ADDENDUM NO. 1

CITY OF SAN ANTONIO
CAPITAL IMPROVEMENTS MANAGEMENT SERVICES

PROJECT NAME:
BLANCO ROAD – FROM HILDEBRAND TO JACKSON KELLER

DATE: January 12, 2012

ADDENDUM NO.1

This addendum should be included in and be considered part of the plans and specifications for the name of the project. The contractor shall be required to sign an acknowledgement of the receipt of this addendum and submit with their bid.

CIMS PROJECT NO.: 40-00004

SPECIFICATIONS:

Formal Invitation for Bid and Contract:

010 INVITATION FOR BIDS (IFB) AND CONTRACT

- Substitute and utilize the revised "010 FORM INVITATION FOR BIDS (IFB) AND CONTRACT SIGNATURE PAGE" per Attachment "A".

- Replace the following forms listed on the City of San Antonio website with the revised 025 Unit Pricing Form – Base Bid and the revised 025 Unit Pricing Form – Add Alt 1 attached.

ENVIRONMENTAL SPECIAL CONDITIONS

- Replace Environmental Special Conditions with "Environmental Specifications for the Waste Management Plan" attached.

- Insert the Addendum Acknowledgement Form. Submit the form signed and dated with the bid proposal package indicating receipt of the number of Addendums received.

STATE OF TEXAS
KYLE GASS
94833
LICENSED
PROFESSIONAL ENGINEER

1/12/12

CITY OF SAN ANTONIO

Issued By: CIMS Department **Date Issued: January 11, 2012**
ID NO.: 40-00004-05-01 **Page 1 of 1**

FORMAL INVITATION FOR BIDS (IFB) and CONTRACT
Blanco Road (From Hildebrand to Jackson-Keller) - (Project No. 40-00004)

Sealed bids, subject to the Terms and Conditions of this Invitation for Bids and other contract provisions, will be received at the Office of the City Clerk, City Hall, 100 Military Plaza, 2nd floor San Antonio, TX 78205 until **2:00 p.m. CST** on **Tuesday, February 21, 2012** and publicly read aloud at **114 W. Commerce, Municipal Plaza Building "B" Room**. This is the *solicitation deadline*. Bids must be submitted in a sealed envelope and clearly marked with the due date of bid, bidder name, Project Name and ID NO. The City is not responsible for submissions not clearly and appropriately marked. Late submissions will be rejected and returned to bidder. **A Mandatory Pre-submittal Conference** will be held at the Municipal Plaza Building, 9th Floor Conference Room, 114 W. Commerce, San Antonio, TX 78205 on **January 31, 2012** at **9:00 am**.

TABLE A - This invitation includes the following Contract Documents:

010	Invitation for Bids and Contract Signature Page	◘	Performance Bond
020	Bid Form	◘	Payment Bond
025	Unit Pricing Form	060	Supplemental Conditions
040	Standard Instructions to Respondent	085	General Conditions for Heavy/Hwy Construction Contracts
050.01	SBEDA Terms & Conditions SBE Subcontracting Goal	095	SAWS Special Conditions
◘	Subcontractor/Supplier Utilization Plan	◘	Prevailing Wage Rate
◘	Exception to SBEDA Program Requirements Request Form	◘	Environmental Special Specifications
◘	Respondent/Vendor Subcontracting Waiver Request Form		

Plans, Specifications and Special Conditions may be purchased at a cost of **$175.00** per set (tax included) from the office of **Civil Engineering Consultants, 11550 IH-10W, Suite 395, San Antonio, Tx 78230 or by Phone- (210) 641-9999.** No refund will be made for plan sets that are returned. Addenda will be posted on the web at www.sanantonio.gov/rfplistings along with this solicitation. Changes to Plans, Specifications and Special Conditions will be included in an addendum and may be obtained from the office of **CEC**. Bidder understands and agrees that bidder is responsible for obtaining addenda and adhering to all requirements in addenda. City is not responsible for incorrect information obtained through other sources.

The following documents (fully completed and with original signatures) constitute the required information to be submitted as a part of the bid proposal clearly marked on the outside of the sealed envelope with the due date of bid, bidder name, Project Name and ID NO as follows:

1.)	010	Invitation for Bids and Contract Signature Page	4.)	Bid Bond or Cashier's Check
2.)	020	Bid Form	5.)	Subcontractor/Supplier Utilization Plan
3.)	025	Unit Pricing Form	6.)	Signed Addenda Acknowledgement Forms

It is understood and agreed that the work is to be completed in full on or before **529** calendar days for base bid, plus **168** calendar days for the additive alternate bid. This project **does include** hazardous environmental work. This project requires **2** project sign(s).

Respondents must demonstrate commitment to satisfy a twenty percent (20%) subcontracting goal. In the absence of a waiver granted by the Small Business Office, failure of a Respondent to commit to satisfying the SBE subcontracting goal shall render its response NON-RESPONSIVE.

This is a Public Works Contract and chapter 2258 of the Texas Government Code requires that not less than the prevailing wage rate for work of a similar character in this locality shall be paid all laborers, workmen, and mechanics employed in the construction thereof. The Wage Decision Number **TX120016 1/06/2012 TX16** shall be used on this contract, which is available on the web at http://www.wdol.gov/dba.aspx#0.

The undersigned, by his/her signature, represents that he/she is authorized to bind the bidder to fully comply with Contract Documents for the amount(s) shown on the accompanying bid sheet(s). The work proposed to be done shall be accepted when fully completed and finished to the entire satisfaction of the City. The undersigned certifies all prices contained in this bid have been carefully checked and are submitted as correct and final. The Bidder by submitting this bid and signing below, acknowledges that he/she has received & read the entire Bid and Contract document and agrees to be bound by the terms therein, has received all Addenda, and agrees to the terms, conditions, and requirements of the bidder's bid proposal and all documents listed in TABLE A above and the enabling Ordinance and associated documentation that form the entire Contract upon approval by the City Council.

Official Name of Company (legal):_____

_____/_____ Signer's Name: _____
Original Signature of Person Authorized to Sign Bid/Contract Date (Please Print or Type)

CITY OF SAN ANTONIO
025 UNIT PRICING FORM

PROJECT NAME: BLANCO ROAD (From Hildebrand to Jackson Keller)
PROJECT NO.: 04-00004 (BASE 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.
	100.1			MOBILIZATION	LS	1			1
	100.2			INSURANCE AND BOND	LS	1			2
	101.1			PREPARING RIGHT OF WAY	LS	1			3
	104.1			STREET EXCAVATION	CY	15674			4
	106.1			BOX CULVERT EXCAVATION & BACKFILL	CY	6783			5
	107.1			EMBANKMENT (FINAL)(DENS CONT)(TY B)	CY	98			6
	108.1			LIME TREAT. SUBGRADE (6" COMPACTED DEPTH)	SY	26698			7
	108.2			LIME	TON	481			8
	200.1			FLEXIBLE BASE (6" COMPACTED DEPTH)(TY C)	SY	75			9
	203.1			TACK COAT	GAL	19			10
	205.2			HOT MIX ASPHALTIC PAVEMENT, TYPE B (6" COMP. DEPTH)	SY	657			11
	205.2			HOT MIX ASPHALTIC PAVEMENT, TYPE B (8.5" COMP. DEPTH)	SY	26698			12
	205.2			HOT MIX ASPHALTIC PAVEMENT, TYPE B (12" COMP. DEPTH)	SY	501			13
	205.2			HOT MIX ASPHALTIC PAVEMENT, TY B (7.5" COMPACTED DEPTH)	SY	175			14
	205.3			HOT MIX ASPHALTIC PAVEMENT, TYPE C (2" COMP. DEPTH)	SY	24887			15
	205.4			HOT MIX ASPHALTIC PAVEMENT, TY D (2.5" COMPACTED DEPTH)	SY	191			16
	209.1			CONCRETE PAVEMENT (10" DEPTH)(BUS PAD)	SY	1665			17
	230.1			FLEXIBLE PAVEMENT FULL-DEPTH REPAIR (6" COMP. DEPTH)	SY	687			18
	230.2			CONCRETE PAVEMENT FULL-DEPTH REPAIR (6" COMP. DEPTH)	SY	144			19
	234.1			BASE REINFORCEMENT TX-5	SY	26698			20
	260			ULTRA-THIN BONDED HOT MIX WEARING COURSE (NOVACHIP SURFACE TREATMENT)	SY	24887			21
	308.1			DRILLED SHAFTS (24")	LF	68.4			22
	308.1			DRILLED SHAFTS (30")	LF	11.3			23
	308.1			DRILLED SHAFTS (36")	LF	66			24
	309.1			PRECAST CONCRETE CULVERT (3'X3')	LF	61.29			25
	309.1			PRECAST CONCRETE CULVERT (4'X3')	LF	171.1			26
	309.1			PRECAST CONCRETE CULVERT (6'X5')	LF	1076.86			27
	401.1		401	REINFORCED CONCRETE PIPE (24") CLASS III	LF	890.52			28
	401.1		401	REINFORCED CONCRETE PIPE (24") CLASS IV	LF	91.55			29
	401.1		401	REINFORCED CONCRETE PIPE (30") CLASS III	LF	230.93			30
	401.1		401	REINFORCED CONCRETE PIPE (30") CLASS IV	LF	342.11			31
	401.1		401	REINFORCED CONCRETE PIPE (36") CLASS III	LF	323.52			32
	401.1		401	REINFORCED CONCRETE PIPE (42") CLASS III	LF	234.47			33
	401.1		401	REINFORCED CONCRETE PIPE (48") CLASS IV	LF	249.1			34
	401.1		401	REINFORCED CONCRETE PIPE (60") CLASS III	LF	521.65			35
	403.1		403	JUNCTION BOX 4'X4'X4'	EA	9			36
	403.3		403	JUNCTION BOX 6'X6'X6'	EA	6			37
	403.4		403	JUNCTION BOX 7'X7'X7'	EA	3			38
	403.5		403	JUNCTION BOX 8'X8'X8'	EA	1			39
	403.7		403	INLET (TY I)	EA	8			40
	403.09		403	INLET (TY III)	EA	7			41
	403.11		403	INLET (TY V)	EA	6			42
	403.15		403	TY W-5	EA	1			43
	403.21		403	TY X-1	EA	2			44
	403.22		403	TY X-2	EA	2			45
	403.23		403	TY X-3	EA	1			46

CITY OF SAN ANTONIO
025 UNIT PRICING FORM

PROJECT NAME: BLANCO ROAD (From Hildebrand to Jackson Keller)
PROJECT NO.: 04-00004 (BASE 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.
	403.24		403	TY X-4	EA	5			47
	403.25		403	TY X-5	EA	2			48
	403.26		403	TY X-6	EA	4			49
	403.27			MANHOLE VERTICAL STACK	EA	9			50
	410.2			GRAVEL SUBGRADE FILLER	CY	608.2			51
	413.1			FLOWABLE BACKFILL	CY	899.7			52
	500.1			CONCRETE CURBING	LF	7852			53
	502.1		502	CONCRETE SIDEWALKS	SY	3711			54
	503.1		503	PORTLAND CEMENT CONCRETE DRIVEWAYS	SY	65			55
	503.2		503	PORTLAND CEMENT CONCRETE DRIVEWAYS - COMMERCIAL	SY	3080			56
	503.4		503	ASPHALTIC CONCRETE DRIVEWAY	SY	1039			57
	503.5		503	GRAVEL DRIVEWAY	SY	9			58
	504.1			CONCRETE MEDIAN	SY	269			59
	504.2			CONCRETE DIRECTIONAL ISLAND	SY	121			60
	505.1		505	CONCRETE RIPRAP (4")	SY	10			61
	505.1		505	CONCRETE RIPRAP (5" THICK)	SY	63.3			62
	506.1			CONCRETE RETAINING WALLS-COMB. TYPE	CY	41			63
	507.1			CHAIN LINK WIRE FENCE (4' HIGH)	LF	92			64
	507.2			CHAIN LINK WIRE FENCE (6' HIGH)	LF	152			65
	507.3			CHAIN LINK WIRE FENCE (8' HIGH)	LF	50			66
	507.4			GATES-PEDESTRIAN	EA	2			67
	508.1			RELOCATING WIRE FENCE	LF	50			68
	516.1			BURMUDA SODDING	SY	692			69
	516.2			ST. AUGUSTINE SODDING	SY	692			70
	522.1			SIDEWALK PIPE RAILING	LF	10			71
	523.1		523	ADJUSTING VEHICULAR GATES	OPENING	2			72
	523.3		523	ADJUSTING PEDESTRIAN GATES	EA	2			73
	525.1			CONCRETE TRAFFIC BARRIER (PORTABLE)	LF	3060			74
	530.1			BARRICADES, SIGNS AND TRAFFIC HANDLING	LS	1			75
	531.03			R1-1 STOP (30")(HIGH DENSITY)	EA	14			76
	531.04			R1-2 YIELD (36")(HIGH DENSITY)	EA	2			77
	531.06			R2-1 SPEED LIMIT (24"x30")	EA	6			78
	531.21			R7-1 NO PARKING ANYTIME (18"x24")(HIGH DENSITY)	EA	2			79
	531.22			R7-18 NO PARKING THIS SIDE THIS BLOCK (18"x24")(HIGH DENSITY)	EA	1			80
	531.24			R9-3A PEDESTRIAN CROSSING PROHIBITED (18"x18")(HIGH DENSITY)	EA	1			81
	531.57			9 INCH STREET NAME BLOCK NUMBERS (VARIES X 9")	EA	54			82
	531.59			SPECIAL SIGN (HIGH DENSITY)	EA	7			83
	531.86			R9-3B USE CROSSWALK (18"X12")(HIGH INTENSITY)	EA	1			84
	531.87			R10-1 CROSS ONLY ON PED SIGNAL (9"X12")(HIGH INTENSITY)	EA	12			85
	535.01			4 INCH WIDE YELLOW LINE	LF	5625			86
	535.02			4 INCH WIDE WHITE LINE	LF	1800			87
	535.04			8 INCH WIDE WHITE LINE	LF	745			88
	535.07			24 INCH WIDE WHITE LINE	LF	940			89
	535.09			LEFT WHITE ARROW	EA	8			90
	535.12			WORD "ONLY"	EA	3			91

CITY OF SAN ANTONIO
025 UNIT PRICING FORM

PROJECT NAME: BLANCO ROAD (From Hildebrand to Jackson Keller)
PROJECT NO.: 04-00004 (BASE 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.
	535.22			6 INCH BROKEN WHITE LINE	LF	60			92
	535.30			24 INCH WIDE YELLOW LINE	LF	193			93
	535.31			18 INCH WHITE YIELD TRIANGLE	EA	20			94
	535.32			YELLOW MEDIAN NOSE	EA	1			95
	537.1			TRAFFIC BUTTON (TYPE W)	EA	2434			96
	537.2			TRAFFIC BUTTON (TYPE Y)	EA	3262			97
	537.6			PAVEMENT MARKER (TYPE I-C)	EA	204			98
	537.8			PAVEMENT MARKER (TYPE II A-A)	EA	1326			99
	537.9			PAVEMENT MARKER (TYPE II C-R)	EA	809			100
	540.06			CONSTRUCTION EXITS (INSTALL/REMOVE)	SY	390			101
	540.07			CONSTRUCTION PERIMETER FENCE	LF	11630			102
	540.10			CURB INLET GRAVEL FILTERS	LF	980			103
	550.1			TRENCH EXCAVATION SAFETY PROTECTION	LF	4180.1			104
	552.1			REMOVING AND RELOCATING IRRIGATION SYSTEMS	LF	300			105
	615.1			TRAFFIC SIGNAL CONTROLLER ASSEMBLY (TYPE 332 CABINET)	EA	2			106
	618.1			CONDUIT (2 INCH/PVC SCHEDULE 40)	LF	3404			107
	618.2			CONDUIT (3 INCH / PVC SCHEDULE 40)	LF	1054			108
	620.1			ELECTRICAL CONDUCTORS (NO. 6) (BARE)	LF	46			109
	620.2			ELECTRICAL CONDUCTORS (NO. 8) (BARE)	LF	708			110
	620.3			ELECTRICAL CONDUCTORS (NO. 6) (INSULATED)	LF	152			111
	624.8			GROUND BOXES TYPE D (162922) W/ APRON	EA	26			112
	628.1			ELECTRICAL SERVICES	EA	2			113
	655.1			TYPE 332 CONTROLLER FOUNDATION	EA	2			114
	680.2			INSTALLATION OF HIGHWAY TRAFFIC SIGNALS (SYSTEM)	EA	2			115
	681.1			TEMP TRAFFIC SIGNAL (PER INTERSECTION)	EA	2			116
	682.1			INS VEH SIG SECTION W/BACK PLATE (12 INCH)(3 SECONDS)	EA	14			117
	682.2			INS VEH SIG SECTION W/BACK PLATE (12 INCH)(4 SECONDS)	EA	4			118
	686.282B			INSTALL TRAFFIC SIGNAL POLE ASSEMBLIES (STEEL) (2 ARM 28-28')(ILSN)	EA	1			119
	682.4			INSTALL PEDESTRIAN SIGNAL SECTION (12 IN) LED (2 IND)	EA	12			120
	684.1			TRAFFIC SIGNALCABLES (TYPE A)(14AWG)(CONDUCTOR NO.4)	LF	906			121
	684.1			TRAFFIC SIGNALCABLES (TYPE A)(14AWG)(CONDUCTOR NO.9)	LF	2478			122
	686.51			INSTALL TRAFFIC SIGNAL POLE ASSEMBLIES (STEEL) (1 ARM 36')(ILSN)	EA	1			123
	686.61			INSTALL TRAFFIC SIGNAL POLE ASSEMBLIES (STEEL) (1 ARM 40')(ILSN)	EA	4			124
	687.1			PEDESTAL POLE ASSEMBLY	EA	5			125
	688.2			PEDESTRIAN DETECTORS (2 INCH PUSH BUTTON)	EA	12			126
	693.1			INTERNALLY LIGHTED STREET NAME SIGN (LED) (6 FT) (DOUBLE SIDED)	EA	4			127
	693.2			INTERNALLY LIGHTED STREET NAME SIGN (LED) (8 FT) (DOUBLE SIDED)	EA	2			128
	693.3			INTERNALLY LIGHTED STREET NAME SIGN (LED) (6 FT) (SINGLE SIDED)	EA	1			129
	694.1			VIVDS PROCESSOR UNIT	EA	15			130
	694.2			VIVDS CAMERA ASSEMBLY	EA	15			131
	694.4			VIVDS SET-UP SYSTEM	EA	2			132
	694.6			VIVDS COMMUNICATION CABLE (COAXIAL)	LF	2022			133
	695.3			EMERGENCY PREEMPTION DETECTOR	EA	3			134
	695.4			EMERGENCY PREEMPTION DETECTOR CABLE	LF	1118			135
	801.2			LEVEL IIA PROTECTIVE FENCING	LF	100			136
	801.3			LEVEL IIB PROTECTIVE FENCING	LF	23			137
	802.2			LEVEL II PRUNING	LS	1			138
	9506			REMOVAL AND REPLACEMENT OF WROUGHT IRON FENCE	LF	50			139
	9507			REMOVING AND REPLACING PIPE RAIL FENCE	LF	50			140
	9508.1			REMOVAL AND REPLACEMENT OF WOOD FENCE	LF	50			141

CITY OF SAN ANTONIO
025 UNIT PRICING FORM

PROJECT NAME: BLANCO ROAD (From Hildebrand to Jackson Keller)
PROJECT NO.: 04-00004 (BASE 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.
	9508.2			REMOVAL AND REPLACEMENT OF WOOD GATES	EA	2			142
	110.2.1			TRANSPORTATION TO DISPOSAL FACILITY (COSA)	CY	3000			143
	110.2.4			TRANSPORTATION TO DISPOSAL FACILITY (CPS))	CY	240			144
	110.2.9			LANDFILL DISPOSAL (COSA)	CY	3000			145
	110.2.12			LANDFILL DISPOSAL (CPS)	CY	240			146
	110.4.1			REMOVAL, STORAGE AND TREATMENT OF IMPACTED GROUNDWATER	GAL	25000			147
	110.4.2			DISPOSAL OF IMPACTED GROUNDWATER	GAL	25000			148
	110.5.1			DEVELOPMENT OF A SITE SPECIFIC HEALTH AND SAFETY PLAN	LS	1			149
	110.6.1			DEVELOPMENT OF THE WASTE MANAGEMENT PLAN	LS	1			150
	110.6.2			ENVIRONMENTAL OVERSIGHT IMPLEMENTATION	LS	1			151
	0662 2001			WK ZN PAV MRK NON-REMOV (W) 4" (BRK)	LF	1780			152
	0662 2012			WK ZN PAV MRK NON-REMOV (W) 8" (SLD)	LF	745			153
	0662 2032			WK ZN PAV MRK NON-REMOV (Y) 4" (SLD)	LF	5587			154
	0662 2079			WK ZN PAV MRK REMOV (W) 24" (SLD)	LF	492			155
	0662 2113			WORK ZN PAV MRK SHT TERM (TAB) TY W	EA	450			156
	0662 2114			WORK ZN PAV MRK SHT TERM (TAB) TY Y	EA	1050			157
							Total CoSA Base Bid Amount:		

SAWS Sanitary Sewer Base Bid

	100			Mobilization	LS	1			1
	101			Preparation of Right-of-Way	LS	1			2
	550			Trench Excavation Safety Protection	LF	1,967.70			3
	848			8" PVC Gravity Sanitary Sewer Line (0'-6' Cut) (SRD 26)	LF	223.20			4
	848			8" PVC Gravity Sanitary Sewer Line (6'-10' Cut) (SRD 26)	LF	590.36			5
	848			8" PVC Gravity Sanitary Sewer Line (10'-14' Cut) (SRD 26)	LF	184.81			6
	848			8" PVC Gravity Sanitary Sewer Line (14'-18' Cut) (SRD 26)	LF	46.00			7
	848			10" PVC Gravity Sanitary Sewer Line (6'-10' Cut) (SRD 26)	LF	134.25			8
	848			10" PVC Gravity Sanitary Sewer Line (10'-14' Cut) (SRD 26)	LF	384.41			9
	848			10" PVC Gravity Sanitary Sewer Line (14'-18' Cut) (SRD 26)	LF	14.62			10
	848			15" PVC Gravity Sanitary Sewer Line (10'-14' Cut) (SRD 26)	LF	95.75			11
	848			15" PVC Gravity Sanitary Sewer Line (14'-18' Cut) (SRD 26)	LF	254.30			12
	851			Adjusting Existing Manholes (Watertight Ring and Cover)	EA	3			13
	852.1			Sanitary Sewer Manhole (0'-6')	EA	14			14
	852.2			Sanitary Sewer Drop Manhole (0'-6')	EA	2			15
	852.3			Extra Depth Manhole (>6')	VF	46.3			16
	854			Sanitary Sewer Laterals	LF	529			17
	854A			One-Way Sanitary Sewer Clean-out	EA	17			18
	858			Concrete Encasement, Cradles, Saddles & Collars	CY	13.0			19
	860			Vertical Stacks	VF	12.0			20
	864			Bypass Pumping	LS	1			21
	866			Post-Construction Sanitary Sewer Main Television Inspection (8"-15" Main)	LF	1,927.70			22
	866			Pre-Construction Sanitary Sewer Main Television Inspection (18"-24" Main)	LF	2,533.92			23
	110.2.3			TRANSPORTATION TO DISPOSAL FACILITY (SAWS SEWER)	CY	280			24
	110.2.11			LANDFILL DISPOSAL (SAWS SEWER)	CY	280			25
							Total SAWS Sanitary Sewer Base Bid Amount:		

CITY OF SAN ANTONIO
025 UNIT PRICING FORM

PROJECT NAME: BLANCO ROAD (From Hildebrand to Jackson Keller)
PROJECT NO.: 04-00004 (BASE 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.
SAWS Water Base Bid									
	100			Mobilization	LS	1			1
	101			Preparation of Right-of-Way	LS	1			2
	550			Trench Excavation Safety Protection	LF	4,612			3
	818			6" PVC Waterline (Restrained)	LF	44			4
	818			8" PVC Waterline (Restrained)	LF	3,788			5
	818			12" PVC Waterline (Restrained)	LF	723			6
	818			16" PVC Waterline (Restrained)	LF	57			7
	824			Relay 3/4" Short Service	EA	10			8
	824			Relay 3/4" Long Service	EA	8			9
	824			Relay 1" Long Service	EA	4			10
	824			Relay 1 1/2" Short Service	EA	1			11
	824			Relay 1 1/2" Long Service	EA	3			12
	824			Relay 2" Short Service	EA	2			13
	824			Relay 4" Short Service	EA	1			14
	824.5			Customer Shut-Off Valve	EA	13			15
	826			Valve Box Adjustment	EA	2			16
	828			4" Gate Valve	EA	1			17
	828			8" Gate Valve	EA	24			18
	828			12" Gate Valve	EA	4			19
	828			16" Gate Valve	EA	1			20
	832			24"x8" Tapping Sleeves & Valves	EA	1			21
	833			Existing Meter and New Meter Box Relocation	EA	28			22
	833			Meter Box	EA	28			23
	834			Fire Hydrant	EA	8			24
	836			Pipe Fittings, All Sizes and Types	TON	15.20			25
	840			6" Water Tie-ins	EA	9			26
	840			8" Water Tie-ins	EA	8			27
	840			12" Water Tie-ins	EA	5			28
	840			16" Water Tie-ins	EA	2			29
	840			24" Water Tie-ins	EA	1			30
	841			Hydrostatic Testing	EA	7			31
	844			2" Blowoff, Temporary	EA	19			32
	846			1" Air Release Assemblies	EA	1			33
	856.2			8" Carrier Pipe	LF	68			34
	856.3			Casing or Liner 24"	LF	68			35
	3000.14			Removal, Transp and Disposal of AC Pipe	LS	1			36
	3000.15			Asbestos Abatement Work Plan	LS	1			37
	110.2.2			TRANSPORTATION TO DISPOSAL FACILITY (SAWS WATER)	CY	250			38
	110.2.10			LANDFILL DISPOSAL (SAWS WATER)	CY	250			39
		Total SAWS Water Base Bid Amount:							

