



City of San Antonio
TRANSPORTATION AND CAPITAL IMPROVEMENTS

ADDENDUM No. 2

FORMAL INVITATION FOR BIDS (IFB)

PROJECT NAME: Menger Creek Drainage – ID NO.:40-00328

DATE: August 4, 2015

This addendum is separated into sections for convenience; however, all contractors, subcontractors, material men, and other parties shall be responsible for reading the entire addendum. The failure to list an item or items in all affected sections of this addendum does not relieve any party affected from performing as per instructions, providing that the information is set forth one time any place in this addendum. These documents shall be attached to and become part of the Contract Documents for this project. The contractor shall be required to sign an acknowledgement of the receipt of this addendum and submit with their proposal package.

GENERAL:

1. The following changes and/or additions to the Contract Documents, via this addendum, shall apply to proposals made for and to the execution of the various parts of the work affected thereby.
2. Careful note of the Addendum shall be taken by all interested parties and all trades affected shall be fully advised in their performance of the work involved.

GENERAL COMMENTS:

CoSA Drainage Improvements Plans (Base Bid and Add. Alt. 1):

1. The following sheets were revised in the construction plans for the CoSA Drainage Improvements:
 - o C-04 (Quantity Sheet)
 - o C-03 (CoSA General Notes)
 - o C-44 (Hydraulic Data Sheet 1 of 3, Railroad Culvert)
 - o C-82 (Proposed UPRR Typical Section)
 - o C-83 (Additive Alternative Plan, Sta. 0+00 to Sta. 4+99.58)
 - o C-84 (Additive Alternative Profile, Sta. 0+00 to Sta. 3+62.92)
 - o C-86 (Additive Alternative, Enlarged Plan, Sta. 0+00 to Sta. 2+87)
 - o C-87 (Additive Alternative, Railroad Crossing – Section)
2. A Special Specification for UPRR Flaggings (1205) was added to the CoSA Specifications.
3. Bid Form 025 was revised; adding, changing, and deleting several bid items & quantities.

Linear Park Plans:

4. Clarifications to sheet ALT 1.02 are as follows:
 - o ALT 1.02A: The shade canopy at Fitness Node 'A' in Additive Alternate No. 5 is to have an eave height of 8'-6".
 - o ALT 1.02D: The two shade canopies at Fitness Node 'B' in Additive Alternate No. 8 are to have an eave height of 8'-6".

5. Clarifications to Sheet SL 1.01 are as follows:
 - o Of the (3) shade canopies at the fitness area, (2) are to have an eave height of 8'-6" and (1) is to have an eave height of 9'-6".
 - o Additive Alternate No. 2 - Linear Park Base Bid is to include the following:
 - (6) Standard Picnic Tables, Model No. 68-935 as manufactured by 'Dumor' or approved equal; and
 - (2) ADA Picnic Tables, Model No. 68-935-668 as manufactured by 'Dumor' or approved equal.
 - Colors to be selected by owner. Picnic tables to be surface mounted and secured with loctite.
6. Clarification to Sheet PL 1.01
 - o The legend is to read "Area of park to be planted with sod as per Alternate No. 11".
7. Clarification to Sheet DT 2.07, Detail 8- Alum Plate Metal Sign Panel Lay-out
 - o The City of San Antonio Parks & Recreation logo should have an overall dimension of 1'-6" ht. x 1'-5" width.
8. "Detail 3: French Drain for DF-1" on Sheet EPS 1.0 has been updated. See attached Sheet EPS 1.0

QUESTIONS FROM PROSPECTIVE BIDDERS:

1. Is the SBEDA percentage judged by the entire contract or just the base bid? If just the base bid, will contractors get an opportunity to meet the goal if the additive alternative lowers their percentage?
 - *Bidders are required to submit a Subcontractor/Supplier Utilization Plan form with their bid submittal. **In the absence of a waiver, the Utilization Plan form must demonstrate the bidder's commitment to meet the assigned 16% M/WBE and 2% AABE Subcontracting goals for the bidder's base bid amount only.** If the City accepts one or more alternates, the lowest responsive bidder will be requested to update their Utilization Plan prior to award. Alternates are subjected to the assigned subcontracting goals.*
2. The Menger Creek Drainage Project's Subcontractor Utilization Plan calls for 16% M/WBE participation. In my proposal, do I also need to submit a Good Faith Effort?
 - *Please refer to Question #1. **Bidders are not required to submit a Respondent/Vendor Subcontracting Waiver Request Form with their bids.** However, if a bidder is not able to commit to meeting the assigned goals through the Subcontractor/Supplier Utilization Plan form, the bidder should prepare and submit with their bid a Respondent/Vendor Subcontracting Waiver Request Form demonstrating their good faith efforts to meet the assigned goals. Kindly note that Waiver Request Forms are subject to approval by the Economic Development Department.*
3. Please clarify the zero quantities showing up in the bid 025 form.
 - *Items previously shown with zero quantity have been removed.*
4. Is a Railroad Permit Acquired?
 - *It will be provided by the City before the start of construction.*
5. Has the Railroad Right-of-Way entry been acquired?
 - *UPRR Right of Entry permits will be provided by the City before the start of construction.*
6. Sheet C-87 Note 5: What will the railroad insurance requirements be?
 - *UPRR insurance requirements will be provided by the City before the start of construction.*
7. Are Flaggers Required?
 - *Yes.*
8. If flaggers are required, can a pay item be added?
 - *Yes, a bid item for 1 flagger and related specification has been added.*
9. Will information related to the work in the UPRR right of way require flaggers and the number of trains that pass through the project limits? This information is needed for insurance.
 - *1 flagger has been added to the bid form.*
 - *An average of 18 trains pass through the project area daily.*
10. Can you please provide the train schedule?
 - *Train schedules are not available, other than an average of 18 trains passing thru the project area daily.*
11. Sheet C-87 Note 4: Can you please provide AREMA Chapter 2, Part 4 as part of the specs?
 - *Specifications may be obtained directly from AREMA. Visit <https://www.arema.org/publications/mre/index.aspx>, or call 301-459-3200 for more information.*

12. Sheet C-87 Note 10: States Clay beneath slabs to be 1,500 psi min.
 - a) If not 1500 psi, what will it be?
 - Contractor to test the clay and evaluate the bearing pressure. If it isn't 1,500 psi, over-excavation will likely be needed, item would be a change to the contract and negotiated as such.
 - b) Over Excavate for it? How Much? Place with what?
 - If it isn't 1,500 psi, over-excavation will likely be needed, item would be a change to the contract and negotiated as such.

13. Please clarify the quantities related to Additive Alternative #1 related to the headwall.
 - Prepare your bid using the quantities provided.

14. Additive Alt 1 Pay items 307.1 (Approach Slab/Retaining Walls/ Head Walls or Outfall Structures)
 - a) Please Verify the Quantities.
 - Prepare your bid using the quantities provided.
 - b) Verify Limits of each of those items.
 - Please your bid using the limits provided.

15. C-87 and C-89: Footing width of wall 11'-6" tall detail 1-C-86 on sheet shows 8'-6"
 - a) What is the footing width dimension for walls 7'-0" tall on both sides of this wall?
 - The headwall footings are typical and extend the entire length of the headwall, the downstream outlet walls are shown in the details on sheets C-91 and C-92.
 - b) Is wall thickness the same as 11'-6" wall at 1'-6"?
 - The wall thickness is 1'6".

16. Can a list of registered engineers familiar with railroad loadings be provided?
 - No such list is available.

END OF ADDENDUM No. 2

CADD FILE: L:\ACTIVE PROJECTS\COSA - MENDER CREEK\3.0 CAD\2109QNTY01 PLOTTED: 8/3/2015 2:37:57 PM BY: ADAM SOEUR CTB FILE: CAS.CTB

QUANTITY SUMMARY			
ITEM #	DESCRIPTION	UNIT	QUANTITY
COSA ITEMS			
103.1	REMOVE CONCRETE CURB	LF	680
103.3	REMOVE CONCRETE SIDEWALKS AND DRIVEWAYS	SF	2700
103.4	REMOVE EXISTING CONCRETE RIPRAP	SF	131206
104.1	STREET EXCAVATION	CY	746
105.1	CHANNEL EXCAVATION	CY	10275
108.1	LIME TREATED SUBGRADE (6 IN COMPACTED DEPTH)	SY	1693
108.2	LIME (APPLICATION RATE 31 LBS/SY)	TON	26
200.1	FLEXIBLE BASE (6" COMPACTED DEPTH)	SY	489
202.1	PRIME COAT	GAL	98
203.1	TACK COAT	GAL	373
205.2	HOT MIX ASPHALTIC PAVEMENT, TYPE B (6" COMPACTED DEPTH)	SY	1693
205.4	HOT MIX ASPHALTIC PAVEMENT, TYPE D (2" COMPACTED DEPTH)	SY	2035
306.1	STRUCTURAL EXCAVATION	CY	164
307.1	CONCRETE STRUCTURE (ELEVATED SIDEWALK)	CY	22
307.1	CONCRETE STRUCTURE (GRATED INLET APRON)	CY	3
401.1	REINFORCED CONCRETE PIPE (CLASS III)(24" DIA)	LF	45
401.1	REINFORCED CONCRETE PIPE (CLASS III)(30" DIA)	LF	20
403.8	INLET TYPE I (COMPLETE)(10 FT) WITH LOCKING COVER LID H=4.5'	EA	1
403.8	INLET TYPE I (COMPLETE)(10 FT) WITH LOCKING COVER LID H=5.0'	EA	1
403.13	SPECIAL INLET (COMPLETE) (TXDOT CURB INLET TYPE IIR)	EA	2
403.13	SPECIAL INLET (COMPLETE) (TXDOT 30' GRATED INLET TYPE X-5)	EA	1
403.13	SPECIAL INLET (COMPLETE) (GRATED INLET FOR FRENCH DRAIN)	EA	1
403.14	INLET EXTENSIONS (10 FT)	EA	3
407.1	CONCRETE ENCASEMENT	CY	1
407.2	CONCRETE CRADLES	CY	1
410.2	GRAVEL SUBGRADE FILLER	CY	2400
413.1	FLOWABLE FILL (LOW STRENGTH)	CY	5
500.1	CONCRETE CURB	LF	543
502.1	CONCRETE SIDEWALKS	SY	486
503.1	PORTLAND CEMENT CONCRETE DRIVEWAY	SY	58
503.2	PORTLAND CEMENT CONCRETE DRIVEWAY - COMMERCIAL	SY	24
505.1	CONCRETE RIPRAP (5" THICK) (CONCRETE CHANNEL)	SY	14998
506.1	CONCRETE RETAINING WALLS - COMBINATION TYPE	CY	4
507.5	GATES - VEHICULAR MAINTENANCE GATE AT MONSON	EA	1
508.1	RELOCATING CHAIN LINK WIRE FENCE (4' HIGH)	LF	51
510.1	TIMBER GUARD POSTS	EA	13
512.1	ADJUSTING EXISTING MANHOLES	EA	2
515.1	TOPSOIL (4" DEPTH)	CY	783
516.1	BERMUDA SODDING	SY	1246
516.3	BUFFALO 609 SODDING	SY	5803
522.1	SIDEWALK PIPE RAILING	LF	131
524.1	CONCRETE STEPS	CY	1
525.1	CONCRETE TRAFFIC BARRIER (PORTABLE)(INSTALL)	LF	80
525.1	CONCRETE TRAFFIC BARRIER (PORTABLE)(REMOVE)	LF	80
531.3	R1-1 STOP (30 IN)	EA	3
531.57	10 INCH STREET NAME, BLOCK NUMBERS (VARIESX10") (TWO SIGN PLATES BACK TO BACK)	EA	6
540.1	ROCK FILTER DAMS (TYPE 2)(INSTALL)	LF	74
540.2	ROCK FILTER DAMS (TYPE 2)(REMOVE)	LF	74
540.61	CONSTRUCTION EXITS (INSTALL)	SY	412
540.62	CONSTRUCTION EXITS (REMOVE)	SY	412
540.9	TEMPORARY SEDIMENT CONTROL FENCE	LF	198
540.1	CURB INLET GRAVEL FILTERS	LF	251
540.11	GRAVEL FILTER BAGS	LF	52
550.1	TRENCH EXCAVATION SAFETY PROTECTION	LF	44
801.1	LEVEL I PROTECTIVE FENCING	LF	1452
801.2	LEVEL IIA PROTECTIVE FENCING	LF	273
801.3	LEVEL IIB PROTECTIVE FENCING	LF	20
802.1	LEVEL II PRUNING	EA	6
902.1	STEEL POSTS AND CABLE	LF	144
1001.1	REMOVE EXISTING DOUBLE 10'X6' BOX CULVERTS AT RIO GRANDE	LS	1
1001.2	REMOVE EXISTING 48" RCP PIPE CULVERT AT STA 27+29	LS	1
1001.3	REMOVE EXISTING 54" RCP PIPE CULVERT AT STA 30+97	LS	1
1001.4	REMOVE EXISTING 54" RCP PIPE CULVERT AT STA 35+48	LS	1
1001.5	REMOVE EXISTING METAL BEAM GUARD RAIL AT RIO GRANDE	LS	1
1001.6	REMOVE EXISTING PEDESTRIAN BRIDGE AT GRIMES ST.	LS	1
TxDOT 432	RIPRAP (RR8 SIDE CHANNEL TIE INS)	CY	2
TxDOT 556	PIPE UNDERDRAINS (INC. PIPE, GRAVEL, & GEOTEXTILE)	LF	2429
TxDOT ITEM# NORTH RIO GRANDE ST. BRIDGE			
400	CEMENT STABILIZED BACKFILL (BEHIND ABUTMENT)	CY	80
416	DRILLED SHAFT (30 IN)	LF	440
420	CLASS C CONCRETE (ABUTMENTS)	CY	49
420	CLASS S CONCRETE (SLAB)	CY	47
420	CLASS S CONCRETE (BRIDGE SIDEWALK)	CY	18
425	PRESTRESSED CONCRETE BRIDGE BEAM (55B15)	LF	446
442	STRUCTURAL STEEL (MISC NON-BRIDGE)	LB	346
450	RAIL (TYPE C223)	LF	120
454	ARMOR JOINT (WITH SEAL)	LF	84

PREFABRICATED PEDESTRIAN BRIDGE			
400	CEMENT STABILIZED BACKFILL (BEHIND ABUTMENT)	CY	10
416	DRILLED SHAFT (24 IN)	LF	140
420	CLASS C CONCRETE (ABUTMENTS)	CY	9
420	CLASS S CONCRETE (BRIDGE DECK)	CY	7
432	RIPRAP (RR8)	CY	6
442	STRUCTURAL STEEL (MISC NON-BRIDGE)	LB	210
554027	PREFABRICATED PEDESTRIAN BRIDGE	EA	1
COSA 522.1	SIDEWALK PIPE RAILING	LF	32
MISCELLANEOUS ITEMS			
COSA 100.1	MOBILIZATION (11%)	LS	1
COSA 100.2	INSURANCE AND BOND (3%)	LS	1
COSA 101.1	PREPARING RIGHT OF WAY (4%)	LS	1
COSA 530.1	BARRICADES, SIGNS, AND TRAFFIC HANDLING (3%)	LS	1
551201	FORCE ACCOUNT - DE-ENERGIZE CPS POWER LINES	EA	2

