

Addendum No. 2

BND SOUTH PORT CONNECTOR ROAD

October 17, 2019

1. CHANGE IN BID OPENING DATE AND TIME:

- a. The Bid Opening date is hereby changed from **Monday, October 21, 2019 at 3:00 PM CDT** to **Friday, October 25, 2019 at 11:00 AM CDT**.

CLARIFICATIONS AND ANSWERS TO POTENTIAL BIDDERS' QUESTIONS:

2. REQUIREMENT TO MAINTAIN A SECURE PORT PERIMETER

- a. The Port of Brownsville is a secured Port facility and must maintain that status without exception. A portion of the work as a part of the project includes work on both sides of the secured perimeter.
- b. The Port expects for the successful bidder to perform the portion of work inside the secured perimeter from the inside, and the work outside the secured perimeter from the outside.
- c. The Port will make every effort to closely coordinate with the successful bidder to facilitate activities immediately at the crossing of the current secured perimeter.
- d. Upon completion of the work inside the Secure perimeter, the Port will relocate the fence as depicted in the attached Fenced Perimeter drawing, in close coordination with the successful bidder.

3. SITE VISITS PRIOR TO BIDDING

- a. Potential bidders are encouraged to visit the site. Please contact Mr. Ariel Chávez II (956-592-3973) and/or the Port Harbormaster Mike Davis (956-831-8256) prior to going to the site. The port has strict security guidelines and the project area is within Port Property. A portion of the proposed project is accessible from Ostos Road inside the Port and a portion of accessible from SH 4 (Boca Chica Blvd.).

4. AT WHAT LOCATIONS IS EPOXY COATED STEEL REINFORCEMENT REQUIRED FOR THIS PROJECT?

- a. All concrete structures which require steel reinforcement will use epoxy coated rebar. **Sheets 83 and 105** of the construction plans have been updated and attached to this addendum to reflect this.

- b. Attention of potential bidders is called to the Buy America provisions of this project as indicated in **Item 2L - Instructions to Bidders** in the Local Government General Requirements and Covenants portion of the Bid Document.
- 5. **HAS AN ALTERNATIVE TO CONCRETE BEEN CONSIDERED FOR THIS PROJECT? THE U.S. OVERWEIGHT LOAD IS SIGNIFICANTLY LOWER THAN THE MEXICAN OVERSIZED VEHICLE AND USING ASPHALT WOULD SIGNIFICANTLY REDUCE COST.**
 - a. This road has been designed for overweight Mexican vehicles. Alternatives were considered early on in project development, but the decision to use a concrete section was made early on due to overall need and design considerations.
- 6. **WHAT IS THE ENGINEER'S ESTIMATED COST?**
 - a. The engineer's estimate of probable cost is not available for release.
- 7. **HAS A TIME DETERMINATION SCHEDULE BEEN PROVIDED ON HOW THE PROJECT TIME WAS SET AT 240 WORKING DAYS AND IF SO, CAN IT BE PROVIDED?**
 - a. The time determination schedule has been included in this addendum. The dates shown on the schedule do not reflect the project letting and award dates, but the schedule is the basis for the project time.
 - b. The Port is planning to extend the contract time. The Time Determination Schedule is being revised and must be approved by TxDOT. The Bid Form will be also revised as appropriate.
- 8. **ARE ANY PERMITS REQUIRED FOR THE WORK BEING DONE BY THE PROJECT? THE PROJECT CROSSES WETLANDS, AND IN ORDER TO HAVE ENOUGH ROOM TO PERFORM THE WORK, EQUIPMENT MAY NEED TO ENTER THE WETLANDS.**
 - a. The completed work as shown by the plans has been determined to not require a section 404 construction permit. However, if the contractor intends to bring in fill material to the wetlands to perform the work in the contract or other such activities which would require a Section 404 permit, they are responsible for obtaining permits as described in page 167 of the plans, EPIC Sheet 1 of 2.
- 9. **WHAT IS THE REQUIRED STRENGTH OF THE CONCRETE?**
 - a. Unless otherwise noted, the project requires a compressive strength of concrete no less than 4,000 psi in 28 days. Cylinders for compressive strength testing will be taken every 20 or 30 cubic yards, at the discretion of the Port, and at the Port's expense. Concrete that is part of any failed tests shall be rejected, and the contractor shall be responsible to remove and replace it at his expense, at the

discretion of the Engineer and the Port, or as provided in the contract documents. Contractor shall be responsible for the cost of any retests.

