

**CITY OF SAN ANTONIO  
DEPARTMENT OF CAPITAL IMPROVEMENTS  
MANAGEMENT SERVICES**

**PROJECT NAME: CITY-WIDE BRIDGE REPLACEMENT PROGRAM:  
RITTIMAN AT SALADO CREEK  
PROJECT NO. 40-0008**

DATE: February 10, 2011

**ADDENDUM NO. 2**

This addendum is to be included in and considered part of the plans and specifications for the above named project. The contractor shall be required to sign an acknowledgment of the receipt of this addendum at the time it is received. The items of the plans pertaining to this project shall be changed as follows:

1. Pricing Form 025: Item number 539.1 and 539.2 are switched to 535.1 and 535.2 . New pricing form is provided. The following quantities changed: 108.1, 108.2, 203.1, 205.2 (11"), 205.4 (2 ½"), 525.1. The following Items were added: 205.2 (5"), 205.4 (1 ½"). The Estimates and Quantities sheet is revised.
2. The Bus Pad Detail: The index of sheets has been revised to show its inclusion in the plan set. The Bus Pad Detail has also been included in this addendum.
3. SW3P: sheets 9, 44 and 45 are revised to clarify responsibility for SW3P and Care of Water Plan
4. Concrete Traffic Barrier: sheets 10, 12, 13, 44 and 45 are revised to show an additional 120 of barrier.
5. Hike and Bike trail reconstruction: Sheets 10, 13 and 99 are revised to show quantities for the reconstruction of the trail.
6. Reinforcing bar sizes for the bridge sidewalk: Sheets 240, 241, 242, 243, 244 are revised to show the bar sizes of X, Y and Z. Sheet 245 is revised to clarify the attachment of the sidewalk to the approach slab.

End of Addendum #2, consisting of this page, bid questions (2 pages), revised form 025 (4 pages) and 15 Plan Sheets, Addendum No.2 Acknowledgement Receipt (1 page).

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Amy Stone, PE  
Structural Engineering Associates, Inc  
phone: 210-735-9202  
San Antonio, Texas

CITY OF SAN ANTONIO  
CAPITAL IMPROVEMENTS MANAGEMENT SERVICES  
CONTRACT SERVICES DIVISION

RECEIPT OF ADDENDUM NUMBER 2 IS HEREBY ACKNOWLEDGED FOR THE PLANS AND SPECIFICATIONS ASSOCIATED WITH THE CONSTRUCTION OF THE **CITY-WIDE BRIDGE REPLACEMENT PROGRAM: RITTIMAN AT SALADO CREEK PROJECT NO. 40-00008** FOR WHICH BIDS WILL BE OPENED ON **FEBRUARY 16<sup>TH</sup>, 2011.**

THIS ACKNOWLEDGEMENT MUST BE SIGNED AND RETURNED WITH THE BID PACKAGE.

Company Name: \_\_\_\_\_

Address: \_\_\_\_\_

City/State/Zip Code: \_\_\_\_\_

Date: \_\_\_\_\_

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Signature

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Print Name/Title

**City Wide Bridge Replacement Program**  
**February 10<sup>th</sup>, 2011**

**City of San Antonio Capital Improvements Management Services**  
**Bid Questions**

- 1- Can we supply proof of prequalification with the State of Texas in lieu of the City of San Antonio prequalification forms? Only the City's 030 form should be included with the submitted bid.
- 2- Can you provide the design details for the existing bridge slab, so we can evaluate the necessity for the edge of slab support? No. Existing plans are unavailable for review. See item #11.
- 3- Plan sheets 91-92 indicate the use of Low Profile CTB, but sheets 21 and 228 seem to indicate Jersey style CTB. Can you confirm that the Low Profile CTB is continuous across the existing bridge? A CTB is required on the phased construction of the bridge. All barrier is quantified as "CONCRETE TRAFFIC BARRIER (PORTABLE)". The TCP typical sections show where the "Jersey style CTB" (F-Shape) is required to be secured to the deck. Sheet 267 shows the standard detail for the F-Shape Barrier.
- 4- Will the City provide the Portable CTB for this project and if so, what is the stockpile location? City will not provide Portable CTB for the project.
- 5- Assuming there is no overlay for the bridge and approach slab, would the height of the bridge curb be 7" as shown on sheet 110 in order to match the concrete curb detail? Yes.
- 6- Will the use of prestressed deck panels be allowed? PMD? Yes.
- 7- Sheet 228 indicates there is only 4'-0" between the Phase I slab joint and the centerline/PGL of Rittiman. Most conventional over hang jacks are 54" plus half the width of the "A" beam equals 5'-0", which will have the overhang formwork extending 1'-0" past the Rittiman Centerline/PGL into the travel lane of the existing bridge. Will this be allowed? If not, how far can our formwork extend past the Phase Joint? The construction may not intrude on the travel lane. The front of the rail is the edge of the travel lane.
- 8- Is there a summary that breaks down the pay quantity for each MSE wall? No
- 9- Can you verify that a moment slab is required for the coping that receives C221 railing? Yes, a moment slab is required.
- 10- What is the street classification for this project? Rittiman is classified as a Secondary Arterial on the 2010 Major Thoroughfare Plan
- 11- The quantity summary on sheet 11 indicates 67,900 lbs of structural steel in conjunction with the bridge bents. What is this material? The Misc Struct Steel is intended to capture the cost of the slab edge support system.
- 12- Is an Anchor Slab required for the railing on top of the retaining wall? An anchor slab is required per the TxDOT standard. The anchor slab for the rail on top of the retaining wall is subsidiary to the retaining wall price.
- 13- There are several standards included in the plans regarding Lighting Brackets, but I have yet to find any brackets shown on the plans. Can you confirm there are no lighting brackets on the bridge or retaining walls? There is one lighting bracket on sheet 104.
- 14- What type of finish will be required for the bridge deck and approach slabs? Concrete Surface Treatment Class I.
- 15- Will the bid be postponed due to the unavailability of bid document 025? No, the bid will not be postponed.

## PRE-BID MEETING QUESTIONS

### **Project: City-Wide Bridge Replacement Project – Rittiman at Salado**

A pre-bid meeting was held on February 1, 2011 for the above mentioned project. The following is a list of responses to questions asked during this meeting regarding the Small Business Economic Development Advocacy (SBEDA) Program.

1. **Question:** Are Letters of Intent due for all subcontractors at the time of response?
2. **Response:** Yes. The City's new SBEDA Ordinance 2010-06-17-0531 states that documentation confirming a subcontractor commitment to perform work shall be submitted at the time of response.
3. **Question:** Is an original signature required for each Letter of Intent submitted at the time of response?
4. **Response:** No. Because Letters of Intent may be faxed or emailed to a prospective Respondent, electronic or faxed signatures on Letters of Intent are therefore acceptable.
5. **Question:** What is the "change of subcontractors" process under the new ordinance?
6. **Response:** Once awarded, a Prime Contractor must submit a Change to Utilization Plan Form through the CIMS Small Business Division notifying and requesting written approval from the Small Business Office (SBO) in advance of any change in Subcontractors. The Prime Contractor must notify Subcontractors of proposed changes prior to submitting the Change to Utilization Plan Form. The Prime Contractor must undertake Good Faith Efforts to replace certified SBEs with one or more similarly certified SBE Subcontractors. If the Prime Contractor is unable to meet the original subcontracting goals placed on a contract, the Prime Contractor must also submit a Subcontracting Waiver Request Form.
7. **Question:** If the City will allow 20 days for the low bidder to supply the appropriate insurance and bonds, why could there not be a similar 10 day period to provide appropriate details for the SBE commitment, as this is how TxDOT handles their DBE commitments? If the necessary details are not provided in the post bid time frame, the City keeps the contractors' bid security.
8. **Response:** As outlined by the City's revised SBEDA ordinance approved by City Council on June 17, 2010, a prospective Respondent must submit details for SBE commitments at the time of response. Please refer to Ordinance No. 2010-06-17-0531 for more information.
9. **Question:** What will be the outcome if the low bidder does not meet the SBEDA requirements?
10. **Answer:** The response will be deemed non-Responsive, as specified in City Ordinance No. 2010-06-17-0531.
11. **Question:** Must the Prime-Contractor buy-out or subcontract the SBEDA goals if he or she meets and or exceeds the prescribed goals (minority/small/disadvantaged) and the scope of the project fully fits within the Prime-Contractor's normal every-day in house operations?
12. **Answer:** Yes. This solicitation was assigned a 15% SBE Subcontracting goal. As a result, the S/M/WBE status of a prospective Respondent is not applicable. The 15% SBE Subcontracting goal is mandatory of all Prime Contractors responding to this solicitation.

CITY OF SAN ANTONIO  
025 UNIT PRICING FORM

PROJECT NAME: RITTIMAN ROAD OVER SALADO CREEK  
PROJECT NO. 40-0008

ALT. NO.	ITEM NO.	DESC CODE	S.P. NO.	BID ITEM DESCRIPTION	UNIT OF MEASURE	APPROX. QTY.	UNIT BID PRICE	AMOUNT	ITEM SEQUENCE NO.
	100.1			MOBILIZATION	LS	1			1
	100.2			INSURANCE AND BOND	LS	1			2
	101.1			PREPARING RIGHT-OF-WAY	LS	1			3
	103.1			REMOVE CONCRETE CURB	LF	3,933			4
	103.3			REMOVE CONCRETE SIDEWALKS & DRIVEWAYS	SF	25,933			5
	103.4			REMOVE MISCELLANEOUS CONCRETE	SF	14,712			6
	104.1			STREET EXCAVATION	CY	1,266			7
	105.1			CHANNEL EXCAVATION	CY	7,060			8
	107.1			EMBANKMENT (FINAL) (DENS CONT)(TY B)	CY	13,158			9
	108.1			LIME TREAT SUBGRADE (6" COMPACTED DEPTH)	SY	9,056			10
	108.2			LIME	TON	149			11
	203.1			TACK COAT	GAL	482			12
	205.2			HOT MIX ASPHALTIC PAVEMENT, TYPE B (11" COMP. DEPTH)	SY	9,056			13
	205.2			HOT MIX ASPHALTIC PAVEMENT, TYPE B (12" COMP. DEPTH)	SY	1,031			14
	205.2			HOT MIX ASPHALTIC PAVEMENT, TYPE B (6" COMP. DEPTH)	SY	180			15
	205.2			HOT MIX ASPHALTIC PAVEMENT, TYPE B (5" COMP. DEPTH)	SY	250			
	205.4			HOT MIX ASPHALTIC PAVEMENT, TYPE D (2 1/2" COMP. DEPTH)	SY	8,018			16
	205.4			HOT MIX ASPHALTIC PAVEMENT, TYPE D (1 1/2" COMP. DEPTH)	SY	250			
	208.1			SALVAGING, HAULING & STOCKPILING RECLAIMABLE ASPHALTIC PAVEMENT(2"	SY	4,283			17
	208.1			SALVAGING, HAULING & STOCKPILING RECLAIMABLE ASPHALTIC PAVEMENT(6"	SY	1,956			18
	209.1			CONCRETE PAVEMENT (10" DEEP) (BUS PAD)	SY	392			19
	401.1		401	REINFORCED CONCRETE PIPE (CLASS III) (24" DIA)	LF	798			20
	401.1		401	REINFORCED CONCRETE PIPE (CLASS III) (30" DIA)	LF	51			21
	403.1		403	JUNCTION BOX 4'X4'X4'	EA	3			22
	403.7		403	CURB INLET TY C-I (10 FT)	EA	1			23
	465			INLET (COMPL) (CURB) (TY C) (SA DIST)	EA	2			24
	465			INLET EXT (TY C-E) (SA DIST)	EA	1			25
	465			INLET (COMPL) (TRAFFIC) (TY X-2)	EA	1			26
	467			SET (TY II) (24 IN) (RCP) (3:1) (C)	EA	3			27
	500.1			CONCRETE CURBING	LF	3,540			28
	502.1		502	CONCRETE SIDEWALKS	SY	1,646			29
	503.2		503	PORTLAND CEMENT CONC DRIVEWAYS - COMMERCIAL	SY	928			30
	504.2			CONCRETE DIRECTIONAL ISLAND	SY	37			31
	505.1		505	CONCRETE RIPRAP (5" THICK)	SY	3,457			32
	507.5			GATES-VEHICULAR	OPEN	2			33
	515.1			TOPSOIL	CY	137			34
	520.1		520	HYDROMULCHING (RESIDENTIAL OR COMMERCIAL)	SY	1,392			35
	523.1		523	ADJUSTING VEHICULAR GATES	EA	2			36
	525.1			CONCRETE TRAFFIC BARRIER (PORTABLE)	LF	1,860			37
	530.1			BARRICADES, SIGNS AND TRAFFIC HANDLING	LS	1			38
	531.3			R1-1 STOP (30")	EA	1			39
	531.6			R1-2 YIELD (36") (HIGH DENSITY)	EA	1			40
	531.6			R2-1 SPEED LIMIT (24" X 30")	EA	1			41
	531.57			9 INCH STREET NAME BLOCK NUMBERS (VARIES X 9")	EA	3			42
	535.1			4 INCH WIDE YELLOW LINE	LF	5,720			43
	535.2			4 INCH WIDE WHITE LINE	LF	1,665			44
	535.7			24 INCH WIDE WHITE LINE	LF	16			45
	537.6			TRAFFIC BUTTON (TYPE I-C)	EA	142			46

CITY OF SAN ANTONIO  
025 UNIT PRICING FORM

PROJECT NAME: RITTIMAN ROAD OVER SALADO CREEK  
PROJECT NO. 40-0008

ALT. NO.	ITEM NO.	DESC. CODE	S.P. NO.	BID ITEM DESCRIPTION	UNIT OF MEASURE	APPROX. QTY.	UNIT BID PRICE	AMOUNT	ITEM SEQUENCE NO.
	540.1			ROCK FILTER DAMS (INSTALL/REMOVE) (TY 3)	LF	215			47
	540.6			CONSTRUCTION EXITS (INSTALL/REMOVE)	SY	233			48
	540.7			CONSTRUCTION PERIMETER FENCE	LF	400			49
	540.9			TEMPORARY SEDIMENT CONTROL FENCE	LF	1,595			50
	540.1			CURB INLET GRAVEL FILTERS	LF	228			51
	550.1			TRENCH EXCAVATION SAFETY PROTECTION	LF	218			52
	551.1			TEMPORARY SPECIAL SHORING	SF	5,857			53
	662			WRK ZN PAV MARK NON REMOV (W) 4" (SLD)	LF	6,649			54
	662			WRK ZN PAV MARK NON REMOV (Y) 4" (SLD)	LF	8,262			55
	662			WRK ZN PAV MARK REMOV (W) 4" (SLD)	LF	8,122			56
	662			WRK ZN PAV MARK REMOV (Y) 4" (SLD)	LF	11,214			57
	801.2			LEVEL IIA PROTECTIVE FENCING	LF	231			58
	801.3			LEVEL IIB PROTECTIVE FENCING	LF	14			59
	5346			ADJUSTING/ RELOCATION OF MECHANICAL VEHICULAR GATES	EA	2			60
	6264			REMOVE AND RELOCATE ILLUMINATION POLES	EA	1			61
	9506			REMOVAL AND REPLACEMENT OF WROUGHT IRON FENCE	LF	50			62
	9507			REMOVE AND RELOCATE BUSINESS SIGNS	EA	1			63
	20403			B1 TEMPORARY SPECIAL SHORING	SF	840			64
	20416			B1 DRILLED SHAFT (30 IN)	LF	420			65
	20416			B1 DRILLED SHAFT (36 IN)	LF	1,740			66
	20420		20420	B1 CL C CONC (ABUT)	CY	51			67
	20420		20420	B1 CL C CONC (BENT)	CY	731			68
	20420		20420	B1 CL S CONC (APPR SLAB)	CY	195			69
	20420		20420	B1 CL S CONC (BRIDGE SIDEWALK)	CY	297			70
	20422			B1 REINF CONC SLAB	SF	46,200			71
	20423			B1 RETAINING WALLS (MSE)	SF	11,791			72
	20425		20425	B1 PRESTR CONC BEAM (TY A)	LF	6,953			73
	20428			B1 CONC SURF TREAT (CLASS I)	SY	4,979			74
	20432			B1 RIPRAP (CONC) (5 IN)	CY	44			75
	20442		20442	B1 STR STL (MISCELLANEOUS)	LB	67,900			76
	20450		20450	B1 RAIL (TY C221)	LF	3,424			77
	20454			B1 SEALED EXPANSION JOINT (4 IN) (SEJ-P)	LF	346			78
	20496			B1 REMOV STR (BRIDGE 100-499 FT LENGTH)	EA	1			79

