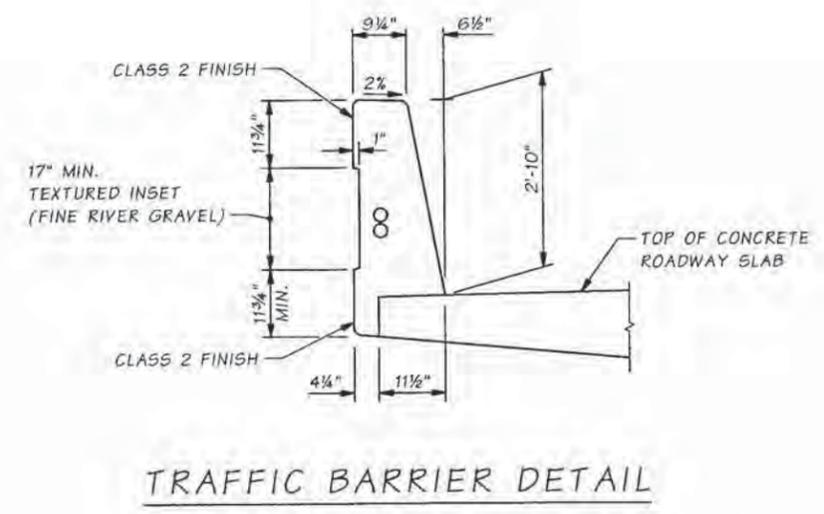
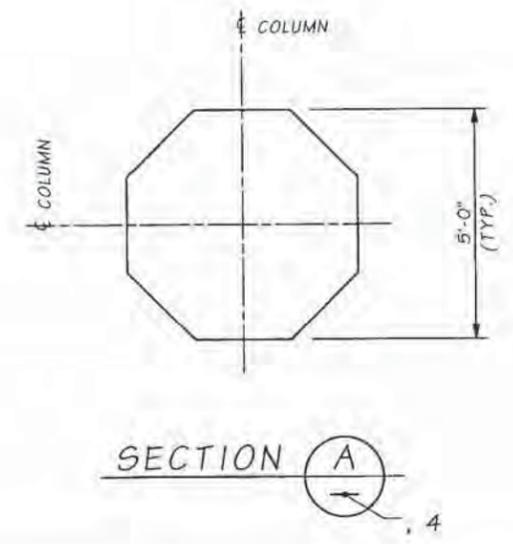


SPAN 1 SECTION ~ SB AND DL1R  
SHOWN NEAR PIER 2



TRAFFIC BARRIER DETAIL



SR 509 JOB NO. 7013 SHEET 3 OF 4

Bridge Design Engr.	Kapur, J.	07/05	M:\PRELIMINARY PLANS\SR 509\7 NORTH BRIDGES\WETLAND B O'XING SB\SB TYP SECT 1 ALT GIRDER.MAN	REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
Supervisor				10	WASH.			
Designed By				JOB NUMBER				
Checked By	Sherkat, M	05/05						
Detailed By	Foote, N.	04/05						
Bridge Projects Engr.	Kirker, KN	07/05						
Prelim. Plan By	MINNS, GEC	04/05						
Architect/Specialist	Kinderman, P	05/05	DATE	REVISION	BY	APPD.		

