

New Harbor Bridge Preliminary Approach Spans

Segmental Span By Span

February 1, 2016

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DATE: 2/1/2016 TIME: 4:59:20 PM USER: lcvanough

HL-93 LOADING

 <p>FLATIRON DRAGADOS USA A JOINT VENTURE in association with FIGG & ACS</p>	 <p>FIGG TBPE, FIRM # F-4883</p>
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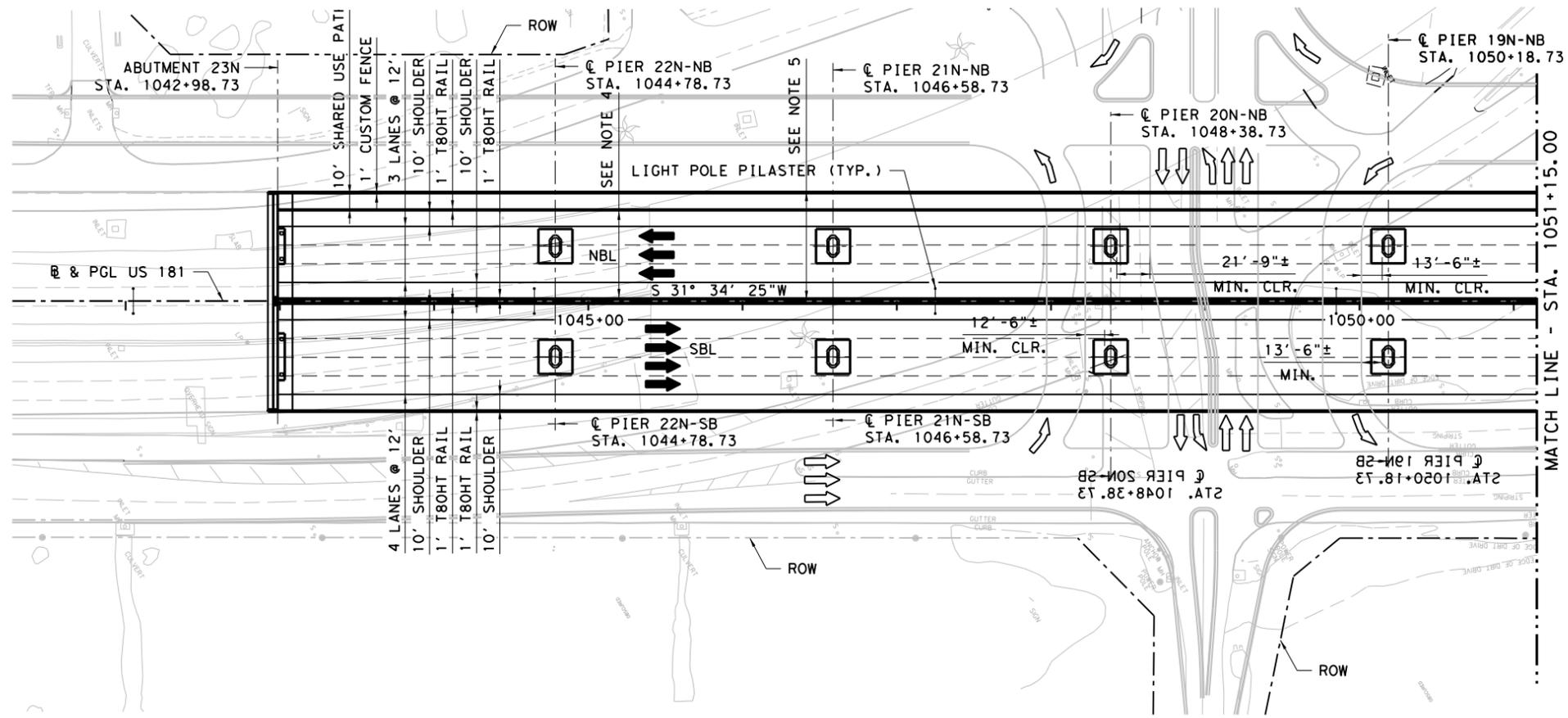


US 181/IH 37 - HARBOR BRIDGE APPROACH SPANS CONCRETE BOX OPTION

SHEET 1 OF 1

DESIGN	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
GRAPHICS	X	(See Title Sheet)		X
	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK	TEXAS	CRP	NUECES	AO
CHECK	CONTROL	SECTION	JOB	
	0101	06	095	

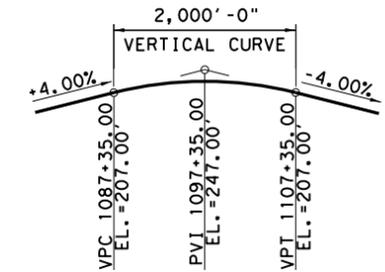
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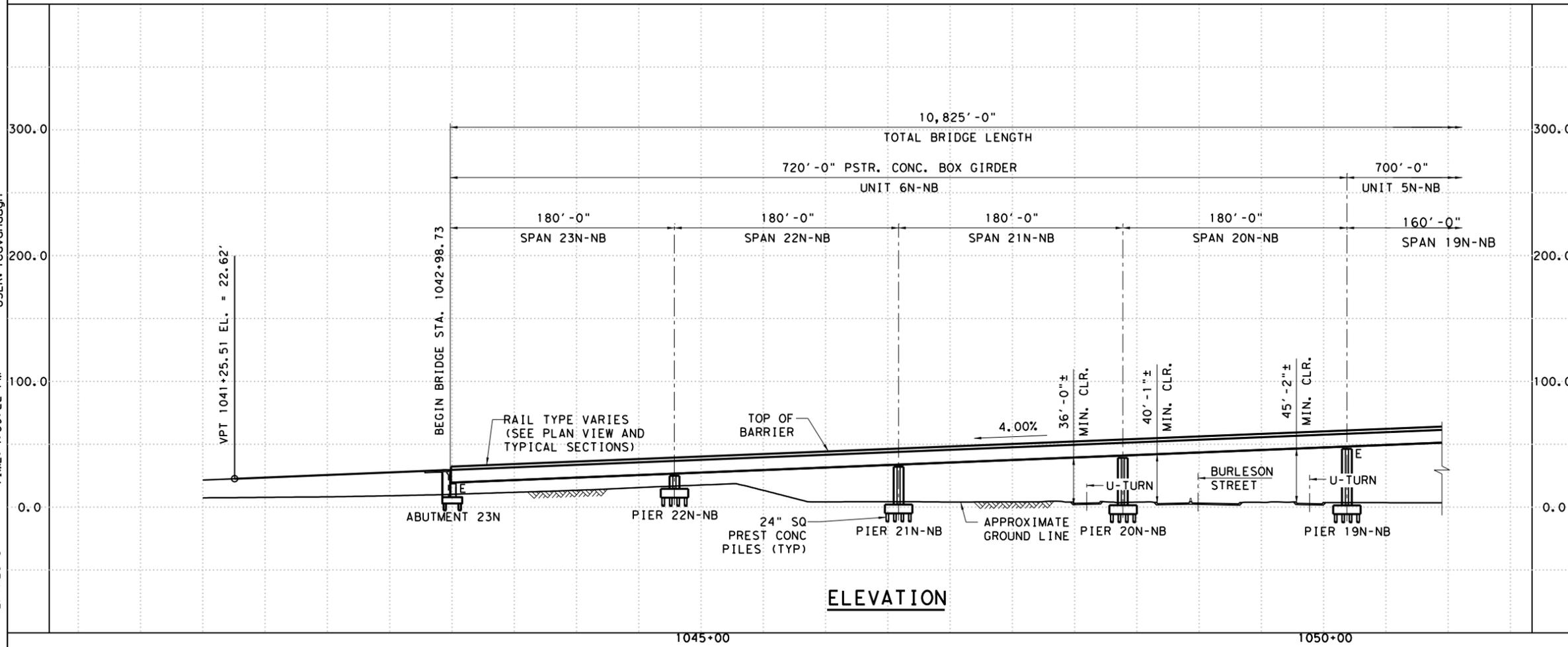
PLAN

- NOTES:
1. ALL PIERS ARE PERPENDICULAR OR RADIAL TO US 181.
 2. FOR CROSS STREET PROFILES, SEE ROADWAY PLANS.
 3. SEE FOUNDATION LAYOUT SHEETS FOR BORING LOCATIONS.
 4. NB ROADWAY WIDTH VARIES FROM 56' TO 80'.
 5. NB OVERALL WIDTH VARIES FROM 58' TO 93'-8".

DESIGN DATA (NB APPROACH)	
NBI. NO.	XX-XXX-XXXXXX-XXX
FUNC CLASS:	URBAN FREEWAY
DESIGN SPEED:	70 MPH
ADT: NB APPROACH	
(2015)	= XX,XXX
(2035)	= XX,XXX



STA = 1097+35.00
 EL = 247.00'
 G = -4.00%
 K = 250
 L = 2,000.00'



ELEVATION

HL-93 LOADING

FLATIRON DRAGADOS USA
 A JOINT VENTURE
 in association with **FIGG & ACS**

FIGG
 TBPE, FIRM # F-4883

Texas Department of Transportation 2015

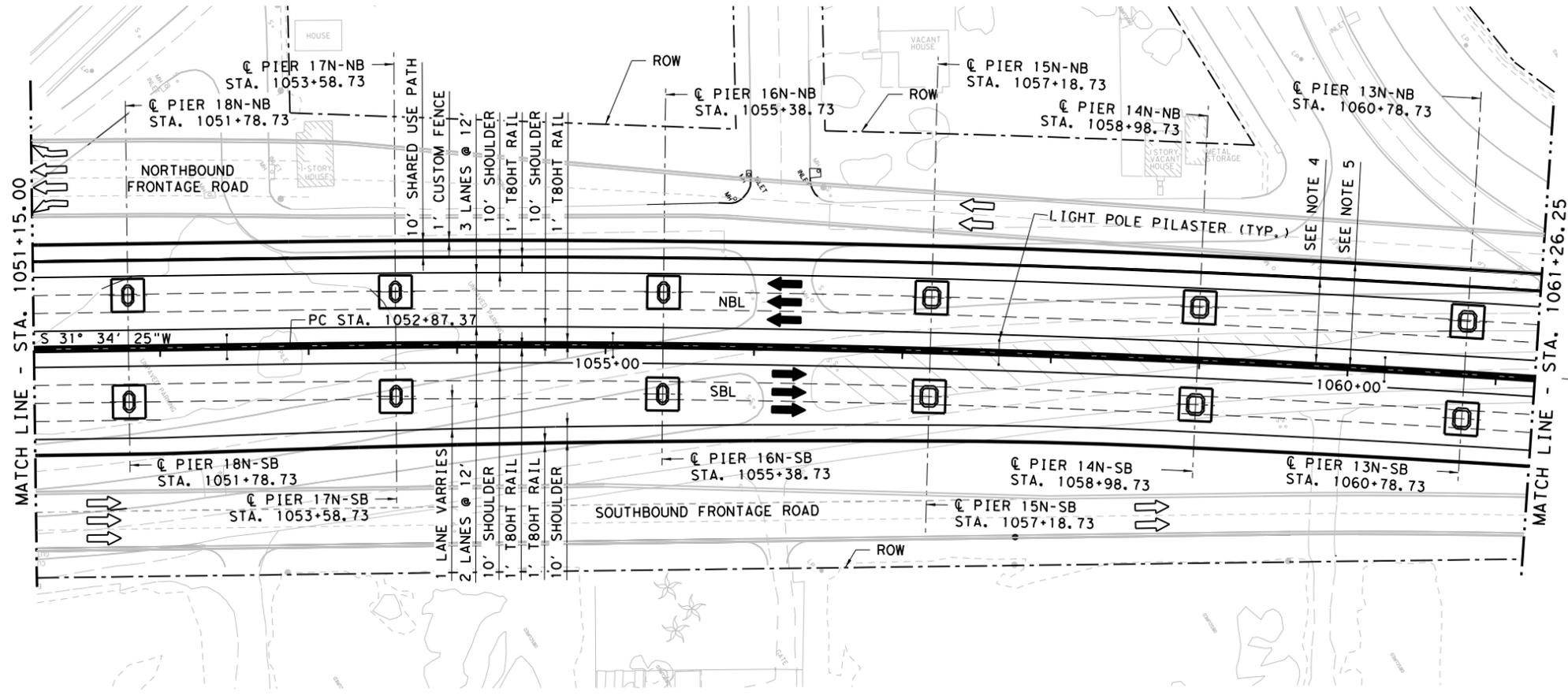
**US 181/IH 37 - HARBOR BRIDGE
 APPROACH SPANS
 NORTHBOUND APPROACH
 BRIDGE LAYOUT**

SHEET 1 OF 8

DESIGN	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
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CHECK	STATE	DISTRICT	COUNTY	SHEET NO.
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	CONTROL	SECTION	JOB	
	0101	06	095	

PRELIMINARY NOT FOR CONSTRUCTION, FEBRUARY 2016

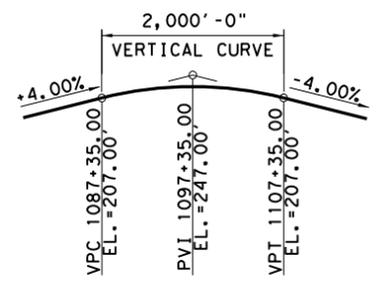
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CURVE US181-4
 PI STATION = 1057+29.63
 DELTA = 4° 42' 50" RT
 DEGREE = 0° 31' 59"
 TANGENT = 442.4669'
 LENGTH = 884.4345'
 RADIUS = 10,750.0000'

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 A JOINT VENTURE
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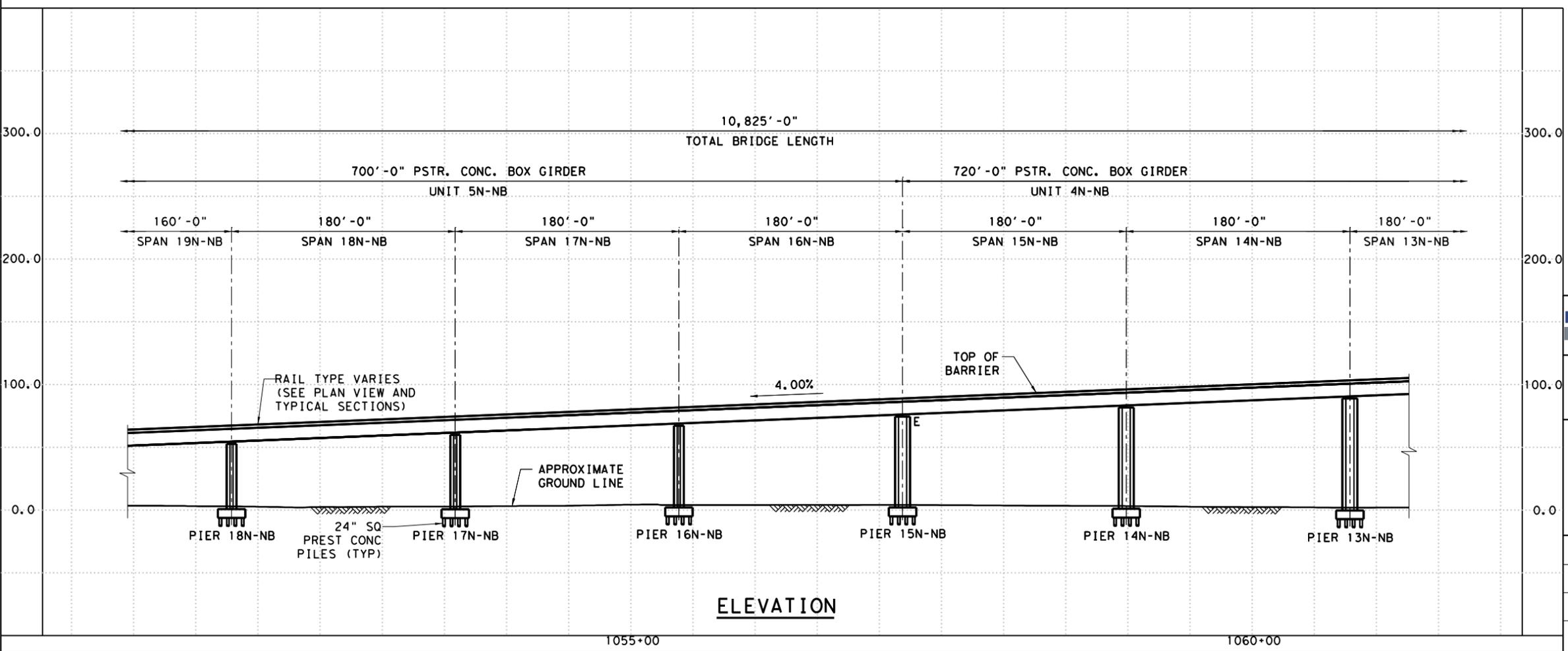
FIGG
 TBPE, FIRM # F-4883



**US 181/IH 37 - HARBOR BRIDGE
 APPROACH SPANS
 NORTHBOUND APPROACH
 BRIDGE LAYOUT**

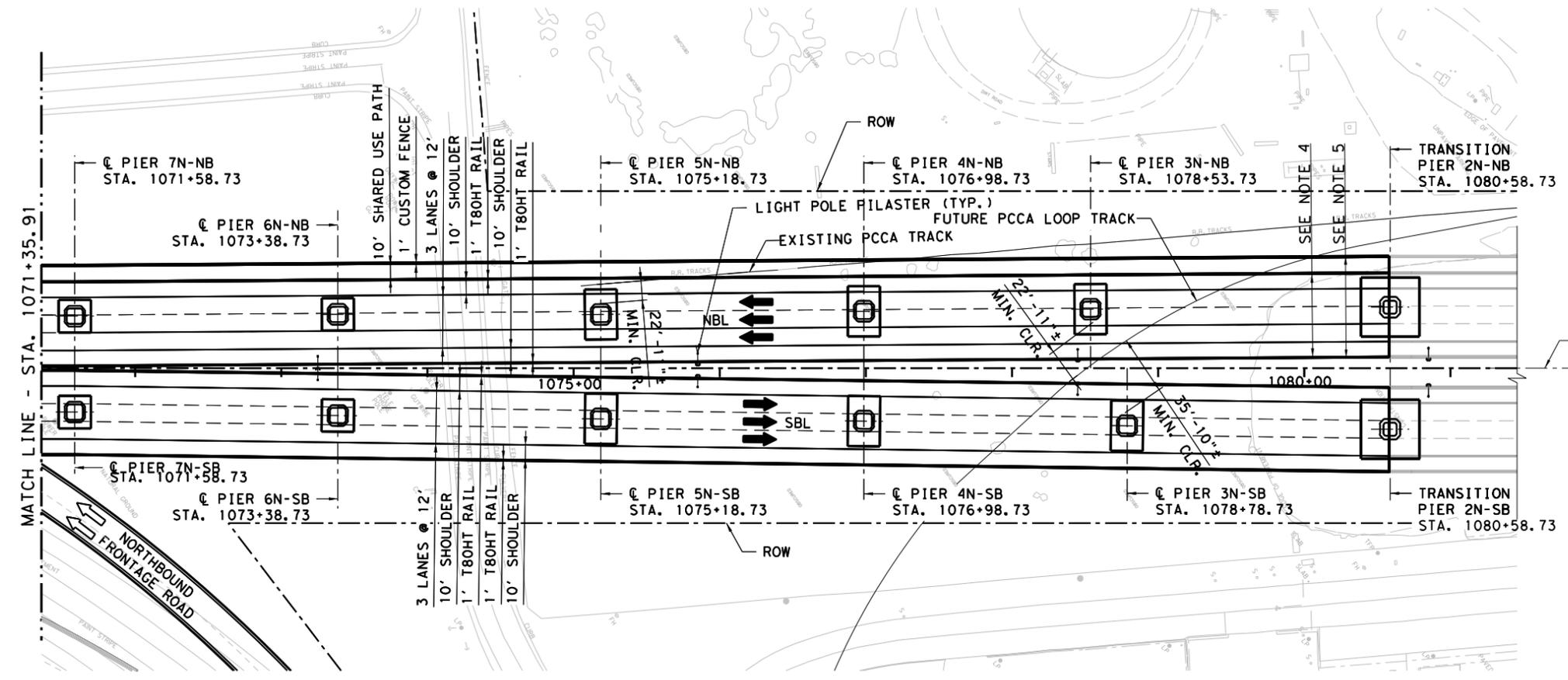
SHEET 2 OF 8

DESIGN	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
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	CONTROL	SECTION	JOB	
	0101	06	095	