**SAWS - WATER BID**

ALT. NO.	ITEM NO.	DESC. CODE	S.P. NO.	BID ITEM DESCRIPTION	UNIT OF MEASURE	APPROX. QUANTITIES	UNIT BID PRICE	AMOUNT	ITEM SEQUENCE NO.
	100			Mobilization	LS	1			1
	101			Preparation of Right-of-Way	LS	1			2
	205.4			Hot Mix Asphaltic Pavement, Type D (2" Comp. Depth)	SY	410			3
	208.1			Salvaging, Hauling & Stockpiling Reclaimable Asphaltic Pavm't 2.0" Depth	SY	410			4
	511.3			Replacing with Hot Mix Asphaltic Concrete Pavement (Type B (8")/Type D (2"))	SY	635			5
	537.8			Traffic Button (Type II A-A)	EA	340			6
	535.1			4 Inch Wide Yellow Line	LF	40			7
	535.2			4 Inch Wide White Line	LF	28			8
	550			Trench Excavation Safety Protection	LF	1862			9
	818			8" PVC Waterline (Restrained)	LF	833			10
	818			12" PVC Waterline (Restrained)	LF	20			11

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ALT. NO.	ITEM NO.	DESC. CODE	S.P. NO.	BID ITEM DESCRIPTION	UNIT OF MEASURE	APPROX. QTY.	UNIT BID PRICE	AMOUNT	ITEM SEQUENCE NO.
	818			16" PVC Waterline (Restrained)	LF	1009			12
	824			Relay 1 1/2" Short Service	EA	1			13
	824			Relay 2" Short Service	EA	1			14
	828			8" Gate Valves	EA	3			15
	828			12" Gate Valves	EA	1			16
	828			16" Gate Valves	EA	3			17
	833			Existing Meter and New Meter Box Relocation	EA	2			18
	834			Fire Hydrant	EA	2			19
	836			Pipe Fittings, All Sizes and Types	TON	9.2			20
	840			8" Water Tie-ins	EA	2			21
	840			12" Water Tie-ins	EA	3			22
	840			16" Water Tie-ins	EA	2			23
	841			Hydrostatic Testing	EA	2			24
	844			2" Blowoff, Temporary	EA	5			25
	846			1" Air Release Assemblies	EA	4			26
	856.2			8" Carrier Pipe for Jacking, Boring, Tunneling	LF	52			27
	856.2			16" Carrier Pipe for Jacking, Boring, Tunneling	LF	134			28
	856.3			Casing or Liner 24"	LF	52			29
	856.3			Casing or Liner 30"	LF	134			30
	1015			1 1/2" & 2" Copper Service Line Leak/Break Repair	EA	2			31
	1020			12" Main Break/Leak Repair	EA	2			32
	1020			16" Main Break/Leak Repair	EA	2			33
	3000.14			Removal, Transp and Disposal of AC Pipe	LS	1			34
	3000.15			Asbestos Abatement Work Plan	LS	1			35

Total SAWS -  
Water Bid  
Amount:

**SAWS - Sewer Bid**

ALT. NO.	ITEM NO.	DESC. CODE	S.P. NO.	BID ITEM DESCRIPTION	UNIT OF MEASURE	APPROX. QUANTITIES	UNIT BID PRICE	AMOUNT	ITEM SEQUENCE NO.
	100			Mobilization	LS	1			1
	101			Preparation of Right-of-Way	LS	1			2
	103.1			Remove Concrete Curb	LF	60			3
	103.3			Remove Concrete Sidewalks & Driveways	SF	240			4
	205.4			Hot Mix Asphaltic Pavement, Type D (2" Comp. Depth)	SY	325			5
	208.1			Salvaging, Hauling, and Stockpiling Reclaimable Asphaltic Pavm't 2.0" Depth	SY	325			6
	500.1			Concrete Curbing	LF	60			7
	502.1			Concrete Sidewalks	SY	30			8
	511.3			Replacing with Hot Mix Asphaltic Concrete Pavement (Type B (8")/Type D (2"))	SY	725			9
	535.1			4 Inch Wide Yellow Line	LF	130			10
	535.2			4 Inch Wide White Line	LF	40			11
	550			Trench Excavation Safety Protection	LF	1579.08			12
	848			8" PVC Gravity Sanitary Sewer Line (6'-10' Cut) (SRD 26)	LF	1256.73			13
	848			10" PVC Gravity Sanitary Sewer Line (6'-10' Cut) (SRD 26)	LF	272.61			14
	848			21" PVC Gravity Sanitary Sewer Line (6'-10' Cut) (SRD 26)	LF	49.74			15



SHEET NO.	GENERAL
1	TITLE SHEET
2	SHEET INDEX
3	PROJECT LAYOUT
4	PROJECT CONTROL SHEETS
5	HORIZONTAL AND VERTICAL ALIGNMENT DATA SHEETS
6 - 7	TYPICAL SECTIONS
8 - 9	GENERAL NOTES
10	ESTIMATE AND QUANTITIES SHEETS
11	BRIDGE AND RETAINING WALL ESTIMATED QUANTITIES
12	TCP AND SW3P SUMMARY
13	GRADING SUMMARY
14	EARTHWORK SUMMARY
15	DRAINAGE SUMMARY
16	PAVEMENT MARKING, SIGNING AND DELINEATION SUMMARY

SHEET NO.	TRAFFIC CONTROL PLAN
17	SCHEDULE OF TRAFFIC CONTROL AND ADVANCED WARNING DEVICES
18	SEQUENCE OF WORK NARRATIVE
19 - 23	TRAFFIC CONTROL PLAN TYPICAL SECTIONS
24	DETOUR LAYOUT
25 - 58	TRAFFIC CONTROL PLAN LAYOUTS
59	SW3P NARRATIVE
60 - 63	TEMPORARY SHORING

SHEET NO.	TRAFFIC CONTROL AND SW3P STANDARDS
64 - 67	COSA BARRICADES AND CONSTRUCTION STANDARDS
68 - 79	**BC - 05
80	**TCP (1-2) - 98
81 - 82	**TCP (2-4) & (2-5) - 03
83 - 84	**TCP (3-1) & (3-3) - 98
85	**TCP (7-1) - 98
86	**WZ (TD) - 03
87	**WZ (STPM) - 03
88	**WZ (UL) - 03
89 - 90	**WZ (BTS-1-2) - 03
91 - 92	**LPCB (1-2)-92
93 - 94	*TEMP EROSION, SEDIMENT & WATER POLLUTION CONTROL MEASURES (1-2) - 05
95	*TREE PRESERVATION

SHEET NO.	ROADWAY DETAILS
96 - 105	PLAN & PROFILE SHEETS
106 - 107	HEADER BANK GRADING

SHEET NO.	ROADWAY STANDARDS
108	*CONCRETE DRIVEWAYS STANDARDS - 09
109	*WHEELCHAIR RAMP STANDARDS - 09
110 - 111	*MISCELLANEOUS CONSTRUCTION STANDARDS (I) - 09, (II) MOD - 10
111A	*CONCRETE BUS STOP PAD

SHEET NO.	DRAINAGE DETAILS
112	DRAINAGE AREA MAP
113 - 114	DRAINAGE CALCULATIONS
115 - 116	STORM DRAIN LAYOUTS
117 - 118	STORM DRAIN LATERAL SECTIONS
119	CULVERT DRAINAGE AREA MAP
120 - 124	PROPOSED HYDRAULIC DATA SHEETS
125 - 128	CULVERT LAYOUTS
129	OUTFALL DETAIL

SHEET NO.	DRAINAGE STANDARDS
133 - 135	*TYPE "C" INLETS (TYPE I & II) & INLET EXTENSION - 09
136 - 137	**CURB INLET EXTENSION TYPE C
138	*4'X4'X4' JUNCTION BOX - 05
139	*PIPE BEDDING & MISC DRAINAGE DETAILS - 09
140 - 141	**SAFETY END TREATMENT SETP-CD
142	**TRAFFIC INLET

SHEET NO.	SIGNING & PAVEMENT MARKING DETAILS
143 - 149	SIGNING AND PAVEMENT MARKINGS LAYOUTS

SHEET NO.	PAVEMENT MARKINGS, SMALL SIGNS AND DELINEATION STANDARDS
150 - 151	*PAVEMENT MARKINGS (4 & 5 OF 16) - 09
152 - 155	*TE-SGN(1 THRU 4) - 06

SHEET NO.	ROADWAY CROSS SECTIONS
156 - 205	RITTIMAN RD CROSS SECTIONS
206 - 212	GRANTHAM DR CROSS SECTIONS
213 - 218	PARK ROAD CROSS SECTIONS
219 - 225	QUEENS CASTLE DR CROSS SECTIONS

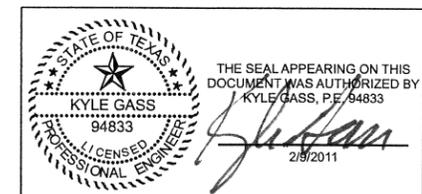
SHEET NO.	BRIDGE
226 - 227	BRIDGE LAYOUTS
228	BRIDGE TYPICAL SECTION
229 - 232	BRIDGE DETAILS - ABUTMENT
233 - 234	BRIDGE DETAILS - BENT
235 - 239	BRIDGE DETAILS - FRAMING
240 - 244	BRIDGE DETAILS - SLAB
245	MISCELLANEOUS SLAB DETAIL
246	PRESTRESSED CONCRETE I-BEAM DESIGN
247 - 255	RETAINING WALL LAYOUTS

SHEET NO.	TxDOT STANDARDS
256	BRIDGE APPROACH SLAB (BAS - A)
257	CONCRETE RIPRAP AND SHOULDER DRAINS (CRR)
258 - 259	PRESTRESSED CONCRETE I-BEAM DETAILS (IBD)
260 - 261	ELASTOMERIC BEARING AND BEAM END DETAILS (IBEB)
262	THICKENED SLAB END DETAILS (IBTS)
263 - 265	COMBINATION RAIL (TYPE C221)
266	SEALED EXPANSION JOINT TYPE P (SEJ - P)
267	CONCRETE SAFETY BARRIER (F - SHAPE), PRECAST BARRIER PINNED TO BRIDGE DEC CSB (7) - 04
268	MECH STAB EARTH RETAINING WALL R W (MSE)
269 - 270	ROADWAY INLET FOR MSE RETAINING WALL TRAFFIC RAIL FOUNDATION (RW(RI))
271	RETAINING WALL TRAFFIC RAILING FOUNDATIONS (RW(TRF))
272 - 273	LIGHTING BRACKET FOR MSE RETAINING WALL TRAFFIC RAIL FOUNDATION (RW(LB))

\* COSA STANDARDS  
\*\* TXDOT STANDARDS

THE STANDARD SHEETS SPECIFICALLY IDENTIFIED ABOVE,  
HAVE BEEN SELECTED BY ME OR UNDER MY SUPERVISION  
AS BEING APPLICABLE TO THIS PROJECT.

*[Signature]*  
2/9/2011



**SEA** STRUCTURAL ENGINEERING ASSOCIATES, INC.  
CONSULTING ENGINEERS  
SAN ANTONIO, TEXAS

**CEC** DON DURDEN, INC.  
d.b.a. CIVIL ENGINEERING CONSULTANTS  
11550 IH 10 WEST, SUITE 395  
SAN ANTONIO, TEXAS 78230-1037  
TEL: (210) 641-9999  
FAX: (210) 641-6440  
REGISTRATION #F-2214  
CEC PROJECT NUMBER: E0357700

CITY OF SAN ANTONIO  
CAPITAL IMPROVEMENTS  
MANAGEMENT SERVICES  
DEPARTMENT

RITTIMAN ROAD

INDEX OF SHEETS  
ADDENDUM NO. 2

SHEET 1 OF 1

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THE FOLLOWING CHANGES ARE MADE TO THE CITY OF SAN ANTONIO'S GENERAL NOTES:

ADDITIONAL NOTES

1.THESE PLANS CONTAIN A STORM WATER POLLUTION PREVENTION PLAN (SW3P). A TEMPORARY ACCESS ROUTE WILL BE USED UPSTREAM OF SALADO CREEK WITH TEMPORARY ROCK FILL AS SHOWN IN THE PLANS. A ROCK FILTER DAM IS RECOMMENDED DOWNTREAM OF THE BRIDGE.

THE BMPs PLACED BY THE CONTRACTOR ARE TO ADDRESS THE DEBRIS CONTAMINATING THE SALADO CREEK FROM THIS PROJECT. HOWEVER CONSIDERING THE LOCATION, IT IS EXPECTED THAT ADDITIONAL SEDIMENTS, TRASH, ETC., WILL BE ENCOUNTERED BY THE BMPs AND EXTRA MAINTENANCE WILL BE REQUIRED FROM THE CONTRACTOR THROUGHOUT THE DURATION OF CONSTRUCTION AT NO ADDITIONAL COST TO THE CITY OF SAN ANTONIO.

2.THE CONTRACTOR WILL COORDINATE WITH THE CITY AND THE PROPERTY OWNER OF THE CAMBRIDGE APARTMENTS PRIOR TO REPLACEMENT OF THE BUSINESS SIGN, FOUNDATION, HARDSCAPE AND LIGHTING LOCATED ON QUEENS CASTLE. PLEASE REFER TO SPECIAL SPECIFICATION ITEM 9507 "BUSINESS SIGN REPLACEMENT (CAMBRIDGE APARTMENTS)".

3.IN THE EVENT THAT THERE IS ANY DAMAGE TO THE HIKE AND BIKE TRAIL NEAR HOLBROOK, THE TRAIL MUST BE REPAIRED TO AS GOOD OR BETTER CONDITIONS.

4.CONTRACTOR MUST WORK EXPEDITIOUSLY TO MINIMIZE CLOSURE OF HIKE AND BIKE TRAIL.

5.TRAFFIC CONTROL PLAN AND SW3P LAYOUTS - PHASE 3, SHEET NO. 44:  
PHASE 3A, FROM STA. 7+65 TO STA. 12+00 AND INCLUDING PARK RD SHALL BE RECONSTRUCTED IN ITS ENTIRETY IN ORDER TO LIMIT CLOSURE OF JOHN JAMES PARK TO 60 CALENDAR DAYS.

CONSULTANT NAME			
STREET NUMBER AND ADDRESS			
CITY		STATE	ZIP CODE
TELEPHONE NUMBER	FAX NUMBER	INTERNET ADDRESS	
CITY OF SAN ANTONIO			
CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT			
PROJECT TITLE			
SUPPLEMENTAL GENERAL NOTES			
ADDENDUM NO. 2			
% SUBMITTAL	PROJECT NO.:	DATE:	
DRWN. BY:	DSGN. BY:	CHKD. BY:	SHEET NO.: 9