ADDITIVE ALTERNATE NO. 1			
ITEM #	DESCRIPTION	UNIT	QUANTITY
COSA ITEMS			
103.4	REMOVE CONCRETE RIPRAP	SF	6,600
105.1	CHANNEL EXCAVATION	CY	1,600
306.1	STRUCTURAL EXCAVATION	CY	2,300
307.1	CONCRETE STRUCTURE (APPROACH SLABS)	CY	300
307.1	CONCRETE STRUCTURE (RETAINING WALLS)	CY	120
307.1	CONCRETE STRUCTURE (HEADWALLS OR OUTFALL STRUCTURES)	CY	300
307.1	CONCRETE STRUCTURE (ENERGY DISSIPATOR BLOCKS)	CY	2
406.1	JACKING PIPE (84" SMOOTH STEEL PIPE)	LF	140
410.2	GRAVEL SUBGRADE FILLER	CY	200
505.1	CONCRETE RIPRAP (5" THICK)	SY	627
507.2	CHAIN LINK WIRE FENCE (6' HIGH)	LF	265
515.1	TOPSOIL (4" DEPTH)	CY	105
516.3	BUFFALO 609 SODDING	SY	942
540.1	ROCK FILTER DAMS (INSTALL) (TYPE 2)	LF	74
540.2	ROCK FILTER DAMS (REMOVE) (TYPE 2)	LF	74
540.61	CONSTRUCTION EXITS (INSTALL)	SY	83
540.62	CONSTRUCTION EXITS (REMOVE)	SY	83
540.9	EROSION AND SEDIMENTATION CONTROL	LF	356
551.1	TEMPORARY SPECIAL SHORING (BORING & RECEIVING PITS)	SF	1,200
801.1	LEVEL 1 PROTECTIVE FENCING	LF	440
801.3	LEVEL IIB PROTECTIVE FENCING	LF	7
802.1	LEVEL II PRUNING	EA	2
1001.7	REMOVE CONCRETE RETAINING WALL AT STA 1+35	LS	1
TxDOT ITEMS			
432.1	STONE RIPRAP BEDDING (6")	SY	50
432.2	3" STONE RIPRAP PLACED	CY	125
MISCELLANEOUS ITEMS			
COSA 100.1	MOBILIZATION	LS	1
COSA 100.2	INSURANCE AND BOND	LS	1
COSA 101.1	PREPARING RIGHT OF WAY	LS	1
551205.1	FLAGGER FOR UPRR R.O.W.	DAY	90



NO.	BY	DATE	REVISION DESCRIPTION
1	PS	8-3-15	ADD/ADJUST QUANTITIES

CAS CONSULTING & SERVICES INC
 7908 CAMERON ROAD
 AUSTIN, TEXAS 78754
 REG. No. F-003572

CITY OF SAN ANTONIO
 CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT
 MENDER CREEK

QUANTITY SHEET

GENERAL NOTES

- ALL CONSTRUCTION SHALL CONFORM TO THE CITY OF SAN ANTONIO STANDARD SPECIFICATIONS FOR CONSTRUCTION JUNE 2008, OR LATEST.
- NO EXTRA PAYMENT SHALL BE ALLOWED FOR WORK CALLED FOR ON THE PLANS, BUT NOT INCLUDED IN THE BID PROPOSAL. THIS INCIDENTAL WORK WILL BE REQUIRED AND SHALL BE INCLUDED IN THE PAY ITEM TO WHICH IT RELATES.
- THE CONTRACTOR SHALL PROVIDE ACCESS FOR THE DELIVERY OF MAIL BY THE U.S. POSTAL SERVICE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING TO ITS ORIGINAL OR BETTER CONDITION ANY DAMAGE DONE TO EXISTING FENCES, CONCRETE ISLANDS, STREET PAVING, CURBS, SHRUBS, BUSHES OR DRIVEWAYS. (NO SEPARATE PAY ITEM).
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO SEE THAT ALL SIGNS AND BARRICADES ARE PROPERLY INSTALLED AND MAINTAINED. ALL LOCATIONS AND DISTANCES WILL BE DECIDED UPON IN THE FIELD BY THE CONTRACTOR, USING THE "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES". THE CITY'S CONSTRUCTION INSPECTOR AND TRAFFIC ENGINEERING REPRESENTATIVE WILL ONLY BE RESPONSIBLE TO INSPECT BARRICADES AND SIGNS. IF, IN THE OPINION OF THE TRAFFIC ENGINEERING REPRESENTATIVE AND THE CONSTRUCTION INSPECTOR, THE BARRICADES AND SIGNS DO NOT CONFORM TO ESTABLISHED STANDARDS OR ARE INCORRECTLY PLACED OR ARE INSUFFICIENT IN QUANTITY TO PROTECT THE GENERAL PUBLIC, THE CONSTRUCTION INSPECTOR SHALL HAVE THE OPTION TO STOP OPERATIONS UNTIL SUCH TIME AS THE CONDITIONS ARE CORRECTED.
- IF THE NEED ARISES, ADDITIONAL BARRICADES AND DIRECTIONAL DEVICES MAY BE ORDERED BY THE TRAFFIC ENGINEERING REPRESENTATIVE AT THE CONTRACTOR'S EXPENSE.
- DUE TO FEDERAL REGULATIONS TITLE 49, PART 192.171 C.P.S. MUST MAINTAIN ACCESS TO GAS VALVES AT ALL TIMES. THE CONTRACTOR MUST PROTECT AND WORK AROUND ANY GAS VALVES THAT ARE IN THE PROJECT AREA.
- CONTRACTOR SHALL NOTIFY THE CITY INSPECTOR TWENTY FOUR (24) HOURS PRIOR TO BACKFILL OF ANY UTILITY TRENCHES TO SCHEDULE FOR DENSITY TEST AS REQUIRED.
- CONTRACTOR SHALL PRESERVE ALL CONSTRUCTION STAKES, MARKS, ETC. IF ANY ARE DESTROYED OR REMOVED BY THE CONTRACTOR OR HIS EMPLOYEES, THEY SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
- CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES PRIOR TO CONSTRUCTION TO DETERMINE THE LOCATION OF EXISTING UTILITIES. CONTRACTOR SHALL NOTIFY THE FOLLOWING AT LEAST FORTY-EIGHT (48) HOURS PRIOR TO EXCAVATION OPERATION:

SAN ANTONIO WATER SYSTEM (SAWS)	233-2009
BEXAR METROPOLITAN WATER DISTRICT (BEXAR MET)	354-6538 / 357-5741
C.O.S.A. DRAINAGE	207-8052
C.O.S.A. SIGNAL OPERATIONS	207-7720 / 207-7765
TEXAS STATE WIDE ONE CALL LOCATOR	1-800-344-8377
- CITY PUBLIC SERVICE ENERGY	
- TIME WARNER	
- AT&T	
- MCI	
- THE EXISTENCE AND LOCATION OF UNDERGROUND UTILITIES INDICATED ON THE PLANS ARE TAKEN FROM AVAILABLE RECORDS AND ARE NOT GUARANTEED, BUT SHALL BE INVESTIGATED AND VERIFIED BY THE CONTRACTOR BEFORE STARTING WORK. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY DAMAGE TO AND FOR THE MAINTENANCE AND PROTECTION OF THE EXISTING UTILITIES EVEN IF THEY ARE NOT SHOWN ON THE PLANS. LOCATION AND DEPTH OF EXISTING UTILITIES SHOWN HERE ARE APPROXIMATE ONLY. ACTUAL LOCATIONS AND DEPTHS MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION AND HE SHALL BE RESPONSIBLE FOR PROTECTION OF SAME DURING CONSTRUCTION.
- ALL WASTE MATERIAL SHALL BECOME PROPERTY OF THE CONTRACTOR AND SHALL BE HIS SOLE RESPONSIBILITY TO DISPOSE OF THIS MATERIAL OFF THE LIMITS OF THE PROJECT. NO WASTE MATERIAL SHALL BE PLACED IN EXISTING LOWS THAT WILL BLOCK OR ALTER FLOW LIMITS OF EXISTING ARTIFICIAL OR NATURAL DRAINAGE.
- THE CONTRACTOR SHALL NOT PLACE ANY WASTE MATERIAL IN THE 100-YEAR FLOOD PLAIN WITHOUT FIRST OBTAINING AN APPROVED FLOOD PLAIN DEVELOPMENT PERMIT.
- THE CONTRACTOR SHALL MAINTAIN ALL ADJOINING STREETS AND TRAVELED ROUTES FREE FROM SPILLED AND / OR TRACKED CONSTRUCTION MATERIALS AND / OR DEBRIS.
- IF THE CONTRACTOR ENCOUNTERS ANY ARCHAEOLOGICAL DEPOSITS DURING CONSTRUCTION OPERATIONS, THE CONTRACTOR MUST STOP EXCAVATION IMMEDIATELY, CONTACT THE CITY INSPECTOR, AND CALL THE CITY HISTORIC PRESERVATION OFFICE AT 207-7306 OR 207-3327 FOR AN ARCHAEOLOGICAL INVESTIGATION. THE CONTRACTOR CANNOT BEGIN EXCAVATION AGAIN WITHOUT WRITTEN PERMISSION FROM THE CITY. IF MORE THAN THREE (3) DAYS ARE REQUIRED FOR INVESTIGATION (NOT INCLUDING HOLIDAY AND WEEKENDS) AND IF THE CONTRACTOR IS UNABLE TO WORK IN OTHER AREAS, THEN THE CONTRACTOR WILL BE ALLOWED TO NEGOTIATE FOR ADDITIONAL CONSTRUCTION TIME UPON WRITTEN REQUEST WITHIN TEN (10) DAYS AFTER THE FIRST NOTICE TO THE CITY OF ARCHAEOLOGICAL INVESTIGATION FOR EACH EVENT. IF THE TIME REQUIRED FOR INVESTIGATION IS LESS THAN OR EQUAL TO THREE (3) DAYS FOR EACH EVENT, CONTRACT DURATION WILL NOT BE EXTENDED.
- IF SUSPECTED CONTAMINATION IS ENCOUNTERED DURING CONSTRUCTION OPERATIONS, C.O.S.A. SHALL BE NOTIFIED IMMEDIATELY WHEN CONTAMINATED SOILS AND / OR GROUNDWATER ARE ENCOUNTERED AT LOCATIONS NOT IDENTIFIED IN THE PLANS. THE NOTIFICATION SHOULD INCLUDE THE STATION NUMBER, TYPE OF CONTAMINATED MEDIA, EVIDENCE OF CONTAMINATION AND MEASURES TAKEN TO CONTAIN THE CONTAMINATED MEDIA AND PREVENT PUBLIC ACCESS. THE CONTAMINATED SOIL AND / OR GROUNDWATER SHALL NOT BE REMOVED FROM THE LOCATION WITHOUT PRIOR C.O.S.A. APPROVAL. THE CONTRACTOR MUST STOP THE EXCAVATION IMMEDIATELY AND CONTACT THE C.O.S.A. INSPECTOR. THE CONTRACTOR CANNOT BEGIN EXCAVATION ACTIVITIES WITHOUT WRITTEN PERMISSION FROM THE CITY.
- CONTRACTOR IS TO INCLUDE A MAILBOX POST BLOCKOUT FOR VACANT LOTS AND ALL RESIDENCES WHICH DO NOT HAVE MAILBOXES AT THE CURB. BLOCKOUTS ARE PROVIDED FOR FUTURE USE BY THE POST OFFICE.
- CONTRACTOR SHALL NOT REMOVE OR ADJUST ANY VIA FACILITIES. THE CONTRACTOR MUST CONTACT VIA FOURTEEN DAYS PRIOR, FOR THE REMOVAL OF BENCHES, STOP POLES OR ANY OTHER VIA FACILITIES THAT MAY BE PRESENT. PLEASE PROVIDE THIRTY DAYS PRIOR NOTICE FOR SHELTER REMOVAL (TELEPHONE NOS: (210) 362-2155 OR (210) 362-2096). THE CONTRACTOR WILL BE LIABLE FOR ANY DAMAGES TO VIA FACILITIES NOT REMOVED BY VIA. THE CONTRACTOR IS REQUIRED TO REPLACE ALL FLATWORK REMOVED OR DAMAGED IN THE COURSE OF EXECUTING THE CONTRACT UNLESS OTHERWISE NOTED BY VIA. THE CONTRACTOR WILL BE RESPONSIBLE FOR PROTECTING VIA FACILITIES IF ADJACENT TO WORK AREA.

TREE PROTECTION AND PRESERVATION GENERAL NOTES

- NO UTILITY OR STREET EXCAVATION WORK SHALL BEGIN IN AREAS WHERE TREE PRESERVATION AND TREATMENT MEASURES HAVE NOT BEEN COMPLETED AND APPROVED.
- TREE PROTECTION FENCING SHALL BE REQUIRED. TREE PROTECTION FENCING SHALL BE INSTALLED, MAINTAINED AND REPAIRED BY THE CONTRACTOR DURING SITE CONSTRUCTION. DURING CONSTRUCTION ACTIVITY, AT LEAST A SIX-INCH LAYER OF COARSE MULCH SHALL BE PLACED AND MAINTAINED OVER THE ROOT PROTECTION ZONE (NO SEPARATE PAY ITEM).
- THE CONTRACTOR SHALL AVOID CUTTING ROOTS LARGER THAN ONE INCH IN DIAMETER WHEN EXCAVATING NEAR EXISTING TREES. EXCAVATION IN THE VICINITY OF TREES SHALL PROCEED WITH CAUTION. THE CONTRACTOR SHALL CONTACT THE CITY INSPECTOR FOR GUIDANCE.
- ROOTS WILL BE CUT WITH A ROCK SAW OR BY HAND, NOT BY AN EXCAVATOR OR OTHER ROAD CONSTRUCTION EQUIPMENT.
- ALL CURB AND SIDEWALK WORK SHALL USE ALTERNATIVE CONSTRUCTION METHODS TO MINIMIZE EXTENSIVE ROOT DAMAGE TO TREES (REFER TO DETAILS).
- EXPOSED ROOTS SHALL BE COVERED AT THE END OF THE DAY USING TECHNIQUES SUCH AS COVERING WITH SOIL, MULCH, OR WET BURLAP.
- NO EQUIPMENT, VEHICLES OR MATERIALS SHALL OPERATE OR BE STORED WITHIN THE ROOT PROTECTION ZONE OF ANY TREE NEAR THE PROJECT. ROOT PROTECTION ZONE IS 1 FOOT OF RADIUS PER INCH OF TREE'S DIAMETER. A 10-INCH DIAMETER TREE WOULD HAVE A 10 FOOT RADIUS ROOT PROTECTION ZONE AROUND THE TREE. ROOTS OR BRANCHES IN CONFLICT WITH THE CONSTRUCTION SHALL BE CUT CLEANLY ACCORDING TO PROPER PRUNING METHODS. OAK WOUNDS SHALL BE PAINTED OVER WITHIN 30 MINUTES TO PREVENT OAK WILT.