10. WHAT IS THE EXPECTED NOTICE OF AWARD AND NOTICE TO PROCEED DATES?

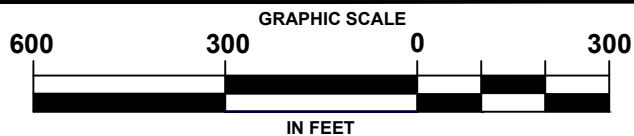
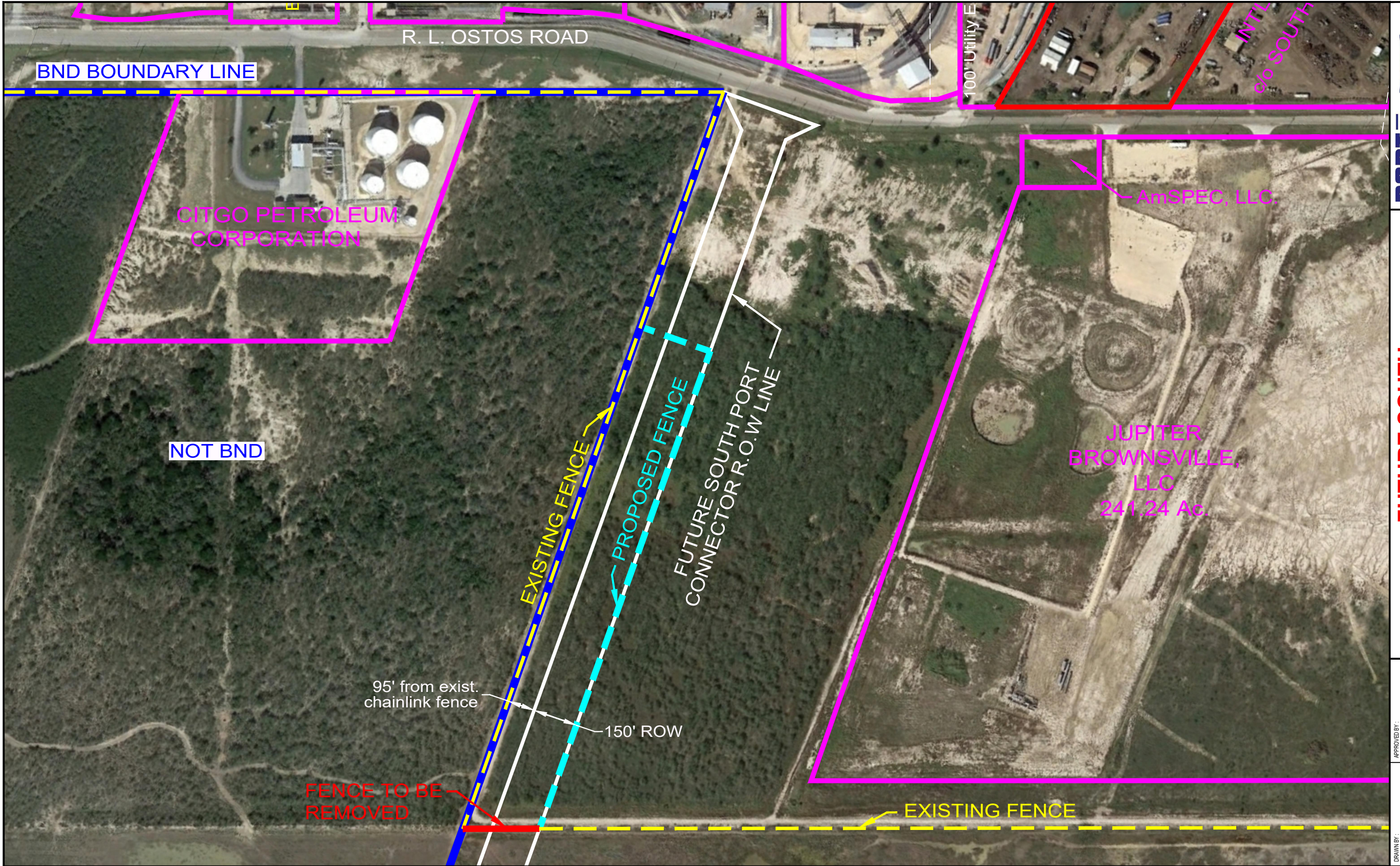
- a. The plan is for Port Commissioners to conditionally award the project to the lowest responsive bidder on November 6, 2019. Further, it is anticipated that the official Notice of Award will be given to the successful contractor in early January 2020, with the notice to proceed given at late January or early February 2020.

11. WHAT AUTHORITY WOULD THE REQUIRED FIELD BIOLOGIST HAVE WITH RESPECT TO THE PROJECT? WHOSE RESPONSIBILITY IS IT TO RETAIN THE BIOLOGIST? DOES THE PORT HAVE A LIST OF QUALIFIED INDIVIDUALS AVAILABLE TO DISTRIBUTE?

- a. The responsibilities and authority of the independent biologist are outlined on **page 168** of the construction plans (EPIC Sheet 2 of 2) under Section V.3.1-4.
- b. It is the responsibility of the successful bidder to retain the qualified biologist. This work shall be subsidiary to other bid items, and shall not be paid for separately.
- c. Potential bidders are encouraged to search online to find qualified biologists for this project as per the requirements in the EPIC Sheet above mentioned.

