STA. 831+69.31  
Δ = 7°-00'-19.3"  
LS = 350.00'  
LT = 233.35'  
ST = 116.68'

**-L- CURVE DATA**  
PI = STA. 837+97.07  
Δ = 11°-40'-23.4" (LT)  
D = 1°-08'-45.3"  
L = 1,018.68'  
T = 511.11'  
R = 5,000.00'

PROJECT NO. R-2828  
WAKE & JOHNSTON COUNTY  
STATION: 832+93.35 -L-  
SHEET 1 OF 2

STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
RALEIGH  
PRELIMINARY  
GENERAL DRAWING  
DUAL BRIDGES ON -L- (NC-540)  
OVER UNNAMED TRIBUTARY  
TO SWIFT CREEK

**PRELIMINARY PLANS  
DO NOT USE FOR CONSTRUCTION**

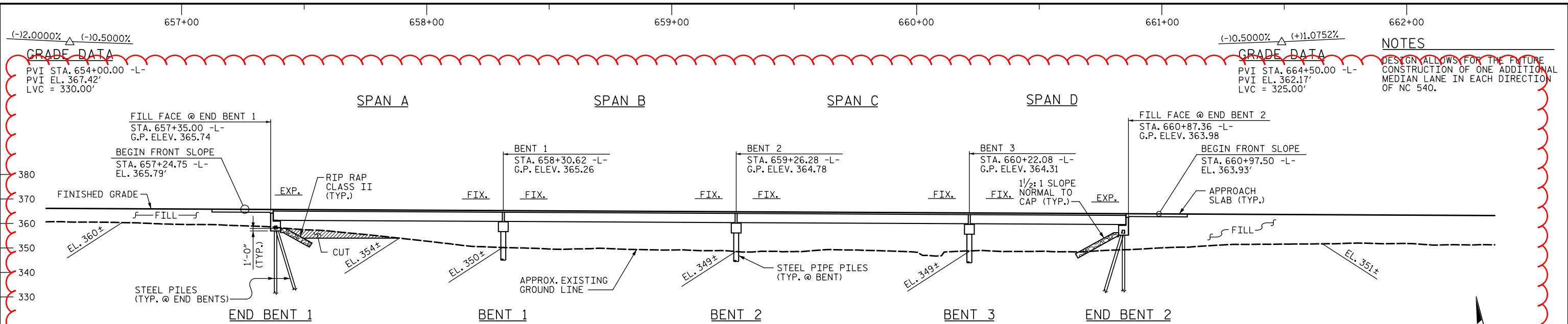


REVISIONS				SHEET NO.
NO.	BY:	DATE:	DATE:	
1		3		S9-1 TOTAL SHEETS XX
2		4		

**Trestle Pile Bent** containing 3 x 24" dia pipe piles  
Distance Between Pile Bents = Approx 40' - 0"

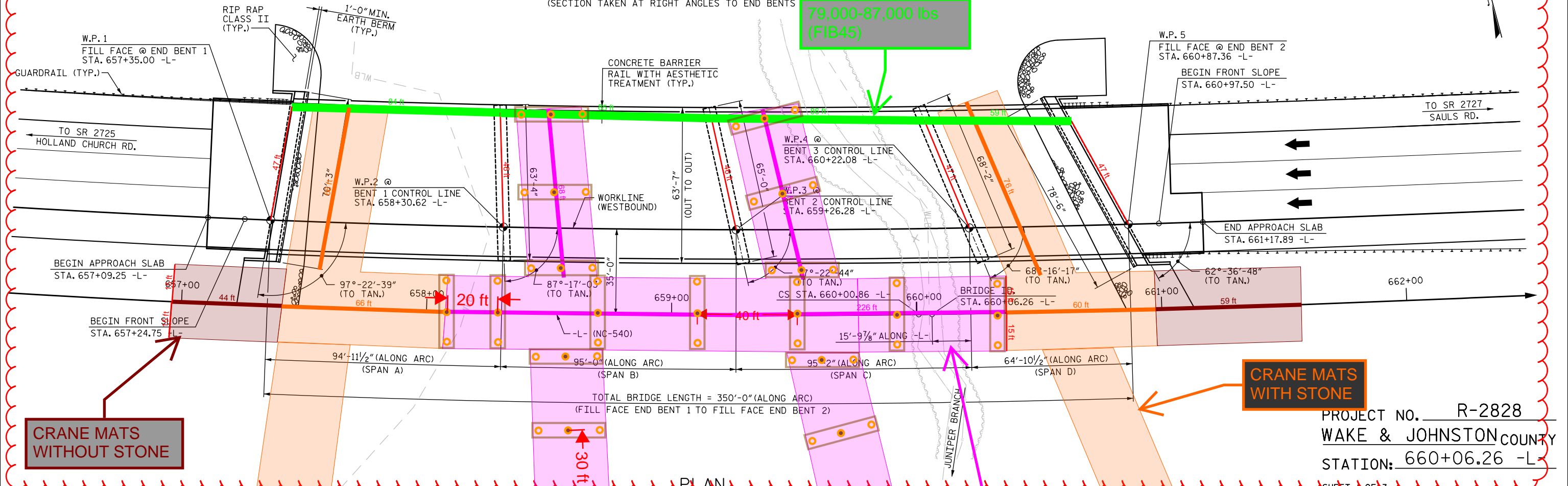
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DESIGNED BY:	J. SHERMAN	DATE:	JUL 2018
DRAWN BY:	M. HOBBS	DATE:	JUL 2018
CHECKED BY:	M. WAGNER	DATE:	JUL 2018
DESIGN ENGINEER OF RECORD:		DATE:	