- SAPLINGS, SHRUBS OR BUSHES TO BE CLEARED FROM THE PROTECTED ROOT ZONE AREA OF A LARGE TREE SHALL BE REMOVED BY HAND AS DESIGNATED BY THE INSPECTOR.
- NO WIRES, NAILS OR OTHER MATERIAL MAY BE ATTACHED TO PROTECTED TREES.
- TREES, TREE LIMBS, BUSHES AND SHRUBS LOCATED IN THE CITY STREET OR ALLEY RIGHT-OF-WAY OR PERMANENT EASEMENTS WHICH INTERFERE WITH PROPOSED CONSTRUCTION ACTIVITIES SHALL BE PROPERLY PRUNED FOLLOWING THE ANSI A-300 STANDARDS FOR PRUNING. ALL TREE PRUNING SHALL BE COMPLETED BY A CITY OF SAN ANTONIO TREE MAINTENANCE LICENSED CONTRACTOR (ARTICLE 21-171, CITY CODE) ONLY AFTER APPROVAL FROM THE CAPITAL PROJECTS MANAGEMENT THROUGH THE INSPECTOR.
- NO EXCESSIVE TREE TRIMMING WILL BE PERMITTED.
- ALL DEBRIS GENERATED BY THE PRUNING AND TRIMMING OF THE TREES AND / OR BUSHES SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF PROPERLY (NO SEPARATE PAY ITEM).
- TREES MUST BE MAINTAINED IN GOOD HEALTH THROUGHOUT THE CONSTRUCTION PROCESS. MAINTENANCE MAY INCLUDE, BUT NOT LIMITED TO: WATERING THE ROOT PROTECTION ZONE, WASHING FOLIAGE, FERTILIZATION, PRUNING, ADDITIONAL MULCH APPLICATIONS AND OTHER MAINTENANCE AS NEEDED ON THE PROJECT.
- ANY TREE REMOVAL SHALL BE APPROVED BY THE CITY ARBORIST. (207-0278)
- TREES WHICH ARE DAMAGED OR LOST DUE TO THE CONTRACTOR'S NEGLIGENCE DURING CONSTRUCTION SHALL BE MITIGATED TO THE CITY'S SATISFACTION.
- TREE PLANTING FOR MITIGATION OR ENHANCEMENT: ALL PLANTED TREES SHALL BE MAINTAINED IN A HEALTHY CONDITION AT ALL TIMES. THIS INCLUDES IRRIGATION, FERTILIZING, PRUNING AND OTHER MAINTENANCE AS NEEDED ON THE PROJECT. TREES THAT DIE WITHIN TWELVE (12) MONTHS SHALL BE REPLACED WITH A TREE OF EQUAL SIZE AND SPECIES.

ACCESSIBILITY REQUIREMENTS

- THE CONTRACTOR SHALL PROVIDE AND MAINTAIN VEHICULAR AND PEDESTRIAN ACCESS AT ALL TIMES TO LOCAL RESIDENCES AND BUSINESSES.
- WHEN THE WORK REQUIRES THE EXCAVATION OF THE STREET AND THE REMOVAL OF THE EXISTING DRIVEWAY APPROACHES AND SIDEWALKS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING TEMPORARY ALL-WEATHER ACCESS TO THE BUSINESSES AND RESIDENCES. THE TEMPORARY DRIVEWAY APPROACHES SHALL BE CONSTRUCTED WITH FLEXIBLE BASE OR GRAVEL MATERIAL AT NO SEPARATE COST TO THE CITY.
- PRIOR TO INITIATING THE CONSTRUCTION OF NEW DRIVEWAY APPROACHES, THE CONTRACTOR SHALL GIVE ADVANCE WARNING IN PERSON, OR IN WRITING, OF AT LEAST 48 HOURS TO EACH RESIDENCE THAT WILL BE IMMEDIATELY AFFECTED, SO THAT ALTERNATE PLANS MAY BE MADE BY THE RESIDENTS.
- FOR BUSINESSES WITH MORE THAN ONE DRIVEWAY, AT LEAST ONE DRIVEWAY SHALL REMAIN OPEN WHILE THE OTHER NEW DRIVEWAY APPROACHES ARE CONSTRUCTED. FOR BUSINESSES WITH ONLY ONE DRIVEWAY, THE NEW DRIVEWAY APPROACH SHALL BE CONSTRUCTED IN HALF WIDTHS, UNLESS A TEMPORARY ASPHALT DRIVEWAY IS FIRST INSTALLED AT NO SEPARATE COST TO THE CITY.

SUPPLEMENTAL GENERAL NOTES

- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL OBTAIN ALL REQUIRED STORM WATER PERMITS, FEES, AND APPROVALS. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED ALL PERMITS REQUIRED FOR CONSTRUCTION IN DRAINAGE EASEMENTS, RIGHT-OF-WAYS, AND FLOODPLAINS
- THE CONTRACTOR SHALL NOTIFY STORM WATER ENGINEERING AT LEAST 24 HOURS PRIOR TO THE INSTALLATION OF ANY DRAINAGE FACILITY WITHIN A DRAINAGE EASEMENT OR STREET RIGHT-OF-WAY NOT INDICATED ON THE CONSTRUCTION PLANS.

ADDITIONAL NOTES

- EXCESS SOIL DISPOSAL: CONTRACTOR SHALL PROVIDE A SUBMITTAL REGARDING SOIL DISPOSAL SITES TO CITY 45 DAYS PRIOR TO COMMENCEMENT OF HAULING OFF ANY EXCAVATED AND/OR EXCESS FILL MATERIAL FROM PROJECT SITE. THE CONDITIONS SET FORTH HEREIN SOLELY ARE DUE TO A DESIRE BY CITY TO MANAGE AND DOCUMENT THE DISPOSAL OF SOILS FROM THE PROJECT SITE, NOT DUE TO ANY ENVIRONMENTAL CONCERNS RELATIVE TO THE MATERIAL BEING DISPOSED OF. ACCORDINGLY, IN THE SOIL DISPOSAL CONTRACTOR SUBMITTAL

CONTRACTOR SHALL CERTIFY AND ASSURE THE NUMBER OF SOIL DISPOSAL SITES CONTRACTOR UTILIZES DOES NOT EXCEED THREE (3) SITES.

CONTRACTOR SHALL CERTIFY THAT NO DISPOSAL AREAS ARE WITHIN THE FLOOD PLAIN AND PROVIDE OWNER EVIDENCE TO THAT EFFECT.

CONTRACTOR SHALL PROVIDE ALL AFFECTED LANDOWNER'S WRITTEN AUTHORIZATION TO DISPOSE OF SOIL FROM THIS PROJECT ON HIS/HER/ITS PROPERTY.

CONTRACTORS SHALL INCLUDE PROVISIONS IN LANDOWNER AGREEMENTS THAT CITY RESERVES THE RIGHT TO CONDUCT INDEPENDENT VISUAL INSPECTIONS AND SOIL TESTING ON LISTED PROPERTIES PRIOR TO DISPOSAL OF THE PROJECT'S EXCESS SOILS, TO DETERMINE BACKGROUND LEVELS OF VARIOUS ELEMENTS AS IDENTIFIED BY CITY. SAID LANDOWNER AGREEMENTS SHALL PROVIDE AN EFFECTIVE RIGHT OF ENTRY THAT WILL EXPIRE UPON SUBSTANTIAL COMPLETION OF PROJECT.

CONTRACTOR AGREES TO ABIDE BY LANDOWNERS WRITTEN CONDITIONS IN LANDOWNER AGREEMENTS, INCLUDING THOSE RELATED TO PLACING, COMPACTING, RESTORATION AND EROSION CONTROL OF THE SITE(S). LANDOWNER WILL BE REQUESTED TO PROVIDE FINAL WRITTEN APPROVAL PRIOR TO SUBSTANTIAL COMPLETION AND ANY COSTS CITY INCURS, TO ADDRESS LEGITIMATE LANDOWNER CONCERNS, WILL BE CONSIDERED AND MAY BE DEDUCTED FROM CONTRACTOR'S FINAL PAYMENT, AS DETERMINED BY CITY.

ACCORDINGLY, LANDOWNERS SHALL PROVIDE CERTIFICATION TO CONTRACTOR AND CONTRACTOR SHALL INCLUDE SAID CERTIFICATION IN ITS SUBMITTAL THAT EXCESS SOILS SHALL NOT BE HAULED TO RESIDENTIAL PROPERTIES. EVERY ATTEMPT SHALL BE MADE TO DISPOSE OF EXCESS SOILS AT EITHER COMMERCIAL OR INDUSTRIAL PROPERTIES.

CONTRACTOR AGREES TO COMPLY WITH OTHER REGULATORY AGENCIES FOR PROPER AND LEGAL IMPLEMENTATION OF THE REUSE PLAN PRIOR TO SOILS TRANSPORT, AS APPLICABLE. CONTRACTOR SHALL ENSURE AN APPROPRIATE STORM WATER POLLUTION PREVENTION PLAN IS DEVELOPED AND IMPLEMENTED, IN ACCORDANCE WITH TEXAS POLLUTANT DISCHARGE ELIMINATION SYSTEM REQUIREMENTS, AS APPLICABLE.

CONTRACTOR SHALL BE RESPONSIBLE FOR TRACKING EXCESS SOIL DISPOSED AT APPROVED DESIGNATED AREAS. CONTRACTOR SHALL TRACK LOADS AND PROVIDE DOCUMENTATION, SUCH AS TRIP TICKETS OR "BILL OF LANDING" FOR ALL TRANSPORTED SOIL TO EACH APPROVED SITES.

SUPPLEMENTAL GENERAL NOTES

- THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING EXISTING DRAINAGE FACILITIES FROM DAMAGE. ANY DAMAGE TO EXISTING DRAINAGE SYSTEMS, WHETHER OR NOT SHOWN ON THE PLANS, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR AT HIS EXPENSE. THE CONTRACTOR SHALL NOTIFY STORM WATER ENGINEERING AT 210-207-8052 AS SOON AS THE CONFLICTS WITH UTILITIES ARE ENCOUNTERED OR ANY DRAINAGE SYSTEM IS DAMAGED DURING CONSTRUCTION.
- CONSTRUCTION SPOILS WILL NOT BE ALLOWED TO BE DEPOSITED ANYWHERE WITHIN A DRAINAGE EASEMENT, RIGHT-OF-WAY OR FLOODPLAIN WITHIN THE LIMITS OF THE PROJECT AND SHALL BE DISPOSED OFFSITE IN COMPLIANCE WITH CURRENT APPLICABLE REGULATIONS
- NO STRUCTURE, FENCES, WALLS, LANDSCAPING, OR OTHER OBSTRUCTIONS THAT IMPEDE DRAINAGE SHALL BE PLACED WITHIN THE LIMITS OF THE DRAINAGE EASEMENTS SHOWN ON THE CONSTRUCTION DOCUMENTS
- UPON COMPLETION OF TRENCHING, THE AREA WILL BE BACKFILLED AND COMPACTED TO ITS ORIGINAL CONDITION. TRENCHES/BORE PITS TO BE OPEN AND UNATTENDED LONGER THAN 24 HOURS SHALL BE PROTECTED TO WITHSTAND ALL HYDRODYNAMIC AND HYDROSTATIC FORCES AND PREVENT DOWNSTREAM IMPACTS. TRENCH/BORE PITS TO BE OPEN LONGER THAN 30 DAYS AFTER STARTING EXCAVATION SHALL BE BACKFILLED WITH A SEMI-PERMANENT REPAIR BACKFILL.

PRIVATE UTILITY NOTES

FPL FIBERNET

- NEXTERA FIBERNET WILL NEED A 10 DAY NOTIFICATION FROM COSA FOR OUR CREWS TO SCHEDULE AND MOBILIZE TO ADJUST THE DEPTH OF OUR CONDUITS.
- NEXTERA FIBERNET WILL NEED FOR THE COSA GC TO REMOVE THE RIPRAP AT STATION # 31+50 FROM THE EXISTING 10' X 6' BOX CULVERTS GOING WEST APPROXIMATELY 20' WIDE.
- NEXTERA FIBERNET WILL NEED TO POTHOLE OUR FACILITIES PRIOR TO THE COSA GC REMOVING THE RIPRAP. THIS WILL GIVE US 100% CERTAINTY OF THE DEPTH AND WILL ALSO PREVENT THE RISK OF BEING DAMAGED DURING THE RIPRAP REMOVAL. WE WILL HAVE A REPRESENTATIVE ON SITE TO OVERSEE THE REMOVAL OF THE RIPRAP. THE POTHOLING WILL ALSO REQUIRE A 10 DAY NOTIFICATION TO SCHEDULE AND MOBILIZE.
- NEXTERA FIBERNET WILL NEED AN ACCESS POINT TO ENTER THE DRAINAGE DITCH ON THE WEST SIDE OF HINES STREET UNLESS THE COSA GC WILL HAVE THE EXISTING 10' X 6' BOX CULVERTS REMOVED PRIOR TO REMOVING THE RIPRAP AT STATION # 31+50.
- NEXTERA FIBERNET'S CONTRACTOR WILL NEED 7 DAYS TO COMPLETE THE NECESSARY RELOCATION OF OUR CONDUIT RUNS.
- IN EXCHANGE FOR THE FOREGOING, NEXTERA FIBERNET AGREES TO BE RESPONSIBLE FOR THE REASONABLE AND NECESSARY DIRECT COSTS INCURRED BY COSA DUE TO DELAY TO THE MENDER CREEK DRAINAGE PROJECT CAUSED BY FAILURE OF NEXTERA FIBERNET TO FULLY PERFORM THE WORK DESCRIBED ABOVE WITHIN THE TIMEFRAME ALLOTTED, EXCEPT TO THE EXTENT ANY SUCH DELAY WAS CAUSED OR CONTRIBUTED TO BY FORCE MAJEURE, OR ANY ACTION OR FAILURE ETO ACT OF OR BY COSA OR ITS AGENTS, EMPLOYEES OR CONTRACTORS OR ANY THIRD PARTY UNAFFILIATED WITH NEXTERA FIBERNET, OR NEXTERA FIBERNET'S INABILITY, FOLLOWING REASONABLE EFFORTS, TO OBTAIN PHYSICAL ACCESS TO AREAS OWNED OR CONTROLLED BY COSA OR THIRD PARTIES WHICH ACCESS IS REASONABLY REQUIRED TO COMPLETE THE WORK DESCRIBED ABOVE. FOR THE PURPOSES OF THE FOREGOING, "FORCE MAJEURE" SHALL MEAN A CAUSE BEYOND THE REASONABLE CONTROL OF NEXTERA FIBERNET, INCLUDING, BUT NOT LIMITED TO, ACTS OF GOD, LIGHTNING, FIRE, EXPLOSION, STORM, HURRICANE, SINKHOLE OR OTHER SIMILAR CATASTROPHES; ANY LAW, ORDER, REGULATION, DIRECTION, ACTION OR REQUEST OF ANY GOVERNMENT OR GOVERNMENT AGENCY; NATIONAL EMERGENCIES, WARS, TERRORIST ACTS, INSURRECTIONS, OR RIOTS; VANDALISM, SABOTAGE, CRIMINAL OR UNLAWFUL ACTS OF THIRD PARTIES; STRIKES, LOCKOUTS, WORK STOPPAGES OR OTHER LABOR DISPUTES OR DIFFICULTIES; OR EXPIRATION OR TERMINATION OF NECESSARY CONTRACTUAL RIGHTS FOR REASONS OTHER THAN DEFAULT BY NEXTERA FIBERNET.

CENTURYLINK

- COSA PROVIDE 10 DAY NOTICE FOR CTL CREWS TO MOBILIZE FOR THE RELOCATION.
- CTL REQUEST COSA (OR REPRESENTATIVE) REMOVE RIPRAP AT STATION # 31+50 FROM THE EXISTING 10' X 6' BOX CULVERTS GOING WEST APPROXIMATELY 20'.
- CTL WILL POTHOLE AS REQUIRED TO PREVENT THE RISK OF DAMAGE DURING COSA WORK. CTL REQUEST A 10 DAY NOTICE TO POTHOLING WORK.
- CTL REQUEST THE EXISTING 10' X 6' BOX CULVERT REMOVED PRIOR TO RELOCATION.
- CTL ANTICIPATES 7 WORK DAYS TO COMPLETE THE RELOCATION.
- CTL WILL COMPLY WITH ALL APPLICABLE LAWS WORKING WITHIN THE ABOVE REFERENCED PROJECT.