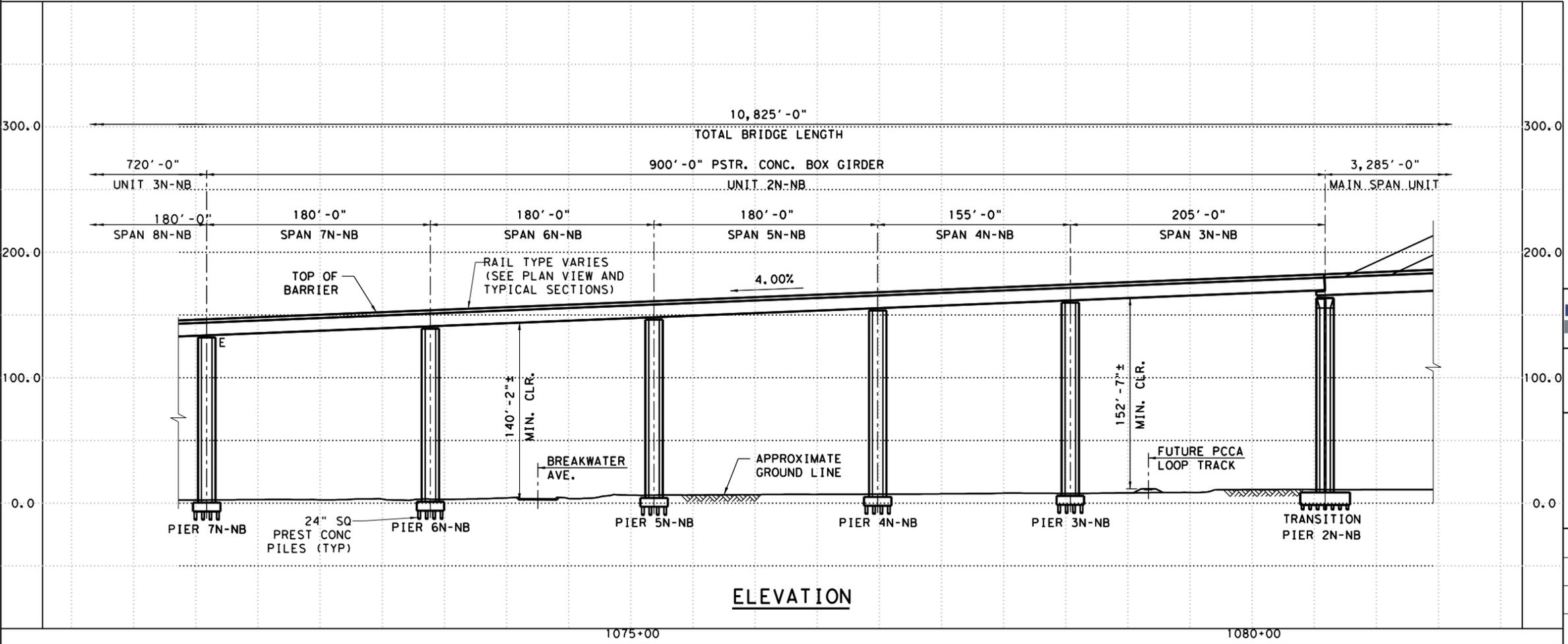
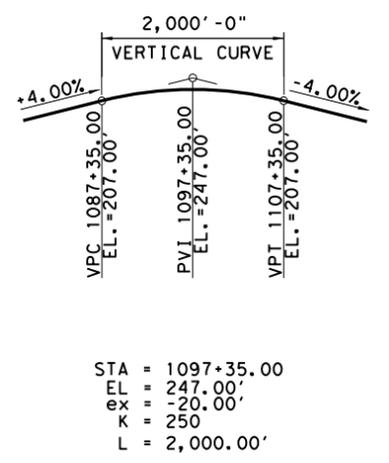
PRELIMINARY NOT FOR CONSTRUCTION, FEBRUARY 2016

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 USER: lcaavanaugh
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FIGG
 TBPE, FIRM # F-4883

Texas Department of Transportation 2015

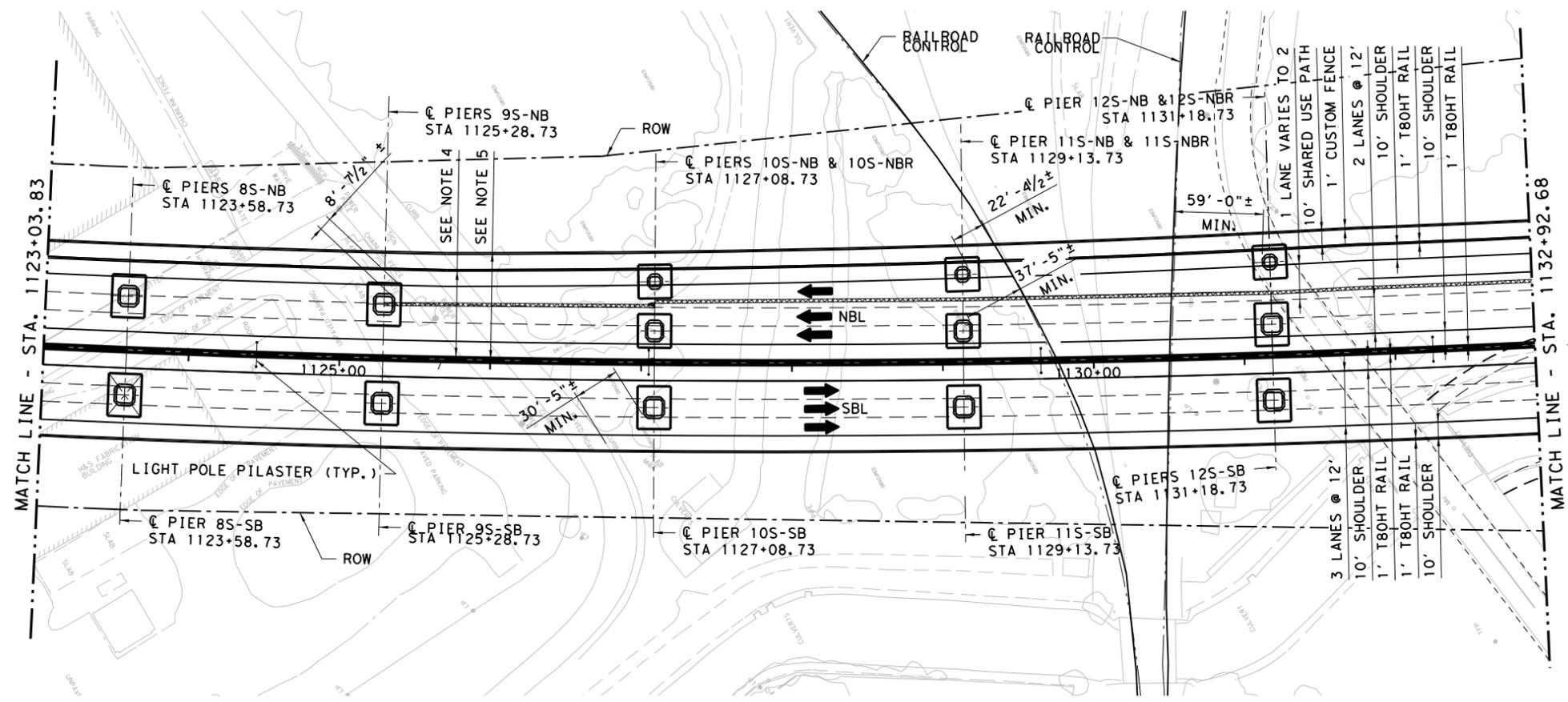
US 181/IH 37 - HARBOR BRIDGE
 APPROACH SPANS
 NORTHBOUND APPROACH
 BRIDGE LAYOUT

SHEET 4 OF 8

DESIGN	FED. RD. DIV. NO. X	FEDERAL AID PROJECT NO. (See Title Sheet)		HIGHWAY NO. X
GRAPHICS	STATE TEXAS	DISTRICT CRP	COUNTY NUECES	SHEET NO.
CHECK	CONTROL 0101	SECTION 06	JOB 095	A5
CHECK				

PRELIMINARY NOT FOR CONSTRUCTION, FEBRUARY 2016

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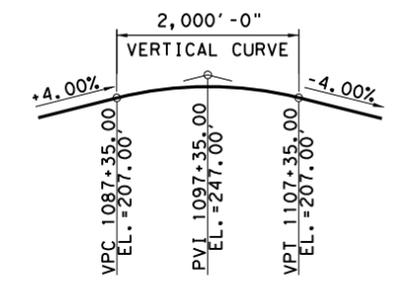


PLAN

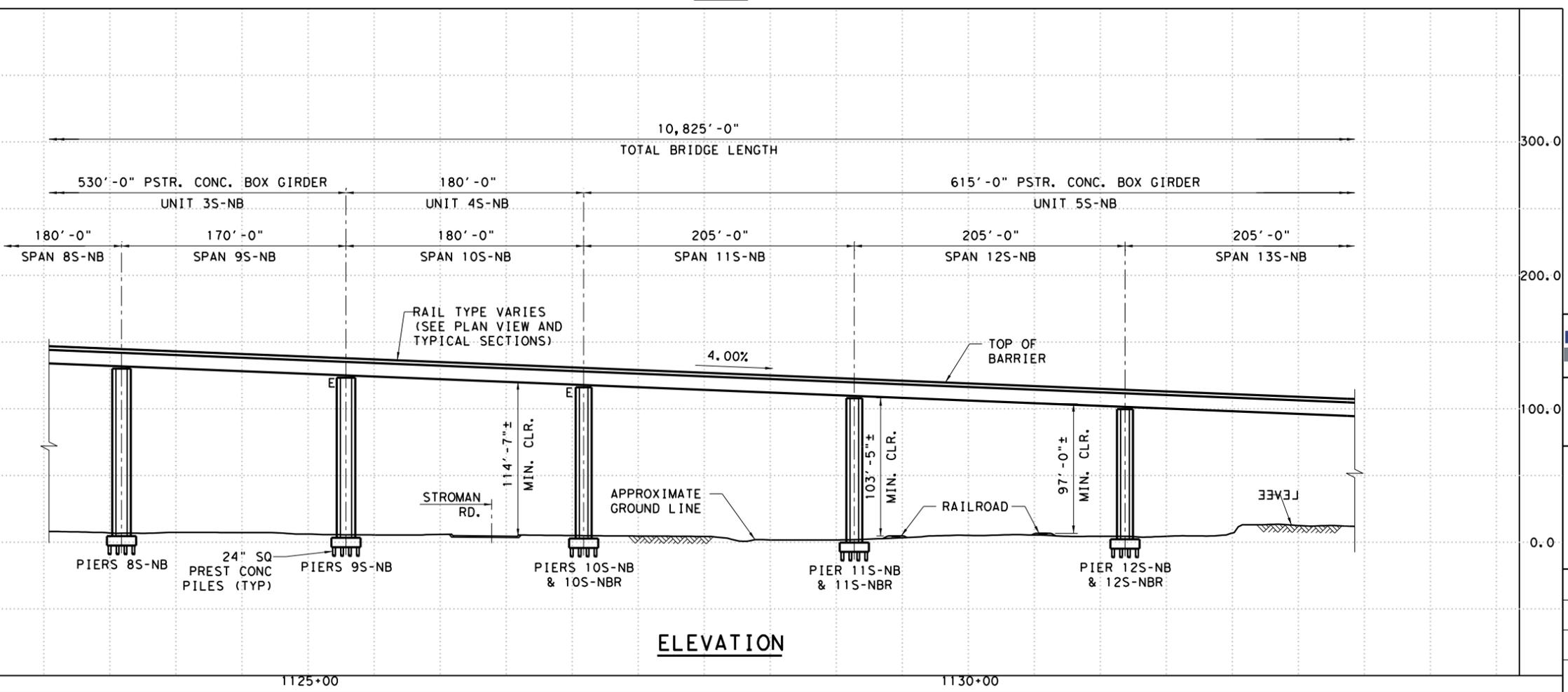
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CURVE US181-5
 PI STATION = 1150+01.38
 DELTA = 37° 37' 32" LT
 DEGREE = 0° 31' 59"
 TANGENT = 3,662.2666'
 LENGTH = 7,059.4024'
 RADIUS = 10,750.0000'

DESIGN DATA (NB APPROACH)
 NBI. NO. XX-XXX-XXXXXX-XXX
 FUNC CLASS: URBAN FREEWAY
 DESIGN SPEED: 70 MPH
 ADT: NB APPROACH
 (2015) = XX,XXX
 (2035) = XX,XXX



STA = 1097+35.00
 EL = 247.00'
 ex = 20.00'
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 L = 2,000.00'



ELEVATION

HL-93 LOADING

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FIGG
 TBPE, FIRM # F-4883

Texas Department of Transportation^{®2015}

**US 181/IH 37 - HARBOR BRIDGE
 APPROACH SPANS
 NORTHBOUND APPROACH
 BRIDGE LAYOUT**

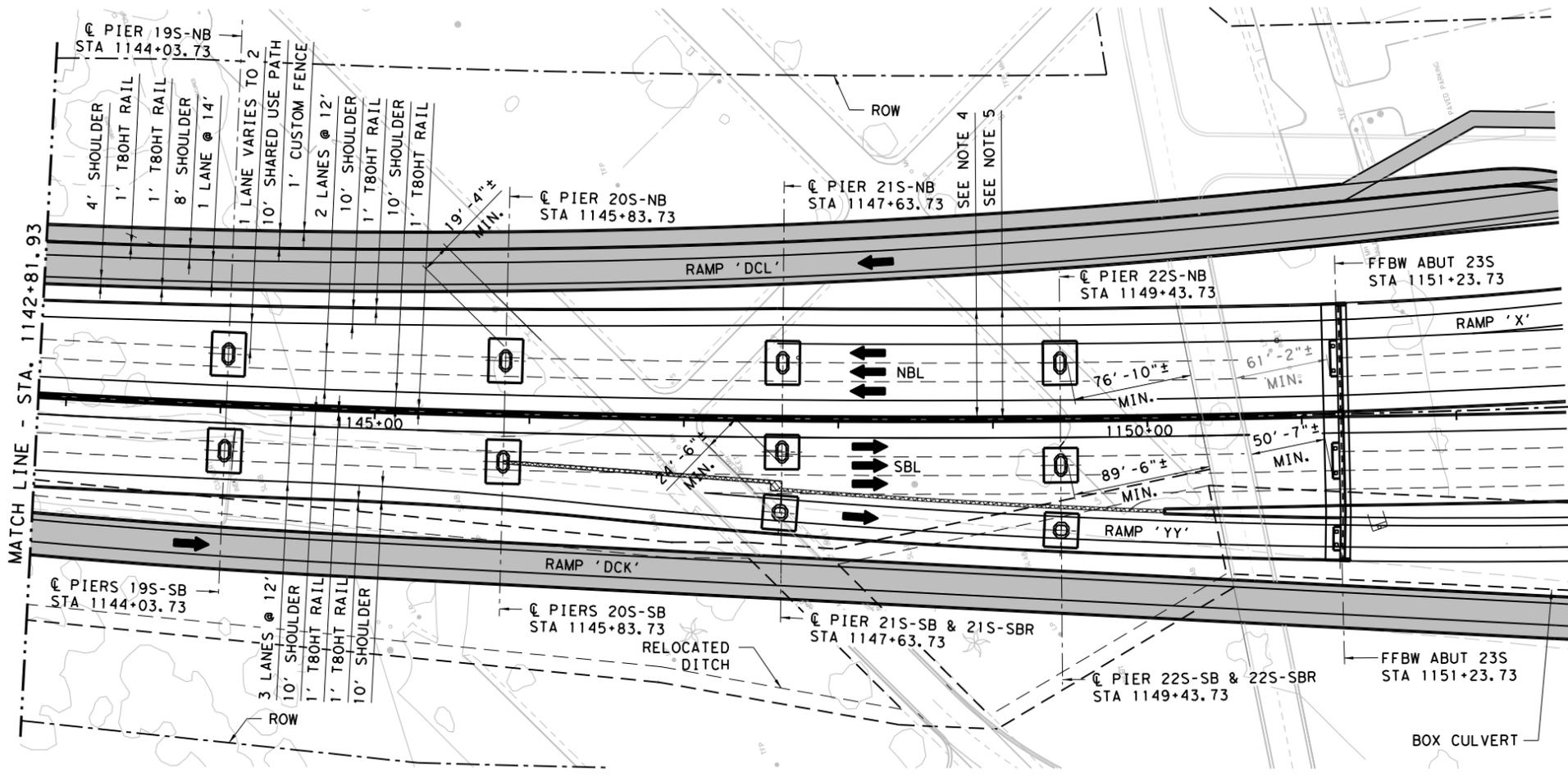
SHEET 6 OF 8

DESIGN	FED. RD. DIV. NO. X	FEDERAL AID PROJECT NO. (See Title Sheet)	HIGHWAY NO. X
GRAPHICS	STATE TEXAS	DISTRICT CRP	COUNTY NUECES
CHECK	CONTROL 0101	SECTION 06	JOB 095
CHECK			A7

PRELIMINARY NOT FOR CONSTRUCTION, FEBRUARY 2016

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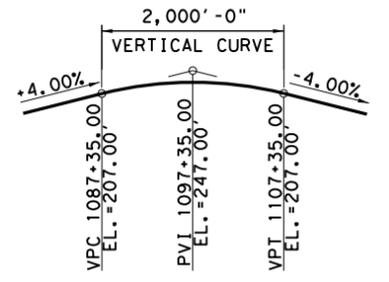


LEGEND
 [Symbol] DENOTES ROADWAY BRIDGES.
 [Symbol] SEE DIRECT CONNECT "K" BRIDGE 14 FOR RAMP DCK BRIDGE. SEE DIRECT CONNECT "L" BRIDGE 16 FOR RAMP DCL BRIDGE.