BRIDGE AND STRUCTURES OFFICE

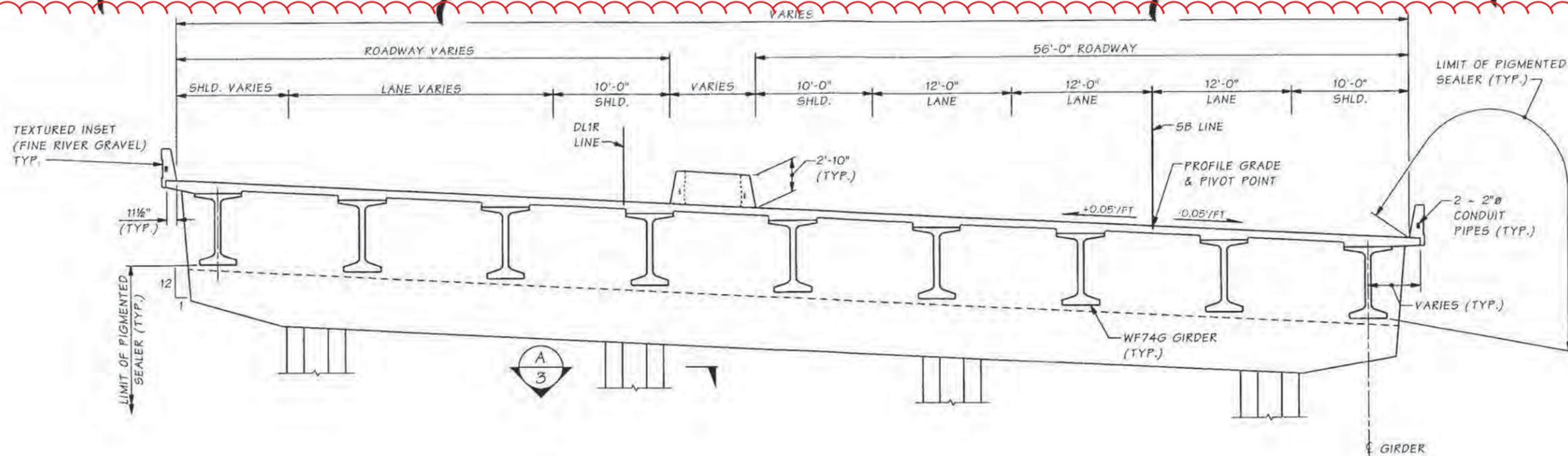


SB SR 509 OVER WETLAND B BRIDGE

PRELIMINARY PLAN

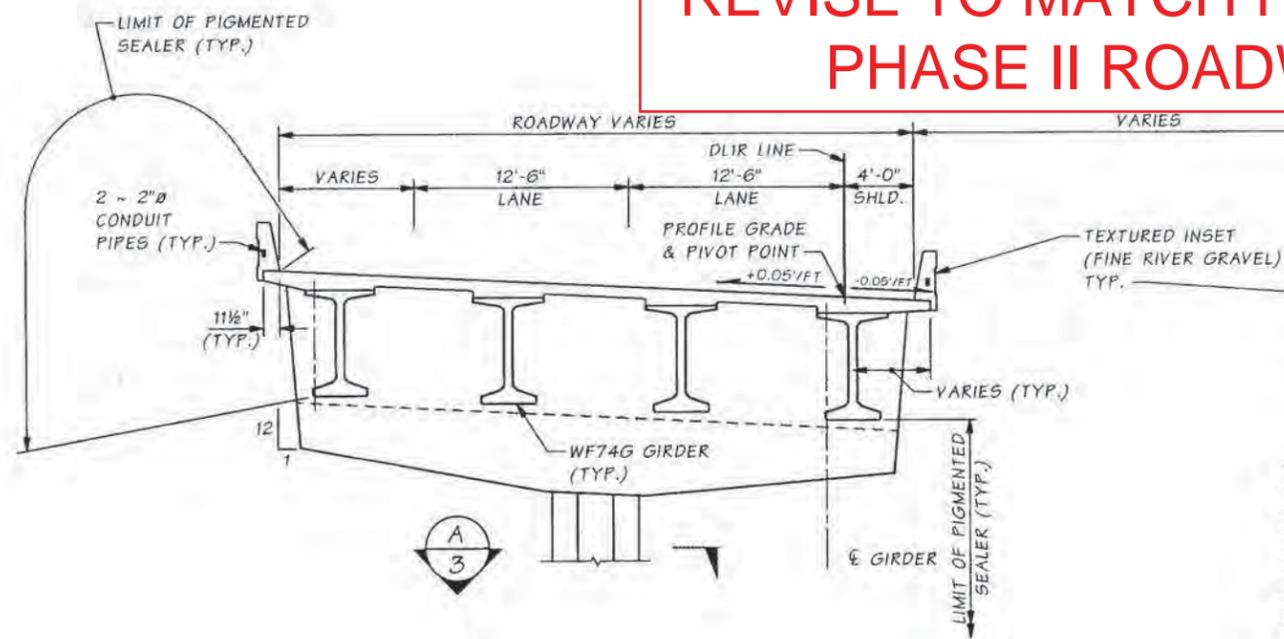
BRIDGE SHEET NO. 3  
SHEET OF SHEETS

C.S. 1739 ~ PROJ. NO. XL2398B ~ NORTHWEST REGION ~ SR 509 ~ I-5 TO SOUTH 176 STREET ~ SB SR 509 OVER WETLAND B BRIDGE

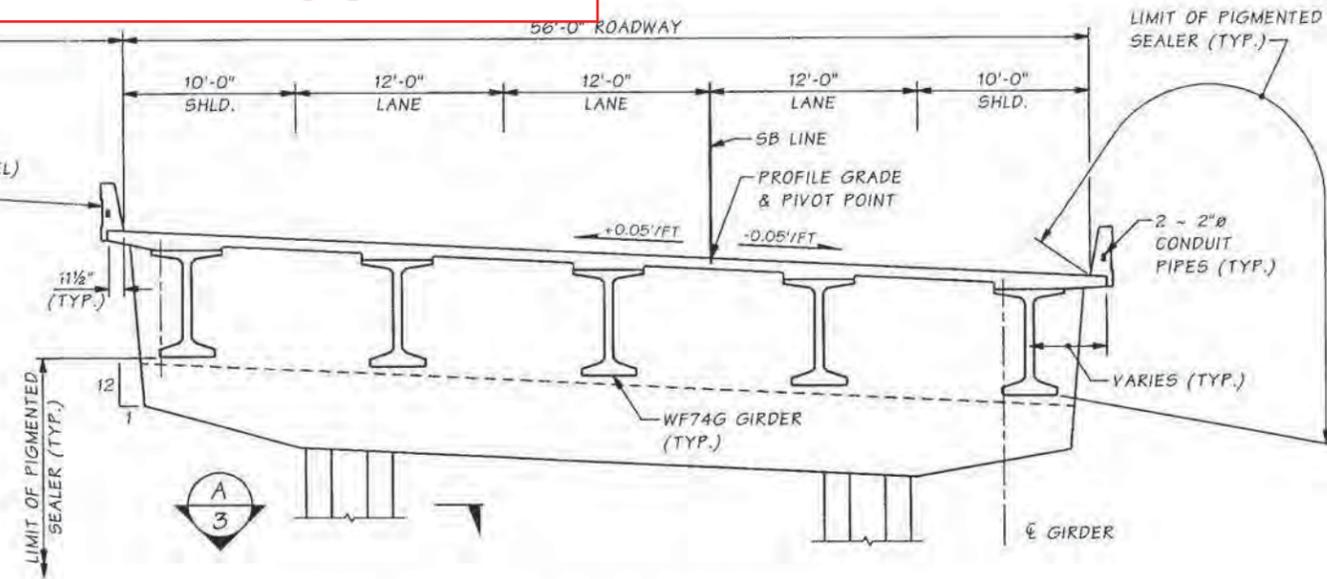


SPAN 2 SECTION ~ SB AND DLIR

**REVISE TO MATCH PROPOSED SR 509  
PHASE II ROADWAY LAYOUT**



SPAN 3, 4, 5 & 6 SECTION ~ DLIR  
SHOWN NEAR PIER 5



SPAN 3, 4, 5 & 6 SECTION ~ SB  
SHOWN NEAR PIER 5

SR 509 JOB NO. 7013 SHEET 4 OF 4

Bridge Design Engr.	Kapur, J.	07/05	M:\PRELIMINARY PLANS\SR 509\7 NORTH BRIDGES\WETLAND B O'XING SB\SB TYP SECT 2 ALT GIRDER.MAN			
Supervisor			REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.
Designed By			10	WASH.		TOTAL SHEETS
Checked By	Sherkat, M	05/05	JOB NUMBER			
Detailed By	Footo, N.	04/05				
Bridge Projects Engr.	Kirker, KN	07/05				
Prelim. Plan By	MINNS, GEC	04/05				
Architect/Specialist	Kinderman, P	05/05	DATE	REVISION	BY	APP'D

**BRIDGE AND STRUCTURES OFFICE**



SB SR 509 OVER WETLAND B BRIDGE

PRELIMINARY PLAN

BRIDGE SHEET NO. 4

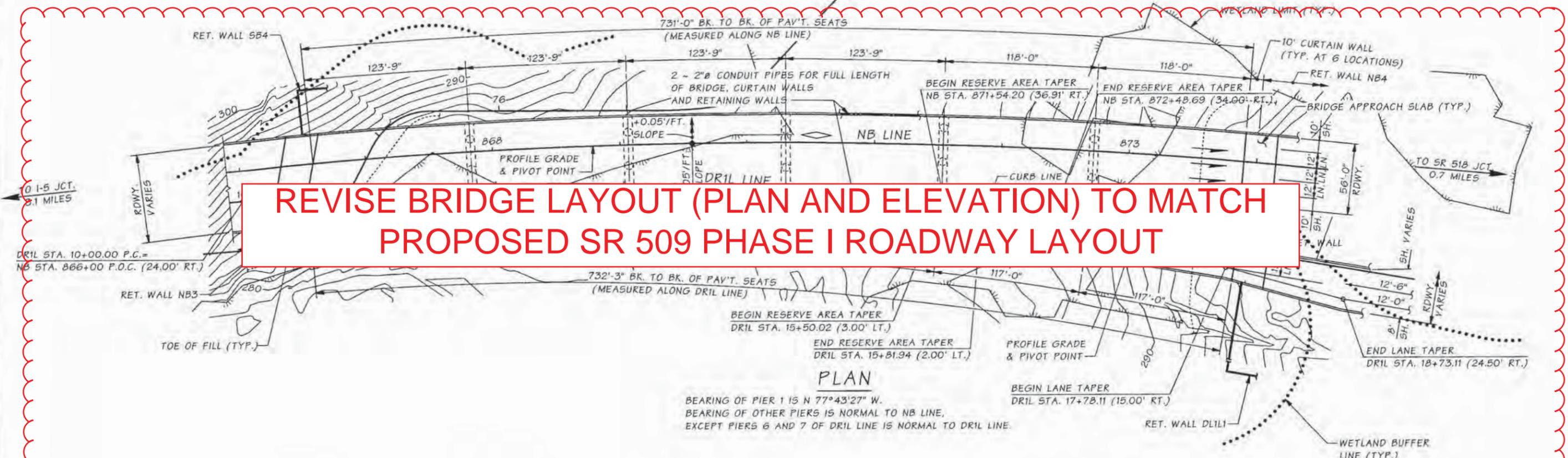
C.S. 1739 ~ PROJ. NO. XL2398B ~ NORTHWEST REGION ~ SR 509 ~ I-5 TO SOUTH 176 STREET ~ SB SR 509 OVER WETLAND B BRIDGE

**CURVE DATA**

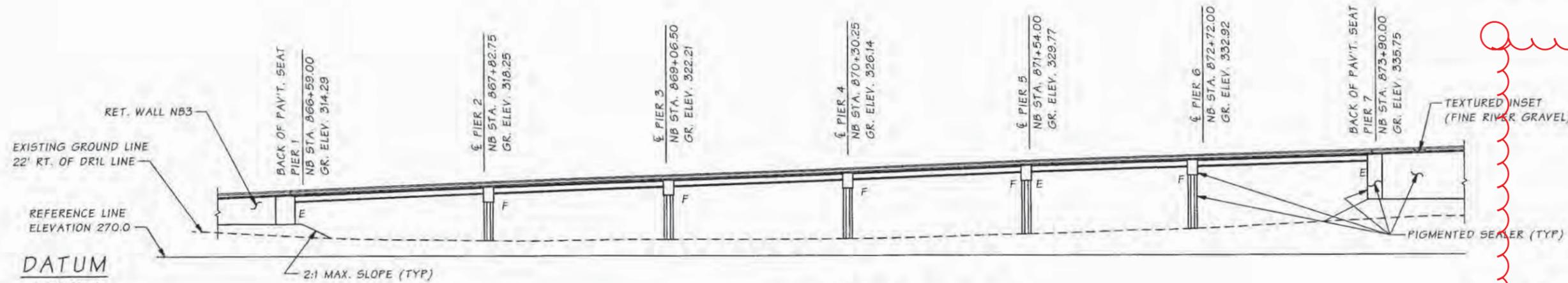
P.I. STATION	Δ	RADIUS	TANGENT	LENGTH	BK. TAN BRG.
NB 852+54.40	78° 33' 26" RT.	4150.00'	3394.16'	5690.00'	N 69° 03' 29" W
DRIL 13+40.17	15° 29' 50" RT.	2500.00'	340.17'	676.19'	

SEC. 32, T.23 N., R.4E., W.M.  
KING COUNTY

SR 509



**PLAN**  
BEARING OF PIER 1 IS N 77°43'27" W.  
BEARING OF OTHER PIERS IS NORMAL TO NB LINE,  
EXCEPT PIERS 6 AND 7 OF DRIL LINE IS NORMAL TO DRIL LINE.



**ELEVATION ~ NB**

GRADE ELEVATIONS SHOWN ARE FINISH GRADES AT TOP OF ROADWAY SLAB ON NB LINE AND ARE EQUAL TO PROFILE GRADE. SEE SHEET 2 FOR ELEVATION ~ DRIL

P.C. GIRDERS (WF74G)  
CONT. FOR LL  
LOADING: HL-93

PLAN APPROVED BY:  
Jugesh Kapur, 07/27/05  
BRIDGE AND STRUCTURES ENGINEER  
Susan Everett, 08/15/05  
ENGINEERING MANAGER

SR 509 JOB NO. 7014 SHEET 1 OF 4

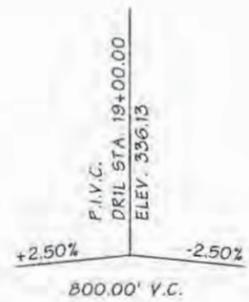
BRIDGE DESIGN ENGR.	DATE	REVISION	BY	APP'D
Kapur, J.	07/05			