12. PLEASE PROVIDE THE LOCATION(S) AND LAYOUT OF WHERE THE STONE RIPRAP RAP IS UTILIZED.

- a. The locations and layout of the stone rip rap at the abutments and stone rip rap mow strips are shown on the Plan and Profile Sheets (pages 44-49). Details for Stone Riprap are on pages 119 and 120. Details for the Mow Strip are on Sheet 54.



PORT OF BROWNSVILLE the port that works	
FUTURE SOUTH PORT CONNECTOR PROPOSED FENCE	
DRAWN BY : PE	APPROVED BY :
DATE DRAWN : Oct 2019	REVISION DATE :
CHECKED BY : A. CHAVEZ II	DWG. NO. :
SCALE : AS SHOWN	FILE NAME : C:\MY DRAWINGS\517Security\SouthPortConnectorFence.dwg

Contract Time
South Port Connector

Rd: South Port Connector County: Cameron
CSJ: 0921-06-288 Project: U2299.117

TASK #	Description	Quantity	Unit	Daily Rate	Duration	Pred Task	% Complete	Start Day	Finish Day	November (19)	December (19)	January (20)	February (20)	March (20)	April (20)
	South Port Connector														
1	PROJECT LETTING DATE: September 17, 2019						100								
2	PROJECT AWARD & REVIEW DOCUMENTS (3 MONTHS): Estimated Start Date: 11-07-2019					1	100								
3	Install Warning Signs	1	LS	0.5	2	2	100	1	2						
4	Install SW3P Devices	1	LS	2000	3	3	100	3	5						
5	Prep ROW	105	STA	20	6	4	100	6	11						
6	Work Perform @ Bridge # 1														
7	Prestress Conrete Piling (16 SQ IN) - ITEM 409	40	LF	150	1	5	100	12	12						
8	Prestress Conrete Piling (24 SQ IN) - ITEM 409	7,938	LF	150	53	6	100	12	64						
9	Abutments - ITEM 420	2	EA	0.3	7	8	20	23	29						
10	Bents - ITEM 420	15	EA	0.2	75	9	100	30	104						
11	Concrete Beams - ITEM 425	112	EA	8	14	8	50	68	81						
12	Conrete Bridge Deck - ITEM 422	100,000	SF	1400	72	11	100	82	153						
13	Conc Rail (TY T223) - ITEM 450	4,072	LF	50	82	12	100	110	191						
14	Work Perform @ Bridge # 2														
15	Prestress Conrete Piling (16 SQ IN) - ITEM 409	40	LF	150	1	5	100	12	12						
16	Prestress Conrete Piling (24 SQ IN) - ITEM 409	8,708	LF	150	59	15	100	12	70						
17	Abutments - ITEM 420	2	EA	0.3	7	16	20	23	29						
18	Bents - ITEM 420	18	EA	0.2	90	17	100	30	119						
19	Concrete Beams - ITEM 425	133	EA	8	17	18	50	68	84						
20	Conrete Bridge Deck - ITEM 422	118,750	SF	1400	85	19	100	85	169						
21	Conc Rail (TY T223) - ITEM 450	4,822	LF	50	97	20	100	119	215						
22	Work Perform on Roadway														
23	Culverts -ITEM 464 & 467	120	LF	200	1	5	100	12	12						
24	Excavation - ITEM 110	9,063	CY	2000	5	23	100	13	17						
25	Subgrade Treatment - ITEM 260	37,423	SY	2000	19	24	100	18	36						
26	Embankment (Roadway) - ITEM 132	70,871	CY	2000	36	25	100	37	72						
27	Flex base - ITEM 247	6,473	CY	750	9	26	100	73	81						
28	Cement Treat New Base - ITEM 275	38,836	SY	2500	16	27	100	82	97						
29	Prime Coat - ITEM 310	7,628	GAL	8000	1	28	100	98	98						
30	Bond Breaker - ITEM 342	2,178	TON	750	3	29	100	99	101						
31	Concrete Pavement (CRCP) 12" - ITEM 360	37,423	SY	1000	38	30	100	102	139						
32	Install Pavement Markings & Markers - ITEM 666	42,623	LF	50000	1	21	100	216	216						
33	Install Signs - ITEM 666	35	EA	10	4	32	100	217	220						
34	Rain Delays	1	LS	0.1	10	33	100	221	230						
35	Final Clean UP	1	LS	0.1	10	34	100	231	240						
36	Estimated End Date: 11-06-2020														
37															
38	TOTAL DAYS	240													
39															



