



County of El Paso Purchasing Department  
800 E. Overland Room 300  
El Paso, Texas 79901  
(915) 546-2048 / Fax: (915) 546-8180

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### **ADDENDUM 5**

**To:** All Interested Bidders  
**From:** Elvia Contreras, Formal Bid Buyer  
**Date:** February 15, 2012  
**Subject:** BID # 11-045, Construction for the Tornillo Guadalupe New International Bridge

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**The deadline for questions has been rescheduled to March 1, 2012 at 12:00 P.M.**

**The bid opening has been rescheduled to March 8, 2012 at 2:00 P.M.**

**The following sheets from the Bid Documents Book have been revised as a part of this Addendum No. 5 and are attached and made a part of these bid documents: 2, 13, 14, 15, 16, 105.**

**The following plan sheets have been revised as a part of this Addendum No. 5, copies are attached and are made a part of these bid documents: 2, 3, 4, 5A, 5B, 6, 10, 11, 12,13, 14, 15.**

**The following new plans sheets have been added as a part of this Addendum No. 5, copies are attached and are made a part of these bid documents: 15A, 15B, 15C, 15D.**

**NOTE: BIDDERS ARE REQUIRED TO INDICATE THEIR ACKNOWLEDGEMENT OF THIS ADDENDUM IN THE APPROPRIATE LOCATION ON THE BID PROPOSAL FORM.**

**END OF ADDENDUM NO. 5**

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The following specifications are from TxDOT Standard Specifications for Construction and Maintenance of Highways, Streets and Bridges, adopted June 1, 2004 and incorporated into this project, by reference. Should any of these Technical Specifications conflict with requirements contained within the aforementioned Divisions A-B, the requirements of these Technical Specifications shall control.

**Standard Specifications**

ITEM 132	EMBANKMENT
ITEM 275	CEMENT TREATMENT (ROAD-MIXED) **
ITEM 300	ASPHALTS, OILS, AND EMULSIONS
ITEM 314	EMULSIFIED ASPHALT TREATMENT
ITEM 320	EQUIPMENT FOR ASPHALT CONCRETE PAVEMENT
ITEM 340	DENSE-GRADED HOT-MIX ASPHALT (METHOD)
ITEM 341	DENSE-GRADED HOT-MIX ASPHALT (QC/QA)
ITEM 401	FLOWABLE BACKFILL
ITEM 416	DRILLED SHAFT FOUNDATIONS
ITEM 420	CONCRETE STRUCTURES

## UNIT PRICES

For changing quantities of work items from those indicated by the contract drawings upon written instructions from the architect/engineer, the following unit prices shall prevail:

Item No./ Spec. No.	Est. Qty.	Unit of Meas	Item Description / Unit Price (in Words)	Unit Price (in numbers)	Extension (in numbers)
BASE	BID				
1. 132 **	21500	CY	EMBANKMENT, TYPE B _____ /unit		
2. 164	9664	SY	Seeding for erosion control _____ /unit		
3. 401	311	CY	Flowable Backfill _____ /unit		
4. 416	100	LF	Drill Shaft (18") _____ /unit		
5. 416	800	LF	Drill Shaft (36") _____ /unit		
6. 416	2400	LF	Drill Shaft (60") _____ /unit		
7. 420	78.4	CY	CL C Conc (Abut) _____ /unit		
8. 420	784.9	CY	CL C Conc (Bent) _____ /unit		
9. 420	142.5	CY	CL S Conc (Appr Slab) _____ /unit		
10. 422	55056	SF	Reinf Conc Slab (CL S) _____ /unit		
11. 425	8746.9	LF	Prest Conc Beam (TY IV) _____ /unit		
12. 428	6231	SY	Conc Surf Treat (Class I) _____ /unit		
13. 432	195	CY	Riprap Concrete, Class "B" _____ /unit		
14. 442	496	LB	Structural Steel, misc. _____ /unit		

15. 450	1246.1	LF	Rail (TY C501) _____/unit		
16. 454	297.3	LF	Sealed Expansion Joint _____/unit		
17. 500	1	LS	Mobilization _____/unit		
18. 502	12	MO	Barricades, Signs and Traffic Handling _____/unit		
19. 506	219	SY	Construction Exits (Install) (TY 1) _____/unit		
20. 506	219	SY	Construction Exits (Remove) _____/unit		
21. 506	3220	LF	Temporary Sediment Control Fence _____/unit		
22. 506	3220	LF	Temporary Sediment Control Fence (Remove) _____/unit		
23. 550	1245.7	LF	Chain Link Fence _____/unit		
24. 550	152	LF	Permanent Border Fence Remove _____/unit		
25. 550	152	LF	Permanent Border Fence Install _____/unit		
26. 550	160	LF	Temporary Border Fence Remove _____/unit		
27. 550	160	LF	Temporary Border Fence Install _____/unit		
28. 550	1	EA	Temporary Border Fence Gate Install _____/unit		
29. 610	14	EA	Roadway Illuminaire Assembly _____/unit		
30. 666	640	LF	Refl Pav Mrk TY I (W) 4" (Brk) (100 Mil) _____/unit		
31. 666	1246	LF	Refl Pav Mrk TY I (W) 4" (Slid) (100 Mil) _____/unit		
32. 666	1246	LF	Refl Pav Mrk TY I (Y) 4" (Slid) (100 Mil) _____/unit		

33. 672	32	EA	Refl Pav Mrkr TY I-C _____ /unit		
34. 672	30	EA	Refl Pav Mrkr TY II-A-A _____ /unit		
TOTAL	BASE	BID	_____		
			ADDITIVE ALTERNATE NO.1		
35. 422	9400	SF	Reinf Conc Slab (CL S) _____ /unit		
36. 425	1495	LF	Prest Conc Beam (TY IV) _____ /unit		
37. 428	1002	SY	Conc Surf Treat (Class I) _____ /unit		
38. 450	200	LF	Rail (TY C501) _____ /unit		
39. 550	200	LF	Chain Link Fence _____ /unit		
40. 666	80	LF	Refl Pav Mrk TY I (W) 4" (Brk) (100 Mil) _____ /unit		
41. 666	200	LF	Refl Pav Mrk TY I (W) 4" (Slid) (100 Mil) _____ /unit		
42. 666	200	LF	Refl Pav Mrk TY I (Y) 4" (Slid) (100 Mil) _____ /unit		
43. 672	59	EA	Refl Pav Mrkr TY I-C _____ /unit		
44. 672	6	EA	Refl Pav Mrkr TY II-A-A _____ /unit		
TOTAL	ALT#1	BID	_____		
			** ADDITIVE ALTERNATE NO. 2		
45. 275 **	69.0	TON	CEMENT TREATMENT(CEMENT) _____ /unit		

46. 275 **	4490.0	SY	CEMENT TREATMENT(ROADMIXED) _____/unit		
**TOTAL	ALT # 2	BID	_____		
			** ADDITIVE ALTERNATE NO. 3		
47. 432 **	125.0	CY	RIPRAP (STONE)(DRY)(6 IN) _____/unit		
** TOTAL	ALT # 3	BID	_____		

The total base bid amount and total additive alternates #1, #2 & #3 bids shown on these page shall match exactly the amount shown on the bid form. The above unit prices shall include all labor, materials, bailing, shoring, removal, overhead, profit, insurance, etc., to cover the finished work of the several kinds called for. Changes shall be processed in accordance with the GENERAL CONDITIONS.

Bidder understands that the Owner reserves the right to reject any or all bids and to waive any technicalities in the bidding.

The bidder agrees that this bid shall be good and may not be withdrawn for a period of 90 calendar days after the scheduled closing time for receiving bids.

Upon receipt of Owner's written acceptance of this bid, Bidder will execute the formal contract attached within 10 days and deliver a Surety Bond as required by the GENERAL CONDITIONS.

The bid security attached in the sum of \_\_\_\_\_ (\_\_\_\_\_) is to become the property of the Owner in the event the contract and bond are not executed within the time above set forth, as liquidated damages for the delay and additional expense to the Owner caused thereby.

Respectfully submitted:

By \_\_\_\_\_

\_\_\_\_\_ TITLE

\_\_\_\_\_ ADDRESS

\_\_\_\_\_

ALL STANDARD SPECIFICATIONS, SPECIAL PROVISIONS AND SPECIAL SPECIFICATIONS APPLICABLE TO THIS PROJECT ARE IDENTIFIED AS FOLLOWS:

**STANDARD SPECIFICATIONS:** ADOPTED BY THE TEXAS DEPARTMENT OF TRANSPORTATION, JUNE 1, 2004.  
STANDARD SPECIFICATIONS ARE INCORPORATED INTO THE CONTRACT BY REFERENCE.

ITEM 132	EMBANKMENT
ITEM 164	SEEDING FOR EROSION CONTROL
ITEM 275	CEMENT TREATMENT (ROAD-MIXED)
ITEM 401	FLOWABLE BACKFILL
ITEM 416	DRILLED SHAFT FOUNDATIONS
ITEM 420	CONCRETE STRUCTURES
ITEM 421	HYDRAULIC CEMENT CONCRETE
ITEM 422	REINFORCED CONCRETE SLAB
ITEM 425	PRECAST PRESTRESSED CONCRETE STRUCTURAL MEMBERS
ITEM 426	PRESTRESSING
ITEM 428	CONCRETE SURFACE TREATMENT
ITEM 432	RIPRAP
ITEM 440	REINFORCING STEEL
ITEM 441	STEEL STRUCTURES
ITEM 442	METAL FOR STRUCTURES
ITEM 445	GALVANIZING
ITEM 449	ANCHOR BOLTS
ITEM 450	RAILING
ITEM 454	BRIDGE EXPANSION JOINTS
ITEM 466	HEADWALLS AND WINGWALLS
ITEM 500	MOBILIZATION
ITEM 502	BARRICADES, SIGNS AND TRAFFIC HANDLING
ITEM 506	TEMPORARY EROSION, SEDIMENTATION & ENV. CONTROLS
ITEM 550	CHAIN LINK FENCE
ITEM 610	ROADWAY ILLUMINATION ASSEMBLIES
ITEM 618	CONDUIT
ITEM 620	ELECTRICAL CONDUCTORS
ITEM 624	GROUND BOXES
ITEM 628	ELECTRICAL SERVICES
ITEM 634	PLYWOOD SIGNS
ITEM 644	SMALL ROADSIDE SIGN SUPPORTS AND ASSEMBLIES
ITEM 658	DELINEATOR AND OBJECT MARKER ASSEMBLIES
ITEM 662	WORK ZONE PAVEMENT MARKINGS
ITEM 666	REFLECTORIZED PAVEMENT MARKINGS
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**GENERAL NOTES:**

1. WHEREVER "THE DEPARTMENT" "THE ENGINEER" OR "EL PASO DISTRICT" IS REFERRED TO IN THE PLANS AND IN THE "TEXAS STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MAINTENANCE OF HIGHWAYS, STREETS AND BRIDGES (2004)" FOR THIS PROJECT SHALL MEAN THE COUNTY OF EL PASO.