BRIDGE AND STRUCTURES OFFICE 		BRIDGE SHEET NO. 1 SHEET OF PRELIMINARY PLANS
----------------------------------	--	--

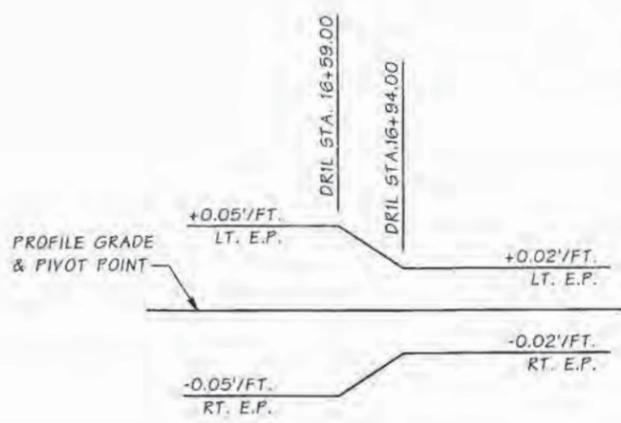
C.S. 1739 ~ PROJ. NO. XL2398D ~ NORTHWEST REGION ~ SR 509 ~ I-5 TO SOUTH 176 STREET ~ NB SR 509 OVER WETLAND B BRIDGE



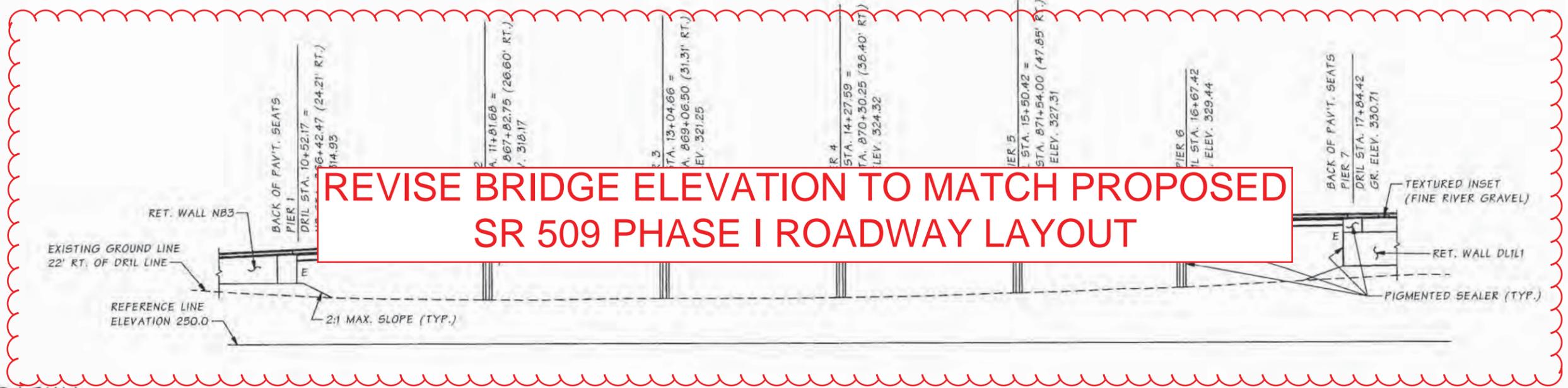
NB LINE PROFILE



DRIL LINE PROFILE



DRIL LINE SUPERELEVATION TRANSITION DIAGRAM



**REVISE BRIDGE ELEVATION TO MATCH PROPOSED SR 509 PHASE I ROADWAY LAYOUT**

DATUM  
NAVD 1988

ELEVATION ~ DRIL

GRADE ELEVATIONS SHOWN ARE FINISH GRADES AT TOP OF ROADWAY SLAB ON DRIL LINE AND ARE EQUAL TO PROFILE GRADE. SEE SHEET 1 FOR PLAN.

PLAN APPROVED BY:  
Jugesh Kapur for 07/27/05  
BRIDGE AND STRUCTURES ENGINEER  
Susan Everett 08/15/05  
ENGINEERING MANAGER

Supervisor	DESIGNED BY	CHECKED BY	DATE	REVISION	BY	APP'D
Bridge Design Engr. Kapur, J.			07/05			
Designed By						
Checked By	Sherkat, M		05/05			
Detailed By	Footo, N.		04/05			
Bridge Projects Engr.	Kirker, KN		07/05			
Prelim. Plan By	MINNS, GEC		04/05			
Architect/Specialist	Kinderman/Khaleghi		05/05			

BRIDGE AND STRUCTURES OFFICE

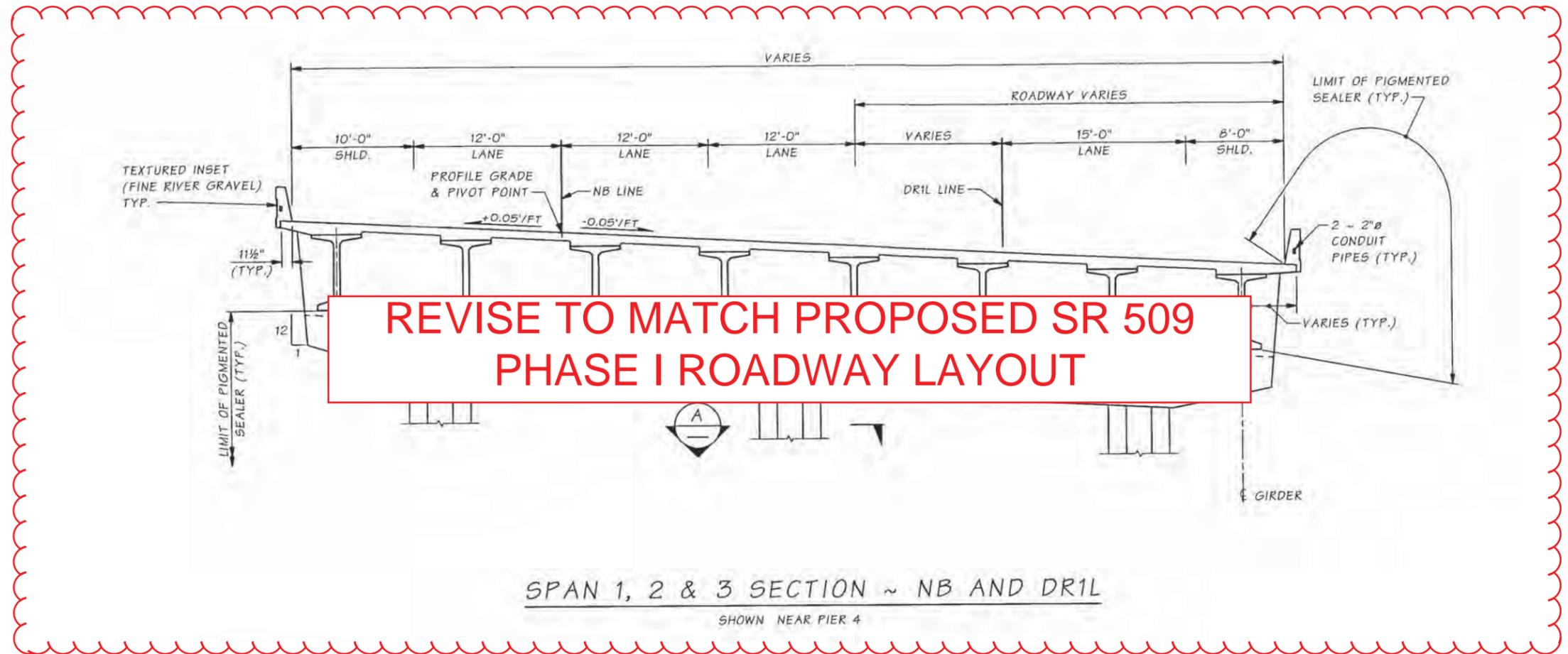
Washington State Department of Transportation

BRIDGE SHEET NO.	2
SHEET	OF
SHEETS	

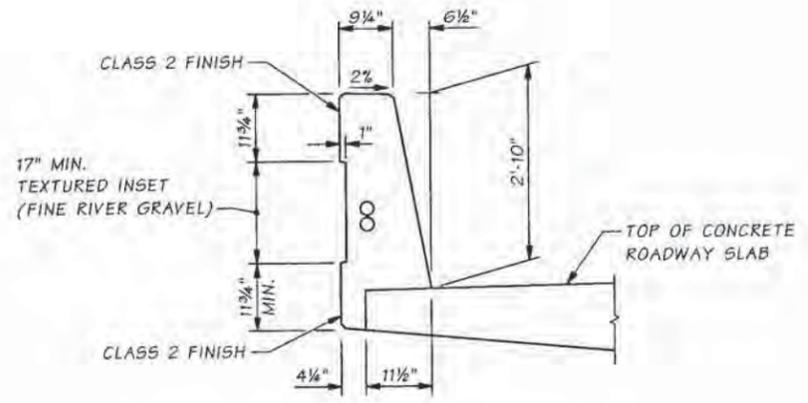
NB SR 509 OVER WETLAND B BRIDGE  
PRELIMINARY PLAN

SR 509 JOB NO. 7014 SHEET 2 OF 4

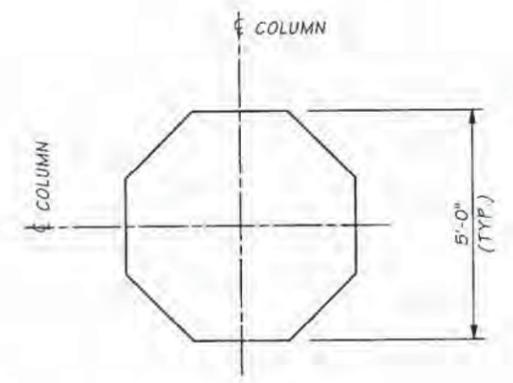
C.S. 1739 ~ PROJ. NO. XL2398D ~ NORTHWEST REGION ~ SR 509 ~ I-5 TO SOUTH 176 STREET ~ NB SR 509 OVER WETLAND B BRIDGE