CITY OF SAN ANTONIO
025 UNIT PRICING FORM

PROJECT NAME: BLANCO ROAD (From Hildebrand to Jackson Keller)
PROJECT NO.: 04-00004 (BASE 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.
CPS Energy Gas Base Bid									
NOTE A:	For each of the items below, the Contractor's work is to include: trenching, joining, testing, coating steel, connecting new pipe to existing pipe and all necessary fittings for tie-ins such as, stopper fittings and 3-way stopper tees, sand padding, backfilling and compacting to consistency of original soil, installing all necessary cathodic protection devices such as CPTLB's and anodes, replacing paving, curbs, and sidewalks removed or damaged during construction, and cleanup as may be necessary in each instance.								
NOTE B:	Trenching is considered to be the normal method of service installation and is required on all service adjustments. A gas service can be rerun by INSERTION, when the old service is PULLED from the riser to one foot inside the property line, ONLY at the discretion of the CPS Inspector.								
NOTE C:	Bid quantities shown are estimates by CPS. Per foot prices shall be applied to the actual distance measured along the top of the trench or the actual length of the bore, as applicable.								
NOTE D:	Unit prices shall include insurance costs. CPS' insurance requirements are specified in Exhibit GAS-1.								
	1			Rerun and Lower Gas Service Off New Main (Main to 1 Ft. Inside Property Line), Sizes 1/2" thru 4" (including replacing riser if necessary).					
				SHORT SIDE	1 EA	3			1
				LONG SIDE	1 EA	4			2
	2			Rerun and Lower Gas Service Off New Main to Meter, Sizes 1/2" thru 4" (including replacing riser if necessary).					
				SHORT SIDE	1 EA	3			3
				LONG SIDE	1 EA	5			4
	3			Extend or Cut Back, pump test and tie existing service to new main, sizes 1/2" to 4"					
				TIE OVER	1 EA	1			5
	4			Install Gas Main or Casing (Distance As Measured Along the Top of Trench)					
				2" PLASTIC PIPE AND TRACER WIRE	1 FT	2944			6
				6" PLASTIC PIPE AND TRACER WIRE	1 FT	88			7
				8" PLASTIC PIPE AND TRACER WIRE	1 FT	96			8
				12" STEEL	1 FT	1162			9
The COST to abandon the existing main(s) is not an ADDITIONAL item and is to be included in the Unit Price(s) for this item.									
	5			Install Gas Mains Joint Trench (Distance As Measured Along the Top of Trench)					
				6" PLASTIC PIPE WITH TRACER WIRE & 12" STEEL	1 FT	1092			10
				2" PLASTIC PIPE WITH TRACER WIRE & 12" STEEL	1 FT	198			11
The COST to abandon the existing main(s) is not an ADDITIONAL item and is to be included in the Unit Price(s) for this item.									
	6			Fabricate and Install Undergound Double Run Regulator Station. Includes abandoning and removal of existing Regulator Station.					
				REGULATOR STATION	1 EA	1			12
	7			Install Undergound Vault, Concrete Pad, and Concrete filled Bollards. Includes abandoning and removal of existing Underground Vault.					
				UNDERGROUND VAULT	1 EA	2			13
	8			Temporary Street Restoration (Utility Adjustment Phase)					
				ASPHALT - 6" H.M.A.C. TYPE B	1 SY	735			14

CITY OF SAN ANTONIO
025 UNIT PRICING FORM

PROJECT NAME: BLANCO ROAD (From Hildebrand to Jackson Keller)
PROJECT NO.: 04-00004 (BASE 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.
	9			Street Restoration Adjustment, when required. To be used as directed by the CPS Energy Representative.					
				FLOWABLE FILL OR ASPHALT TREATED BASE	1 CY	11			15
				ASPHALT (2" H.M.A.C. TYPE D)	1 SY	50			16
		Total CPS Gas Base Bid Amount:							

_____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.
_____Acknowleged 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: _____

Title: _____

CITY OF SAN ANTONIO
025 UNIT PRICING FORM

PROJECT NAME: BLANCO ROAD (From Hildebrand to Jackson Keller)
PROJECT NO.: 04-00004 (ADDITIVE ALTERNATE 1)

ALT. NO.	ITEM NO.	DESC. CODE	S.P. NO.	BID ITEM DESCRIPTION	UNIT OF MEASURE	APPROX. QUANTITIES	UNIT BID PRICE	AMOUNT	ITEM SEQUENCE NO.
1	100.1			MOBILIZATION	LS	1			1
1	100.2			INSURANCE AND BOND	LS	1			2
1	101.1			PREPARING RIGHT OF WAY	LS	1			3
1	104.1			STREET EXCAVATION	CY	9757			4
1	106.1			BOX CULVERT EXCAVATION & BACKFILL	CY	2439			5
1	107.1			EMBANKMENT (FINAL)(DENS CONT)(TY B)	CY	13			6
1	108.1			LIME TREAT. SUBGRADE (6" COMPACTED DEPTH)	SY	17114			7
1	108.2			LIME	TON	309			8
1	200.1			FLEXIBLE BASE (6" COMPACTED DEPTH)(TY C)	SY	24			9
1	203.1			TACK COAT	GAL	9			10
1	205.2			HOT MIX ASPHALTIC PAVEMENT, TYPE B (8.5" COMP. DEPTH)	SY	17114			11
1	205.2			HOT MIX ASPHALTIC PAVEMENT, TY B (7.5" COMPACTED DEPTH)	SY	89			12
1	205.3			HOT MIX ASPHALTIC PAVEMENT, TYPE C (2.25" COMP. DEPTH)	SY	445			13
1	205.3			HOT MIX ASPHALTIC PAVEMENT, TYPE C (2" COMP. DEPTH)	SY	16552			14
1	208.1			SALVAGING, HAULING & STOCKPILING RECLAIMABLE ASPHALTIC PAVEMENT(3" DEPTH)	SY	445			15
1	209.1			CONCRETE PAVEMENT (10" DEPTH)(BUS PAD)	SY	1254			16
1	230.1			FLEXIBLE PAVEMENT FULL-DEPTH REPAIR (6" COMP. DEPTH)	SY	424			17
1	230.2			CONCRETE PAVEMENT FULL-DEPTH REPAIR (6" COMP. DEPTH)	SY	97			18
1	234.1			BASE REINFORCEMENT TX-5	SY	17114			19
1	260			ULTRA-THIN BONDED HOT MIX WEARING COURSE (NOVACHIP SURFACE TREATMENT)	SY	16997			20
1	308.1			DRILLED SHAFTS (24")	LF	91.2			21
1	308.1			DRILLED SHAFTS (30")	LF	45.2			22
1	308.1			DRILLED SHAFTS (36")	LF	52.8			23
1	309.1			PRECAST CONCRETE CULVERT (6'X4')	LF	428.04			24
1	401.1		401	REINFORCED CONCRETE PIPE (24") CLASS III	LF	644.2			25
1	401.1		401	REINFORCED CONCRETE PIPE (42") CLASS III	LF	122.21			26
1	401.1		401	REINFORCED CONCRETE PIPE (42") CLASS IV	LF	313.22			27
1	401.1		401	REINFORCED CONCRETE PIPE (48") CLASS IV	LF	1144.31			28
1	401.1		401	REINFORCED CONCRETE PIPE (54") CLASS III	LF	326.98			29
1	403.1		403	JUNCTION BOX 4'X4'X4'	EA	1			30
1	403.3		403	JUNCTION BOX 6'X6'X6'	EA	10			31
1	403.4		403	JUNCTION BOX 7'X7'X7'	EA	3			32
1	403.5		403	JUNCTION BOX 8'X8'X8'	EA	1			33
1	403.7		403	INLET (TY I)	EA	6			34
1	403.09		403	INLET (TY III)	EA	12			35
1	403.11		403	INLET (TY V)	EA	1			36
1	403.21		403	TY X-1	EA	3			37
1	403.23		403	TY X-3	EA	4			38
1	403.25		403	TY X-5	EA	1			39
1	403.27			MANHOLE VERTICAL STACK	EA	4			40
1	410.2			GRAVEL SUBGRADE FILLER	CY	457			41
1	413.1			FLOWABLE BACKFILL	CY	1175			42
1	500.1			CONCRETE CURBING	LF	4923			43

CITY OF SAN ANTONIO
025 UNIT PRICING FORM

PROJECT NAME: BLANCO ROAD (From Hildebrand to Jackson Keller)
PROJECT NO.: 04-00004 (ADDITIVE ALTERNATE 1)

ALT. NO.	ITEM NO.	DESC. CODE	S.P. NO.	BID ITEM DESCRIPTION	UNIT OF MEASURE	APPROX. QUANTITIES	UNIT BID PRICE	AMOUNT	ITEM SEQUENCE NO.
1	502.1		502	CONCRETE SIDEWALKS	SY	2287			44
1	503.1		503	PORTLAND CEMENT CONCRETE DRIVEWAYS	SY	951			45
1	503.2		503	PORTLAND CEMENT CONCRETE DRIVEWAYS - COMMERCIAL	SY	1744			46
1	503.4		503	ASPHALTIC CONCRETE DRIVEWAY	SY	915			47
1	503.5		503	GRAVEL DRIVEWAY	SY	121			48
1	506.1			CONCRETE RETAINING WALLS-COMB. TYPE	CY	33.3			49
1	507.1			CHAIN LINK WIRE FENCE (4' HIGH)	LF	43			50
1	507.2			CHAIN LINK WIRE FENCE (6' HIGH)	LF	127			51
1	507.5			GATES-VEHICULAR	OPENING	2			52
1	516.1			BURMUDA SODDING	SY	217			53
1	516.2			ST. AUGUSTINE SODDING	SY	217			54
1	524.1			CONCRETE STEPS	CY	2			55
1	525.1			CONCRETE TRAFFIC BARRIER (PORTABLE)	LF	2020			56
1	530.1			BARRICADES, SIGNS AND TRAFFIC HANDLING	LS	1			57
1	531.03			R1-1 STOP (30")(HIGH DENSITY)	EA	7			58
1	531.06			R2-1 SPEED LIMIT (24"x30")	EA	3			59
1	531.11			R3-5L LEFT ONLY (30"X36") (HIGH INTENSITY)	EA	1			60
1	531.34			S1-1 ADVANCE SCHOOL CROSSING AND SCHOOL CROSSING (36"x36")	EA	6			61
1	531.35			W16-7 DIAGONAL ARROW SIGN (DIAMOND GRADE (FLUORESCENT YELLOW GREEN))(30"x18")	EA	4			62
1	531.57			9 INCH STREET NAME BLOCK NUMBERS (VARIES X 9")	EA	28			63
1	531.62			W16-9P AHEAD (36"x20")(HIGH DENSITY)	EA	1			64
1	531.66			S5-2A END SCHOOL ZONE (24"x9")	EA	2			65
1	531.87			R10-1 CROSS ONLY ON PED SIGNAL (9"X12")(HIGH INTENSITY)	EA	16			66
1	535.01			4 INCH WIDE YELLOW LINE	LF	5207			67
1	535.02			4 INCH WIDE WHITE LINE	LF	1210			68
1	535.04			8 INCH WIDE WHITE LINE	LF	220			69
1	535.07			24 INCH WIDE WHITE LINE	LF	961			70
1	535.09			LEFT WHITE ARROW	EA	6			71
1	535.30			24 INCH WIDE YELLOW LINE	LF	305			72
1	535.32			YELLOW MEDIAN NOSE	EA	5			73
1	537.1			TRAFFIC BUTTON (TYPE W)	EA	936			74
1	537.2			TRAFFIC BUTTON (TYPE Y)	EA	2028			75
1	537.6			PAVEMENT MARKER (TYPE I-C)	EA	129			76
1	537.8			PAVEMENT MARKER (TYPE II A-A)	EA	863			77
1	537.9			PAVEMENT MARKER (TYPE II C-R)	EA	317			78
1	540.06			CONSTRUCTION EXITS (INSTALL/REMOVE)	SY	234			79
1	540.07			CONSTRUCTION PERIMETER FENCE	LF	6440			80
1	540.10			CURB INLET GRAVEL FILTERS	LF	590			81
1	550.1			TRENCH EXCAVATION SAFETY PROTECTION	LF	2978.96			82
1	552.1			REMOVING AND RELOCATING IRRIGATION SYSTEMS	LF	200			83
1	615.1			TRAFFIC SIGNAL CONTROLLER ASSEMBLY (TYPE 332 CABINET)	EA	2			84
1	618.1			CONDUIT (2 INCH/PVC SCHEDULE 40)	LF	2375			85
1	620.1			ELECTRICAL CONDUCTORS (NO. 6) (BARE)	LF	30			86
1	620.2			ELECTRICAL CONDUCTORS (NO. 8) (BARE)	LF	701			87
1	620.3			ELECTRICAL CONDUCTORS (NO. 6) (INSULATED)	LF	60			88
1	624.8			GROUND BOXES TYPE D (162922) W/ APRON	EA	22			89
1	628.1			ELECTRICAL SERVICES	EA	2			90
1	655.1			TYPE 332 CONTROLLER FOUNDATION	EA	2			91
1	680.2			INSTALLATION OF HIGHWAY TRAFFIC SIGNALS (SYSTEM)	EA	2			92
1	681.1			TEMP TRAFFIC SIGNAL (PER INTERSECTION)	EA	2			93
1	682.1			INS VEH SIG SECTION W/BACK PLATE (12 INCH)(3 SECONDS)	EA	16			94

CITY OF SAN ANTONIO
025 UNIT PRICING FORM

PROJECT NAME: BLANCO ROAD (From Hildebrand to Jackson Keller)
PROJECT NO.: 04-00004 (ADDITIVE ALTERNATE 1)

ALT. NO.	ITEM NO.	DESC. CODE	S.P. NO.	BID ITEM DESCRIPTION	UNIT OF MEASURE	APPROX. QUANTITIES	UNIT BID PRICE	AMOUNT	ITEM SEQUENCE NO.
1	682.2			INS VEH SIG SECTION W/BACK PLATE (12 INCH)(4 SECONDS)	EA	3			95
1	682.4			INSTALL PEDESTRIAN SIGNAL SECTION (12 IN) LED (2 IND)	EA	16			96
1	684.1			TRAFFIC SIGNAL CABLES (TYPE A)(14AWG)(CONDUCTOR NO.4)	LF	993			97
1	684.1			TRAFFIC SIGNAL CABLES (TYPE A)(14AWG)(CONDUCTOR NO.9)	LF	2305			98
1	685.4			SOLAR POWERED (PHOTOVOLTAIC) SCHOOL ZONE FLASHER ASSEMBLY (MAST ARM)	EA	2			99
1	686.3			INSTALL TRAFFIC SIGNAL POLE ASSEMBLIES (STEEL) (1 ARM 28')	EA	2			100
1	686.31			INSTALL TRAFFIC SIGNAL POLE ASSEMBLIES (STEEL) (1 ARM 28')(ILSN)	EA	2			101
1	686.41			INSTALL TRAFFIC SIGNAL POLE ASSEMBLIES (STEEL) (1 ARM 32')(ILSN)	EA	2			102
1	686.51			INSTALL TRAFFIC SIGNAL POLE ASSEMBLIES (STEEL) (1 ARM 36')(ILSN)	EA	1			103
1	686.61			INSTALL TRAFFIC SIGNAL POLE ASSEMBLIES (STEEL) (1 ARM 40')(ILSN)	EA	3			104
1	687.1			PEDESTAL POLE ASSEMBLY	EA	1			105
1	688.2			PEDESTRIAN DETECTORS (2 INCH PUSH BUTTON)	EA	16			106
1	693.1			INTERNALLY LIGHTED STREET NAME SIGN (LED) (6 FT) (DOUBLE SIDED)	EA	6			107
1	693.2			INTERNALLY LIGHTED STREET NAME SIGN (LED) (8 FT) (DOUBLE SIDED)	EA	2			108
1	694.1			VIVDS PROCESSOR UNIT	EA	16			109
1	694.2			VIVDS CAMERA ASSEMBLY	EA	16			110
1	694.4			VIVDS SET-UP SYSTEM	EA	2			111
1	694.6			VIVDS COMMUNICATION CABLE (COAXIAL)	LF	2120			112
1	695.3			EMERGENCY PREEMPTION DETECTOR	EA	2			113
1	695.4			EMERGENCY PREEMPTION DETECTOR CABLE	LF	1529			114
1	801.2			LEVEL IIA PROTECTIVE FENCING	LF	100			115
1	801.3			LEVEL IIB PROTECTIVE FENCING	LF	34			116
1	802.2			LEVEL II PRUNING	LS	1			117
1	110.2.5			TRANSPORTATION TO DISPOSAL FACILITY (COSA)	CY	2650			118
1	110.2.8			TRANSPORTATION TO DISPOSAL FACILITY (CPS)	CY	80			119
1	110.2.13			LANDFILL DISPOSAL (COSA)	CY	2650			120
1	110.2.16			LANDFILL DISPOSAL (CPS)	CY	80			121
1	110.4.3			REMOVAL, STORAGE AND TREATMENT OF IMPACTED GROUNDWATER	GAL	25000			122
1	110.4.4			DISPOSAL OF IMPACTED GROUNDWATER	GAL	25000			123
1	110.5.2			DEVELOPMENT OF A SITE SPECIFIC HEALTH AND SAFETY PLAN	LS	1			124
1	110.6.3			DEVELOPMENT OF THE WASTE MANAGEMENT PLAN	LS	1			125
1	110.6.4			ENVIRONMENTAL OVERSIGHT IMPLEMENTATION	LS	1			126
1	0662 2001			WK ZN PAV MRK NON-REMOV (W) 4" (BRK)	LF	1210			127
1	0662 2012			WK ZN PAV MRK NON-REMOV (W) 8" (SLD)	LF	220			128
1	0662 2032			WK ZN PAV MRK NON-REMOV (Y) 4" (SLD)	LF	5207			129
1	0662 2079			WK ZN PAV MRK REMOV (W) 24" (SLD)	LF	313			130
1	0662 2113			WORK ZN PAV MRK SHT TERM (TAB) TY W	EA	450			131
1	0662 2114			WORK ZN PAV MRK SHT TERM (TAB) TY Y	EA	1050			132
								Total CoSA Additive Alternate 1 Bid Amount:	

SAWS Sanitary Sewer Additive Alternate 1 Bid

1	100			Mobilization	LS	1			1
1	101			Preparation of Right-of-Way	LS	1			2
1	550			Trench Excavation Safety Protection	LF	140.13			3
1	848			8" PVC Gravity Sanitary Sewer Line (0'-6' Cut) (SRD 26)	LF	23.00			4
1	848			8" PVC Gravity Sanitary Sewer Line (6'-10' Cut) (SRD 26)	LF	87.13			5
1	851			Adjusting Existing Manholes (Watertight Ring and Cover)	EA	2			6
1	852.1			Sanitary Sewer Manhole (0'-6')	EA	2			7

CITY OF SAN ANTONIO
025 UNIT PRICING FORM

PROJECT NAME: BLANCO ROAD (From Hildebrand to Jackson Keller)
PROJECT NO.: 04-00004 (ADDITIVE ALTERNATE 1)

ALT. NO.	ITEM NO.	DESC. CODE	S.P. NO.	BID ITEM DESCRIPTION	UNIT OF MEASURE	APPROX. QUANTITIES	UNIT BID PRICE	AMOUNT	ITEM SEQUENCE NO.
1	854			Sanitary Sewer Laterals	LF	235			8
1	854A			One-Way Sanitary Sewer Clean-out	EA	10			9
1	858			Concrete Encasement, Cradles, Saddles & Collars	CY	4.8			10
1	860			Vertical Stacks	VF	0.0			11
1	864			Bypass Pumping	LS	1			12
1	866			Post-Construction Sanitary Sewer Main Television Inspection (8"-15" Main)	LF	110.13			13
1	866			Pre-Construction Sanitary Sewer Main Television Inspection (18"-24" Main)	LF	188.13			14
1	110.2.7			TRANSPORTATION TO DISPOSAL FACILITY (SAWS SEWER)	CY	5			15
1	110.2.15			LANDFILL DISPOSAL (SAWS SEWER)	CY	5			16
		Total SAWS Sanitary Sewer Additive Alternate 1 Bid Amount:							

SAWS Water Additive Alternate 1 Bid

1	100			Mobilization	LS	1			1
1	101			Preparation of Right-of-Way	LS	1			2
1	550			Trench Excavation Safety Protection	LF	3,639			3
1	818			6" PVC Waterline (Restrained)	LF	30			4
1	818			8" PVC Waterline (Restrained)	LF	910			5
1	818			12" PVC Waterline (Restrained)	LF	2,699			6
1	824			Relay 3/4" Short Service	EA	20			7
1	824			Relay 3/4" Long Service	EA	13			8
1	824			Relay 1" Short Service	EA	1			9
1	824			Relay 1" Long Service	EA	4			10
1	824			Relay 2" Short Service	EA	2			11
1	824			Relay 2" Long Service	EA	1			12
1	824			New 3/4" Unmetered Short Service	EA	2			13
1	824.5			Customer Shut-Off Valve	EA	27			14
1	828			8" Gate Valve	EA	10			15
1	828			12" Gate Valve	EA	9			16
1	833			Existing Meter and New Meter Box Relocation	EA	41			17
1	833			Meter Box	EA	43			18
1	834			Fire Hydrant	EA	7			19
1	836			Pipe Fittings, All Sizes and Types	TON	13.10			20
1	840			6" Water Tie-ins	EA	6			21
1	840			8" Water Tie-ins	EA	4			22
1	840			12" Water Tie-ins	EA	3			23
1	841			Hydrostatic Testing	EA	8			24
1	844			2" Blowoff, Temporary	EA	11			25
1	846			1" Air Release Assemblies	EA	8			26
1	856.2			8" Carrier Pipe for Jacking, Boring, Tunneling	LF	40			27
1	856.3			Casing or Liner 24"	LF	40			28
1	3000.14			Removal, Transp and Disposal of AC Pipe	LS	1			29
1	3000.15			Asbestos Abatement Work Plan	LS	1			30
1	110.2.6			TRANSPORTATION TO DISPOSAL FACILITY (SAWS WATER)	CY	500			31
1	110.2.14			LANDFILL DISPOSAL (SAWS WATER)	CY	500			32
		Total SAWS Water Additive Alternate 1 Bid Amount:							

CITY OF SAN ANTONIO
025 UNIT PRICING FORM

PROJECT NAME: BLANCO ROAD (From Hildebrand to Jackson Keller)
PROJECT NO.: 04-00004 (ADDITIVE ALTERNATE 1)

ALT. NO.	ITEM NO.	DESC. CODE	S.P. NO.	BID ITEM DESCRIPTION	UNIT OF MEASURE	APPROX. QUANTITIES	UNIT BID PRICE	AMOUNT	ITEM SEQUENCE NO.
CPS Energy Gas Additive Alternate 1 Bid									
NOTE A:	For each of the items below, the Contractor's work is to include: trenching, joining, testing, coating steel, connecting new pipe to existing pipe and all necessary fittings for tie-ins such as, stopper fittings and 3-way stopper tees, sand padding, backfilling and compacting to consistency of original soil, installing all necessary cathodic protection devices such as CPTLB's and anodes, replacing paving, curbs, and sidewalks removed or damaged during construction, and cleanup as may be necessary in each instance.								
NOTE B:	Trenching is considered to be the normal method of service installation and is required on all service adjustments. A gas service can be rerun by INSERTION, when the old service is PULLED from the riser to one foot inside the property line, ONLY at the discretion of the CPS Inspector.								
NOTE C:	Bid quantities shown are estimates by CPS. Per foot prices shall be applied to the actual distance measured along the top of the trench or the actual length of the bore, as applicable.								
NOTE D:	Unit prices shall include insurance costs. CPS' insurance requirements are specified in Exhibit GAS-1.								
1	1			Rerun and Lower Gas Service Off New Main (Main to 1 Ft. Inside Property Line), Sizes 1/2" thru 4" (including replacing riser if necessary).					
				LONG SIDE	1 EA	3			1
1	2			Rerun and Lower Gas Service Off New Main to Meter, Sizes 1/2" thru 4" (including replacing riser if necessary).					
				SHORT SIDE	1 EA	5			2
				LONG SIDE	1 EA	5			3
1	3			Install Gas Main or Casing (Distance As Measured Along the Top of Trench)					
				2" PLASTIC PIPE AND TRACER WIRE	1 FT	1187			4
The COST to abandon the existing main(s) is not an ADDITIONAL item and is to be included in the Unit Price(s) for this item.									
		Total CPS Energy Gas Additive Alternate 1 Bid Amount:							

_____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.

_____Acknowleged 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: _____

Title: _____

ENVIRONMENTAL SPECIFICATIONS FOR THE WASTE MANAGEMENT PLAN

For Blanco Road (Jackson Keller to Hildebrand)
San Antonio, Bexar County, Texas
WBS# 40-00004
Environmental Project Code: 01-582C7-033CIPI

* * *

Prepared by:

City of San Antonio
Capital Improvement Management Services
Environmental Management Division
San Antonio, Texas

* * *

January 11, 2012

TABLE OF CONTENTS

INTRODUCTION		1
ITEM 110	ENVIRONMENTAL AND SAFETY CONCERNS FOR HANDLING OF IMPACTED MEDIA	2
110.1	Description	3
ITEM 110.2	MANAGEMENT TRANSPORTATION AND DISPOSAL OF IMPACTED SOILS	3
110.2	Contractors Bid Item	6
110.2.1	Transportation to Disposal Facility (COSA, Base Bid)	6
110.2.2	Transportation to Disposal Facility (SAWS Water, Base Bid)	6
110.2.3	Transportation to Disposal Facility (SAWS Sewer, Base Bid)	6
110.2.4	Transportation to Disposal Facility (CPS, Base Bid)	6
110.2.5	Transportation to Disposal Facility (COSA, Alternate Bid)	6
110.2.6	Transportation to Disposal Facility (SAWS Water, Alternate Bid)	6
110.2.7	Transportation to Disposal Facility (SAWS Sewer, Alternate Bid)	6
110.2.8	Transportation to Disposal Facility (CPS, Alternate Bid)	7
110.2.9	Landfill Disposal (COSA, Base Bid)	7
110.2.10	Landfill Disposal (SAWS Water, Base Bid)	7
110.2.11	Landfill Disposal (SAWS Sewer, Base Bid)	7
110.2.12	Landfill Disposal (CPS, Base Bid)	7
110.2.13	Landfill Disposal (COSA, Alternate Bid)	7
110.2.14	Landfill Disposal (SAWS Water, Alternate Bid)	7
110.2.15	Landfill Disposal (SAWS Sewer, Alternate Bid)	7
110.2.16	Landfill Disposal (CPS, Alternate Bid)	7
ITEM 110.3	SITE SAFETY AND HAZARDOUS MATERIALS TRAINING	7
ITEM 110.4	REMOVAL, STORAGE, TREATMENT AND/OR DISPOSAL OF IMPACTED AND NON-IMPACTED GROUNDWATER	8
110.4.1	Removal, Storage, and Treatment of Impacted Groundwater (COSA Base Bid)	9
110.4.2	Disposal of Impacted Groundwater (COSA Base Bid)	9
110.4.3	Removal, Storage, and Treatment of Impacted Groundwater (COSA Alternate Bid)	10
110.4.4	Disposal of Impacted Groundwater (COSA Alternate Bid)	10
ITEM 110.5	SITE SPECIFIC HEALTH AND SAFETY PLAN	10
110.5	Contractors Bid Item-Site Specific Health and Safety Plan	12
110.5.1	Development of a Site Specific Health and Safety Plan (Base Bid)	12
110.5.2	Development of a Site Specific Health and Safety Plan (Alternate Bid)	13
ITEM 110.6	WASTE MANAGEMENT PLAN AND ENVIRONMENTAL OVERSIGHT IMPLEMENTATION	12
110.6	Contractors Bid Item-Waste Management Plan and Environmental Oversight Implementation	13
110.6.1	Development of a Waste Management Plan (Base Bid)	14
110.6.2	Environmental Oversight Implementation (Base Bid)	14
110.6.3	Development of a Waste Management Plan (Alternate Bid)	14
110.6.2	Environmental Oversight Implementation (Alternate Bid)	14

TABLES

Table 1 – Environmental Project Data Summary
Table 2A - Maximum Media Contamination Results of AOC A
Table 2B - Maximum Media Contamination Results of AOC B
Table 2C - Maximum Media Contamination Results of AOC C
Table 2D - Maximum Media Contamination Results of AOC D
Table 2E - Maximum Media Contamination Results of AOC E
Table 2F - Maximum Media Contamination Results of AOC F
Table 2G - Maximum Media Contamination Results of AOC G
Table 2H - Maximum Media Contamination Results of AOC H
Table 2I - Maximum Media Contamination Results of AOC I
Table 2J - Maximum Media Contamination Results of AOC J
Table 2K - Maximum Media Contamination Results of AOC K
Table 2L - Maximum Media Contamination Results of AOC L
Table 2M - Maximum Media Contamination Results of AOC M
Table 2N - Maximum Media Contamination Results of AOC N
Table 2O - Maximum Media Contamination Results of AOC O
Table 2P - Maximum Media Contamination Results of AOC P
Table 2Q - Maximum Media Contamination Results of AOC Q
Table 2R - Maximum Media Contamination Results of AOC R
Table 2S - Maximum Media Contamination Results of AOC S
Table 2T - Maximum Media Contamination Results of AOC T
Table 2U - Maximum Media Contamination Results of AOC U
Table 2V - Maximum Media Contamination Results of AOC V
Table 2W - Maximum Media Contamination Results of AOC W

FIGURES

Figure 1 –Project Limits
Figure 2 – Areas of Concern A & B
Figure 3 – Area of Concern C
Figure 4 – Areas of Concern D, E & F
Figure 5 – Area of Concern F
Figure 6 – Area of Concern G
Figure 7 – Area of Concern H
Figure 8 – Area of Concern I
Figure 9 – Area of Concern J
Figure 10 – Area of Concern K
Figure 11 – Areas of Concern L & M
Figure 12 – Areas of Concern N, O, P & Q
Figure 13 – Areas of Concern R & S
Figure 14 – Area of Concern T
Figure 15 – Areas of Concern U & V
Figure 16 – Area of Concern W
Figure 17 - Open Excavation Run-on Prevention

SPECIAL ENVIRONMENTAL SPECIFICATIONS

Introduction

As part of the 2007-2012 Bond Program, Proposition I, the City of San Antonio (City), San Antonio Water System (SAWS), and City Public Service (CPS) are in the process of constructing drainage (storm water), sanitary sewer, water, gas, street and sidewalk improvements along Blanco Road. For the purpose of this bid document, the project and specifications have been divided into two segments: 1) ***Base Bid*** from STA 76+00 to 107+76.79 (El Monte to the Olmos Creek) and 2) ***Alternative Bid*** STA 18+29.52 to 42+00 (San Francisco to Edison). [See Figure 1].