NOTES:
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 (2015) = XX,XXX
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 EL = 247.00'
 ex = -20.00'
 K = 250
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PIER SIZES SHOWN ARE APPROXIMATE AND SUBJECT TO CHANGE

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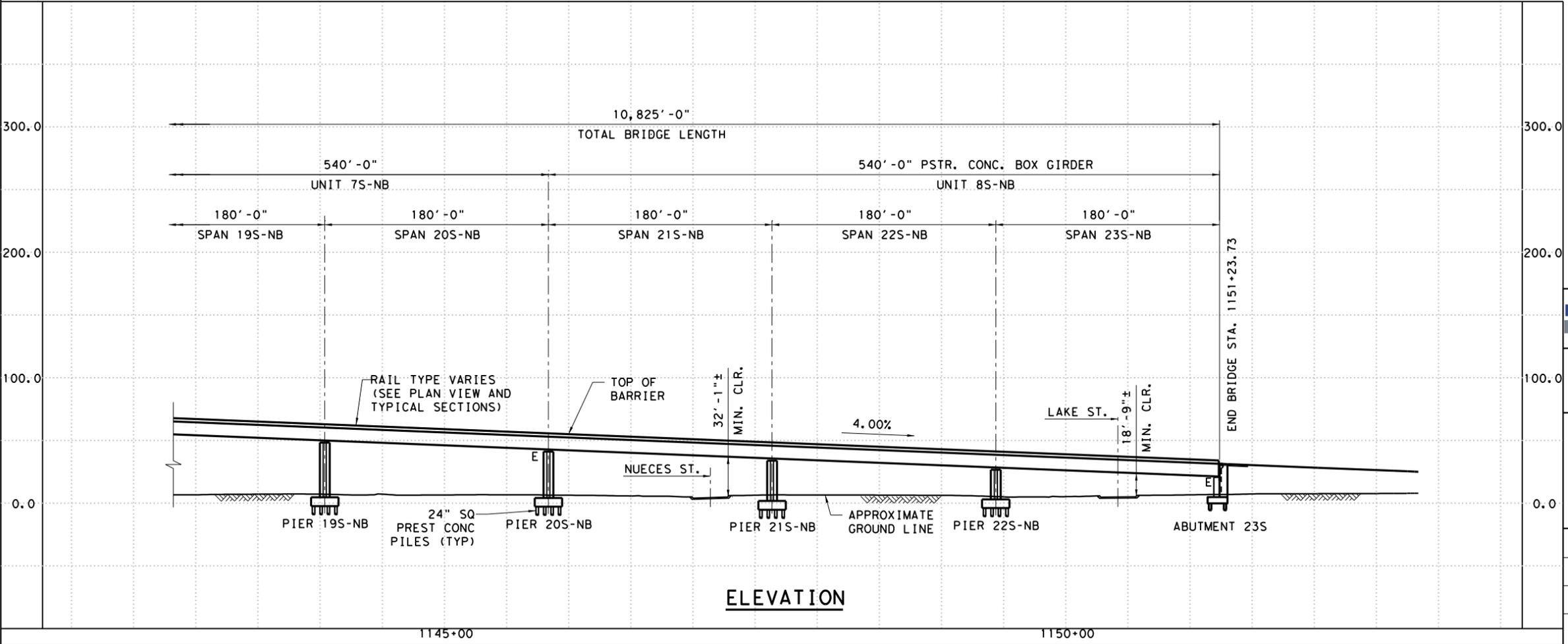


**US 181/IH 37 - HARBOR BRIDGE
 APPROACH SPANS
 NORTHBOUND APPROACH
 BRIDGE LAYOUT**

SHEET 8 OF 8

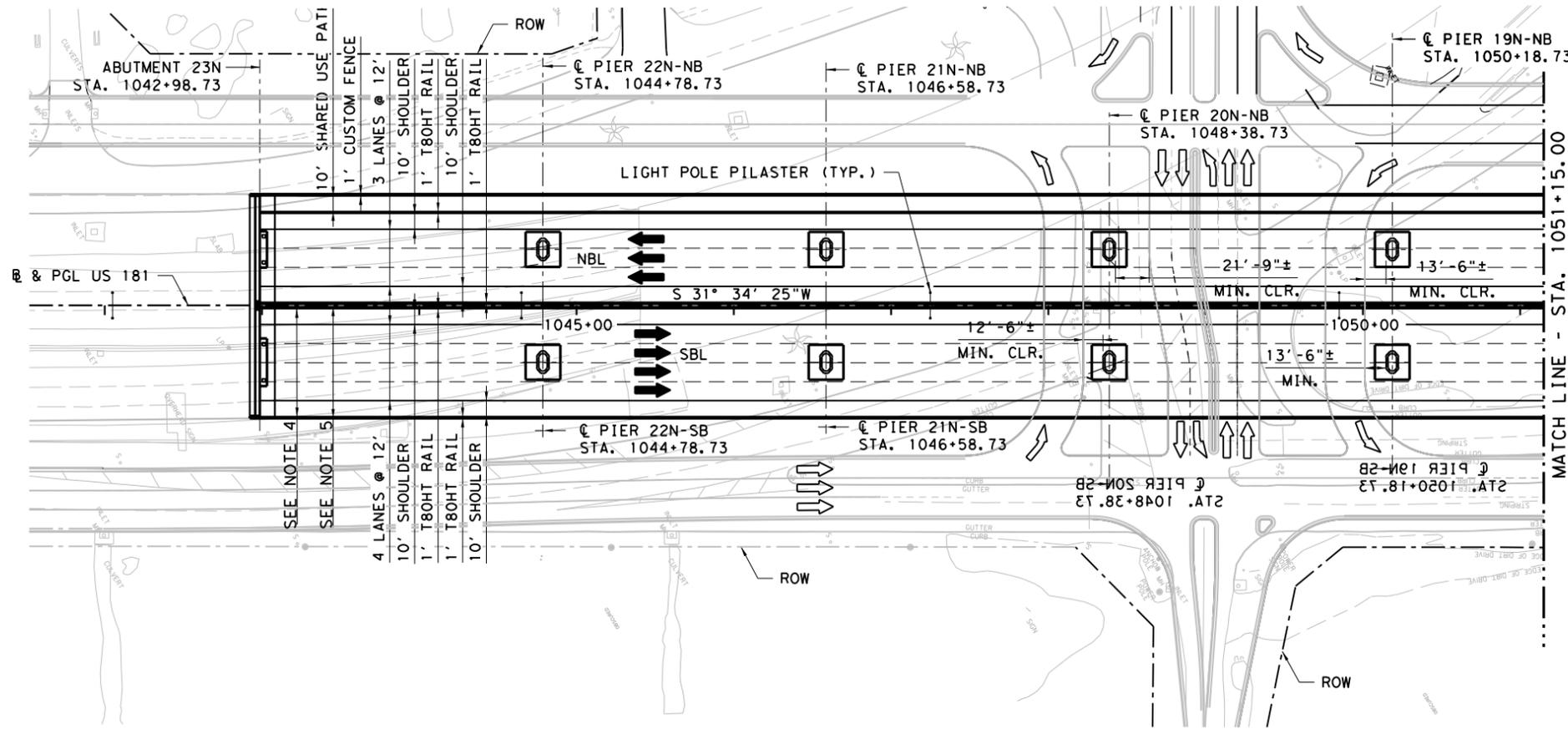
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CHECK	CONTROL 0101	SECTION 06	JOB 095	

PLAN

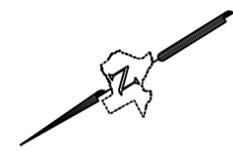


ELEVATION

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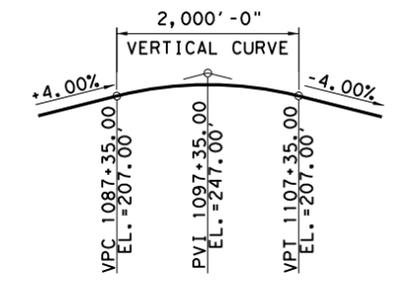


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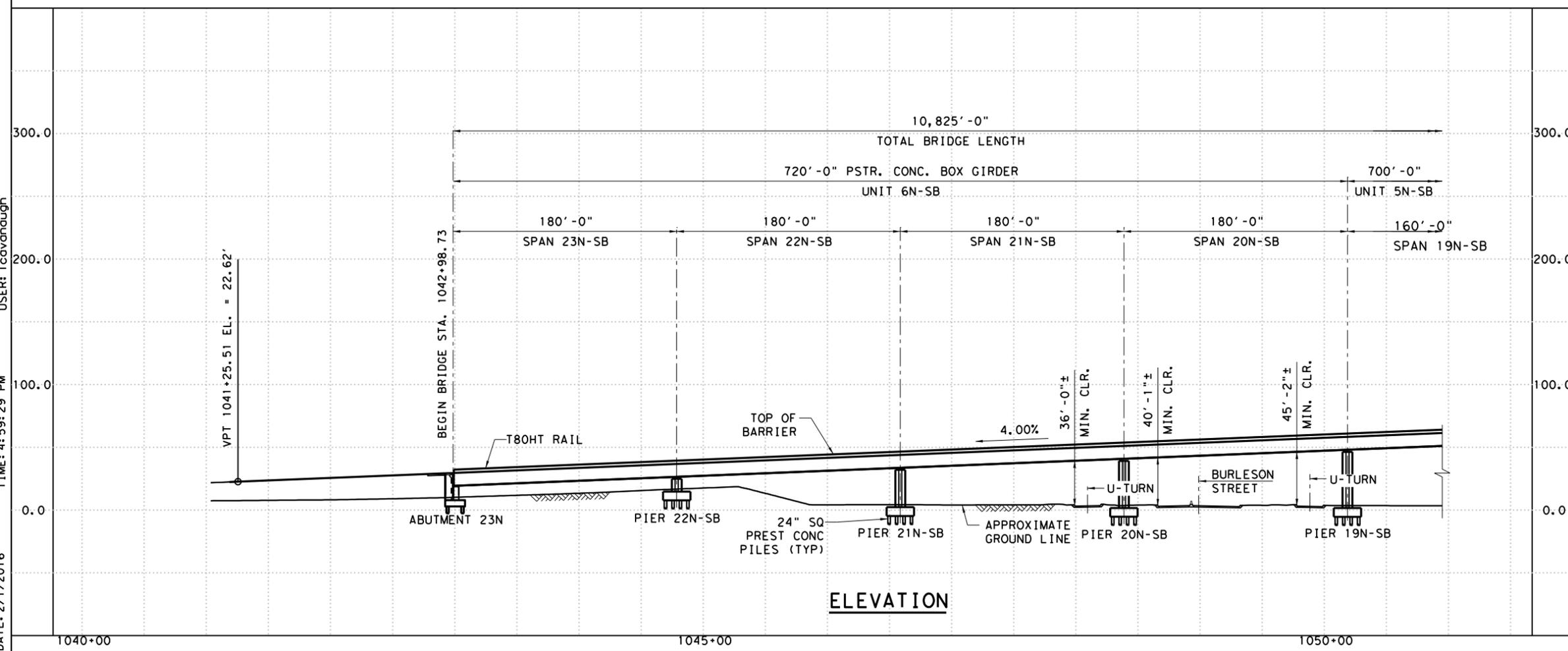


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 4. SB ROADWAY WIDTH VARIES FROM 56' TO 82'-7 1/8".
 5. SB OVERALL WIDTH VARIES FROM 58' TO 84'-7 1/8".

DESIGN DATA (SB APPROACH)
 NBI. NO. XX-XXX-XXXXXX-XXX
 FUNC CLASS: URBAN FREEWAY
 DESIGN SPEED: 70 MPH
 ADT: SB APPROACH
 (2015) = XX,XXX
 (2035) = XX,XXX



STA = 1097+35.00
 EL = 247.00'
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ELEVATION

HL-93 LOADING

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 A JOINT VENTURE
 in association with **FIGG & ACS**

FIGG
 TBPE, FIRM # F-4883

Texas Department of Transportation 2015

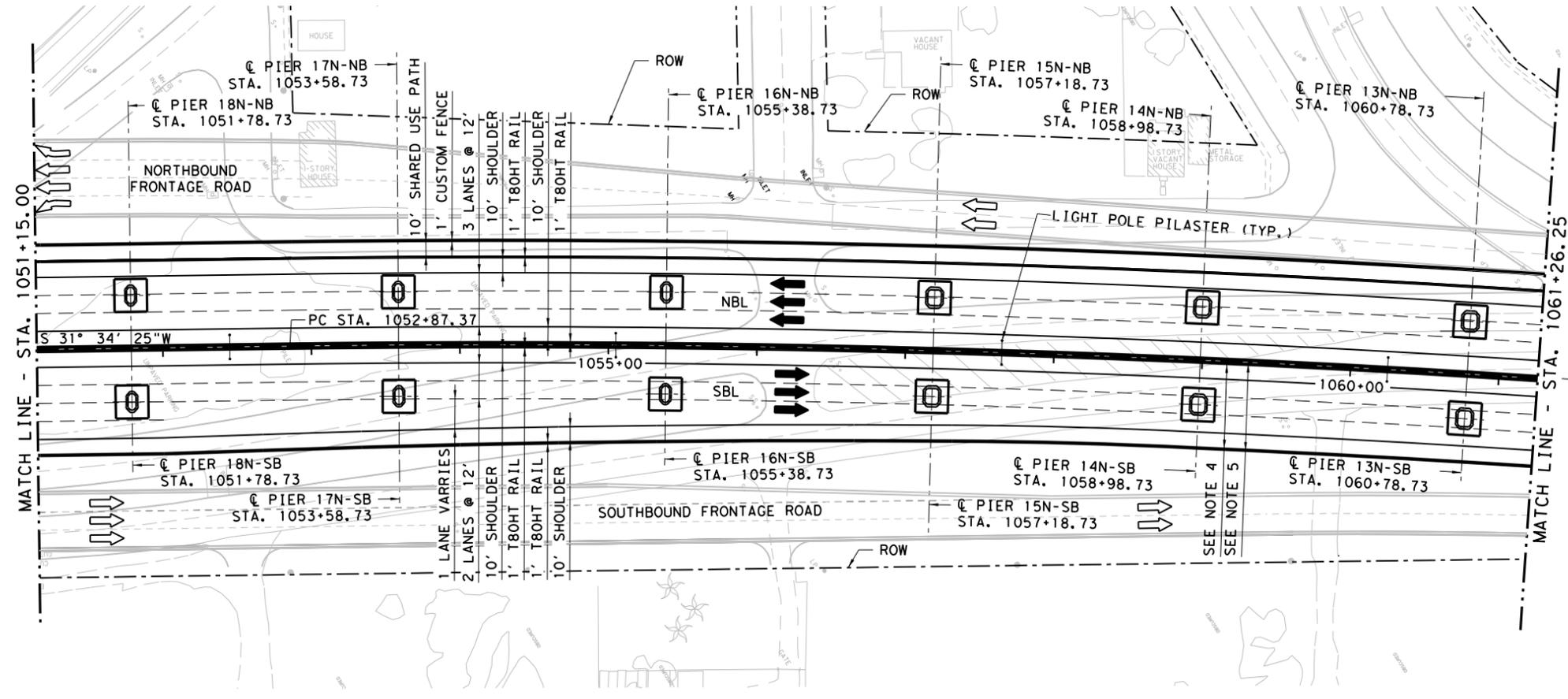
**US 181/IH 37 - HARBOR BRIDGE
 APPROACH SPANS
 SOUTHBOUND APPROACH
 BRIDGE LAYOUT**

SHEET 1 OF 8

DESIGN	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
GRAPHICS	X	(See Title Sheet)		X
CHECK	STATE	DISTRICT	COUNTY	SHEET NO.
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	CONTROL	SECTION	JOB	
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PRELIMINARY NOT FOR CONSTRUCTION, FEBRUARY 2016