SPAN 1, 2 & 3 SECTION ~ NB AND DRIL  
SHOWN NEAR PIER 4



TRAFFIC BARRIER DETAIL



SECTION A

SR 509 JOB NO. 7014 SHEET 3 OF 4

Bridge Design Engr.	Kapur, J.	07/05	M:\PRELIMINARY PLANS\SR 509\7 NORTH BRIDGES\WETLAND B O'XING NB\TYP SECT 1 ALT GIRDER.MAN			
Supervisor			REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.
Designed By			10	WASH.		
Checked By	Sherkat, M	05/05	JOB NUMBER			
Detailed By	Foote, N.	04/05				
Bridge Projects Engr.	Kirker, KN	07/05				
Prelim. Plan By	MINNS, GEC	04/05				
Architect/Specialist	Kinderman/khaleghi	05/05	DATE	REVISION	BY	APPD

BRIDGE AND STRUCTURES OFFICE



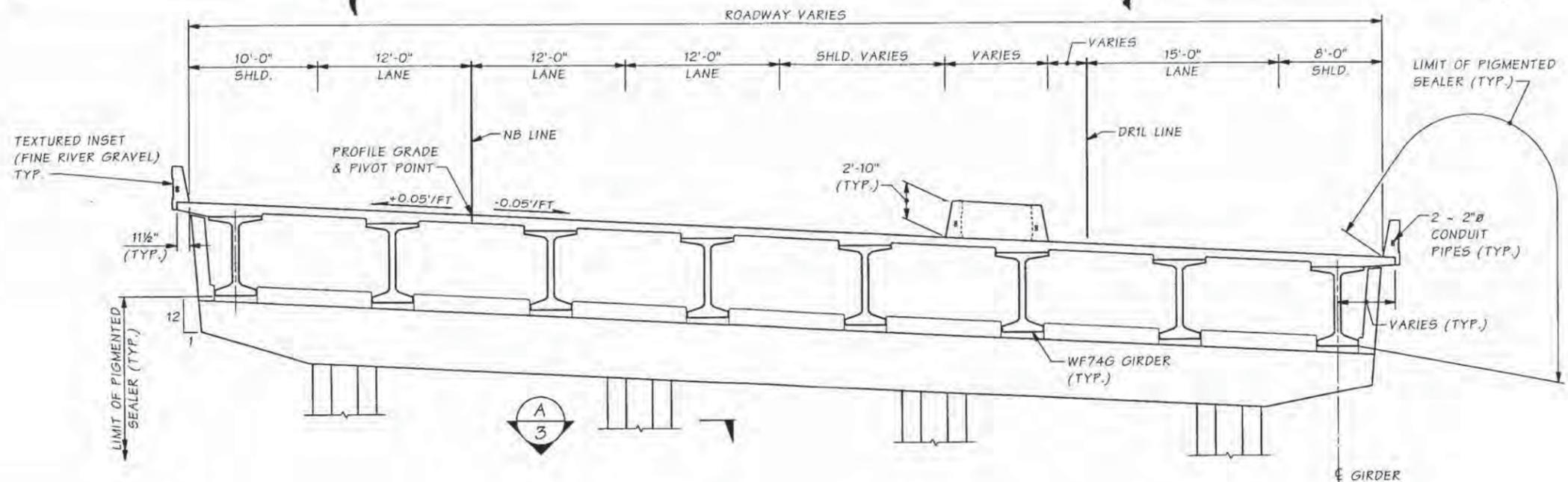
NB SR 509 OVER WETLAND B BRIDGE

PRELIMINARY PLAN

BRIDGE SHEET NO. 3

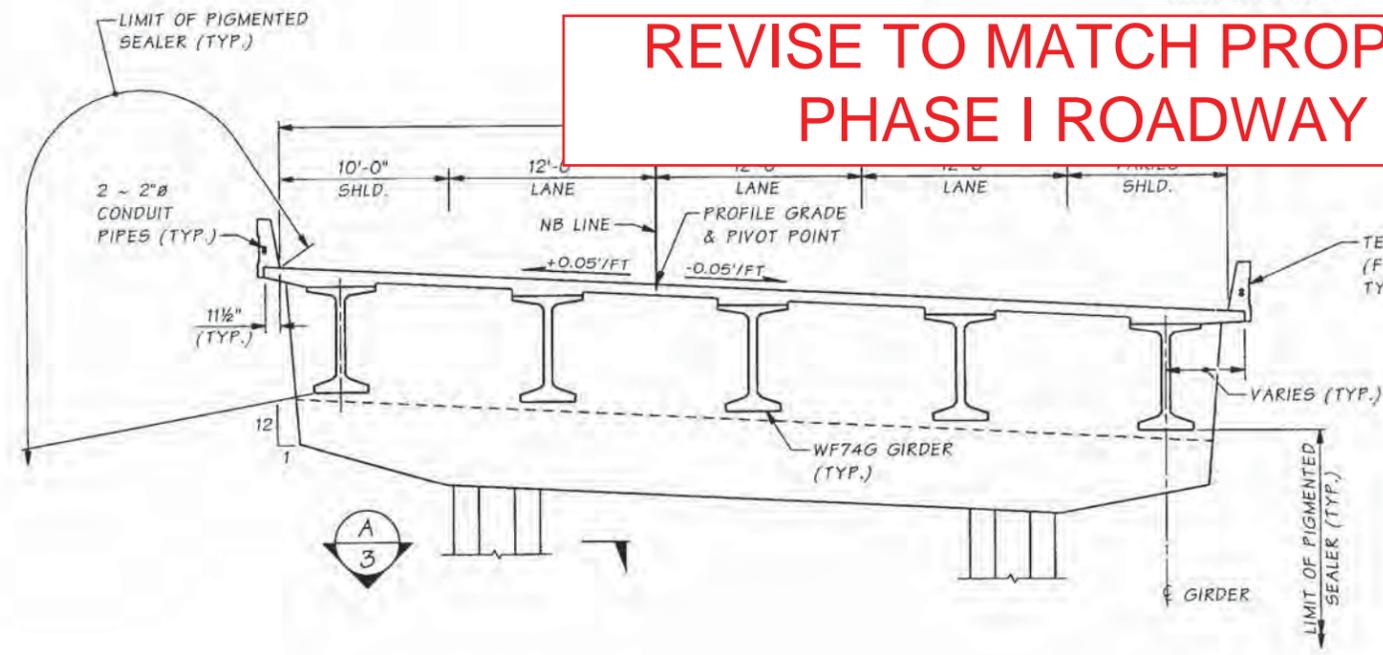
C.S. 1739 ~ PROJ. NO. XL2398B ~ NORTHWEST REGION ~ SR 509 ~ I-5 TO SOUTH 176 STREET ~ NB SR 509 OVER WETLAND B BRIDGE

Tue Aug 16 09:45:43 2005

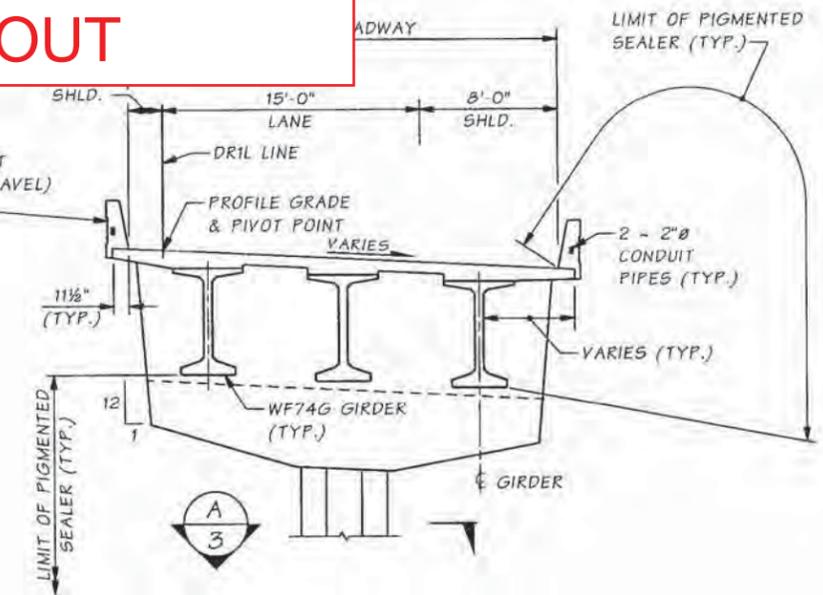


SPAN 4 SECTION ~ NB AND DR1L  
SHOWN FOR PIER 5

**REVISE TO MATCH PROPOSED SR 509  
PHASE I ROADWAY LAYOUT**



SPAN 5 AND 6 SECTION ~ NB  
SHOWN NEAR PIER 5



SPAN 5 AND 6 SECTION ~ DR1L  
SHOWN NEAR PIER 5

SR 509 JOB NO. 7014 SHEET 4 OF 4

Bridge Design Engr.	Kapur, J.	07/05	M:\PRELIMINARY PLANS\SR 509\7 NORTH BRIDGES\WETLAND B 0' XING NB\TYP SECT 2 ALT GIRDER.MAN
Supervisor			
Designed By			
Checked By	Sherkat, M	05/05	
Detailed By	Footo, N.	04/05	
Bridge Projects Engr.	Kirker, KN	07/05	
Prelim. Plan By	MINNS, GEC	04/05	
Architect/Specialist	Kinderman/khaleghi	05/05	DATE REVISION BY APPD

REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
10	WASH.			
JOB NUMBER				

BRIDGE AND STRUCTURES OFFICE



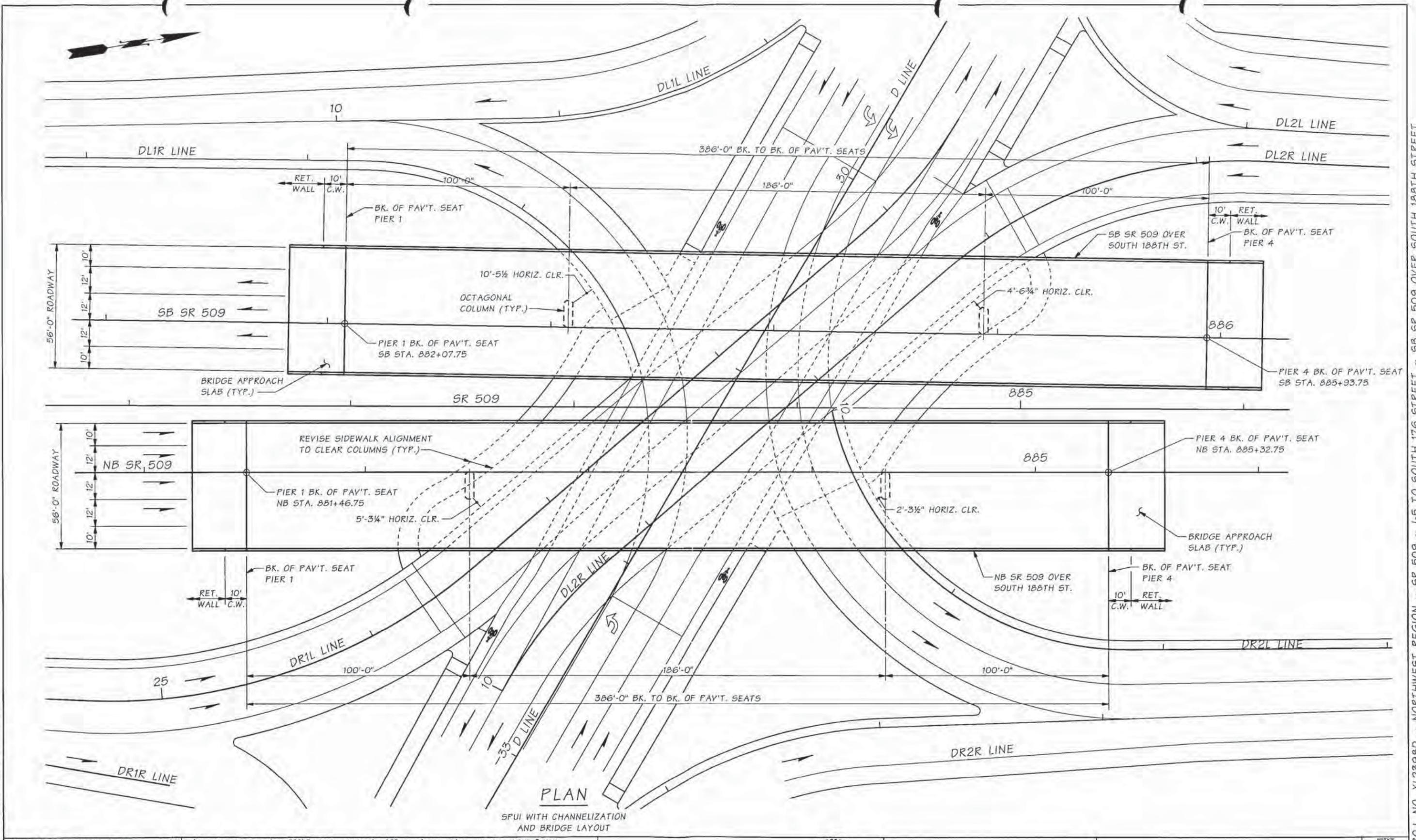
NB SR 509 OVER WETLAND B BRIDGE

PRELIMINARY PLAN

BRIDGE SHEET NO.	4
SHEET	
OF	
SHEETS	

C.S. 1739 ~ PROJ. NO. XL2398B ~ NORTHWEST REGION ~ SR 509 ~ I-5 TO SOUTH 176 STREET ~ NB SR 509 OVER WETLAND B BRIDGE

SR 509 JOB NO. 7011 SHEET 1 OF 7



PLAN  
SPTI WITH CHANNELIZATION AND BRIDGE LAYOUT

Bridge Design Engr.	Stoddard, RB	02/06	M:\PRELIMINARY PLANS\SR 509\7 NORTH BRIDGES\188 ST O'XING SB\NB AND SB LAYOUT 3.MAN			
Supervisor			REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.
Designed By			10	WASH.		TOTAL SHEETS
Checked By	Mizumori, A	01/06	JOB NUMBER			
Detailed By	Foot, N.	09/05				
Bridge Projects Engr.	Lewis, R	02/06				
Prelim. Plan By	MINNS, GEC	09/05				
Architect/Specialist	Kinderman/Khalighi	12/05	DATE	REVISION	BY	APP'D

BRIDGE AND STRUCTURES OFFICE



NB & SB SR 509 OVER SOUTH 188TH STREET  
COMBINED PRELIMINARY PLAN

BRIEFCASE SHEET NO.	1
SHEET	
OF	
SHEETS	

C.S. 1739 ~ PROJ. NO. XL2398D ~ NORTHWEST REGION ~ SR 509 ~ I-5 TO SOUTH 176 STREET ~ SB SR 509 OVER SOUTH 188TH STREET

SEC. 32, T.23N., R4E., W.M.  
KING COUNTY

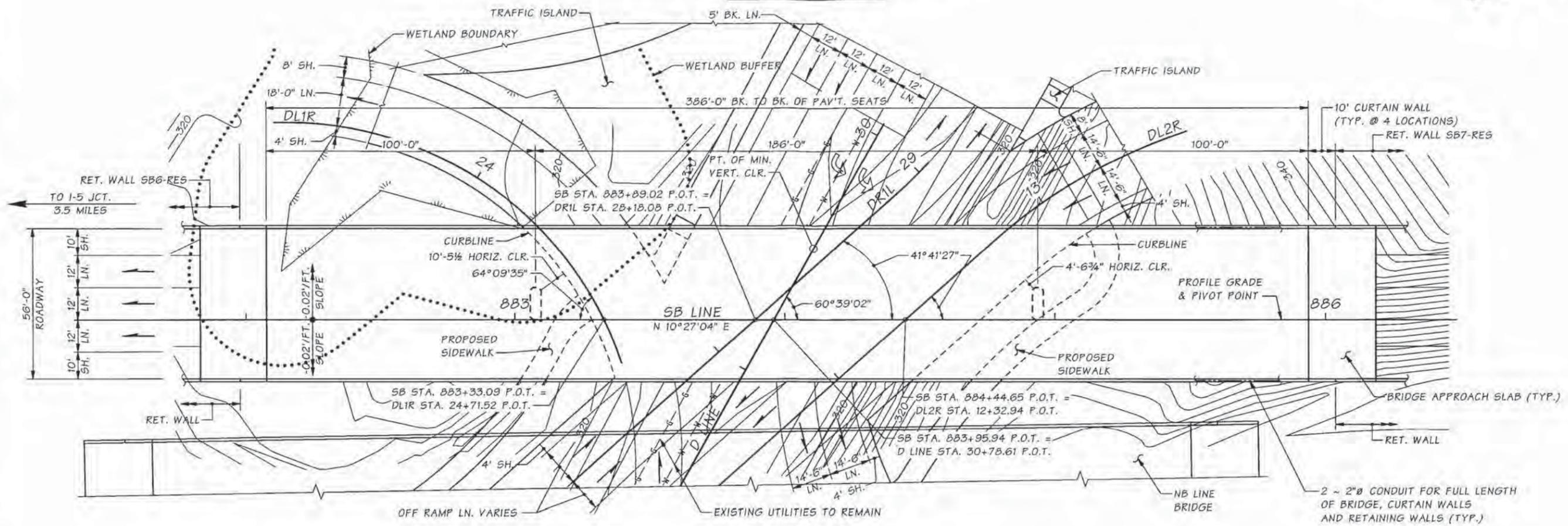
SR 509



PT. OF MIN. VERT. CLR.  
SB STA. 884+11 (29' LT) =  
D LINE STA. 30+48

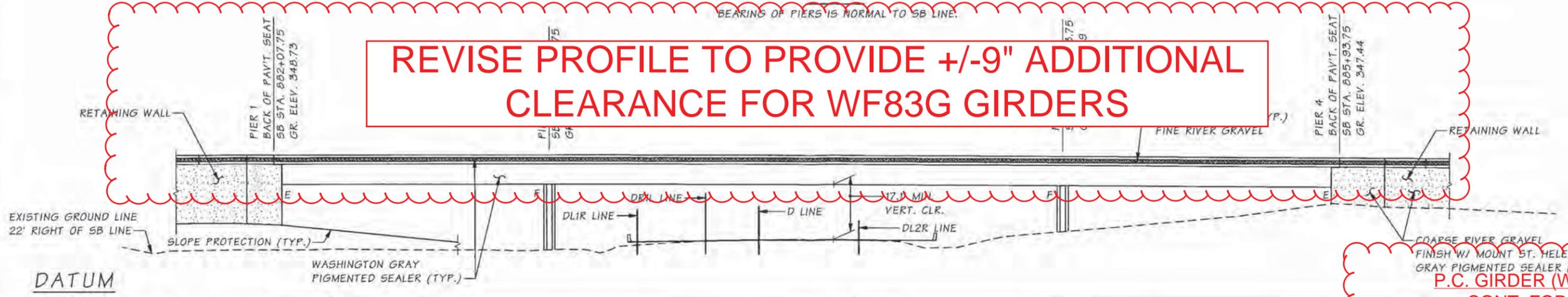
BRIDGE BEFORE APPROACH FILLS  
U78PTG5 P.C. TRAPEZOIDAL GIRDERS (A DIM. = 9')  
DECK PROTECTIVE SYSTEM 1 (EPOXY COATED REBAR)  
CAST-IN-PLACE CONCRETE STRENGTH SHALL BE 4000 psi