**ESTIMATED STREET AND DRAINAGE QUANTITIES**

ITEM #	DESCRIPTION	UNIT	ESTIMATED QUANTITIES	FINAL QUANTITIES	ITEM #	DESCRIPTION	UNIT	ESTIMATED QUANTITIES	FINAL QUANTITIES
	COSA ITEMS					COSA ITEMS			
100.1	MOBILIZATION	LS	1		20496	B1 REMOV STR (BRIDGE 100-499 FT LENGTH)	EA	1	
100.2	INSURANCE AND BOND	LS	1		20662	WRK ZN PAV MARK NON REMOV (W) 4" (SLD)	LF	6649	
101.1	PREPARING RIGHT-OF-WAY	LS	1		20662	WRK ZN PAV MARK NON REMOV (Y) 4" (SLD)	LF	8262	
103.1	REMOVE CONCRETE CURB	LF	3933		20662	WRK ZN PAV MARK REMOV (W) 4" (SLD)	LF	8122	
103.3	REMOVE CONCRETE SIDEWALKS & DRIVEWAYS	SF	25933		20662	WRK ZN PAV MARK REMOV (Y) 4" (SLD)	LF	11214	
103.4	REMOVE MISCELLANEOUS CONCRETE	SF	14712						
104.1	STREET EXCAVATION	CY	1266						
105.1	CHANNEL EXCAVATION	CY	7060						
107.1	EMBANKMENT (FINAL) (DENS CONT)(TY B)	CY	13158						
108.1	LIME TREAT SUBGRADE (6" COMPACTED DEPTH)	SY	9056						
108.2	LIME	TON	149						
203.1	TACK COAT	GAL	482						
205.2	HOT MIX ASPHALTIC PAVEMENT, TYPE B (11" COMP. DEPTH)	SY	9056						
205.2	HOT MIX ASPHALTIC PAVEMENT, TYPE B (12" COMP. DEPTH)	SY	1031						
205.2	HOT MIX ASPHALTIC PAVEMENT, TYPE B (6" COMP. DEPTH)	SY	180						
205.2	HOT MIX ASPHALTIC PAVEMENT, TYPE B (5" COMP. DEPTH)	SY	250						
205.4	HOT MIX ASPHALTIC PAVEMENT, TYPE D (2 1/2" COMP. DEPTH)	SY	8018						
205.4	HOT MIX ASPHALTIC PAVEMENT, TYPE D (1 1/2" COMP. DEPTH)	SY	250						
208.1	SALVAGING, HAULING & STOCKPILING RECLAIMABLE ASPHALTIC PAVEMENT(2" DEPTH)	SY	4283						
208.1	SALVAGING, HAULING & STOCKPILING RECLAIMABLE ASPHALTIC PAVEMENT(6" DEPTH)	SY	1956						
209.1	CONCRETE PAVEMENT (10" DEEP) (BUS PAD)	SY	392						
401.1	REINFORCED CONCRETE PIPE (CLASS III) (24" DIA)	LF	798						
401.1	REINFORCED CONCRETE PIPE (CLASS III) (30" DIA)	LF	51						
401.4	SET (TY II) (24 IN) (RCP) (3:1) (C)	EA	3						
403.1	JUNCTION BOX 4'X4'X4'	EA	3						
403.7	CURB INLET TY C-I (10 FT)	EA	1						
500.1	CONCRETE CURBING	LF	3540						
502.1	CONCRETE SIDEWALKS	SY	1646						
503.2	PORTLAND CEMENT CONC DRIVEWAYS - COMMERCIAL	SY	928						
504.2	CONCRETE DIRECTIONAL ISLAND	SY	37						
505.1	CONCRETE RIPRAP (5" THICK)	SY	3457						
507.5	GATES-VEHICULAR	OPEN	2						
515.1	TOPSOIL	CY	137						
520.1	HYDROMULCHING (RESIDENTIAL OR COMMERCIAL)	SY	1392						
523.1	ADJUSTING VEHICULAR GATES	EA	2						
525.1	CONCRETE TRAFFIC BARRIER (PORTABLE)	LF	1860						
530.1	BARRICADES, SIGNS AND TRAFFIC HANDLING	LS	1						
531.3	R1-1 STOP (30")	EA	1						
531.57	9 INCH STREET NAME BLOCK NUMBERS (VARIES X 9")	EA	3						
531.6	R1-2 YIELD (36") (HIGH DENSITY)	EA	1						
531.6	R2-1 SPEED LIMIT (24" X 30")	EA	1						
535.1	4 INCH WIDE YELLOW LINE	LF	5720						
535.2	4 INCH WIDE WHITE LINE	LF	1665						
535.7	24 INCH WIDE WHITE LINE	LF	16						
537.6	TRAFFIC BUTTON (TYPE I-C)	EA	142						
540.1	ROCK FILTER DAMS (INSTALL/REMOVE) (TY 3)	LF	215						
540.1	CURB INLET GRAVEL FILTERS	LF	228						
540.6	CONSTRUCTION EXITS (INSTALL/REMOVE)	SY	233						
540.7	CONSTRUCTION PERIMETER FENCE	LF	400						
540.9	TEMPORARY SEDIMENT CONTROL FENCE	LF	1595						
550.1	TRENCH EXCAVATION SAFETY PROTECTION	LF	218						
551.1	TEMPORARY SPECIAL SHORING	SF	5857						
801.2	LEVEL IIA PROTECTIVE FENCING	LF	231						
801.3	LEVEL IIB PROTECTIVE FENCING	LF	14						
5346	ADJUSTING/ RELOCATION OF MECHANICAL VEHICULAR GATES	EA	2						
6264	REMOVE AND RELOCATE ILLUMINATION POLES	EA	1						
9506	REMOVAL AND REPLACEMENT OF WROUGHT IRON FENCE	LF	50						
9507	REMOVE AND RELOCATE BUSINESS SIGNS	EA	1						
20403	B1 TEMPORARY SPECIAL SHORING	SF	840						
20416	B1 DRILLED SHAFT (30 IN)	LF	420						
20416	B1 DRILLED SHAFT (36 IN)	LF	1740						
20420	B1 CL C CONC (ABUT)	CY	51						
20420	B1 CL C CONC (BENT)	CY	730.7						
20420	B1 CL S CONC (APPR SLAB)	CY	194.6						
20420	B1 CL S CONC (BRIDGE SIDEWALK)	CY	296.8						
20422	B1 REINF CONC SLAB	SF	46200						
20423	B1 RETAINING WALLS (MSE)	SF	11791						
20425	B1 PRESTR CONC BEAM (TY A)	LF	6953						
20428	B1 CONC SURF TREAT (CLASS I)	SY	4979						
20432	B1 RIPRAP (CONC) (5 IN)	CY	44						
20442	B1 STR STL (MISCELLANEOUS)	LB	67900						
20450	B1 RAIL (TY C221)	LF	3424						
20454	B1 SEALED EXPANSION JOINT (4 IN) (SEJ-P)	LF	346.4						
20465	INLET (COMPL) (CURB) (TY C) (SA DIST)	EA	2						
20465	INLET EXT (TY C-E) (SA DIST)	EA	1						
20465	INLET (COMPL) (TRAFFIC) (TY X-2)	EA	1						

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RITTIMAN ROAD		
ESTIMATE AND QUANTITIES ADDENDUM NO. 2		
SHEET 1 OF 1		
SUBMITTAL	PROJECT NUMBER	DATE
FINAL	40-0008	2/9/2011
DRWN BY:	DSGN BY:	CHKD BY:
		SHEET NO. 10

TCP PHASE I	20662 2004	20662 2032	20662 2067	20662 2099	205.2	205.2	507.5	525.1	104.1
STATION TO STATION	WK ZN PAV MRK NON - REMOV (W) 4" (SLD)	WK ZN PAV MRK NON - REMOV (Y) 4" (SLD)	WK ZN PAV MRK REMOV (W) 4" (SLD)	WK ZN PAV MRK REMOV (Y) 4" (SLD)	HOT MIX (TY B) (12" DEPTH)	HOT MIX (TY B) (6" DEPTH)	GATES VEHICULAR	CONCRETE TRAFFIC BARRIER (PORTABLE)	STREET EXCAVATION
RITTIMAN RD	LF	LF	LF	LF	SY	SY	EA	LF	CY
BEGIN TO STA 4+00			180						
STA 4+00 TO STA 8+00	35	70	366	581	163				104
STA 8+00 TO STA 12+00	400	800			181				145
STA 12+00 TO STA 16+00	400	800							
STA 16+00 TO STA 19+25	325	650							
STA 19+25 TO STA 23+25	400	800			250				100
STA 23+25 TO STA 27+25	50	101	351	702	100				80
STA 27+25 TO END			45	380					
PHASE I TOTALS	1,610	3,221	942	1,673	684				429

SW3P PHASE I	540.1	540.6	540.7	540.9	540.10
STATION TO STATION	ROCK FILTER DAMS (INTALL / REMOVE)(TY 3)	CONSTRUCTION EXISTS (INSTALL / REMOVE)	CONSTRUCTION PERIMETER FENCE	TEMPORARY SEDIMENT CONTROL FENCE	CURB INLET GRAVEL FILTERS
RITTIMAN RD	LF	LF	LF	LF	SY
BEGIN TO STA 4+00					
STA 4+00 TO STA 8+00					
STA 8+00 TO STA 12+00					20
STA 12+00 TO STA 16+00					
STA 16+00 TO STA 19+25					
STA 19+25 TO STA 23+25				150	48
STA 23+25 TO STA 27+25					
STA 27+25 TO END					
PHASE I TOTALS				150	68

TCP PHASE II	20662 2004	20662 2032	20662 2067	20662 2099	205.2	205.2	507.5	525.1	104.1
STATION TO STATION	WK ZN PAV MRK NON - REMOV (W) 4" (SLD)	WK ZN PAV MRK NON - REMOV (Y) 4" (SLD)	WK ZN PAV MRK REMOV (W) 4" (SLD)	WK ZN PAV MRK REMOV (Y) 4" (SLD)	HOT MIX (TY B) (12" DEPTH)	HOT MIX (TY B) (6" DEPTH)	GATES VEHICULAR	CONCRETE TRAFFIC BARRIER (PORTABLE)	STREET EXCAVATION
RITTIMAN RD	LF	LF	LF	LF	SY	SY	EA	LF	CY
BEGIN TO STA 4+00			280	580					
STA 4+00 TO STA 8+00	70	70	697	731				40	
STA 8+00 TO STA 12+00	800	800						400	
STA 12+00 TO STA 16+00	800	800						400	
STA 16+00 TO STA 19+25	650	650						325	
STA 19+25 TO STA 23+25 - 2A	470	795	162	327	337			120	
STA 23+25 TO STA 27+25 - 2A	49	100	75	561					
STA 19+25 TO STA 23+25 - 2B	324							400	
STA 23+25 TO STA 27+25 - 2B	50		351					55	
STA 27+25 TO END			120						
PHASE II TOTALS	3,213	3,215	1,685	2,179	337			1,740	

SW3P PHASE II	540.1	540.6	540.7	540.9	540.10
STATION TO STATION	ROCK FILTER DAMS (INTALL / REMOVE)(TY 3)	CONSTRUCTION EXISTS (INSTALL / REMOVE)	CONSTRUCTION PERIMETER FENCE	TEMPORARY SEDIMENT CONTROL FENCE	CURB INLET GRAVEL FILTERS
RITTIMAN RD	LF	LF	LF	LF	SY
BEGIN TO STA 4+00					
STA 4+00 TO STA 8+00		54			
STA 8+00 TO STA 12+00	30	23		300	18
STA 12+00 TO STA 16+00	140			500	
STA 16+00 TO STA 19+25	15			100	
STA 19+25 TO STA 23+25 - 2A					
STA 23+25 TO STA 27+25 - 2A					
STA 19+25 TO STA 23+25 - 2B				150	60
STA 23+25 TO STA 27+25 - 2B					
STA 27+25 TO END					
PHASE II TOTALS	185	77		1,050	78

TCP PHASE III	20662 2004	20662 2032	20662 2067	20662 2099	205.2	205.2	507.5	525.1	104.1
STATION TO STATION	WK ZN PAV MRK NON - REMOV (W) 4" (SLD)	WK ZN PAV MRK NON - REMOV (Y) 4" (SLD)	WK ZN PAV MRK REMOV (W) 4" (SLD)	WK ZN PAV MRK REMOV (Y) 4" (SLD)	HOT MIX (TY B) (12" DEPTH)	HOT MIX (TY B) (6" DEPTH)	GATES VEHICULAR	CONCRETE TRAFFIC BARRIER (PORTABLE)	STREET EXCAVATION
RITTIMAN RD	LF	LF	LF	LF	SY	SY	EA	LF	CY
BEGIN TO STA 4+00			105						
STA 4+00 TO STA 8+00	70	70	445	342				40	
STA 8+00 TO STA 12+00	779	779	21	21				80	
STA 12+00 TO STA 16+00			800	800					
STA 16+00 TO STA 19+25	71	71	579	579					
STA 19+25 TO STA 23+25	806	806				180	1		
STA 23+25 TO STA 27+25	100	100	382	703					
STA 27+25 TO END				300					
PHASE III TOTALS	1,826	1,826	2,332	2,745		180	1	120	

SW3P PHASE III	540.1	540.6	540.7	540.9	540.10
STATION TO STATION	ROCK FILTER DAMS (INTALL / REMOVE)(TY 3)	CONSTRUCTION EXISTS (INSTALL / REMOVE)	CONSTRUCTION PERIMETER FENCE	TEMPORARY SEDIMENT CONTROL FENCE	CURB INLET GRAVEL FILTERS
RITTIMAN RD	LF	LF	LF	LF	SY
BEGIN TO STA 4+00					
STA 4+00 TO STA 8+00					
STA 8+00 TO STA 12+00					18
STA 12+00 TO STA 16+00				350	
STA 16+00 TO STA 19+25	30	78			
STA 19+25 TO STA 23+25				45	18
STA 23+25 TO STA 27+25		78			
STA 27+25 TO END					
PHASE III TOTALS	30	156		395	36

TCP PHASE IV	20662 2004	20662 2032	20662 2067	20662 2099	205.2	205.2	507.5	525.1	104.1
STATION TO STATION	WK ZN PAV MRK NON - REMOV (W) 4" (SLD)	WK ZN PAV MRK NON - REMOV (Y) 4" (SLD)	WK ZN PAV MRK REMOV (W) 4" (SLD)	WK ZN PAV MRK REMOV (Y) 4" (SLD)	HOT MIX (TY B) (12" DEPTH)	HOT MIX (TY B) (6" DEPTH)	GATES VEHICULAR	CONCRETE TRAFFIC BARRIER (PORTABLE)	STREET EXCAVATION
RITTIMAN RD	LF	LF	LF	LF	SY	SY	EA	LF	CY
BEGIN TO STA 4+00				380					
STA 4+00 TO STA 8+00			300	801					
STA 8+00 TO STA 12+00			458	800					
STA 12+00 TO STA 16+00			800	800					
STA 16+00 TO STA 19+25			650	650					
STA 19+25 TO STA 23+25			509	796					
STA 23+25 TO STA 27+25			401	390					
STA 27+25 TO END			45						
PHASE IV TOTALS			3,163	4,617					
PROJECT TOTAL	6,649	8,262	8,122	11,214	1,031	180	1	1,880	429

SW3P PHASE IV	540.1	540.6	540.7	540.9	540.10
STATION TO STATION	ROCK FILTER DAMS (INTALL / REMOVE)(TY 3)	CONSTRUCTION EXISTS (INSTALL / REMOVE)	CONSTRUCTION PERIMETER FENCE	TEMPORARY SEDIMENT CONTROL FENCE	CURB INLET GRAVEL FILTERS
RITTIMAN RD	LF	LF	LF	LF	SY
BEGIN TO STA 4+00					
STA 4+00 TO STA 8+00					
STA 8+00 TO STA 12+00					24
STA 12+00 TO STA 16+00					
STA 16+00 TO STA 19+25					
STA 19+25 TO STA 23+25					22
STA 23+25 TO STA 27+25					
STA 27+25 TO END					
PHASE IV TOTALS					46
PROJECT TOTAL	215	233	400	1,595	228

**SEA** STRUCTURAL ENGINEERING  
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REGISTRATION #F-2214  
CEC PROJECT NUMBER: E0357700

**CITY OF SAN ANTONIO**  
CAPITAL IMPROVEMENTS  
MANAGEMENT SERVICES  
DEPARTMENT

RITTIMAN ROAD

**TCP AND SW3P SUMMARY**  
ADDENDUM NO. 2

SHEET 1 OF 1

SUBMITTAL	PROJECT NUMBER	DATE
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STATION TO STATION	101.1	103.1	103.3	103.4	104.1	105.1	107.1	108.1	108.2	203.1	205.2	205.4	208.1	208.1	209.1	500.1	502.1
	PREPARING RIGHT OF WAY	REMOVE CONCRETE CURB	REMOVE CONC SDWLK & DRVWY	REMOVE MISC CONC	STREET EXCAVATION	CHANNEL EXCAVATION	EMBANK (FINAL) (DENS CONT) TY B	LIME TREAT SUBGRADE (6")	LIME	TACK COAT	HOT MIX (TY B) (11" DEPTH)	HOT MIX (TY D) (2 1/2" DEPTH)	SALV. HAUL, STK PILE ASPH PAV (2") DEEP	SALV. HAUL, STK PILE ASPH PAV (6") DEEP	CONCRETE PAV (10" DEEP) (BUS PAD)	CONC CURB	CONC SIDEWALKS
	LS	LF	SF	SF	CY	CY	CY	SY	TON	GAL	SY	SY	SY	SY	SY	LF	SY
RITTIMAN RD																	
STA 4+00 TO STA 7+65		255	1,065													255	114
STA 7+65 TO STA 12+00		596	3,019				2,298	38	108	2,298	1,797	1,467			392	560	270
STA 12+00 TO STA 16+00		332	2,720	4,620			23		1	23	20						
STA 16+00 TO STA 19+00		368	2,562	8,832			735	12	41	735	691					15	11
STA 19+00 TO STA 23+00		774	6,359	936			2,128	35	121	2,128	2,001		1,956			804	362
STA 23+00 TO END		444	3,046				397	7	22	397	367					488	112
MATCHLINE A-A				173													
GRANTHAM ST		262	1,776	151			1,173	19	63	1,173	1,045	880				510	288
PARK ROAD		370	2,790				793	13	43	793	715	621				408	235
QUEENS CASTLE DR		532	2,596				1,509	25	83	1,509	1,382	1,315				520	254
				173													
PROJECT TOTALS	1	3,933	25,933	14,712	1,266	7,060	13,158	9,056	149	482	9,056	8,018	4,283	1,956	392	3,540	1,646