2. THE CONTRACTOR WILL BE REQUIRED TO MAINTAIN SUITABLE ACCESS THROUGH AND AROUND THE PROJECT SITE FOR U.S. BORDER PATROL AND THE INTERNATIONAL BOUNDARY AND WATER COMMISSION.

5 ADDENDUM NO.5 02-15-12

4 ADDENDUM NO.4 11-8-11

**THE COUNTY OF EL PASO**

---

**STRUCTURAL ENGINEERING ASSOCIATES, INC.**  
CONSULTING ENGINEERS

<b>TORNILLO-GUADALUPE NEW INTERNATIONAL BRIDGE</b>			
INDEX			
DWN.	DESIGN	DATE	SHEET NO.
S.Z.T.	H.A.A.	1-7-11	2
DWC. CK.	DESIGN CK.	DRAWING FILE	
H.A.A.	M.C.	03-044C	



\* THESE ARE TEXAS D.O.T. MODIFIED STANDARDS. THE DEPARTMENT IS NOT RESPONSIBLE FOR THEIR APPLICATION TO THIS SPECIFIC PROJECT.

REVISION 5-20-11

FIRM REG. NO. F-199

SUMMARY OF ESTIMATED BRIDGE QUANTITIES - U.S. BASE BID

DESCRIPTION	ITEM 401	ITEM 416			ITEM 420		ITEM 420	ITEM 422	ITEM 425	ITEM 428	ITEM 442	ITEM 450	ITEM 454	ITEM 550	ITEM 610
	FLOWABLE BACKFILL	DRILLED SHAFTS			CLASS "C" CONCRETE		APPROACH SLAB CL."S" CONC.	REINFORCED CONCRETE SLAB	PRESTRESSED CONCRETE BEAM (TYPE IV)	CONCRETE SURFACE TREATMENT	STR STL (MISC)	BRIDGE RAILING	SEJ	CHAIN LINK FENCE	ILLUMIN ASSEMBLIES
		CY	18" DIA. LF	36" DIA. LF	60" DIA. LF	ABUTMENT CY	BENT CY	CY	SF	LF	SY	LB	TYPE C501 LF	LF	LF
ABUTMENT 14	311	100	800		78.4						165		99.1		
BENTS 8-13				2400		784.9					331		198.2		
PRESTR. CONC. BM. UNIT 4								27,483	4,365.2	2,926		584.0		584.0	8
PRESTR. CONC. BM. UNIT 5								27,573	4,381.7	2,926		586.1		586.1	6
APPROACH SLAB @ ABUT. NO. 14							142.5			379		76.0		75.6	
<b>TOTAL</b>	<b>311</b>	<b>100</b>	<b>800</b>	<b>2400</b>	<b>78.4</b>	<b>784.9</b>	<b>142.5</b>	<b>55,056</b>	<b>8,746.9</b>	<b>6,231</b>	<b>496</b>	<b>1,246.1</b>	<b>297.3</b>	<b>1,245.7</b>	<b>14</b>

SUMMARY OF ESTIMATED ROADWAY QUANTITIES - U.S. BASE BID

DESCRIPTION	ITEM 132 EMBANKMENT (TY. C) (FINAL) CY	ITEM 432 RIPRAP CONCRETE CLASS "B" CY	ITEM 506 CONSTRUCT EXIT (TY 1) SY	ITEM 506 CONSTRUCT EXIT (REMOV) (TY 1) SY	ITEM 506 TEMP SEDMT CONT FENCE LF	ITEM 506 TEMP SEDMT CONT FENCE (REMOV) LF
EMBANKMENT AT U.S. END	21,500	195.0				
SW3P AT U.S. SIDE			219	219	3,220	3,220
<b>TOTAL</b>	<b>21,500</b>	<b>195.0</b>	<b>219</b>	<b>219</b>	<b>3,220</b>	<b>3,220</b>

SUMMARY OF ESTIMATED STRIPING QUANTITIES - U.S. BASE BID

DESCRIPTION	ITEM 666 REFLECTORIZED PAVEMENT MARKINGS			ITEM 672 RAISED PAVEMENT MARKERS (PLOWABLE REFLECTORIZED PAVEMENT MARKERS)	
	4" WHITE (SLD.) LF	4" WHITE (BRK.) LF	4" YELLOW (SLD.) LF	TYPE I-C EA.	TYPE II-A-A EA.
	LF	LF	LF	EA.	EA.
U.S. SIDE	1,246	640	1,246	32	30
<b>TOTAL</b>	<b>1,246</b>	<b>640</b>	<b>1,246</b>	<b>32</b>	<b>30</b>

SUMMARY OF ESTIMATED BRIDGE QUANTITIES - ADDITIVE ALTERNATE NO.1 (INTERNATIONAL SPAN)

DESCRIPTION	ITEM 422 REINFORCED CONCRETE SLAB SF	ITEM 425 PRESTRESSED CONCRETE BEAM (TYPE IV) LF	ITEM 428 CONCRETE SURFACE TREATMENT SY	ITEM 450 BRIDGE RAILING TYPE C501 LF	ITEM 550 CHAIN LINK FENCE LF
PRESTR. CONC. BM. UNIT 3	9,400	1,495.0	1,002	200.0	200.0
<b>TOTAL</b>	<b>9,400</b>	<b>1,495.0</b>	<b>1,002</b>	<b>200.0</b>	<b>200.0</b>

ADDITIVE ALTERNATE NO.2 (SUBGRADE TREATMENT)

DESCRIPTION	ITEM 275 CEMENT TREATMENT TON	ITEM 275 CEMENT TREATMENT SY
	U.S. EMBANKMENT	69.0

ADDITIVE ALTERNATE NO.3

DESCRIPTION	ITEM 432 RIPRAP (STONE)(DRY) (6 in) CY
	U.S. EMBANKMENT

SUMMARY OF ESTIMATED STRIPING QUANTITIES - ADDITIVE ALTERNATE NO.1 (INTERNATIONAL SPAN)

DESCRIPTION	ITEM 666 REFLECTORIZED PAVEMENT MARKINGS			ITEM 672 RAISED PAVEMENT MARKERS (PLOWABLE REFLECTORIZED PAVEMENT MARKERS)	
	4" WHITE (SLD.) LF	4" WHITE (BRK.) LF	4" YELLOW (SLD.) LF	TYPE I-C EA	TYPE II-A-A EA
	LF	LF	LF	EA	EA
INTERNATIONAL SPAN	200	80	200	59	6
<b>TOTAL</b>	<b>200</b>	<b>80</b>	<b>200</b>	<b>59</b>	<b>6</b>

- NOTES:
- EMBANKMENT TYPE C (FINAL), P.I. BETWEEN 6 AND 15, LL < 40, MIN. DRY DENSITY > 125 pcf, TRIAXIAL CL 4 OR BETTER PER TEX117E. TO MEET GRADATION REQUIREMENTS SHOWN IN GENERAL NOTES, SHEET 5A.
  - MATERIAL FOR EMBANKMENT CANNOT BE OBTAINED FROM ON-SITE SOURCES.

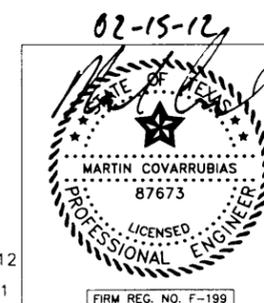
SUMMARY OF SMALL SIGNS

DESCRIPTION	SMALL SIGNS	
	TYPE W16-3A EA	TYPE W11-2 EA
SEE SHEET "STRIPING LAYOUT"	1	1
<b>TOTAL</b>	<b>1</b>	<b>1</b>

SUMMARY OF BORDER FENCE

DESCRIPTION	ITEM 550		
	REMOVE LF	INSTALL LF	GATE EA
PERMANENT FENCE	152	152	0
TEMPORARY FENCE	160	160	1
<b>TOTAL</b>	<b>312</b>	<b>312</b>	<b>1</b>