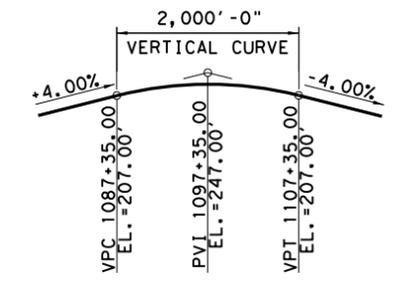
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CURVE US181-4
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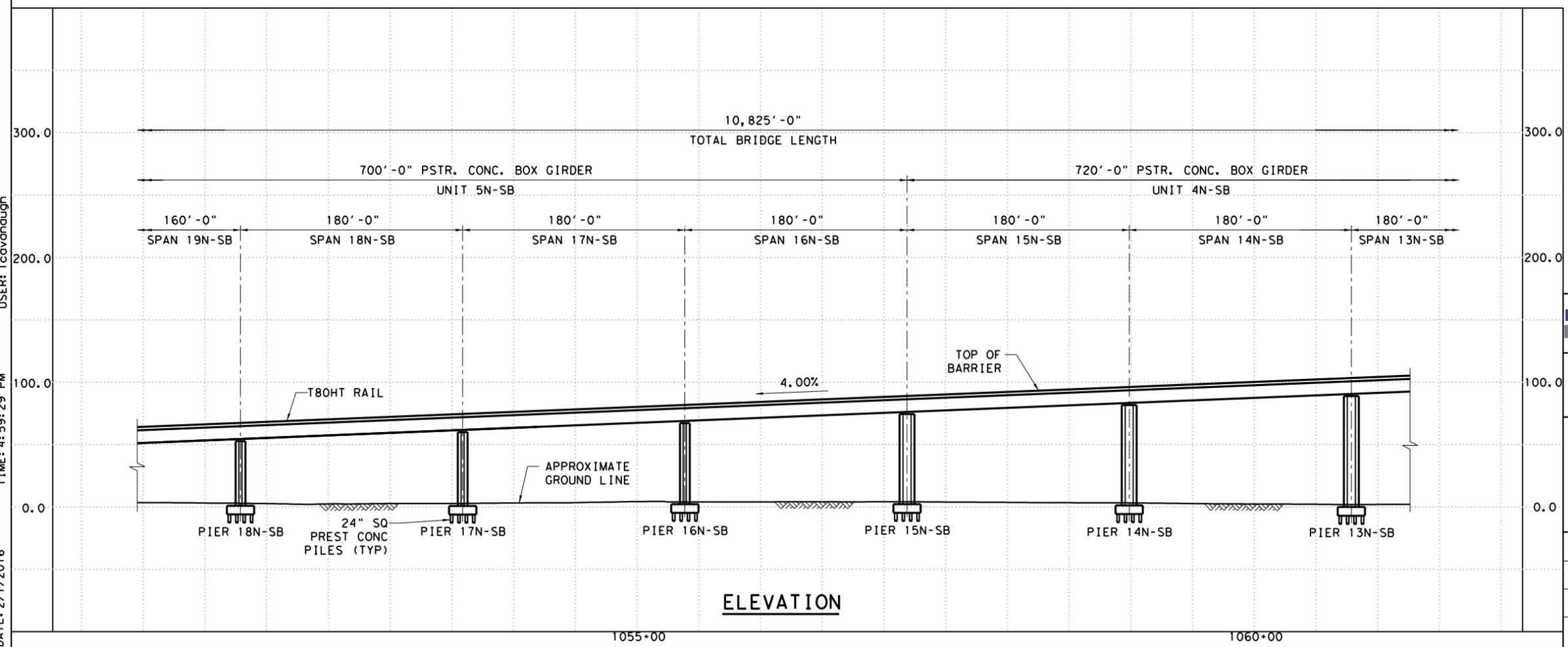
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Texas Department of Transportation^{®2015}
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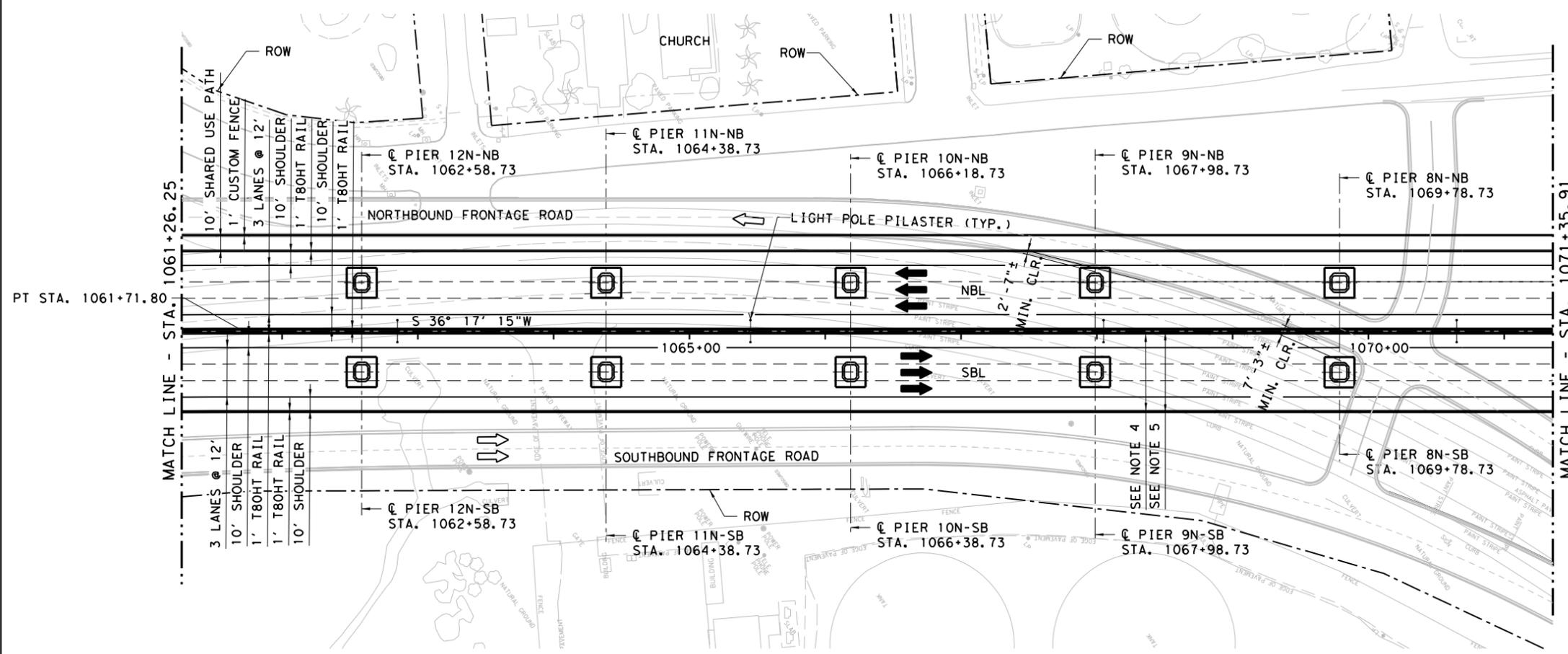
SHEET 2 OF 8

DESIGN	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
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	CONTROL	SECTION	JOB	
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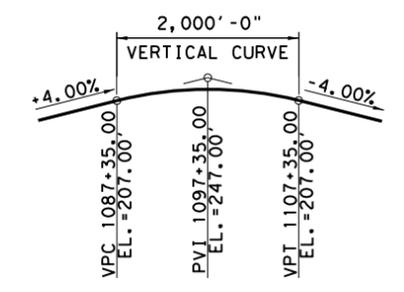
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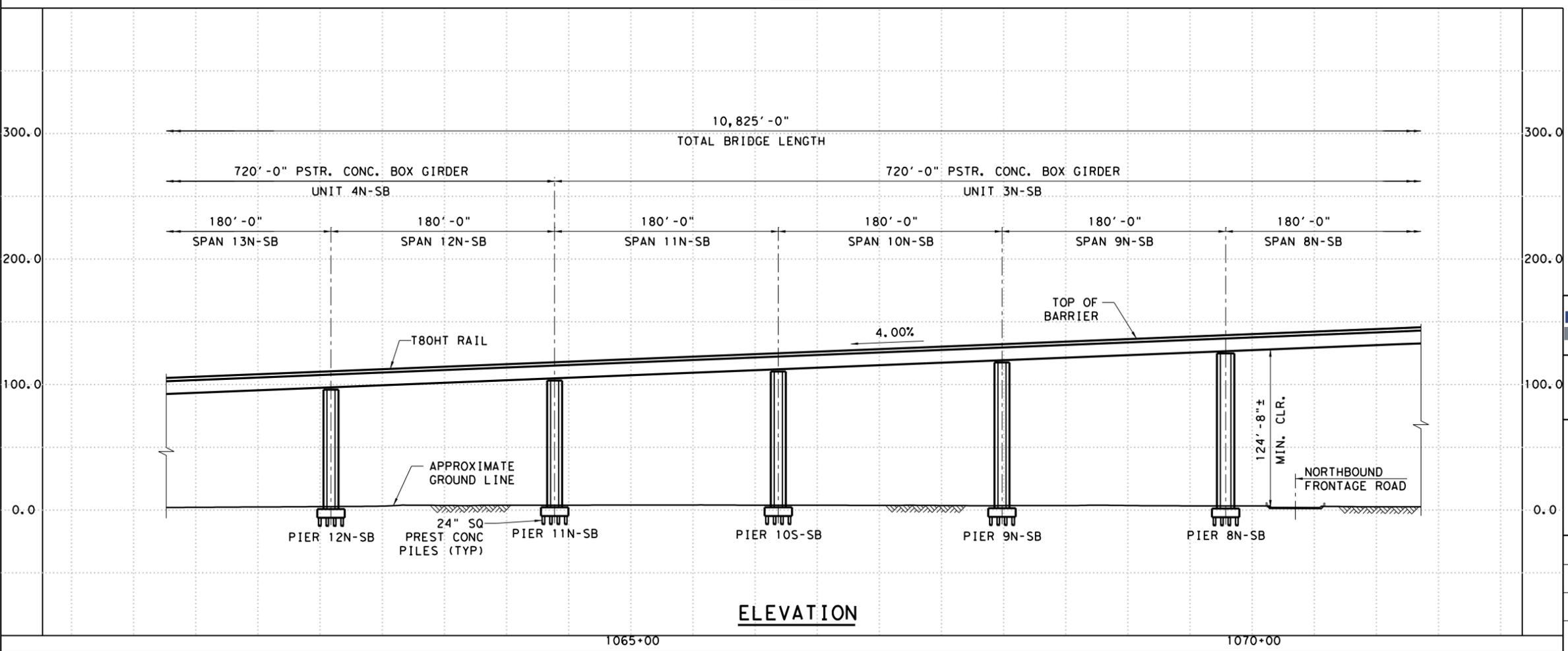
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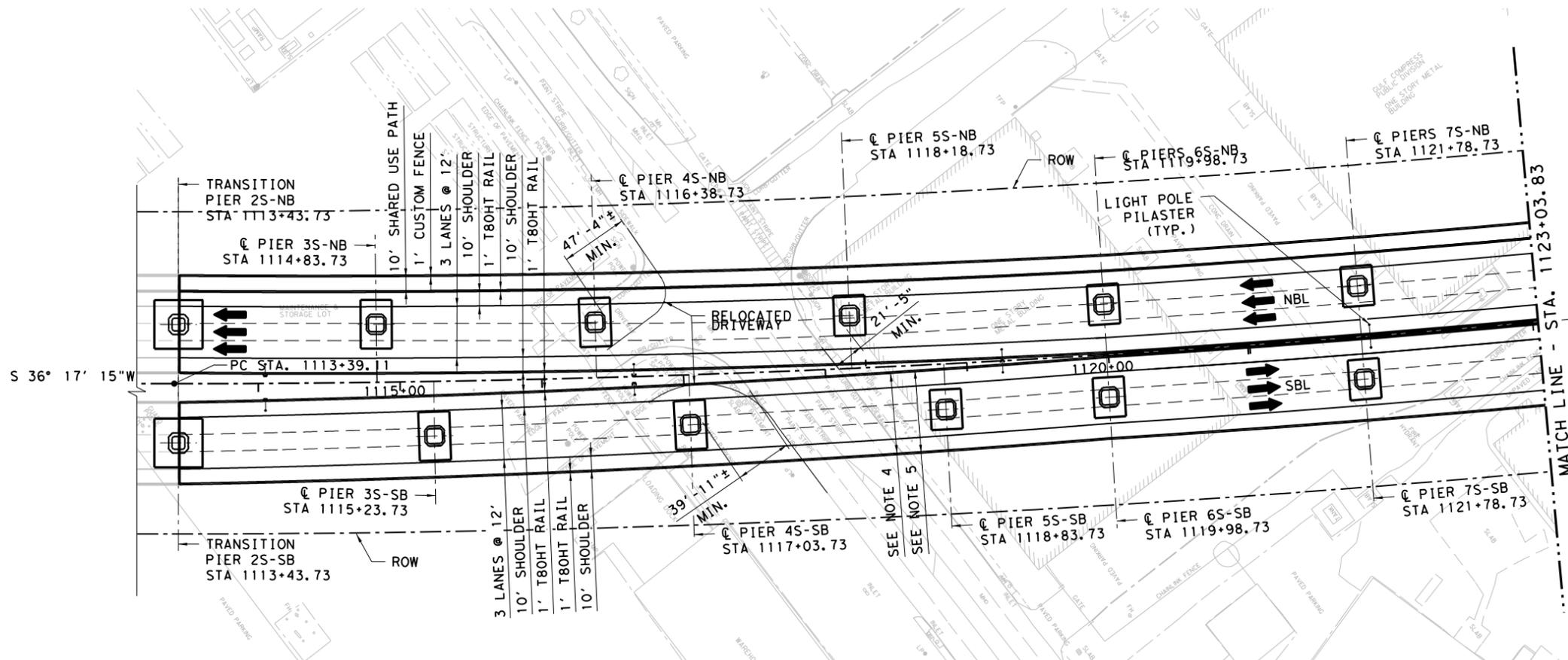
US 181/IH 37 - HARBOR BRIDGE
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 BRIDGE LAYOUT

SHEET 3 OF 8

DESIGN	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
GRAPHICS	X	(See Title Sheet)		X
CHECK	STATE	DISTRICT	COUNTY	SHEET NO.
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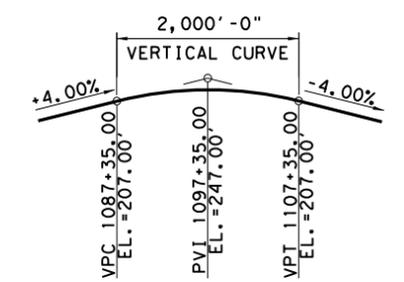
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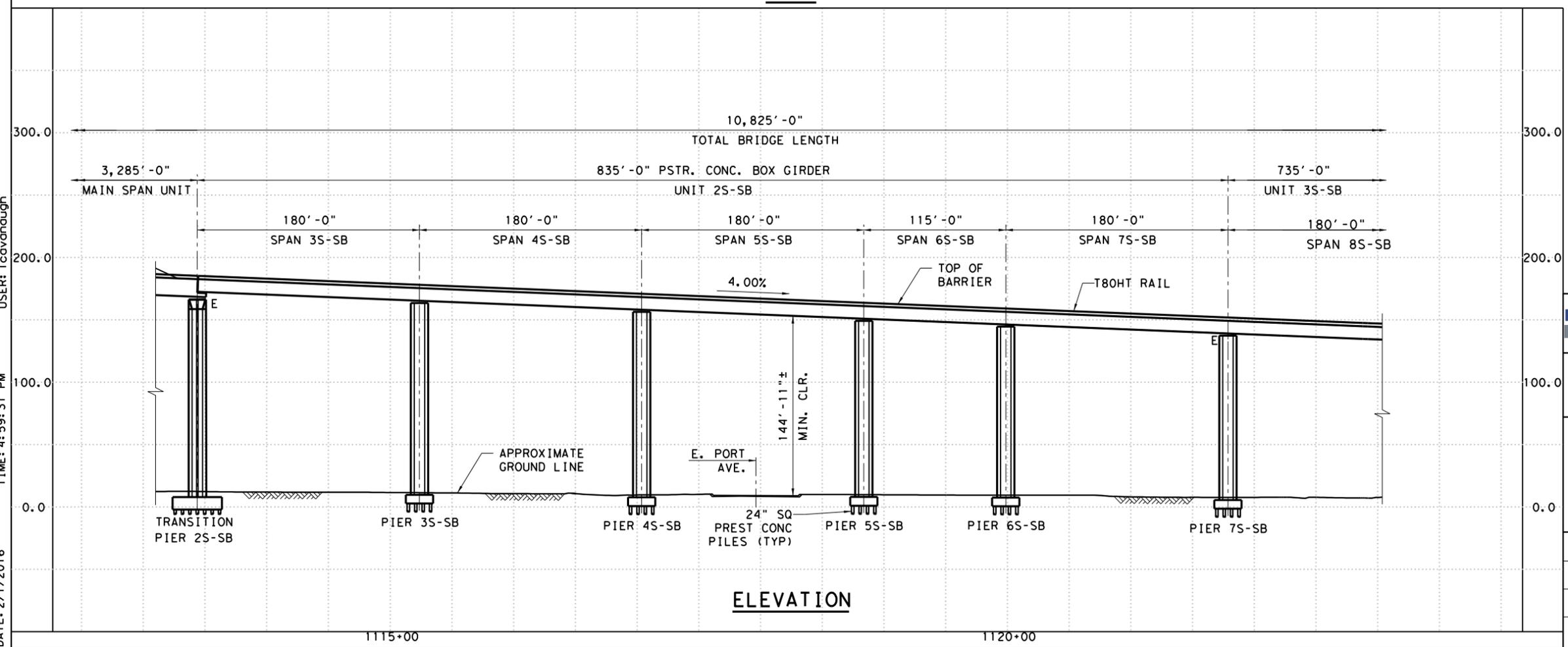
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 (2035) = XX,XXX



STA = 1097+35.00
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PLAN



ELEVATION

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 in association with **FIGG & ACS**

FIGG
 TBPE, FIRM # F-4883

Texas Department of Transportation²⁰¹⁵

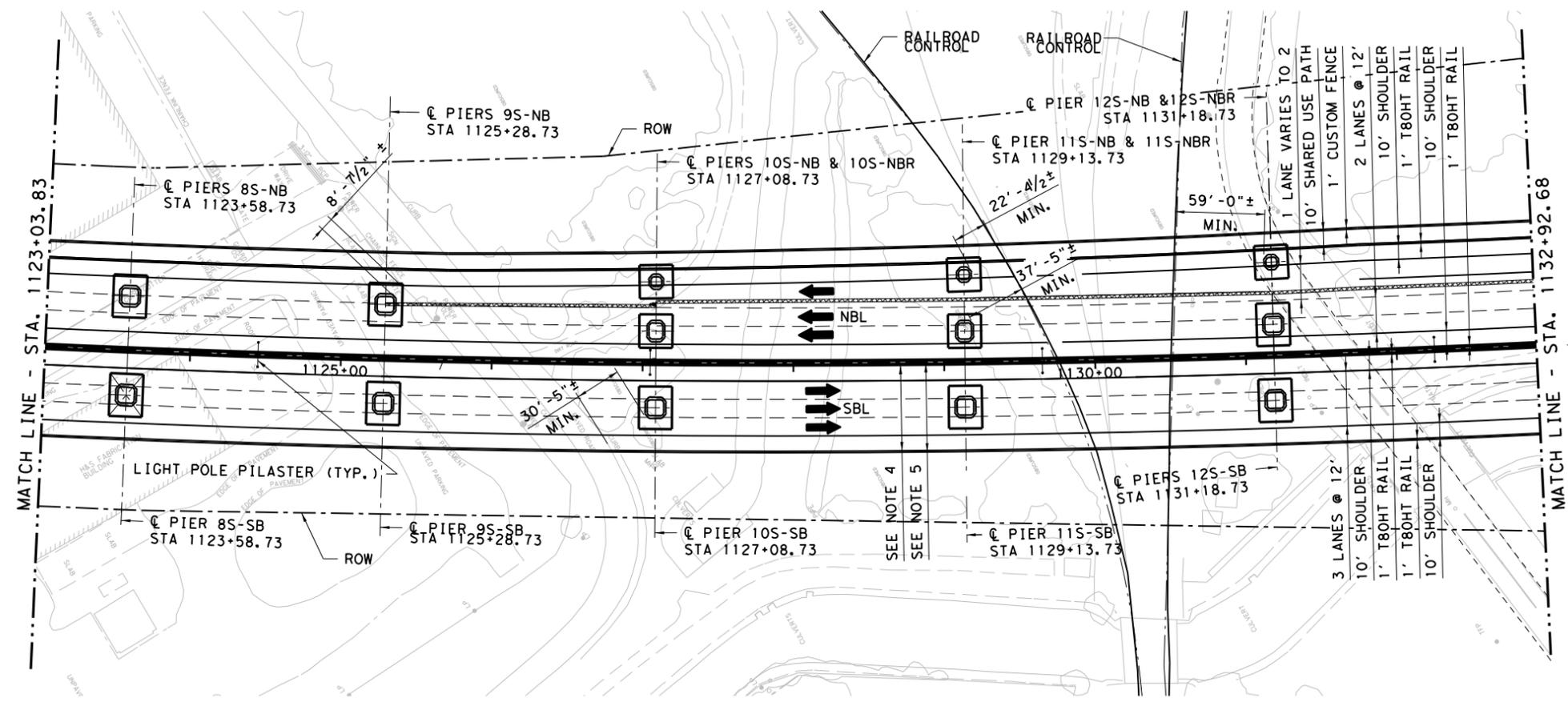
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 SOUTHBOUND APPROACH
 BRIDGE LAYOUT**