STATION TO STATION	503.2	504.2	505.1	507.5	515	520.1	523.1	551.1*	801.2	801.3	5346	6264	9506	9507	205.2	205.4
	PORTLAND CEM CONC DRVWY COMM.	CONC DIRECTIONAL ISLAND	CONC (RIPRAP) (5")	GATES VEHICULAR	TOPSOIL	HYDRO- MULCHING (RES / COMM)	ADJUSTING VEHICULAR GATES	TEMPORARY SPECIAL SHORING	LEVEL IIA PROTECTIVE FENCING	LEVEL IIB PROTECTIVE FENCING	ADJUSTING/ RELOCATION OF MECHANICAL VEH GATES	REMOVE AND RELOCATE ILLUMINATION POLES	REMOVAL AND REPLACEMENT OF WROUGHT IRON FENCE	REMOVAL AND RELOCATE BUSINESS SIGNS	HOT MIX (TY B) (5" DEPTH)	HOT MIX (TY D) (1 1/2" DEPTH)
	SY	SY	SY	EA	CY	SY	EA	SF	LF	LF	EA	EA	LF	EA	SY	SY
RITTIMAN RD																
STA 4+00 TO STA 7+65					11	95										
STA 7+65 TO STA 12+00			23		51	547		1441	30	14						
STA 12+00 TO STA 16+00			1,381					805								
STA 16+00 TO STA 19+00			1,740			260		1164							250	250
STA 19+00 TO STA 23+00	690		146		70	490		2447								
STA 23+00 TO END	238		29		5				51							
MATCHLINE A-A				1												
GRANTHAM ST		37	138						150							
PARK ROAD							2				1					
QUEENS CASTLE DR											2	1	50	1		
PROJECT TOTALS	928	37	3,457	1	137	1,392	2	5,857	231	14	2	1	50	1	250	250

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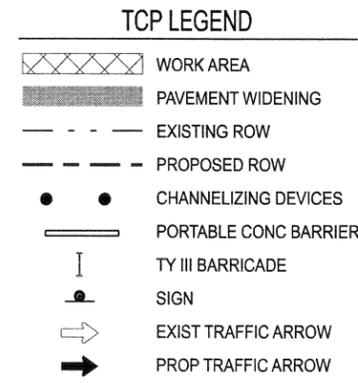
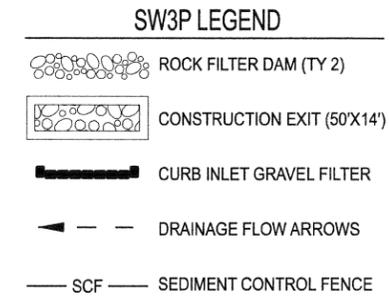
CITY OF SAN ANTONIO  
CAPITAL IMPROVEMENTS  
MANAGEMENT SERVICES  
DEPARTMENT

RITTIMAN ROAD

GRADING SUMMARY  
ADDENDUM NO. 2

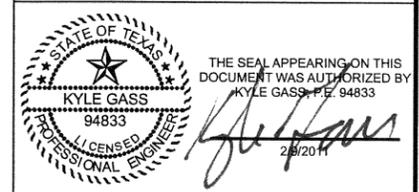
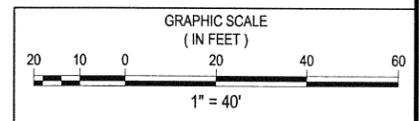
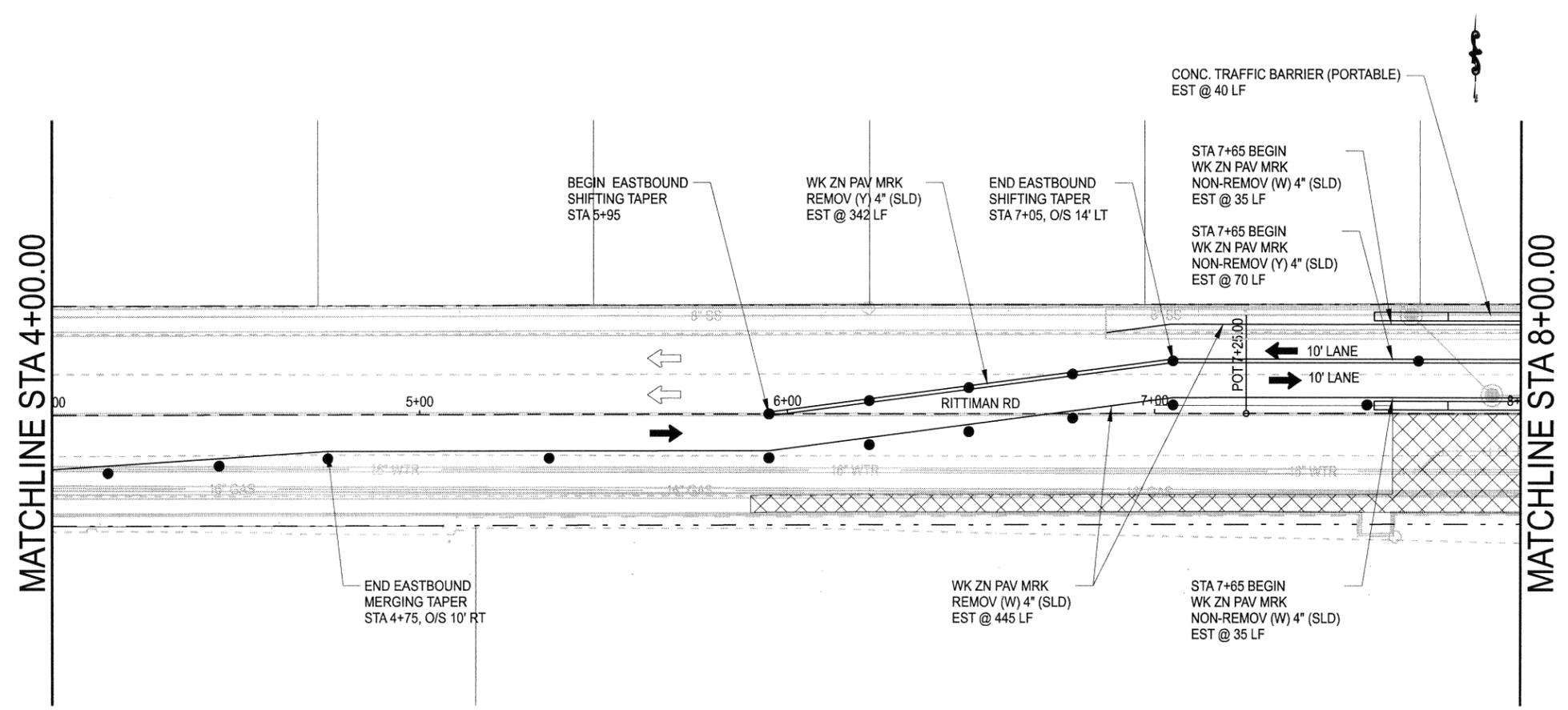
SHEET 1 OF 1		
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FINAL	40-0008	2/9/2011
DRWN BY:	DSGN BY:	CHKD BY:
		SHEET NO.
		13

\*SEE TEMPORARY SHORING SHEETS FOR LOCATIONS



QUANTITY SUMMARY : TCP PH III		
ITEM	UNIT	QTY
WK ZN PAV MRK NON - REMOV (W) 4" (SLD)	LF	70
WK ZN PAV MRK NON - REMOV (Y) 4" (SLD)	LF	70
WK ZN PAV MRK REMOV (W) 4" (SLD)	LF	445
WK ZN PAV MRK REMOV (Y) 4" (SLD)	LF	342
HOT MIX (TY B) (12" DEPTH)	SY	
HOT MIX (TY B) (6" DEPTH)	SY	
GATES VEHICULAR	EA	
CONC. TRAFF BARRIER (PORTABLE)	LF	40

QUANTITY SUMMARY : SW3P PH III		
ITEM	UNIT	QTY
ROCK FILTER DAMS (INTALL / REMOVE)(TY 3)	LF	
CONSTRUCTION EXISTS (INSTALL / REMOVE)	SY	
CONSTRUCTION PERIMETER FENCE	LF	
TEMPORARY SEDIMENT CONTROL FENCE	LF	
CURB INLET GRAVEL FILTERS	LF	



**SEA** STRUCTURAL ENGINEERING ASSOCIATES, INC. CONSULTING ENGINEERS SAN ANTONIO, TEXAS

**CEC** DON DURDEN, INC. d.b.a. CIVIL ENGINEERING CONSULTANTS 11550 IH 10 WEST, SUITE 395 SAN ANTONIO, TEXAS 78230-1037 TEL: (210) 641-9999 FAX: (210) 641-6440 REGISTRATION #F-2214 CEC PROJECT NUMBER: E0357700

CITY OF SAN ANTONIO  
CAPITAL IMPROVEMENTS  
MANAGEMENT SERVICES  
DEPARTMENT  
RITTIMAN ROAD

TRAFFIC CONTROL PLAN  
AND SW3P LAYOUTS  
PHASE 3  
ADDENDUM NO. 2

SHEET 2 OF 8		
SUBMITTAL	PROJECT NUMBER	DATE
FINAL	40-0008	2/9/2011
DRWN BY:	DSGN BY:	CHKD BY:
		SHEET NO. 44

PHASE 3A, FROM STA. 7+65 TO STA. 12+00 AND INCLUDING PARK RD SHALL BE RECONSTRUCTED IN ITS ENTIRETY IN ORDER TO LIMIT CLOSURE OF JOHN JAMES PARK TO 60 CALENDAR DAYS.

MATCHLINE STA 8+00.00

MATCHLINE STA 12+00.00

**SW3P LEGEND**

	ROCK FILTER DAM (TY 2)
	CONSTRUCTION EXIT (50'X14')
	CURB INLET GRAVEL FILTER
	DRAINAGE FLOW ARROWS
	SCF — SEDIMENT CONTROL FENCE

**TCP LEGEND**

	WORK AREA
	PAVEMENT WIDENING
	EXISTING ROW
	PROPOSED ROW
	CHANNELIZING DEVICES
	PORTABLE CONC BARRIER
	TY III BARRICADE
	SIGN
	EXIST TRAFFIC ARROW
	PROP TRAFFIC ARROW

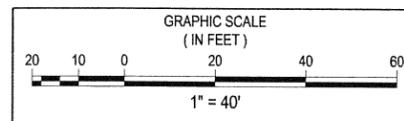
QUANTITY SUMMARY : TCP PH III

ITEM	UNIT	QTY
WK ZN PAV MRK NON - REMOV (W) 4" (SLD)	LF	779
WK ZN PAV MRK NON - REMOV (Y) 4" (SLD)	LF	779
WK ZN PAV MRK REMOV (W) 4" (SLD)	LF	21
WK ZN PAV MRK REMOV (Y) 4" (SLD)	LF	21
HOT MIX (TY B) (12" DEPTH)	SY	
HOT MIX (TY B) (6" DEPTH)	SY	
GATES VEHICULAR	EA	
CONC. TRAFF BARRIER (PORTABLE)	LF	80

QUANTITY SUMMARY : SW3P PH III

ITEM	UNIT	QTY
ROCK FILTER DAMS (INTALL / REMOVE)(TY 3)	LF	
CONSTRUCTION EXISTS (INSTALL / REMOVE)	SY	
CONSTRUCTION PERIMETER FENCE	LF	
TEMPORARY SEDIMENT CONTROL FENCE	LF	
CURB INLET GRAVEL FILTERS	LF	18

NOTES:  
 SEE "BARRICADE AND CONSTRUCTION STANDARDS" FOR ADDITIONAL INFORMATION.  
 \*\*PLACE AT LIMIT OF CONSTRUCTION DURING ROAD CLOSURE ONLY.



STRUCTURAL ENGINEERING ASSOCIATES, INC. CONSULTING ENGINEERS SAN ANTONIO, TEXAS

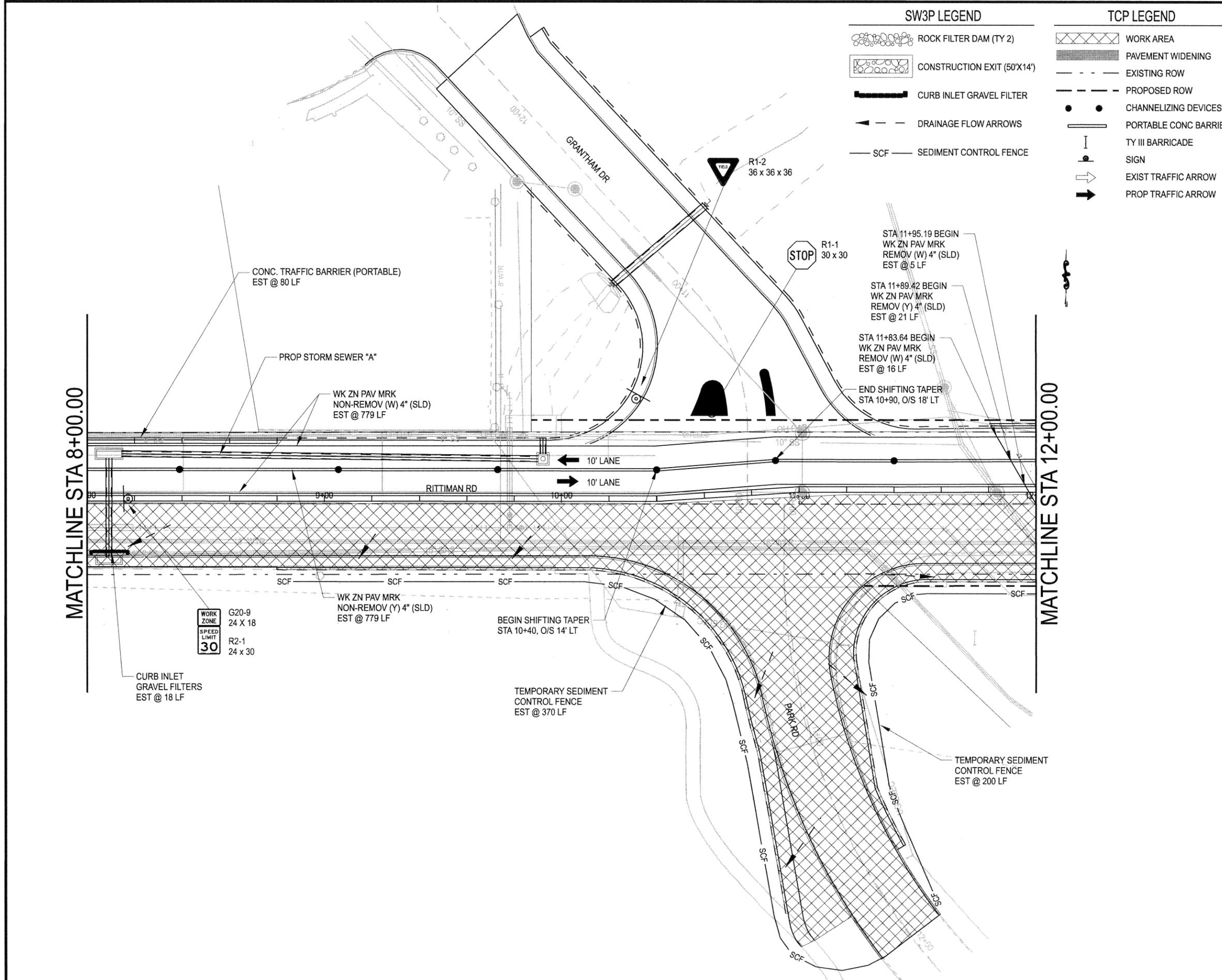
DON DURDEN, INC. d.b.a. CIVIL ENGINEERING CONSULTANTS 11550 IH 10 WEST, SUITE 395 SAN ANTONIO, TEXAS 78230-1037 TEL: (210) 641-9999 FAX: (210) 641-6440 REGISTRATION #F-2214 CEC PROJECT NUMBER: E0357700

CITY OF SAN ANTONIO CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT RITTIMAN ROAD