ADDENDUM 2-15-12  
REVISION 5-20-11



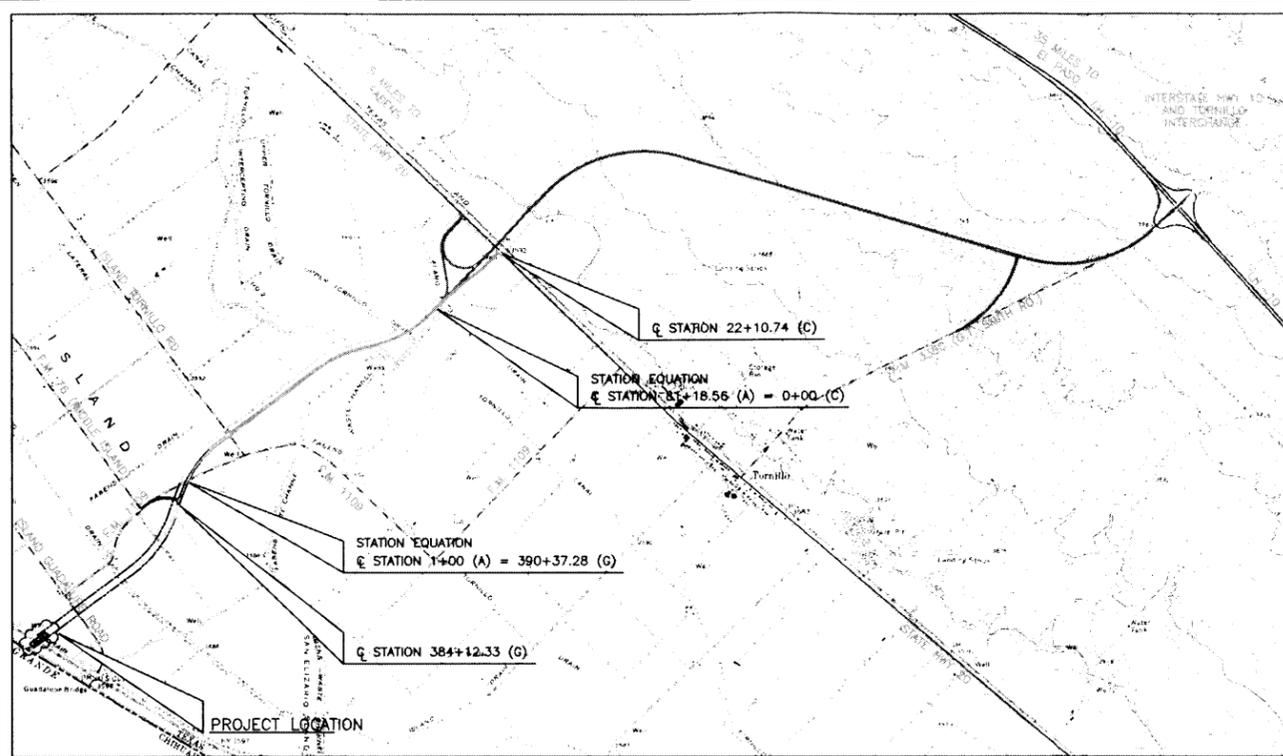
**THE COUNTY OF EL PASO**

**SEA STRUCTURAL ENGINEERING ASSOCIATES, INC. CONSULTING ENGINEERS**

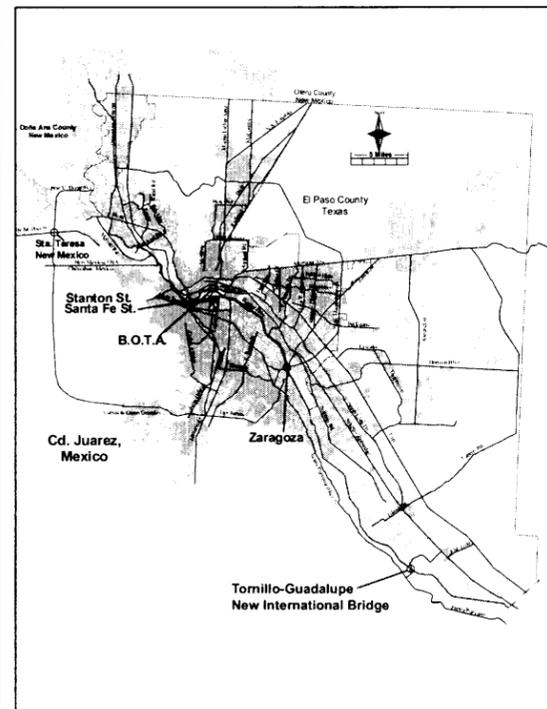
**TORNILLO-GUADALUPE NEW INTERNATIONAL BRIDGE**

**U.S. SUMMARY OF ESTIMATED QUANTITIES**

DWG. CK. H.A.A.	DESIGN H.A.A.	DATE 1-7-11	SHEET NO. 3
	DESIGN CK. M.C.	DRAWING FILE 03-044C	

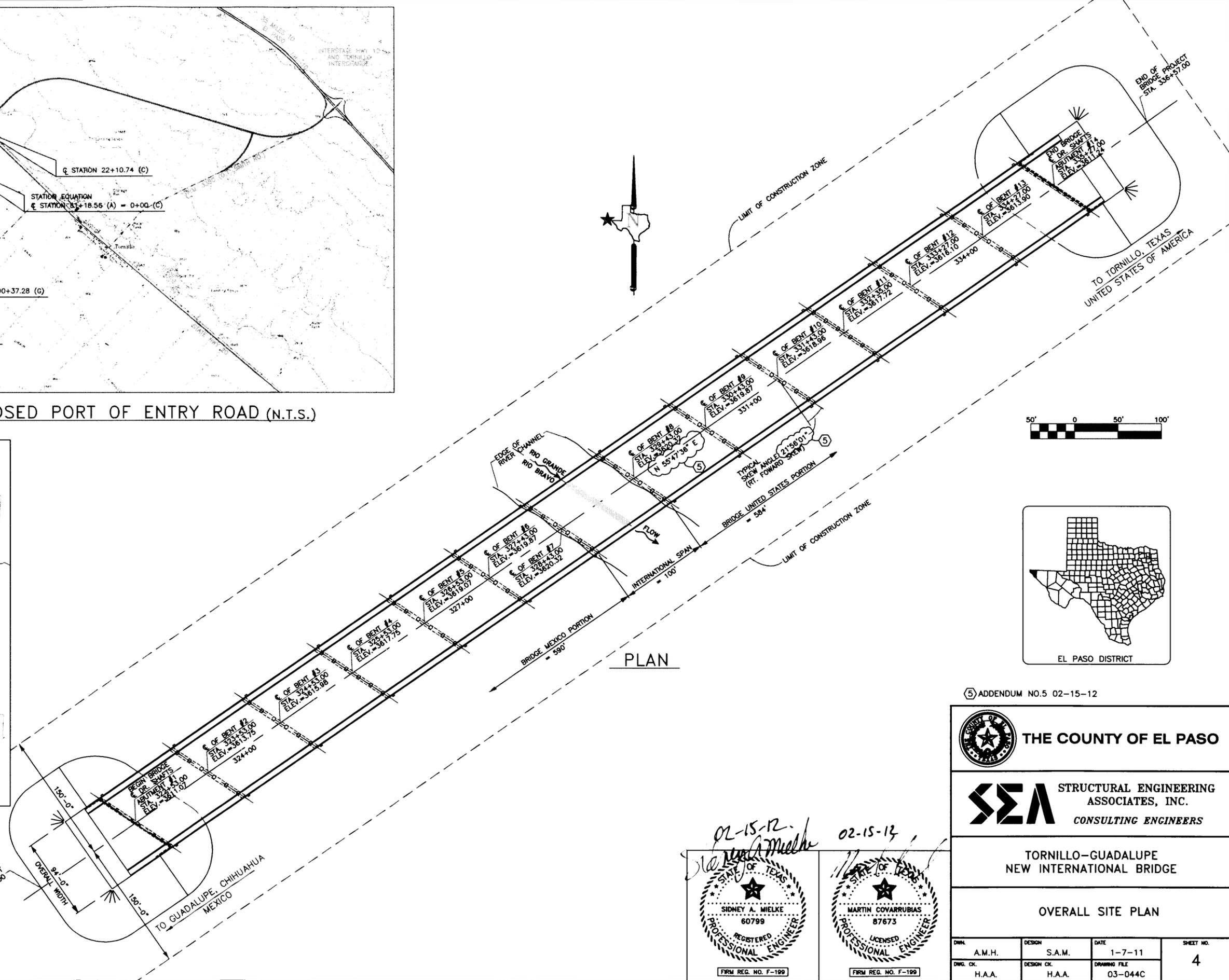
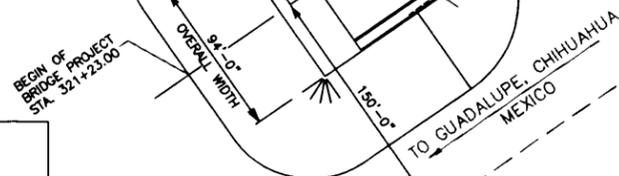


FUTURE PROPOSED PORT OF ENTRY ROAD (N.T.S.)



SITE PLAN

SCHEMATIC BRIDGE IS 1950 FT. UPSTREAM FROM EXISTING FABENS-CASETA BRIDGE APPROX. RIVER MILE = 1,217.40



PLAN

⑤ ADDENDUM NO.5 02-15-12

**THE COUNTY OF EL PASO**

**SEA STRUCTURAL ENGINEERING ASSOCIATES, INC. CONSULTING ENGINEERS**

TORNILLO-GUADALUPE NEW INTERNATIONAL BRIDGE

OVERALL SITE PLAN

02-15-12  
*Sidney A. Mielke*

02-15-12  
*Martin Covarrubias*

STATE OF TEXAS  
SIDNEY A. MIELKE  
60799  
REGISTERED PROFESSIONAL ENGINEER  
FIRM REG. NO. F-199

STATE OF TEXAS  
MARTIN COVARRUBIAS  
87673  
LICENSED PROFESSIONAL ENGINEER  
FIRM REG. NO. F-199

DRAWN A.M.H.	DESIGN S.A.M.	DATE 1-7-11	SHEET NO. 4
DWG. CK. H.A.A.	DESIGN CK. H.A.A.	DRAWING FILE 03-044C	

GENERAL NOTES:

Table 1  
 COMPACTION REQUIREMENTS FOR BASE COURSES  
 PERCENT OF DENSITY AS DETERMINED BY  
 COMPACTION RATIO (TEX-114 - E)

ITEM	DESCRIPTION	ROADWAY COURSE DENSITY
132	EMBANK (DC)(TY C)(FINAL)	95%
275	CEMENT TREATMENT (DC)	95%

1. TO A DEPTH OF 6" BELOW EXISTING GROUND, SCARIFY THE EXISTING GROUND AND COMPACT TO 95% MINIMUM, WHEN UNDER AND OUTSIDE ROADWAY SECTION.

SCOPE OF CONTRACT AND SEQUENCE OF WORK

THE CONTRACTOR SHALL PRESERVE EXISTING ROW MARKERS (TYPE I & TYPE II), PERMANENT BENCHMARKS AND CONTROL MONUMENTS. IF ANY ARE DESTROYED OR DISTURBED DURING CONSTRUCTION, THEY SHALL BE RESET BY THE CONTRACTOR UNDER THE SUPERVISION OF A REGISTERED PROFESSIONAL LAND SURVEYOR (RPLS) AT THE CONTRACTOR'S EXPENSE.