SHEET 5 OF 8

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GRAPHICS	X	(See Title Sheet)		X
CHECK	STATE	DISTRICT	COUNTY	SHEET NO.
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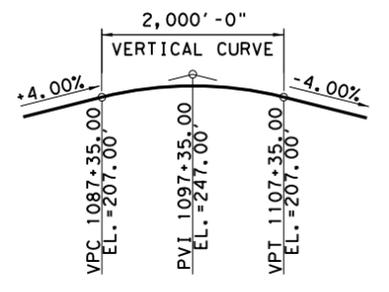
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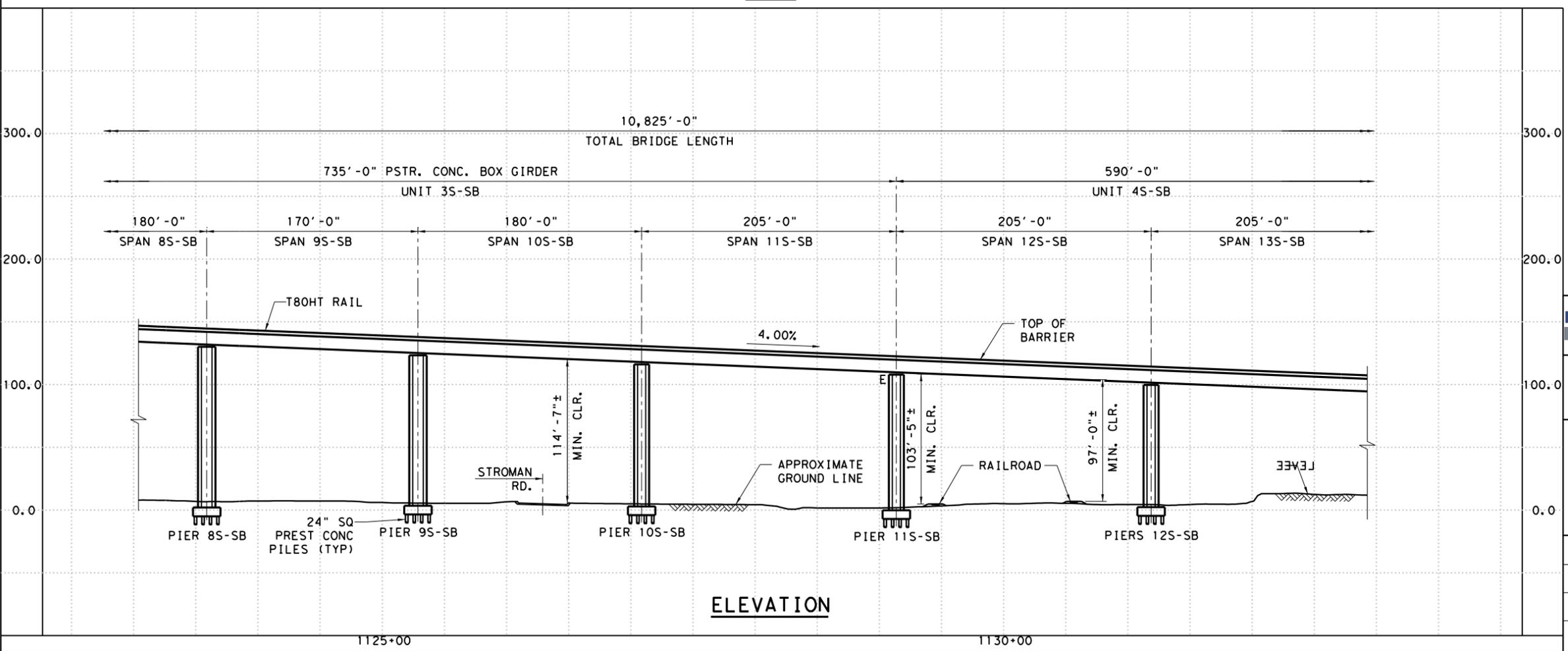
- NOTES:**
1. ALL PIERS ARE PERPENDICULAR OR RADIAL TO R US 181.
 2. FOR CROSS STREET PROFILES, SEE ROADWAY PLANS.
 3. SEE FOUNDATION LAYOUT SHEETS FOR BORING LOCATIONS.
 4. SB ROADWAY WIDTH VARIES FROM 56' TO 82' - 7/8".
 5. SB OVERALL WIDTH VARIES FROM 58' TO 84' - 7/8".

DESIGN DATA (SB APPROACH)

NBI. NO. XX-XXX-XXXXXX-XXX
 FUNC CLASS: URBAN FREEWAY
 DESIGN SPEED: 70 MPH
 ADT: SB APPROACH
 (2015) = XX,XXX
 (2035) = XX,XXX



STA = 1097+35.00
 EL = 247.00'
 ex = -20.00'
 K = 250
 L = 2,000.00'



HL-93 LOADING

FLATIRON DRAGADOS USA
 A JOINT VENTURE
 in association with **FIGG & ACS**

FIGG
 TBPE, FIRM # F-4883

Texas Department of Transportation 2015

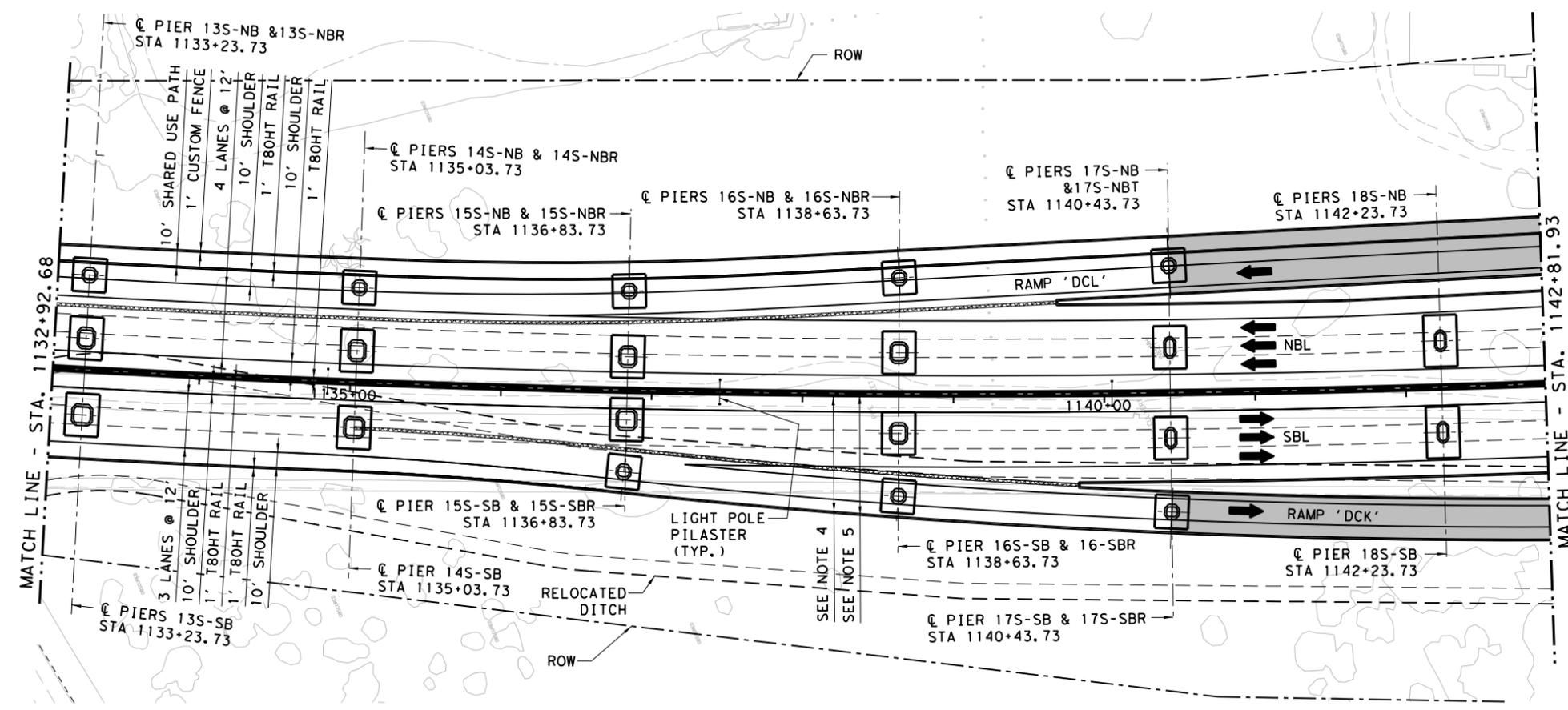
US 181/IH 37 - HARBOR BRIDGE
 APPROACH SPANS
 SOUTHBOUND APPROACH
 BRIDGE LAYOUT

SHEET 6 OF 8

DESIGN	FED. RD. DIV. NO. X	FEDERAL AID PROJECT NO. (See Title Sheet)	HIGHWAY NO. X
GRAPHICS	STATE TEXAS	DISTRICT CRP	COUNTY NUECES
CHECK	CONTROL 0101	SECTION 06	JOB 095
CHECK	A15		

PRELIMINARY NOT FOR CONSTRUCTION, FEBRUARY 2016

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 USER: lcaavanaugh
 DATE: 2/1/2016
 TIME: 4:59:33 PM



PLAN

LEGEND

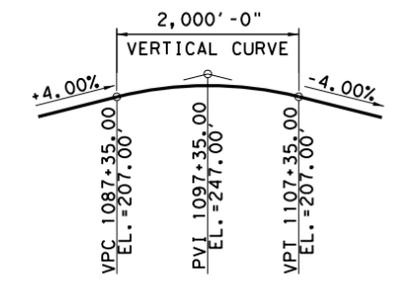
■ DENOTES ROADWAY BRIDGES.
 SEE DIRECT CONNECT "K" BRIDGE 14 FOR RAMP DCK BRIDGE. SEE DIRECT CONNECT "L" BRIDGE 16 FOR RAMP DCL BRIDGE.

NOTES:

1. ALL PIERS ARE PERPENDICULAR OR RADIAL TO R US 181.
2. FOR CROSS STREET PROFILES, SEE ROADWAY PLANS.
3. SEE FOUNDATION LAYOUT SHEETS FOR BORING LOCATIONS.
4. SB ROADWAY WIDTH VARIES FROM 56' TO 82'-7 1/8".
5. SB OVERALL WIDTH VARIES FROM 58' TO 84'-7 1/8".

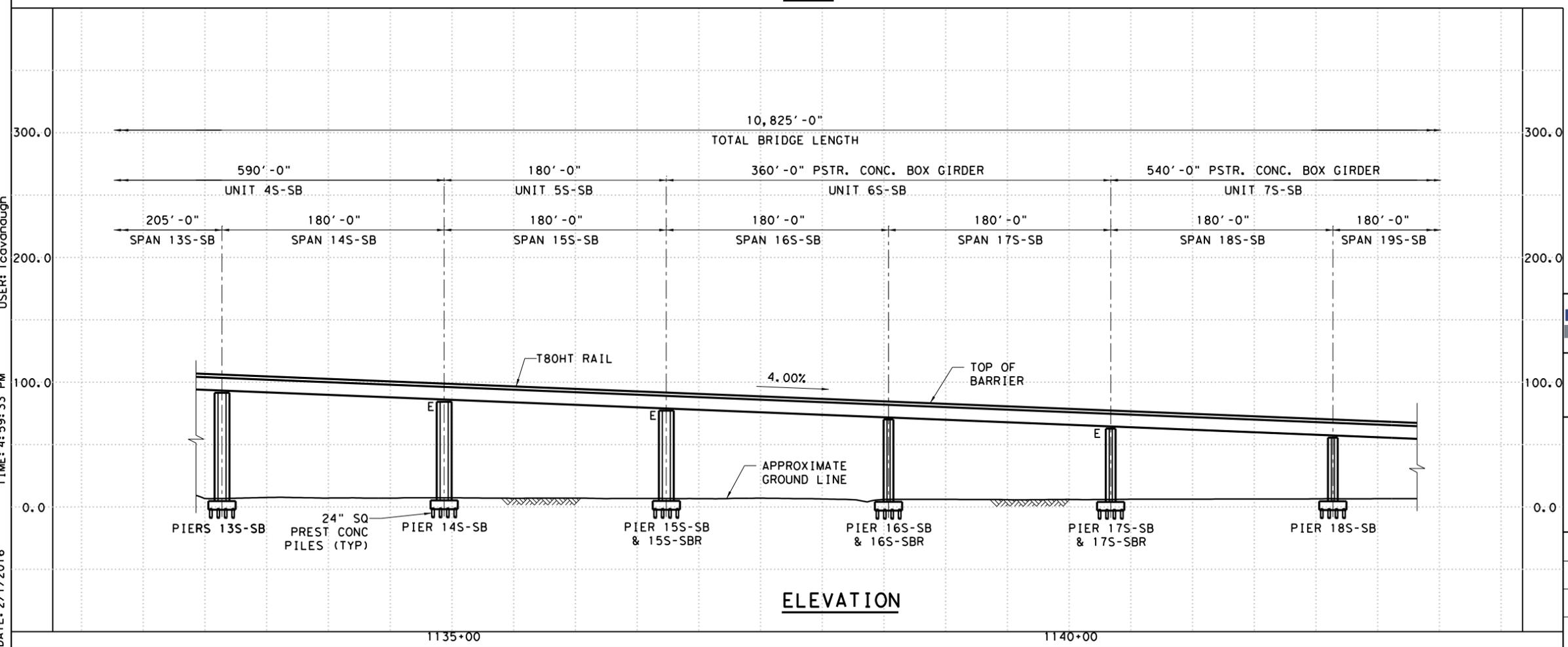
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 ADT: SB APPROACH
 (2015) = XX,XXX
 (2035) = XX,XXX



STA = 1097+35.00
 EL = 247.00'
 Gx = -20.00'
 K = 250
 L = 2,000.00'

PIER SIZES SHOWN ARE APPROXIMATE AND SUBJECT TO CHANGE



ELEVATION

HL-93 LOADING

FLATIRON DRAGADOS USA
 A JOINT VENTURE
 in association with **FIGG & ACS**

FIGG
 TBPE, FIRM # F-4883

Texas Department of Transportation 2015

US 181/IH 37 - HARBOR BRIDGE
 APPROACH SPANS
 SOUTHBOUND APPROACH
 BRIDGE LAYOUT

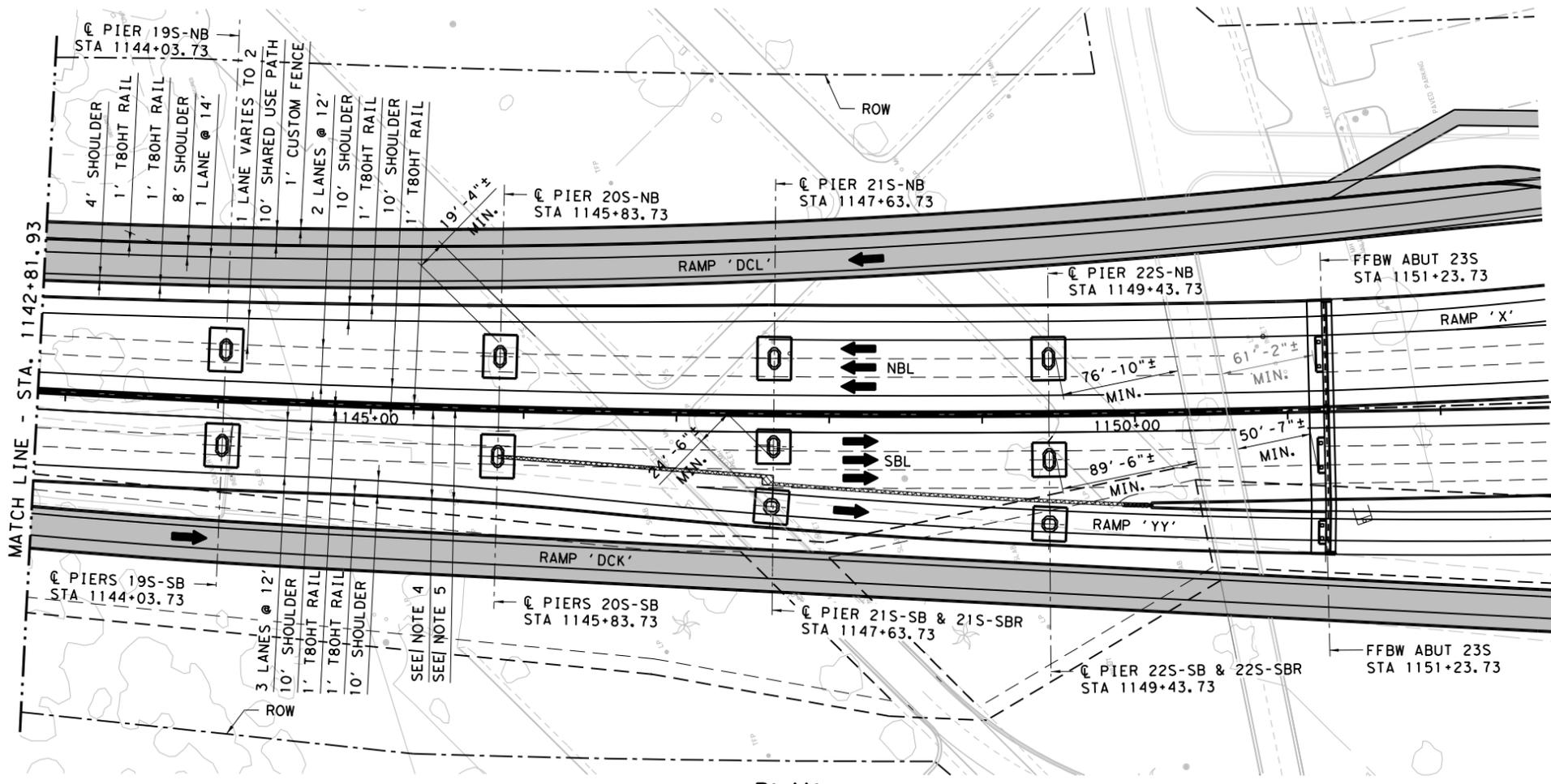
SHEET 7 OF 8

DESIGN	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
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CHECK	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK	TEXAS	CRP	NUECES	A16
	CONTROL	SECTION	JOB	
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PRELIMINARY NOT FOR CONSTRUCTION, FEBRUARY 2016

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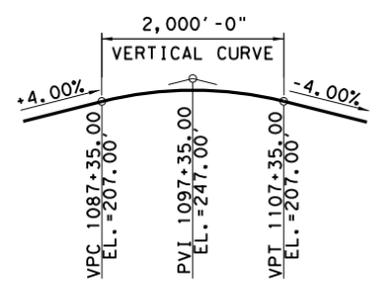
PRELIMINARY NOT FOR CONSTRUCTION, FEBRUARY 2016



LEGEND
 DENOTES ROADWAY BRIDGES.
 SEE DIRECT CONNECT "K" BRIDGE 14 FOR RAMP DCK BRIDGE. SEE DIRECT CONNECT "L" BRIDGE 16 FOR RAMP DCL BRIDGE.