From May to November 2010, an environmental site investigation was performed by the City of San Antonio's environmental consultant, to determine the presence or absence of impacted media from known or suspect historical releases in the vicinities of adjacent fueling stations, automotive body shops, dry cleaners, etc. within the project limits (Blanco, from Hildebrand to Jackson Keller). Results of this investigation identified several areas of known impacted soils within the project area. However, for the purpose of this bid document, eight (8) areas of concern (AOC) were identified in the ***Base Bid*** and fifteen (15) in the ***Alternate Bid***, totaling twenty three (23) areas of concern (see Figures 2 through 16), where affected soils and groundwater may be potentially encountered. *Please note, the areas of concern listed in these specifications do not correlate with the areas of concern identified in the Environmental Consultant's Phase II Environmental Site Assessment (ESA). For clarifications purposes, the figures exhibits showing the areas of concern in these specifications supersede the areas of concern depicted in the Phase II ESA report.*

A review of the subsurface investigations and final design plans dated December 2011, revealed several areas where subsurface soils have been impacted by metals, hydrocarbons and semi-volatile organic compounds. For the purpose of this project, *The Contractor shall make every effort to reuse impacted soils at the station limits described in these specifications.* Excess soils from the areas identified in Table 1 and not reused on the project are classified as Class 2 non-hazardous soils, based on the laboratory results and should be disposed of to a TCEQ authorized landfill. *In the event, that the Contractor cannot reuse the impacted soils, the Contractor will be required to provide documentation to support this justification.*

Soils excavated from areas not addressed in this document and that do not exhibit signs of contamination (i.e., odor, discoloration, visual observation of fuel, etc.) shall be handled as non-impacted material and staged separately

from suspect impacted soils. Soils from the suspected impacted areas identified in this document will require management in accordance with a Waste Management Plan (WMP) to be prepared by the Contractor's Environmental Consultant.

Construction practices must comply with all applicable regulations concerning the prevention of stormwater pollution, as detailed in City's Storm Water Pollution Prevention Plan (SWP3) Manual. New fill materials, such as topsoil, to be placed in City right-of-way (ROW) shall be obtained from a certified clean source outside the project limits. The Contractor shall provide documentation to the City's inspector to support this requirement.

Decontamination of equipment must be conducted prior to moving from a suspected impacted area to a non-impacted area. It is highly recommended to start first with the non-impacted areas and to move to the potentially impacted areas. The Contractor shall be required to document decontamination procedures and waste generated as part of decontaminating of heavy equipment and trucks. Soils from potentially impacted areas shall not be tracked on roadways. Any soils tracked onto roadways shall be immediately removed.

Appropriate decontamination shall be conducted within a designated area where it is possible to contain and collect decontamination-generated fluids and solids. These decontamination wastes shall be placed into appropriate containers for characterization and profiling prior to final disposal. The Contractor may, at their discretion, place the decontamination waste with the suspect impacted soil.

Copies of the subsurface investigation report titled "Phase II Environmental Site Assessment for Blanco Road (Jackson Keller to Hildebrand)," dated September, 2011, is available for review and may be obtained from the CIMS Environmental Project Manager, Ms. Lety Arzate at (210) 207-1408 or by email at: Leticia.Arzate@sanantonio.gov. **Only electronic copies will be provided.**

ITEM 110
ENVIRONMENTAL AND SAFETY CONCERNS
HANDLING OF IMPACTED MEDIA

110.1 DESCRIPTION

This item consists of the evaluation, management, transportation, and disposal of excavated impacted soils; site safety and hazardous materials training; development and implementation of a Site Specific Health and Safety Plan and a Waste Management Plan, in accordance with the specification requirements outlined below.

ITEM 110.2
MANAGEMENT, TRANSPORTATION AND DISPOSAL OF IMPACTED SOILS

Soils at locations identified in Table 1 "Environmental Project Data Summary" may contain or have the potential to contain hydrocarbons, heavy metals and semi-volatile organic compounds (SVOCs) contamination. Tables 2A through 2W provide the maximum detected contaminant concentrations associated with the impacted locations for each area of concern. Management of the affected soil shall be governed at a minimum by the following management procedures and guidelines.

The Contractor's environmental consultant will be responsible for providing environmental oversight and air monitoring activities for their construction workers in ***the affected areas at any proposed depth of the improvements***. The environmental consultant will be on-site to perform air monitoring activities for workers working between station numbers outlined in this document. It is the Contractor's responsibility to ensure that environmental oversight is provided during construction.

The purpose of the monitoring is to assess the potential vapors or dust arising from construction activities and potential exposure to construction workers in the affected areas. Additionally, the City or its representative will provide environmental oversight to ensure the Contractor complies with the Health and Safety Plan and the Waste Management Plan in accordance with Federal, State, and Local regulations.

The specific areas, station numbers and cross-sections, and locations of the impacted areas in the ***base*** and ***alternate*** bids are identified in Table 1 and Figures 2 through 16. Specific procedures required for handling impacted media from the different areas of concern (AOC A through AOC W) are listed below:

Areas of Concern (A through W)

The Contractor should reuse all impacted soil within the affected areas to minimize waste volume during construction. The City strongly recommends the Contractor to manage affected soils by reusing potentially impacted soils in all areas of concern (AOC). The proposed improvements located in these affected areas are described in Table 1.

The impacted media generated during construction in all Areas of Concern (AOC), both ***base*** and ***alternate bids***, shall be managed by reusing as much as the impacted material as possible. The excess impacted soils must be disposed of at a licensed TCEQ landfill. The Contractor will be required to coordinate and notify the City's representative 48 hours in advance prior to beginning work in the different Areas of Concern. Excess soils that cannot be reused must be removed, transported, and disposed within 48 hours of completing the utility trenches within the affected area.

The soils suspected to be clean (deemed by the City's environmental consultant) will be segregated separate from the impacted soils. It is acceptable to store impacted soils in roll-off containers, or at a staging facility designated by the Contractor until the excavation is ready to be filled again. After the installation of the different utilities and the required backfill media, impacted soil should be used first to fill the excavation before clean soil is utilized. This procedure only applies to areas described in Table 1. Excess clean soils should be handled as they are handled in a non-impacted project.

Contaminants that would be potentially encountered in the project from the areas included in Table 1 can be classified as Class 2 Non-hazardous waste. All potentially impacted soils must be managed in accordance with applicable Federal, State, and Local regulations. Management of these wastes is governed by the Texas Commission for Environmental Quality (TCEQ) waste requirements.

If impacted soils cannot be reused for any reason; then, the Contractor must properly excavate, remove, and dispose of the soils. The impacted media shall be transported and disposed of at a facility authorized by the TCEQ to accept such materials. The City's representative will be also obtaining a preliminary waste disposal authorization from local disposal facilities for disposal of approximately 7,000 loose or truck cubic yards of impacted media. However, the disposal facility may require additional sampling of the excavated soils for waste characterization purposes. It will be the Contractor's responsibility to conduct additional soil sampling and analyses, if necessary, for waste characterization and disposal purposes. The selected

disposal facility shall be approved by the City, prior to beginning work in affected areas.

When transporting the impacted soils, it is the Contractor's responsibility to ensure all dump trucks used to transport this waste are equipped with operating tarps. If the tarps are not effective, the City's inspector or City's representative will remove trucks from this project. The City inspector or City's representative will also determine if trucks need to be lined with polyethylene sheeting or not.

The Contractor will be required to obtain all necessary permits to transport and waste manifest to dispose of affected media at a licensed landfill. Specifically, the trucks transporting the affected material will be required to have a solid waste haulers permit. This permit is a local requirement and will be verified prior to beginning work in the affected area. In the event the permit is not obtained or available, the inspector will immediately remove the truck from the construction project. Additionally, trucks hauling affected media to a licensed landfill without this permit are subject to a fine by the City of San Antonio, Code Enforcement Department. The Contractor will be required to provide documentation of truck information, such as company, truck numbers, permit numbers, etc.

If necessary, the Contractor shall notify the City's Inspector or City's representative at least 48 hours in advance of hauling impacted soil to the approved landfill. Waste manifests shall be used to transport impacted materials from the impacted areas to the final disposal site(s). The City's Inspector or City's representative will obtain and sign the waste manifests as the generator for the impacted soils. Copies of the disposal records for the soils shall be provided to the Contractor's Environmental Consultant and waste manifest not used for this project must be returned to the City Inspector. The Consultant will be responsible for preparing a final report with all this documentation.

The City shall be notified immediately when impacted soils and/or groundwater are encountered at locations not identified in this document. The notification should include the station numbers, specific points, exact locations, type of impacted media, evidence of impact, and measures taken to contain the impacted media and prevent public access. The contaminated soil and/or groundwater shall not be removed from the location without prior City's approval.

The total estimated quantity of impacted soil to be excavated for all areas of concern (Base bid and Alternate Bid) is approximately 7,000 loose or truck cubic yards. The excavation of soils will not be paid for separately, but it will be subsidiary to the various bid items

governing the excavation for the project, and the installation of storm drain and utilities.

The bid proposal estimated quantities for transportation and disposal (if needed) is based on the best information available as a result of the environmental investigation and in no way correlates to actual payment made for Bid Item 110.2. Final payment for Bid Item 110.2 will be based entirely on actual quantities of materials verified by the COSA Inspector, or if the soils are disposed by the quantities accepted by the TCEQ certified landfill facility and approved by the City. Five percent of the total amounts of pay Item 110.2 will be withheld until all disposal documentation is received by the City.

110.2 Contractors Bid Item – Transportation and Disposal of Impacted Soils

110.2.1 Transportation to Disposal Facility [COSA, *Base Bid*] (Estimated Quantity: 3,000 loose or truck cubic yards) Refer to Bid Item 110.2.1

110.2.2 Transportation to Disposal Facility [SAWS Water, *Base Bid*] (Estimated Quantity: 250 loose or truck cubic yards) Refer to Bid Item 110.2.2

110.2.3 Transportation to Disposal Facility [SAWS Sewer, *Base Bid*] (Estimated Quantity: 280 loose or truck cubic yards) Refer to Bid Item 110.2.3

110.2.4 Transportation to Disposal Facility [CPS, *Base Bid*] (Estimated Quantity: 240 loose or truck cubic yards) Refer to Bid Item 110.2.4

110.2.5 Transportation to Disposal Facility [COSA, *Alternate Bid*] (Estimated Quantity: 2,650 loose or truck cubic yards) Refer to Bid Item 110.2.5

110.2.6 Transportation to Disposal Facility [SAWS Water, *Alternate Bid*] (Estimated Quantity: 500 loose or truck cubic yards) Refer to Bid Item 110.2.6

110.2.7 Transportation to Disposal Facility [SAWS Sewer, *Alternate Bid*] (Estimated Quantity: 5 loose or truck cubic yards) Refer to Bid Item 110.2.7

110.2.8 Transportation to Disposal Facility [CPS, *Alternate Bid*] (Estimated Quantity: 80 loose or truck cubic yards) Refer to Bid Item 110.2.8

110.2.9 Landfill Disposal [COSA, *Base Bid*] (Estimated Quantity: 3,000 loose or truck cubic yards, Class 2 Non-hazardous) Refer to Bid Item 110.2.9

110.2.10 Landfill Disposal [SAWS Water, *Base Bid*] (Estimated Quantity: 250 loose or truck cubic yards, Class 2 Non-hazardous) Refer to Bid Item 110.2.10

110.2.11 Landfill Disposal [SAWS Sewer, *Base Bid*] (Estimated Quantity: 280 loose or truck cubic yards, Class 2 Non-hazardous) Refer to Bid Item 110.2.11

110.2.12 Landfill Disposal [CPS, *Base Bid*] (Estimated Quantity: 240 loose or truck cubic yards, Class 2 Non-hazardous) Refer to Bid Item 110.2.12

110.2.13 Landfill Disposal [COSA, *Alternate Bid*] (Estimated Quantity: 2,650 loose or truck cubic yards, Class 2 Non-hazardous) Refer to Bid Item 110.2.13

110.2.14 Landfill Disposal [SAWS Water, *Alternate Bid*] (Estimated Quantity: 500 loose or truck cubic yards, Class 2 Non-hazardous) Refer to Bid Item 110.2.14

110.2.15 Landfill Disposal [SAWS Sewer, *Alternate Bid*] (Estimated Quantity: 5 loose or truck cubic yards, Class 2 Non-hazardous) Refer to Bid Item 110.2.15

110.2.16 Landfill Disposal [CPS, *Alternate Bid*] (Estimated Quantity: 80 loose or truck cubic yards, Class 2 Non-hazardous) Refer to Bid Item 110.2.16

ITEM 110.3
SITE SAFETY AND HAZARDOUS MATERIALS TRAINING

Because of the potential for exposure to hazardous materials, all contractors, employees, and subcontractors working in or near the areas of known impacted media shall be required to have successfully completed a 40-hour Hazardous Waste Operations and Emergency Response (HAZWOPER) course in accordance with the Occupational Safety and Health Administration

(OSHA) guidelines contained in 29 Code of Federal Regulations 1910.120 and retain current certification in such. The site health and safety supervisor shall have completed the 8-hour HAZWOPER Supervisory Training course.

The Contractor shall be responsible for providing this training to their employees and subcontractors' employees. The Contractor shall make current completion certifications available for inspection at any time during the project.

ITEM 110.4
REMOVAL, STORAGE, TREATMENT AND/OR DISPOSAL OF IMPACTED AND NON-IMPACTED GROUNDWATER

During the course of the project, water, either stormwater or groundwater, may accumulate in the excavations in the different Areas of Concern. It is in the best interest of the Contractor to provide soil berms or other protective measures around the excavated trench to prevent water intrusion. A figure depicting protective measures for stormwater intrusion is shown on Figure 17, "Open Excavation Run-on Prevention."

Groundwater at locations identified in Table 1 has the potential to contain contamination. Tables 2A through 2W provide the maximum detected contaminant concentrations associated with the impacted locations. Management of this waste shall be governed at a minimum by the following management procedures and guidelines.

Groundwater sampling results in the different Areas of Concern indicate that the concentrations encountered are above levels for direct disposal into the stormwater or sanitary sewer system. As necessary for construction, groundwater in this area shall be removed, stored (if necessary), and properly disposed of. It will be the Contractor's responsibility to determine appropriate handling practices. In the event that the Contractor decides to store the groundwater in a temporary frac tank, the Contractor will be required to provide a certification that the tank is free of contaminants and to identify a staging area that is approved by the City Inspector. The contractor shall comply with all Federal, State, and local regulations governing the disposal of contaminated water.

Appropriate methods for disposal of this groundwater may include: (a) Disposal at an authorized disposal facility. This facility must be authorized by all applicable Federal, State, and local agencies to accept such waste. This option would require the contractor to remove, containerize, test, transport, and dispose of the water at an authorized Texas Commission on Environmental Quality (TCEQ) disposal facility; or (b) Pre-treatment and subsequent disposal via San Antonio Water System (SAWS). This option

would require the contractor to remove, treat the water to below SAWS pretreatment standards, test, and dispose of the water through the sanitary sewer system. Coordination with the San Antonio Water System (SAWS) would be required for this option. A permit must be obtained prior starting this project.

The Contractor shall notify the City's Inspector or City's representative at least 48 hours in advance of hauling impacted groundwater to the disposal site. Waste manifests shall be used to transport impacted groundwater from the impacted areas to the final disposal site(s). The City's Inspector or City's representative will sign the manifests as the generator for the impacted groundwater. Copies of the disposal records for the groundwater shall be submitted to the City's Inspector. The City's inspector will forward these documents to the Capital Improvements Management Services Department, Environmental Management Division.

The estimated quantity of suspect impacted groundwater to be disposed of is approximately 25,000 gallons. This item shall govern the removal, storage, testing, transport, treatment, and/or disposal of impacted groundwater removed from the area of concern (for the ***Base Bid*** and the ***Alternate Bid***). Removal and disposal of impacted groundwater shall be measured by the gallon of water actually disposed by manifest or by meter. Under no circumstances shall the Contractor exceed the unit quantity without first obtaining authorization from the City. In the event that the Contractor exceeds the unit quantity, the City will retest and/or re-evaluate the water to determine if it is still contaminated. In the event that the water is non-contaminated, the Contractor shall dispose of the water as clean and no additional compensation will be given to the contractor. Payment for this item will be made at the contract unit price for Removal and Disposal of Impacted Groundwater. Final payment for bid Item 110.4 will be based entirely on actual quantities of materials verified by the City Inspector, or accepted by the TCEQ certified landfill facility and approved by the City. Five percent of the total amounts of pay Item 110.4 will be withheld until all disposal documentation are received by the City.

110.4.1 Contractors Bid Item – Removal, Storage and Treatment of Impacted Groundwater (COSA, *Base Bid*, Estimated Quantity: 25,000 gallons) Refer to Bid Item 110.4.1

110.4.2 Contractors Bid Item – Disposal of Impacted Groundwater (COSA, *Base Bid*, Estimated Quantity: 25,000 gallons) Refer to Bid Item 110.4.2

110.4.3 Contractors Bid Item – Removal, Storage and Treatment of Impacted Groundwater (COSA, *Alternate Bid*, Estimated Quantity: 25,000 gallons) Refer to Bid Item 110.4.3

110.4.4 Contractors Bid Item – Disposal of Impacted Groundwater (COSA, *Alternate Bid*, Estimated Quantity: 25,000 gallons) Refer to Bid Item 110.4.4

ITEM 110.5
SITE SPECIFIC HEALTH AND SAFETY PLAN

The Contractor shall prepare and implement a Site Specific Health and Safety (H&S) Plan. The Contractor shall also provide a competent Health and Safety Officer/Supervisor or environmental consultant who will comply and implement the Site Specific H&S Plan. The Project Health and Safety Officer/Supervisor or environmental consultant shall also be responsible for providing environmental oversight, air monitoring and aiding the Contractor, City Inspector(s), and/or City's representative to coordinate handling and disposition of impacted soils at the construction site. The Construction Superintendent may also be considered as the Health and Safety Officer/Supervisor.

The Contractor's H&S Plan must comply with applicable regulations contained in 29 CFR 1910.120. The Contractor should review and apply the standards found in Section 1910.120 (Hazardous Waste Operations), Subsection M (Personal Protective Equipment), and Subsection Z (Toxic and Hazardous Substances). Additionally, the Contractor should review and incorporate into the H&S Plan all relevant construction procedures which are regulated by Section 1926. The H&S Plan shall be submitted to the City of San Antonio, Environmental Management Division to the attention of the Environmental Project Manager for review prior beginning construction activities in the impacted areas. Once the Contractor H&S Plan receives approval by CIMS Environmental, the Contractor may begin construction activities in the affected areas.

Where the various sections of the Occupational Safety and Health Administration (OSHA) regulations require specific subplans/programs, such as Confined Space, Lockout/Tagout, Hazard Communication, Excavation and Trenching, etc., written documentation shall be developed by the Contractor that is specific for the potential hazards associated with this construction effort. This is in addition to standard OSHA requirements for this type of construction project. Appropriate traffic control devices and location access

limitation devices shall be utilized according to applicable regulations and the approved H&S Plan.
The H&S Plan shall include at a minimum the following information:

1) A health and safety risk analysis for each location, task, or operation to be performed by the Contractor.

2) A description of the training to be provided to location workers to comply with 29 CFR 1910.120(f).

3) List of engineering controls, work practices, and personal protective equipment to be provided by the Contractor to the Contractor's employees for each task or operation to be performed. These must comply with 29 CFR 1910.120(g).

4) A description of the frequency and type of air monitoring to be provided to comply with 29 CFR 1910.120(h), including the concentrations of contaminants or air constituents that will cause the Contractor to take actions to increase or decrease protective measures.

5) A description of location control measures to be used to comply with 29 CFR 1910.120(d).

6) A decontamination plan to comply with requirements of 29 CFR 1910.120(k). This plan must address both personnel and equipment decontamination and disposal of decontamination-generated fluids and materials.

7) An emergency response and spill containment plan to comply with 29 CFR 1910.120(i and j).

8) A confined space entry program to comply with 29 CFR 1910.146.

9) An excavation safety program to comply with 29 CFR 1926, Subpart P.

10) A location map, with a route and phone number, to the nearest emergency medical facility.

11) Personal Protective Equipment (PPE) levels shall be defined as appropriate to location contaminant concentrations in order to maintain worker safety.

12) A route map showing the closest medical facility to the site.

13) A truck route map showing the designated route from the project site to the proposed disposal facility.

The Contractor shall add additional elements to the H&S Plan, as required, for the safe execution of the project. The Contractor must include a written statement that they are committed to employing/enforcing the H&S Plan and will be implemented for all project operations. All workers and visitors to the site shall be informed of the H&S Plan and shall sign a statement acknowledging their commitment to following the procedures of the H&S Plan. The Contractor will be required to submit a finalized copy of the H&S Plan, a copy of the 40-hour HAZWOPER training certifications, and a copy of the 8 hour supervisory training certificates of all employees qualified to work within the impacted area to the City of San Antonio, Environmental Management Division (EMD), prior to beginning construction. CIMS EMD will review the submittals and determine weather the contractor meet the requirements or not.

The following tables should be used by the Contractor to develop the H&S Plan. Table 1 provides the stations numbers where impacted media might be encountered, the type of media impacted and the type of contaminant to be encountered.

Tables 2A through 2W provide a summary of impacted soil and groundwater locations identified by specific points within the project limits in the different Areas of Concern. The table also presents the maximum detected level of contaminants concentrations (TPH, BTEX, VOC, SVOC, etc.) identified at the sampled locations within the project limits within the AOCs.

There is the possibility that other contaminants could be encountered within the project limits. If the Contractor suspects additional contamination or impacted media outside the designated areas, the Contractor shall notify the construction inspector, City's inspector, and/or City's representative immediately.

This work will be paid under Item 110.5, "Site Specific Health and Safety Plan," and includes all time, materials, and labor required to prepare the required document. This document must be prepared with specific information for the project. *Generic documents will not be accepted*.

110.5 Contractors Bid Item -- Site Specific Health and Safety Plan

Development of a Site Specific Health and Safety Plan (Base Bid, Lump Sum) - - Refer to Bid Item 110.5.1

Development of a Site Specific Health and Safety Plan (Alternate Bid, Lump Sum) - - Refer to Bid Item 110.5.2

ITEM 110.6
WASTE MANAGEMENT PLAN AND ENVIRONMENTAL OVERSIGHT IMPLEMENTATION

The Contractor is required to prepare a Waste Management Plan outlining a description on how the impacted media would be handled during construction. With information provided in Tables 1 and 2A through 2W, the Contractor's Consultant shall provide a plan to reuse the impacted soils and a description of how the groundwater will be removed, treated and/or disposed.