Contract Time
South Port Connector

Rd: South Port Connector County: Cameron
CSJ: 0921-06-288 Project: U2299.117

TASK #	Description	Quantity	Unit	Daily Rate	Duration	Pred Task	% Complete	Start Day	Finish Day	May (20)	June (20)	July (19)	August (20)	September (20)	October (20)	November (20)
	South Port Connector															
1	PROJECT LETTING DATE: September 17, 2019						100									
2	PROJECT AWARD & REVIEW DOCUMENTS (3 MONTHS): Estimated Start Date: 11-07-2019					1	100									
3	Install Warning Signs	1	LS	0.5	2	2	100	1	2							
4	Install SW3P Devices	1	LS	2000	3	3	100	3	5							
5	Prep ROW	105	STA	20	6	4	100	6	11							
6	Work Perform @ Bridge # 1															
7	Prestress Conrete Piling (16 SQ IN) - ITEM 409	40	LF	150	1	5	100	12	12							
8	Prestress Conrete Piling (24 SQ IN) - ITEM 409	7,938	LF	150	53	6	100	12	64							
9	Abutments - ITEM 420	2	EA	0.3	7	8	20	23	29							
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36	Estimated End Date: 11-06-2020															
37																
38	TOTAL DAYS	240														
39																



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Project Number:

County: Cameron

Control: 0921-06-288

Highway: South Port Connector

404 Permit Requirements:

The Contractor shall note that discharge of permanent or temporary fill material into the waters of the United States (U.S.), including jurisdictional wetlands, as necessary for construction, will require specific approval from the U.S. Army Corps of Engineers (USACE) under section 404 of the Clean Water Act.

A nationwide or individual permit was not prepared for the development of this project as the work was deemed outside of the jursidiction of the USACE. Any permit required by the Contractor to perform the work of this project is the Contractor's sole responsibility. However, the Contractor may request BND to assist in this process by providing complete and specific revised details for BND review and submittal to the USACE. For off project right of way coordination, the Contractor or his agent, shall handle all activities directly with the USACE.

It is essential that any impacts to USACE jurisdictional waters of the U.S., including jurisdictional wetlands, be the minimum necessary to complete the proposed work. If the Contractor needs further explanation of the conditions of the permit, including means of compliance, they may contact the Pharr District Environmental Coordinator.

Project Specific Locations (PSL's) Coordination

The Contractor shall not initiate activities in a project specific location (PSL) associated with a U.S. Army Corps of Engineers (USACE) permit area that has not been previously evaluated by the USACE as part of the permitting for this project. Such activities include, but are not limited to, haul roads, equipment staging areas, borrow and disposal sites. Associated defined here includes materials delivered to, or from the PSL. The permit area includes all waters of the U.S., or associated wetlands, affected by activities associated with this project. Special restrictions may be required for such work. The Contractor shall be responsible for any, and all consultations with the USACE regarding activities, including project specific locations (PSLs) that have not been previously evaluated by the USACE.

The Contractor shall provide the department with a copy of all consultation(s), or approval(s), from the USACE prior to initiating activities.

The Contractor may proceed with activities in PSLs that do not affect a USACE permit area if a self determination has been made that the PSL is non-jurisdictional or proper USACE clearances have been obtained in jurisdictional areas, or have been previously evaluated by the USACE as

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part of the permit review of this project. The Contractor is solely responsible for documenting any determination(s) that their activities do not affect a USACE permit area. The Contractor shall maintain copies of their determination(s) for review by the department or any regulatory agency.

The total disturbed area for this project is 36 acres. The disturbed area for all project locations in the Contract, and the Contractor project specific locations (PSLs) within 1 mile of the project limits for the Contract, will further establish the authorization requirements for storm water discharges. The Department will obtain an authorization to discharge storm water from the Texas Commission of Environmental Quality (TCEQ) for the construction activities shown on the plans. The Contractor is to obtain required authorization from TCEQ for Contractor PSLs for construction support activities on or off the R.O.W. When the total area disturbed in the Contract, and PSLs within 1 mile of the project limits exceeds 5 acres, provide a copy of the Contractor NOI for PSLs on the R.O.W. to the Engineer and to the local government that operates a separate storm sewer system.

Establish uniform perennial vegetative coverage with a density of at least 70% of the native background vegetative cover to achieve final stabilization.

For all pits and quarries, comply with the "Texas Aggregate Quarry and Pit Safety Act".

In order to expedite the approval process for PSLs, or to eliminate or minimize potential impacts to project progress, initiate coordination efforts with the USACE **within 30 days from the date of "Authorization to Begin Work"**. If this is not done, the Contractor waives the right to request any contract time considerations if project progress is impacted and PSLs approval is still pending.

Requests submitted to the BND will be evaluated on this basis, and will require documentation showing substantial early coordination efforts to expedite the approval process as herein stated. The request shall include a detailed chronological summary status with dates of coordination activities with the resource agencies, including those occurring after the initial coordination, to be reviewed and confirmed by the district's environmental section.