**NOTES**  
 DESIGN ALLOWS FOR THE FUTURE CONSTRUCTION OF ONE ADDITIONAL MEDIAN LANE IN EACH DIRECTION OF NC 540.

**SECTION ALONG WESTBOUND WORKLINE**  
 (SECTION TAKEN AT RIGHT ANGLES TO END BENTS)



**HORIZ. CURVE DATA**

PI STA. = 649+64.92 -L-	PLS STA. = 661+05.87 -L-
Δ = 23°-51'-27.6" (LT)	OS = 1°-47'-13.0"
D = 1°-08'-04.5"	LS = 315.00'
L = 2,102.80'	LT = 210.01'
T = 1,066.86'	ST = 105.01'
R = 5,050.00'	

**PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION**

PROJECT NO. R-2828  
 WAKE & JOHNSTON COUNTY  
 STATION: 660+06.26 -L-

STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH  
 PRELIMINARY  
 GENERAL DRAWING  
 DUAL BRIDGES ON -L- (NC-540)  
 OVER JUNIPER BRANCH  
 (WESTBOUND)

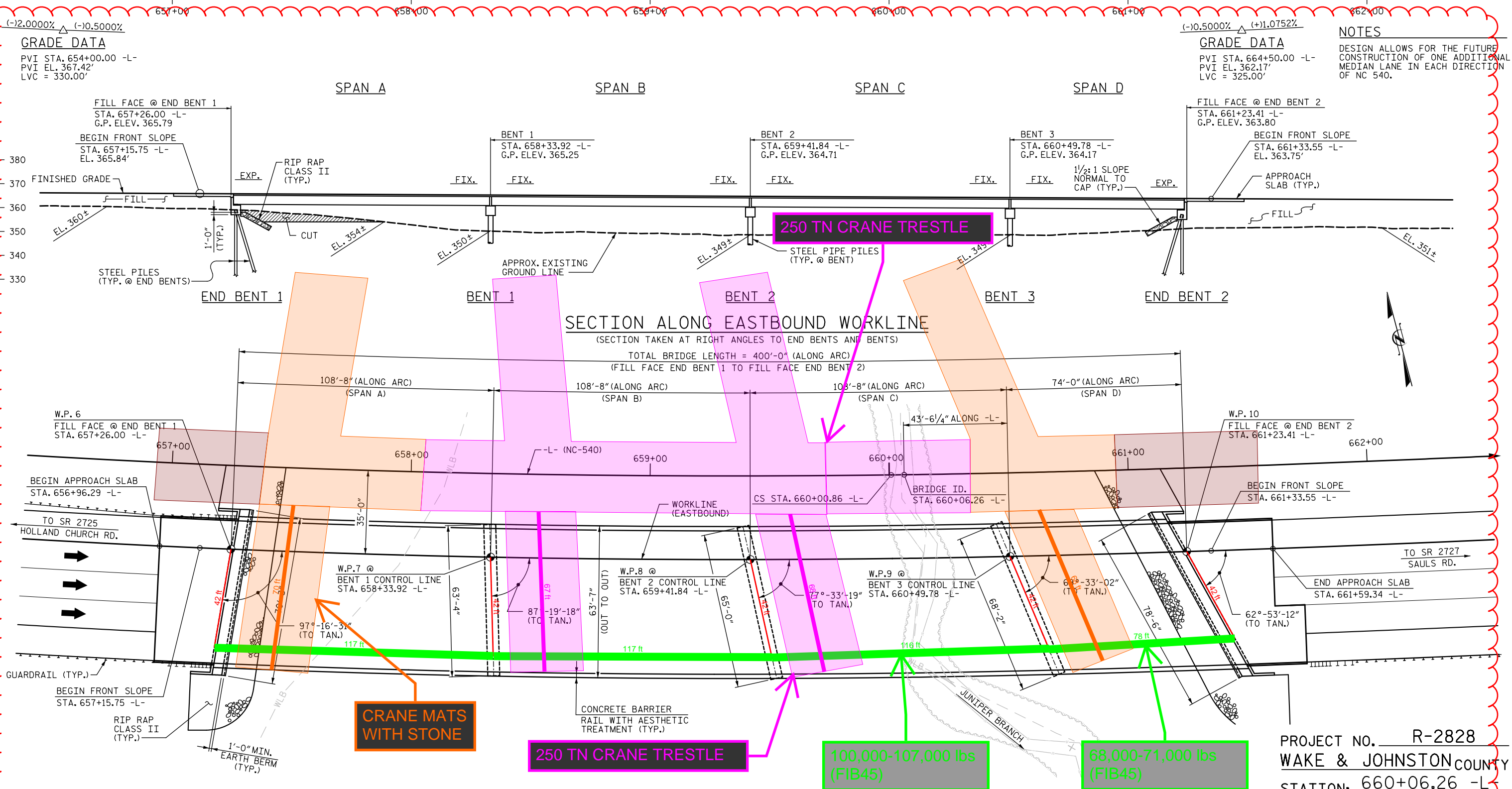
DESIGNED BY: V.WU	DATE: AUG 2018
DRAWN BY: V.WU	DATE: AUG 2018
CHECKED BY: A.PETER	DATE: AUG 2018
DESIGN ENGINEER OF RECORD:	DATE:

**LANE**      **BLYTHE**      **DRMP**

A JOINT VENTURE

REVISIONS						SHEET NO. S5-1
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			TOTAL SHEETS XX
2			4			

STR. #5



**GRADE DATA**  
 (-)2.0000% (-)0.5000%  
 PVI STA. 654+00.00 -L-  
 PVI EL. 367.42'  
 LVC = 330.00'

**GRADE DATA**  
 (-)0.5000% (+)1.0752%  
 PVI STA. 664+50.00 -L-  
 PVI EL. 362.17'  
 LVC = 325.00'

**NOTES**  
 DESIGN ALLOWS FOR THE FUTURE CONSTRUCTION OF ONE ADDITIONAL MEDIAN LANE IN EACH DIRECTION OF NC 540.

**SECTION ALONG EASTBOUND WORKLINE**  
 (SECTION TAKEN AT RIGHT ANGLES TO END BENTS AND BENTS)  
 TOTAL BRIDGE LENGTH = 400'-0" (ALONG ARC)  
 (FILL FACE END BENT 1 TO FILL FACE END BENT 2)

**HORIZ. CURVE DATA**  
 -L-  
 PI STA. = 649+64.92 -L- PLS STA. = 661+05.87 -L-  
 $\Delta = 23^\circ-51'-27.6"$  (LT)  $\Theta S = 1^\circ-47'-13.0"$   
 $D = 1^\circ-08'-04.5"$  LS = 315.00'  
 $L = 2,102.80'$  LT = 210.01'  
 $T = 1,066.86'$  ST = 105.01'  
 $R = 5,050.00'$