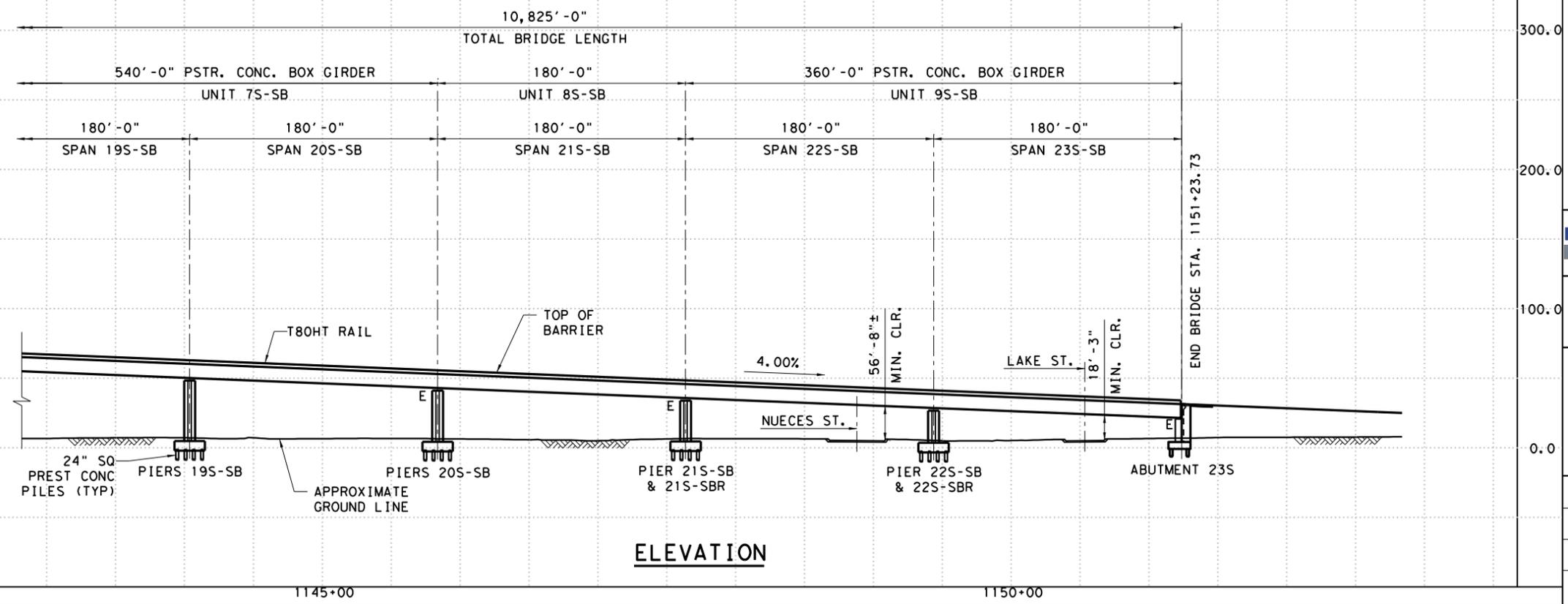
NOTES:
 1. ALL PIERS ARE PERPENDICULAR OR RADIAL TO US 181.
 2. FOR CROSS STREET PROFILES, SEE ROADWAY PLANS.
 3. SEE FOUNDATION LAYOUT SHEETS FOR BORING LOCATIONS.
 4. SB ROADWAY WIDTH VARIES FROM 56' TO 82'-7 7/8".
 5. SB OVERALL WIDTH VARIES FROM 58' TO 84'-7 7/8".

DESIGN DATA (SB APPROACH)
 NBI. NO. XX-XXX-XXXXXX-XXX
 FUNC CLASS: URBAN FREEWAY
 DESIGN SPEED: 70 MPH
 ADT: SB APPROACH
 (2015) = XX,XXX
 (2035) = XX,XXX



STA = 1097+35.00
 EL = 247.00'
 EX = -20.00'
 K = 250
 L = 2,000.00'

PIER SIZES SHOWN ARE APPROXIMATE AND SUBJECT TO CHANGE



HL-93 LOADING

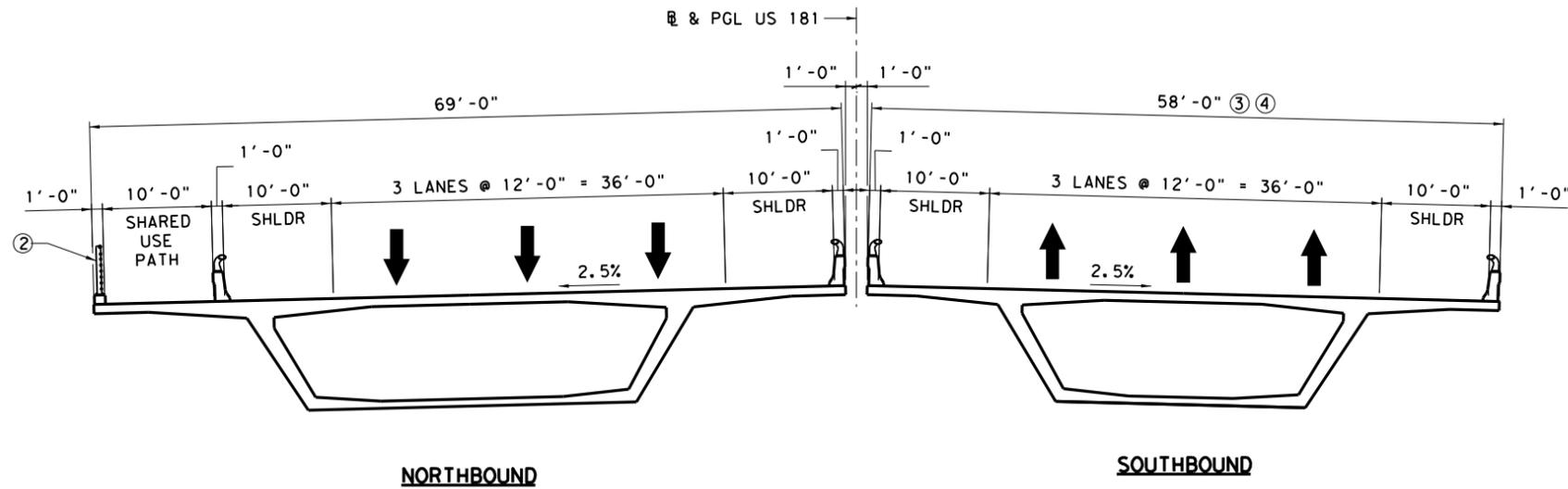


**US 181/IH 37 - HARBOR BRIDGE
 APPROACH SPANS
 SOUTHBOUND APPROACH
 BRIDGE LAYOUT**

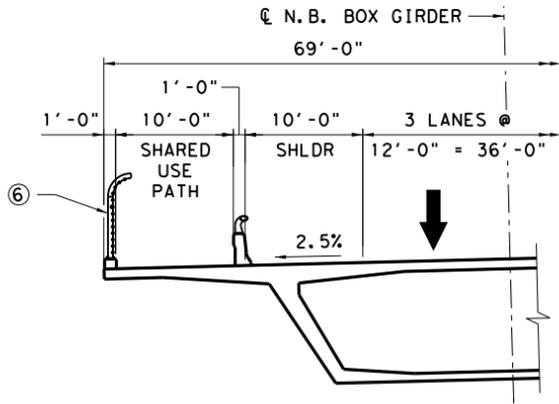
SHEET 8 OF 8

DESIGN	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
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CHECK	TEXAS	CRP	NUECES	A17
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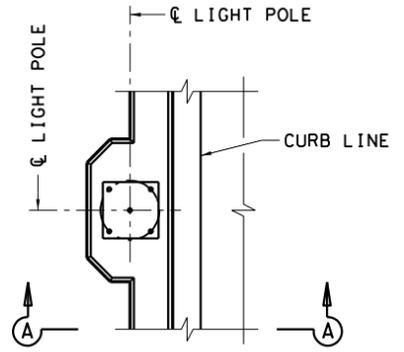
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 DATE: 2/1/2016
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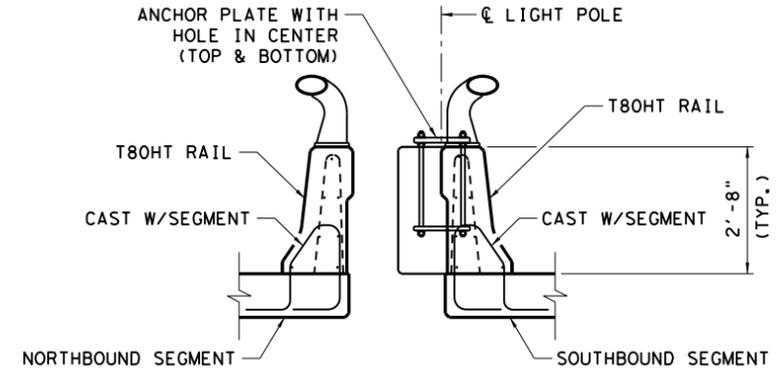
TYPICAL APPROACH SPAN CROSS SECTION
 (LOOKING UPSTATION)



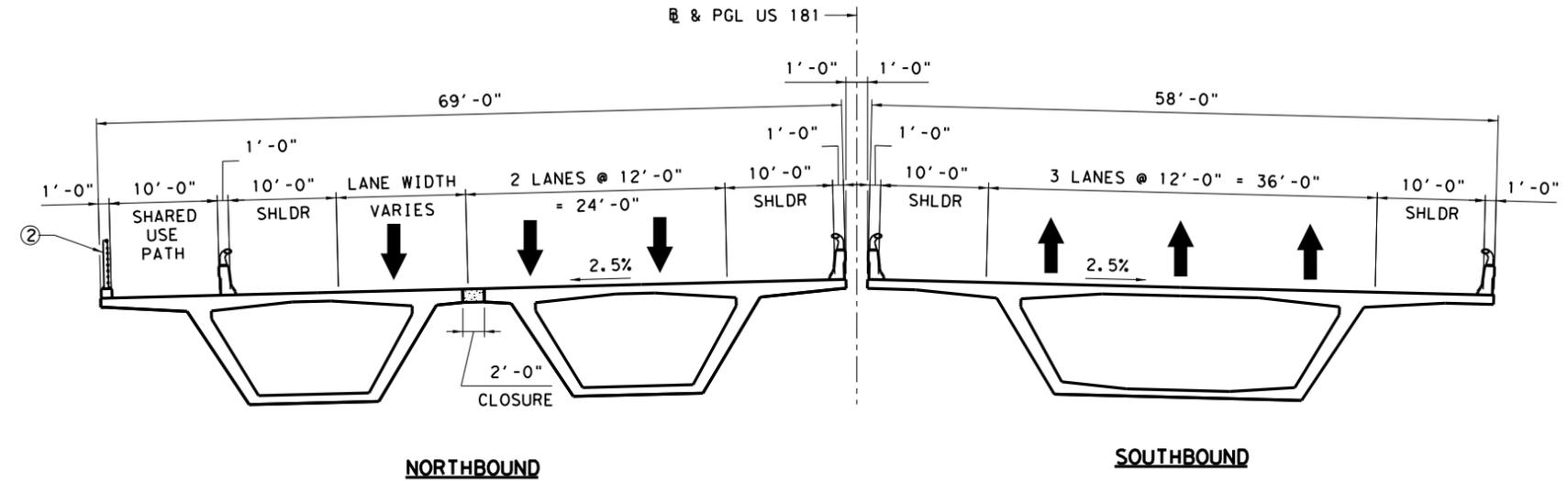
PARTIAL CROSS SECTION



PARTIAL PLAN
 (LIGHT POLE PILASTER)



SECTION A-A
 (LOOKING UPSTATION)



SOUTH APPROACH SPAN CROSS SECTION
 (PIER 9S (US)) (LOOKING UPSTATION)

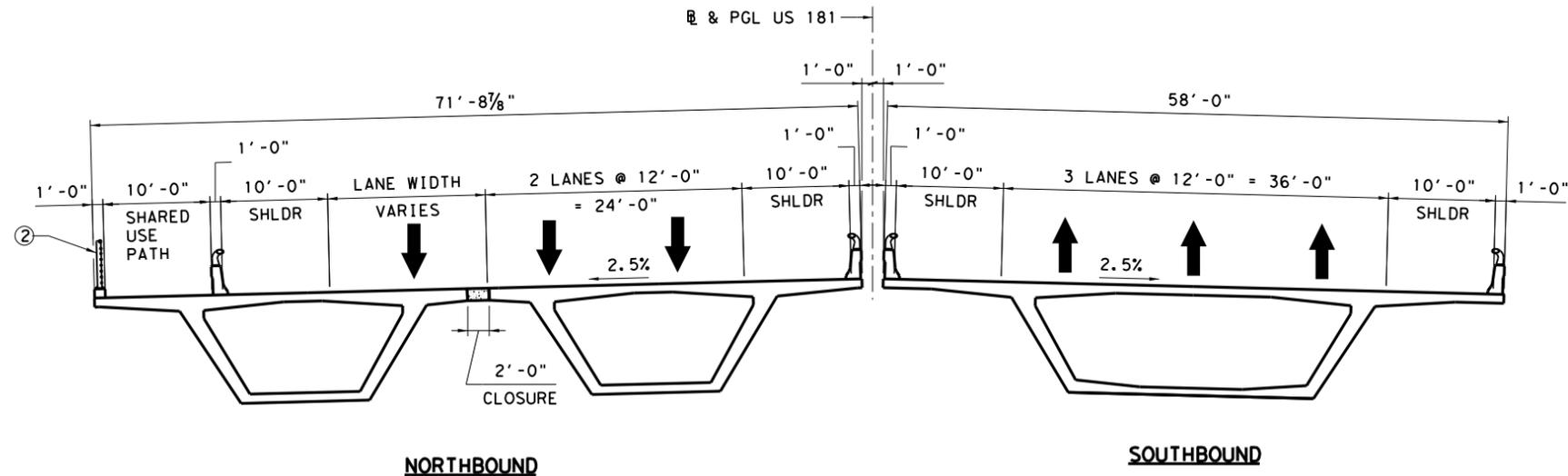
- GENERAL NOTES:**
- FOR TRAFFIC BARRIER DETAILS, SEE TXDOT STANDARD DRAWING TYPE T80HT.
 - FOR SHARED USE PATH RAIL, A 54" CUSTOM FENCE SHALL BE PROVIDED.
 - VARIES FROM 70'-0" AT ABUTMENT 23N-SB TO 58'-0" AT PIER 14N-SB.
 - THICKENED CANTILEVER WING REQUIRED FOR WIDENED 58' BOX.
 - (US) - UPSTATION SIDE
(DS) - DOWNSTATION SIDE
 - FOR SHARED USE PATH RAIL, A CUSTOM FENCE SHALL BE PROVIDED ON THE NORTHBOUND STRUCTURE BETWEEN STA. 1074+50.00 & STA. 1080+58.73 AND STA. 1113+43.73 & STA. 1131+18.73.
 - SECTIONS ARE TAKEN RADIALY FROM PGL. NO CORRECTION IS SHOWN OR IMPLIED FOR RAMP THAT ARE OBLIQUE TO PGL. IN THESE CASES THE DIMENSION SHOWN ON THESE RAMP IS PERPENDICULAR TO THE RAMP ALIGNMENT.

HL-93 LOADING

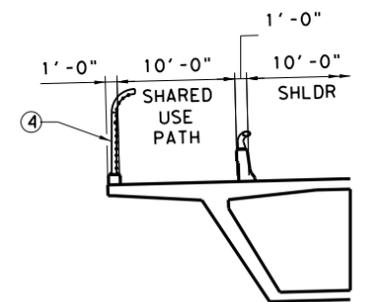
US 181/IH 37 - HARBOR BRIDGE APPROACH SPANS DECK SECTION 1			
SHEET 1 OF 8			
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	STATE	DISTRICT	COUNTY
CHECK	TEXAS	CRP	NUECES
CHECK	CONTROL	SECTION	JOB
	0101	06	095
			A18

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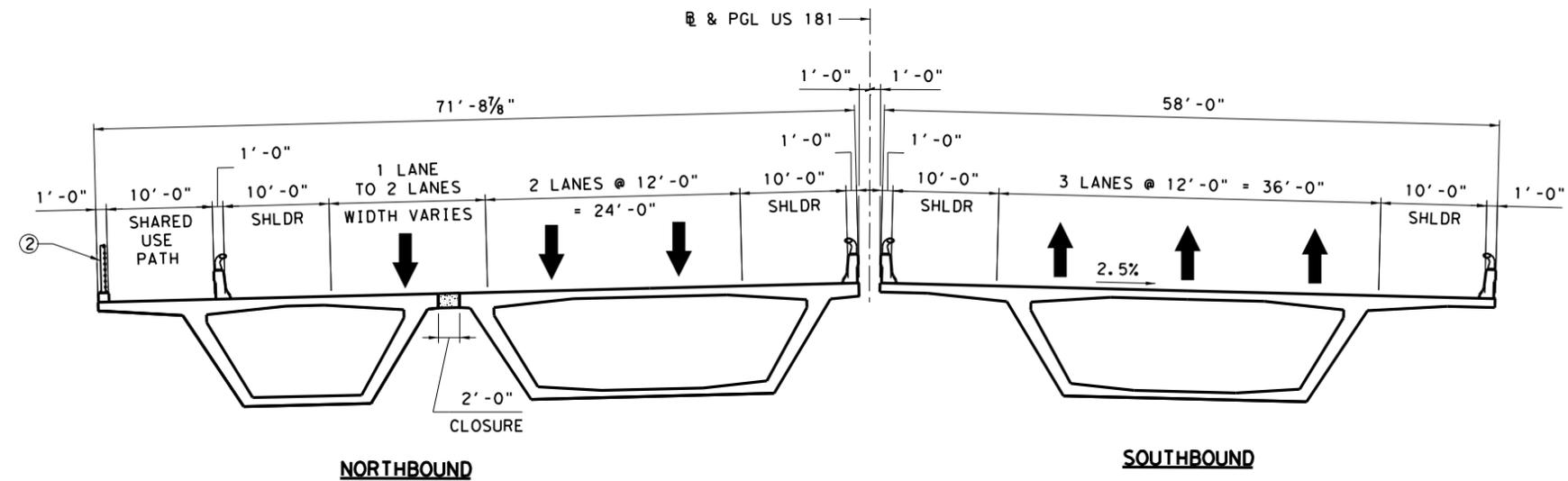
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SOUTH APPROACH SPAN CROSS SECTION
 (PIER 10S (DS)) (LOOKING UPSTATION)