SR 509 JOB NO. 7011 SHEET 2 OF 7



PLAN

**REVISE PROFILE TO PROVIDE +/-9" ADDITIONAL CLEARANCE FOR WF83G GIRDERS**



ELEVATION

GRADE ELEVATIONS SHOWN ARE FINISH GRADES AT TOP OF ROADWAY ON SB LINE AND ARE EQUAL TO PROFILE GRADE.

COARSE RIVER GRAVEL  
 FINISH W/ MOUNT ST. HELENS  
 GRAY PIGMENTED SEALER (TYP.)  
**P.C. GIRDER (WF83G)**  
**CONT. FOR LL**  
~~U78PTG5 P.C.~~  
~~TRAPEZOIDAL GIRDERS~~  
 LOADING: HL-93

PLAN APPROVED BY:  
*Jugesh Kapur* 2-13-06  
BRIDGE AND STRUCTURES ENGINEER

DESIGNED BY	CHECKED BY	DATE	REVISION	BY	APP'D
Supervisor	Mizumori, A	01/06			
Designed By	Foot, N.	09/05			
Checked By	MINNS, GEC	09/05			
Detailed By	Kinderman/Khaleghi	12/05			

Fri Feb 03 12:55:21 2006

BRIDGE AND STRUCTURES OFFICE



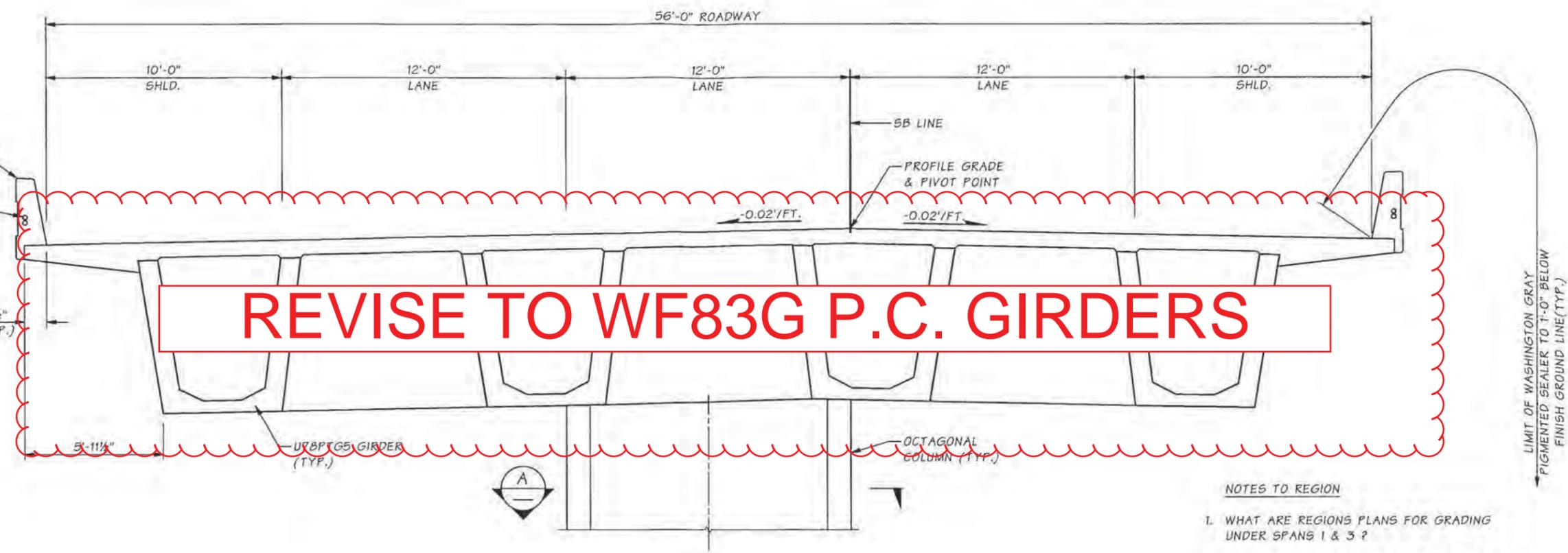
SB SR 509 OVER SOUTH 188TH STREET

PRELIMINARY PLAN

SHEET NO.	2
SHEET	
OF	
SHEETS	

C.S. 1739 ~ PROJ. NO. XL2396D ~ NORTHWEST REGION ~ SR 509 ~ I-5 TO SOUTH 176 STREET ~ SB SR 509 OVER SOUTH 188TH STREET

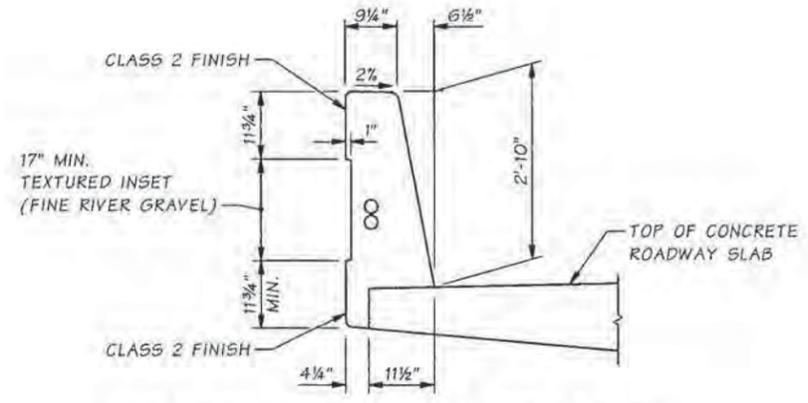
C.S. 1739 ~ PROJ. NO. XL2398D ~ NORTHWEST REGION ~ SR 509 ~ I-5 TO SOUTH 176 STREET ~ SB SR 509 OVER SOUTH 188TH STREET



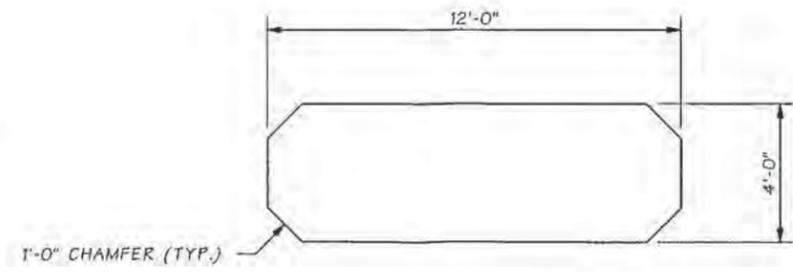
TYPICAL SECTION ~ SB LINE

NOTES TO REGION

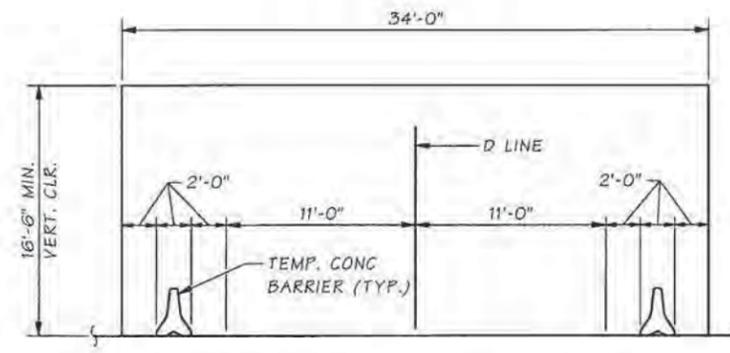
1. WHAT ARE REGION'S PLANS FOR GRADING UNDER SPANS 1 & 3 ?
2. PLEASE PROVIDE CURVE DATA FOR THE D LINE AND VERIFY CURVE DATA FOR OTHER LINES.
3. WILL THE TRAFFIC ON SOUTH 188TH STREET (D LINE) BE DETOURED AROUND THE CONSTRUCTION SITE ?
4. WILL UTILITY LINES BE INSTALLED ON BRIDGE ?
5. PLEASE REVISE SIDEWALK ALIGNMENT TO CLEAR COLUMNS AT INTERIOR PIERS.