UPON ISSUANCE OF A WORK ORDER BY EL PASO COUNTY, SUBMIT FOR APPROVAL, A PROPOSED SEQUENCE OF CONSTRUCTION, TO WHICH CHANGES WILL NOT BE PERMITTED UNLESS APPROVED IN WRITING.

THE CONTRACTOR SHALL INFORM THE ENGINEER AND THE RESPECTIVE UTILITY COMPANIES WHEN IT BECOMES APPARENT THAT UTILITY LINES WILL INTERFERE WITH WORK IN PROGRESS.

THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE PROJECT SITE PRIOR TO SUBMITTING BIDS.

PROVIDE AUTOMOBILE AND PEDESTRIAN ACCESS AT ALL TIMES, INCLUDING SATURDAYS, SUNDAYS, AND HOLIDAYS. THIS ACCESS INCLUDES, DESIGNATED ROUTE TO AND FROM EXISTING PORT OF ENTRY. THIS REQUIREMENT SHALL BE CONSIDERED SUBSIDIARY TO THE VARIOUS BID ITEMS.

THE CONTRACTOR SHALL SCHEDULE AND PERFORM HIS WORK TO ASSURE PROPER DRAINAGE DURING THE COURSE OF HIS OPERATIONS. ALL LABOR, TOOLS, EQUIPMENT, AND SUPERVISION REQUIRED TO ASSURE SUCH DRAINAGE AND ANY REMOVAL OR HANDLING OF WATER IN ORDER TO MAINTAIN DRY CONDITIONS SHALL BE CONSIDERED INCIDENTAL WORK.

EXISTING PAVEMENT, UTILITIES, STRUCTURES, ETC., DAMAGED AS A RESULT OF THE OPERATIONS WILL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO EL PASO COUNTY.

EL PASO COUNTY WILL FURNISH HORIZONTAL AND VERTICAL CONTROL REFERENCE POINTS. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND GRADES BEFORE PROCEEDING WITH THE WORK. ANY DISCREPANCIES FOUND SHALL BE REPORTED IMMEDIATELY, OTHERWISE THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR THEIR CORRECTNESS.

THE LOCATIONS OF ALL GROUND BOXES, CABINET FOUNDATIONS, AND STRUCTURES SHALL BE SHOWN ON THE PLANS AND MAY BE MOVED ONLY AS APPROVED IN WRITING.

MATERIAL SOURCES

ALL MATERIAL SOURCES FOR ITEM 132, SHALL BE FROM AN OFF-SITE LOCATION APPROVED, IN WRITING.

UPON ABANDONMENT OF THE MATERIAL SOURCE SITES, THE CONTRACTOR SHALL DISPOSE OF ALL OVERBURDEN, UNUSED MATERIALS, ETC., AS DIRECTED. THIS WORK SHALL NOT BE PAID FOR DIRECTLY, BUT SHALL BE CONSIDERED SUBSIDIARY TO THE VARIOUS BID ITEMS.

LEGAL RELATIONS AND RESPONSIBILITIES TO THE PUBLIC

OSHA REGULATIONS PROHIBIT OPERATIONS THAT WILL BRING PERSONS OR EQUIPMENT WITHIN 10 FEET OF AN ENERGIZED ELECTRICAL LINE. WHERE WORKERS AND/OR EQUIPMENT MAY BE CLOSE TO AN ENERGIZED ELECTRICAL LINE, THE CONTRACTOR SHALL NOTIFY THE ELECTRICAL POWER COMPANY AND MAKE ALL NECESSARY ADJUSTMENTS TO ENSURE THE SAFETY OF WORKERS NEAR THE ENERGIZED LINE.

PROSECUTION AND PROGRESS

PROVIDE A CRITICAL-PATH-METHOD SCHEDULE FOR REVIEW AND APPROVAL BY EL PASO COUNTY.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING CONSTRUCTION EASEMENTS FROM EL PASO COUNTY WATER IMPROVEMENT DISTRICT FOR CROSSING OF THE IRRIGATION LINED CHANNELS AND BORDER INTERCEPTING DRAIN. AT THE CONTRACTORS EXPENSE, THE CONTRACTOR MAY INSTALL APPROVED PIPING & DIRT RAMPS IN BOTH CHANNELS IN ORDER TO FACILITATE ACCESS. INSTALLING A DIRT RAMP INTO THE RIVER FLOODWAY IS PERMISSIBLE. THE CONTRACTOR SHALL BE REQ'D TO NOTIFY THE INT. BOUNDARY AND WATER COMMISSION PRIOR TO PLACING FILL IN FLOODWAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING THE RAMP, AT THE CONTRACTORS EXPENSE, DURING A FLOOD EVENT, AND WHEN CONSTRUCTION IS COMPLETED.

ALL CONSTRUCTION SPOILS SHALL BE REMOVED FROM THE SITE WEEKLY.

CONSTRUCTION OF THE LAND PORT OF ENTRY (LPOE) WILL BE UNDERWAY PRIOR TO THE START OF BRIDGE CONSTRUCTION ACCESS TO THE BRIDGE CONSTRUCTION SITE WILL BE THROUGH THE LPOE CONSTRUCTION SITE. AN ACCESS ROUTE FOR ALL BRIDGE CONSTRUCTION ACTIVITIES HAS BEEN DEFINED, REFER TO PLAN SHEET 130. BRIDGE CONTRACTOR YARD AND LAY DOWN AREA HAS BEEN DEFINED, REFER TO PLAN SHEET 130. BRIDGE CONTRACTOR SHALL COORDINATE THEIR WORK CLOSELY WITH THE CONTRACTOR FOR THE LPOE.

THE CONTRACTOR WILL BE REQUIRED TO ISSUE ALL OF HIS EMPLOYEES WORKING ON THIS PROJECT IDENTIFICATION BADGES. ALL CONTRACTOR EMPLOYEES WORKING ON THIS PROJECT WILL BE REQUIRED TO DISPLAY THEIR IDENTIFICATION BADGES ON THEIR PERSON AT ALL TIMES WHEN ON THE CONSTRUCTION SITE.

CONTRACTOR TO COMPLETE EMBANKMENT AND ABUTMENT #14 AT EARLIEST POSSIBLE DATE BUT NO LATER THAN 9 JULY 2012



**SEA** STRUCTURAL ENGINEERING ASSOCIATES, INC.  
CONSULTING ENGINEERS

TORNILLO-GUADALUPE  
NEW INTERNATIONAL BRIDGE

GENERAL NOTES &  
SPECIFICATION DATA SHEETS

DWN.	DESIGN	DATE	SHEET NO.
A.M.H.	H.A.A.	1-7-11	5A
DWG. CK.	DESIGN CK.	DRAWING FILE	
H.A.A.	M.C.	03-044C	



⑤ ADDENDUM 02-15-12  
 ⚠ REVISION 5-20-11

FIRM REG. NO. F-199

ITEM 132-EMBANKMENT

EMBANKMENT SOIL MATERIAL SHOULD MEET THE REQUIREMENTS OF A TYPE C SOIL MATERIAL. APPROVED TYPE C EMBANKMENT SOIL MATERIALS SHALL BE GRANULAR CRUSHED STONE, SANDY GRAVEL MATERIALS OR GRAVELLY CLAYEY SANDS FREE OF CLAY LUMPS, DELETERIOUS MATERIALS, ORGANIC MATERIAL COBBLES OR BOULDERS OVER 3 INCHES IN NOMINAL SIZE. TYPE C MATERIALS SHOULD HAVE A LIQUID LIMIT NO GREATER THAN 40, PLASTICITY INDEX BETWEEN 6 TO 15, EXHIBIT AN OPTIMUM DRY DENSITY OF AT LEAST 125 POUNDS PER CUBIC FOOT (pcf) AND MEET THE REQUIREMENTS OF A TRIAXIAL CLASS 4 OR BETTER PER TxDOT TEST METHOD TEX-117E. TYPE C EMBANKMENT SOILS SHALL BE CLASSIFIED AS A-2-4, A-2-5, A-2-6 AND A-2-7 MATERIALS IN ACCORDANCE WITH AASHTO M-145 OR BE CLASSIFIED AS SC, SC-SM, GC, GM AND GC-GM IN ACCORDANCE WITH THE UNIFIED SOIL CLASSIFICATION SYSTEM (USCS). TYPE C SOIL MATERIALS SHALL ALSO MEET THE SIEVE ANALYSIS REQUIREMENTS TABULATED BELOW.

TY C EMBANKMENT GRADATION REQUIREMENTS

SIEVE SIZE (SQUARE OPENING)	% PASSING BY WEIGHT
3-INCH	100
1-3/4-INCH	90-100
3/4-INCH	70-100
NO. 4	35-55
NO. 200	13-45

SOILS CLASSIFIED AS SP,SP-SM,CH,CL,MH,ML,OH,OL AND PT IN ACCORDANCE WITH THE USCS SHALL NOT BE CONSIDERED APPROVED TYPE C EMBANKMENT SOIL MATERIALS.

ITEM 204-SPRINKLING (DUST CONTROL)

THIS ITEM WILL BE USED TO PREVENT WIND EROSION OF EXPOSED SOIL AS REQUIRED, OR AS DIRECTED.

THE CONTRACTOR IS RESPONSIBLE TO CONTROL BLOWING DUST DURING EARTHWORK ACTIVITIES SUBSIDIARY TO ITEM 132.

ITEM 204- SHALL ONLY BE UTILIZED UNDER EXCEPTIONAL CASES NOT COVERED UNDER THE PERTINENT EARTHWORK ITEMS AS DIRECTED FOR DUST CONTROL. PAYMENT FOR THIS ITEM SHALL BE CONSIDERED SUBSIDIARY TO ITEM 132.

ITEM 275- CEMENT TREATMENT (ROAD MIXED): FIVE PERCENT (5%) BY UNIT WEIGHT OF CEMENT SHALL BE ADDED TO THE TOP SIX INCHES (6") OF EMBANKMENT MATERIAL SUBGRADE. AFTER APPLICATION OF CEMENT AND MIXING IS COMPLETED, COMPACT THE TREATED SUBGRADE TO 95% DENSITY, USING DENSITY CONTROL PROCEDURES.