PARTIAL CROSS SECTION



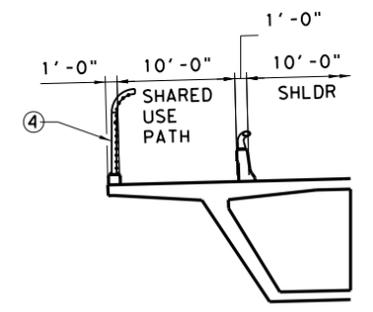
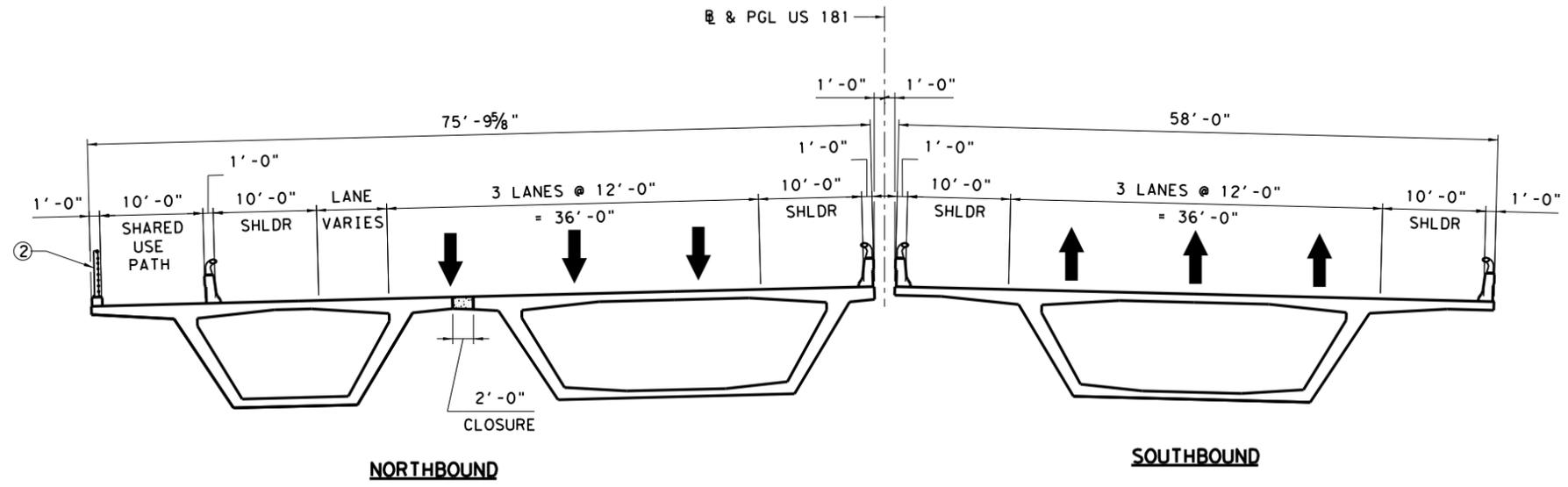
SOUTH APPROACH SPAN CROSS SECTION
 (PIER 10S (US)) (LOOKING UPSTATION)

- GENERAL NOTES:**
- FOR TRAFFIC BARRIER DETAILS, SEE TXDOT STANDARD DRAWING TYPE T80HT.
 - FOR SHARED USE PATH RAIL, A 54" CUSTOM FENCE SHALL BE PROVIDED.
 - (US) - UPSTATION SIDE
(DS) - DOWNSTATION SIDE
 - FOR SHARED USE PATH RAIL, A CUSTOM FENCE SHALL BE PROVIDED ON THE NORTHBOUND STRUCTURE BETWEEN STA. 1074+50.00 & STA. 1080+58.73 AND STA. 1113+43.73 & STA. 1131+18.73.
 - SECTIONS ARE TAKEN RADIALY FROM PGL. NO CORRECTION IS SHOWN OR IMPLIED FOR RAMPS THAT ARE OBLIQUE TO PGL. IN THESE CASES THE DIMENSION SHOWN ON THESE RAMPS IS PERPENDICULAR TO THE RAMP ALIGNMENT.

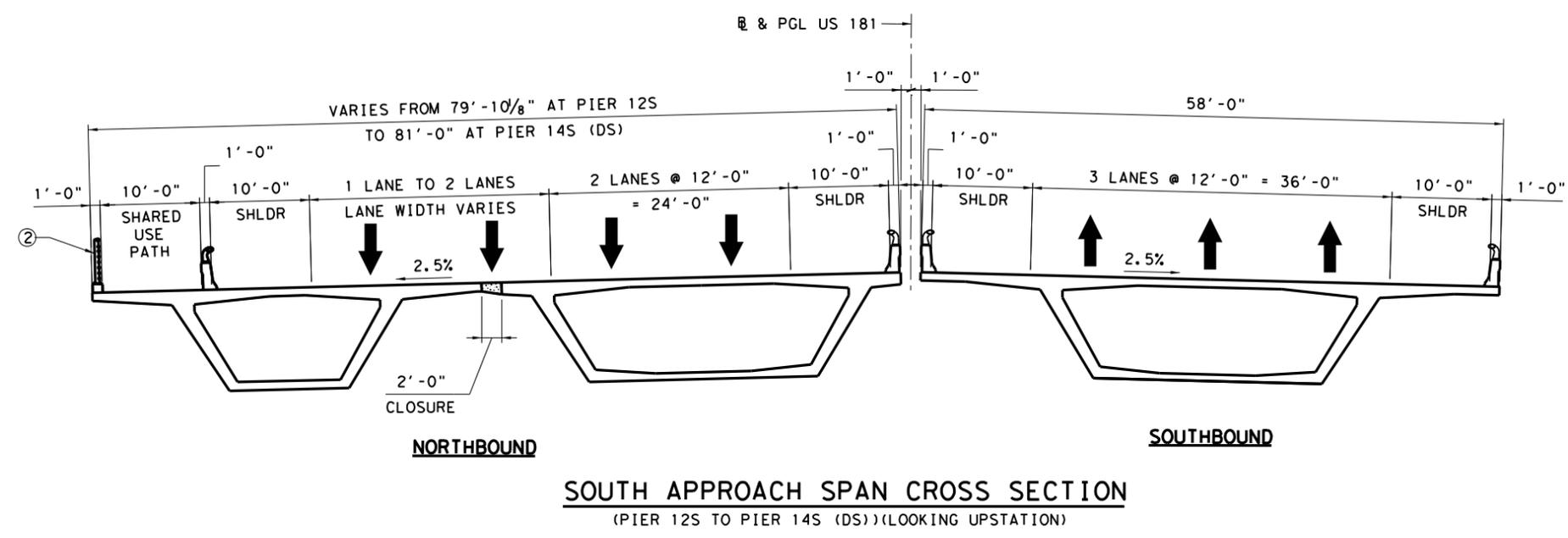
HL-93 LOADING

US 181/IH 37 - HARBOR BRIDGE APPROACH SPANS DECK SECTION 2				
SHEET 2 OF 8				
DESIGN	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
GRAPHICS	X	(See Title Sheet)		X
	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK	TEXAS	CRP	NUECES	A19
CHECK	CONTROL	SECTION	JOB	
	0101	06	095	

PRELIMINARY NOT FOR CONSTRUCTION, FEBRUARY 2016



- GENERAL NOTES:**
- FOR TRAFFIC BARRIER DETAILS, SEE TXDOT STANDARD DRAWING TYPE T80HT.
 - FOR SHARED USE PATH RAIL, A 54" CUSTOM FENCE SHALL BE PROVIDED.
 - (US) - UPSTATION SIDE
(DS) - DOWNSTATION SIDE
 - FOR SHARED USE PATH RAIL, A CUSTOM FENCE SHALL BE PROVIDED ON THE NORTHBOUND STRUCTURE BETWEEN STA. 1074+50.00 & STA. 1080+58.73 AND STA. 1113+43.73 & STA. 1131+18.73.
 - SECTIONS ARE TAKEN RADIALY FROM PGL. NO CORRECTION IS SHOWN OR IMPLIED FOR RAMPS THAT ARE OBLIQUE TO PGL. IN THESE CASES THE DIMENSION SHOWN ON THESE RAMPS IS PERPENDICULAR TO THE RAMP ALIGNMENT.



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FLATIRON DRAGADOS USA
A JOINT VENTURE
in association with **FIGG & ACS**

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TBPE, FIRM # F-4883

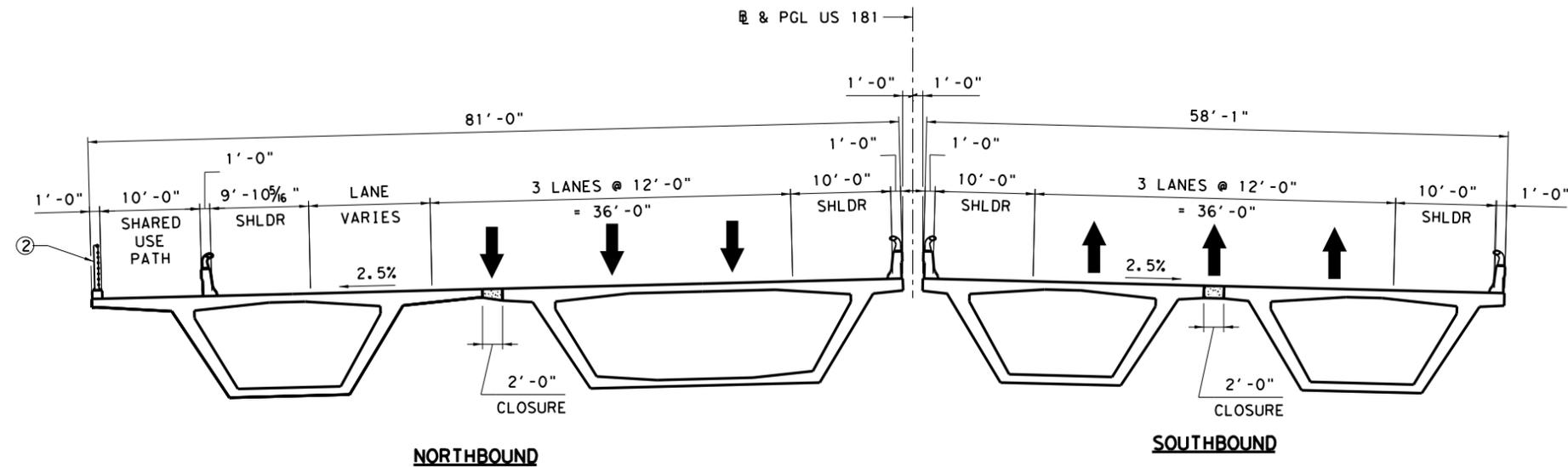
Texas Department of Transportation[®] 2015

US 181/IH 37 - HARBOR BRIDGE
APPROACH SPANS
DECK SECTION 3

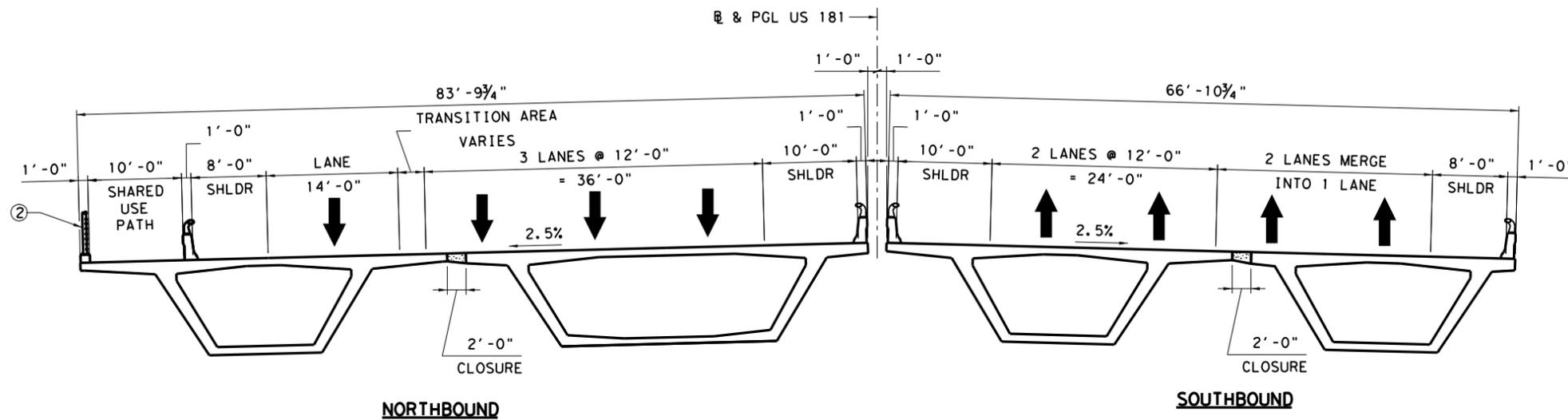
SHEET 3 OF 8

DESIGN	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
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CHECK	TEXAS	CRP	NUECES	A20
CHECK	CONTROL	SECTION	JOB	
	0101	06	095	

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SOUTH APPROACH SPAN CROSS SECTION
 (PIER 145 (US))(LOOKING UPSTATION)



SOUTH APPROACH SPAN CROSS SECTION
 (PIER 155 (DS))(LOOKING UPSTATION)

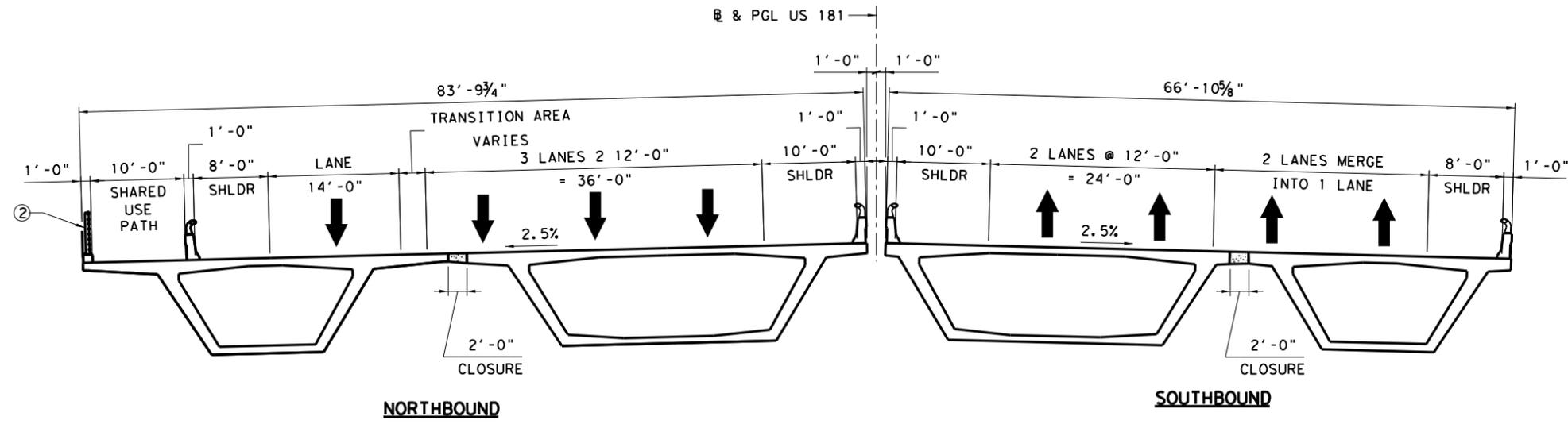
- GENERAL NOTES:**
1. FOR TRAFFIC BARRIER DETAILS, SEE TXDOT STANDARD DRAWING TYPE T80HT.
 2. FOR SHARED USE PATH RAIL, A 54" CUSTOM FENCE SHALL BE PROVIDED.
 3. (US) - UPSTATION SIDE
(DS) - DOWNSTATION SIDE
 4. SECTIONS ARE TAKEN RADIALY FROM PGL. NO CORRECTION IS SHOWN OR IMPLIED FOR RAMPS THAT ARE OBLIQUE TO PGL. IN THESE CASES THE DIMENSION SHOWN ON THESE RAMPS IS PERPENDICULAR TO THE RAMP ALIGNMENT.

HL-93 LOADING

US 181/IH 37 - HARBOR BRIDGE APPROACH SPANS DECK SECTION 4				
SHEET 4 OF 8				
DESIGN	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
GRAPHICS	X	(See Title Sheet)		X
	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK	TEXAS	CRP	NUECES	A21
CHECK	CONTROL	SECTION	JOB	
	0101	06	095	

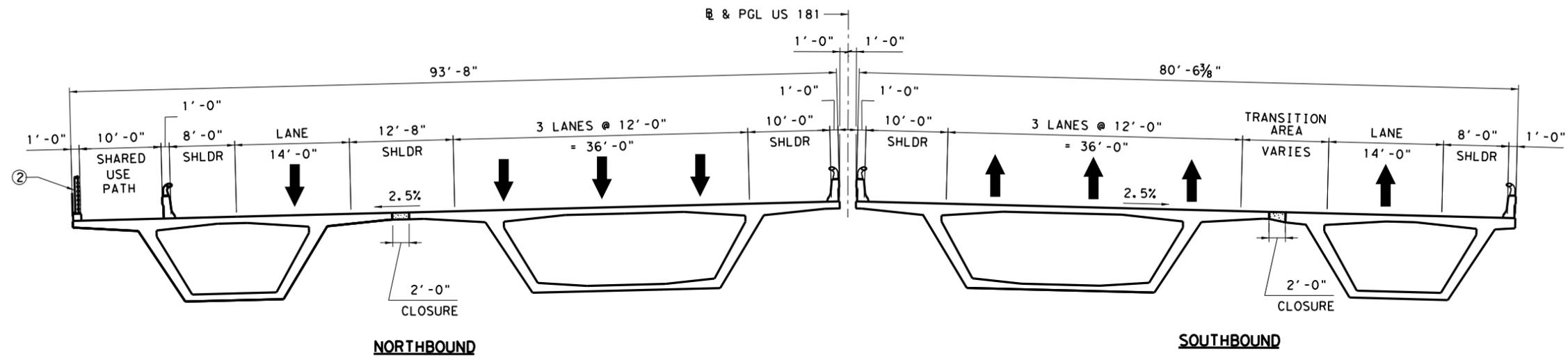
PRELIMINARY NOT FOR CONSTRUCTION, FEBRUARY 2016

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 DATE: 2/1/2016 TIME: 4:59:36 PM USER: lcvanough



SOUTH APPROACH SPAN CROSS SECTION
 (PIER 15S (US)) (LOOKING UPSTATION)

- GENERAL NOTES:**
- FOR TRAFFIC BARRIER DETAILS, SEE TXDOT STANDARD DRAWING TYPE T80HT.
 - FOR SHARED USE PATH RAIL, A 54" CUSTOM FENCE SHALL BE PROVIDED.
 - (US) - UPSTATION SIDE
(DS) - DOWNSTATION SIDE
 - SECTIONS ARE TAKEN RADIALY FROM PGL. NO CORRECTION IS SHOWN OR IMPLIED FOR RAMPs THAT ARE OBLIQUE TO PGL. IN THESE CASES THE DIMENSION SHOWN ON THESE RAMPs IS PERPENDICULAR TO THE RAMP ALIGNMENT.