Handwritten signature and date: 8-3-2015

NO.	BY	DATE	REVISION DESCRIPTION
1	PS	8-3-15	ADD SOIL AND UTIL. NOTES



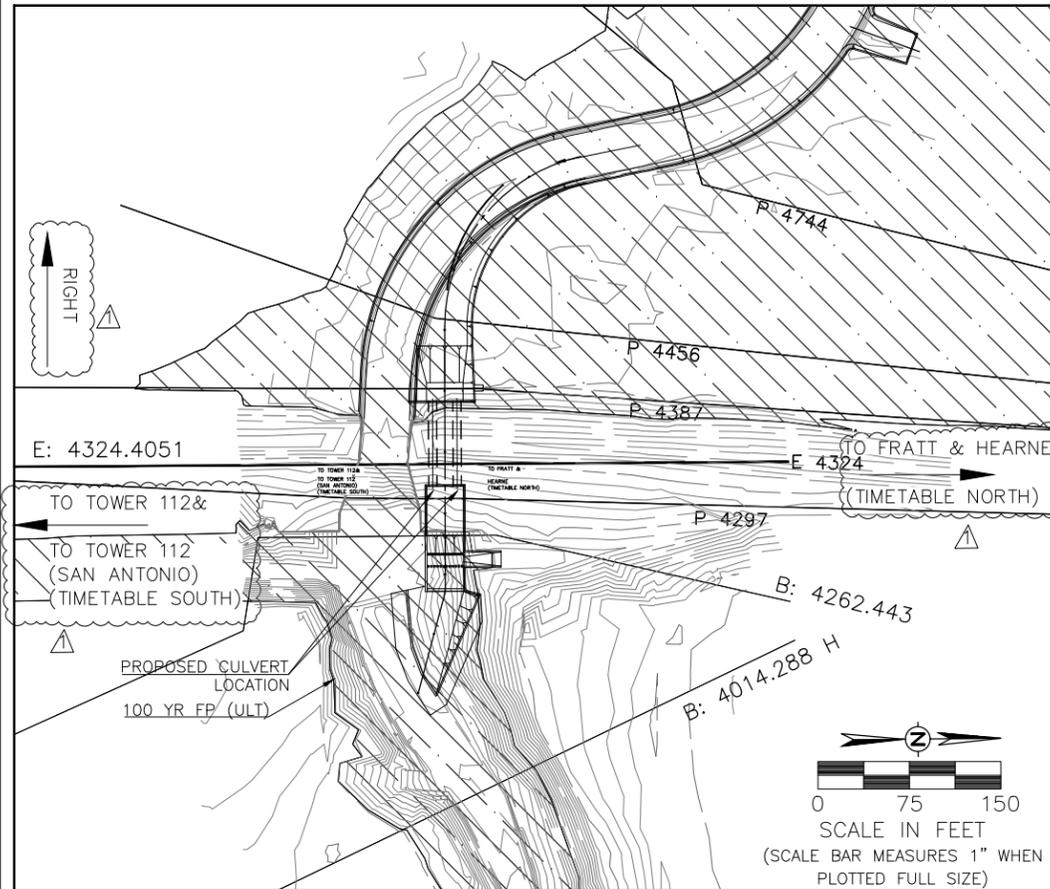
MENDER CREEK

COSA GENERAL NOTES

95% SUBMITTAL		PROJECT NO.:	DATE: 8/3/15
DRWN. BY:	DSGN. BY:	CHKD. BY:	SHEET NO.: C-03

CADD FILE: L:\ACTIVE PROJECTS\COSA - MENDER CREEK\3.0 CAD\2109UTIL-NOTE01 PLOTTED: 8/3/2015 1:23:09 PM BY: BRANDY CTB FILE: CAS.CTB

HEC-RAS CROSS SECTION LAYOUT (MENGER CREEK)



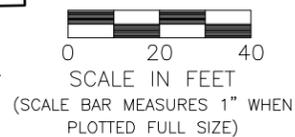
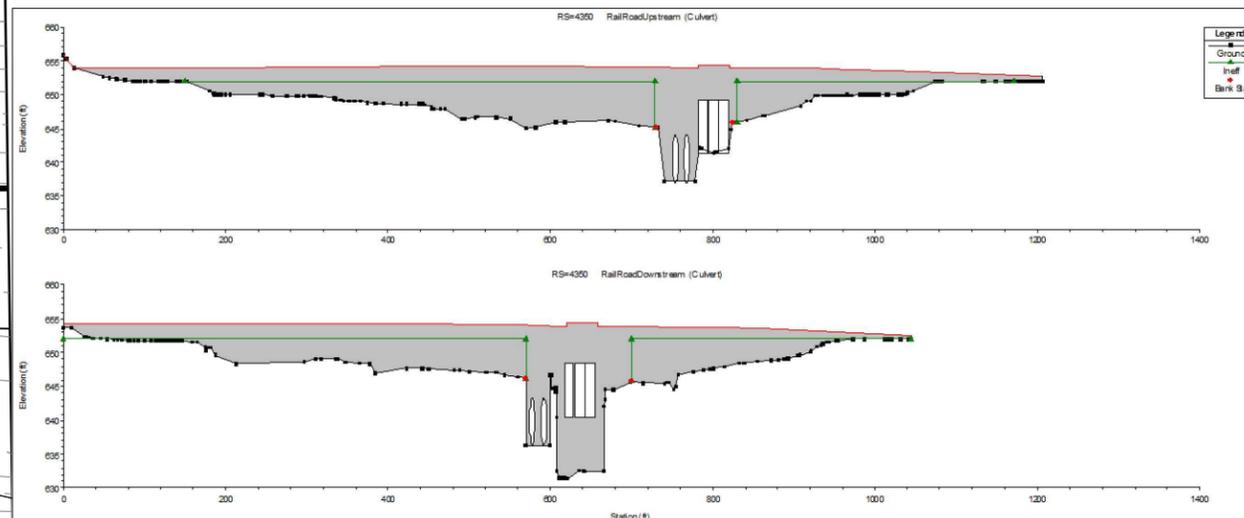
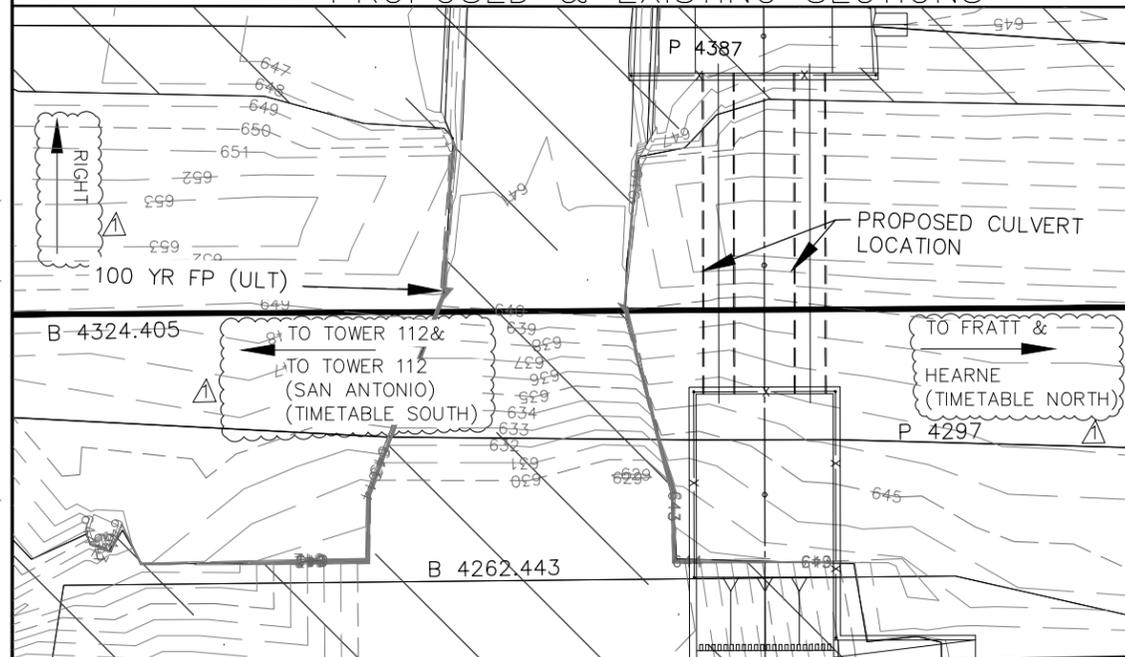
PROPOSED CONDITIONS WITH ULTIMATE FLOW

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
HR1010523 A	5743.38	1% Ultimate	3906	644.47	651.52	651.52	654.4	0.002078	13.61	287.05	49.62	1
HR1010523 A	5498.07	1% Ultimate	3906	643.91	650.95	650.95	653.84	0.002094	13.64	286.32	49.59	1
HR1010523 A	5243.87	1% Ultimate	3906	643.33	650.89	650.89	653.09	0.001376	12.1	399.8	160.75	0.84
HR1010523 A	4987.29	1% Ultimate	3906	642.75	649.95	649.95	651.48	0.001147	10.95	701.35	301.92	0.77
HR1010523 A	4744.2	1% Ultimate	3906	642.2	649.96	648.97	650.7	0.000593	8.32	1546.36	524.76	0.56
HR1010523 A	4455.958 J	1% Ultimate	3906	641.62	650.11	646.77	650.48	0.00019	5.27	1070.67	676.86	0.33
HR1010523 A	4387.2	1% Ultimate	3906	637.2	650.16	643.51	650.41	0.000081	4	995.18	852.53	0.22
HR1010523 A	4350 RailRoad											
HR1010523 A	4297.19	1% Ultimate	3906	631.4	640.78	637.5	641.36	0.000568	6.12	638.11	88.61	0.4
HR1010523 A	4262.443	1% Ultimate	3906	629.22	640.95	633.77	641.17	0.000092	3.81	1025.69	153.03	0.22

EXISTING CONDITIONS WITH ULTIMATE FLOW

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
HR1010523 A	5243.619	1% Ultimate	3554	643.5	652.25	650.71	653.11	0.001055	7.49	569.61	309.85	0.58
HR1010523 A	4987.097	1% Ultimate	3554	642.8	652.42	650.71	652.75	0.000511	5.04	1289.12	380.06	0.36
HR1010523 A	4744.093	1% Ultimate	3554	642.3	652.52	648.26	652.56	0.000354	1.64	2205.68	664.47	0.12
HR1010523 A	4455.958 J	1% Ultimate	3554	641.7	652.11	647.88	652.43	0.000316	4.8	1073.96	776.84	0.3
HR1010523 A	4400											
HR1010523 A	4375.29	1% Ultimate	3554	641.5	652.16	647.82	652.34	0.000232	3.64	1669.82	859.35	0.26
HR1010523 A	4350 RailRoad											
HR1010523 A	4324.405 I	1% Ultimate	3554	640.87	648.64	648.64	651.76	0.003975	14.19	250.44	40.26	1
HR1010523 A	4262.443	1% Ultimate	3554	632	640.52	640.52	640.83	0.001031	4.46	799.21	136.4	0.32

UPRR DETAIL PROPOSED & EXISTING SECTIONS



B: CROSS SECTION BOTH EXISTING & PROPOSED
E: CROSS SECTION EXISTING
P: CROSS SECTION PROPOSED



NO.	BY	DATE	REVISION DESCRIPTION
1	PS	8-3-2015	ADD UPRR INFORMATION

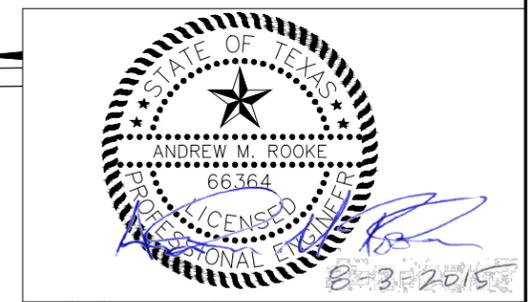
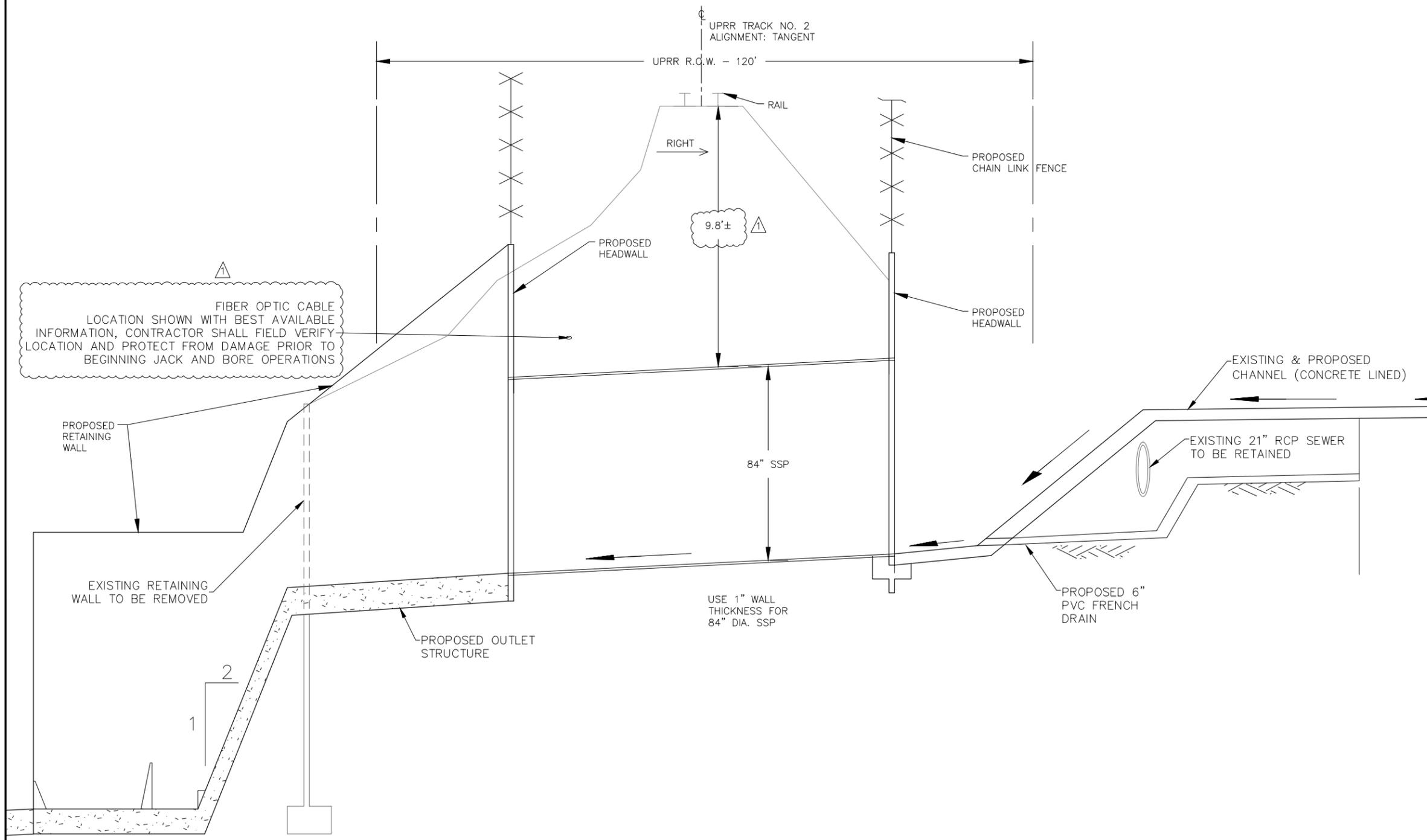
CAS CONSULTING & SERVICES INC
7908 CAMERON ROAD
AUSTIN, TEXAS 78754
REG. NO. F-003572