If treatment of the groundwater is the selected method prior to disposal, the Contractor's Consultant must obtain a permit from SAWS prior beginning the project. Cost associated with the permit should be included in Item 110.6 Waste Management Plan and Oversight Implementation.

All potentially impacted soils and groundwater must be managed in accordance with applicable Federal, State, and Local regulations. Management of these wastes is governed by the Texas Commission for Environmental Quality (TCEQ) waste requirements.

The Contractor is required to submit this Plan to CIMS Environmental Project Manager for approval prior beginning work in the impacted areas. The Contractor must have an Environmental Consultant providing oversight during the course of the project in the Areas of Concern (AOCs) listed in Table 1. Oversight is required for the installation of **all** utilities, independently of the depth, in all the areas outlined in Table 1.

Upon completion, the Contractor is required to submit a final report for this project. The environmental report shall include but not be limited to: number of environmental oversight days, air monitoring frequency and results, total cubic yards of impacted media removed and disposed (if needed), and a summary of the environmental activities.

This work will be paid under Item 110.6, "Waste Management Plan and Environmental Oversight Implementation" and includes all equipment, time, materials, and labor required to complete the work.

110.6 Contractors Bid Item – Waste Management Plan and Environmental Oversight Implementation

Development of the Waste Management Plan (Base bid, Lump Sum) - Refer to Bid Item 110.6.1

Environmental Oversight Implementation (Base bid, Lump Sum) - Refer to Bid Item 110.6.2

Development of the Waste Management Plan (Alternate bid, Lump Sum) - Refer to Bid Item 110.6.3

Environmental Oversight Implementation (Alternate bid, Lump Sum) - Refer to Bid Item 110.6.4

TABLES

TABLE 1
ENVIRONMENTAL PROJECT DATA SUMMARY
Blanco Road (Jackson Keller to Hildebrand)
Areas of Concern "A" through "H" Base Bid

Project Design Data					Environmental Data			
AOC No.	**Nearest Cross Street**	**From Station No.**	**To Station No.**	**Improvements Of Concern**	**Impacted Media**		**Contaminant Type**	**On-Site Monitoring Required**
					Groundwater	Soil		
A	El Monte Blvd. (West)	76+50 (Blanco Rd., west side of the street) 10+24 (El Monte Blvd.)	76+80 10+83	Sewer, water, gas, storm drainage, sidewalks	No	Yes Soils generated from the excavation from the surface to the proposed utility excavation depth are considered class 2, non-hazardous and must be reused.	Heavy Metals (arsenic and barium)	Yes [1]
B	El Monte (East of Blanco)	77+75 (Blanco Rd., west side of the street)	78+50	Sewer, water, gas, storm drainage and sidewalks	No	Yes Soils generated from the excavation from the surface to the proposed utility excavation depth are considered class 2, non-hazardous and must be reused.	Heavy Metals (arsenic and barium)	Yes [1]
C	San Angelo Blvd. (West)	79+45 (Blanco Rd., west side of the street) 10+22 (San Angelo Blvd.)	80+75 10+43	Water, gas, storm drainage and sidewalks	No	Yes Soils generated from the excavation from the surface to the proposed utility excavation depth are considered class 2, non-hazardous and must be reused.	Heavy Metals (arsenic and barium)	Yes [1]

D	Venice St.	87+95 (Blanco Rd., west side of the street)	88+40	Gas, storm drainage and sidewalks	No	Yes Soils generated from the excavation from the surface to the proposed utility excavation depth are considered class 2, non-hazardous and must be reused.	Hydrocarbons	Yes [1]
E	Basse Rd.	89+60 (Blanco Rd., west side of the street)	90+10	Gas, storm drainage and sidewalks	No	Yes Soils generated from the excavation from the surface to the proposed utility excavation depth are considered class 2, non-hazardous and must be reused.	Hydrocarbons	Yes [1]
F	Basse Rd.	91+60 (Blanco Rd., west side of the street)	92+60	Gas, storm drainage and sidewalks	No	Yes Soils generated from the excavation from the surface to the proposed utility excavation depth are considered class 2, non-hazardous and must be reused.	Heavy Metals (arsenic and lead)	Yes [1]
G	Weizmann Blvd. (West)	103+10 (Blanco Rd., east side of the street)	103+90	Sewer, water, gas, storm drainage and sidewalks	No	Yes Soils generated from the excavation from the surface to the proposed utility excavation depth are considered class 2, non-hazardous and must be reused.	Heavy Metals (Arsenic)	Yes [1]

H	Weizmann Blvd., East	104+25 (Blanco Rd., east side of the street) 10+22 (Weizmann Blvd. East)	104+70 10+85	Sewer, water, storm drainage and sidewalks	Yes Hydrocarbons present in the groundwater. Water must be properly treated and disposed.	Yes Soils generated from the excavation from the surface to the proposed utility excavation depth are considered class 2, non-hazardous and must be reused.	Hydrocarbons and Heavy Metals (Lead and barium)	Yes [1]

Areas of Concern "I" through "W" Alternate Bid

I	San Francisco	18+20 (Blanco Rd., west and east sides of the street)	18+70	Gas, storm drainage and sidewalks	No	Yes Soils generated from the excavation from the surface to the proposed utility excavation depth are considered class 2, non-hazardous and must be reused.	Heavy Metals (Lead and barium)	Yes [1]
J	Pasadena St.	20+10 (Blanco Rd., east side of the street)	20+40	Gas, storm drainage and sidewalks	No	Yes Soils generated from the excavation from the surface to the proposed utility excavation depth are considered class 2, non-hazardous and must be reused.	Heavy Metals (Lead)	Yes [1]

K	West Olmos Dr.	24+10 (Blanco Rd., east side of the street)	24+30	Water, storm drainage and sidewalks	No	Yes Soils generated from the excavation from the surface to the proposed utility excavation depth are considered class 2, non-hazardous and must be reused.	Heavy Metals (Arsenic)	Yes [1]
L	Santa Monica St.	27+20 (Blanco Rd., west side of the street)	27+40	Storm drainage and sidewalks	No	Yes Soils generated from the excavation from the surface to the proposed utility excavation depth are considered class 2, non-hazardous and must be reused.	Heavy Metals (Barium)	Yes [1]
M	Santa Monica St.	27+85 (Blanco Rd., west side of the street)	28+20	Storm drainage and sidewalks	No	Yes Soils generated from the excavation from the surface to the proposed utility excavation depth are considered class 2, non-hazardous and must be reused.	Heavy Metals (Lead)	Yes [1]
N	Sacramento St.	30+50 (Blanco Rd., west side of the street)	30+85	Gas, storm drainage and sidewalks	No	Yes Soils generated from the excavation from the surface to the proposed utility excavation depth are considered class 2, non-hazardous and must be reused.	Heavy Metals (Barium)	Yes [1]

O	Sacramento St.	30+60 (Blanco Rd., east side of the street)	31+00	Water, gas, storm drainage and sidewalks	No	Yes Soils generated from the excavation from the surface to the proposed utility excavation depth are considered class 2, non-hazardous and must be reused.	Heavy Metals (Barium)	Yes [1]
P	Sacramento St.	31+40 (Blanco Rd., west side of the street) 10+22 (Sacramento west)	31+85 10+82	Water, gas, storm drainage and sidewalks	No	Yes Soils generated from the excavation from the surface to the proposed utility excavation depth are considered class 2, non-hazardous and must be reused.	Hydrocarbons	Yes [1]
Q	Sacramento St.	31+40 (Blanco Rd., east side of the street)	31+90	Water, gas, storm drainage and sidewalks	No	Yes Soils generated from the excavation from the surface to the proposed utility excavation depth are considered class 2, non-hazardous and must be reused.	Heavy Metals (Barium)	Yes [1]
R	McIlvaine St.	32+40 (Blanco Rd., east side of the street)	32+85	Water, storm drainage and sidewalks	No	Yes Soils generated from the excavation from the surface to the proposed utility excavation depth are considered class 2, non-hazardous and must be reused.	Heavy Metals (Lead)	Yes [1]

S	McIlvaine St.	33+40 (Blanco Rd., east side of the street)	33+70	Water, storm drainage and sidewalks	No	Yes Soils generated from the excavation from the surface to the proposed utility excavation depth are considered class 2, non-hazardous and must be reused.	Heavy Metals (Lead)	Yes [1]
T	Fresno Rd. (West)	10+54.14	10+80	Water, storm drainage and sidewalks	Potentially (traces of MtBE detected in groundwater)	Yes Soils generated from the excavation from the surface to the proposed utility excavation depth are considered class 2, non-hazardous and must be reused.	Heavy Metals (Barium)	Yes [1]
U	Fresno Rd.	37+65 (Blanco Rd., west side of the street)	39+00	Water, storm drainage and sidewalks	Potentially (traces of MtBE detected in groundwater)	Yes Soils generated from the excavation from the surface to the proposed utility excavation depth are considered class 2, non-hazardous and must be reused.	Heavy Metals (Barium and lead)	Yes [1]
V	Fresno Rd.	38+20 (Blanco Rd., east side of the street)	39+00	Water, storm drainage and sidewalks	Yes Hydrocarbons present in the groundwater. Water must be properly treated and disposed.	Yes Soils generated from the excavation from the surface to the proposed utility excavation depth are considered class 2, non-hazardous and must be reused.	Heavy Metals (Barium), Hydrocarbons	Yes [1]

W	Edison Dr.	40+25 (Blanco Rd., east side of the street)	41+60	Water, storm drainage and sidewalks	No groundwater encountered during assessment, but likelihood of being contaminated with hydrocarbons	Yes Soils generated from the excavation from the surface to the proposed utility excavation depth are considered class 2, non-hazardous and must be reused.	Heavy Metals (Lead and barium), Methylene Chloride	Yes [1]

Notes:

AOC: Areas of Concern

1) Onsite monitoring must be provided by Contractor's environmental consultant for workers handling impacted materials. COSA's environmental consultant is responsible for providing environmental oversight and monitoring to ensure that impacted media is properly excavated, transported, and disposed of to a licensed landfill and contractor is in compliance with the waste management plan to be prepared for this project.

TABLE 2A
MAXIMUM MEDIA CONTAMINATION RESULTS
Blanco Road (Jackson Keller to Hildebrand)
Areas of Concern "A" through "H" Base Bid

	AOC No. A Soil (mg/kg)	**AOC No. A** Soil (mg/kg)	**AOC No. A** Groundwater (mg/L)	TRRP Tier 1 PCLs ${}^{Tot}Soil_{comb}$ (mg/kg)*	Texas Specific Background Levels (mg/kg)*	TRRP Tier 1 PCLs ${}^{GW}Soil_{ing}$ (mg/L)*	TRRP Tier 1 PCLs ${}^{GW}GW_{Ing}$ (mg/L)	TRRP Tier 1 PCLs ${}^{air}GW_{Inh-V}$ (mg/L)
Depth bgs	3 to 5 feet (AOC44-4)	2.5 to 5.0 feet (AOC44-3)						
Chemicals of Concern								
TPH, TX1005, C6-C12	ND	ND	BRL	1,600	NL	65	0.98	1,800
TPH, TX1005, >C12-C28	ND	ND	BRL	2,300	NL	200	0.98	7,500
TPH, TX1005, >C28-C35	ND	ND	BRL	2,300	NL	200	0.98	NL
TPH, TX1005, >C6-C35	ND	ND	BRL	NL	NL	NL	NL	NL
Arsenic	7.26	**10.2**	BRL	24	5.9	5	0.01	NL
Barium	**502**	**466**	BRL	8,100	330	440	2.0	NL
Lead	ND	ND	BRL	500	15	3	0.015	NL
Methylene Chloride	ND	ND	BRL	390	NL	0.013	0.005	1,300

Bolded value indicated that concentration has exceeded the PCL for that chemical.

PCLs: Protective Concentration Levels
bgs: below ground surface
ND: non-detect
NL: No listed
BRL: Below Reporting Limits

TABLE 2B
MAXIMUM MEDIA CONTAMINATION RESULTS
Blanco Road (Jackson Keller to Hildebrand)
Areas of Concern "A" through "H" Base Bid

	AOC No. B Soil (mg/kg)	**AOC No. B** Soil (mg/kg)	**AOC No. B** Groundwater (mg/L)	TRRP Tier 1 PCLs $^{Tot}Soil_{comb}$ (mg/kg)*	Texas Specific Background Levels (mg/kg)*	TRRP Tier 1 PCLs $^{GW}Soil_{ing}$ (mg/L)*	TRRP Tier 1 PCLs $^{GW}GW_{Ing}$ (mg/L)	TRRP Tier 1 PCLs $^{air}GW_{Inh-V}$ (mg/L)
Depth bgs	5 to 7.5 feet (AOC43-1)	2.5 to 5.0 feet (AOC44-3)						
Chemicals of Concern								
TPH, TX1005, C6-C12	ND	ND	BRL	1,600	NL	65	0.98	1,800
TPH, TX1005, >C12-C28	ND	ND	BRL	2,300	NL	200	0.98	7,500
TPH, TX1005, >C28-C35	ND	ND	BRL	2,300	NL	200	0.98	NL
TPH, TX1005, >C6-C35	ND	ND	BRL	NL	NL	NL	NL	NL
Arsenic	**8.81**	**11.8**	BRL	24	5.9	5	0.01	NL
Barium	ND	**556**	BRL	8,100	330	440	2.0	NL
Lead	ND	ND	BRL	500	15	3	0.015	NL
Methylene Chloride	ND	ND	BRL	390	NL	0.013	0.005	1,300

Bolded value indicated that concentration has exceeded the PCL for that chemical.

PCLs: Protective Concentration Levels
bgs: below ground surface
ND: non-detect
NL: No listed
BRL: Below Reporting Limits

TABLE 2C
MAXIMUM MEDIA CONTAMINATION RESULTS
Blanco Road (Jackson Keller to Hildebrand)
Areas of Concern "A" through "H" Base Bid

	AOC No. C Soil (mg/kg)	**AOC No. C** Soil (mg/kg)	**AOC No. C** Groundwater (mg/L)	TRRP Tier 1 PCLs ${}^{Tot}Soil_{comb}$ (mg/kg)*	Texas Specific Background Levels (mg/kg)*	TRRP Tier 1 PCLs ${}^{GW}Soil_{ing}$ (mg/L)*	TRRP Tier 1 PCLs ${}^{GW}GW_{Ing}$ (mg/L)	TRRP Tier 1 PCLs ${}^{air}GW_{Inh-V}$ (mg/L)
Depth bgs	5 to 7.5 feet (AOC40-1)	2.0 to 5.0 feet (AOC40-2)						
Chemicals of Concern								
TPH, TX1005, C6-C12	ND	ND	BRL	1,600	NL	65	0.98	1,800
TPH, TX1005, >C12-C28	ND	ND	BRL	2,300	NL	200	0.98	7,500
TPH, TX1005, >C28-C35	ND	ND	BRL	2,300	NL	200	0.98	NL
TPH, TX1005, >C6-C35	ND	ND	BRL	NL	NL	NL	NL	NL
Arsenic	**14.6**	6.6	BRL	24	5.9	5	0.01	NL
Barium	ND	**496**	BRL	8,100	330	440	2.0	NL
Lead	**17.5**	ND	BRL	500	15	3	0.015	NL
Methylene Chloride	ND	ND	BRL	390	NL	0.013	0.005	1,300

Bolded value indicated that concentration has exceeded the PCL for that chemical.

PCLs: Protective Concentration Levels
bgs: below ground surface
ND: non-detect
NL: No listed
BRL: Below Reporting Limits

TABLE 2D
MAXIMUM MEDIA CONTAMINATION RESULTS
Blanco Road (Jackson Keller to Hildebrand)
Areas of Concern "A" through "H" Base Bid

	AOC No. D Soil (mg/kg)		**AOC No. D** Groundwater (mg/L)	TRRP Tier 1 PCLs ${}^{Tot}Soil_{comb}$ (mg/kg)*	Texas Specific Background Levels (mg/kg)*	TRRP Tier 1 PCLs ${}^{GW}Soil_{ing}$ (mg/L)*	TRRP Tier 1 PCLs ${}^{GW}GW_{Ing}$ (mg/L)	TRRP Tier 1 PCLs ${}^{air}GW_{Inh-V}$ (mg/L)
Depth bgs	5 to 7.5 feet (AOC36-1)							
Chemicals of Concern								
TPH, TX1005, C6-C12	**253**		NE	1,600	NL	65	0.98	1,800
TPH, TX1005, >C12-C28	20		NE	2,300	NL	200	0.98	7,500
TPH, TX1005, >C28-C35	ND		NE	2,300	NL	200	0.98	NL
TPH, TX1005, >C6-C35	ND		NE	NL	NL	NL	NL	NL
Arsenic	ND		NE	24	5.9	5	0.01	NL
Barium	ND		NE	8,100	330	440	2.0	NL
Lead	ND		NE	500	15	3	0.015	NL
Methylene Chloride	ND		NE	390	NL	0.013	0.005	1,300

Bolded value indicated that concentration has exceeded the PCL for that chemical.

PCLs: Protective Concentration Levels
bgs: below ground surface
ND: non-detect
NL: No listed
BRL: Below Reporting Limits
NE: Not encountered

TABLE 2E
MAXIMUM MEDIA CONTAMINATION RESULTS
Blanco Road (Jackson Keller to Hildebrand)
Areas of Concern "A" through "H" Base Bid

	AOC No. E Soil (mg/kg)		**AOC No. E** Groundwater (mg/L)	TRRP Tier 1 PCLs $^{Tot}Soil_{comb}$ (mg/kg)*	Texas Specific Background Levels (mg/kg)*	TRRP Tier 1 PCLs $^{GW}Soil_{ing}$ (mg/L)*	TRRP Tier 1 PCLs $^{GW}GW_{Ing}$ (mg/L)	TRRP Tier 1 PCLs $^{air}GW_{Inh-V}$ (mg/L)
Depth bgs	7.5 to 10.0 feet (AOC35-6)							
Chemicals of Concern								
TPH, TX1005, C6-C12	**87.6**		NE	1,600	NL	65	0.98	1,800
TPH, TX1005, >C12-C28	20		NE	2,300	NL	200	0.98	7,500
TPH, TX1005, >C28-C35	ND		NE	2,300	NL	200	0.98	NL
TPH, TX1005, >C6-C35	ND		NE	NL	NL	NL	NL	NL
Arsenic	ND		NE	24	5.9	5	0.01	NL
Barium	ND		NE	8,100	330	440	2.0	NL
Lead	ND		NE	500	15	3	0.015	NL
Methylene Chloride	ND		NE	390	NL	0.013	0.005	1,300

Bolded value indicated that concentration has exceeded the PCL for that chemical.

PCLs: Protective Concentration Levels
bgs: below ground surface
ND: non-detect
NL: No listed
BRL: Below Reporting Limits
NE: Not encountered

TABLE 2F
MAXIMUM MEDIA CONTAMINATION RESULTS
Blanco Road (Jackson Keller to Hildebrand)
Areas of Concern "A" through "H" Base Bid

	AOC No. F Soil (mg/kg)	**AOC No. F** Soil (mg/kg)	**AOC No. F** Groundwater (mg/L)	TRRP Tier 1 PCLs ${}^{Tot}Soil_{comb}$ (mg/kg)*	Texas Specific Background Levels (mg/kg)*	TRRP Tier 1 PCLs ${}^{GW}Soil_{ing}$ (mg/L)*	TRRP Tier 1 PCLs ${}^{GW}GW_{Ing}$ (mg/L)	TRRP Tier 1 PCLs ${}^{air}GW_{Inh-V}$ (mg/L)
Depth bgs	2.5 to 5.0 feet (AOC30-2)	1.5 to 2.5 feet (AOC30-3)						
Chemicals of Concern								
TPH, TX1005, C6-C12	ND	ND	NE	1,600	NL	65	0.98	1,800
TPH, TX1005, >C12-C28	ND	ND	NE	2,300	NL	200	0.98	7,500
TPH, TX1005, >C28-C35	ND	ND	NE	2,300	NL	200	0.98	NL
TPH, TX1005, >C6-C35	ND	ND	NE	NL	NL	NL	NL	NL
Arsenic	**7.36**	ND	NE	24	5.9	5	0.01	NL
Barium	ND	ND	NE	8,100	330	440	2.0	NL
Lead	**16.2**	**15.6**	NE	500	15	3	0.015	NL
Methylene Chloride	ND	ND	NE	390	NL	0.013	0.005	1,300

Bolded value indicated that concentration has exceeded the PCL for that chemical.

PCLs: Protective Concentration Levels
bgs: below ground surface
ND: non-detect
NL: No listed
BRL: Below Reporting Limits
NE: Not encountered

TABLE 2G
MAXIMUM MEDIA CONTAMINATION RESULTS
Blanco Road (Jackson Keller to Hildebrand)
Areas of Concern "A" through "H" Base Bid

	AOC No. G Soil (mg/kg)	**AOC No. G** Soil (mg/kg)	**AOC No. G** Groundwater (mg/L)	TRRP Tier 1 PCLs ${}^{Tot}Soil_{comb}$ (mg/kg)*	Texas Specific Background Levels (mg/kg)*	TRRP Tier 1 PCLs ${}^{GW}Soil_{ing}$ (mg/L)*	TRRP Tier 1 PCLs ${}^{GW}GW_{Ing}$ (mg/L)	TRRP Tier 1 PCLs ${}^{air}GW_{Inh-V}$ (mg/L)
Depth bgs	15.5 to 17.5 feet (AOC25-3)	1.5 to 2.5 feet (AOC25-5)						
Chemicals of Concern								
TPH, TX1005, C6-C12	ND	ND	NE	1,600	NL	65	0.98	1,800
TPH, TX1005, >C12-C28	ND	ND	NE	2,300	NL	200	0.98	7,500
TPH, TX1005, >C28-C35	ND	ND	NE	2,300	NL	200	0.98	NL
TPH, TX1005, >C6-C35	ND	ND	NE	NL	NL	NL	NL	NL
Arsenic	**21.1**	**11.18**	NE	24	5.9	5	0.01	NL
Barium	ND	ND	NE	8,100	330	440	2.0	NL
Lead	ND	ND	NE	500	15	3	0.015	NL
Methylene Chloride	ND	ND	NE	390	NL	0.013	0.005	1,300

Bolded value indicated that concentration has exceeded the PCL for that chemical.

PCLs: Protective Concentration Levels
bgs: below ground surface
ND: non-detect
NL: No listed
BRL: Below Reporting Limits
NE: Not encountered

TABLE 2H
MAXIMUM MEDIA CONTAMINATION RESULTS
Blanco Road (Jackson Keller to Hildebrand)
Areas of Concern "A" through "H" Base Bid

	AOC No. H Soil (mg/kg)	**AOC No. H** Soil (mg/kg)	**AOC No. H** Groundwater (mg/L)	TRRP Tier 1 PCLs $^{Tot}Soil_{comb}$ (mg/kg)*	Texas Specific Background Levels (mg/kg)*	TRRP Tier 1 PCLs $^{GW}Soil_{ing}$ (mg/L)*	TRRP Tier 1 PCLs $^{GW}GW_{Ing}$ (mg/L)	TRRP Tier 1 PCLs $^{air}GW_{Inh-V}$ (mg/L)
Depth bgs	12.5 to 15.0 feet (AOC25-1)	2.5 to 5.0 feet (AOC25-2)						
Chemicals of Concern								
TPH, TX1005, C6-C12	ND	ND	**1.56**	1,600	NL	65	0.98	1,800
TPH, TX1005, >C12-C28	ND	ND	ND	2,300	NL	200	0.98	7,500
TPH, TX1005, >C28-C35	ND	ND	ND	2,300	NL	200	0.98	NL
TPH, TX1005, >C6-C35	ND	ND	ND	NL	NL	NL	NL	NL
Arsenic	6.97*	ND	NA	24	5.9	5	0.01	NL
Barium	ND	**1,640** (at 12.5 feet)	NA	8,100	330	440	2.0	NL
Lead	ND	**15.4**	NA	500	15	3	0.015	NL
Methylene Chloride	ND	ND	0.004**	390	NL	0.013	0.005	1,300

Bolded value indicated that concentration has exceeded the PCL for that chemical.
PCLs: Protective Concentration Levels
bgs: below ground surface
ND: non-detect
NL: No listed
NA: Not analyzed
BRL: Below Reporting Limits
NE: Not encountered
* Arsenic concentration measured below the site-specific background concentration calculated for this location.
** Traces of many semi-volatile organic components detected in groundwater

TABLE 2I
MAXIMUM MEDIA CONTAMINATION RESULTS
Blanco Road (Jackson Keller to Hildebrand)
Areas of Concern "I" through "W" Alternate Bid

	AOC No. I Soil (mg/kg)	**AOC No. I** Soil (mg/kg)	**AOC No. I** Groundwater (mg/L)	TRRP Tier 1 PCLs $^{Tot}Soil_{comb}$ (mg/kg)*	Texas Specific Background Levels (mg/kg)*	TRRP Tier 1 PCLs $^{GW}Soil_{ing}$ (mg/L)*	TRRP Tier 1 PCLs $^{GW}GW_{Ing}$ (mg/L)	TRRP Tier 1 PCLs $^{air}GW_{Inh-V}$ (mg/L)
Depth bgs	0.5 to 2.5 feet (AOC83-3)	2.5 to 5.0 feet (AOC85-1)						
Chemicals of Concern								
TPH, TX1005, C6-C12	ND	ND	NE	1,600	NL	65	0.98	1,800
TPH, TX1005, >C12-C28	ND	ND	NE	2,300	NL	200	0.98	7,500
TPH, TX1005, >C28-C35	ND	ND	NE	2,300	NL	200	0.98	NL
TPH, TX1005, >C6-C35	ND	ND	NE	NL	NL	NL	NL	NL
Arsenic	5.95*	6.96*	NE	24	5.9	5	0.01	NL
Barium	ND	**674**	NE	8,100	330	440	2.0	NL
Lead	**17.1** (at 5 feet too)	ND	NE	500	15	3	0.015	NL
Methylene Chloride	ND	ND	NE	390	NL	0.013	0.005	1,300

Bolded value indicated that concentration has exceeded the PCL for that chemical.
PCLs: Protective Concentration Levels
bgs: below ground surface
ND: non-detect
NL: No listed
BRL: Below Reporting Limits
NE: Not encountered
* Arsenic concentration measured below the site-specific background concentration calculated for this location.
** Traces of many semi-volatile organic components detected in groundwater

TABLE 2J
MAXIMUM MEDIA CONTAMINATION RESULTS
Blanco Road (Jackson Keller to Hildebrand)
Areas of Concern "I" through "W" Alternate Bid