SOUTH APPROACH SPAN CROSS SECTION
 (PIER 16S (DS)) (LOOKING UPSTATION)

HL-93 LOADING

FLATIRON DRAGADOS USA
 A JOINT VENTURE
 in association with FIGG & ACS

FIGG
 TBPE, FIRM # F-4883

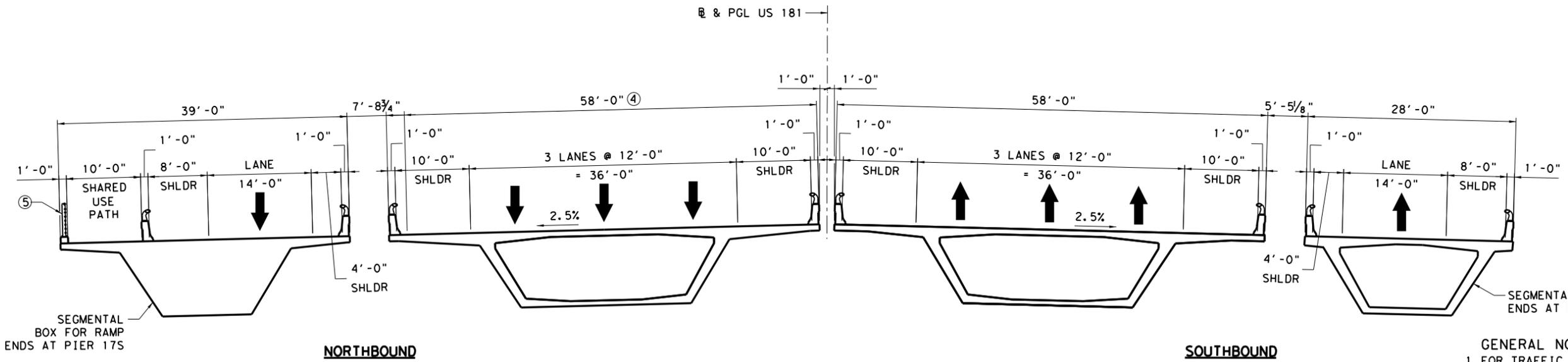
Texas Department of Transportation 2015

US 181/IH 37 - HARBOR BRIDGE
APPROACH SPANS
DECK SECTION 5

SHEET 5 OF 8

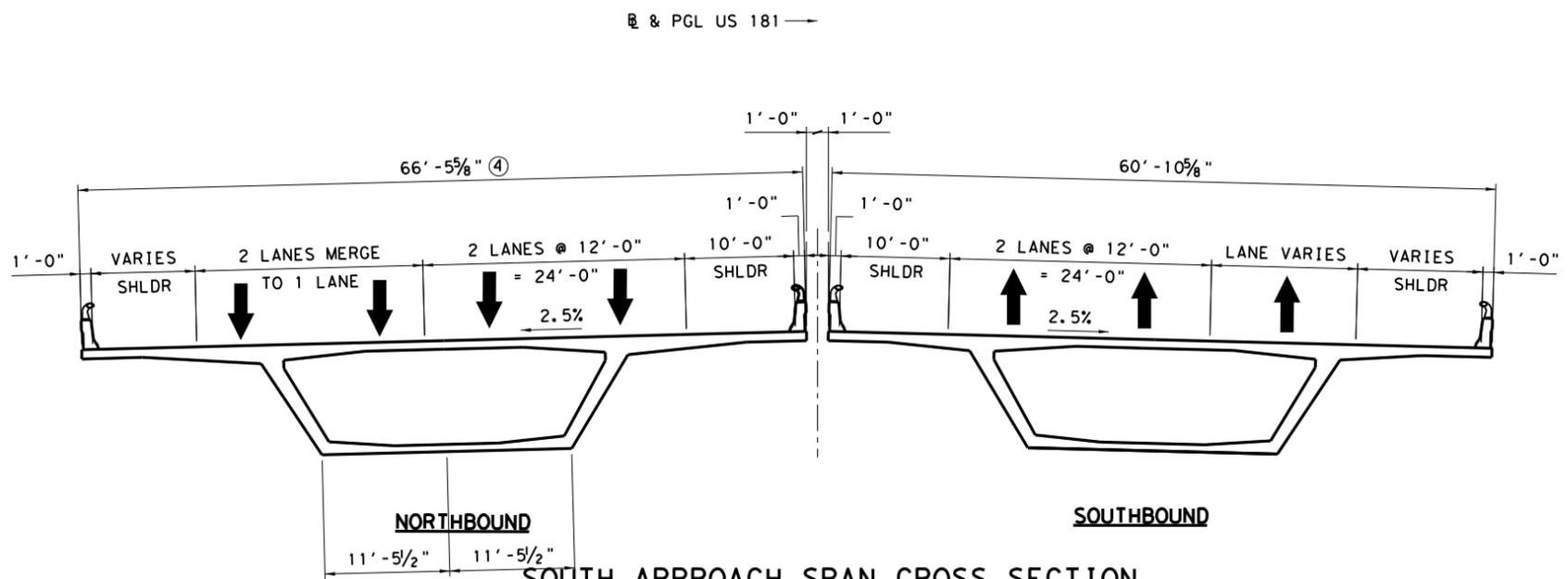
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	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK	TEXAS	CRP	NUECES	A22
CHECK	CONTROL	SECTION	JOB	
	0101	06	095	

PRELIMINARY NOT FOR CONSTRUCTION, FEBRUARY 2016



SOUTH APPROACH SPAN CROSS SECTION
(PIER 175) (LOOKING UPSTATION)

- GENERAL NOTES:**
- FOR TRAFFIC BARRIER DETAILS, SEE TXDOT STANDARD DRAWING TYPE T80HT.
 - (US) - UPSTATION SIDE
(DS) - DOWNSTATION SIDE
 - SECTIONS ARE TAKEN RADIALY FROM PGL. NO CORRECTION IS SHOWN OR IMPLIED FOR RAMP THAT ARE OBLIQUE TO PGL. IN THESE CASES THE DIMENSION SHOWN ON THESE RAMP IS PERPENDICULAR TO THE RAMP ALIGNMENT.
 - THICKENED WING AND WEB REQUIRED FOR WIDENED 58' NORTHBOUND BOX BETWEEN PIER 175-NB(US) AND ABUTMENT 23S-NB.
 - FOR SHARED USE PATH RAIL, A CUSTOM FENCE SHALL BE PROVIDED.

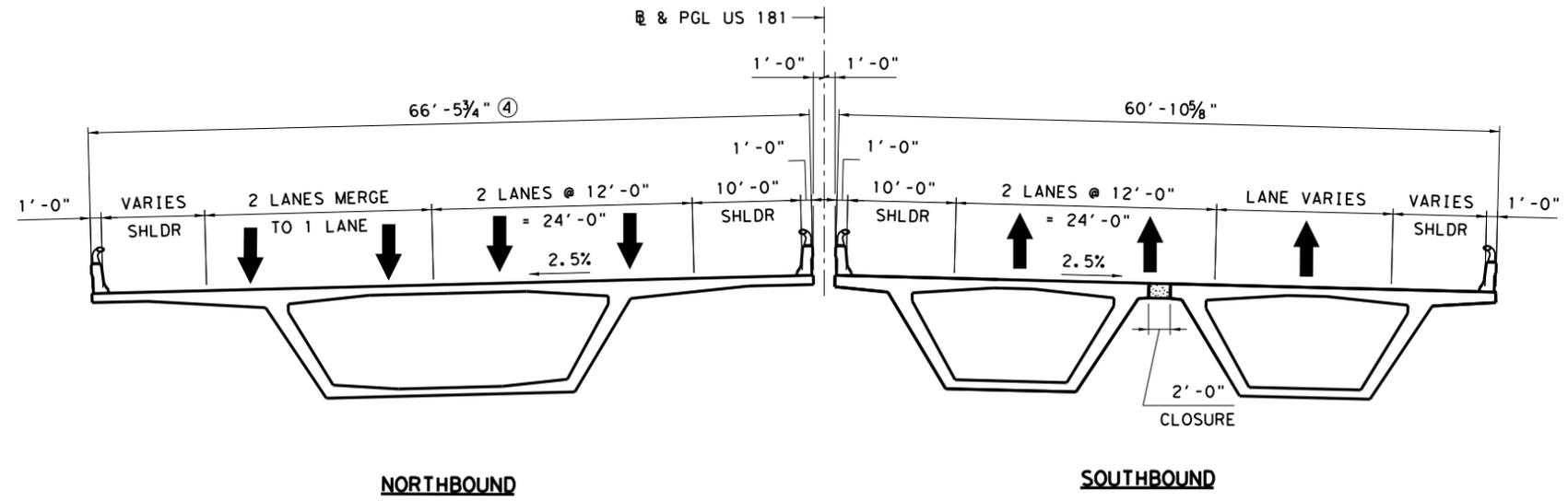


SOUTH APPROACH SPAN CROSS SECTION
(PIER 205 (DS)) (LOOKING UPSTATION)

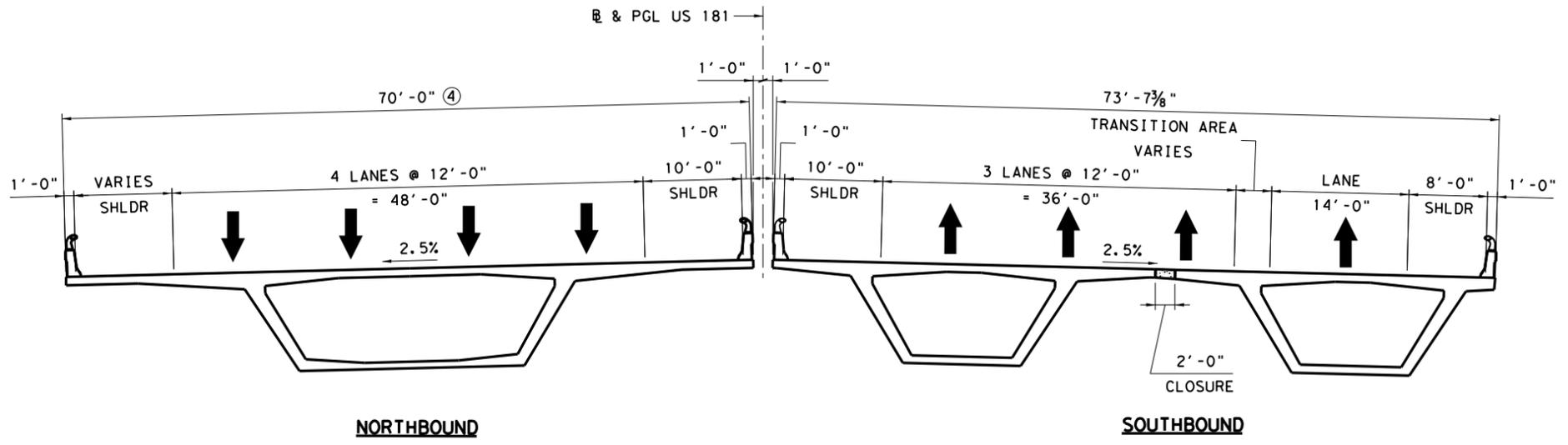
HL-93 LOADING

<p>FLATIRON DRAGADOS USA A JOINT VENTURE in association with FIGG & ACS</p>		<p>FIGG TBPE, FIRM # F-4883</p>		
<p>Texas Department of Transportation</p>				
<p>US 181/IH 37 - HARBOR BRIDGE APPROACH SPANS DECK SECTION 6</p>				
SHEET 6 OF 8				
DESIGN	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
GRAPHICS	X	(See Title Sheet)		X
	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK	TEXAS	CRP	NUECES	A23A
CHECK	CONTROL	SECTION	JOB	
	0101	06	095	

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SOUTH APPROACH SPAN CROSS SECTION
 (PIER 20S (US))(LOOKING UPSTATION)



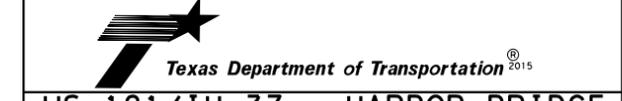
SOUTH APPROACH SPAN CROSS SECTION
 (PIER 21S (DS))(LOOKING UPSTATION)

- GENERAL NOTES:**
- FOR TRAFFIC BARRIER DETAILS, SEE TXDOT STANDARD DRAWING TYPE T80HT.
 - (US) - UPSTATION SIDE
(DS) - DOWNSTATION SIDE
 - SECTIONS ARE TAKEN RADIALY FROM PGL. NO CORRECTION IS SHOWN OR IMPLIED FOR RAMPs THAT ARE OBLIQUE TO PGL. IN THESE CASES THE DIMENSION SHOWN ON THESE RAMPs IS PERPENDICULAR TO THE RAMP ALIGNMENT.
 - THICKENED WING AND WEB REQUIRED FOR WIDENED 58' NORTHBOUND BOX BETWEEN PIER 17S-NB(US) AND ABUTMENT 23S-NB

HL-93 LOADING

FLATIRON DRAGADOS USA
 A JOINT VENTURE
 in association with **FIGG & ACS**

FIGG
 TBPE, FIRM # F-4883

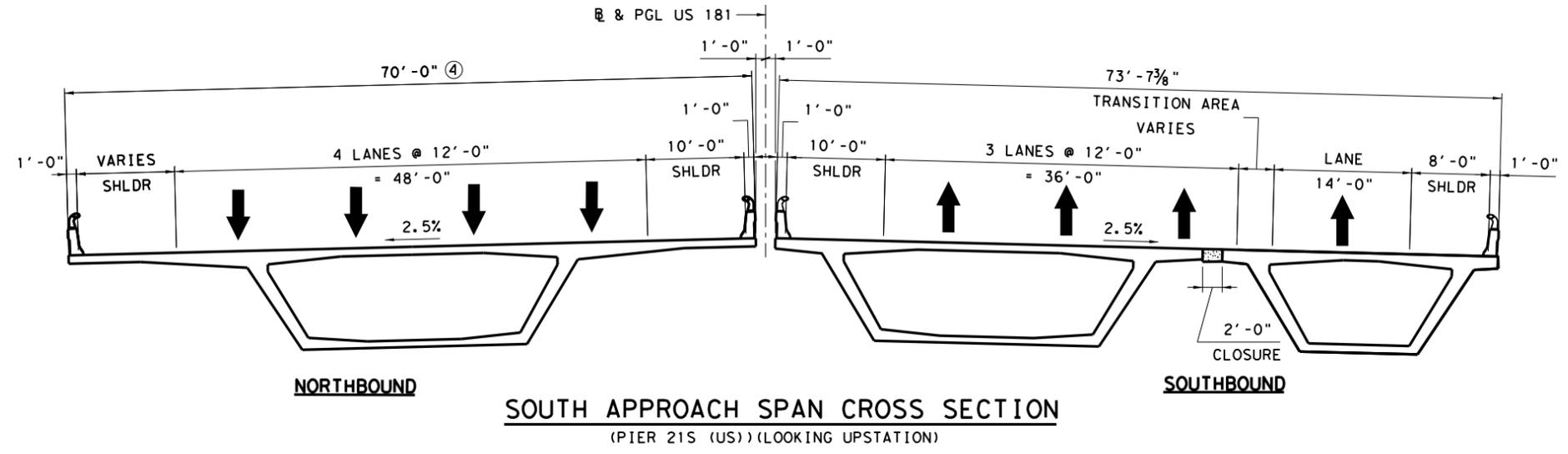


**US 181/IH 37 - HARBOR BRIDGE
 APPROACH SPANS
 DECK SECTION 7**

SHEET 7 OF 8

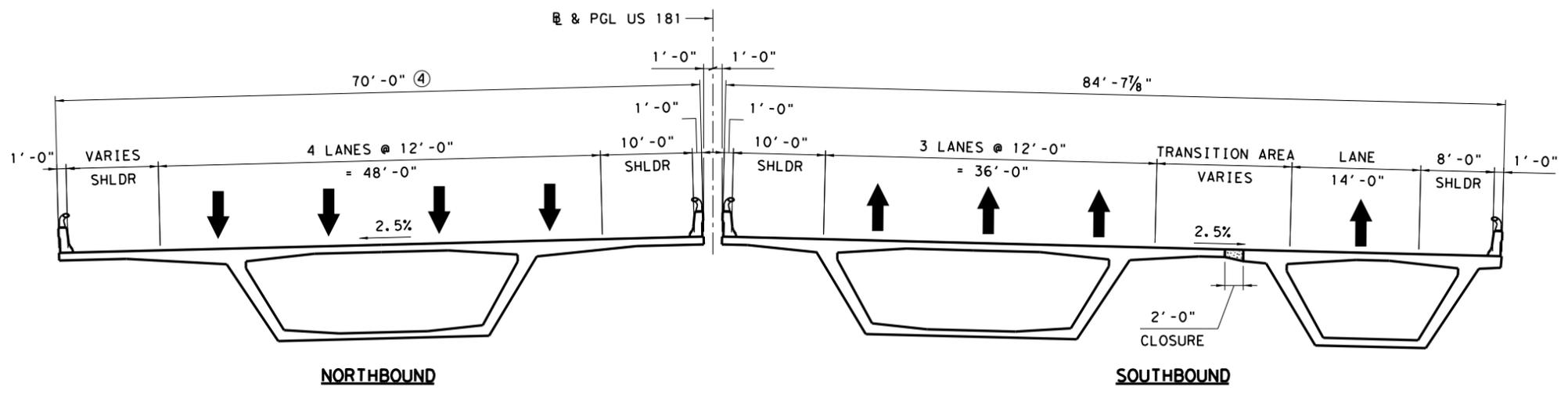
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CHECK	TEXAS	CRP	NUECES	A23B
CHECK	CONTROL	SECTION	JOB	
	0101	06	095	

PRELIMINARY NOT FOR CONSTRUCTION, FEBRUARY 2016



SOUTH APPROACH SPAN CROSS SECTION
(PIER 21S (US)) (LOOKING UPSTATION)

- GENERAL NOTES:**
1. FOR TRAFFIC BARRIER DETAILS, SEE TXDOT STANDARD DRAWING TYPE T80HT.
 2. (US) - UPSTATION SIDE
(DS) - DOWNSTATION SIDE
 3. THICKENED CANTILEVER WING REQUIRED FOR WIDENED 58' NORTHBOUND BOX.
 - ④ THICKENED WING AND WEB REQUIRED FOR WIDENED 58' NORTHBOUND BOX BETWEEN PIER 17S-NB(US) AND ABUTMENT 23S-NB
 5. SECTIONS ARE TAKEN RADIALY FROM PGL. NO CORRECTION IS SHOWN OR IMPLIED FOR RAMPs THAT ARE OBLIQUE TO PGL. IN THESE CASES THE DIMENSION SHOWN ON THESE RAMPs IS PERPENDICULAR TO THE RAMP ALIGNMENT.



SOUTH APPROACH SPAN CROSS SECTION
(PIER 22S (US)) (LOOKING UPSTATION)

HL-93 LOADING

US 181/IH 37 - HARBOR BRIDGE APPROACH SPANS DECK SECTION 8				
SHEET 8 OF 8				
DESIGN	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
GRAPHICS	X	(See Title Sheet)		X
	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK	TEXAS	CRP	NUECES	A23C
CHECK	CONTROL	SECTION	JOB	
	0101	06	095	