CITY OF SAN ANTONIO
CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT
MENGER CREEK

HYDRAULIC DATA SHEET 1 OF 3
RAILROAD CULVERT

CADD FILE: L:\ACTIVE PROJECTS\COSA - MENGER CREEK\3.0 CAD\2109HYDR03 PLOTTED: 8/3/2015 1:23:50 PM BY: BRANDY CTB FILE: CAS 50% CTB

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NO.	BY	DATE	REVISION DESCRIPTION
1	PS	8-3-2015	ADD NOTE, CHANGE DIMENSION

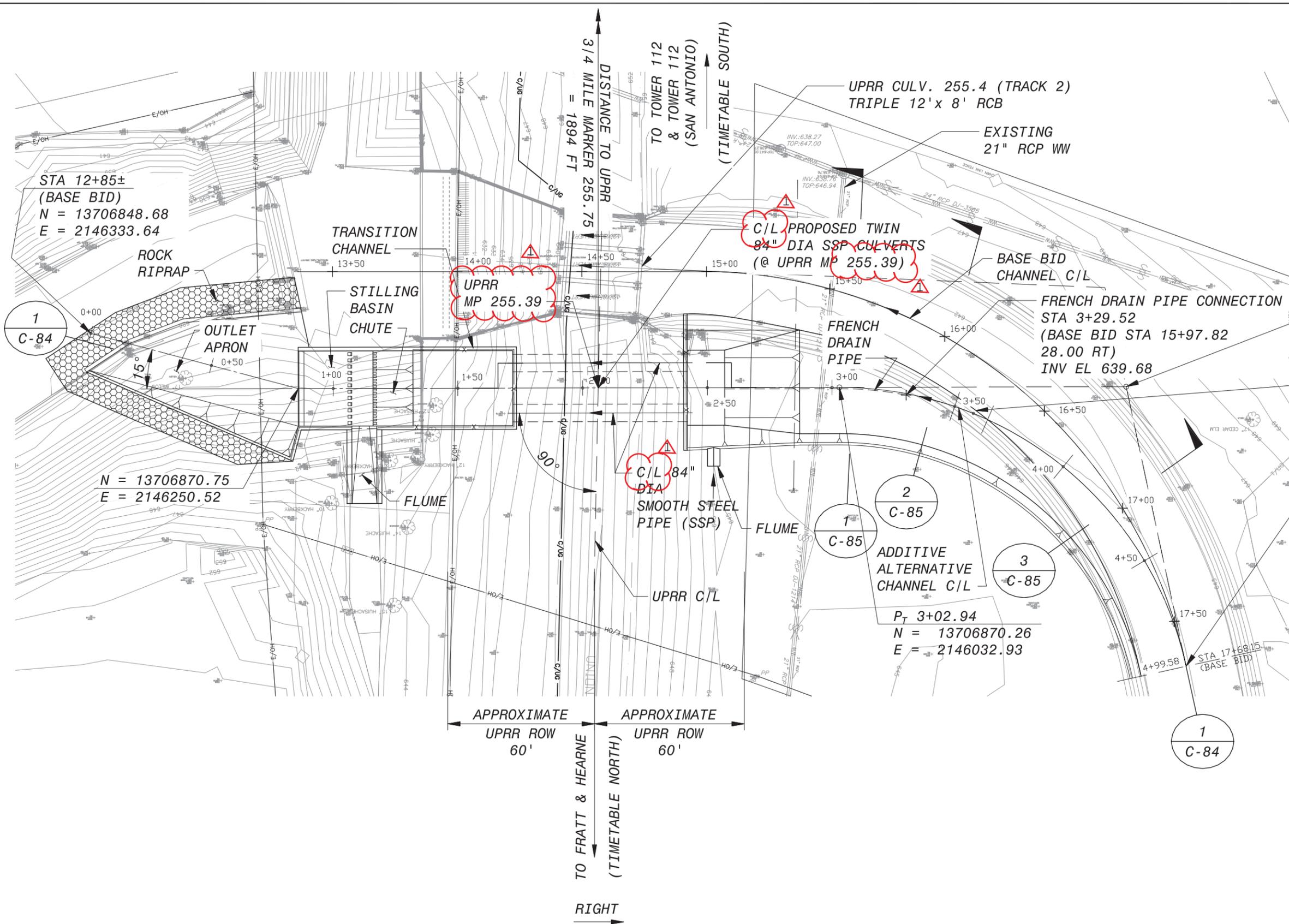
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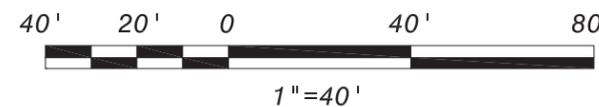
MENDER CREEK
 PROPOSED UPRR TYPICAL SECTION

PROPOSED UPRR TYPICAL SECTION ALONG CENTERLINE OF PROPOSED 84" RCP
 N.T.S.

CADD FILE: C:\PW_WORKING\CNGPW\1093792\C-83 PLOTTED: 7/31/2015 9:23:08 AM BY: SCHLESSELMAN, JOHN K. CTB FILE: CAS 50%.CTB



PLAN - STA 0+00 TO STA 4+99.58
1" = 40'-0"



STATE OF TEXAS
ERIC LEWIS BAILEY
107920
LICENSED PROFESSIONAL ENGINEER
E. L. Bailey
7/31/15

NO.	BY	DATE	REVISION DESCRIPTION
1	EB	7/31/15	Misc. Clarifications

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14100 SAN PEDRO, SUITE 405
SAN ANTONIO, TEXAS 78232
REG. No. F-013253

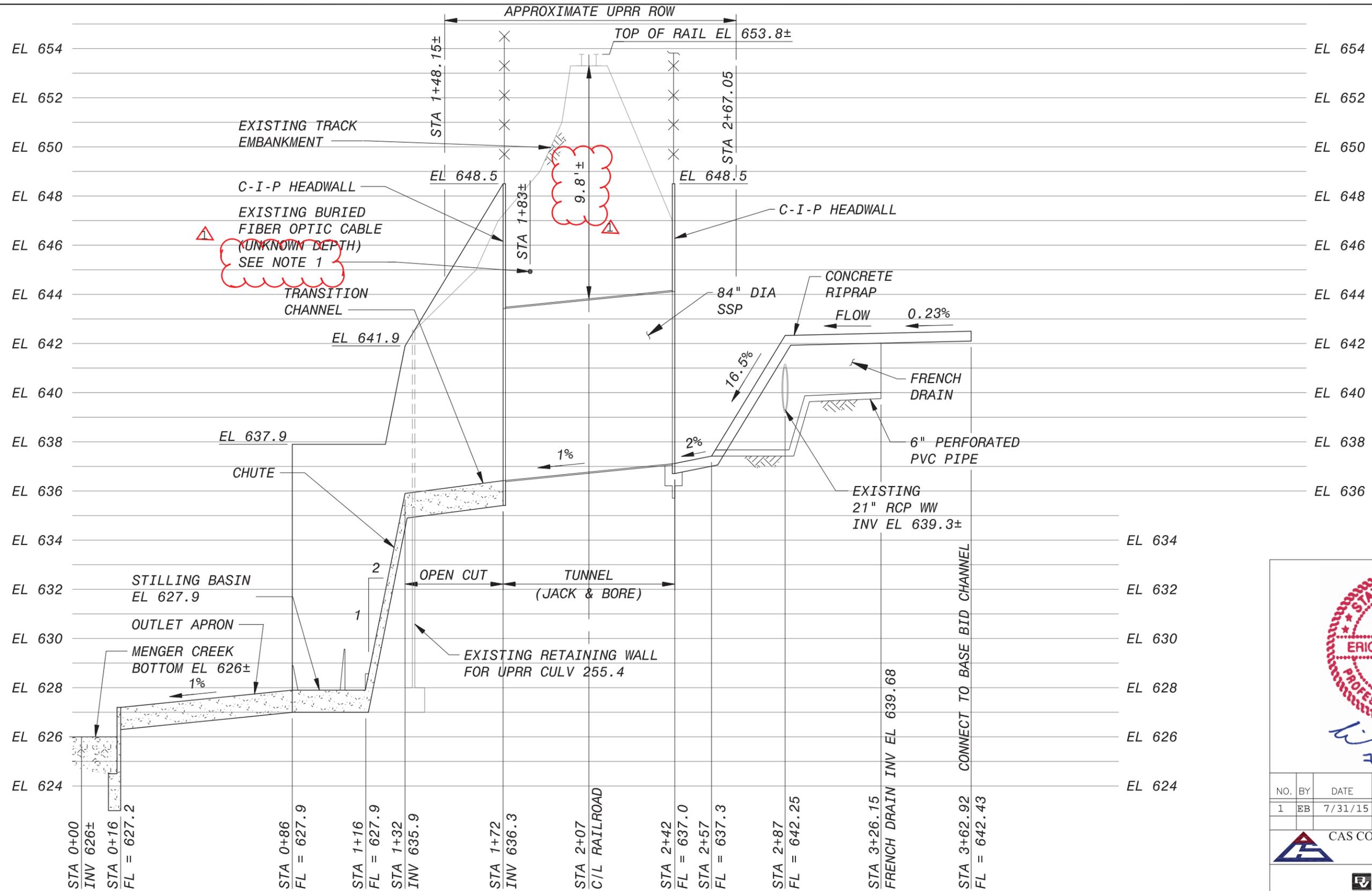
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MENDER CREEK

ADDITIVE ALTERNATIVE PLAN
STA. 0+00 TO STA. 4+99.58

100% SUBMITTAL	PROJECT NO.:	SHEET 83 OF 141
DRWN. BY:	DSGN. BY:	DATE: 06/19/15
CHKD. BY:		SHEET NO.: C-83

CADD FILE: C:\PW_WORKING\CNGPW\1093792\C-84 PLOTTED: 7/31/2015 9:32:58 AM BY: SCHLESSELMAN, JOHN K. CTB FILE: CAS 50%.CTB



NOTES:

1. LOCATION SHOWN USING BEST AVAILABLE INFORMATION. CONTRACTOR SHALL FIELD VERIFY LOCATION AND PROTECT FIBER OPTIC CABLE IN PLACE DURING CONSTRUCTION.

ADDITIVE ALTERNATIVE NO. 1

1
C-83

PROFILE LEGEND:	PROFILE SCALE:
EXISTING GROUND ———	1"=40' HORIZONTAL
PROPOSED GROUND ———	1"=4' VERTICAL



NO.	BY	DATE	REVISION DESCRIPTION
1	EB	7/31/15	Misc. Clarifications

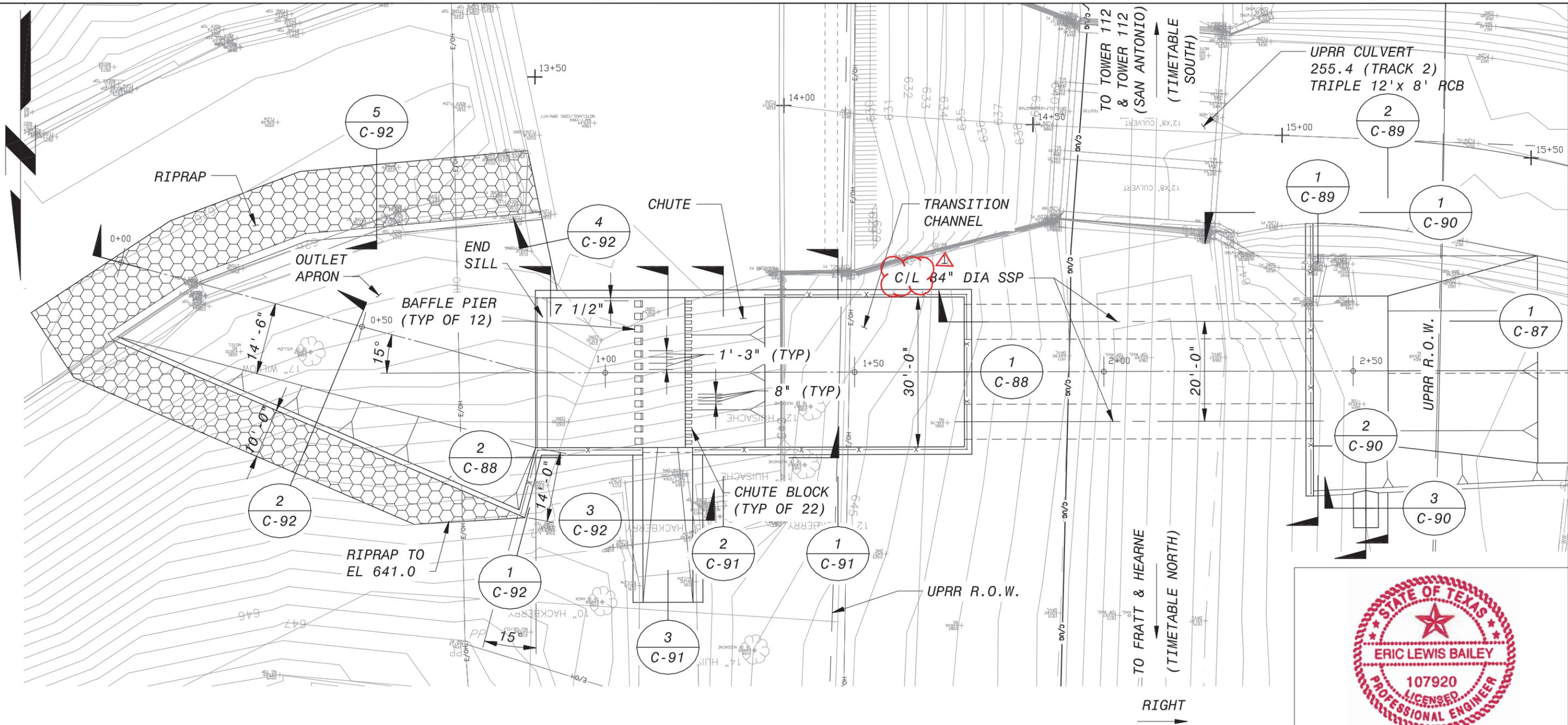
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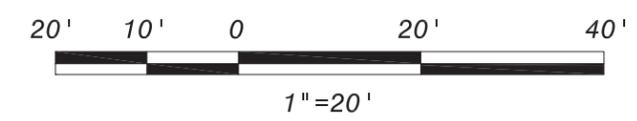
CITY OF SAN ANTONIO
CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT
MENGER CREEK

ADDITIVE ALTERNATIVE PROFILE
STA. 0+00 TO STA. 3+62.92

CADD FILE: C:\PW_WORKING\CNGPW\1093792\C-86 PLOTTED: 7/31/2015 9:37:35 AM BY: SCHLESSELMAN, JOHN K. CTB FILE: CAS 50%.CTB



ENLARGED PLAN - STA 0+00 TO STA 2+87
 1" = 20'-0"