TRAFFIC CONTROL PLAN AND SW3P LAYOUTS PHASE 3 ADDENDUM NO. 2

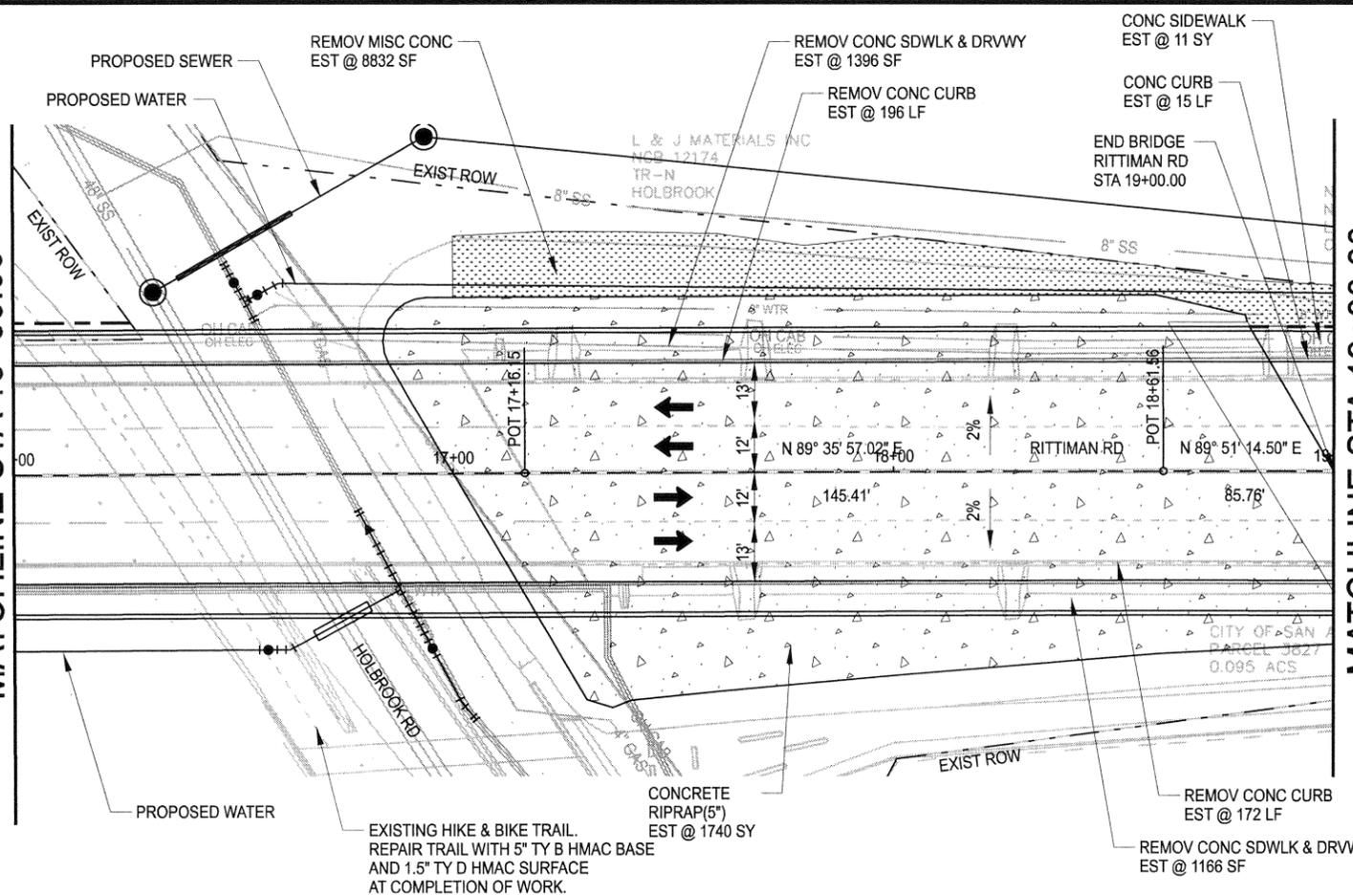
SHEET 3 OF 8

SUBMITTAL	PROJECT NUMBER	DATE
FINAL	40-0008	2/9/2011
DRWN BY:	DSGN BY:	CHKD BY:



MATCHLINE STA 16+00.00

MATCHLINE STA 19+00.00



QUANTITY SUMMARY: ROADWAY		
ITEM	UNIT	QTY
PREP ROW	STA	
REMOV CONC CURB	LF	368
REMOV CONC SDWLK & DRVWY	SF	2562
REMOV MISC CONCRETE	SF	8832
SALVAGE & STK PILE ASPH PAV (2")	SY	
SALVAGE & STK PILE ASPH PAV (6")	SY	
CONC PAV (10") (BUS PAD)	SY	
CONCRETE CURBS	LF	15
CONCRETE SIDEWALKS	SY	11
PORTLAND CEM CONC DRVWY COMM	SY	
CONC DIRECTIONAL ISLAND	SY	
CONCRETE RIPRAP(5")	SY	1740
GATES-VEHICULAR	EA	
TOPSOIL	CY	
HYDROMULCH	SY	260
ADJUST VEHICULAR GATES	EA	
LEVEL IIA PROTECTIVE FENCING	EA	
LEVEL IIB PROTECTIVE FENCING	EA	
ADJUSTING/RELOCATION OF MECH. VEHICULAR GATES	EA	
REMOVAL AND REPLACEMENT OF WROUGHT IRON FENCE	EA	
REMOVAL AND RELOCATE BUSINESS SIGNS	EA	

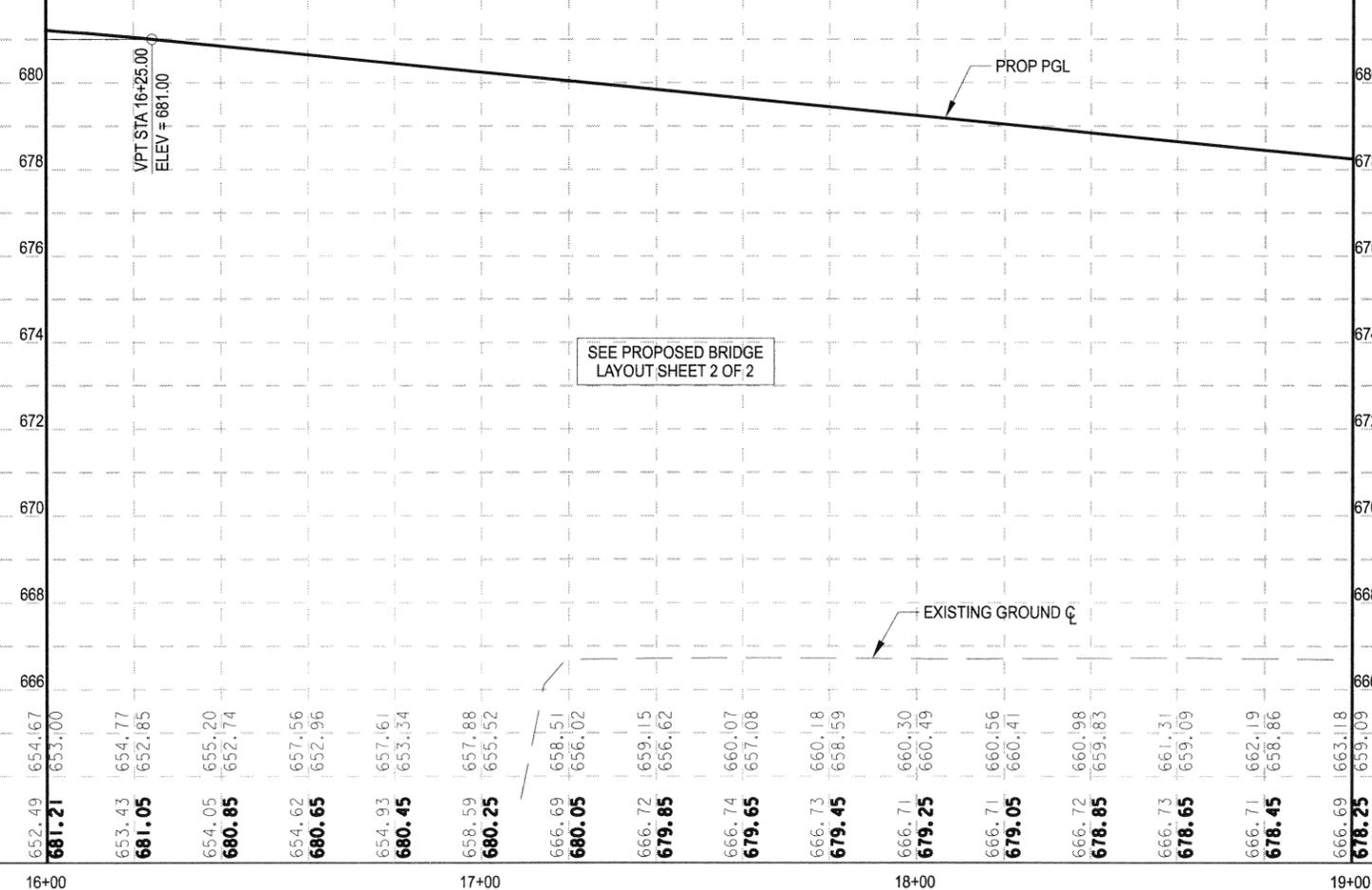
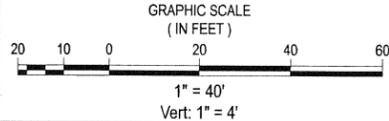
NOTE: PAVEMENT QUANTITIES ARE INCLUDED FOR THE REPAIR OF HOLBROOK AT THE COMPLETION OF WORK.

PLAN VIEW LEGEND

- PROP EDGE OF ROADWAY
- - - PROP RETAINING WALL
- - - EXIST EASEMENT
- - - EXISTING FEATURES
- - - EXISTING ROW
- - - PROP ROW
- XX — XX PROPOSED FENCE
- [Pattern] HYDROMULCHING

PROFILE VIEW LEGEND

- PROPOSED PGL
- - - EXISTING CENTERLINE
- - - EXIST ROW (RIGHT)
- - - PROP ROW (RIGHT)
- - - EXIST ROW (LEFT)
- - - PROP ROW (LEFT)



STATE OF TEXAS  
 KYLE GASS  
 94833  
 LICENSED PROFESSIONAL ENGINEER  
 THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY KYLE GASS P.E. 94833  
 2/9/2011

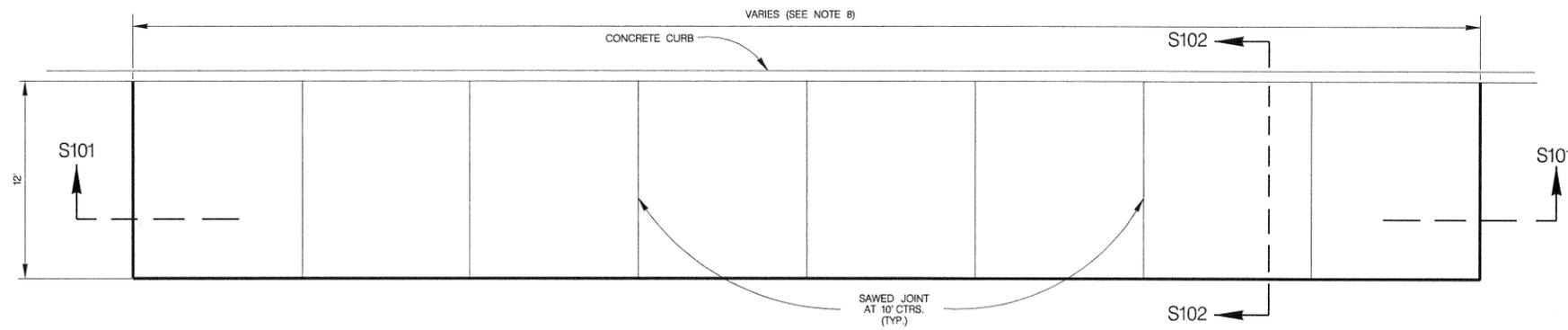
**SEA** STRUCTURAL ENGINEERING ASSOCIATES, INC.  
 CONSULTING ENGINEERS  
 SAN ANTONIO, TEXAS

**CEC** DON DURDEN, INC.  
 d.b.a. CIVIL ENGINEERING CONSULTANTS  
 11550 IH 10 WEST, SUITE 395  
 SAN ANTONIO, TEXAS 78230-1037  
 TEL: (210) 641-9999  
 FAX: (210) 641-6440  
 REGISTRATION #F-2214  
 CEC PROJECT NUMBER: E0357700

CITY OF SAN ANTONIO  
 CAPITAL IMPROVEMENTS  
 MANAGEMENT SERVICES  
 DEPARTMENT

RITTIMAN ROAD  
 RITTIMAN ROAD  
 PLAN AND PROFILE  
 SHEETS  
 ADDENDUM NO. 2

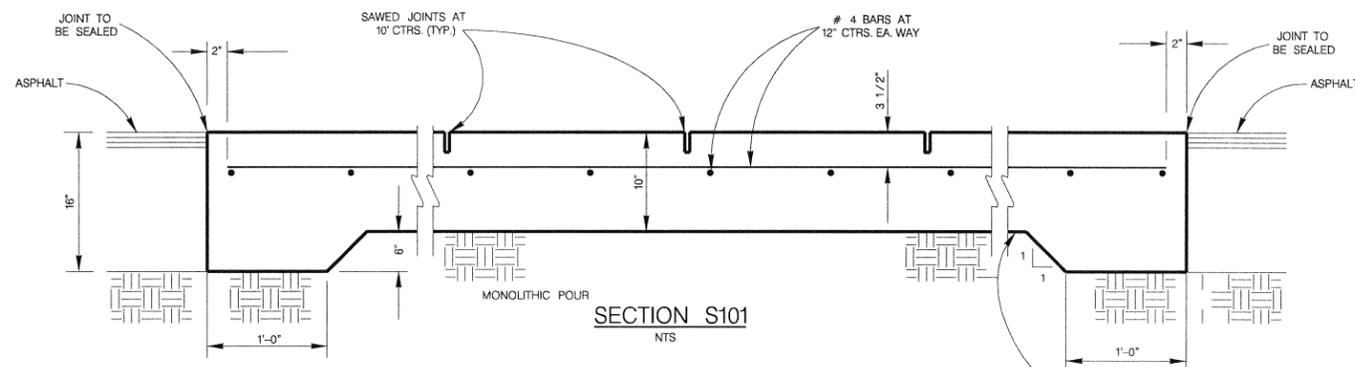
SHEET 4 OF 7		
SUBMITTAL	PROJECT NUMBER	DATE
FINAL	40-0008	2/9/2011
DRWN BY:	DSGN BY:	CHKD BY:
		SHEET NO.
		99



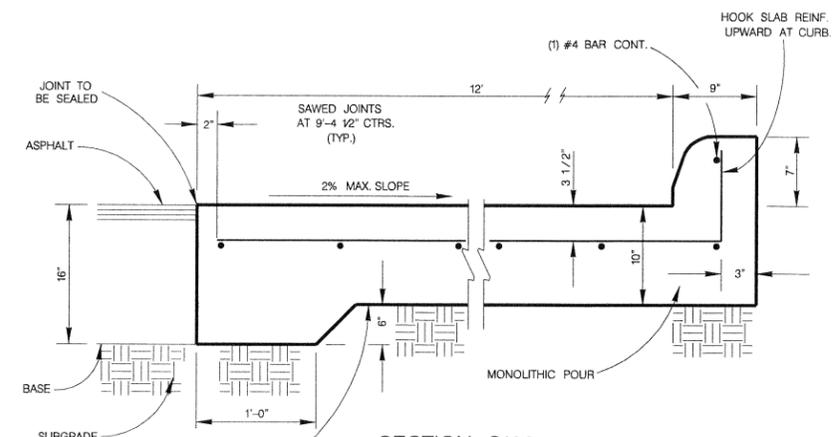
PLAN VIEW  
NTS

GENERAL NOTES

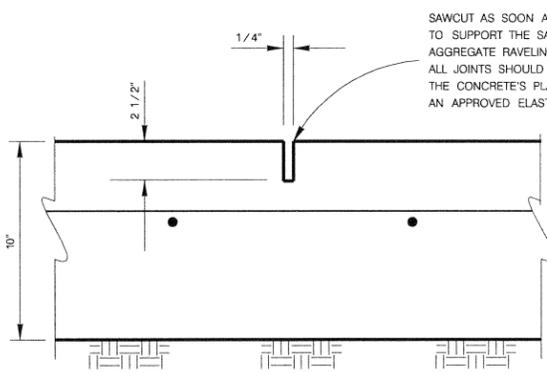
1. ALL CONCRETE SHALL TEST 4,000 P.S.I. AT 28 DAYS.
2. BUS STOP CONCRETE PAD CONSTRUCTION SHALL BE PAID UNDER ITEM 209 AT THE UNIT PRICE BID, WHICH PRICE SHALL BE FULL COMPENSATION FOR ALL DEMOLITION, REMOVAL OF EXISTING CURB, EXCAVATION, HAULING, CRUSHED LIMESTONE, REINFORCING STEEL, CONCRETE, CONCRETE CURB, JOINTS, AND INCIDENTALS NECESSARY TO COMPLETE THE WORK.
3. BUS PAD AND CURB SHALL BE MONOLITHICALLY POURED. ALL EXISTING CURBING SHALL BE REMOVED AND REPLACED AS PER STANDARD DETAILS.
4. THE CONTRACTOR SHALL CONSTRUCT AN EXPANSION JOINT MIDWAY IF THE "CONCRETE BUS STOP PAD" IS LONGER THAN 150 FEET. NO DIRECT PAYMENT SHALL BE MADE FOR CONSTRUCTION OF AN EXPANSION JOINT.
5. ACTUAL BUS PAD LENGTH AND WIDTH TO BE FIELD DETERMINED BY CITY ENGINEER OR HIS DESIGNATED REPRESENTATIVE.
6. DO NOT DRIVE ON PAD UNTIL CONCRETE HAS REACHED A STRENGTH OF 2,800 P.S.I.
7. BREAK TEST CYLINDERS AS FOLLOWS:  
2 AT 3 DAYS  
2 AT 7 DAYS  
2 AT 28 DAYS
8. CONCRETE BUS PAD LENGTH (OR AS SHOWN ON THE PLANS):  
30 M.P.H. - 100'  
35 M.P.H. - 160'  
40 M.P.H. - 160'  
45 M.P.H. - 200'