TRAFFIC BARRIER DETAILS



SECTION A



CONSTRUCTION OPENING

SR 509 JOB NO. 7011 SHEET 3 OF 7

Bridge Design Engr.	<i>R. A. ...</i>	M:\PRELIMINARY PLANS\SR 509\7 NORTH BRIDGES\188 ST O'XING SB\SB U78PTG5 TYP SECT.MAN			
Supervisor		REGION	STATE	FED. AID PROJ. NO.	SHEET NO.
Designed By		10	WASH.		TOTAL SHEETS
Checked By	Mizumori, A 01/06				
Detailed By	Footo, N. 09/05				
Bridge Projects Engr.	<i>R. A. ...</i>				
Prelim. Plan By	MINNS, GEC 09/05				
Architect/Specialist	Kinderman/Khaleghi 12/05	DATE	REVISION	BY	APPD

**BRIDGE AND STRUCTURES OFFICE**

**Washington State Department of Transportation**

SB SR 509 OVER SOUTH 188TH STREET

**PRELIMINARY PLAN**

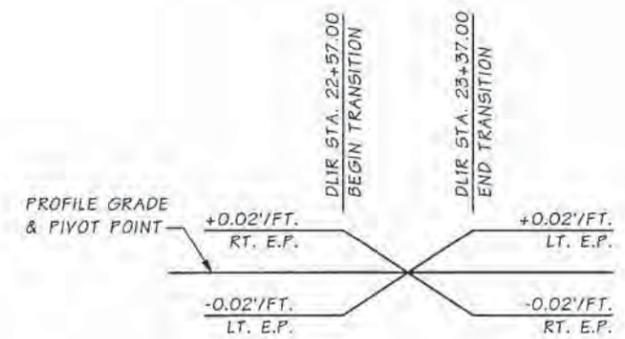
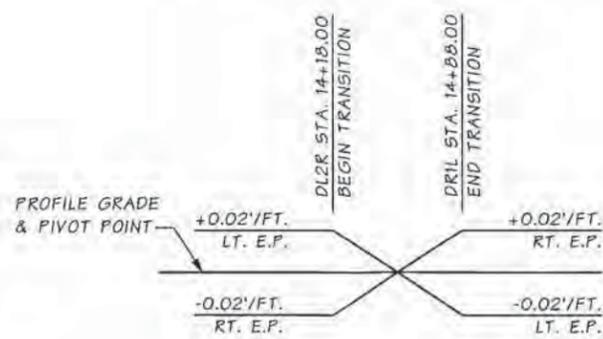
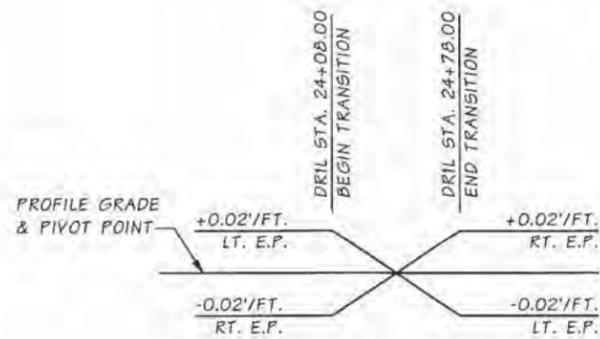
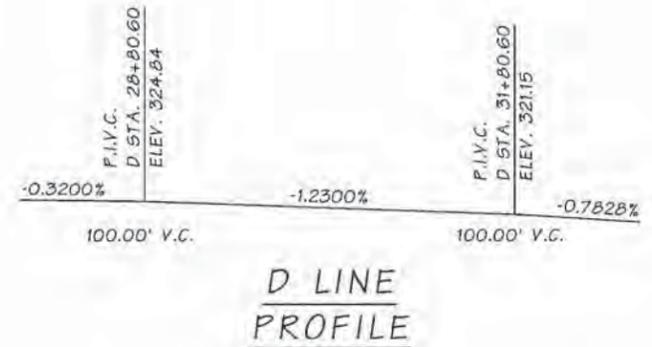
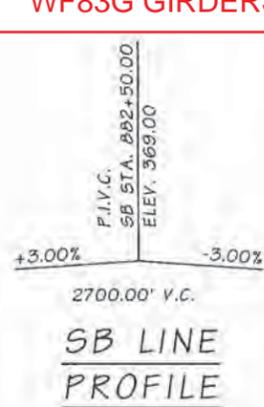
BRIDGE SHEET NO. **3**

SHEET OF SHEETS

CU 'E DATA

P.I. STATION	Δ	RADIUS	TANGENT	LENGTH	BK. TAN BRG.
SB 053+33.02	76° 21' 40" RT.	4170.00'	3279.18'	5557.59'	N 65°54'37" W
DR1L 25+66.67	43° 11' 51" LT.	250.00'	98.98'	188.49'	N 31°14'23" W
DL1R 24+20.13	72° 07' 24" RT.	130.00'	94.67'	163.64'	N 10°14'19" E
DL2R 13+56.33	43° 18' 08" RT.	200.00'	79.39'	151.15'	N 31°14'23" W
D					

REVISE PROFILE TO PROVIDE +/- 9" ADDITIONAL CLEARANCE FOR WF83G GIRDERS



SR 509 JOB NO. 7011 SHEET 4 OF 7

Bridge Design Engr. <i>Rohail Bhatia 2/06</i>	M:\PRELIMINARY PLANS\SR 509\7 NORTH BRIDGES\188 ST O'XING SB\PROFILE SHEET.MAN		REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
Supervisor			10	WASH.			
Designed By			JOB NUMBER				
Checked By Mizumori, A	01/06						
Detailed By Foote, N.	09/05						
Bridge Projects Engr. <i>Ron Alvar 2/06</i>							
Prelim. Plan By MINNS, GEC	09/05						
Architect/Specialist Kinderman/Khaleghi	12/05	DATE	REVISION	BY	APPD		