ITEM 8: Prosecution and Progress

Liquidated damages per Working Day for this project have been set at \$1,425.00 per day.

Where road closures or detours around structures are necessary to accomplish proposed work, the removal of existing structures and/or cutting of existing pavement will not be permitted until all pre-cast members for the proposed structure have been cast, tested, and approved for use.

	NO.	DESCRIPTION	DATE
ADDENDUM #2	△	GENERAL NOTE REVISED	10/14/19

SOUTH PORT CONNECTOR

GENERAL NOTES
&
SPECIFICATIONS

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MOBILITY AUTHORITY

PORT OF
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the port that works

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DRAWING PREPARED BY: S&B			
FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.		SHEET NO.
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DGN: JS	STATE	DIST.	COUNTY
CHK DGN: FC	TEXAS	PHARR	CAMERON
DWG:	CONT.	SECT.	JOB
CHK DWG:	0921	06	288
	SOUTH PORT CONNECTOR		

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Control: 0921-06-288

Highway: South Port Connector

will be allowed when opened to traffic unless specifically noted in the plans for a particular location.

Construct longitudinal joints with a joint maker providing a maximum one (1) inch vertical edge (1/2 inch desirable) with an adjacent 6:1 taper. Construct the outside edge with a 6:1 taper, or backfill within the same day.

Unless otherwise approved by the Engineer, a tack coat will be placed on all lifts in accordance to 341.4.7.2 Tack Coat. A non-tracking tack coat shall be used. This work will not be paid for directly, but will be considered subsidiary to Item 341.

ITEM 400: Excavation and Backfill for Structures

If the Contractor elects to cut pavement (existing/detour) for structural work beyond that required by the construction phasing shown in the plans and approved by the Engineer, it shall be restored at the Contractor's expense and backfilled to its original condition or better in accordance with Item 400.

Unless shown otherwise in the plans, use a 1-ft depth for Item 400 Structural Excavation (Special) for gravel bedding needed below drainage structures with unstable material.

Item 404: Driving Piling

Difficult Driving

If it is necessary to advance the piling through a strong or stiff layer where refusal is possible, a pile penetration note may be required. A typical note may read, "The contractor's attention is drawn to the hard material in the soil profile, jetting and/or pilot holes may be necessary to advance the piling to the required penetration depth."

Dynamic Monitoring

Dynamic monitoring of a pile during driving can be accomplished using a Pile Driving Analyzer (PDA) testing system. PDA testing measures the strain and acceleration in the piles as a result of the impact of the hammer. PDA testing of a pile can help to determine the stresses in the pile during and monitor the pile for damage or integrity. The capacity of the pile and the time dependent changes in capacity (if a restrike is undertaken) can be obtained if the PDA testing data is used with the Case Pile Wave Analysis Program (CAPWAP).

Dynamic Monitoring will be required on all test piles.

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ITEM 420: Concrete Substructures

Pay bent concrete as plan quantity.

Promptly apply an ordinary surface finish to all concrete surfaces once meeting curing requirements.

Place longitudinal construction joints at the lane line for bridge approach slabs. These construction joints will be subsidiary to Item 420.

ITEM 421: Hydraulic Cement Concrete

Provide Sulfate Resistant Concrete for all concrete piling and drilled shafts.

Provide equipment at the batch plant for determining the free moisture and/or absorption of aggregates in accordance with applicable TXDOT Test.

Provide the following items for concrete batch inspection in accordance with specifications outlined in DMS-10101, "Computer Equipment":

- (1) One Desktop Microcomputer or One Laptop Microcomputer
- (2) One Integrated Printer/Scanner/Copier/Fax Unit
- (3) Contractor-Furnished Software
- (4) Hardware

Submit to the Engineer for approval the project locations for all Portland Cement concrete washout areas prior to starting any concrete work.

Use membrane curing, Type 2, for concrete curb, gutter and combined curb and gutter, concrete medians, directional islands and sidewalks.

ITEM 427: Surface Finishes for Concrete

Provide surface finishes for concrete as follows:


- (1) Bridge overpass and underpass structures - Surface Area I, opaque sealer coating (color to be determined by the Engineer).