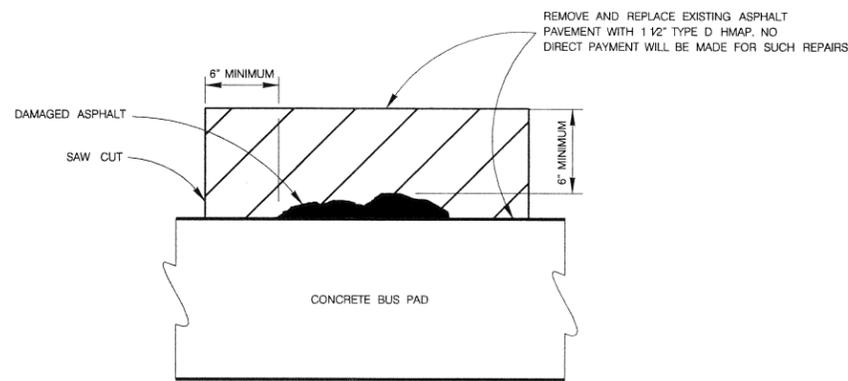
SECTION S101  
NTS



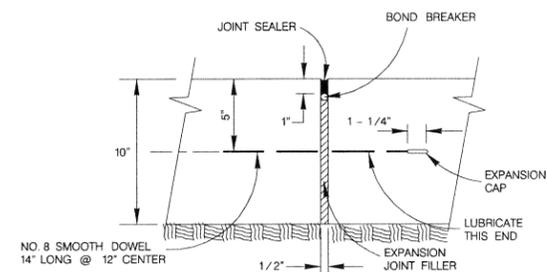
SECTION S102  
NTS



SAWED JOINT DETAIL  
NTS

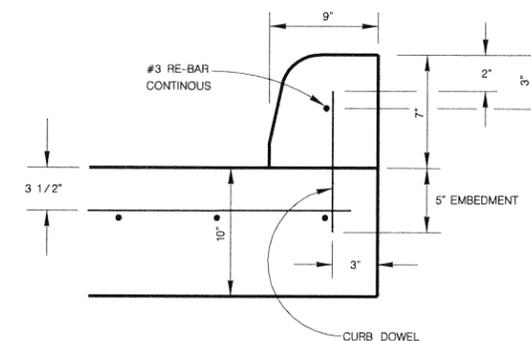


REPAIR OF DAMAGED ASPHALT  
NTS

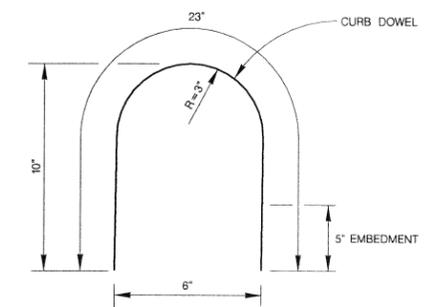


EXPANSION JOINT DETAIL  
SCALE : 1" = 1'

NOTE:  
THE CONTRACTOR SHALL CONSTRUCT AN EXPANSION JOINT MIDWAY IF THE "CONCRETE BUS STOP PAD" IS LONGER THAN 150 FEET. NO DIRECT PAYMENT SHALL BE MADE FOR CONSTRUCTION OF AN EXPANSION JOINT.



CONCRETE CURB OPTION  
NEED CITY ENGINEER'S APPROVAL  
NTS



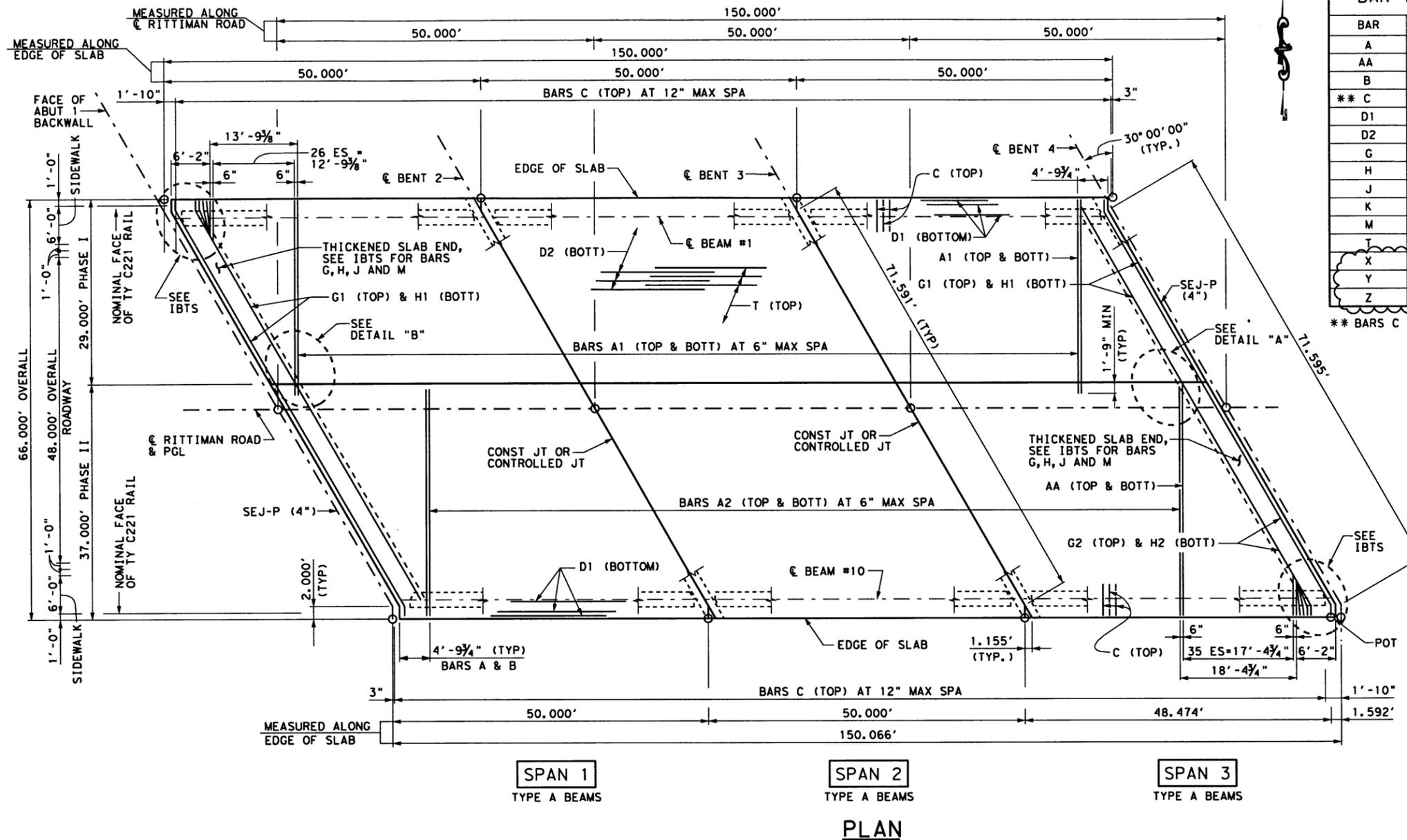
CURB DOWEL  
NO. 3 RE-BAR @ 30' C-C  
NTS

MAY 2009

CITY OF SAN ANTONIO  
CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT

CONCRETE  
BUS STOP PAD  
ADDENDUM NO. 2

FINAL	SUBMITTAL	PROJECT NO. 40-0008	DATE:
DRWN. BY: V. VASQUEZ	DSGN. BY: L. MALTOS	CHKD. BY: R.S. HOSSEINI, P.E.	SHEET NO. 111A



BAR TABLE	
BAR	SIZE
A	#5
AA	#5
B	#5
** C	#5
D1	#5
D2	#5
G	#5
H	#5
J	#5
K	#5
M	#5
T	#4
X	#4
Y	#4
Z	#4

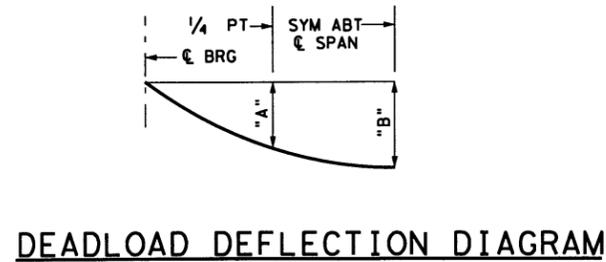
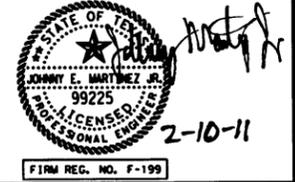
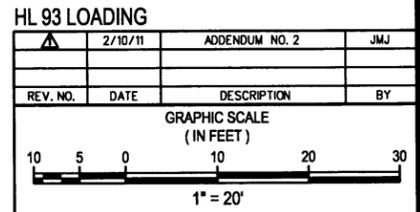
\*\* BARS C = 5'-0"

TABLE OF ESTIMATED QUANTITIES			
SPAN NO.	BRIDGE SIDEWALK CY	REINF CONCRETE SLAB SF	PRESTRESSED CONCRETE BEAMS TYPE A FT
1	21.2	3,300	496.43
2	21.2	3,300	496.69
3	21.2	3,300	496.69
TOTAL	63.6	9,900	1,489.81
CLASS "S" CONCRETE		CY	253.6
① TOTAL REINF STEEL		LB	64,350

- ① FOR CONTRACTOR'S INFORMATION ONLY.
- ② BEAM LENGTHS SHOWN ARE BOTTOM FLANGE LENGTHS WITH ADJUSTMENT FOR BEAM SLOPE.
- ③ REINFORCING STEEL WEIGHT IS CALCULATED USING AN APPROXIMATE FACTOR OF 6.5 LB/FT<sup>2</sup>.

TABLE OF SECTION DEPTHS				
SPAN NO.	BEAM NO.	"X" AT € BRG	"Y" AT € BRG	"S" AT € SPAN
1-3	1-10	10 1/4"	3'-2 1/4"	8 5/8"

\* THEORETICAL DIMENSION



CALCULATED DEFLECTIONS SHOWN ARE DUE TO THE CONCRETE SLAB ON INTERIOR BEAMS ONLY (E<sub>c</sub> = 5000 ksi) ADJUST VALUES AS REQUIRED FOR EXTERIOR BEAMS AND IF OPTIONAL SLAB FORMING IS USED. THESE VALUES MAY REQUIRE FIELD VERIFICATION.

SPAN NO.	BEAM NO.	"A"	"B"
1-3	1-10	0.046	0.065

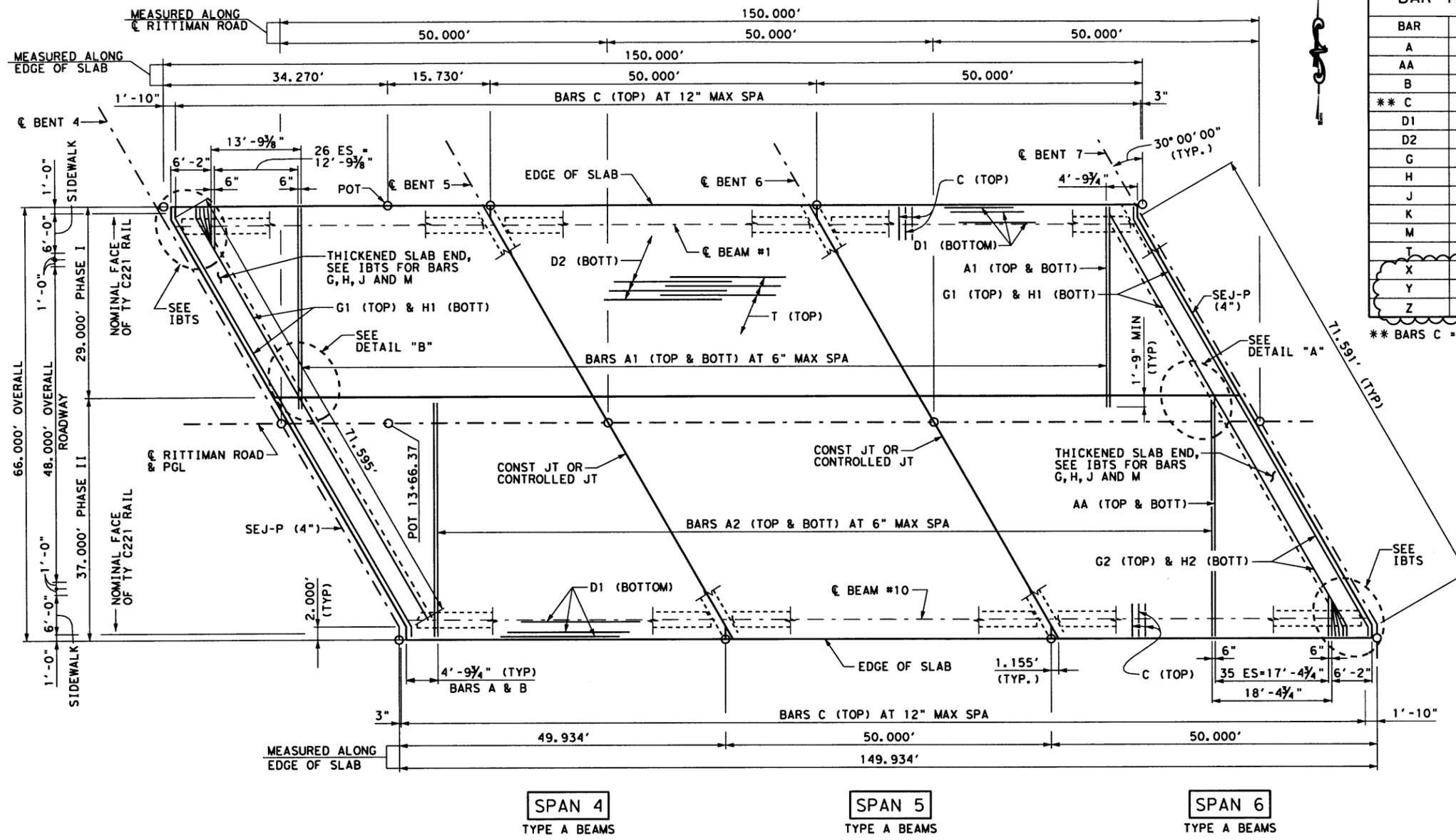
**GENERAL NOTES:**  
 DESIGNED ACCORDING TO AASHTO LRFD SPECIFICATIONS.  
 ALL CONCRETE SHALL BE CLASS S, f'<sub>c</sub> = 4,000 PSI.  
 ALL REINFORCING SHALL BE GRADE 60.  
 BAR LAPS, WHERE REQUIRED, SHALL BE AS FOLLOWS:  
 UNCOATED - #4 = 1'-5"  
 UNCOATED - #5 = 1'-9"  
 EPOXY COATED - #4 = 2'-1"  
 EPOXY COATED - #5 = 2'-7"  
 CHAMFER ALL EXPOSED EDGES 3/4" UNLESS NOTED OTHERWISE.  
 FOR BEAM, BEARING PAD, AND THICKENED SLAB END, SEE IBD, IBEB, AND IBTS.  
 SEE SEJ-P SHEET FOR DETAILS OF SEJ TO BE PLACED WITH SLAB AND APPROACH SLAB.

**SEA** STRUCTURAL ENGINEERING ASSOCIATES, INC. CONSULTING ENGINEERS SAN ANTONIO, TEXAS  
 FIRM REGISTRATION NO.: F199

**CITY OF SAN ANTONIO**  
**CAPITAL IMPROVEMENTS**  
**MANAGEMENT SERVICES**  
**DEPARTMENT**

RITTIMAN ROAD		
RITTIMAN ROAD BRIDGE		
SLAB DETAILS - UNIT 1		
ADDENDUM NO. 2		
SHEET 1 OF 5		
SUBMITTAL	PROJECT NUMBER	DATE
100% PS&E	40-008	30 NOV 2010
DRWN BY:	DSGN BY:	CHKD BY:
LC	JMJ	AMS
		SHEET NO.
		240

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BAR TABLE	
BAR	SIZE
A	#5
AA	#5
B	#5
** C	#5
D1	#5
D2	#5
G	#5
H	#5
J	#5
K	#5
M	#5
T	#4
X	#4
Y	#4
Z	#4

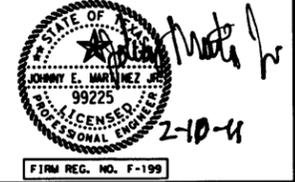
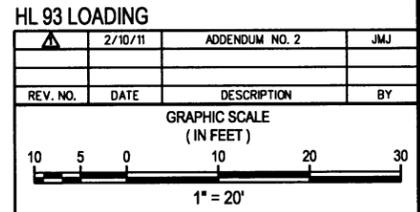
\*\* BARS C = 5'-0"

TABLE OF ESTIMATED QUANTITIES			
SPAN NO.	BRIDGE SIDEWALK CY	REINF CONCRETE SLAB SF	PRESTRESSED CONCRETE BEAMS TYPE A FT
4	21.2	3,300	496.70
5	21.2	3,300	496.69
6	21.2	3,300	496.69
TOTAL	63.6	9,900	1,490.08
CLASS "S" CONCRETE			CY 253.7
① TOTAL REINF STEEL			LB 64,350

- ① FOR CONTRACTOR'S INFORMATION ONLY.
- ② BEAM LENGTHS SHOWN ARE BOTTOM FLANGE LENGTHS WITH ADJUSTMENT FOR BEAM SLOPE.
- ③ REINFORCING STEEL WEIGHT IS CALCULATED USING AN APPROXIMATE FACTOR OF 6.5 LB/FT<sup>2</sup>.