ITEM 416-DRILLED SHAFT FOUNDATIONS

DRILLED SHAFT CONSTRUCTION AT ALL ABUTMENTS AND INTERIOR BENTS SHALL BE BY AN APPROVED METHOD, AS DIRECTED.

ALL FOUNDATIONS SHALL BE STAKED BY THE CONTRACTOR AND LOCATIONS APPROVED PRIOR TO DRILLING OPERATIONS IN ORDER TO ENSURE THAT THERE IS NOT A CONFLICT WITH UTILITY LINES.

ITEM 421-HYDRAULIC CEMENT CONCRETE

TYPE II CEMENT SHALL BE USED IN CLASS A,B,C & S CONCRETE BUT MAY BE USED IN ALL OTHER CONCRETE.

CONCRETE TRUCKS WILL NOT BE ALLOWED TO WASH-OUT OR DISCHARGE SURPLUS CONCRETE OR DRUM-WASH WATER ON THE PROJECT SITE, EXCEPT AT APPROVED LOCATIONS WHERE APPROVED EARTHEN BERMS HAVE BEEN CONSTRUCTED FOR THAT PURPOSE.

PERSONNEL HANDLING, TRANSPORTING AND CURING OF ALL CONCRETE TEST SPECIMENS WILL BE ACI CERTIFIED AND APPROVED BY THE COUNTY OF EL PASO. IN ADDITION, EQUIPMENT WILL BE CERTIFIED PRIOR TO THEIR USE. ALL CONCRETE QUALITY TESTS AND MOLDING OF ALL TEST SPECIMENS SHALL BE PERFORMED BY THE COUNTY OF EL PASO EMPLOYEES OR ITS CONSULTANTS CERTIFIED PERSONNEL.

FURNISH AND MAINTAIN ALL TEST MOLDS MEETING THE REQUIREMENTS OF TEST METHOD TEX-447-A AND TEX-448-A. THE TEST MOLDS MUST BE READY FOR USE WHEN NEEDED. CURE CONCRETE TEST BEAM AND PROVIDE PERSONNEL TO REMOVE TEST SPECIMENS FROM MOLDS AND TRANSPORT THEM TO CURING LOCATION, AS DIRECTED. FOR ALL CONCRETE ITEMS, HAVE AVAILABLE A WHEELBARROW OR OTHER ACCEPTABLE CONTAINER TO USE IN SAMPLING OF CONCRETE. ALL LABOR, TOOLS, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE THE WORK WILL BE SUBSIDIARY TO THE VARIOS BID ITEMS.

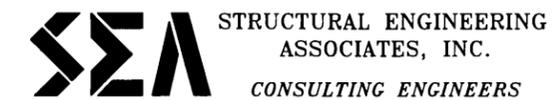
ALL CLASS "A" AND "B" CONCRETE USED FOR SAMPLING AND TESTING PURPOSES ONLY, WILL BE DEFINED AS MISCELLANEOUS CONCRETE.

ALL CONCRETE DESIGNS AND CONCRETE AGGREGATE SOURCES SHALL BE APPROVED.

7-DAY JOB CONTROL TESTS WILL BE IN ACCORDANCE WITH TEST METHOD TEX-418-A "COMPRESSIVE STRENGTH OF CYLINDRICAL CONCRETE SPECIMENS".

5) ADDENDUM 02-15-12

4) ADDENDUM NO.4 11-8-11

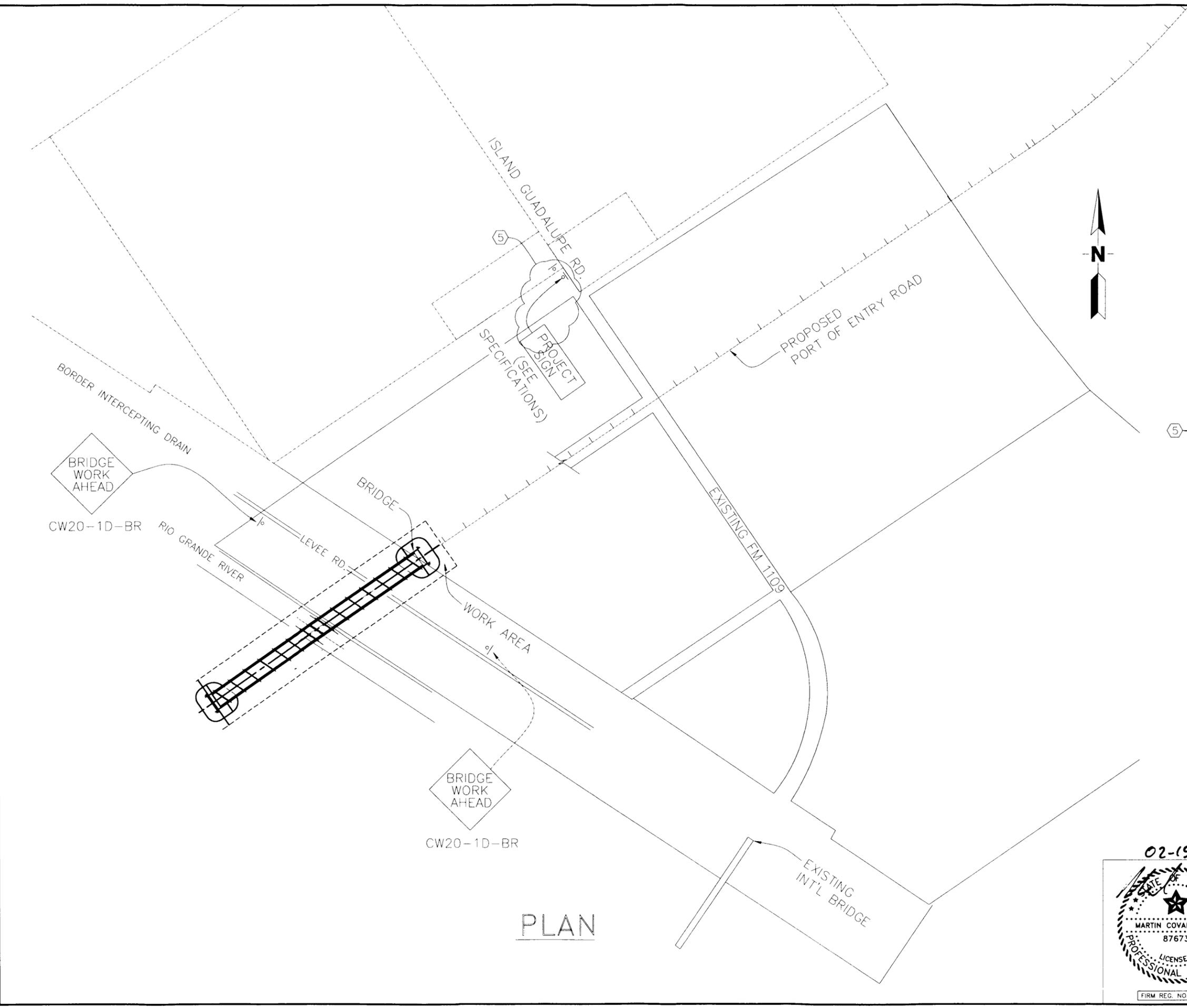


TORNILLO-GUADALUPE  
NEW INTERNATIONAL BRIDGE

GENERAL NOTES &  
SPECIFICATION DATA SHEETS

DWN.	DESIGN	DATE	SHEET NO.
A.M.H.	H.A.A.	1-7-11	5B
DWG. CK.	DESIGN CK.	DRAWING FILE	
H.A.A.	M.C.	03-044C	





**NOTES**

1. SIGNS, BARRICADES, AND CHANNELIZATION DEVICES MAY NOT BE SHOWN AT A PRECISE OR MEASURED POSITION. THE CONTRACTOR SHALL PLACE THE BARRICADES, DEVICES AND/OR SIGNS WITH APPROVAL IN POSITIONS TO MEET FIELD CONDITIONS.
2. PAYMENT FOR SIGNS, BARRICADES, CHANNELIZING DEVICES, SPECIAL SIGNS SHALL BE SUBSIDIARY TO VARIOUS BID ITEMS
3. ANY CONFLICTING SIGNS SHALL BE COVERED, AS DIRECTED.
4. REFER TO SHEET 130 FOR BRIDGE CONTRACTOR ACCESS ROUTES.