NO.	BY	DATE	REVISION DESCRIPTION
1	EB	7/31/15	Misc. Clarifications

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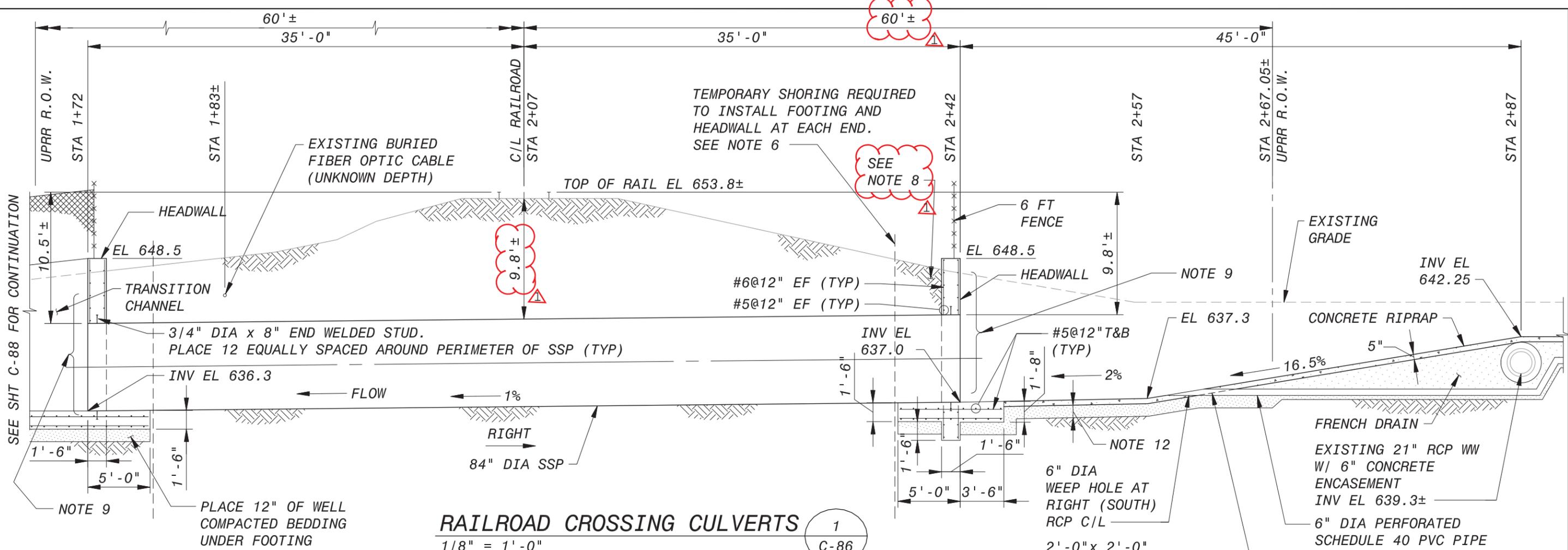
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 MENDER CREEK

ADDITIVE ALTERNATIVE
 ENLARGED PLAN
 STA. 0+00 TO STA. 2+87

100% SUBMITTAL	PROJECT NO.:	SHEET 86 OF 141
DRWN. BY:	DSGN. BY:	DATE: 06/19/15
	CHKD. BY:	SHEET NO.: C-86

CADD FILE: C:\PW_WORKING\CNGPW\1093792\C-87 PLOTTED: 7/31/2015 9:52:43 AM BY: SCHLESSELMAN, JOHN K. CTB FILE: CAS 50%.CTB



RAILROAD CROSSING CULVERTS
 1
 C-86
 1/8" = 1'-0"

NOTES:

1. SMOOTH STEEL PIPE (SSP) SHOWN SHALL MEET REQUIREMENTS FOR BEING JACKED INTO PLACE AS SHOWN ON THIS SHEET. THE STEEL PIPE SHALL BE ASTM A139, GRADE B, WITH A MINIMUM YIELD STRENGTH OF 35KSI AND A MINIMUM 1" WALL THICKNESS. CONTRACTOR SHALL INCREASE THE MINIMUM WALL THICKNESS IF REQUIRED TO MEET THE REQUIREMENTS OF HIS CONSTRUCTION OPERATIONS, AT NO ADDITIONAL COST TO THE OWNER.
2. THE CONTRACTOR SHALL USE THE ONE-PASS CONSTRUCTION METHOD OF JACKING THE PIPE INTO PLACE WITH THE PIPE SERVING AS INITIAL CONSTRUCTION LINING AND TUNNEL SUPPORT, AND AS THE STORMWATER CONDUIT THROUGH THE RAILROAD EMBANKMENT.
3. JACK & BORE OPERATIONS SHALL BE CONTINUOUS WITHIN ZONE 'A' AS DEFINED BY THE UPRR TEMPORARY SHORING GUIDELINES.
4. THE CRITERIA FOR THE RAILROAD CROSSING SHALL BE IN ACCORDANCE WITH THE AMERICAN RAILWAY ENGINEERING AND MAINTENANCE-OF-WAY ASSOCIATION (AREMA) MANUAL OF RAILWAY ENGINEERING, CHAPTER 1, PART 4.
5. THE CONTRACTOR SHALL PROVIDE A SETTLEMENT AND LATERAL DISPLACEMENT MONITORING PLAN WITH INITIAL READINGS BEFORE CONSTRUCTION BEGINS. THIS PLAN NEEDS TO BE SUBMITTED TO THE UPRR FOR REVIEW AND APPROVAL PRIOR TO START OF CONSTRUCTION. CONSTRUCTION IS NOT TO BEGIN UNTIL APPROVAL OF PLAN IS RECEIVED. ALL JACK & BORE OPERATIONS ARE TO CEASE IF VERTICAL AND/OR LATERAL DISPLACEMENT OF EITHER RAIL EXCEEDS 1/4". CONTRACTOR IS TO CONTACT UPRR ENGINEER AND OPERATION CANNOT RESUME UNTIL THE DIFFERENTIAL MOVEMENT IS REMEDIATED AND FURTHER DIFFERENTIAL MOVEMENT IS MINIMIZED TO FALL WITHIN THE 1/4" TOLERANCE.
6. DETAILS AND CALCULATIONS COMPRISING THE DESIGN OF TEMPORARY SHORING SYSTEM AT THE APPROXIMATE LOCATIONS INDICATED ABOVE ARE CONTRACTOR RESPONSIBILITY AND NEED TO BE SUBMITTED TO UPRR FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION. REFER TO UPRR 'GUIDELINES FOR TEMPORARY SHORING' FOR FURTHER EXPLANATION (TYP).
7. EXCAVATED MATERIAL SHALL BE DISPOSED OFF-SITE AT AN OWNER-APPROVED LOCATION.
8. BACKFILL FOR HEADWALLS AT STA 1+72 AND STA 2+42 SHALL BE EITHER CLEAN SAND OR CRUSHED LIMESTONE. ON-SITE CLAYS SHOULD NOT BE USED.
9. RETAINING WALL FOUNDATIONS ARE DESIGNED USING A COEFFICIENT OF FRICTION OF 0.30, WHICH IS AN AVERAGE BETWEEN DRY CLAY CONDITIONS (0.40) AND WET CLAY CONDITIONS (0.20).
10. CONTRACTOR SHALL CONFIRM THE ALLOWABLE BEARING ON CLAY BENEATH SLABS ON GRADE IS 1500 PSF MIN.
11. SEE ADDITIONAL REINFORCEMENT AT OPENINGS OF HEADWALL IN SECTION 1 ON SHEET C-89.
12. PROVIDE 12" OF WELL COMPACTED BEDDING UNDER SLABS/FOOTINGS LOCATED ON UPRR R.O.W. (TYP).

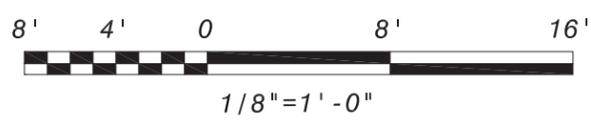
NO.	BY	DATE	REVISION DESCRIPTION
1	EB	7/31/15	Misc. Clarifications

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CITY OF SAN ANTONIO
 CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT
 MENDER CREEK

ADDITIVE ALTERNATIVE
 RAILROAD CROSSING - SECTION

100% SUBMITTAL	PROJECT NO.:	DATE: 06/19/15
DRWN. BY:	DSGN. BY:	CHKD. BY:



SPECIAL SPECIFICATION

1205

Flagger for Union Pacific Railroad R.O.W.

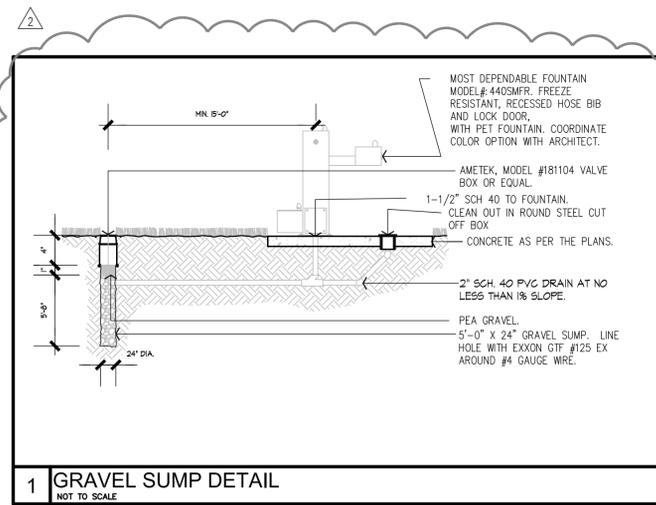
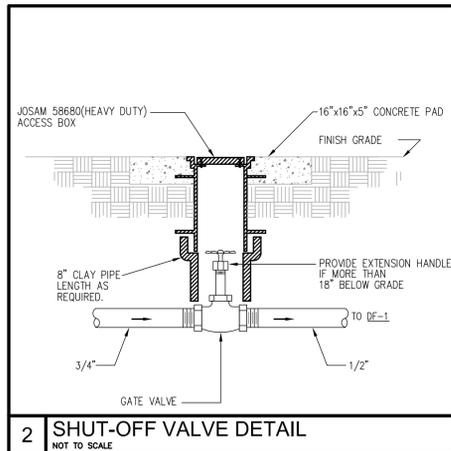
1. **Description.** This Item shall govern flagging operations associated with work within or adjacent to Union Pacific Railroad R.O.W. Contractor shall provide one flagger at position designated by the UPRR representative. Only qualified flaggers may be used per Standard Specification Item 530.
2. **Location.** The work area is at the proposed 84" diameter culverts crossing under the Union Pacific Railroad R.O.W. from Additive Alternate Bid No. 1 Station 0+00 to Station 4+99.
3. **Timing.** Flaggers will be required on-site whenever there are construction activities.
4. **Measurement.** This Item will be measured per day.
5. **Payment.** The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid. This price shall be full compensation for all items necessary to complete the work.
6. **Bid Items.**

1205.1 Flagger for UPRR R.O.W.

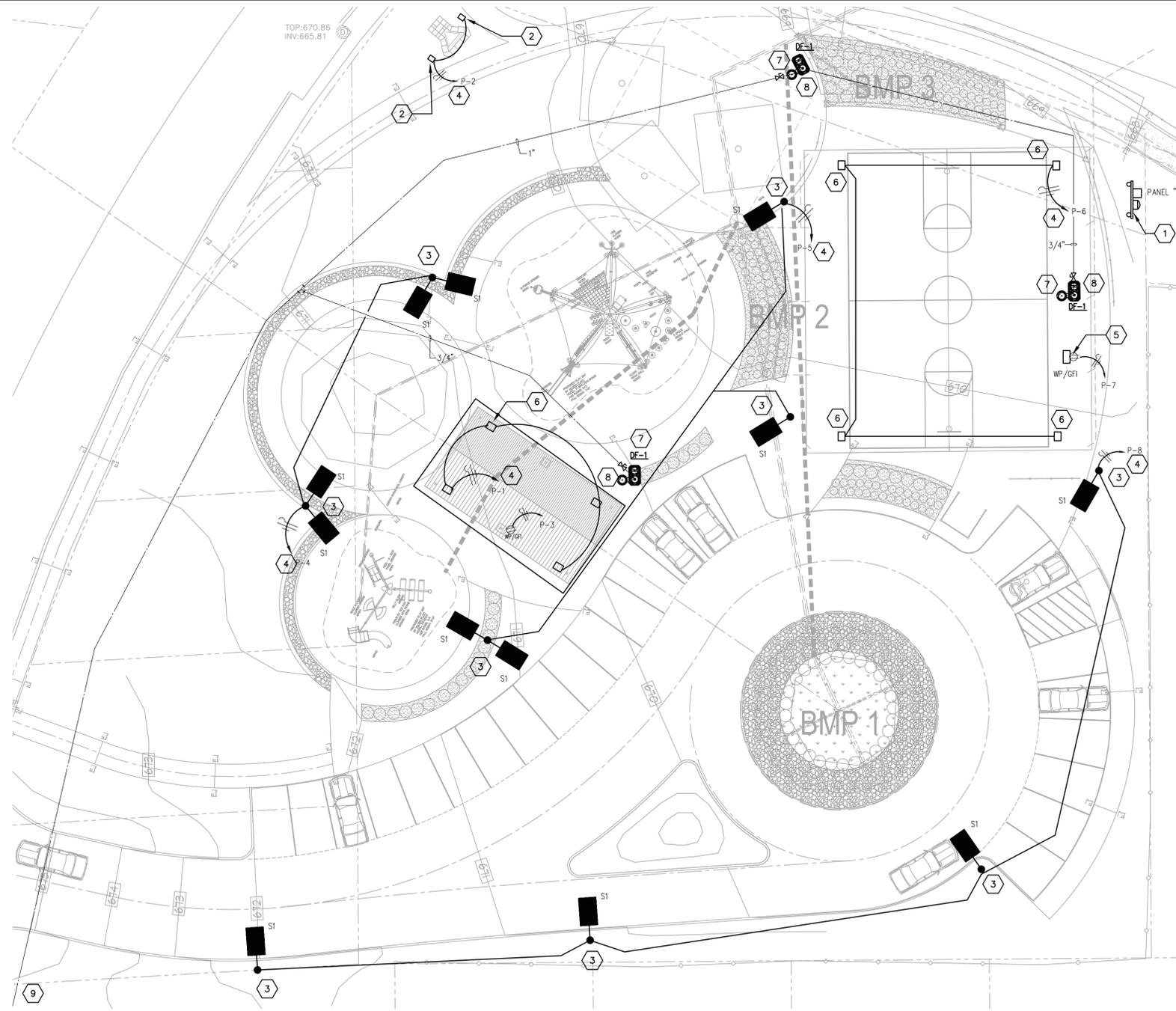
Day

PLUMBING GENERAL PLAN NOTES:

- (A) THE CONTRACTOR IS FULLY RESPONSIBLE FOR PERFORMING ALL WORK UNDER THIS SECTION OF THE PROJECT IN FULL COMPLIANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL CODES INCLUDING THOSE PUBLISHED BY OSHA AND EPA.
- (B) THE EXTENT OF DEMOLITION WORK IS INDICATED ON THE ARCHITECTURAL DRAWINGS AND BY THE REQUIREMENTS OF THIS SECTION. A VISIT TO THE SITE WILL BE REQUIRED PRIOR TO BIDDING. CONTRACTOR SHALL IDENTIFY/VERIFY ALL PLUMBING LINES BEFORE STARTING ANY DEMOLITION WORK.
- (C) ALL EXISTING PLUMBING FIXTURES AND EQUIPMENT REMOVED DURING CONSTRUCTION THAT ARE NOT TO BE REUSED SHALL BE REMOVED FROM THE JOB SITE AND PROPERLY RETURNED TO THE OWNER, IF DESIRED BY OWNER.
- (D) DRAINAGE PIPING INVERT ELEVATIONS NOTED ON FLOOR PLANS AS: INV. EL.= 0.00' BFF ARE BELOW FINISHED FLOOR TAKEN FROM FIRST FLOOR FINISHED ELEVATION OF 0.00' TO INSIDE BOTTOM OF PIPE.
- (E) PLUMBER SHALL FIELD VERIFY EXACT BUILDING FINISHED FLOOR ELEVATION AND THE INVERT ELEVATION OF ALL DRAIN LINES AT PROPOSED CONNECTING POINTS WITH SITE CIVIL UTILITIES PRIOR TO INSTALLATION OF BUILDING PIPING.
- (F) THIS CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD COORDINATING LOCATIONS AND ELEVATIONS OF ALL PLUMBING PIPING WITH OTHER TRADES PRIOR TO INSTALLATION. CORRECTIONS OR RELOCATIONS DUE TO MISALIGNED PIPE SHALL BE PERFORMED IN A TIMELY MANNER AT NO ADDITIONAL COST TO OWNER.
- (G) DO NOT SCALE THE PLUMBING DRAWINGS FOR ROUGH-IN WORK. CONTRACTOR SHALL REFER TO THE DIMENSIONED ARCHITECTURAL AND LANDSCAPE DRAWINGS TO FIELD DETERMINE EXACT LOCATIONS OF PLUMBING ROUGH-IN WORK.
- (H) PROVIDE ISOLATION VALVES FOR ALL BRANCHES OFF DOMESTIC WATER MAINS. ALL PLUMBING SYSTEM VALVES SHALL BE INSTALLED IN ACCESSIBLE CEILING SPACES. WHERE CEILING IS NOT ACCESSIBLE, OR SPACE IS CONFLICTING, VALVES SHALL BE INSTALLED IN PARTITIONS OR PIPE CHASES. PROVIDE APPROVED PAINTED STEEL HINGED ACCESS PANELS IN LOCATIONS PRE-APPROVED BY THE ARCHITECT. PROVIDE STAINLESS STEEL ACCESS DOORS FOR SHOWER, LOCKER AND LOCKER TOILET ROOM PANELS.