	AOC No. J Soil (mg/kg)	**AOC No. J** Soil (mg/kg)	**AOC No. J** Groundwater (mg/L)	TRRP Tier 1 PCLs ${}^{Tot}Soil_{comb}$ (mg/kg)*	Texas Specific Background Levels (mg/kg)*	TRRP Tier 1 PCLs ${}^{GW}Soil_{ing}$ (mg/L)*	TRRP Tier 1 PCLs ${}^{GW}GW_{Ing}$ (mg/L)	TRRP Tier 1 PCLs ${}^{air}GW_{Inh-V}$ (mg/L)
Depth bgs	2.5 to 5.0 feet (AOC83-1)							
Chemicals of Concern								
TPH, TX1005, C6-C12	ND		NE	1,600	NL	65	0.98	1,800
TPH, TX1005, >C12-C28	ND		NE	2,300	NL	200	0.98	7,500
TPH, TX1005, >C28-C35	ND		NE	2,300	NL	200	0.98	NL
TPH, TX1005, >C6-C35	ND		NE	NL	NL	NL	NL	NL
Arsenic	ND		NE	24	5.9	5	0.01	NL
Barium	ND		NE	8,100	330	440	2.0	NL
Lead	**20.7**		NE	500	15	3	0.015	NL
Methylene Chloride	ND		NE	390	NL	0.013	0.005	1,300

Bolded value indicated that concentration has exceeded the PCL for that chemical.
PCLs: Protective Concentration Levels
bgs: below ground surface
ND: non-detect
NL: No listed
BRL: Below Reporting Limits
NE: Not encountered

TABLE 2K
MAXIMUM MEDIA CONTAMINATION RESULTS
Blanco Road (Jackson Keller to Hildebrand)
Areas of Concern "I" through "W" Alternate Bid

	AOC No. K Soil (mg/kg)	**AOC No. K** Soil (mg/kg)	**AOC No. K** Groundwater (mg/L)	TRRP Tier 1 PCLs $^{Tot}Soil_{comb}$ (mg/kg)*	Texas Specific Background Levels (mg/kg)*	TRRP Tier 1 PCLs $^{GW}Soil_{ing}$ (mg/L)*	TRRP Tier 1 PCLs $^{GW}GW_{Ing}$ (mg/L)	TRRP Tier 1 PCLs $^{air}GW_{Inh-V}$ (mg/L)
Depth bgs	2.5 to 5.0 feet (AOC79-3)							
Chemicals of Concern								
TPH, TX1005, C6-C12	ND		NE	1,600	NL	65	0.98	1,800
TPH, TX1005, >C12-C28	ND		NE	2,300	NL	200	0.98	7,500
TPH, TX1005, >C28-C35	ND		NE	2,300	NL	200	0.98	NL
TPH, TX1005, >C6-C35	ND		NE	NL	NL	NL	NL	NL
Arsenic	**14.5**		NE	24	5.9	5	0.01	NL
Barium	332		NE	8,100	330	440	2.0	NL
Lead	ND		NE	500	15	3	0.015	NL
Methylene Chloride	ND		NE	390	NL	0.013	0.005	1,300

Bolded value indicated that concentration has exceeded the PCL for that chemical.
PCLs: Protective Concentration Levels
bgs: below ground surface
ND: non-detect
NL: No listed
BRL: Below Reporting Limits
NE: Not encountered

TABLE 2L
MAXIMUM MEDIA CONTAMINATION RESULTS
Blanco Road (Jackson Keller to Hildebrand)
Areas of Concern "I" through "W" Alternate Bid

	AOC No. L Soil (mg/kg)	**AOC No. L** Soil (mg/kg)	**AOC No. L** Groundwater (mg/L)	TRRP Tier 1 PCLs $^{Tot}Soil_{comb}$ (mg/kg)*	Texas Specific Background Levels (mg/kg)*	TRRP Tier 1 PCLs $^{GW}Soil_{ing}$ (mg/L)*	TRRP Tier 1 PCLs $^{GW}GW_{Ing}$ (mg/L)	TRRP Tier 1 PCLs $^{air}GW_{Inh-V}$ (mg/L)
Depth bgs	2.5 to 5.0 feet (AOC77-3)							
Chemicals of Concern								
TPH, TX1005, C6-C12	ND		NE	1,600	NL	65	0.98	1,800
TPH, TX1005, >C12-C28	ND		NE	2,300	NL	200	0.98	7,500
TPH, TX1005, >C28-C35	ND		NE	2,300	NL	200	0.98	NL
TPH, TX1005, >C6-C35	ND		NE	NL	NL	NL	NL	NL
Arsenic	ND		NE	24	5.9	5	0.01	NL
Barium	**466**		NE	8,100	330	440	2.0	NL
Lead	ND		NE	500	15	3	0.015	NL
Methylene Chloride	ND		NE	390	NL	0.013	0.005	1,300

Bolded value indicated that concentration has exceeded the PCL for that chemical.
PCLs: Protective Concentration Levels
bgs: below ground surface
ND: non-detect
NL: No listed
BRL: Below Reporting Limits
NE: Not encountered

TABLE 2M
MAXIMUM MEDIA CONTAMINATION RESULTS
Blanco Road (Jackson Keller to Hildebrand)
Areas of Concern "I" through "W" Alternate Bid

	AOC No. M Soil (mg/kg)	**AOC No. M** Soil (mg/kg)	**AOC No. M** Groundwater (mg/L)	TRRP Tier 1 PCLs $^{Tot}Soil_{comb}$ (mg/kg)*	Texas Specific Background Levels (mg/kg)*	TRRP Tier 1 PCLs $^{GW}Soil_{ing}$ (mg/L)*	TRRP Tier 1 PCLs $^{GW}GW_{Ing}$ (mg/L)	TRRP Tier 1 PCLs $^{air}GW_{Inh-V}$ (mg/L)
Depth bgs	1.5 to 3.0 feet (AOC77-2)							
Chemicals of Concern								
TPH, TX1005, C6-C12	ND		NE	1,600	NL	65	0.98	1,800
TPH, TX1005, >C12-C28	ND		NE	2,300	NL	200	0.98	7,500
TPH, TX1005, >C28-C35	ND		NE	2,300	NL	200	0.98	NL
TPH, TX1005, >C6-C35	ND		NE	NL	NL	NL	NL	NL
Arsenic	6.16*		NE	24	5.9	5	0.01	NL
Barium	**22.3**		NE	8,100	330	440	2.0	NL
Lead	ND		NE	500	15	3	0.015	NL
Methylene Chloride	ND		NE	390	NL	0.013	0.005	1,300

Bolded value indicated that concentration has exceeded the PCL for that chemical.
PCLs: Protective Concentration Levels
bgs: below ground surface
ND: non-detect
NL: No listed
BRL: Below Reporting Limits
NE: Not encountered
* Arsenic concentration measured below the site-specific background concentration calculated for this location.

TABLE 2N
MAXIMUM MEDIA CONTAMINATION RESULTS
Blanco Road (Jackson Keller to Hildebrand)
Areas of Concern "I" through "W" Alternate Bid

	AOC No. N Soil (mg/kg)	**AOC No. N** Soil (mg/kg)	**AOC No. N** Groundwater (mg/L)	TRRP Tier 1 PCLs $^{Tot}Soil_{comb}$ (mg/kg)*	Texas Specific Background Levels (mg/kg)*	TRRP Tier 1 PCLs $^{GW}Soil_{ing}$ (mg/L)*	TRRP Tier 1 PCLs $^{GW}GW_{Ing}$ (mg/L)	TRRP Tier 1 PCLs $^{air}GW_{Inh-V}$ (mg/L)
Depth bgs	2.5 to 5.0 feet (AOC74-4)							
Chemicals of Concern								
TPH, TX1005, C6-C12	ND		NE	1,600	NL	65	0.98	1,800
TPH, TX1005, >C12-C28	ND		NE	2,300	NL	200	0.98	7,500
TPH, TX1005, >C28-C35	ND		NE	2,300	NL	200	0.98	NL
TPH, TX1005, >C6-C35	ND		NE	NL	NL	NL	NL	NL
Arsenic	6.96*		NE	24	5.9	5	0.01	NL
Barium	**826**		NE	8,100	330	440	2.0	NL
Lead	15		NE	500	15	3	0.015	NL
Methylene Chloride	ND		NE	390	NL	0.013	0.005	1,300

Bolded value indicated that concentration has exceeded the PCL for that chemical.
PCLs: Protective Concentration Levels
bgs: below ground surface
ND: non-detect
NL: No listed
BRL: Below Reporting Limits
NE: Not encountered
* Arsenic concentration measured below the site-specific background concentration calculated for this location.

TABLE 2O
MAXIMUM MEDIA CONTAMINATION RESULTS
Blanco Road (Jackson Keller to Hildebrand)
Areas of Concern "I" through "W" Alternate Bid

	AOC No. O Soil (mg/kg)	**AOC No. O** Soil (mg/kg)	**AOC No. O** Groundwater (mg/L)	TRRP Tier 1 PCLs $^{Tot}Soil_{comb}$ (mg/kg)*	Texas Specific Background Levels (mg/kg)*	TRRP Tier 1 PCLs $^{GW}Soil_{ing}$ (mg/L)*	TRRP Tier 1 PCLs $^{GW}GW_{Ing}$ (mg/L)	TRRP Tier 1 PCLs $^{air}GW_{Inh-V}$ (mg/L)
Depth bgs	2.5 to 5.0 feet (AOC73-2)							
Chemicals of Concern								
TPH, TX1005, C6-C12	ND		NE	1,600	NL	65	0.98	1,800
TPH, TX1005, >C12-C28	ND		NE	2,300	NL	200	0.98	7,500
TPH, TX1005, >C28-C35	ND		NE	2,300	NL	200	0.98	NL
TPH, TX1005, >C6-C35	ND		NE	NL	NL	NL	NL	NL
Arsenic	ND		NE	24	5.9	5	0.01	NL
Barium	**606**		NE	8,100	330	440	2.0	NL
Lead	ND		NE	500	15	3	0.015	NL
Methylene Chloride	0.015J		NE	390	NL	0.013	0.005	1,300

Bolded value indicated that concentration has exceeded the PCL for that chemical.
PCLs: Protective Concentration Levels
bgs: below ground surface
ND: non-detect
NL: No listed
BRL: Below Reporting Limits
NE: Not encountered
J: Target analyte was positively identified below the Method Quantification Limit and above the Standard Quantification Limit.

TABLE 2P
MAXIMUM MEDIA CONTAMINATION RESULTS
Blanco Road (Jackson Keller to Hildebrand)
Areas of Concern "I" through "W" Alternate Bid

	AOC No. P Soil (mg/kg)	**AOC No. P** Soil (mg/kg)	**AOC No. P** Groundwater (mg/L)	TRRP Tier 1 PCLs ${}^{Tot}Soil_{comb}$ (mg/kg)*	Texas Specific Background Levels (mg/kg)*	TRRP Tier 1 PCLs ${}^{GW}Soil_{ing}$ (mg/L)*	TRRP Tier 1 PCLs ${}^{GW}GW_{Ing}$ (mg/L)	TRRP Tier 1 PCLs ${}^{air}GW_{Inh-V}$ (mg/L)
Depth bgs	10-12.5 feet (AOC74-1)	10-12.5 feet (AOC74-5)						
Chemicals of Concern								
TPH, TX1005, C6-C12	**238**	**798**	NE	1,600	NL	65	0.98	1,800
TPH, TX1005, >C12-C28	ND	ND	NE	2,300	NL	200	0.98	7,500
TPH, TX1005, >C28-C35	ND	ND	NE	2,300	NL	200	0.98	NL
TPH, TX1005, >C6-C35	238	ND	NE	NL	NL	NL	NL	NL
Arsenic	ND	ND	NE	24	5.9	5	0.01	NL
Barium	ND	ND	NE	8,100	330	440	2.0	NL
Lead	ND	ND	NE	500	15	3	0.015	NL
Methylene Chloride	ND	ND	NE	390	NL	0.013	0.005	1,300

Bolded value indicated that concentration has exceeded the PCL for that chemical.
PCLs: Protective Concentration Levels
bgs: below ground surface
ND: non-detect
NL: No listed
BRL: Below Reporting Limits
NE: Not encountered

TABLE 2Q
MAXIMUM MEDIA CONTAMINATION RESULTS
Blanco Road (Jackson Keller to Hildebrand)
Areas of Concern "I" through "W" Alternate Bid

	AOC No. Q Soil (mg/kg)	**AOC No. Q** Soil (mg/kg)	**AOC No. Q** Groundwater (mg/L)	TRRP Tier 1 PCLs $^{Tot}Soil_{comb}$ (mg/kg)*	Texas Specific Background Levels (mg/kg)*	TRRP Tier 1 PCLs $^{GW}Soil_{ing}$ (mg/L)*	TRRP Tier 1 PCLs $^{GW}GW_{Ing}$ (mg/L)	TRRP Tier 1 PCLs $^{air}GW_{Inh-V}$ (mg/L)
Depth bgs	3-5 feet (AOC73-1)	2.5-5 feet (AOC70-3)						
Chemicals of Concern								
TPH, TX1005, C6-C12	ND	ND	NE	1,600	NL	65	0.98	1,800
TPH, TX1005, >C12-C28	ND	ND	NE	2,300	NL	200	0.98	7,500
TPH, TX1005, >C28-C35	ND	ND	NE	2,300	NL	200	0.98	NL
TPH, TX1005, >C6-C35	ND	ND	NE	NL	NL	NL	NL	NL
Arsenic	ND	ND	NE	24	5.9	5	0.01	NL
Barium	**1,450**	**458**	NE	8,100	330	440	2.0	NL
Lead	ND	ND	NE	500	15	3	0.015	NL
Methylene Chloride	ND	0.006J	NE	390	NL	0.013	0.005	1,300

Bolded value indicated that concentration has exceeded the PCL for that chemical.
PCLs: Protective Concentration Levels
bgs: below ground surface
ND: non-detect
NL: No listed
BRL: Below Reporting Limits
NE: Not encountered
J: Target analyte was positively identified below the Method Quantification Limit and above the Standard Quantification Limit.

TABLE 2R
MAXIMUM MEDIA CONTAMINATION RESULTS
Blanco Road (Jackson Keller to Hildebrand)
Areas of Concern "I" through "W" Alternate Bid

	AOC No. R Soil (mg/kg)	**AOC No. R** Soil (mg/kg)	**AOC No. R** Groundwater (mg/L)	TRRP Tier 1 PCLs ${}^{Tot}Soil_{comb}$ (mg/kg)*	Texas Specific Background Levels (mg/kg)*	TRRP Tier 1 PCLs ${}^{GW}Soil_{ing}$ (mg/L)*	TRRP Tier 1 PCLs ${}^{GW}GW_{Ing}$ (mg/L)	TRRP Tier 1 PCLs ${}^{air}GW_{Inh-V}$ (mg/L)
Depth bgs	1-2.5 feet (AOC70-1)							
Chemicals of Concern								
TPH, TX1005, C6-C12	ND		NE	1,600	NL	65	0.98	1,800
TPH, TX1005, >C12-C28	ND		NE	2,300	NL	200	0.98	7,500
TPH, TX1005, >C28-C35	ND		NE	2,300	NL	200	0.98	NL
TPH, TX1005, >C6-C35	ND		NE	NL	NL	NL	NL	NL
Arsenic	ND		NE	24	5.9	5	0.01	NL
Barium	ND		NE	8,100	330	440	2.0	NL
Lead	**23**		NE	500	15	3	0.015	NL
Methylene Chloride	ND		NE	390	NL	0.013	0.005	1,300

Bolded value indicated that concentration has exceeded the PCL for that chemical.
PCLs: Protective Concentration Levels
bgs: below ground surface
ND: non-detect
NL: No listed
BRL: Below Reporting Limits
NE: Not encountered

TABLE 2S
MAXIMUM MEDIA CONTAMINATION RESULTS
Blanco Road (Jackson Keller to Hildebrand)
Areas of Concern "I" through "W" Alternate Bid

	AOC No. S Soil (mg/kg)	**AOC No. S** Soil (mg/kg)	**AOC No. S** Groundwater (mg/L)	TRRP Tier 1 PCLs $^{Tot}Soil_{comb}$ (mg/kg)*	Texas Specific Background Levels (mg/kg)*	TRRP Tier 1 PCLs $^{GW}Soil_{ing}$ (mg/L)*	TRRP Tier 1 PCLs $^{GW}GW_{Ing}$ (mg/L)	TRRP Tier 1 PCLs $^{air}GW_{Inh-V}$ (mg/L)
Depth bgs	1-2.5 feet (AOC67-1)							
Chemicals of Concern								
TPH, TX1005, C6-C12	ND		NE	1,600	NL	65	0.98	1,800
TPH, TX1005, >C12-C28	ND		NE	2,300	NL	200	0.98	7,500
TPH, TX1005, >C28-C35	ND		NE	2,300	NL	200	0.98	NL
TPH, TX1005, >C6-C35	ND		NE	NL	NL	NL	NL	NL
Arsenic	ND		NE	24	5.9	5	0.01	NL
Barium	ND		NE	8,100	330	440	2.0	NL
Lead	**20.6**		NE	500	15	3	0.015	NL
Methylene Chloride	ND		NE	390	NL	0.013	0.005	1,300

Bolded value indicated that concentration has exceeded the PCL for that chemical.
PCLs: Protective Concentration Levels
bgs: below ground surface
ND: non-detect
NL: No listed
BRL: Below Reporting Limits
NE: Not encountered

TABLE 2T
MAXIMUM MEDIA CONTAMINATION RESULTS
Blanco Road (Jackson Keller to Hildebrand)
Areas of Concern "I" through "W" Alternate Bid

	AOC No. T Soil (mg/kg)	**AOC No. T** Soil (mg/kg)	**AOC No. T** Groundwater (mg/L)	TRRP Tier 1 PCLs ${}^{Tot}Soil_{comb}$ (mg/kg)*	Texas Specific Background Levels (mg/kg)*	TRRP Tier 1 PCLs ${}^{GW}Soil_{ing}$ (mg/L)*	TRRP Tier 1 PCLs ${}^{GW}GW_{Ing}$ (mg/L)	TRRP Tier 1 PCLs ${}^{air}GW_{Inh-V}$ (mg/L)
Depth bgs	5-7.5 feet (AOC64-2)							
Chemicals of Concern								
TPH, TX1005, C6-C12	ND		ND*	1,600	NL	65	0.98	1,800
TPH, TX1005, >C12-C28	ND		ND*	2,300	NL	200	0.98	7,500
TPH, TX1005, >C28-C35	ND		ND*	2,300	NL	200	0.98	NL
TPH, TX1005, >C6-C35	ND		ND*	NL	NL	NL	NL	NL
Arsenic	ND		ND*	24	5.9	5	0.01	NL
Barium	**645**		ND*	8,100	330	440	2.0	NL
Lead	ND		ND*	500	15	3	0.015	NL
Methylene Chloride	0.005J		ND*	390	NL	0.013	0.005	1,300

Bolded value indicated that concentration has exceeded the PCL for that chemical.
PCLs: Protective Concentration Levels
bgs: below ground surface
ND: non-detect
NL: No listed
BRL: Below Reporting Limits
NE: Not encountered
J: Target analyte was positively identified below the Method Quantification Limit and above the Standard Quantification Limit.
*** The only constituent found in groundwater was 0.006 mg/L MtBE**

TABLE 2U
MAXIMUM MEDIA CONTAMINATION RESULTS
Blanco Road (Jackson Keller to Hildebrand)
Areas of Concern "I" through "W" Alternate Bid

	AOC No. U Soil (mg/kg)	**AOC No. U** Soil (mg/kg)	**AOC No. U** Groundwater (mg/L)	TRRP Tier 1 PCLs ${}^{Tot}Soil_{comb}$ (mg/kg)*	Texas Specific Background Levels (mg/kg)*	TRRP Tier 1 PCLs ${}^{GW}Soil_{ing}$ (mg/L)*	TRRP Tier 1 PCLs ${}^{GW}GW_{Ing}$ (mg/L)	TRRP Tier 1 PCLs ${}^{air}GW_{Inh-V}$ (mg/L)
Depth bgs	5-7.5 feet (AOC64-2)	7.5-10 feet (AOC64-3)						
Chemicals of Concern								
TPH, TX1005, C6-C12	ND	ND	ND*	1,600	NL	65	0.98	1,800
TPH, TX1005, >C12-C28	ND	ND	ND*	2,300	NL	200	0.98	7,500
TPH, TX1005, >C28-C35	ND	ND	ND*	2,300	NL	200	0.98	NL
TPH, TX1005, >C6-C35	ND	ND	ND*	NL	NL	NL	NL	NL
Arsenic	ND	ND	ND*	24	5.9	5	0.01	NL
Barium	**645**	**709**	ND*	8,100	330	440	2.0	NL
Lead	ND	**15.9**	ND*	500	15	3	0.015	NL
Methylene Chloride	ND	ND	ND*	390	NL	0.013	0.005	1,300

Bolded value indicated that concentration has exceeded the PCL for that chemical.
PCLs: Protective Concentration Levels
bgs: below ground surface
ND: non-detect
NL: No listed
BRL: Below Reporting Limits
NE: Not encountered
J: Target analyte was positively identified below the Method Quantification Limit and above the Standard Quantification Limit.
*** The only constituent found in groundwater was 0.006 mg/L MtBE**

TABLE 2V
MAXIMUM MEDIA CONTAMINATION RESULTS
Blanco Road (Jackson Keller to Hildebrand)
Areas of Concern "I" through "W" Alternate Bid

	AOC No. V Soil (mg/kg)	**AOC No. V** Soil (mg/kg)	**AOC No. V** Groundwater (mg/L)	TRRP Tier 1 PCLs $^{Tot}Soil_{comb}$ (mg/kg)*	Texas Specific Background Levels (mg/kg)*	TRRP Tier 1 PCLs $^{GW}Soil_{ing}$ (mg/L)*	TRRP Tier 1 PCLs $^{GW}GW_{Ing}$ (mg/L)	TRRP Tier 1 PCLs $^{air}GW_{Inh-V}$ (mg/L)
Depth bgs	5-7.5 feet (AOC60-1)	5-7.5 feet (AOC61-2)						
Chemicals of Concern								
TPH, TX1005, C6-C12	**221 (at 7.5 feet)**	**104**	ND*	1,600	NL	65	0.98	1,800
TPH, TX1005, >C12-C28	ND	ND	ND*	2,300	NL	200	0.98	7,500
TPH, TX1005, >C28-C35	ND	ND	ND*	2,300	NL	200	0.98	NL
TPH, TX1005, >C6-C35	221	104	**13.1**	NL	NL	NL	NL	NL
Arsenic	ND	ND	ND*	24	5.9	5	0.01	NL
Barium	**552**	**709**	ND*	8,100	330	440	2.0	NL
Lead	ND	**15.9**	ND*	500	15	3	0.015	NL
Methylene Chloride	ND	ND	ND*	390	NL	0.013	0.005	1,300

Bolded value indicated that concentration has exceeded the PCL for that chemical.
PCLs: Protective Concentration Levels
bgs: below ground surface
ND: non-detect
NL: No listed
BRL: Below Reporting Limits
NE: Not encountered
J: Target analyte was positively identified below the Method Quantification Limit and above the Standard Quantification Limit.
*** Groundwater also exhibited 3.46 mg/L MtBE and 0.3645 mg/L Benzene.**

TABLE 2W
MAXIMUM MEDIA CONTAMINATION RESULTS
Blanco Road (Jackson Keller to Hildebrand)
Areas of Concern "I" through "W" Alternate Bid

	AOC No. W Soil (mg/kg)	**AOC No. W** Soil (mg/kg)	**AOC No. W** Groundwater (mg/L)	TRRP Tier 1 PCLs $^{Tot}Soil_{comb}$ (mg/kg)*	Texas Specific Background Levels (mg/kg)*	TRRP Tier 1 PCLs $^{GW}Soil_{ing}$ (mg/L)*	TRRP Tier 1 PCLs $^{GW}GW_{Ing}$ (mg/L)	TRRP Tier 1 PCLs $^{air}GW_{Inh-V}$ (mg/L)
Depth bgs	2.5-5 feet (AOC58-1)	2.5-5 feet (AOC58-2)						
Chemicals of Concern								
TPH, TX1005, C6-C12	ND	ND	NE	1,600	NL	65	0.98	1,800
TPH, TX1005, >C12-C28	ND	ND	NE	2,300	NL	200	0.98	7,500
TPH, TX1005, >C28-C35	ND	ND	NE	2,300	NL	200	0.98	NL
TPH, TX1005, >C6-C35	ND	ND	NE	NL	NL	NL	NL	NL
Arsenic	ND	ND	NE	24	5.9	5	0.01	NL
Barium	ND	**1,050 in sample from 58-3 at 5 feet**	NE	8,100	330	440	2.0	NL
Lead	**25.9**	**25.9**	NE	500	15	3	0.015	NL
Methylene Chloride	0.017*	0.009*	NE	390	NL	0.013	0.005	1,300

Bolded value indicated that concentration has exceeded the PCL for that chemical.
PCLs: Protective Concentration Levels
bgs: below ground surface
ND: non-detect
NL: No listed
BRL: Below Reporting Limits
NE: Not encountered
***** Lab reported these values might not be accurate and the samples might have not contained Methylene Chloride.

This information might be found at the Texas Commission of Environmental Quality (TCEQ) web site [http://www.tceq.state.tx.us/remediation/trrp/trrppcls.html]. The chemicals listed in this table only reflect partial information of the potential chemicals that may be found during the construction activities. It is the contractor environmental consultant's responsibility to monitor the area where the potential contaminants exist, as it is outlined in this document.