**LEGEND:**

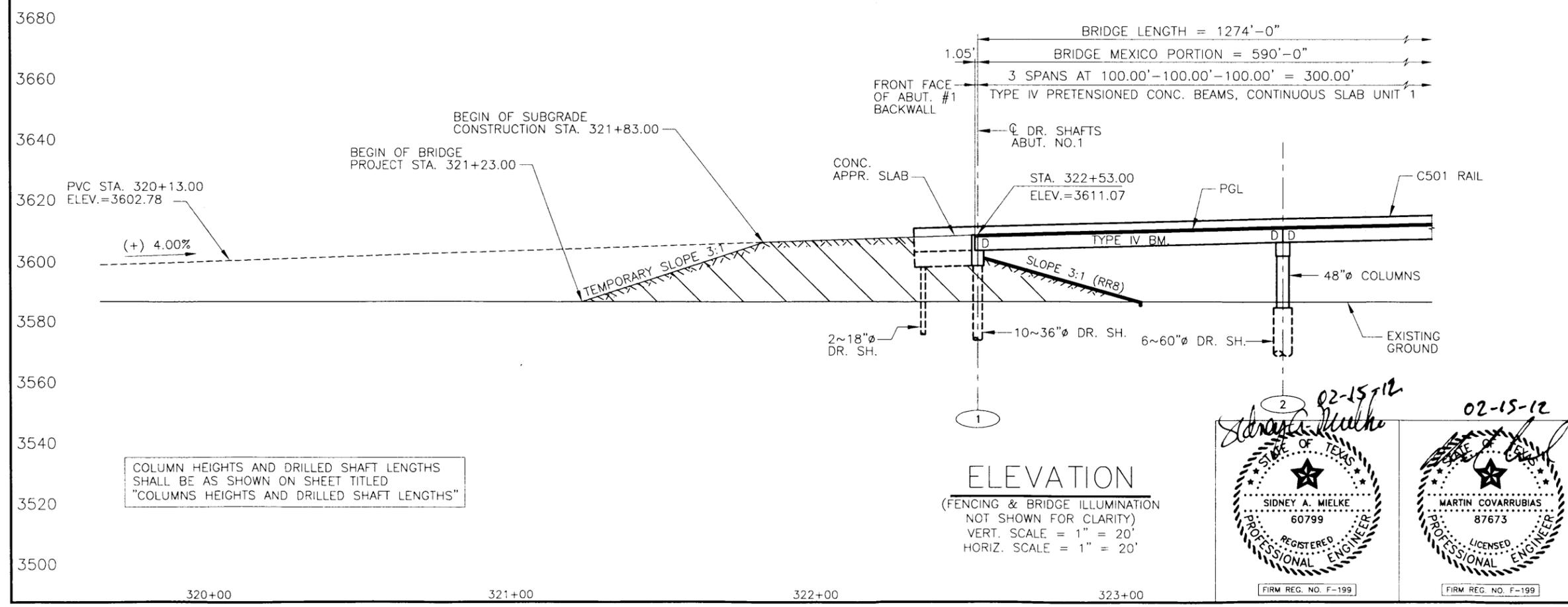
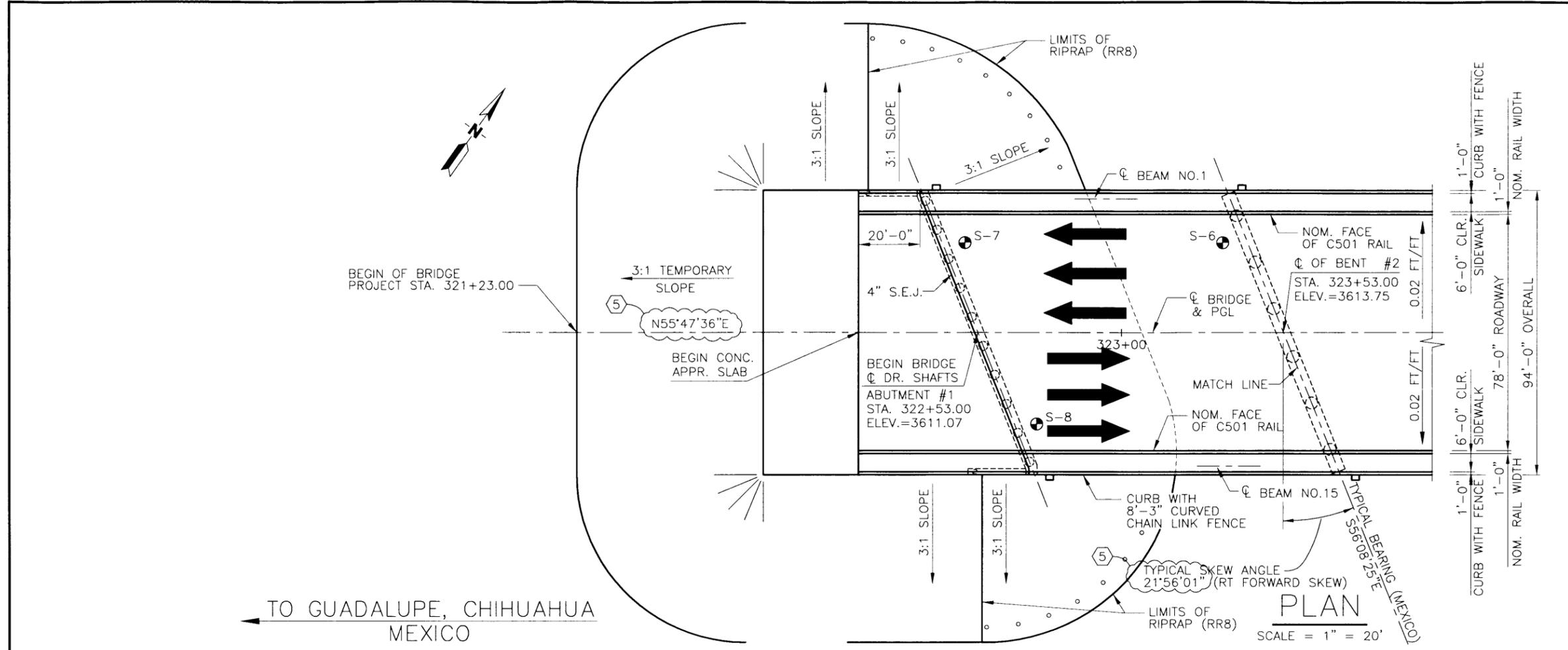
- PROPOSED SIGN
- |— PROPOSED TYPE III BARRICADES

5 ADDENDUM 02-15-12

 <p><b>THE COUNTY OF EL PASO</b></p>														
 <p><b>STRUCTURAL ENGINEERING ASSOCIATES, INC.</b> CONSULTING ENGINEERS</p>														
<p><b>TORNILLO-GUADALUPE NEW INTERNATIONAL BRIDGE</b></p>														
<p><b>BARRICADE PLAN (U.S. SIDE)</b></p>														
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">DWN</td> <td style="width: 25%;">DESIGN</td> <td style="width: 25%;">DATE</td> <td style="width: 25%;">SHEET NO</td> </tr> <tr> <td>A.M.H.</td> <td>H.A.A.</td> <td>1-7-11</td> <td rowspan="2" style="text-align: center; vertical-align: middle;">6</td> </tr> <tr> <td>DWG. CK</td> <td>DESIGN CK</td> <td>DRAWING FILE</td> </tr> <tr> <td>H.A.A.</td> <td>M.C.</td> <td>03-044C</td> </tr> </table>	DWN	DESIGN	DATE	SHEET NO	A.M.H.	H.A.A.	1-7-11	6	DWG. CK	DESIGN CK	DRAWING FILE	H.A.A.	M.C.	03-044C
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A.M.H.	H.A.A.	1-7-11	6											
DWG. CK	DESIGN CK	DRAWING FILE												
H.A.A.	M.C.	03-044C												



PLAN



ADDENDUM NO.5 02-15-12

**THE COUNTY OF EL PASO**

**SEA** STRUCTURAL ENGINEERING ASSOCIATES, INC. CONSULTING ENGINEERS

TORNILLO-GUADALUPE NEW INTERNATIONAL BRIDGE

BRIDGE LAYOUT SPAN 1

OWN. A.M.H.	DESIGN S.A.M./H.A.A.	DATE 1-7-11	SHEET NO. 10
DWG. CK. A.D.K.	DESIGN CK. H.A.A.	DRAWING FILE 03-044C	

02-15-12

02-15-12

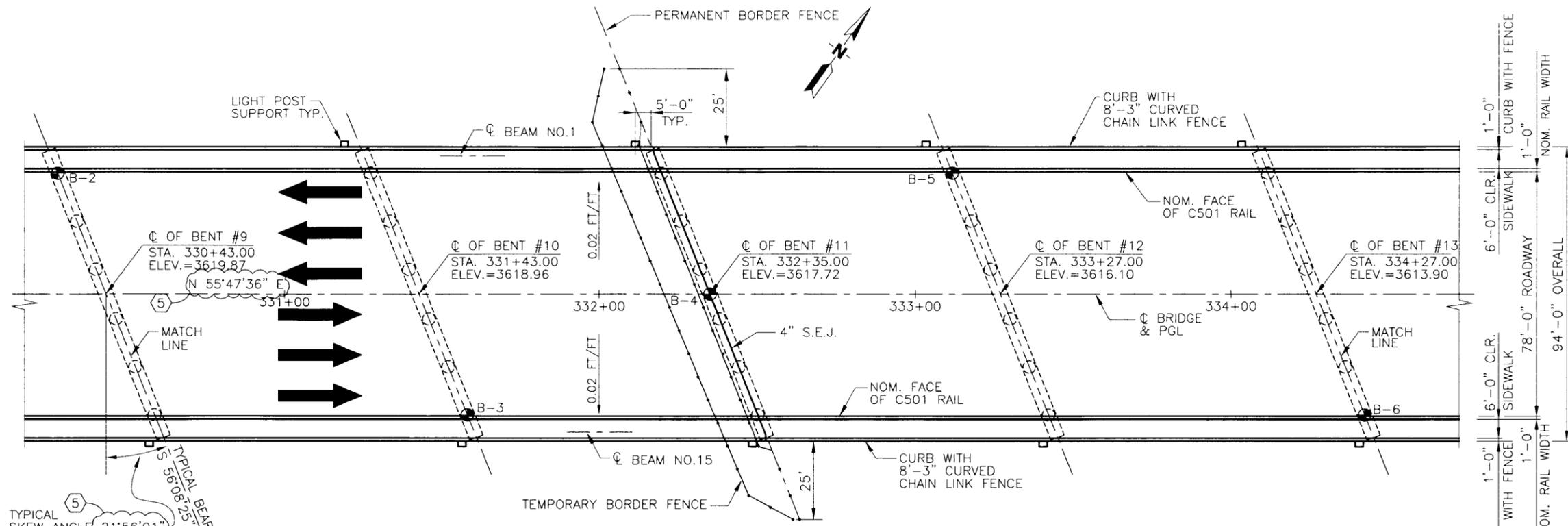
SIDNEY A. MIELKE 60799 REGISTERED PROFESSIONAL ENGINEER FIRM REG. NO. F-199

MARTIN COVARRUBIAS 87673 LICENSED PROFESSIONAL ENGINEER FIRM REG. NO. F-199

COLUMN HEIGHTS AND DRILLED SHAFT LENGTHS SHALL BE AS SHOWN ON SHEET TITLED "COLUMNS HEIGHTS AND DRILLED SHAFT LENGTHS"