	NO.	DESCRIPTION	DATE
ADDENDUM #2	△	GENERAL NOTE REVISED	10/14/19


SOUTH PORT CONNECTOR


GENERAL NOTES
&
SPECIFICATIONS

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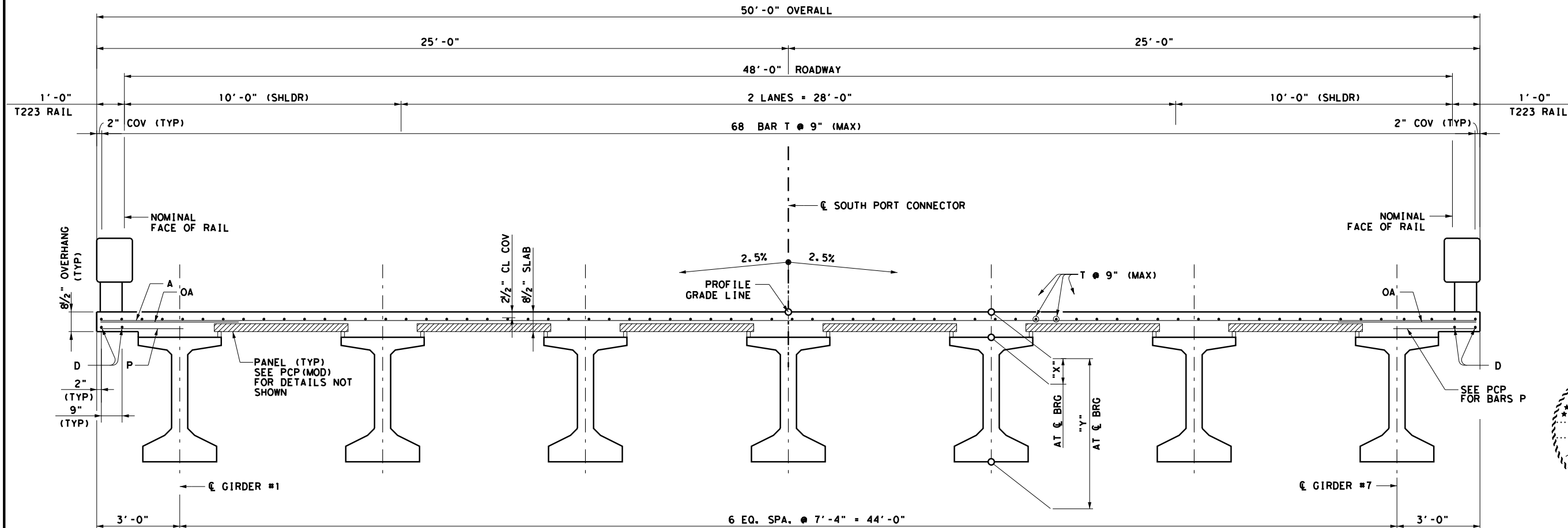
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6		
DGN: JS	STATE	DIST.
CHK DGN: FC	TEXAS	PHARR
DWG:	CONT.	SECT.
CHK DWG:	0921	06

COUNTY	CAMERON
HIGHWAY NO.	
	SOUTH PORT CONNECTOR

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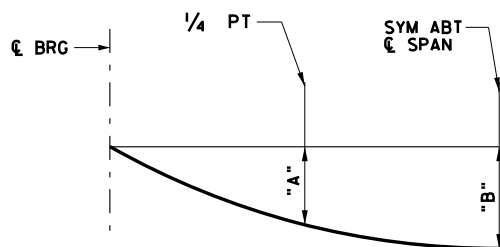
TYPICAL TRANSVERSE SECTION
(SPAN 1-16 - 7 GIRDERS)

TABLE OF SECTION DEPTHS			
SPAN NO.	GIRDER NO.	"X" AT CL BRG	"Y" AT CL BRG ①
1-16	ALL	10 3/4"	5'-4 3/4"

① "Y" VALUE SHOWN IS BASED ON THEORETICAL GIRDER CAMBER, DEAD LOAD DEFLECTION FROM AN 8 1/2" CONCRETE SLAB, A CONSTANT ROADWAY GRADE, AND USING PRECAST PANELS (PCP). THE CONTRACTOR WILL ADJUST THIS VALUE AS NECESSARY FOR ANY ROADWAY VERTICAL CURVE AND/OR IF PRECAST OVERHANG PANEL (PCP(O)) OPTION IS USE.

BAR TABLE	
BAR	SIZE
A	#4
D	#4
G	#4
H	#4
J	#4
M	#4
OA	#5
P	#4
T	#4

SPAN	BEAM	"A" (ft)	"B" (ft)
1-16	ALL	0.157	0.223



DEAD LOAD DEFLECTION DIAGRAM

NOTE: DEFLECTIONS SHOWN ARE DUE TO PRESTRESSED CONCRETE PANELS AND CAST-IN-PLACE SLAB ONLY. (Ec=5000 ksi) ADJUSTED DEFLECTIONS BASED ON FIELD OBSERVATIONS AS NEED.