FIGURES

FIGURE 1

PROJECT LIMITS

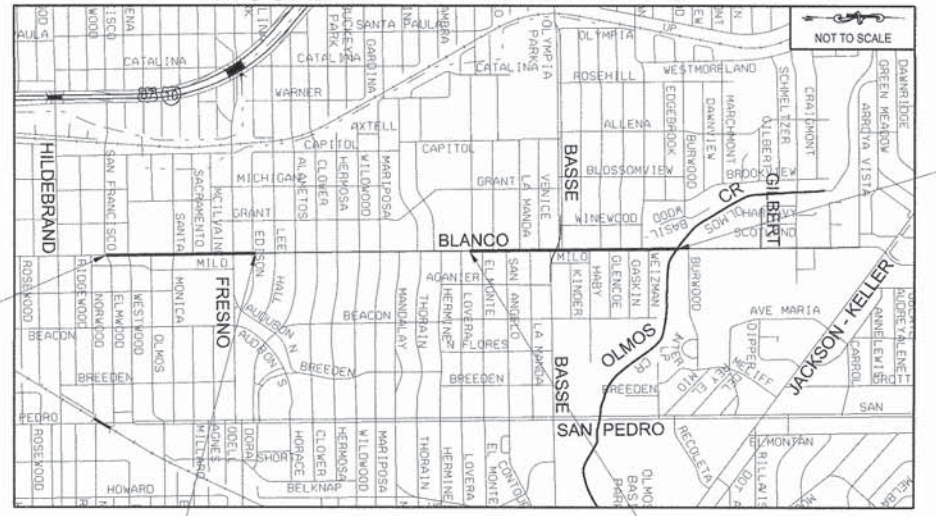
CITY OF SAN ANTONIO

DEPARTMENT OF CAPITAL IMPROVEMENT MANAGEMENT SERVICES

BLANCO RD (FROM HILDEBRAND TO JACKSON-KELLER)

TOTAL LENGTH OF PROJECT: 12,112 ft / 2.29 MI

FIGURE 1 PROJECT LIMITS



BEGIN ALTERNATE BID PROJECT: STA 17+34.53

END ALTERNATE BID PROJECT: STA 42+30.00

END BASE BID PROJECT: STA 107+76.79

BEGIN BASE BID PROJECT: STA 75+85.00

Prepared By:

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

People
Build San Antonio
Process
Systems

OUR MISSION: TOGETHER, DEDICATED TO OUR COMMUNITY... BUILDING A GREAT SAN ANTONIO

.../Blanco_TSH_AOC_contam.dgn 12/16/2011 10:33:26 AM

FIGURES 2 THROUGH 7

BASE BID

CROSS SECTIONS OF ENVIRONMENTAL AREAS OF CONCERN "A" THROUGH "H"

FOR LOCATION OF UNDERGROUND ELECTRIC AND GAS FACILITIES, TELEPHONE CABLES, AND TIME WARNER CABLE TV CALL TEXAS STATE WIDE ONE CALL LOCATOR NUMBER 1-800-545-6005 48 HOURS PRIOR BEFORE BEGINNING ANY EXCAVATION.

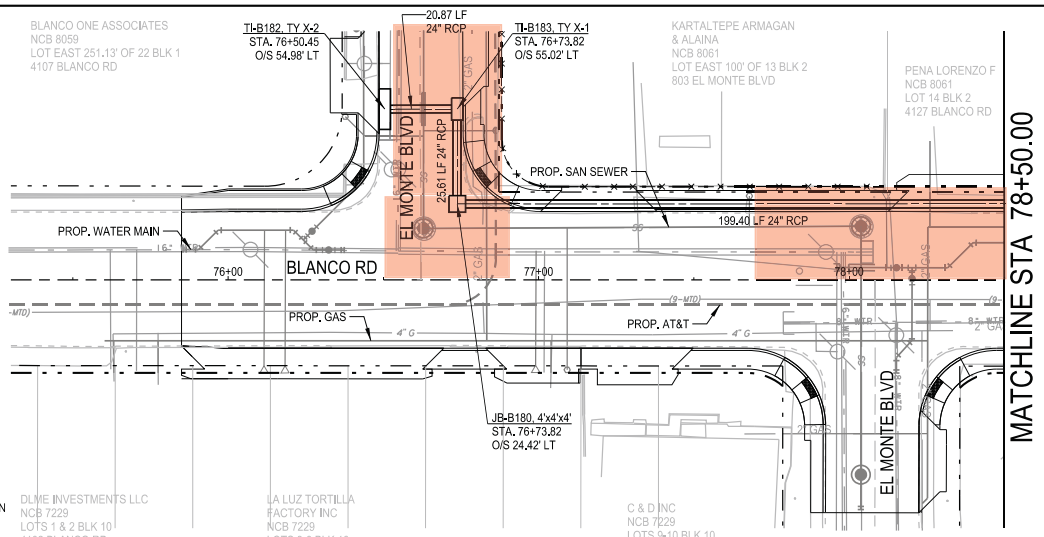
DUE TO FEDERAL REGULATION TITLE 49, PART 192.181, C.P.S. MUST MAINTAIN ACCESS TO GAS VALVES AT ALL TIMES. THE CONTRACTOR MUST PROTECT AND WORK AROUND ANY GAS VALVES THAT ARE IN THE PROJECT AREA.

THE CONTRACTOR WILL BE RESPONSIBLE FOR PROTECTING C.P.S. OVERHEAD AND UNDER-GROUND ELECTRIC FACILITIES IF ADJACENT TO WORK AREAS.

THE CONTRACTOR WILL HAVE RESPONSIBILITY TO PROTECT AND SUPPORT CABLE TV AND TELEPHONE COMPANY PLANT DURING CONSTRUCTION.

THE EXISTENCE AND LOCATION OF UTILITIES INDICATED ON THE PLAN ARE TAKEN FROM AVAILABLE RECORDS AND ARE NOT GUARANTEED TO BE ACCURATE.

CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL/SAFETY EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICALINFORMATION AND THE ANTICAPATED INSTALLATION SITE(S) IN ORDER TO DEVELOP THE CONTRACTOR'S PLANS TO IMPLEMENT THE PROJECT DESCRIBED IN THE CONTRACT COUMDNTS. THE CONTRACTOR'S PLANS SHALL PROVIED FOR ADEQUATE TRENCH SAFETY SYSTEMS THAT COMPLY WITH, AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. CONTRACTOR AND/OR CONTRACOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL DEVELOP AND IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION



SYSTEM B

SCALE
HORZ: 1" = 40'
VERT: 1" = 10'

PLAN VIEW LEGEND

CI = CURB INLET
JB = JUNCTION BOX
MH = MANHOLE
TI = TRAFFIC INLET

- PROPOSED STRUCTURE
- PROPOSED CURB
- EXIST EDGE OF ROADWAY
- EXISTING FEATURES
- EXISTING RIGHT OF WAY
- PROPOSED RIGHT OF WAY
- UG TEL — UNDGR TELEPHONE
- X GAS — GAS LINE
- X SS — SANITARY SEWER LINE
- X WTR — WATER LINE
- UG FO — UNDGR FIBER OPTIC
- x — x — x — FENCE

PROPOSED WATER, SANITARY SEWER, TELEPHONE, AND GAS UTILITIES SHOWN ARE APPROXIMATE. SEE RELEVENT PLANS FOR DETAILS.

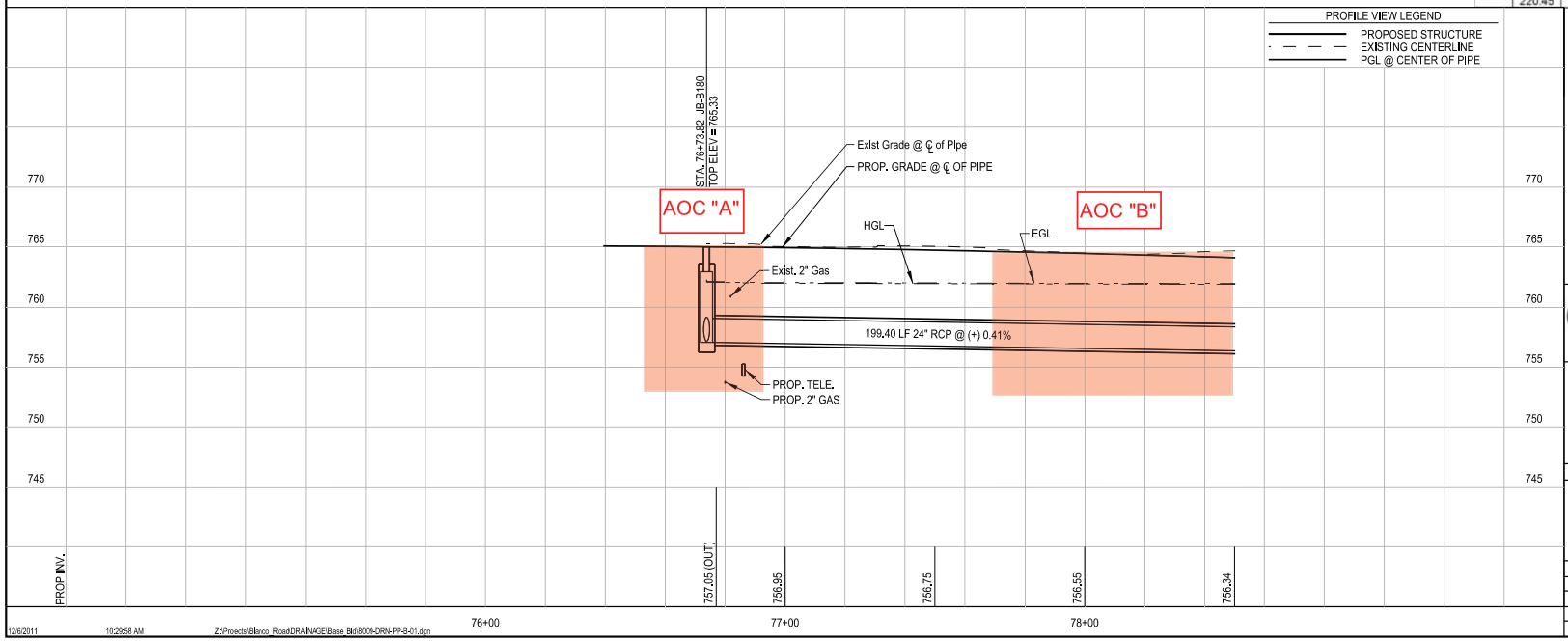
FINAL	EST	UNIT	DESCRIPTION
	287.4	CY	Excavation, Trenching and Backfilling*
	220.45	LF	Reinforced Concrete Pipe (24") Class III
	1	EA	Junction Box 4'x4'x4'
	1	EA	Ty X-1
	1	EA	Ty X-2
	18.0	CY	Gravel Subgrade Filler
	18.2	CY	Flowable Backfil
	220.45	LF	Trench Excavation Safety Protection

*NOT PAID FOR DIRECTLY, SUBSIDIARY TO VARIOUS BID ITEMS

20 10 0 20 40 60
1" = 40'

PROFILE VIEW LEGEND

- PROPOSED STRUCTURE
- EXISTING CENTERLINE
- PGL @ CENTER OF PIPE



MAESTAS & ASSOCIATES, INC
11550 IH 10 WEST, STE. 320 SAN ANTONIO, TX 78230
(210) 366-1988 (210) 366-1980 fax TBPE No.: F-333

CITY OF SAN ANTONIO
CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT

BLANCO ROAD SEG 3 BASE BID

FIGURE 2
AOC "A" & "B"

12/6/2011 10:29:58 AM Z:\Projects\Blanco_Road\DRAINAGE\Base_Bid\8009-DRN-PP-B-01.dgn

FOR LOCATION OF UNDERGROUND ELECTRIC AND GAS FACILITIES, TELEPHONE CABLES, AND TIME WARNER CABLE TV CALL TEXAS STATE WIDE ONE CALL LOCATOR NUMBER 1-800-545-6005 48 HOURS PRIOR BEFORE BEGINNING ANY EXCAVATION.

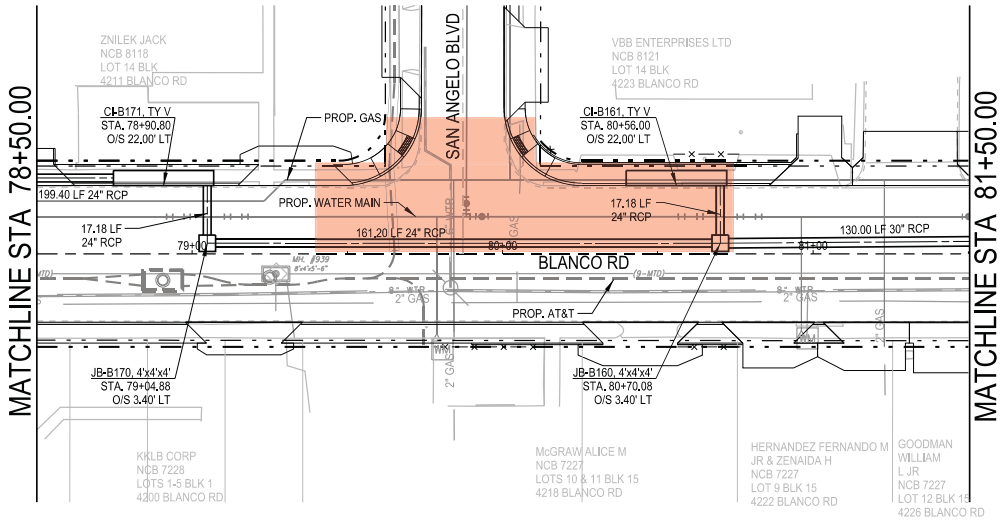
DUE TO FEDERAL REGULATION TITLE 49, PART 192.181, C.P.S. MUST MAINTAIN ACCESS TO GAS VALVES AT ALL TIMES. THE CONTRACTOR MUST PROTECT AND WORK AROUND ANY GAS VALVES THAT ARE IN THE PROJECT AREA.

THE CONTRACTOR WILL BE RESPONSIBLE FOR PROTECTING C.P.S. OVERHEAD AND UNDER-GROUND ELECTRIC FACILITIES IF ADJACENT TO WORK AREAS.

THE CONTRACTOR WILL HAVE RESPONSIBILITY TO PROTECT AND SUPPORT CABLE TV AND TELEPHONE COMPANY PLANT DURING CONSTRUCTION.

THE EXISTENCE AND LOCATION OF UTILITIES INDICATED ON THE PLAN ARE TAKEN FROM AVAILABLE RECORDS AND ARE NOT GUARANTEED TO BE ACCURATE.

CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL/SAFETY EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICALINFORMATION AND THE ANTICAPATED INSTALLATION SITE(S) IN ORDER TO DEVELOP THE CONTRACTOR'S PLANS TO IMPLEMENT THE PROJECT DESCRIBED IN THE CONTRACT COUMDNTS. THE CONTRACTOR'S PLANS SHALL PROVIED FOR ADEQUATE TRENCH SAFETY SYSTEMS THAT COMPLY WITH, AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. CONTRACTOR AND/OR CONTRACOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL DEVELOP AND IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION



SYSTEM B

SCALE
HORZ: 1" = 40'
VERT: 1" = 10'

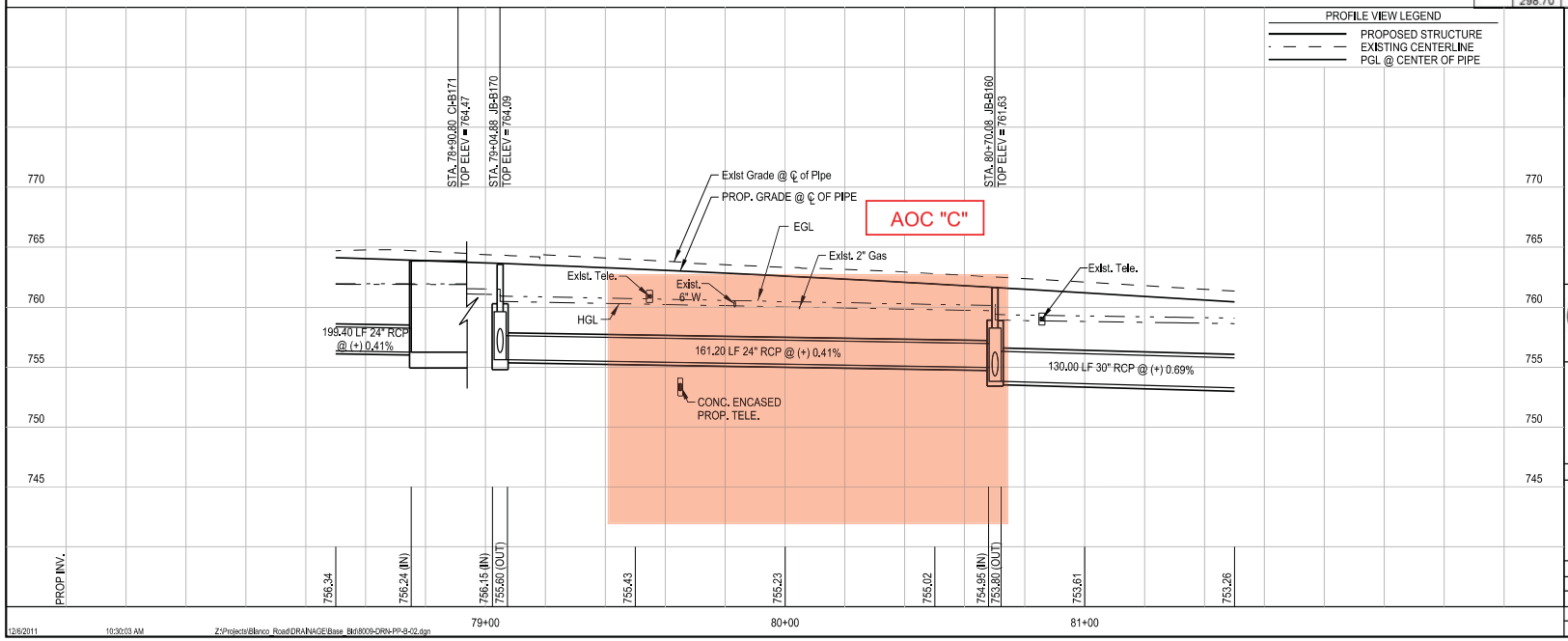
PLAN VIEW LEGEND

CI = CURB INLET
JB = JUNCTION BOX
MH = MANHOLE
TI = TRAFFIC INLET

- PROPOSED STRUCTURE
- PROPOSED CURB
- EXIST EDGE OF ROADWAY
- EXISTING FEATURES
- EXISTING RIGHT OF WAY
- PROPOSED RIGHT OF WAY
- UG TEL — UNDGR TELEPHONE
- X GAS — GAS LINE
- X SS — SANITARY SEWER LINE
- X WTR — WATER LINE
- UG FO — UNDGR FIBER OPTIC
- FENCE

PROPOSED WATER, SANITARY SEWER, TELEPHONE, AND GAS UTILITIES SHOWN ARE APPROXIMATE. SEE RELEVENT PLANS FOR DETAILS.

FINAL	EST	UNIT	DESCRIPTION
	302.2	CY	Excavation, Trenching and Backfilling*
	220.78	LF	Reinforced Concrete Pipe (24") Class III
	77.92	LF	Reinforced Concrete Pipe (30") Class III
	2	EA	Junction Box 4'x4'x4'
	2	EA	Inlet (TY V)
	25.9	CY	Gravel Subgrade Filler
	28.3	CY	Flowable Backfill
	298.70	LF	Trench Excavation Safety Protection



PROFILE VIEW LEGEND

- PROPOSED STRUCTURE
- EXISTING CENTERLINE
- PGL @ CENTER OF PIPE

*NOT PAID FOR DIRECTLY, SUBSIDIARY TO VARIOUS BID ITEMS

20 10 0 20 40 60
1" = 40'

MAESTAS & ASSOCIATES, INC
11550 IH 10 WEST, STE. 320 SAN ANTONIO, TX 78230
(210) 366-1988 (210) 366-1980 fax TBPE No.: F-333

CITY OF SAN ANTONIO
CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT

BLANCO ROAD SEG 3 BASE BID

FIGURE 3
AOC "C"

12/6/2011 10:30:03 AM Z:\Projects\Blanco_Road\DRAINAGE\Base_Bid\8009-DRN-PP-B-02.dgn

FOR LOCATION OF UNDERGROUND ELECTRIC AND GAS FACILITIES, TELEPHONE CABLES, AND TIME WARNER CABLE TV CALL TEXAS STATE WIDE ONE CALL LOCATOR NUMBER 1-800-545-6005 48 HOURS PRIOR BEFORE BEGINNING ANY EXCAVATION.

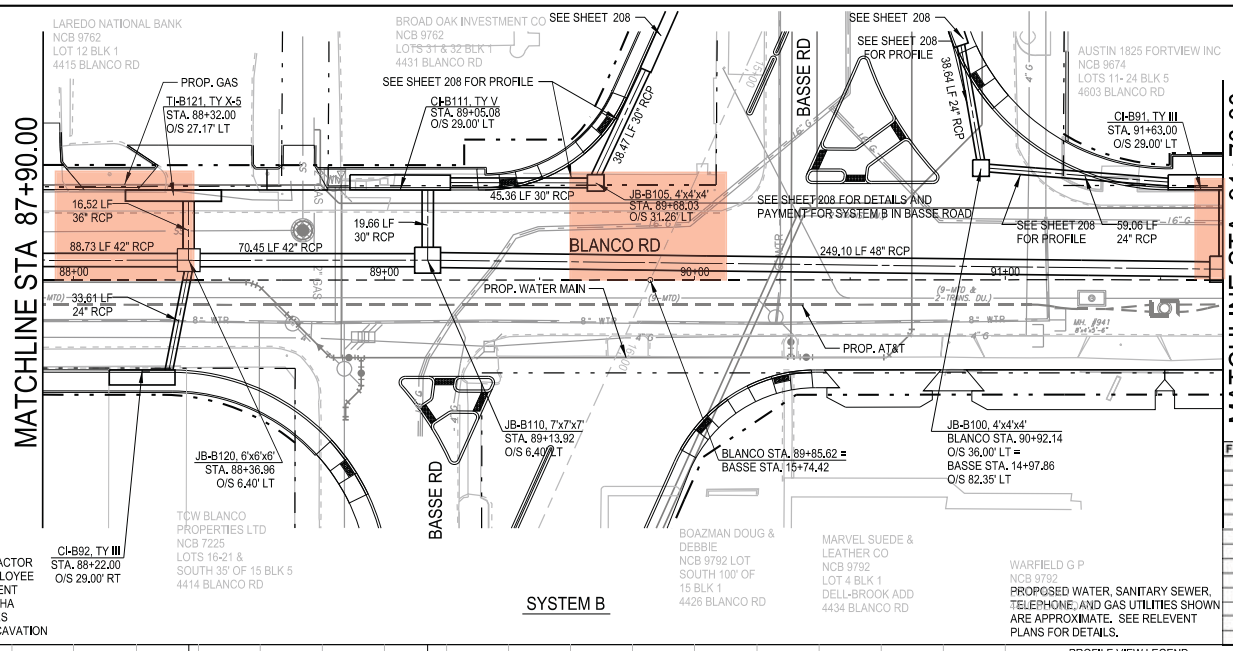
DUE TO FEDERAL REGULATION TITLE 49, PART 192.181, C.P.S. MUST MAINTAIN ACCESS TO GAS VALVES AT ALL TIMES. THE CONTRACTOR MUST PROTECT AND WORK AROUND ANY GAS VALVES THAT ARE IN THE PROJECT AREA.

THE CONTRACTOR WILL BE RESPONSIBLE FOR PROTECTING C.P.S. OVERHEAD AND UNDER-GROUND ELECTRIC FACILITIES IF ADJACENT TO WORK AREAS.

THE CONTRACTOR WILL HAVE RESPONSIBILITY TO PROTECT AND SUPPORT CABLE TV AND TELEPHONE COMPANY PLANT DURING CONSTRUCTION.

THE EXISTENCE AND LOCATION OF UTILITIES INDICATED ON THE PLAN ARE TAKEN FROM AVAILABLE RECORDS AND ARE NOT GUARANTEED TO BE ACCURATE.

CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL/SAFETY EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICALINFORMATION AND THE ANTICAPATED INSTALLATION SITE(S) IN ORDER TO DEVELOP THE CONTRACTOR'S PLANS TO IMPLEMENT THE PROJECT DESCRIBED IN THE CONTRACT COUMDNTS. THE CONTRACTOR'S PLANS SHALL PROVIED FOR ADEQUATE TRENCH SAFETY SYSTEMS THAT COMPLY WITH, AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. CONTRACTOR AND/OR CONTRACOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL DEVELOP AND IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION



SYSTEM B

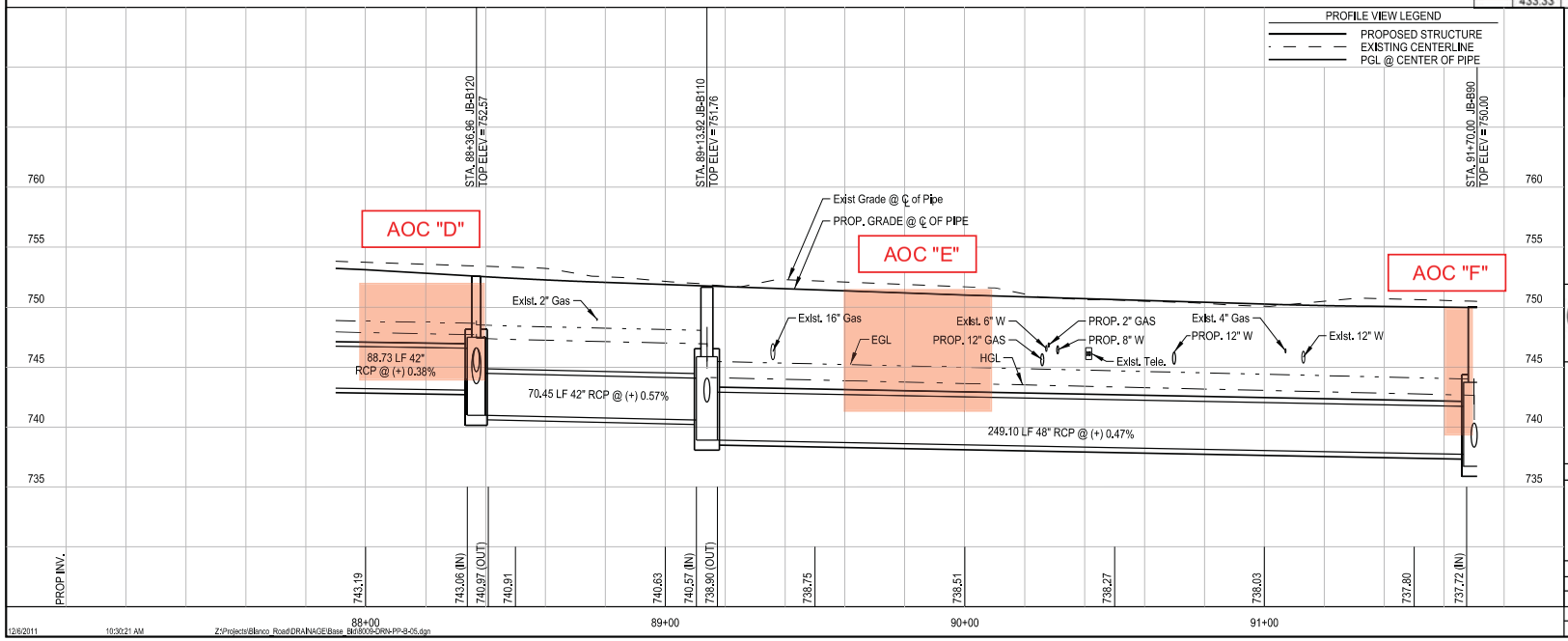
PLAN VIEW LEGEND

CI = CURB INLET
JB = JUNCTION BOX
MH = MANHOLE
TI = TRAFFIC INLET

- PROPOSED STRUCTURE
- PROPOSED CURB
- EXIST EDGE OF ROADWAY
- EXISTING FEATURES
- EXISTING RIGHT OF WAY
- PROPOSED RIGHT OF WAY
- UG TEL — UNDGR TELEPHONE
- X GAS — GAS LINE
- X SS — SANITARY SEWER LINE
- X WTR — WATER LINE
- UG FO — UNDGR FIBER OPTIC
- FENCE

SCALE
HORZ: 1" = 40'
VERT: 1" = 10'

FINAL	EST	UNIT	DESCRIPTION
	120.4	CY	Excavation, Trenching and Backfilling*
	33.61	LF	Reinforced Concrete Pipe (24") Class III
	36.20	LF	Reinforced Concrete Pipe (36") Class III
	114.42	LF	Reinforced Concrete Pipe (42") Class III
	249.10	LF	Reinforced Concrete Pipe (48") Class IV
	1	EA	Junction Box 5'x6'x6'
	1	EA	Junction Box 7'x7'x7'
	2	EA	Inlet (TY III)
	1	EA	Inlet (TY V)
	1	EA	Ty X-5
	64.5	CY	Gravel Subgrade Filler
	215.3	CY	Flowable Backfil
	433.33	LF	Trench Excavation Safety Protection



*NOT PAID FOR DIRECTLY, SUBSIDIARY TO VARIOUS BID ITEMS

20 10 0 20 40 60
1" = 40'

MAESTAS & ASSOCIATES, INC
11550 IH 10 WEST, STE. 320 SAN ANTONIO, TX 78230
(210) 366-1988 (210) 366-1980 fax TBPE No.: F-333

CITY OF SAN ANTONIO
CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT

BLANCO ROAD SEG 3 BASE BID

FIGURE 4
AOC "D","E" & "F"

8009-DRN-PP-B-05.dgn 12/6/2011 10:30:22 AM

FOR LOCATION OF UNDERGROUND ELECTRIC AND GAS FACILITIES, TELEPHONE CABLES, AND TIME WARNER CABLE TV CALL TEXAS STATE WIDE ONE CALL LOCATOR NUMBER 1-800-545-6005 48 HOURS PRIOR BEFORE BEGINNING ANY EXCAVATION.