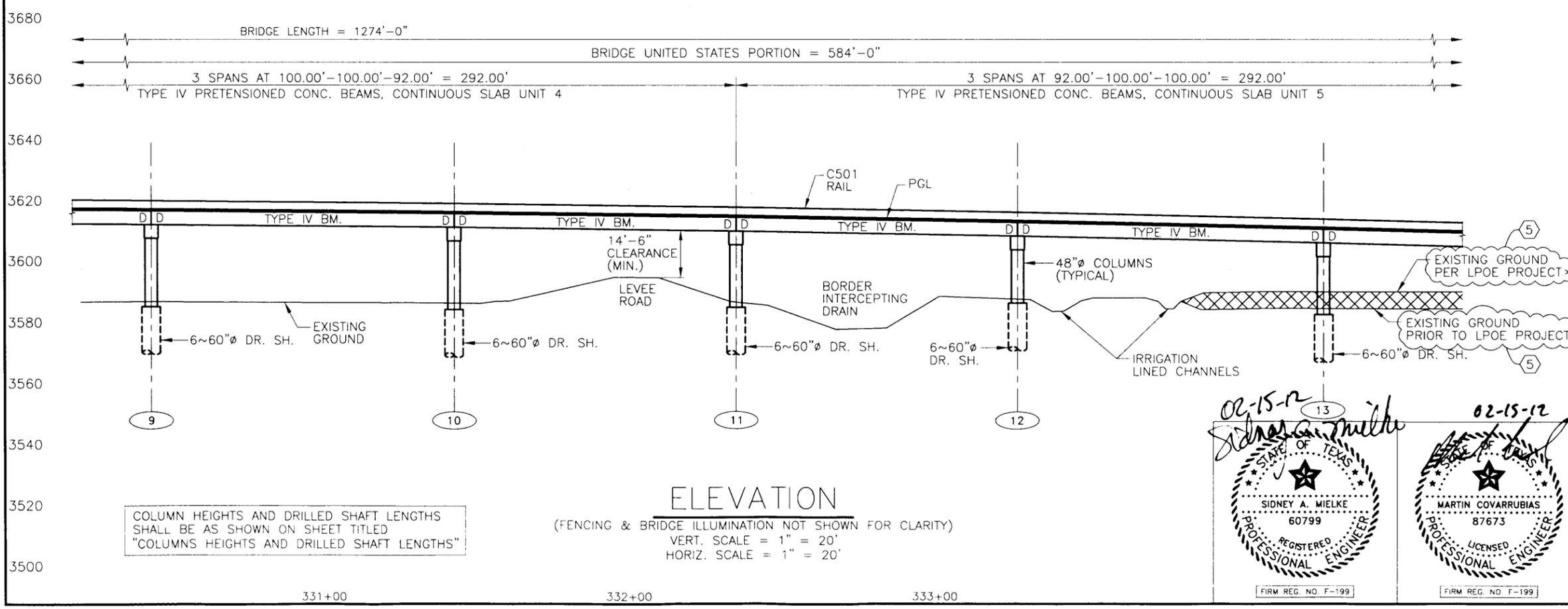




PLAN  
SCALE = 1" = 20'

TO TORNILLO, TEXAS  
UNITED STATES OF AMERICA

⊙ INDICATES CORE BORING, SEE CORE BORING SHTS.



ELEVATION  
(FENCING & BRIDGE ILLUMINATION NOT SHOWN FOR CLARITY)  
VERT. SCALE = 1" = 20'  
HORIZ. SCALE = 1" = 20'

\* ELEV = 3592.52' OR 1095m  
REFER TO SHEETS 15A-15D  
FOR ADDITIONAL DETAILS

5 ADDENDUM NO.5 02-15-12

THE COUNTY OF EL PASO

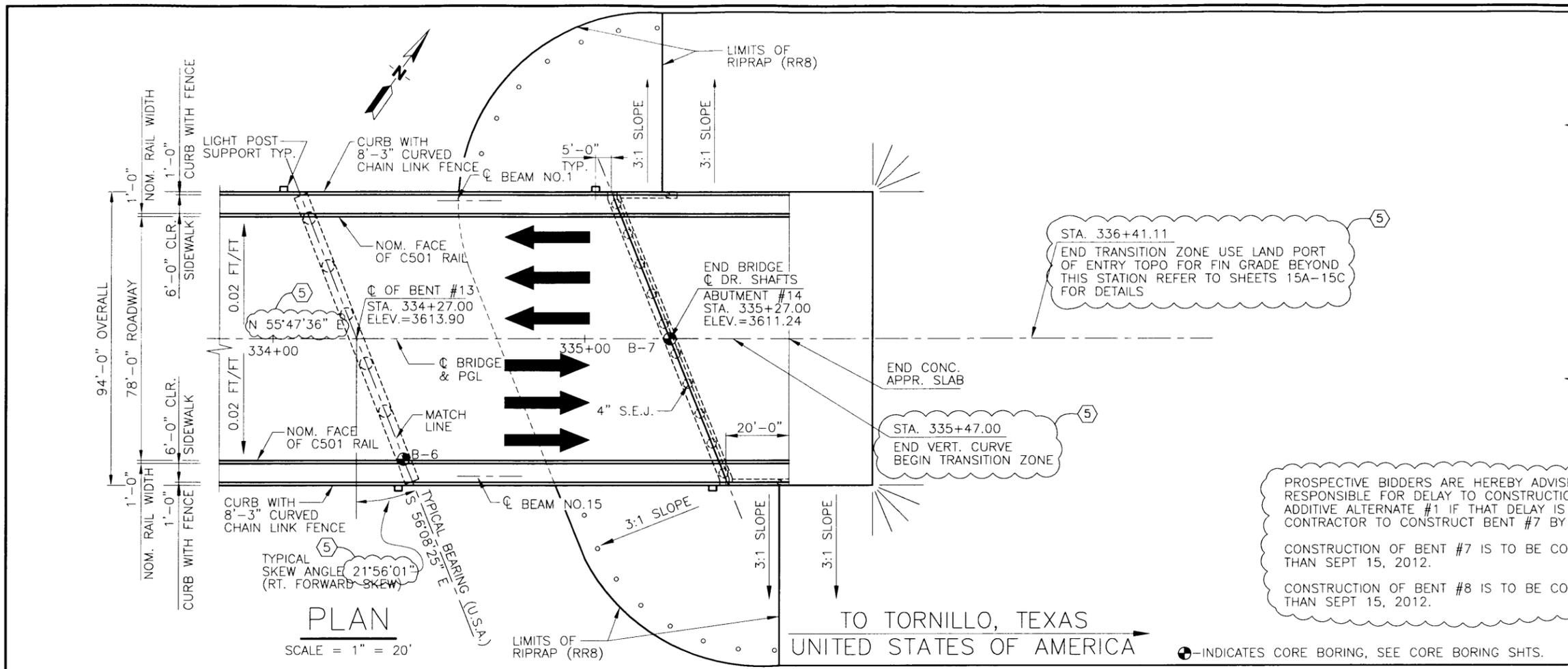
SEA STRUCTURAL ENGINEERING ASSOCIATES, INC. CONSULTING ENGINEERS

TORNILLO-GUADALUPE  
NEW INTERNATIONAL BRIDGE

BRIDGE LAYOUT  
SPANS 9 THRU 12

02-15-12  
SIDNEY A. WIELKE 60799 REGISTERED PROFESSIONAL ENGINEER  
02-15-12  
MARTIN COVARRUBIAS 87673 LICENSED PROFESSIONAL ENGINEER  
FIRM REG. NO. F-199

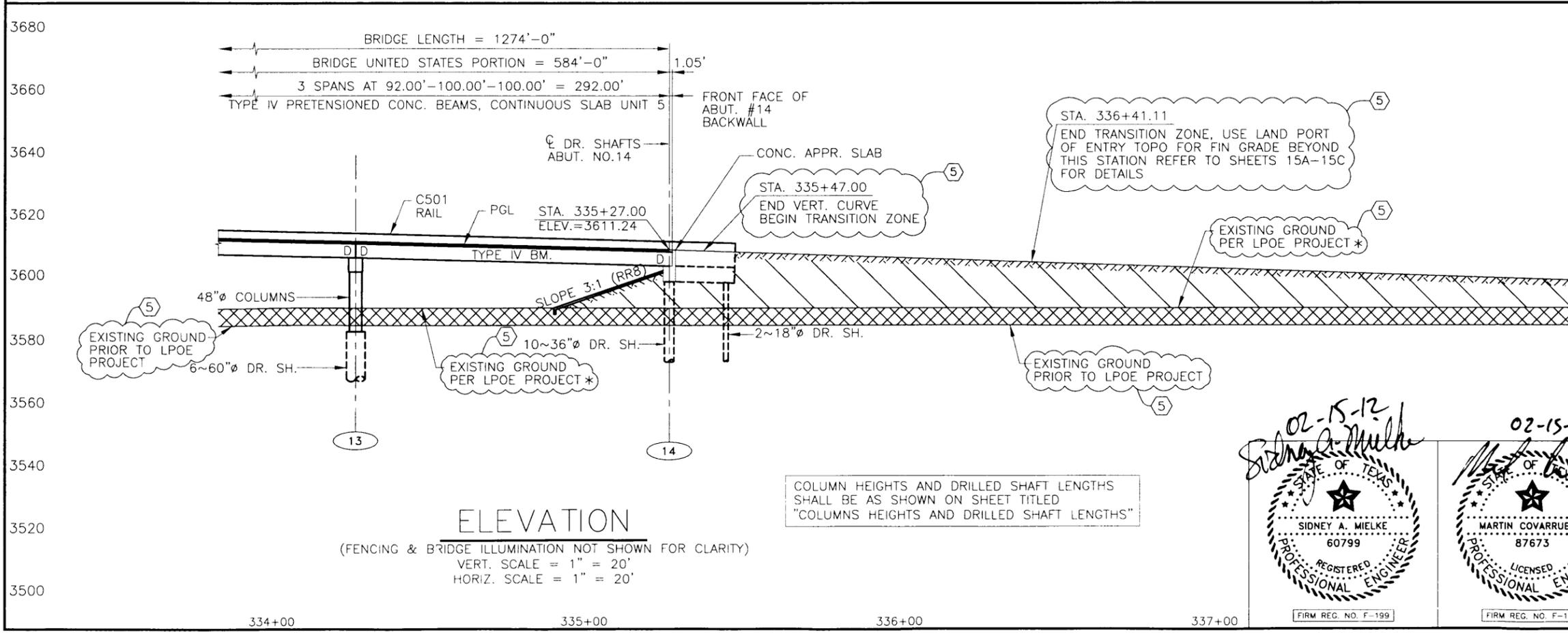
DWN. A.M.H.	DESIGN S.A.M./H.A.A.	DATE 1-7-11	SHEET NO. 13
DWG. CK. A.D.K.	DESIGN CK. H.A.A.	DRAWING FILE 03-044C	



NOTE:  
 MATERIAL FOR EMBANKMENT MUST BE OBTAINED FROM OFF SITE SOURCES.  
 CONTRACTOR TO COMPLETE EMBANKMENT AND ABUTMENT #14 AT EARLIEST POSSIBLE DATE BUT NO LATER THAN 9 JULY 2012

PROSPECTIVE BIDDERS ARE HEREBY ADVISED THAT THE U.S. CONTRACTOR WILL NOT BE HELD RESPONSIBLE FOR DELAY TO CONSTRUCTION OF THE INTERNATIONAL SPAN THAT IS INCLUDED IN ADDITIVE ALTERNATE #1 IF THAT DELAY IS CAUSED SOLELY BY FAILURE OF THE MEXICAN CONTRACTOR TO CONSTRUCT BENT #7 BY THE DATE INDICATED BELOW:  
 CONSTRUCTION OF BENT #7 IS TO BE COMPLETED BY THE MEXICAN CONTRACTOR BY NO LATER THAN SEPT 15, 2012.  
 CONSTRUCTION OF BENT #8 IS TO BE COMPLETED BY THE U.S. CONTRACTOR BY NO LATER THAN SEPT 15, 2012.