TABLE OF SECTION DEPTHS				
SPAN NO.	BEAM NO.	"X" AT € BRG	"Y" AT € BRG	"S" AT € SPAN *
4-5	1-10	10 1/4"	3'-2 1/4"	8 5/8"
6	1-10	10"	3'-2"	8 7/8"

\* THEORETICAL DIMENSION

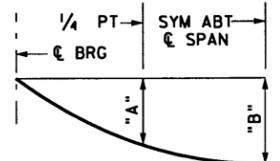


**SEA** STRUCTURAL ENGINEERING ASSOCIATES, INC. CONSULTING ENGINEERS SAN ANTONIO, TEXAS  
FIRM REGISTRATION NO.: F199

**CITY OF SAN ANTONIO**  
**CAPITAL IMPROVEMENTS**  
**MANAGEMENT SERVICES**  
**DEPARTMENT**

RITTIMAN ROAD  
**RITTIMAN ROAD BRIDGE**  
SLAB DETAILS - UNIT 2  
**ADDENDUM NO. 2**  
SHEET 2 OF 5

SUBMITTAL	PROJECT NUMBER	DATE
100% PS&E	40-0008	30 NOV 2010
DRWN BY: LC	DSGN BY: JMJ	CHKD BY: AMS
		SHEET NO. 241



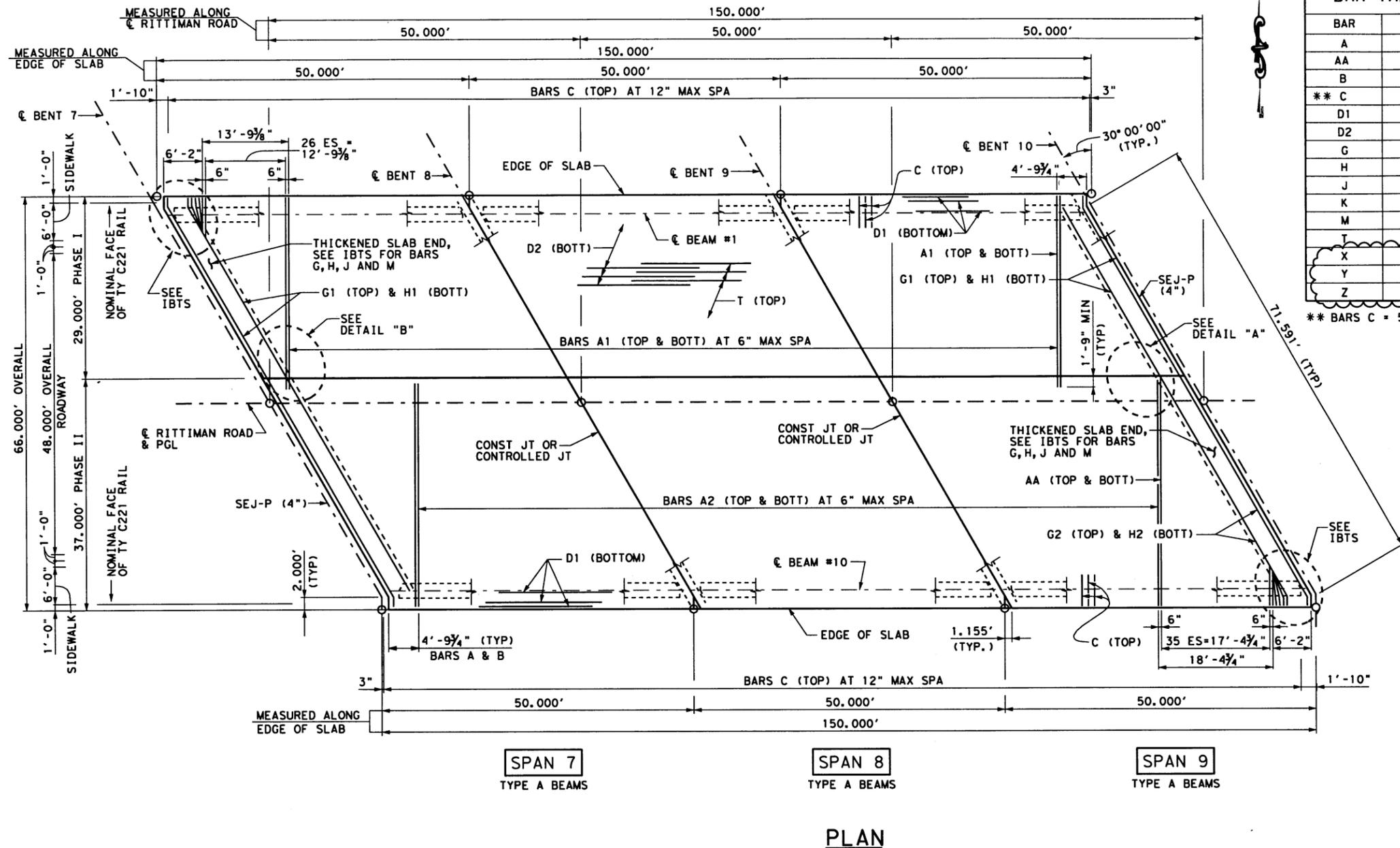
**DEADLOAD DEFLECTION DIAGRAM**

CALCULATED DEFLECTIONS SHOWN ARE DUE TO THE CONCRETE SLAB ON INTERIOR BEAMS ONLY ( $E_c = 5000$  ksi) ADJUST VALUES AS REQUIRED FOR EXTERIOR BEAMS AND IF OPTIONAL SLAB FORMING IS USED. THESE VALUES MAY REQUIRE FIELD VERIFICATION.

SPAN NO.	BEAM NO.	"A"	"B"
4-6	1-10	0.046	0.065

**GENERAL NOTES:**  
DESIGNED ACCORDING TO AASHTO LRFD SPECIFICATIONS.  
ALL CONCRETE SHALL BE CLASS S,  $f'_c = 4,000$  PSI.  
ALL REINFORCING SHALL BE GRADE 60.  
BAR LAPS, WHERE REQUIRED, SHALL BE AS FOLLOW:  
UNCOATED - #4 = 1'-5"  
              - #5 = 1'-9"  
EPOXY COATED - #4 = 2'-1"  
                  - #5 = 2'-7"  
CHAMFER ALL EXPOSED EDGES 3/4" UNLESS NOTED OTHERWISE.  
FOR BEAM, BEARING PAD, AND THICKENED SLAB END, SEE IBD, IBEB, AND IBTS.  
SEE SEJ-P SHEET FOR DETAILS OF SEJ TO BE PLACED WITH SLAB AND APPROACH SLAB.

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BAR TABLE	
BAR	SIZE
A	#5
AA	#5
B	#5
** C	#5
D1	#5
D2	#5
G	#5
H	#5
J	#5
K	#5
M	#5
T	#4
X	#4
Y	#4
Z	#4

\*\* BARS C = 5'-0"

TABLE OF ESTIMATED QUANTITIES			
SPAN NO.	BRIDGE SIDEWALK CY	REINF CONCRETE SLAB SF	PRESTRESSED CONCRETE BEAMS TYPE A FT
7	21.2	3,300	496.67
8	21.2	3,300	496.67
9	21.2	3,300	496.69
TOTAL	63.6	9,900	1,490.03
CLASS "S" CONCRETE			CY 254.0
TOTAL REINF STEEL			LB 64,350

- ① FOR CONTRACTOR'S INFORMATION ONLY.
- ② BEAM LENGTHS SHOWN ARE BOTTOM FLANGE LENGTHS WITH ADJUSTMENT FOR BEAM SLOPE.
- ③ REINFORCING STEEL WEIGHT IS CALCULATED USING AN APPROXIMATE FACTOR OF 6.5 LB/FT<sup>2</sup>.

TABLE OF SECTION DEPTHS				
SPAN NO.	BEAM NO.	"X" AT € BRG	"Y" AT € BRG	"S" AT € SPAN
7-9	1-10	10"	3'-2"	8 1/8"

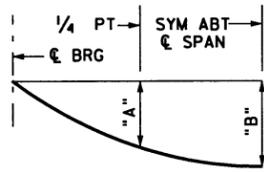
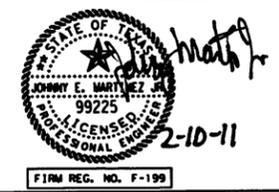
\* THEORETICAL DIMENSION

HL 93 LOADING

REV. NO.	DATE	DESCRIPTION	BY

GRAPHIC SCALE (IN FEET)

1" = 20'



**DEADLOAD DEFLECTION DIAGRAM**

CALCULATED DEFLECTIONS SHOWN ARE DUE TO THE CONCRETE SLAB ON INTERIOR BEAMS ONLY (E<sub>c</sub> = 5000 ksi) ADJUST VALUES AS REQUIRED FOR EXTERIOR BEAMS AND IF OPTIONAL SLAB FORMING IS USED. THESE VALUES MAY REQUIRE FIELD VERIFICATION.

SPAN NO.	BEAM NO.	"A"	"B"
7-9	1-10	0.046	0.065

**GENERAL NOTES:**

DESIGNED ACCORDING TO AASHTO LRFD SPECIFICATIONS.

ALL CONCRETE SHALL BE CLASS S, f'<sub>c</sub> = 4,000 PSI.

ALL REINFORCING SHALL BE GRADE 60.

BAR LAPS, WHERE REQUIRED, SHALL BE AS FOLLOW:  
 UNCOATED ~ #4 = 1'-5"  
 ~ #5 = 1'-9"  
 EPOXY COATED ~ #4 = 2'-1"  
 ~ #5 = 2'-7"

CHAMFER ALL EXPOSED EDGES 3/4" UNLESS NOTED OTHERWISE.

FOR BEAM, BEARING PAD, AND THICKENED SLAB END, SEE IBD, IBEB, AND IBTS.

SEE SEJ-P SHEET FOR DETAILS OF SEJ TO BE PLACED WITH SLAB AND APPROACH SLAB.

**SEA** STRUCTURAL ENGINEERING ASSOCIATES, INC. CONSULTING ENGINEERS SAN ANTONIO, TEXAS

FIRM REGISTRATION NO. F199

**CITY OF SAN ANTONIO**  
**CAPITAL IMPROVEMENTS**  
**MANAGEMENT SERVICES**  
**DEPARTMENT**

RITTIMAN ROAD

RITTIMAN ROAD BRIDGE

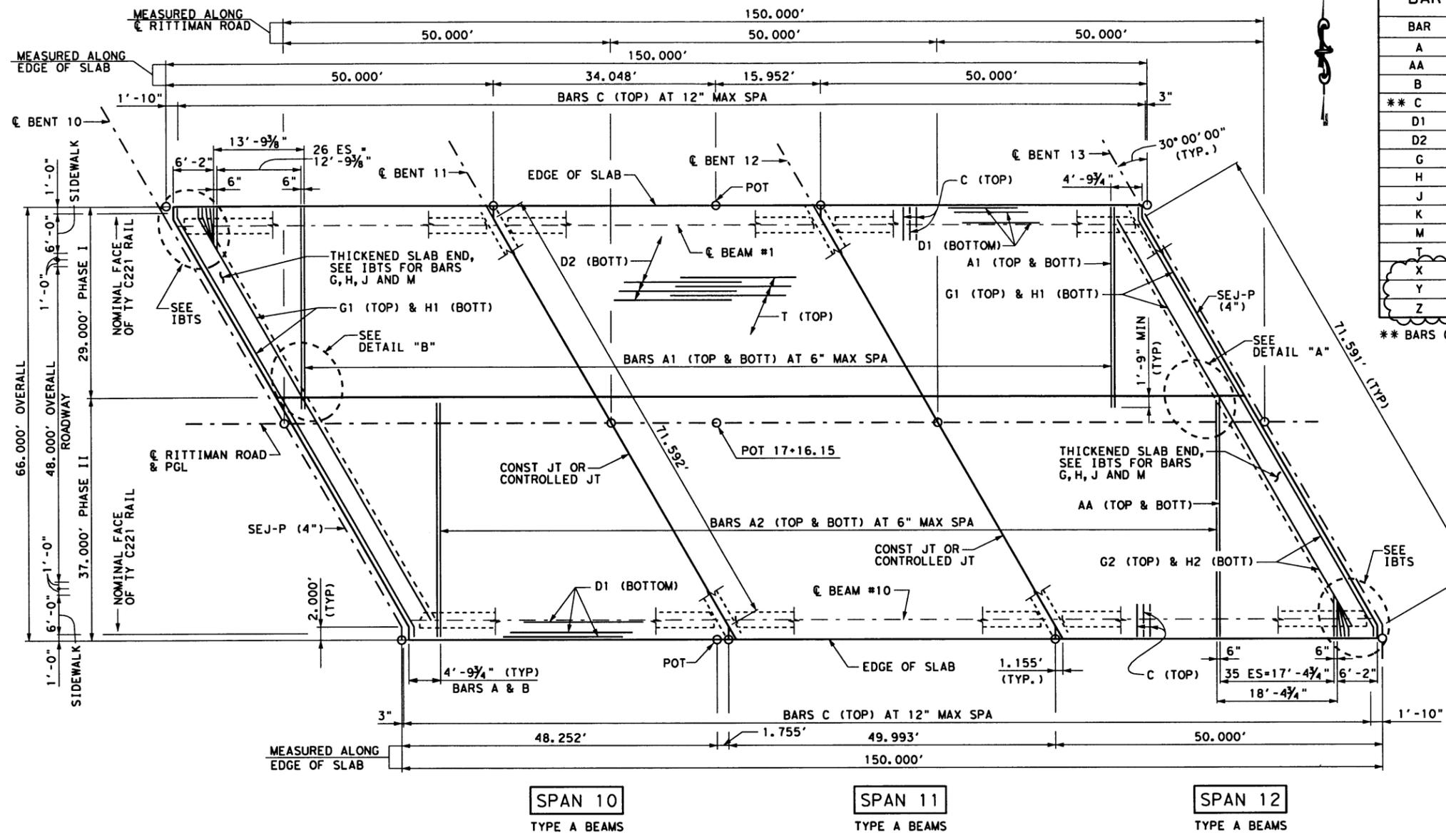
SLAB DETAILS - UNIT 3

ADDENDUM NO. 2

SHEET 3 OF 5

SUBMITTAL	PROJECT NUMBER	DATE
100% PS&E	40-0008	30 NOV 2010
DRWN BY: LC	DSGN BY: JMJ	CHKD BY: AMS
		SHEET NO. 242

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BAR TABLE	
BAR	SIZE
A	#5
AA	#5
B	#5
** C	#5
D1	#5
D2	#5
G	#5
H	#5
J	#5
K	#5
M	#5
T	#4
X	#4
Y	#4
Z	#4

\*\* BARS C = 5'-0"

TABLE OF ESTIMATED QUANTITIES			
SPAN	BRIDGE SIDEWALK	REINF CONCRETE SLAB	PRESTRESSED CONCRETE BEAMS TYPE A
NO.	CY	SF	FT
10	21.2	3,300	496.69
11	21.2	3,300	496.69
12	21.2	3,300	496.69
TOTAL	63.6	9,900	1,490.07
CLASS "S" CONCRETE			CY 253.6
① TOTAL REINF STEEL			LB 64,350

- ① FOR CONTRACTOR'S INFORMATION ONLY.
- ② BEAM LENGTHS SHOWN ARE BOTTOM FLANGE LENGTHS WITH ADJUSTMENT FOR BEAM SLOPE.
- ③ REINFORCING STEEL WEIGHT IS CALCULATED USING AN APPROXIMATE FACTOR OF 6.5 LB/FT<sup>2</sup>.