PLAN MARK	MINIMUM ROUGH-IN SIZES				DESCRIPTION
	WST & VENT	DRAIN	CW	HW	
DF-1	1 1/2"	1 1/2"	1/2"	---	AS SPECIFIED BY LANDSCAPE ARCHITECT.



GENERAL ELECTRICAL NOTES

- A. MINIMUM CIRCUIT SIZE IS 2 #10 AND 1 #10 GROUND IN 3/4" CONDUIT.
- B. COORDINATE LIGHT LOCATIONS WITH OTHER STRUCTURAL, PAVING, SIDEWALKS AND UTILITIES.
- C. CONTRACTOR BE RESPONSIBLE FOR ADJUSTING BRANCH CIRCUIT SIZES BASED ON ACTUAL CIRCUIT DEVELOPED LENGTHS ON SITE. REFER TO VOLTAGE DROP SCHEDULE ON THIS SHEET.
- D. ROUTE ALL EXTERIOR LIGHTING CIRCUITS THROUGH CONTRACTOR FOR PHOTOCELL "ON"/ TIME CLOCK "OFF" OPERATION.
- E. PROVIDE #10 AWG MIN NEUTRAL FOR ALL MULTIWIRE BRANCH CIRCUITS AND PROVIDE HANDLE TIES FOR CIRCUIT BREAKERS AS REQUIRED BY NEC 210.4
- F. CONDUCTOR SIZES INDICATED ASSUME NO MORE THAN (3) SINGLE POLE BRANCH CIRCUITS IN EACH CONDUIT. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DE-RATE CONDUCTORS PER NEC TABLE 310.15(B)(2)(a) FOR CONDUITS WITH MORE THAN (3) CURRENT "CARRYING CONDUCTORS".

GENERAL PLUMBING NOTES

- A. DRAWING IS DIAGRAMMATIC ONLY. CONTRACTOR SHALL COORDINATE EXACT LOCATIONS OF PIPING, DEVICES AND EQUIPMENT WITH BUILDING ELEMENTS AND THE WORK OF OTHER TRADES.
- B. THE CONTRACTOR IS FULLY RESPONSIBLE FOR PERFORMING ALL WORK UNDER THIS SECTION OF THE PROJECT IN FULL COMPLIANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL CODES INCLUDING THOSE PUBLISHED BY OSHA AND EPA.
- C. PLUMBING CONTRACTOR SHALL BE RESPONSIBLE TO REVIEW THE ARCH. DOCUMENTS IN ADDITION TO THE STRUCTURE DOCUMENTS TO DETERMINE THE COMPLETE SCOPE OF WORK.
- D. CONTRACTOR SHALL PROVIDE DE-1 MOST DEPENDABLE FOUNTAIN MODEL# 2008SMXX. COORDINATE COLOR WITH ARCHITECT. FOUNTAIN SHALL HAVE PET FOUNTAIN. REFER TO DETAIL 10&11/E5.0 FOR ADDITIONAL INFORMATION.
- E. CONTRACTOR SHALL PROVIDE ALL REQUIRED EQUIPMENT THAT INCLUDE BUT NOT LIMITED TO BACKFLOW PREVENTER, WATER METER AND VALVES AS REQUIREMENTS TO CONNECTION TO CITY WATER, CONTRACTOR TO COMPLY TO ALL S.A.W.S REQUIREMENTS.

KEYED NOTES

- 1 NEW UNISTRUT SERVICE RACK. COORDINATE EXACT LOCATION WITH LANDSCAPE ARCHITECT PRIOR TO INSTALLATION. COORDINATE WITH CPSE FOR EXTENSION OF SERVICE TO THIS LOCATION. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR SERVICE SECONDARY DUCTBANK PER CPSE STANDARDS.
- 2 NEW PEDESTAL MOUNTED 6W LED FLOOD LIGHT EQUAL TO BEGA #7602 MOUNTED WITH A 5' SET BACK FOR MONUMENT LIGHTING.
- 3 NEW LIGHT POLE. REFER TO DETAIL 1/E4.
- 4 ROUTE THROUGH PHOTOCELL/CONTRACTOR FOR PHOTOCELL "ON"/TIME CLOCK "OFF" OPERATION.
- 5 PROVIDE A DEDICATED WP/GFI PEDESTAL MOUNTED RECEPTACLE MOUNTED 12" AFF ON GRADE SIDE. INSTALL RECEPTACLE IN A LOCKABLE ENCLOSURE. COORDINATE EXACT LOCATION W/LANDSCAPE ARCHITECT PRIOR TO INSTALL.
- 6 NEW FLOOD LIGHT EQUAL TO LITHONIA #ASF1 70MHC M0F 120 MOUNTED TO PAVILION COLUMN TO LIGHT THE UNDERSIDE OF THE NEW PAVILION. PROVIDE ALL NECESSARY MOUNTING HARDWARE FOR MOUNTING ON STRUCTURE COLUMN. COORDINATE MOUNTING HEIGHT AND AIMING WITH LANDSCAPE ARCHITECT. TYPICAL OF (8).
- 7 CONTRACTOR SHALL PROVIDE AND INSTALL NEW DRINKING FOUNTAIN DF-1 PER DETAIL 3/EPS1.0. COORDINATE EXACT LOCATION WITH OWNER/ARCHITECT. PROVIDE A FRENCH DRAIN FOR THE NEW DRINKING FOUNTAIN AS DETAILED ON THIS SHEET. CONTRACTOR SHALL PULL AND EXTEND THE EXISTING WATER LINE FROM EXISTING METER TO NEW DRINKING FOUNTAIN. CONTRACTOR SHALL FURNISH AND INSTALL A CAST IRON VALVE BOX FOR NEW VALVE PER 2/EPS1.0. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING WATER SOURCE ON SITE PRIOR TO BID TO ESTABLISH EXACT PIPING ROUTE AND LENGTH.
- 8 DRY WELL FOR DRINKING FOUNTAIN DRAIN. REFER TO DETAIL 3/EPS1.0.
- 9 EXTEND AND CONNECT TO THE EXISTING WATER METER. FIELD VERIFY EXACT LOCATION PRIOR TO BID. CONNECT NEW DRINKING FOUNTAIN TO EXISTING DOMESTIC WATER SOURCE. PROVIDE A PVB BACKFLOW DEVICE WITH CAGE.



Terra design group, inc.
816 camaron, suite 103
san antonio, texas 78212
210.220.1400
210.220.1404
wheard@terradesignsa.com



**MENGER CREEK
LINEAR PARK**

1526 N. Walters Street
San Antonio, Texas 78202

REVISION	DATE
ADDENDUM #2	2014-07-29

Project no:
Date: JUNE 06, 2015
Sheet:



2902 NORTH FLORES
SAN ANTONIO, TEXAS 78212
210.393.1840 PHONE
SAN ANTONIO
T&PE FIRM REGISTRATION NO. 13361

EPS1.0
100% CONSTRUCTION SET

CITY OF SAN ANTONIO
025 UNIT PRICING FORM (Addendum #2)

PROJECT NAME: Menger Creek Drainage
PROJECT NO.: 40-00328

ALT. NO.	ITEM NO.	DESC. CODE	S.P. NO.	BID ITEM DESCRIPTION	UNIT OF MEASURE	APPROX. QUANTITIES	UNIT BID PRICE	AMOUNT	ITEM SEQUENCE NO.
				The City only will accept bid pricing to the hundredths. Any pricing extended out to three decimal points will be truncated to two decimal points in the City's favor.					
	100.1	COSA		MOBILIZATION	LS	1		\$0.00	
	100.2	COSA		INSURANCE AND BOND	LS	1		\$0.00	
	101.1	COSA		PREPARING RIGHT OF WAY	LS	1		\$0.00	
	103.1	COSA		REMOVE CONCRETE CURB	LF	680		\$0.00	
	103.3	COSA		REMOVE CONCRETE SIDEWALKS AND DRIVEWAYS	SF	2700		\$0.00	
	103.4	COSA		REMOVE EXISTING CONCRETE RIPRAP	SF	131206		\$0.00	
	104.1	COSA		STREET EXCAVATION	CY	746		\$0.00	
	105.1	COSA		CHANNEL EXCAVATION	CY	10275		\$0.00	
	108.1	COSA		LIME TREATED SUBGRADE (6 IN COMPACTED DEPTH)	SY	1693		\$0.00	
	108.2	COSA		LIME (APPLICATION RATE 31 LBS/SY)	TON	26		\$0.00	
	200.1	COSA		FLEXIBLE BASE (6" COMPACTED DEPTH)	SY	489		\$0.00	
	202.1	COSA		PRIME COAT	GAL	98		\$0.00	
	203.1	COSA		TACK COAT	GAL	373		\$0.00	
	205.2	COSA		HOT MIX ASPHALTIC PAVEMENT, TYPE B (6" COMPACTED DEPTH)	SY	1693		\$0.00	
	205.4	COSA		HOT MIX ASPHALTIC PAVEMENT, TYPE D (2" COMPACTED DEPTH)	SY	2035		\$0.00	
	306.1	COSA		STRUCTURAL EXCAVATION	CY	164		\$0.00	
	307.1	COSA		CONCRETE STRUCTURE (ELEVATED SIDEWALK)	CY	22		\$0.00	
	307.1	COSA		CONCRETE STRUCTURE (GRATED INLET APRON)	CY	3		\$0.00	
	401.1	COSA		REINFORCED CONCRETE PIPE (CLASS III)(24" DIA)	LF	45		\$0.00	
	401.1	COSA		REINFORCED CONCRETE PIPE (CLASS III)(30" DIA)	LF	20		\$0.00	
	403.8	COSA		INLET TYPE I (COMPLETE)(10 FT) WITH LOCKING COVER LID H=4.5'	EA	1		\$0.00	
	403.8	COSA		INLET TYPE I (COMPLETE)(10 FT) WITH LOCKING COVER LID H=5.0'	EA	1		\$0.00	
	403.13	COSA		SPECIAL INLET (COMPLETE) (TxDOT CURB INLET TYPE IIR)	EA	2		\$0.00	
	403.13	COSA		SPECIAL INLET (COMPLETE) (TxDOT 30' GRATED INLET TYPE X-5)	EA	1		\$0.00	
	403.13	COSA		SPECIAL INLET (COMPLETE) (GRATED INLET FOR FRENCH DRAIN)	EA	1		\$0.00	
	403.14	COSA		INLET EXTENSIONS (10 FT)	EA	3		\$0.00	
	407.1	COSA		CONCRETE ENCASEMENT	CY	1		\$0.00	
	407.2	COSA		CONCRETE CRADLES	CY	1		\$0.00	
	410.2	COSA		GRAVEL SUBGRADE FILLER	CY	2400		\$0.00	

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413.1	COSA	FLOWABLE FILL (LOW STRENGTH)	CY	5	\$0.00
500.1	COSA	CONCRETE CURB	LF	543	\$0.00
502.1	COSA	CONCRETE SIDEWALKS	SY	486	\$0.00
503.1	COSA	PORTLAND CEMENT CONCRETE DRIVEWAY	SY	58	\$0.00
503.2	COSA	PORTLAND CEMENT CONCRETE DRIVEWAY - COMMERCIAL	SY	24	\$0.00
505.1	COSA	CONCRETE RIPRAP (5" THICK) (CONCRETE CHANNEL)	SY	14998	\$0.00
506.1	COSA	CONCRETE RETAINING WALLS - COMBINATION TYPE	CY	4	\$0.00
507.5	COSA	GATES - VEHICULAR MAINTENANCE GATE AT MONSON	EA	1	\$0.00
508.1	COSA	RELOCATING CHAIN LINK WIRE FENCE (4' HIGH)	LF	51	\$0.00
510.1	COSA	TIMBER GUARD POSTS	EA	13	\$0.00
512.1	COSA	ADJUSTING EXISTING MANHOLES	EA	2	\$0.00
515.1	COSA	TOPSOIL (4" DEPTH)	CY	783	\$0.00
516.1	COSA	BERMUDA SODDING	SY	1246	\$0.00
516.3	COSA	BUFFALO 609 SODDING	SY	5803	\$0.00
522.1	COSA	SIDEWALK PIPE RAILING	LF	131	\$0.00
524.1	COSA	CONCRETE STEPS	CY	1	\$0.00
525.1	COSA	CONCRETE TRAFFIC BARRIER (PORTABLE)(INSTALL)	LF	80	\$0.00
525.1	COSA	CONCRETE TRAFFIC BARRIER (PORTABLE)(REMOVE)	LF	80	\$0.00
530.1	COSA	BARRICADES, SIGNS, AND TRAFFIC HANDLING (3%)	LS	1	\$0.00
531.3	COSA	R1-1 STOP (30 IN)	EA	3	\$0.00
531.57	COSA	10 INCH STREET NAME, BLOCK NUMBERS (VARIESX10") (TWO SIGN PLATES BACK TO BACK)	EA	6	\$0.00
540.1	COSA	ROCK FILTER DAMS (TYPE 2)(INSTALL)	LF	74	\$0.00
540.2	COSA	ROCK FILTER DAMS (TYPE 2)(REMOVE)	LF	74	\$0.00
540.61	COSA	CONSTRUCTION EXITS (INSTALL)	SY	412	\$0.00
540.62	COSA	CONSTRUCTION EXITS (REMOVE)	SY	412	\$0.00
540.9	COSA	TEMPORARY SEDIMENT CONTROL FENCE	LF	198	\$0.00
540.10	COSA	CURB INLET GRAVEL FILTERS	LF	251	\$0.00
540.11	COSA	GRAVEL FILTER BAGS	LF	52	\$0.00
550.1	COSA	TRENCH EXCAVATION SAFETY PROTECTION	LF	44	\$0.00
801.1	COSA	LEVEL I PROTECTIVE FENCING	LF	1452	\$0.00
801.2	COSA	LEVEL IIA PROTECTIVE FENCING	LF	273	\$0.00
801.3	COSA	LEVEL IIB PROTECTIVE FENCING	LF	20	\$0.00
802.1	COSA	LEVEL II PRUNING	EA	6	\$0.00
902.1	COSA	STEEL POSTS AND CABLE	LF	144	\$0.00
1001.1	COSA	REMOVE EXISTING DOUBLE 10'X6' BOX CULVERTS AT RIO GRANDE	LS	1	\$0.00
1001.2	COSA	REMOVE EXISTING 48" RCP PIPE CULVERT AT STA 27+29	LS	1	\$0.00