- 5 ADDENDUM NO.5 02-15-12
- 4 ADDENDUM NO.4 11-8-11
- REVISION 5-20-11



\* ELEV = 3592.52' OR 1095m REFER TO SHEETS 15A-15D FOR ADDITIONAL DETAILS

02-15-12  
 Sidney A. Mielke  
 REGISTERED PROFESSIONAL ENGINEER  
 FIRM REG. NO. F-199

02-15-12  
 Martin Covarrubias  
 LICENSED PROFESSIONAL ENGINEER  
 FIRM REG. NO. F-199

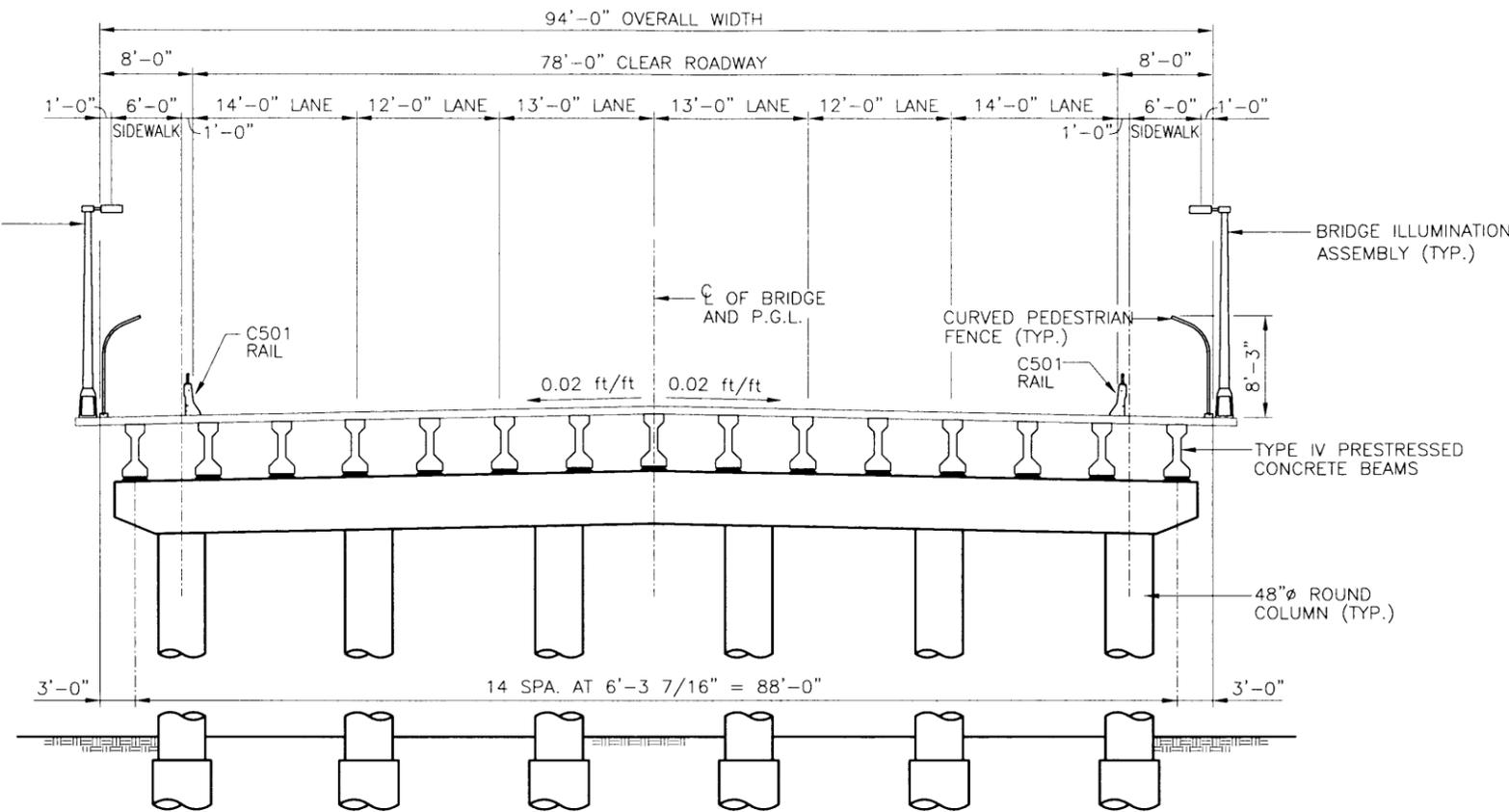
**THE COUNTY OF EL PASO**

**SEA** STRUCTURAL ENGINEERING ASSOCIATES, INC. CONSULTING ENGINEERS

TORNILLO-GUADALUPE NEW INTERNATIONAL BRIDGE

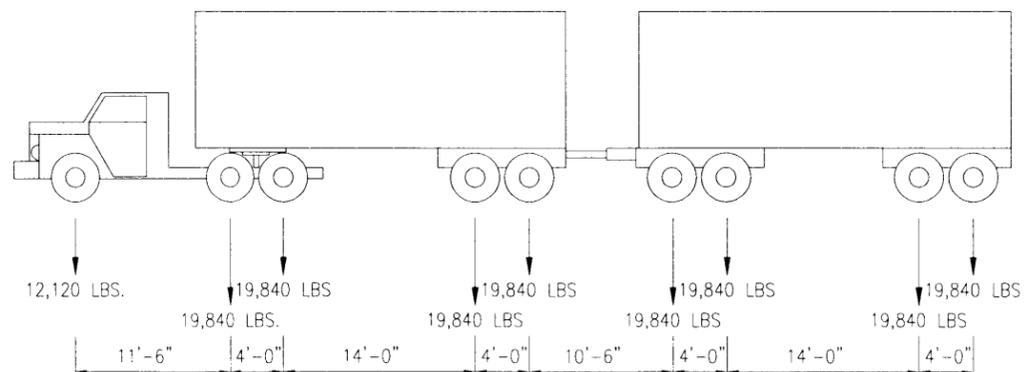
BRIDGE LAYOUT SPAN 13

DWN. A.M.H.	DESIGN S.A.M./H.A.A.	DATE 1-7-11	SHEET NO. 14
DWG. CK. A.D.K.	DESIGN CK. H.A.A.	DRAWING FILE 03-044C	



5  
REVISED INTERIOR BENT DETAILS WILL BE ISSUED AT A LATER DATE, VIA ADDENDUM OR PLAN REVISION, TO ACCOUNT FOR PGL BEARING ADJUSTMENT WITHIN THIS ADDENDUM NO.5.

**TYPICAL TRANSVERSE SECTION**



**BRIDGE DESIGN LOADING = 170,840 LBS.  
T3-S2-R4 TRUCK**

**GENERAL NOTES:**

-DESIGN: HS 25 LOADING IN ACCORDANCE WITH AASHTO 1996 STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES OR THE ABOVE DETAILED T3-S2-R4 TRUCK, WHICHEVER CONTROLS.

VERTICAL CONTROL POINTS	
① IBWC BENCH MARK (ON LEVEE ROAD) BRONZE PLATE IN CONC. MONUMENT	
<u>METRIC</u>	<u>ENGLISH</u>
y = 3,210,330.109 (m)	y = 10,532,579.098 (ft.)
x = 147,509.354 (m)	x = 483,954.575 (ft.)
ELEV = 1096.295 (m)	ELEV = 3596.768 (ft.)
② IBWC BENCH MARK (ON LEVEE ROAD) BRONZE PLATE IN CONC. MONUMENT	
<u>METRIC</u>	<u>ENGLISH</u>
y = 3,210,104.499 (m)	y = 10,531,838.910 (ft.)
x = 147,849.237 (m)	x = 485,069.675 (ft.)
ELEV = 1096.025 (m)	ELEV = 3595.883 (ft.)

5)ADDENDUM NO.5 02-15-12

 **THE COUNTY OF EL PASO**

 **STRUCTURAL ENGINEERING ASSOCIATES, INC.**  
CONSULTING ENGINEERS

TORNILLO-GUADALUPE  
NEW INTERNATIONAL BRIDGE

TYPICAL TRANSVERSE SECTION

02-15-12  
*S. A. Mielke*

02-15-12  
*M. Covarrubias*

 **SIDNEY A. MIELKE**  
60799  
REGISTERED PROFESSIONAL ENGINEER  
FIRM REG. NO. F-199

 **MARTIN COVARRUBIAS**  
87673  
LICENSED PROFESSIONAL ENGINEER  
FIRM REG. NO. F-199

DWN. A.M.H.	DESIGN S.A.M.	DATE 1-7-11	SHEET NO. 15
DWG. CK. H.A.A.	DESIGN CK. H.A.A.	DRAWING FILE 03-044C	