TABLE OF SECTION DEPTHS				
SPAN NO.	BEAM NO.	"X" AT € BRG	"Y" AT € BRG	"S" AT € SPAN
10-12	1-10	10 1/4"	3'-2 1/4"	8 5/8"

\* THEORETICAL DIMENSION

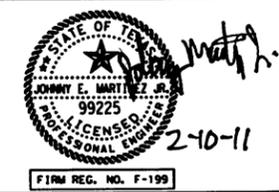
HL 93 LOADING

2/10/11	ADDENDUM NO. 2	JMJ
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REV. NO. DATE DESCRIPTION BY

GRAPHIC SCALE (IN FEET)

1" = 20'



**SEA** STRUCTURAL ENGINEERING ASSOCIATES, INC. CONSULTING ENGINEERS SAN ANTONIO, TEXAS

FIRM REGISTRATION NO.: F199

**CITY OF SAN ANTONIO**  
**CAPITAL IMPROVEMENTS**  
**MANAGEMENT SERVICES**  
**DEPARTMENT**

RITTIMAN ROAD

RITTIMAN ROAD BRIDGE

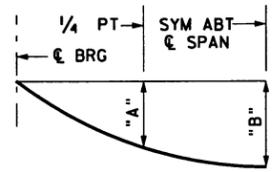
SLAB DETAILS - UNIT 4

ADDENDUM NO. 2

SHEET 4 OF 5

SUBMITTAL	PROJECT NUMBER	DATE
100% PS&E	40-0008	30 NOV 2010
DRWN BY: LC	DSGN BY: MJM	CHKD BY: AMS
		SHEET NO. 243

**PLAN**



**DEADLOAD DEFLECTION DIAGRAM**

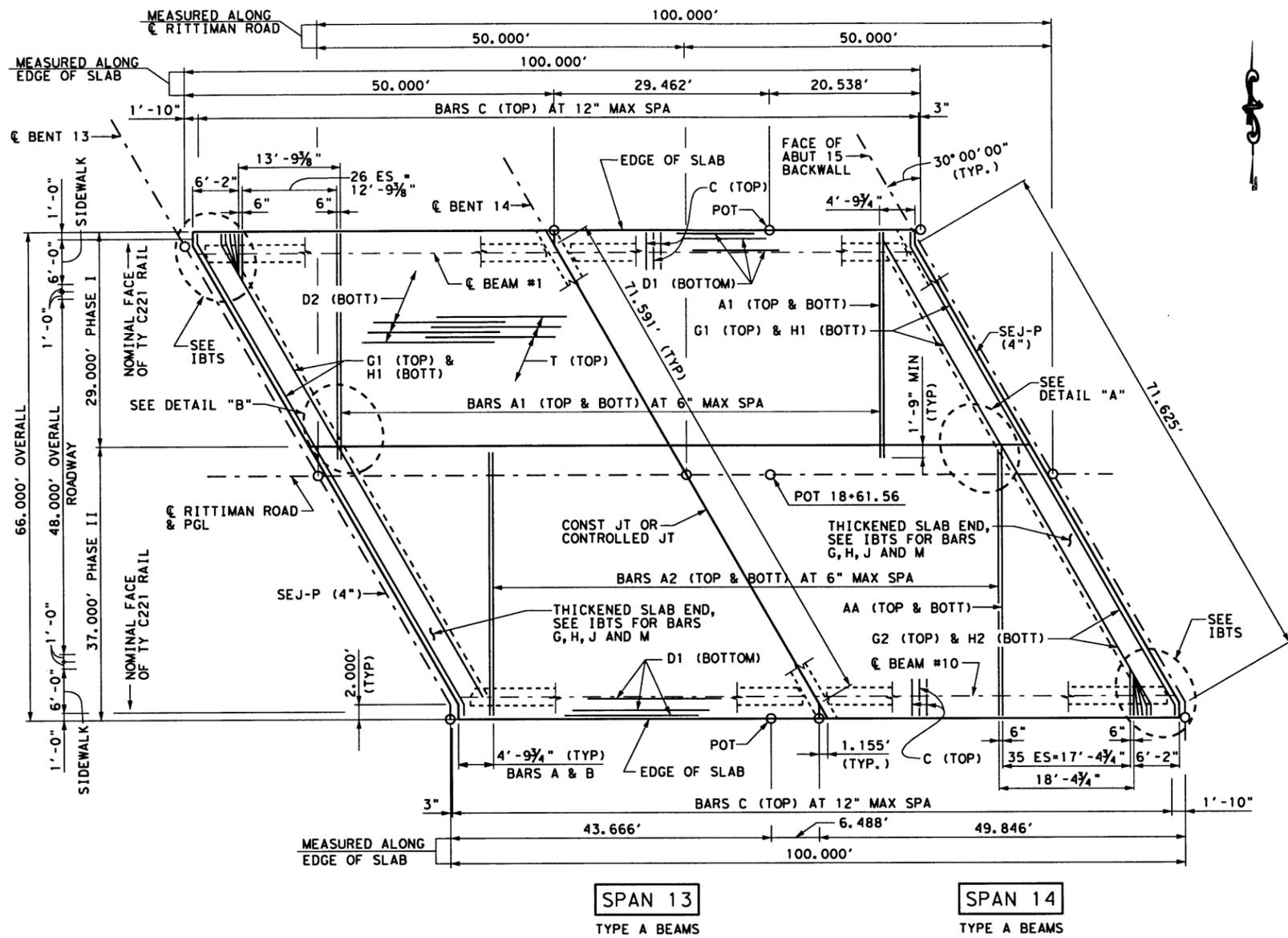
CALCULATED DEFLECTIONS SHOWN ARE DUE TO THE CONCRETE SLAB ON INTERIOR BEAMS ONLY (E<sub>c</sub> = 5000 ksi) ADJUST VALUES AS REQUIRED FOR EXTERIOR BEAMS AND IF OPTIONAL SLAB FORMING IS USED. THESE VALUES MAY REQUIRE FIELD VERIFICATION.

SPAN NO.	BEAM NO.	"A"	"B"
10-12	1-10	0.046	0.065

**GENERAL NOTES:**

- DESIGNED ACCORDING TO AASHTO LRFD SPECIFICATIONS.
- ALL CONCRETE SHALL BE CLASS S, f'<sub>c</sub> = 4,000 PSI.
- ALL REINFORCING SHALL BE GRADE 60.
- BAR LAPS, WHERE REQUIRED, SHALL BE AS FOLLOW:  
 UNCOATED - #4 = 1'-5"  
 - #5 = 1'-9"  
 EPOXY COATED - #4 = 2'-1"  
 - #5 = 2'-7"
- CHAMFER ALL EXPOSED EDGES 3/4" UNLESS NOTED OTHERWISE.
- FOR BEAM, BEARING PAD, AND THICKENED SLAB END, SEE IBD, IBEB, AND IBTS.
- SEE SEJ-P SHEET FOR DETAILS OF SEJ TO BE PLACED WITH SLAB AND APPROACH SLAB.

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BAR TABLE	
BAR	SIZE
A	#5
AA	#5
B	#5
** C	#5
D1	#5
D2	#5
G	#5
H	#5
J	#5
K	#5
M	#5
T	#4
X	#4
Y	#4
Z	#4

\*\* BARS C = 5'-0"

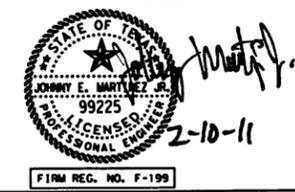
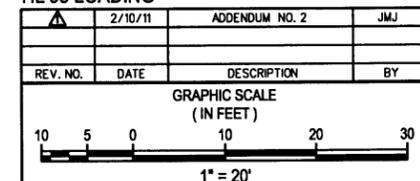
TABLE OF ESTIMATED QUANTITIES			
SPAN	BRIDGE SIDEWALK	REINF CONCRETE SLAB	PRESTRESSED CONCRETE BEAMS @ TYPE A
NO.	CY	SF	FT
13	21.2	3,300	496.71
14	21.2	3,300	496.44
TOTAL	42.4	6,600	993.15
CLASS "S" CONCRETE			CY 170.3
① TOTAL REINF STEEL			LB 42,900

- ① FOR CONTRACTOR'S INFORMATION ONLY.
- ② BEAM LENGTHS SHOWN ARE BOTTOM FLANGE LENGTHS WITH ADJUSTMENT FOR BEAM SLOPE.
- ③ REINFORCING STEEL WEIGHT IS CALCULATED USING AN APPROXIMATE FACTOR OF 6.5 LB/FT<sup>2</sup>.

TABLE OF SECTION DEPTHS				
SPAN NO.	BEAM NO.	"X" AT € BRG	"Y" AT € BRG	"S" AT € SPAN *
13-14	1-10	10 1/4"	3'-2 1/4"	8 5/8"

\* THEORETICAL DIMENSION

HL 93 LOADING



**SEA** STRUCTURAL ENGINEERING ASSOCIATES, INC. CONSULTING ENGINEERS SAN ANTONIO, TEXAS  
FIRM REGISTRATION NO.: F199

**CITY OF SAN ANTONIO**  
**CAPITAL IMPROVEMENTS**  
**MANAGEMENT SERVICES**  
**DEPARTMENT**

RITTIMAN ROAD  
RITTIMAN ROAD BRIDGE

SLAB DETAILS - UNIT 5

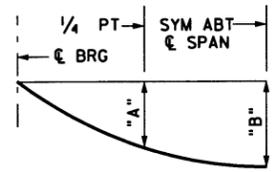
ADDENDUM NO. 2

SHEET 5 OF 5

SUBMITTAL	PROJECT NUMBER	DATE
100% PS&E	40-0008	30 NOV 2010
DRWN BY: LC	DSGN BY: JMJ	CHKD BY: AMS
		SHEET NO. 244

PLAN

DEADLOAD DEFLECTION DIAGRAM



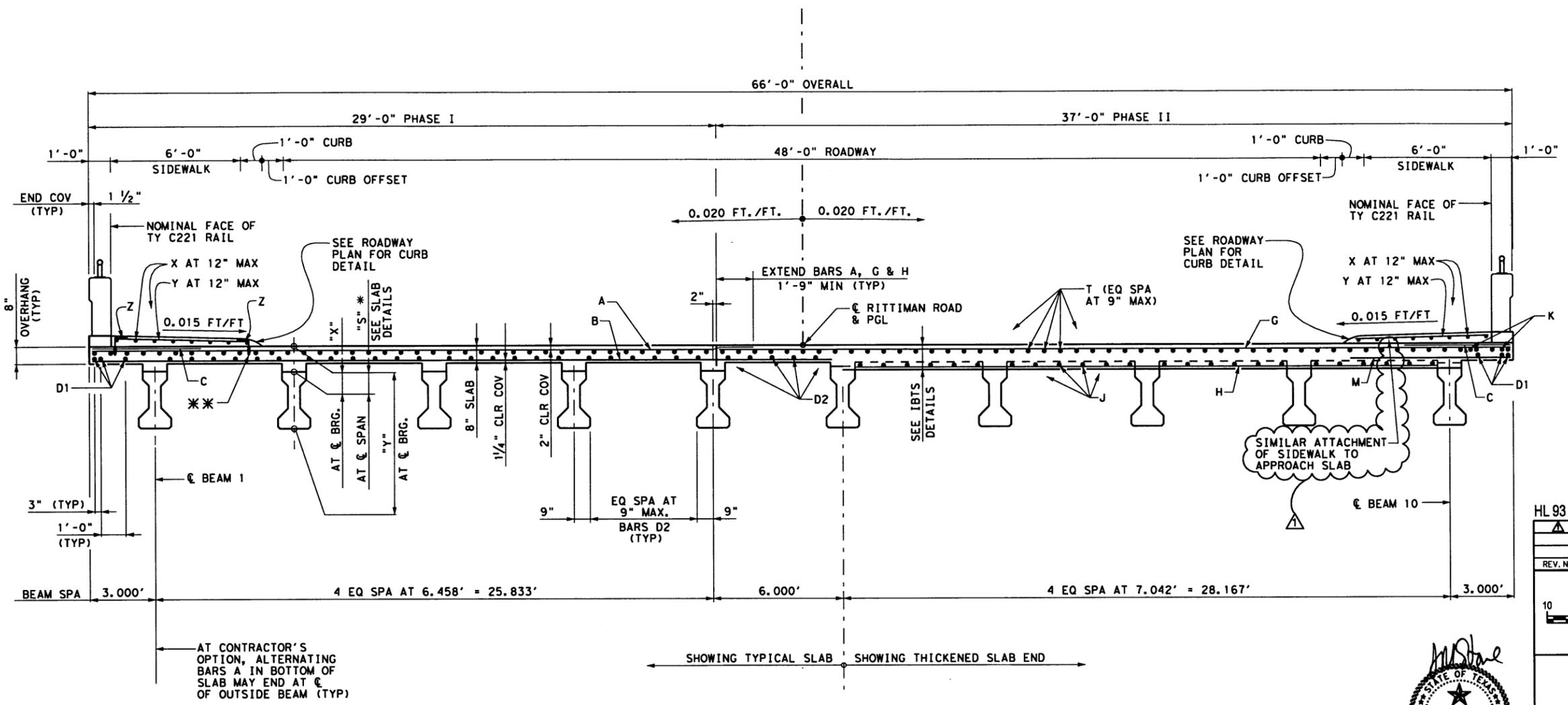
CALCULATED DEFLECTIONS SHOWN ARE DUE TO THE CONCRETE SLAB ON INTERIOR BEAMS ONLY (E<sub>c</sub> = 5000 ksi) ADJUST VALUES AS REQUIRED FOR EXTERIOR BEAMS AND IF OPTIONAL SLAB FORMING IS USED, THESE VALUES MAY REQUIRE FIELD VERIFICATION.

SPAN NO.	BEAM NO.	"A"	"B"
13-14	1-10	0.046	0.065

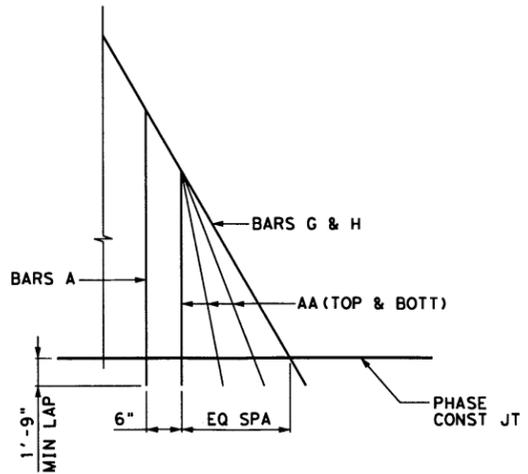
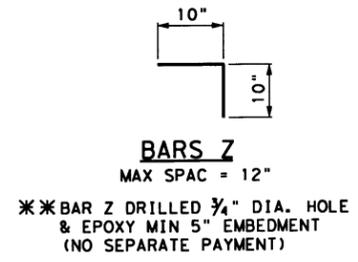
GENERAL NOTES:

- DESIGNED ACCORDING TO AASHTO LRFD SPECIFICATIONS.
- ALL CONCRETE SHALL BE CLASS S, f'<sub>c</sub> = 4,000 PSI.
- ALL REINFORCING SHALL BE GRADE 60.
- BAR LAPS, WHERE REQUIRED, SHALL BE AS FOLLOW:  
UNCOATED - #4 = 1'-5"  
              - #5 = 1'-9"  
EPOXY COATED - #4 = 2'-1"  
                  - #5 = 2'-7"
- CHAMFER ALL EXPOSED EDGES 3/4" UNLESS NOTED OTHERWISE.
- FOR BEAM, BEARING PAD, AND THICKENED SLAB END, SEE IBD, IBE, AND IBTS.
- SEE SEJ-P SHEET FOR DETAILS OF SEJ TO BE PLACED WITH SLAB AND APPROACH SLAB.

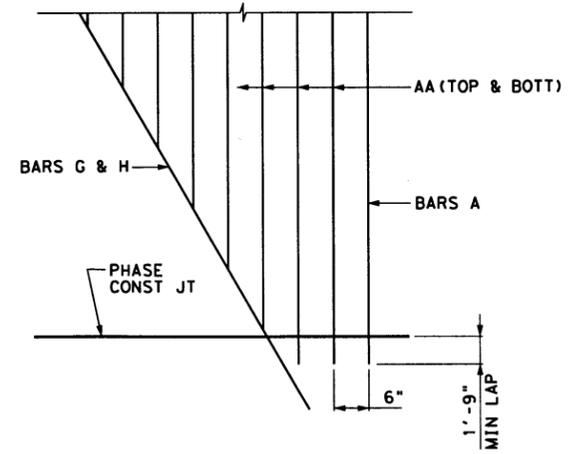
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TYPICAL TRANSVERSE SECTION



DETAIL "A"  
CORNER DETAIL  
AT PHASE CONST. JT

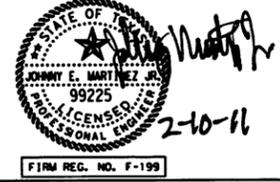


DETAIL "B"  
CORNER DETAIL  
AT PHASE CONST. JT

HL 93 LOADING

REV. NO.	DATE	DESCRIPTION	BY

GRAPHIC SCALE (IN FEET)  
10 5 0 10 20 30  
1" = 20'



**SEA** STRUCTURAL ENGINEERING ASSOCIATES, INC.  
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SAN ANTONIO, TEXAS  
FIRM REGISTRATION NO: F199

CITY OF SAN ANTONIO  
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MANAGEMENT SERVICES  
DEPARTMENT

RITTIMAN ROAD  
RITTIMAN ROAD BRIDGE  
MISCELLANEOUS SLAB DETAILS

ADDENDUM NO. 2  
SHEET 1 OF 1

SUBMITTAL	PROJECT NUMBER	DATE
100% PS&E	40-0008	30 NOV 2010
DRWN BY:	DSGN BY:	CHKD BY:
LC	JMJ	AMS

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