See Sheet# S5-1 for Trestle Pile Bent Layout Configuration

**STRUCTURE #5**

PRELIMINARY PLANS  
 DO NOT USE FOR CONSTRUCTION

PROJECT NO. R-2828  
 WAKE & JOHNSTON COUNTY  
 STATION: 660+06.26 -L-  
 SHEET 2 OF 3

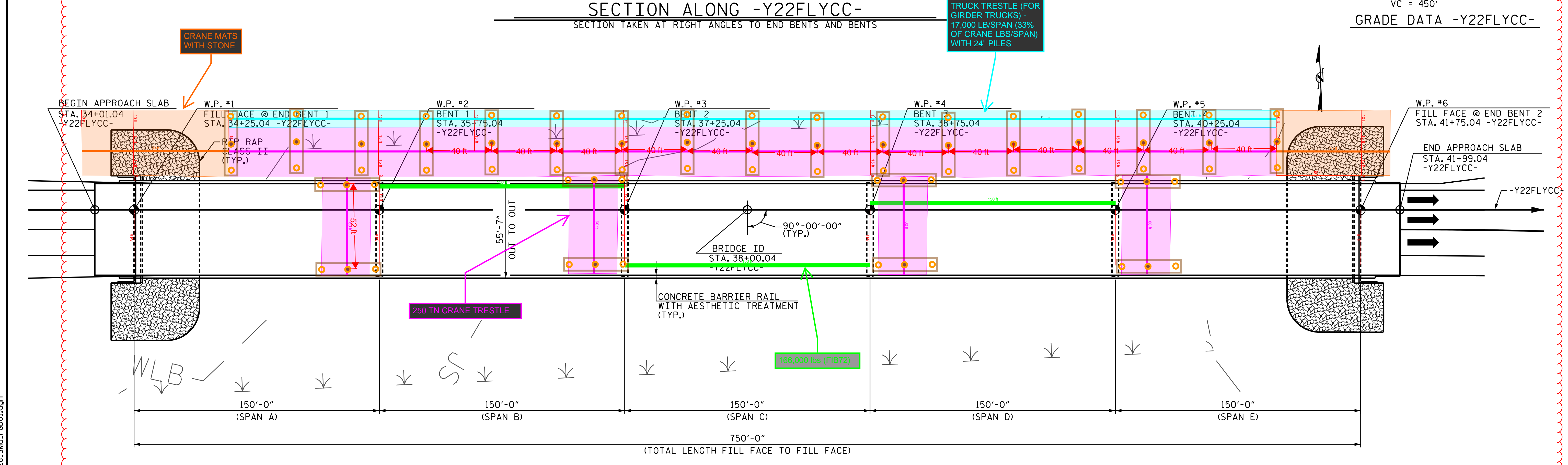
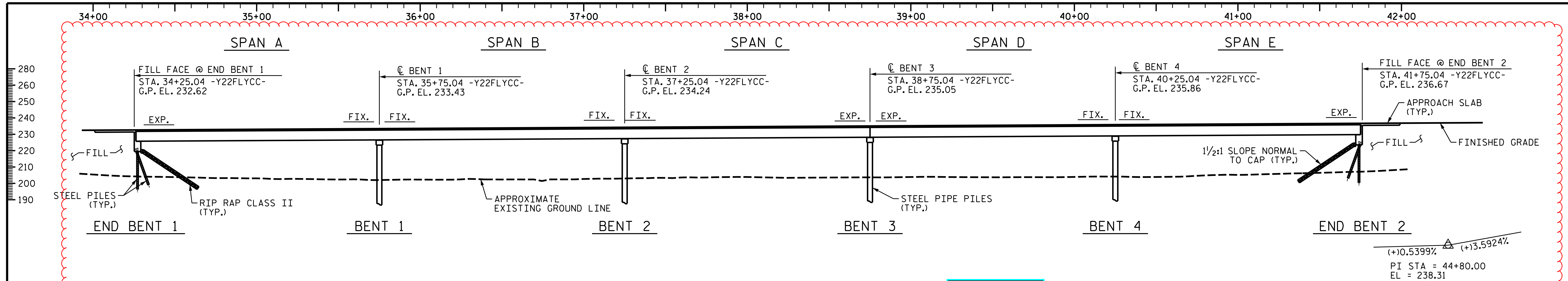
STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH  
 PRELIMINARY  
 GENERAL DRAWING  
 DUAL BRIDGES ON -L- (NC-540)  
 OVER JUNIPER BRANCH  
 (EASTBOUND)

DESIGNED BY: V.WU DATE: AUG 2018  
 DRAWN BY: V.WU DATE: AUG 2018  
 CHECKED BY: A.PETER DATE: AUG 2018  
 DESIGN ENGINEER OF RECORD: DATE:

LANE BLYTHE DRMP  
 A JOINT VENTURE

REVISIONS						SHEET NO. S5-2
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			TOTAL SHEETS XX
2			4			

STR. #5



PROJECT NO. R-2828  
 WAKE & JOHNSTON COUNTY  
 STATION: 38+00.04 -Y22FLYCC-  
 SHEET 1 OF 2

STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH  
 PRELIMINARY  
 GENERAL DRAWING  
 BRIDGE ON -Y22FLYCC-  
 OVER UNNAMED TRIBUTARY  
 TO SWIFT CREEK

**PRELIMINARY PLANS  
 DO NOT USE FOR CONSTRUCTION**



REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S15-1
1			3			TOTAL SHEETS XX
2			4			

DESIGNED BY: J. SHERMAN DATE: SEPT 2018  
 DRAWN BY: C. MAYHAY DATE: SEPT 2018  
 CHECKED BY: M. WAGNER DATE: SEPT 2018  
 DESIGN ENGINEER OF RECORD: DATE:

10/2/2018 c:\projects\wise\p\project\wise\int\sherman\p\40307609\415\_001\_R2828\_SMU\_PD001.dgn