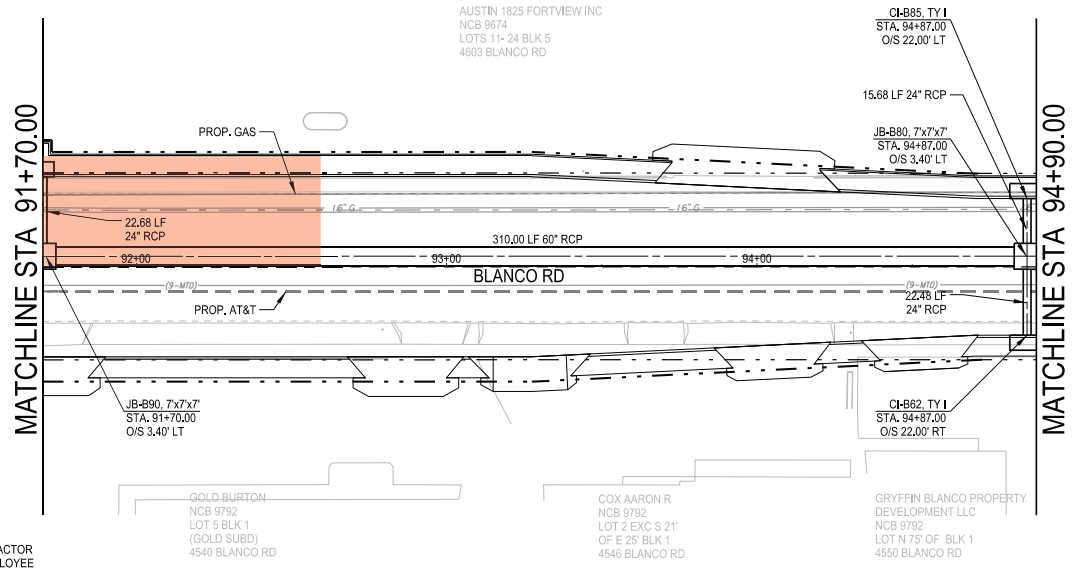
DUE TO FEDERAL REGULATION TITLE 49, PART 192.181, C.P.S. MUST MAINTAIN ACCESS TO GAS VALVES AT ALL TIMES. THE CONTRACTOR MUST PROTECT AND WORK AROUND ANY GAS VALVES THAT ARE IN THE PROJECT AREA.

THE CONTRACTOR WILL BE RESPONSIBLE FOR PROTECTING C.P.S. OVERHEAD AND UNDER-GROUND ELECTRIC FACILITIES IF ADJACENT TO WORK AREAS.

THE CONTRACTOR WILL HAVE RESPONSIBILITY TO PROTECT AND SUPPORT CABLE TV AND TELEPHONE COMPANY PLANT DURING CONSTRUCTION.

THE EXISTENCE AND LOCATION OF UTILITIES INDICATED ON THE PLAN ARE TAKEN FROM AVAILABLE RECORDS AND ARE NOT GUARANTEED TO BE ACCURATE.

CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL/SAFETY EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICALINFORMATION AND THE ANTICAPATED INSTALLATION SITE(S) IN ORDER TO DEVELOP THE CONTRACTOR'S PLANS TO IMPLEMENT THE PROJECT DESCRIBED IN THE CONTRACT COUMDNTS. THE CONTRACTOR'S PLANS SHALL PROVIED FOR ADEQUATE TRENCH SAFETY SYSTEMS THAT COMPLY WITH, AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. CONTRACTOR AND/OR CONTRACOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL DEVELOP AND IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION



SYSTEM B

SCALE
HORZ: 1" = 40'
VERT: 1" = 10'

PLAN VIEW LEGEND

CI = CURB INLET
JB = JUNCTION BOX
MH = MANHOLE
TI = TRAFFIC INLET

- PROPOSED STRUCTURE
- PROPOSED CURB
- EXIST EDGE OF ROADWAY
- EXISTING FEATURES
- EXISTING RIGHT OF WAY
- PROPOSED RIGHT OF WAY
- UG TEL — UNDGR TELEPHONE
- X GAS — GAS LINE
- X SS — SANITARY SEWER LINE
- X WTR — WATER LINE
- UG FO — UNDGR FIBER OPTIC
- FENCE

PROPOSED WATER, SANITARY SEWER, TELEPHONE, AND GAS UTILITIES SHOWN ARE APPROXIMATE. SEE RELEVENT PLANS FOR DETAILS.

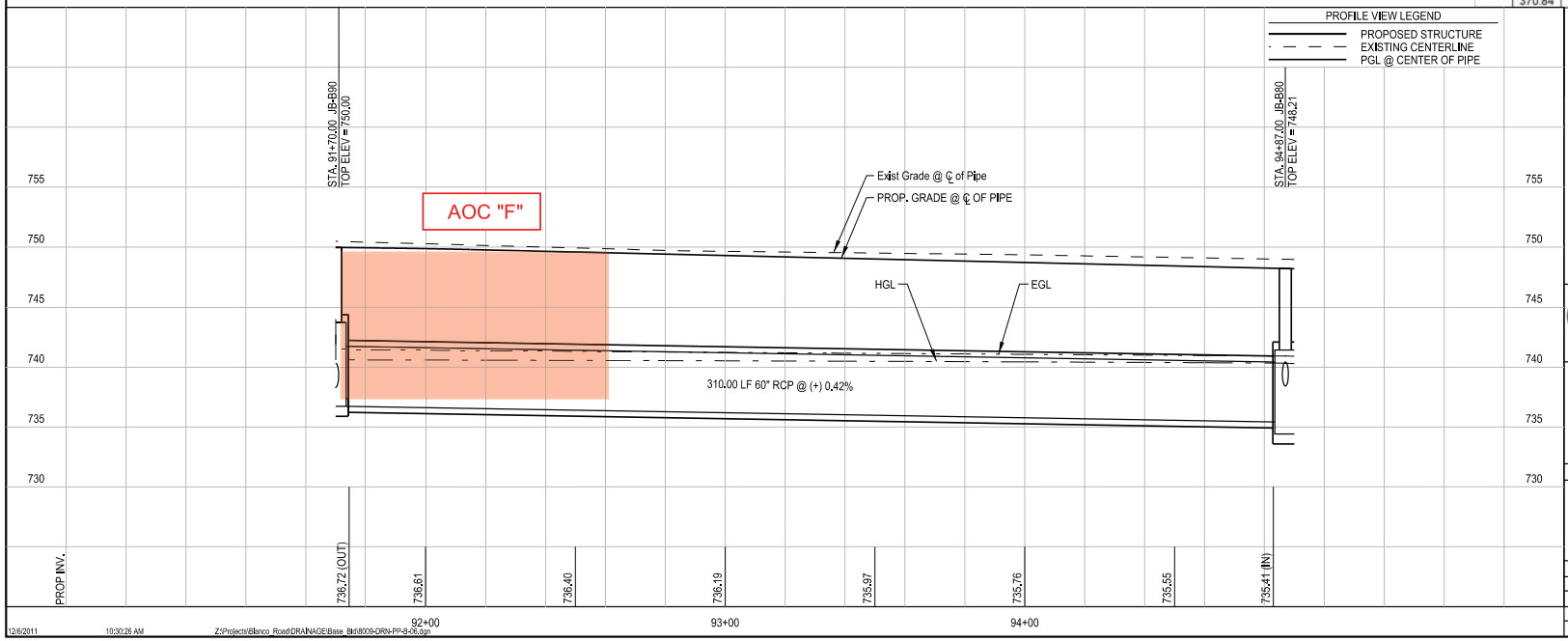
FINAL	EST	UNIT	DESCRIPTION
	1754.6	CY	Excavation, Trenching and Backfilling*
	38.16	LF	Reinforced Concrete Pipe (24") Class III
	22.68	LF	Reinforced Concrete Pipe (36") Class III
	310.00	LF	Reinforced Concrete Pipe (60") Class III
	2	EA	Junction Box 7'x7'x7'
	2	EA	Inlet (TY I)
	68.6	CY	Gravel Subgrade Filler
	266.4	CY	Flowable Backfil
	370.84	LF	Trench Excavation Safety Protection

PROFILE VIEW LEGEND

- PROPOSED STRUCTURE
- EXISTING CENTERLINE
- PGL @ CENTER OF PIPE

*NOT PAID FOR DIRECTLY, SUBSIDIARY TO VARIOUS BID ITEMS

20 10 0 20 40 60
1" = 40'



MAESTAS & ASSOCIATES, INC
11550 IH 10 WEST, STE. 320 SAN ANTONIO, TX 78230
(210) 366-1988 (210) 366-1980 fax TBPE No.: F-333

CITY OF SAN ANTONIO
CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT

BLANCO ROAD SEG 3 BASE BID

FIGURE 5
AOC "F"

12/6/2011 10:30:26 AM Z:\Projects\Blanco_Road\DRAINAGE\Base_Bid\8009-DRN-PP-B-06.dgn

FOR LOCATION OF UNDERGROUND ELECTRIC AND GAS FACILITIES, TELEPHONE CABLES, AND TIME WARNER CABLE TV CALL TEXAS STATE WIDE ONE CALL LOCATOR NUMBER 1-800-545-6005 48 HOURS PRIOR BEFORE BEGINNING ANY EXCAVATION.

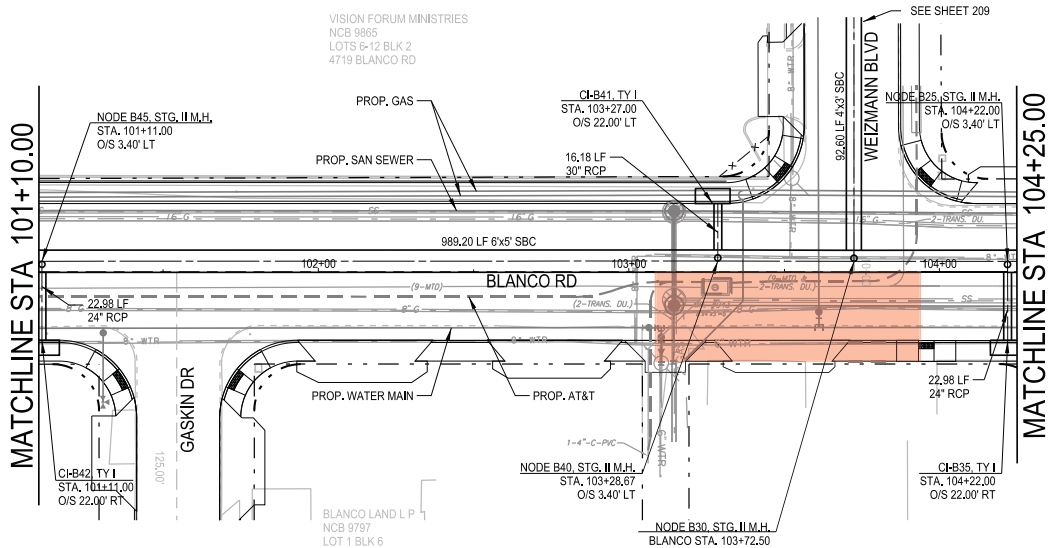
DUE TO FEDERAL REGULATION TITLE 49, PART 192.181, C.P.S. MUST MAINTAIN ACCESS TO GAS VALVES AT ALL TIMES. THE CONTRACTOR MUST PROTECT AND WORK AROUND ANY GAS VALVES THAT ARE IN THE PROJECT AREA.

THE CONTRACTOR WILL BE RESPONSIBLE FOR PROTECTING C.P.S. OVERHEAD AND UNDER-GROUND ELECTRIC FACILITIES IF ADJACENT TO WORK AREAS.

THE CONTRACTOR WILL HAVE RESPONSIBILITY TO PROTECT AND SUPPORT CABLE TV AND TELEPHONE COMPANY PLANT DURING CONSTRUCTION.

THE EXISTENCE AND LOCATION OF UTILITIES INDICATED ON THE PLAN ARE TAKEN FROM AVAILABLE RECORDS AND ARE NOT GUARANTEED TO BE ACCURATE.

CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL/SAFETY EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICALINFORMATION AND THE ANTICAPATED INSTALLATION SITE(S) IN ORDER TO DEVELOP THE CONTRACTOR'S PLANS TO IMPLEMENT THE PROJECT DESCRIBED IN THE CONTRACT COUMDNTS. THE CONTRACTOR'S PLANS SHALL PROVIED FOR ADEQUATE TRENCH SAFETY SYSTEMS THAT COMPLY WITH, AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. CONTRACTOR AND/OR CONTRACOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL DEVELOP AND IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION



SYSTEM B

SCALE
HORZ: 1" = 40'
VERT: 1" = 10'

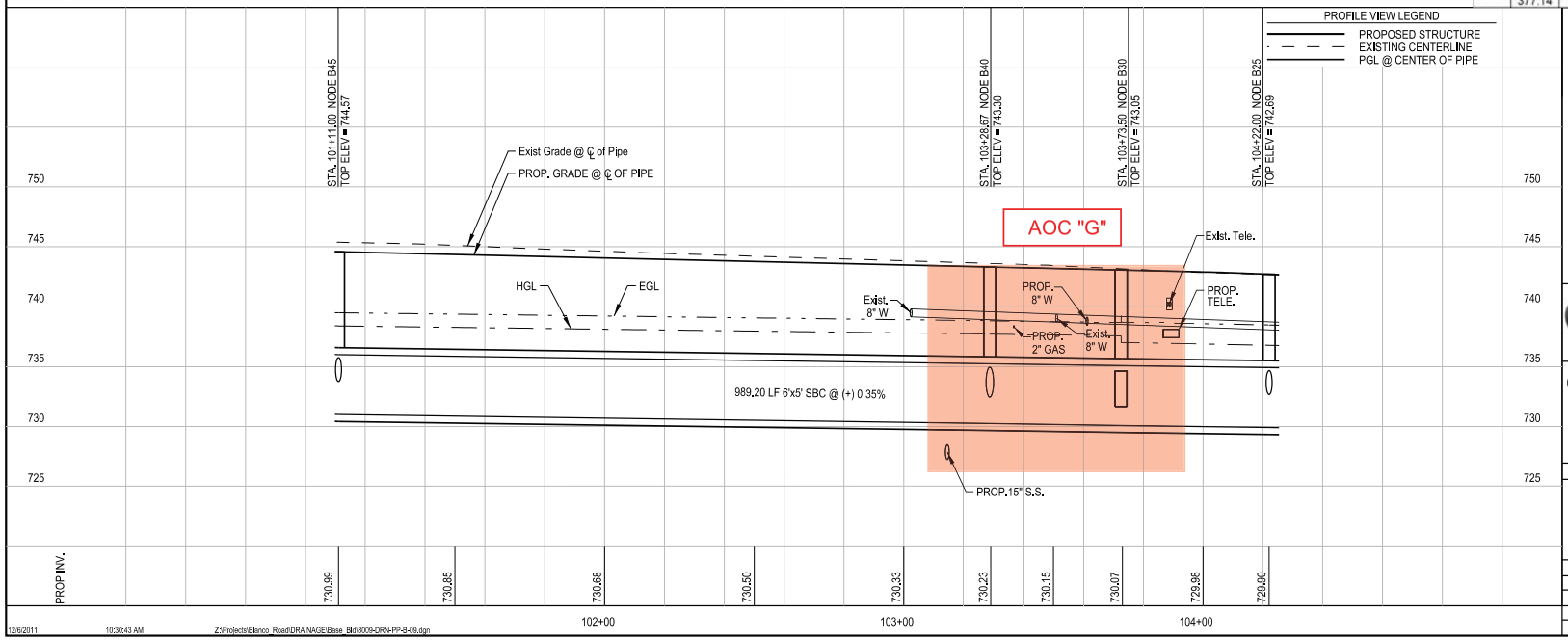
PLAN VIEW LEGEND

CI = CURB INLET
JB = JUNCTION BOX
MH = MANHOLE
TI = TRAFFIC INLET

- PROPOSED STRUCTURE
- PROPOSED CURB
- EXIST EDGE OF ROADWAY
- EXISTING FEATURES
- EXISTING RIGHT OF WAY
- PROPOSED RIGHT OF WAY
- UG TEL — UNDGR TELEPHONE
- X GAS — GAS LINE
- X SS — SANITARY SEWER LINE
- X WTR — WATER LINE
- UG FO — UNDGR FIBER OPTIC
- FENCE

PROPOSED WATER, SANITARY SEWER, TELEPHONE, AND GAS UTILITIES SHOWN ARE APPROXIMATE. SEE RELEVENT PLANS FOR DETAILS.

FINAL	EST	UNIT	DESCRIPTION
	1875	CY	Box Culvert Excavation & Backfill
	315.00	LF	Precast Concrete Culvert (6'x5')
	112.4	CY	Excavation, Trenching and Backfilling*
	45.96	LF	Reinforced Concrete Pipe (24") Class III
	16.18	LF	Reinforced Concrete Pipe (30") Class III
	4	EA	Stg. II Manhole
	3	EA	Inlet (TY I)
	70.5	CY	Gravel Subgrade Filler
	5.9	CY	Flowable Backfil
	377.14	LF	Trench Excavation Safety Protection



PROFILE VIEW LEGEND

- PROPOSED STRUCTURE
- EXISTING CENTERLINE
- PGL @ CENTER OF PIPE

*NOT PAID FOR DIRECTLY, SUBSIDIARY TO VARIOUS BID ITEMS

20 10 0 20 40 60
1" = 40'

MAESTAS & ASSOCIATES, INC
11550 IH 10 WEST, STE. 320 SAN ANTONIO, TX 78230
(210) 366-1988 (210) 366-1980 fax TBPE No.: F-333

CITY OF SAN ANTONIO
CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT

BLANCO ROAD SEG 3 BASE BID

FIGURE 6
AOC "G"

12/6/2011 10:30:43 AM Z:\Projects\Blanco_Road\DRAINAGE\Base_Bid\8009-DRN-PP-B-09.dgn

FOR LOCATION OF UNDERGROUND ELECTRIC AND GAS FACILITIES, TELEPHONE CABLES, AND TIME WARNER CABLE TV CALL TEXAS STATE WIDE ONE CALL LOCATOR NUMBER 1-800-545-6005 48 HOURS PRIOR BEFORE BEGINNING ANY EXCAVATION.

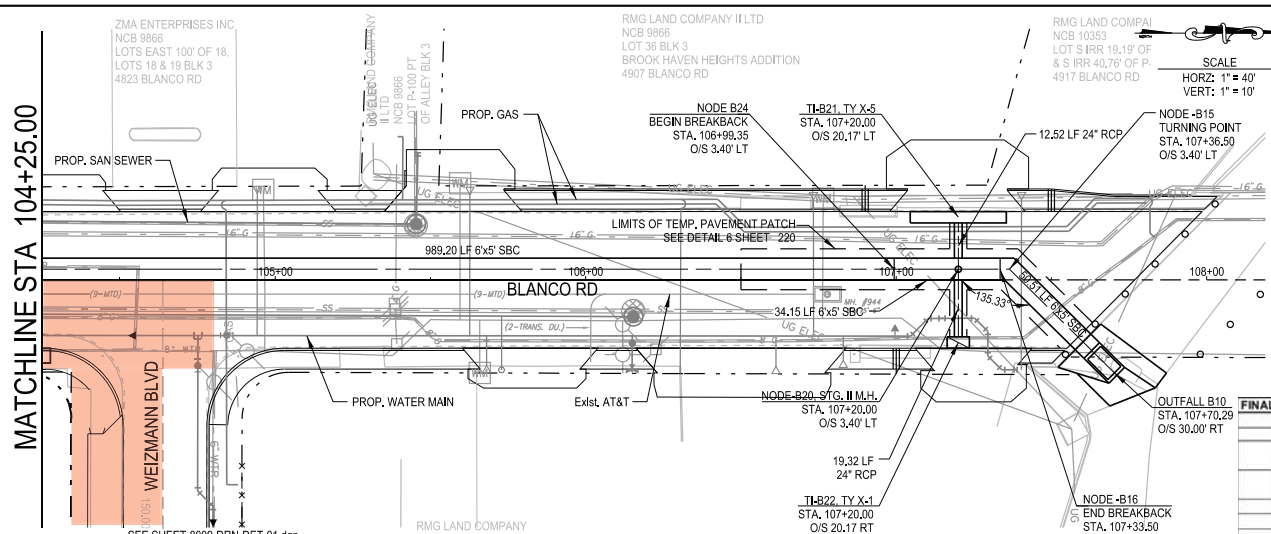
DUE TO FEDERAL REGULATION TITLE 49, PART 192.181, C.P.S. MUST MAINTAIN ACCESS TO GAS VALVES AT ALL TIMES. THE CONTRACTOR MUST PROTECT AND WORK AROUND ANY GAS VALVES THAT ARE IN THE PROJECT AREA.

THE CONTRACTOR WILL BE RESPONSIBLE FOR PROTECTING C.P.S. OVERHEAD AND UNDER-GROUND ELECTRIC FACILITIES IF ADJACENT TO WORK AREAS.

THE CONTRACTOR WILL HAVE RESPONSIBILITY TO PROTECT AND SUPPORT CABLE TV AND TELEPHONE COMPANY PLANT DURING CONSTRUCTION.

THE EXISTENCE AND LOCATION OF UTILITIES INDICATED ON THE PLAN ARE TAKEN FROM AVAILABLE RECORDS AND ARE NOT GUARANTEED TO BE ACCURATE.

CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL/SAFETY EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICALINFORMATION AND THE ANTICAPATED INSTALLATION SITE(S) IN ORDER TO DEVELOP THE CONTRACTOR'S PLANS TO IMPLEMENT THE PROJECT DESCRIBED IN THE CONTRACT COUMDNTS. THE CONTRACTOR'S PLANS SHALL PROVIED FOR ADEQUATE TRENCH SAFETY SYSTEMS THAT COMPLY WITH, AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. CONTRACTOR AND/OR CONTRACOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL DEVELOP AND IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION



SEE SHEET 8009-DRN-DET-01.dgn FOR DRAINAGE OUTFALL DETAILS

6'x5' BOX CULVERT & LATERALS FROM STA. 106+50 TO OLMOS CREEK SHALL BE INSTALLED IN PHASE A. INLET TI-B22 SHALL BE INSTALLED IN PHASE B & INLET TI-B21 SHALL BE INSTALLED IN PHASE C

SYSTEM B

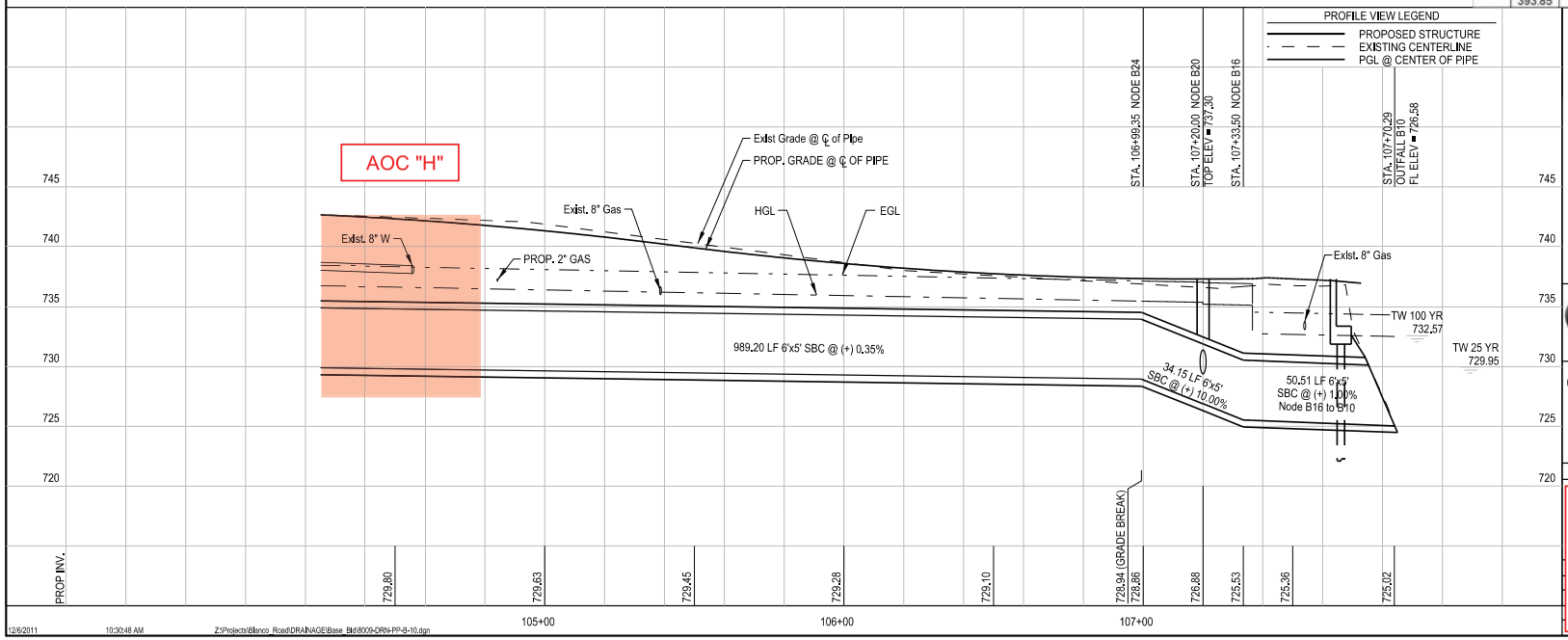
PROPOSED WATER, SANITARY SEWER, TELEPHONE, AND GAS UTILITIES SHOWN ARE APPROXIMATE. SEE RELEVENT PLANS FOR DETAILS.