GENERAL NOTES

DESIGN ACCORDING TO AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 7th EDITION (2014)

MULTI-SPAN UNITS, WITH SLAB CONTINUOUS OVER INTERIOR BENTS, MAY BE FORMED WITH THE DETAIL SHOWN ON THIS SHEET AND STANDARD IGCS

SEE PCP AND PCP-FAB FOR PANEL DETAILS NOT SHOWN

SEE IGTS STANDARD FOR THICKENED SLAB END DETAILS AND QUANTITY ADJUSTMENTS

SEE IGMS STANDARD FOR MISCELLANEOUS DETAILS

SEE RAILING STANDARD FOR RAIL ANCHORAGE IN SLAB

SEE PMDF STANDARD FOR DETAILS AND QUANTITY ADJUSTMENTS IF THIS OPTION IS USED

COVER DIMENSIONS ARE CLEAR DIMENSIONS, UNLESS NOTED OTHERWISE

MATERIAL NOTES

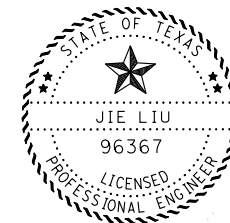
PROVIDE CLASS S CONCRETE (F'C = 4000 PSI)

① PROVIDE GRADE 60 EPOXY COATED REINFORCING STEEL.

PROVIDE BAR LAPS, WHERE REQUIRED, AS FOLLOWS: EPOXY COATED ~ #4 = 2'-5"

DEFORMED WELDED WIRE REINFORCEMENT (WWR)

(ASTM A1064) OF EQUAL SIZE AND SPACING MAY BE SUBSTITUTED FOR BARS A, D, OA, P OR T UNLESS NOTED OTHERWISE. PROVIDE THE SAME LAPS AS REQUIRED FOR REINFORCING BARS



Jie Liu
10/8/2019

T3-S3 TYPE I LOADING

SOUTH PORT CONNECTOR
BRIDGE SLAB DETAIL
BRIDGE #1

SCALE: 1/4" = 1'-0"

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PORT OF BROWNSVILLE
the port that works



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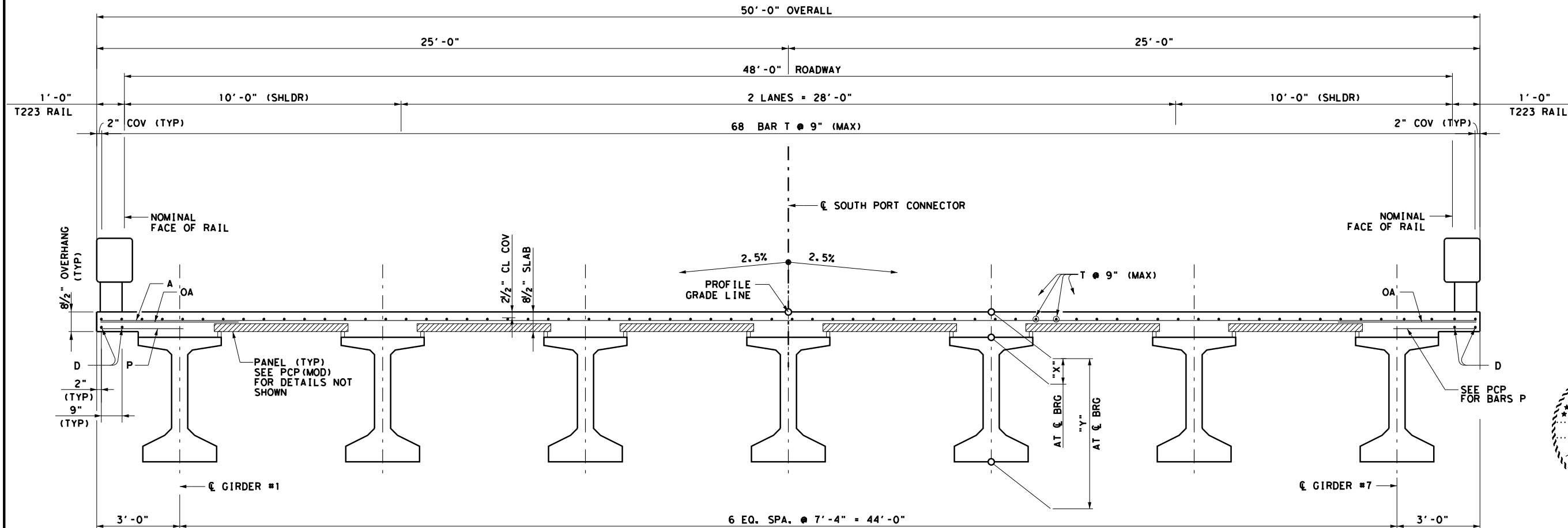
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FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.	SHEET NO.	OF
6		83	1
DCN JL	STATE	DIST.	COUNTY
CHB WC	TEXAS	PHARR	CAMERON
DRC DT	CONT.	SECT.	JOB
CHB MW	0921	06	288
DRC MW			

REV.	DATE	DESCRIPTION	DESIGN	APPRV.
1	10/8/2019	ADDED EPOXY COATING TO REINF. STEEL INCREASED #4 BAR LAP LENGTH	HH	JL
REV.	DATE	DESCRIPTION	DESIGN	APPRV.