BRIDGE AND STRUCTURES OFFICE



Washington State Department of Transportation

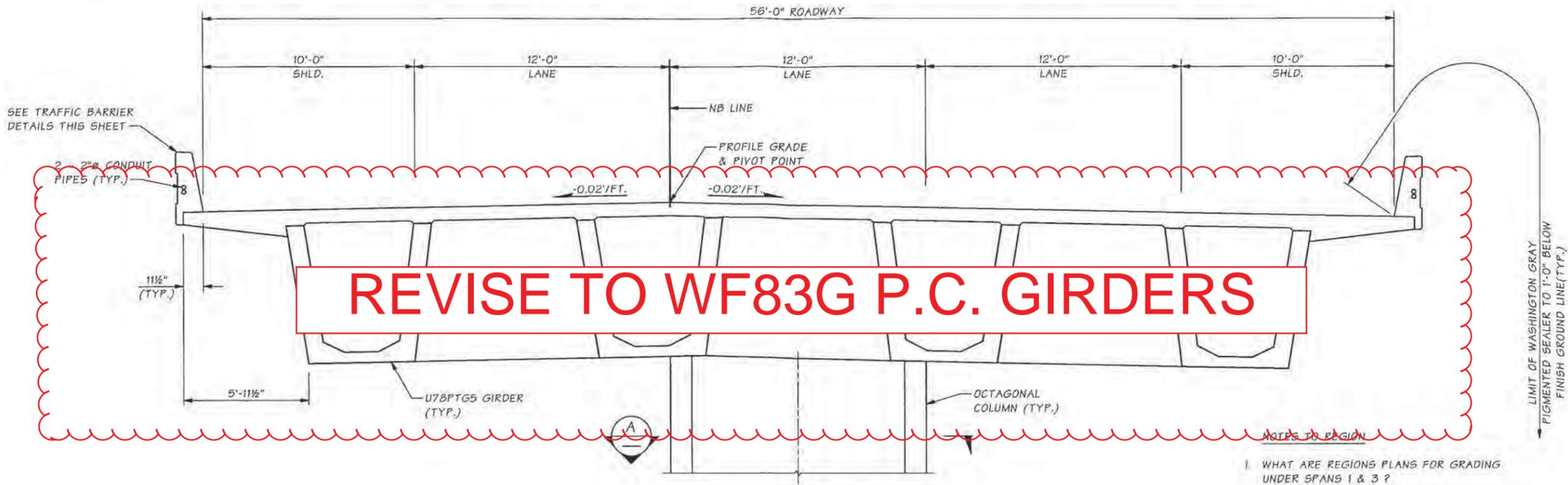
SB SR 509 OVER SOUTH 188TH STREET

PRELIMINARY PLAN

BRIDGE SHEET NO. 4 OF SHEETS

C.S. 1739 ~ PROJ. NO. XL2398D ~ NORTHWEST REGION ~ SR 509 ~ I-5 TO SOUTH 176 STREET ~ SB SR 509 OVER SOUTH 188TH STREET

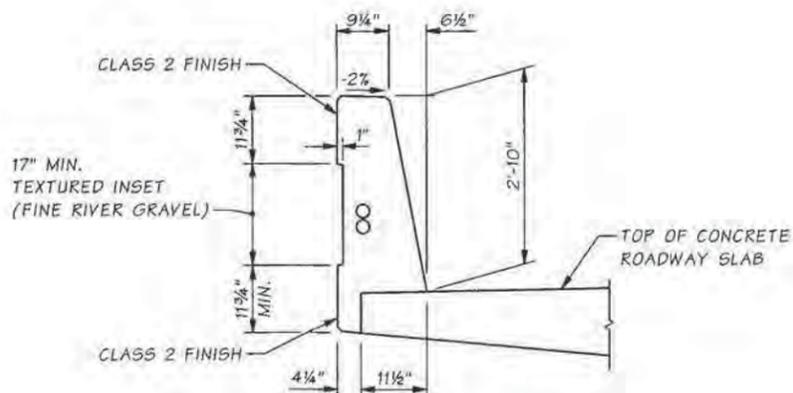




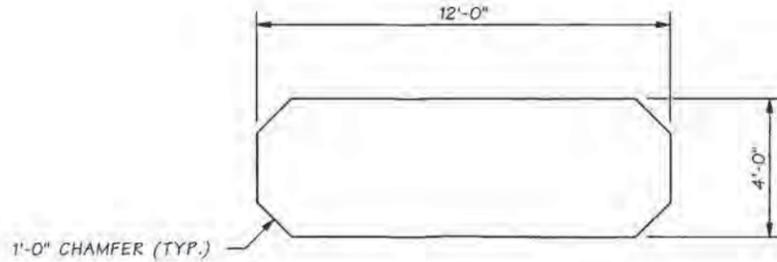
**REVISE TO WF83G P.C. GIRDERS**

TYPICAL SECTION ~ NB LINE

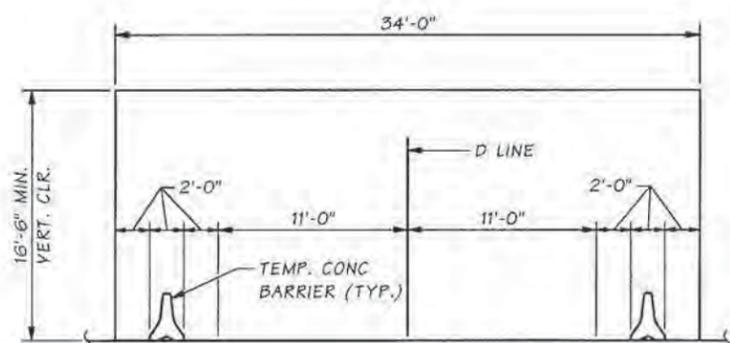
- NOTES TO REGION
1. WHAT ARE REGIONS PLANS FOR GRADING UNDER SPANS 1 & 3 ?
  2. PLEASE PROVIDE CURVE DATA FOR THE D LINE AND VERIFY CURVE DATA FOR OTHER LINES.
  3. WILL THE TRAFFIC ON SOUTH 188TH STREET (D LINE) BE DETOURED AROUND THE CONSTRUCTION SITE ?
  4. WILL UTILITY LINES BE INSTALLED ON BRIDGE ?
  5. PLEASE REVISE SIDEWALK ALIGNMENT TO CLEAR COLUMNS AT INTERIOR PIERS.



TRAFFIC BARRIER DETAILS



SECTION A

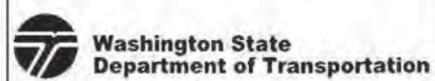


CONSTRUCTION OPENING

SR 509 JOB NO. 7012 SHEET 6 OF 7

Bridge Design Engr. <i>Nikhil Kumar</i>	M:\PRELIMINARY PLANS\SR 509\7 NORTH BRIDGES\S 188 ST O'XING NB\NB TYP SECT U78PTG5 SING COL.MAN		REVISION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
Supervisor				10 WASH.			
Designed By				JOB NUMBER			
Checked By Mizumori, A 01/06							
Detailed By Foote, N. 09/05							
Bridge Projects Engr. <i>Ran Alvar</i> 2/06							
Prelim. Plan By MINNS, GEC 09/05							
Architect/Specialist Kinderman/Khaleghi 12/05	DATE	REVISION	BY	APPD			

BRIDGE AND STRUCTURES OFFICE



BRIDGE SHEET NO.	6
SHEET	
OF	
SHEETS	

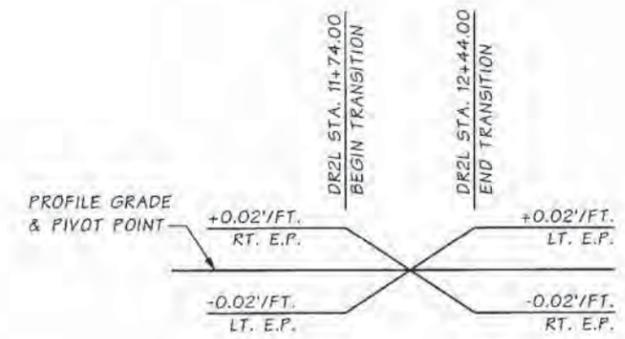
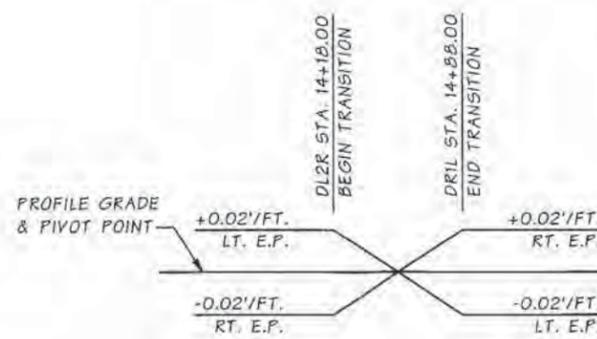
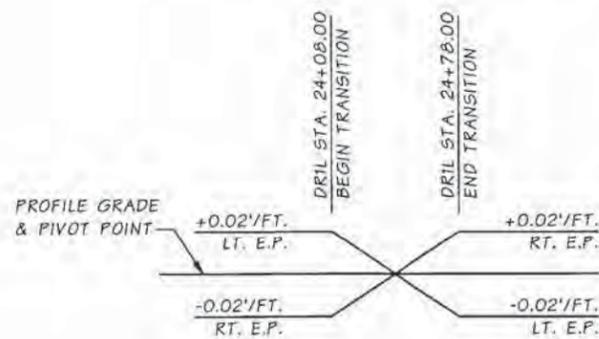
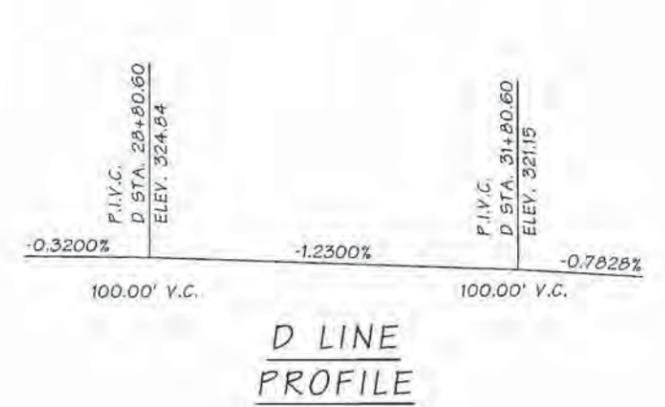
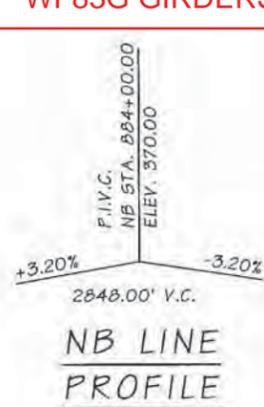
NB SR 509 OVER SOUTH 188TH STREET  
PRELIMINARY PLAN

C.S. 1739 ~ PROJ. NO. X12398D ~ NORTHWEST REGION ~ SR 509 ~ I-5 TO SOUTH 176 STREET ~ NB SR 509 OVER SOUTH 188TH STREET

CU 'E DATA

P.I. STATION	Δ	RADIUS	TANGENT	LENGTH	BK. TAN BRG.
NB 852+54.40	78° 33' 26" RT.	4150.00'	3394.16'	5690.00'	N 69°03'29" W
DR1L 25+66.67	43° 11' 51" LT.	250.00'	98.98'	188.49'	N 31°14'23" W
DR2L 11+10.13	78° 24' 55" LT.	135.00'	110.13'	184.76'	N 9°09'42" E
DL2R 10+37.07	21° 00' 05" RT.	200.00'	37.07'	73.31'	N 31°14'23" W
D					

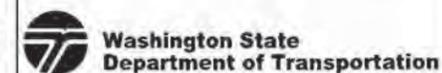
REVISE PROFILE TO PROVIDE +/- 9" ADDITIONAL CLEARANCE FOR WF83G GIRDERS



SR 509 JOB NO. 7012 SHEET 7 OF 7

Bridge Design Engr. <i>[Signature]</i>	M:\PRELIMINARY PLANS\SR 509\7 NORTH BRIDGES\5 188 ST 0' XING NB\PROFILE SHEET.MAN									
Supervisor				REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS		
Designed By				10	WASH.					
Checked By	Mizumori, A	01/06								
Detailed By	Foot, N.	09/05								
Bridge Projects Engr.	<i>[Signature]</i>	2/06								
Prelim. Plan By	MINNS, GEC	09/05								
Architect/Specialist	Kinderman/Khaleghi	12/05	DATE	REVISION	BY	APP'D				

BRIDGE AND STRUCTURES OFFICE



NB SR 509 OVER SOUTH 188TH STREET

PRELIMINARY PLAN

BRIDGE SHEET NO. 7 OF SHEETS

C.S. 1759 ~ PROJ. NO. XL2398D ~ NORTHWEST REGION ~ SR 509 ~ 1-5 TO SOUTH 176 STREET ~ NB SR 509 OVER SOUTH 188TH STREET