CITY OF SAN ANTONIO

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1001.3	COSA		REMOVE EXISTING 54" RCP PIPE CULVERT AT STA 30+97	LS	1		\$0.00
1001.4	COSA		REMOVE EXISTING 54" RCP PIPE CULVERT AT STA 35+48	LS	1		\$0.00
1001.5	COSA		REMOVE EXISTING METAL BEAM GUARD RAIL AT RIO GRANDE	LS	1		\$0.00
1001.6	COSA		REMOVE EXISTING PEDESTRIAN BRIDGE AT GRIMES ST.	LS	1		\$0.00
432	TxDOT		RIPRAP (RR8 SIDE CHANNEL TIE INS)	CY	2		\$0.00
556	TxDOT		PIPE UNDERDRAINS (INC. PIPE, GRAVEL, & GEOTEXTILE)	LF	2429		\$0.00
			NORTH RIO GRANDE ST. BRIDGE				
400	TxDOT		CEMENT STABILIZED BACKFILL (BEHIND ABUTMENT)	CY	80		\$0.00
416	TxDOT		DRILLED SHAFT (30 IN)	LF	440		\$0.00
420	TxDOT		CLASS C CONCRETE (ABUTMENTS)	CY	49		\$0.00
420	TxDOT		CLASS S CONCRETE (SLAB)	CY	47		\$0.00
420	TxDOT		CLASS S CONCRETE (BRIDGE SIDEWALK)	CY	18		\$0.00
425	TxDOT		PRESTRESSED CONCRETE BRIDGE BEAM (5SB15)	LF	446		\$0.00
442	TxDOT		STRUCTURAL STEEL (MISC NON-BRIDGE)	LB	346		\$0.00
450	TxDOT		RAIL (TYPE C223)	LF	120		\$0.00
454	TxDOT		ARMOR JOINT (WITH SEAL)	LF	84		\$0.00
							\$0.00
			PREFABRICATED PEDESTRIAN BRIDGE				\$0.00
400	TxDOT		CEMENT STABILIZED BACKFILL (BEHIND ABUTMENT)	CY	10		\$0.00
416	TxDOT		DRILLED SHAFT (24 IN)	LF	140		\$0.00
420	TxDOT		CLASS C CONCRETE (ABUTMENTS)	CY	9		\$0.00
420	TxDOT		CLASS S CONCRETE (BRIDGE DECK)	CY	7		\$0.00
432	TxDOT		RIPRAP (RR8)	CY	6		\$0.00
442	TxDOT		STRUCTURAL STEEL (MISC NON-BRIDGE)	LB	210		\$0.00
SS4007			PREFABRICATED PEDESTRIAN BRIDGE	EA	1		\$0.00
522.1	COSA		SIDEWALK PIPE RAILING	LF	32		\$0.00
			MISCELLANEOUS ITEMS				
SS1201			FORCE ACCOUNT - DE-ENERGIZE CPS POWER LINES	EA	2	\$10,000.00	\$20,000.00
						Total Bid Amount (COSA Base):	\$20,000.00
			SAWS Water Project No. 12-5092				
100.1	SAWS		MOBILIZATION	LS	1		\$0.00
101.1	SAWS		PREPARATION OF RIGHT-OF-WAY	LS	1		\$0.00
550.1	SAWS		TRENCH EXCAVATION SAFETY PROTECTION	LF	251		\$0.00
812.1	SAWS		8-INCH PVC PIPE (FULLY RESTRAINED)	LF	71		\$0.00

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816.1	SAWS	36-INCH STEEL PIPE (WELDED)	LF	82		\$0.00
826.1	SAWS	VALVE BOX ADJUSTMENT	EA	7		\$0.00
834.3	SAWS	RELOCATE FIRE HYDRANT	EA	1		\$0.00
836.1	SAWS	PIPE FITTINGS, ALL SIZES AND TYPES	TON	1		\$0.00
840.1	SAWS	8-INCH WATER TIE-IN	EA	2		\$0.00
840.1	SAWS	36-INCH WATER TIE-IN	EA	2		\$0.00
841.1	SAWS	HYDROSTATIC TESTING	EA	2		\$0.00
844.1	SAWS	2-INCH BLOWOFF, TEMPORARY	EA	2		\$0.00
844.1	SAWS	4-INCH BLOWOFF, TEMPORARY	EA	2		\$0.00
846.1	SAWS	1" AIR RELEASE ASSEMBLY	EA	1		\$0.00
846.1	SAWS	2" AIR RELEASE ASSEMBLY	EA	2		\$0.00
856.1	SAWS	8" CARRIER PIPE (FULLY RESTRAINED)	LF	42		\$0.00
856.1	SAWS	36" STEEL CARRIER PIPE (WELDED)	LF	56		\$0.00
856.1	SAWS	24" STEEL CASING PIPE - OPEN CUT	LF	42		\$0.00
856.1	SAWS	54" STEEL CASING PIPE - OPEN CUT	LF	56		\$0.00
858.1	SAWS	CONCRETE ENCASEMENT, CRADLES, SADDLES AND COLLARS	CY	2		\$0.00
1015.1	SAWS	SERVICE LINE BREAK/LEAK REPAIRS	EA	1		\$0.00
1020.1	SAWS	WATER MAIN BREAK/LEAK REPAIRS	EA	1		\$0.00
					Total Bid Amount (SAWS Water):	\$0.00
		SAWS Sewer Project No. 12-5592				
100.1	SAWS	MOBILIZATION	LS	1		\$0.00
101.1	SAWS	PREPARATION OF RIGHT-OF-WAY	LS	1		\$0.00
550.1	SAWS	TRENCH EXCAVATION SAFETY PROTECTION	LF	1459		\$0.00
848.1	SAWS	8-INCH PVC SANITARY SEWER (0 TO 6' DEPTH)	LF	52		\$0.00
848.1	SAWS	8-INCH PVC SANITARY SEWER (6' TO 10' DEPTH)	LF	52		\$0.00
848.1	SAWS	10-INCH PVC SANITARY SEWER (0 TO 6' DEPTH)	LF	646		\$0.00
848.1	SAWS	10-INCH PVC SANITARY SEWER (6' TO 10' DEPTH)	LF	443		\$0.00
848.1	SAWS	10-INCH D.I. SANITARY SEWER (6' TO 10' DEPTH)	LF	10		\$0.00
848.1	SAWS	24-INCH PVC SANITARY SEWER (0 TO 6' DEPTH)	LF	25		\$0.00
848.1	SAWS	24-INCH PVC SANITARY SEWER (6' TO 10' DEPTH)	LF	9		\$0.00
848.1	SAWS	24-INCH PVC SANITARY SEWER (10' TO 14' DEPTH)	LF	39		\$0.00
848.1	SAWS	24-INCH PVC SANITARY SEWER (14' TO 18' DEPTH)	LF	183		\$0.00
852.1	SAWS	SANITARY SEWER MANHOLE, 4' DIAMETER (0'-6')	EA	8		\$0.00
852.1	SAWS	SANITARY SEWER MANHOLE, 5' DIAMETER (0'-6')	EA	1		\$0.00
852.1	SAWS	EXTERNAL DROP SANITARY SEWER MANHOLE, 5' DIA. (0'-6')	EA	3		\$0.00
852.2	SAWS	EXTRA DEPTH MANHOLES, 4' DIAMETER (>6')	VF	3		\$0.00

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	852.2	SAWS	EXTRA DEPTH MANHOLES, 5' DIAMETER (>6')	VF	38		\$0.00
	854.1	SAWS	6" SANITARY SEWER LATERALS	LF	90		\$0.00
	854.2	SAWS	ONE-WAY SANITARY SEWER CLEAN-OUT	EA	3		\$0.00
	858.1	SAWS	CONCRETE ENCASEMENT, CRADLES, SADDLES AND COLLARS	CY	123		\$0.00
	864.1	SAWS	WASTEWATER BY PASS PUMPING (ALL DIAMETERS)	LS	1		\$0.00
	866.1	SAWS	SEWER MAIN TELEVISION INSPECTION (8" & 10" - PRE)	LF	1203		\$0.00
	866.1	SAWS	SEWER MAIN TELEVISION INSPECTION (8" & 10" - POST)	LF	1203		\$0.00
	866.1	SAWS	SEWER MAIN TELEVISION INSPECTION (24" - PRE)	LF	256		\$0.00
	866.1	SAWS	SEWER MAIN TELEVISION INSPECTION (24" - POST)	LF	256		\$0.00
	1103.1	SAWS	POINT REPAIRS AND OBSTRUCTION REMOVALS	LS	1		\$0.00
						Total Bid Amount (SAWS Sewer):	\$0.00
			CPS Gas				
			RERUN AND LOWER GAS SERVICES OFF NEW MAIN TO METER, SIZES 1/2" THRU 4" (INCLUDING REPLACING RISER IF NECESSARY). SIZE 1/2" THRU 2" LONG SIDE	EA	4		\$0.00
			INSTALL GAS MAIN OR CASING (DISTANCE AS MEASURED ALONG THE TOP OF TRENCH) 2" PLASTIC PIPE AND TRACER WIRE	LF	151		\$0.00
			INSTALL GAS MAIN OR CASING (DISTANCE AS MEASURED ALONG THE TOP OF TRENCH) 4" PLASTIC PIPE AND TRACER WIRE	LF	435		\$0.00
			STREET RESTORATION ADJUSTMENT, WHEN REQUIRED. TO BE USED AS DIRECTED BY THE CPS ENERGY REPRESENTATIVE. FLOWABLE FILL	CY	10		\$0.00
			STREET RESTORATION ADJUSTMENT, WHEN REQUIRED. TO BE USED AS DIRECTED BY THE CPS ENERGY REPRESENTATIVE. 2" HMAC TYPE D WITH 10" ASPHALT TREATED BASE TYPE D OR FLOWABLE FILL	SY	35		\$0.00
						Total Bid Amount (CPS Gas):	\$0.00
			ADDITIVE ALTERNATE NO. 1				
1	100.1	COSA	MOBILIZATION	LS	1		\$0.00
1	100.2	COSA	INSURANCE AND BOND	LS	1		\$0.00
1	101.1	COSA	PREPARING RIGHT OF WAY	LS	1		\$0.00
1	103.4	COSA	REMOVE CONCRETE RIPRAP	SF	6,600		\$0.00
1	105.1	COSA	CHANNEL EXCAVATION	CY	1,600		\$0.00
1	306.1	COSA	STRUCTURAL EXCAVATION	CY	2,300		\$0.00

CITY OF SAN ANTONIO
025 UNIT PRICING FORM (Addendum #2)

PROJECT NAME: Menger Creek Drainage
PROJECT NO.: 40-00328

1	307.1	COSA	CONCRETE STRUCTURE (APPROACH SLABS)	CY	300	\$0.00
1	307.1	COSA	CONCRETE STRUCTURE (RETAINING WALLS)	CY	120	\$0.00
1	307.1	COSA	CONCRETE STRUCTURE (HEADWALLS OR OUTFALL STRUCTURES)	CY	300	\$0.00
1	307.1	COSA	CONCRETE STRUCTURE (ENERGY DISSIPATOR BLOCKS)	CY	2	\$0.00
1	406.1	COSA	JACKING PIPE (84" SMOOTH STEEL PIPE)	LF	140	\$0.00
1	410.2	COSA	GRAVEL SUBGRADE FILLER	CY	200	\$0.00
1	505.1	COSA	CONCRETE RIPRAP (5" THICK)	SY	627	\$0.00
1	507.2	COSA	CHAIN LINK WIRE FENCE (6' HIGH)	LF	265	\$0.00
1	515.1	COSA	TOPSOIL	CY	105	\$0.00
1	516.3	COSA	BUFFALO 609 SODDING	SY	942	\$0.00
1	540.1	COSA	ROCK FILTER DAMS (INSTALL) (TYPE 2)	LF	74	\$0.00
1	540.2	COSA	ROCK FILTER DAMS (REMOVE) (TYPE 2)	LF	74	\$0.00
1	540.61	COSA	CONSTRUCTION EXITS (INSTALL)	SY	83	\$0.00
1	540.62	COSA	CONSTRUCTION EXITS (REMOVE)	SY	83	\$0.00
1	540.9	COSA	EROSION AND SEDIMENTATION CONTROL	LF	356	\$0.00
1	551.1	COSA	TEMPORARY SPECIAL SHORING (BORING & RECEIVING PITS)	SF	1,200	\$0.00
1	801.1	COSA	LEVEL 1 PROTECTIVE FENCING	LF	440	\$0.00
1	801.3	COSA	LEVEL IIB PROTECTIVE FENCING	LF	7	\$0.00
1	802.1	COSA	LEVEL II PRUNING	EA	2	\$0.00
1	1001.7	COSA	REMOVE CONCRETE RETAINING WALL AT STA 1+35	LS	1	\$0.00
1	432.1	TxDOT	STONE RIPRAP BEDDING (6")	SY	50	\$0.00
1	432.2	TxDOT	3" STONE RIPRAP PLACED	CY	125	\$0.00
1	SS1205.1		FLAGGER FOR UPRR R.O.W.	DAY	90	\$0.00

Total Additive Alternate No. 1 Bid Amount: \$0.00

Total Bid Amount (COSA & SAWS Base + Alternate): \$20,000.00

_____ certifies that the unit prices shown on this complete computer print-out for all of the bid items and the alternates contained in this proposal are the unit prices intended and that its bid will be tabulated using these unit prices and no other information from this print-out.

_____ Acknowledged and agrees that the total bid amount shown will be read as its total bid and further agrees that the official total bid amount will be determined by multiplying the unit bid prices shown in this print-out by the respective estimated quantities shown in the proposal and then totaling all of the extended amounts. _____ agrees to the terms, conditions, and requirements of the bidder's bid proposal.

Signed: _____ Date: _____

CITY OF SAN ANTONIO
025 UNIT PRICING FORM (Addendum #2)

PROJECT NAME: Menger Creek Drainage
PROJECT NO.: 40-00328

Title: _____



City of San Antonio
TRANSPORTATION AND CAPITAL IMPROVEMENTS

RECEIPT OF ADDENDUM NUMBER(S) 2 IS HEREBY ACKNOWLEDGED FOR PLANS AND

SPECIFICATIONS FOR CONSTRUCTION OF THE Menger Creek Drainage #40-00328

FOR WHICH BIDS WILL BE OPENED ON August 11, 2015 at 2:00pm

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

Company Name: _____

Address: _____

City/State/Zip Code: _____

Date: _____

Signature

Print Name/Title