Plotted on: 10/8/2019
Plotted @: 1:23:37 PM

Plotted by: huh1
Design File name: S:\project\2299\500\PS&E\PlanSet\01\Dgn\Brg\BRIDGE 2\2299100SBR025B-ABUT-BENT.dgn



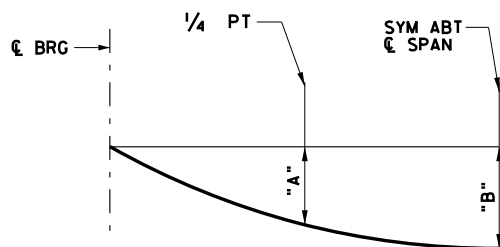
TYPICAL TRANSVERSE SECTION
(SPAN 1-19 - 7 GIRDERS)

TABLE OF SECTION DEPTHS			
SPAN NO.	GIRDER NO.	"X" AT CL BRG	"Y" AT CL BRG ①
1-19	ALL	10 3/4"	5'-4 3/4"

① "Y" VALUE SHOWN IS BASED ON THEORETICAL GIRDER CAMBER, DEAD LOAD DEFLECTION FROM AN 8 1/2" CONCRETE SLAB, A CONSTANT ROADWAY GRADE, AND USING PRECAST PANELS (PCP). THE CONTRACTOR WILL ADJUST THIS VALUE AS NECESSARY FOR ANY ROADWAY VERTICAL CURVE AND/OR IF PRECAST OVERHANG PANEL (PCP(O)) OPTION IS USE.

BAR TABLE	
BAR	SIZE
A	#4
D	#4
G	#4
H	#4
J	#4
M	#4
OA	#5
P	#4
T	#4

SPAN	BEAM	"A" (ft)	"B" (ft)
1-19	ALL	0.157	0.223



DEAD LOAD DEFLECTION DIAGRAM

NOTE: DEFLECTIONS SHOWN ARE DUE TO PRESTRESSED CONCRETE PANELS AND CAST-IN-PLACE SLAB ONLY. (Ec=5000 ksi) ADJUSTED DEFLECTIONS BASED ON FIELD OBSERVATIONS AS NEED.

GENERAL NOTES

DESIGN ACCORDING TO AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 7th EDITION (2014)

MULTI-SPAN UNITS, WITH SLAB CONTINUOUS OVER INTERIOR BENTS, MAY BE FORMED WITH THE DETAIL SHOWN ON THIS SHEET AND STANDARD IGCS

SEE PCP AND PCP-FAB FOR PANEL DETAILS NOT SHOWN

SEE IGTS STANDARD FOR THICKENED SLAB END DETAILS AND QUANTITY ADJUSTMENTS

SEE IGMS STANDARD FOR MISCELLANEOUS DETAILS

SEE PMDF STANDARD FOR DETAILS AND QUANTITY ADJUSTMENTS IF THIS OPTION IS USED

COVER DIMENSIONS ARE CLEAR DIMENSIONS, UNLESS NOTED OTHERWISE

MATERIAL NOTES

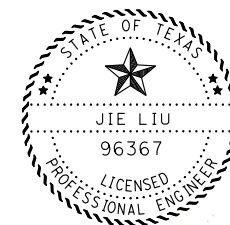
PROVIDE CLASS S CONCRETE (F'C = 4000 PSI)

PROVIDE GRADE 60 EPOXY COATED REINFORCING STEEL.

PROVIDE BAR LAPS, WHERE REQUIRED, AS FOLLOWS: EPOXY COATED ~ #4 = 2'-5"

DEFORMED WELDED WIRE REINFORCEMENT (WWR)

(ASTM A1064) OF EQUAL SIZE AND SPACING MAY BE SUBSTITUTED FOR BARS A, D, OA, P OR T UNLESS NOTED OTHERWISE. PROVIDE THE SAME LAPS AS REQUIRED FOR REINFORCING BARS



10/8/2019

T3-S3 TYPE I LOADING

SOUTH PORT CONNECTOR
BRIDGE SLAB DETAIL
BRIDGE #2

SCALE: 1/4" = 1'-0"

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PORT OF BROWNSVILLE
the port that works



S&B INFRASTRUCTURE, LTD.
TEXAS BOARD OF PROFESSIONAL ENGINEERS # F-1582

DRAWING PREPARED BY: S&B I

FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.	SHEET NO.	OF
6		105	1
DCN	JL	STATE	DIST.
CHN	WC	TEXAS	PHARR
DRN	DT	CONT.	SECT.
CHN	MW	0921	06
DRN		288	
			COUNTY
			CAMERON
			HIGHWAY NO.
			SOUTH PORT CONNECTOR

REV.	DATE	DESCRIPTION	DESIGN	APPRV.
1	10/8/2019	ADDED EPOXY COATING TO REINF. STEEL INCREASED #4 BAR LAP LENGTH	HH	JL
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