PLAN VIEW LEGEND

CI = CURB INLET
JB = JUNCTION BOX
MH = MANHOLE
TI = TRAFFIC INLET

- PROPOSED STRUCTURE
- PROPOSED CURB
- EXIST EDGE OF ROADWAY
- EXISTING FEATURES
- EXISTING RIGHT OF WAY
- PROPOSED RIGHT OF WAY
- UG TEL — UNDGR TELEPHONE
- X GAS — GAS LINE
- X SS — SANITARY SEWER LINE
- X WTR — WATER LINE
- UG FO — UNDGR FIBER OPTIC
- FENCE

FINAL	EST	UNIT	DESCRIPTION
	1676	CY	Box Culvert Excavation & Backfill
	19	GAL	Tack Coat
	191	SY	Hot Mix Asphaltic Pavement, Ty D (2.5" Compacted Depth)
	175	SY	Hot Mix Asphaltic Pavement, Ty B (7.5" Compacted Depth)
	362.01	LF	Precast Concrete Culvert (6'x5')
	41.0	CY	Excavation, Trenching and Backfilling*
	31.84	LF	Reinforced Concrete Pipe (24") Class III
	1	EA	Stg. II Manhole
	1	EA	Ty X-1
	1	EA	Ty X-5
	77.4	CY	Gravel Subgrade Filler
	2.6	CY	Flowable Backfill
	63.3	SY	Concrete Riprap (5" Thick)
	393.85	LF	Trench Excavation Safety Protection



*NOT PAID FOR DIRECTLY, SUBSIDIARY TO VARIOUS BID ITEMS

20 10 0 20 40 60
1" = 40'

MAESTAS & ASSOCIATES, INC
11550 IH 10 WEST, STE. 320 SAN ANTONIO, TX 78230
(210) 366-1988 (210) 366-1980 fax TBPE No.: F-333

CITY OF SAN ANTONIO
CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT

BLANCO ROAD SEG 3 BASE BID

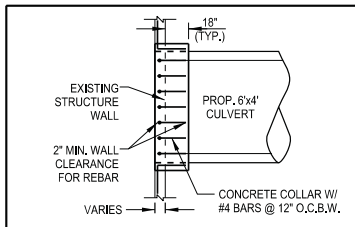
FIGURE 7
AOC "H"

12/6/2011 10:30:48 AM Z:\Projects\Blanco_Road\DRAINAGE\Base_Bid\8009-DRN-PP-B-10.dgn

FIGURES 8 THROUGH 16

ALTERNATE BID

ENVIRONMENTAL AREAS OF CONCERN
"I" THROUGH "W"

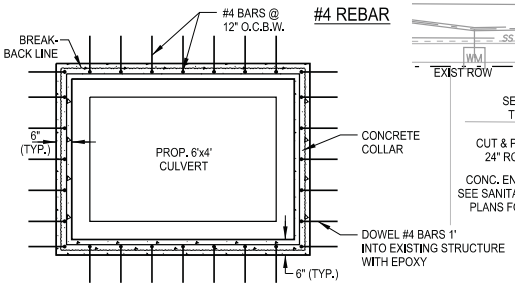


CONCRETE COLLAR PLAN

NOT TO SCALE

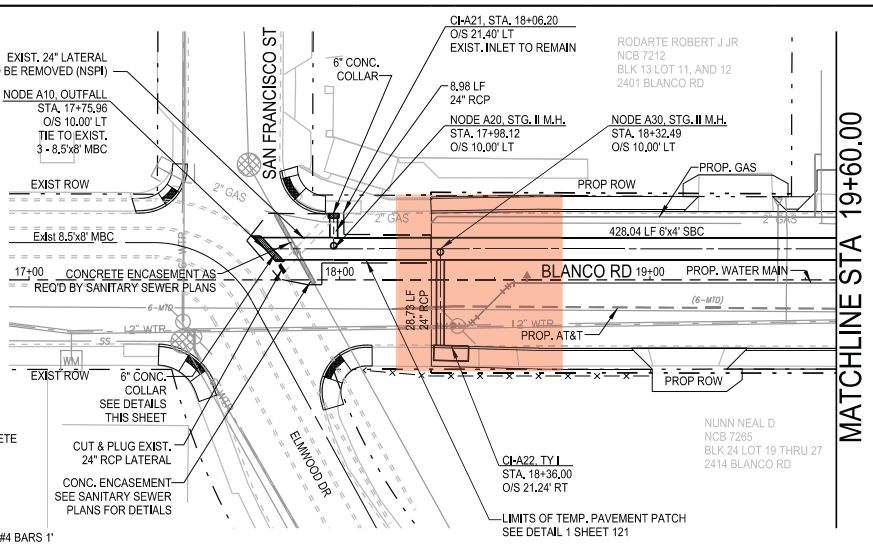
NOTE: CONTRACTOR SHALL MAINTAIN A 12" EMBEDMENT ON ALL REBAR.

#4 REBAR



CONCRETE COLLAR SECTION

NOT TO SCALE



SCALE
HORZ: 1" = 40'
VERT: 1" = 10'

PLAN VIEW LEGEND

CI = CURB INLET
JB = JUNCTION BOX
MH = MANHOLE
TI = TRAFFIC INLET

- PROPOSED STRUCTURE
- PROPOSED CURB
- EXIST EDGE OF ROADWAY
- EXISTING FEATURES
- EXISTING RIGHT OF WAY
- PROPOSED RIGHT OF WAY
- UG TEL — UNDGR TELEPHONE
- X GAS — GAS LINE
- X SS — SANITARY SEWER LINE
- X WTR — WATER LINE
- UG FO — UNDGR FIBER OPTIC
- X — FENCE

NOTE:
CONNECTION FOR PROPOSED 6x4 BOX CULVERT AND 24" RCP TO EXISTING STRUCTURES SHALL BE SUBSIDIARY TO 6x4 BOX CULVERT AND 24" RCP

PROPOSED WATER, SANITARY SEWER, TELEPHONE, AND GAS UTILITIES SHOWN ARE APPROXIMATE. SEE RELEVENT PLANS FOR DETAILS.

FINAL	EST	UNIT	DESCRIPTION
	1069	CY	Box Culvert Excavation & Backfill
	9	GAL	Tack Coat
	89	SY	Hot Mix Asphaltic Pavement, Ty B (7.5" Compacted Depth)
	184.04	LF	Precast Concrete Culvert (6'x4')
	67.6	CY	Excavation, Trenching and Backfilling*
	37.71	LF	Reinforced Concrete Pipe (24") Class III
	2	EA	Stg. II Manhole
	1	EA	Inlet (TY I)
	41.1	CY	Gravel Subgrade Filler
	3.1	CY	Flowable Backfill
	221.75	LF	Trench Excavation Safety Protection

*NOT PAID FOR DIRECTLY, SUBSIDIARY TO VARIOUS BID ITEMS

SYSTEM A

FOR LOCATION OF UNDERGROUND ELECTRIC AND GAS FACILITIES, TELEPHONE CABLES, AND TIME WARNER CABLE TV CALL TEXAS STATE WIDE ONE CALL LOCATOR NUMBER 1-800-545-6005 48 HOURS PRIOR BEFORE BEGINNING ANY EXCAVATION.

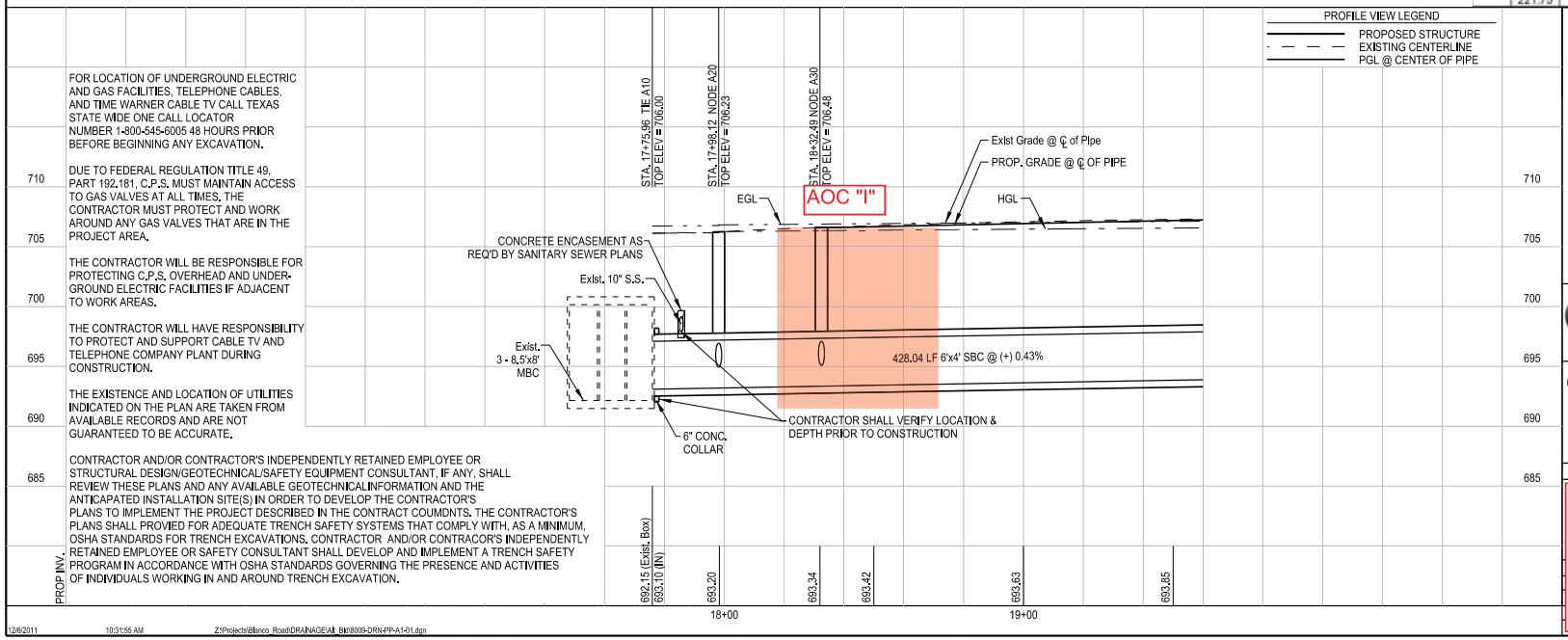
DUE TO FEDERAL REGULATION TITLE 49, PART 192.181, C.P.S. MUST MAINTAIN ACCESS TO GAS VALVES AT ALL TIMES. THE CONTRACTOR MUST PROTECT AND WORK AROUND ANY GAS VALVES THAT ARE IN THE PROJECT AREA.

THE CONTRACTOR WILL BE RESPONSIBLE FOR PROTECTING C.P.S. OVERHEAD AND UNDER-GROUND ELECTRIC FACILITIES IF ADJACENT TO WORK AREAS.

THE CONTRACTOR WILL HAVE RESPONSIBILITY TO PROTECT AND SUPPORT CABLE TV AND TELEPHONE COMPANY PLANT DURING CONSTRUCTION.

THE EXISTENCE AND LOCATION OF UTILITIES INDICATED ON THE PLAN ARE TAKEN FROM AVAILABLE RECORDS AND ARE NOT GUARANTEED TO BE ACCURATE.

CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL/SAFETY EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICALINFORMATION AND THE ANTICAPATED INSTALLATION SITE(S) IN ORDER TO DEVELOP THE CONTRACTOR'S PLANS TO IMPLEMENT THE PROJECT DESCRIBED IN THE CONTRACT COUMDNTS. THE CONTRACTOR'S PLANS SHALL PROVIED FOR ADEQUATE TRENCH SAFETY SYSTEMS THAT COMPLY WITH, AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. CONTRACTOR AND/OR CONTRACOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL DEVELOP AND IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.



MAESTAS & ASSOCIATES, INC
11550 IH 10 WEST, STE. 320 SAN ANTONIO, TX 78230
(210) 366-1988 (210) 366-1980 fax TBPE No.: F-333

CITY OF SAN ANTONIO
CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT

BLANCO ROAD SEG 1 ADD. ALT. 1

FIGURE 8
AOC "I"

12/6/2011 10:31:55 AM Z:\Projects\Blanco_Road\DRAINAGE\All_Bill\8009-DRN-PP-A1-01.dgn

FOR LOCATION OF UNDERGROUND ELECTRIC AND GAS FACILITIES, TELEPHONE CABLES, AND TIME WARNER CABLE TV CALL TEXAS STATE WIDE ONE CALL LOCATOR NUMBER 1-800-545-6005 48 HOURS PRIOR BEFORE BEGINNING ANY EXCAVATION.

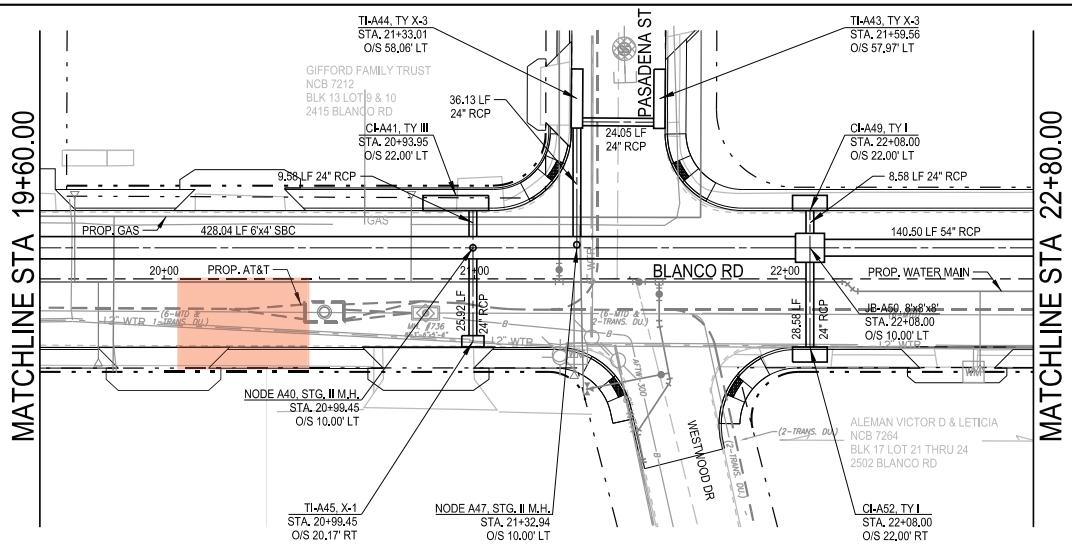
DUE TO FEDERAL REGULATION TITLE 49, PART 192.181, C.P.S. MUST MAINTAIN ACCESS TO GAS VALVES AT ALL TIMES. THE CONTRACTOR MUST PROTECT AND WORK AROUND ANY GAS VALVES THAT ARE IN THE PROJECT AREA.

THE CONTRACTOR WILL BE RESPONSIBLE FOR PROTECTING C.P.S. OVERHEAD AND UNDER-GROUND ELECTRIC FACILITIES IF ADJACENT TO WORK AREAS.

THE CONTRACTOR WILL HAVE RESPONSIBILITY TO PROTECT AND SUPPORT CABLE TV AND TELEPHONE COMPANY PLANT DURING CONSTRUCTION.

THE EXISTENCE AND LOCATION OF UTILITIES INDICATED ON THE PLAN ARE TAKEN FROM AVAILABLE RECORDS AND ARE NOT GUARANTEED TO BE ACCURATE.

CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL/SAFETY EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICALINFORMATION AND THE ANTICAPATED INSTALLATION SITE(S) IN ORDER TO DEVELOP THE CONTRACTOR'S PLANS TO IMPLEMENT THE PROJECT DESCRIBED IN THE CONTRACT COUMDNTS. THE CONTRACTOR'S PLANS SHALL PROVIED FOR ADEQUATE TRENCH SAFETY SYSTEMS THAT COMPLY WITH, AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. CONTRACTOR AND/OR CONTRACOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL DEVELOP AND IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION



SYSTEM A

SCALE
HORZ: 1" = 40'
VERT: 1" = 10'

PLAN VIEW LEGEND

CI = CURB INLET
JB = JUNCTION BOX
MH = MANHOLE
TI = TRAFFIC INLET

- PROPOSED STRUCTURE
- PROPOSED CURB
- EXIST EDGE OF ROADWAY
- EXISTING FEATURES
- EXISTING RIGHT OF WAY
- PROPOSED RIGHT OF WAY
- UG TEL — UNDGR TELEPHONE
- X GAS — GAS LINE
- X SS — SANITARY SEWER LINE
- X WTR — WATER LINE
- UG FO — UNDGR FIBER OPTIC
- FENCE

PROPOSED WATER, SANITARY SEWER, TELEPHONE, AND GAS UTILITIES SHOWN ARE APPROXIMATE. SEE RELEVENT PLANS FOR DETAILS.

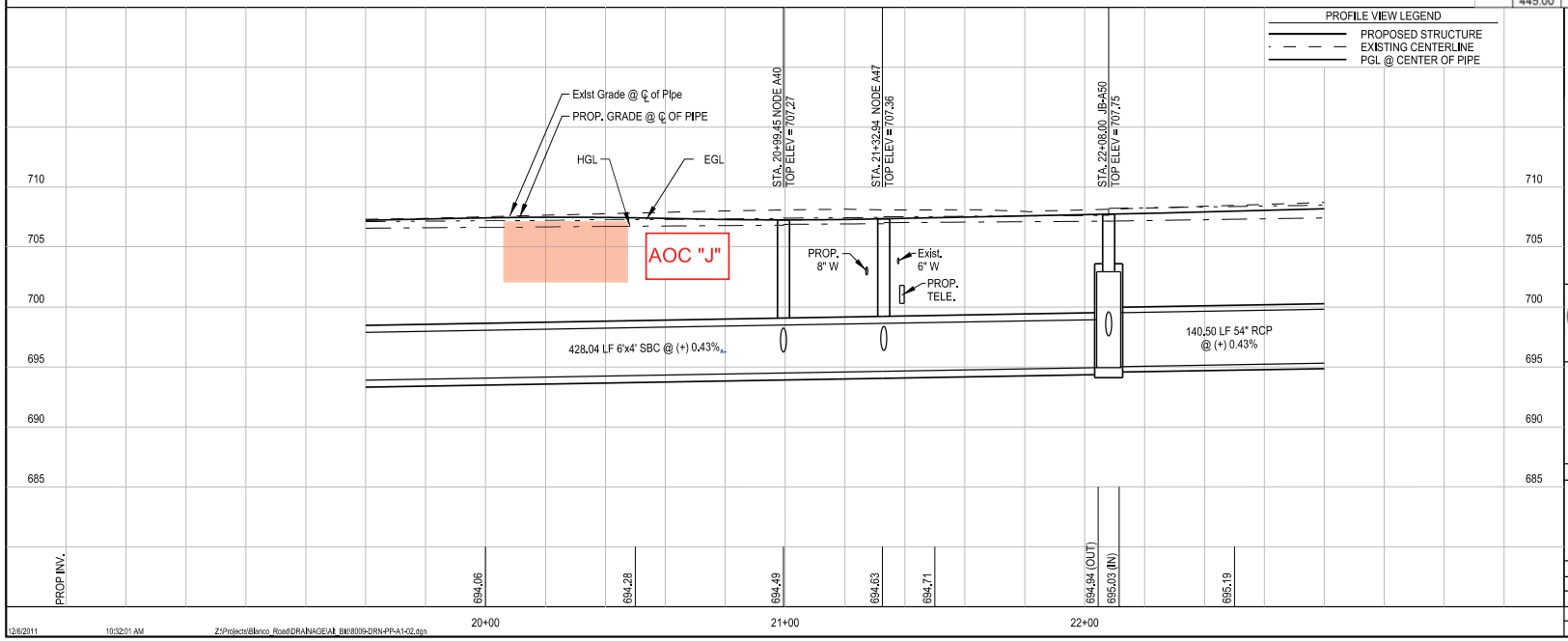
FINAL	EST	UNIT	DESCRIPTION
	1370	CY	Box Culvert Excavation & Backfill
	244.00	LF	Precast Concrete Culvert (6'x4')
	546.7	CY	Excavation, Trenching and Backfilling*
	133.00	LF	Reinforced Concrete Pipe (24") Class III
	68.00	LF	Reinforced Concrete Pipe (54") Class III
	1	EA	Junction Box 8'x8'x8'
	2	EA	Stg. II Manhole
	2	EA	Inlet (TY I)
	1	EA	Inlet (TY III)
	1	EA	Ty X-1
	2	EA	Ty X-3
	73.1	CY	Gravel Subgrade Filler
	55.7	CY	Flowable Backfil
	445.00	LF	Trench Excavation Safety Protection

*NOT PAID FOR DIRECTLY, SUBSIDIARY TO VARIOUS BID ITEMS

20 10 0 20 40 60
1" = 40'

PROFILE VIEW LEGEND

- PROPOSED STRUCTURE
- EXISTING CENTERLINE
- PGL @ CENTER OF PIPE



MAESTAS & ASSOCIATES, INC
11550 IH 10 WEST, STE. 320 SAN ANTONIO, TX 78230
(210) 366-1988 (210) 366-1980 fax TBPE No.: F-333

CITY OF SAN ANTONIO
CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT

BLANCO ROAD SEG 1 ADD. ALT. 1

FIGURE 9
AOC "J"

12/6/2011 10:32:01 AM Z:\Projects\Blanco_Road\DRAINAGE\All_Bkt\8009-DRN-PP-A1-02.dgn

FOR LOCATION OF UNDERGROUND ELECTRIC AND GAS FACILITIES, TELEPHONE CABLES, AND TIME WARNER CABLE TV CALL TEXAS STATE WIDE ONE CALL LOCATOR NUMBER 1-800-545-6005 48 HOURS PRIOR BEFORE BEGINNING ANY EXCAVATION.

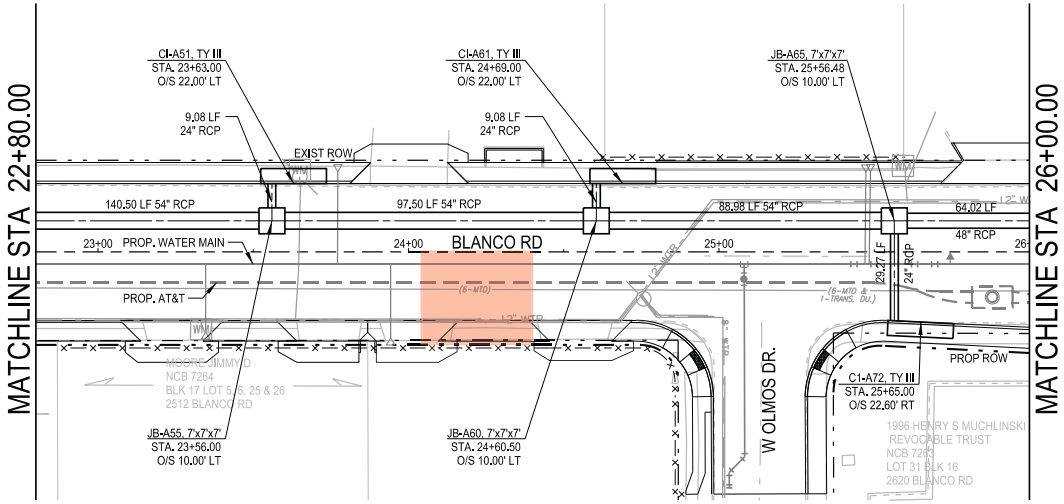
DUE TO FEDERAL REGULATION TITLE 49, PART 192.181, C.P.S. MUST MAINTAIN ACCESS TO GAS VALVES AT ALL TIMES. THE CONTRACTOR MUST PROTECT AND WORK AROUND ANY GAS VALVES THAT ARE IN THE PROJECT AREA.

THE CONTRACTOR WILL BE RESPONSIBLE FOR PROTECTING C.P.S. OVERHEAD AND UNDER-GROUND ELECTRIC FACILITIES IF ADJACENT TO WORK AREAS.

THE CONTRACTOR WILL HAVE RESPONSIBILITY TO PROTECT AND SUPPORT CABLE TV AND TELEPHONE COMPANY PLANT DURING CONSTRUCTION.

THE EXISTENCE AND LOCATION OF UTILITIES INDICATED ON THE PLAN ARE TAKEN FROM AVAILABLE RECORDS AND ARE NOT GUARANTEED TO BE ACCURATE.

CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL/SAFETY EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICALINFORMATION AND THE ANTICAPATED INSTALLATION SITE(S) IN ORDER TO DEVELOP THE CONTRACTOR'S PLANS TO IMPLEMENT THE PROJECT DESCRIBED IN THE CONTRACT COUMDNTS. THE CONTRACTOR'S PLANS SHALL PROVIED FOR ADEQUATE TRENCH SAFETY SYSTEMS THAT COMPLY WITH, AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. CONTRACTOR AND/OR CONTRACOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL DEVELOP AND IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION



SYSTEM A

SCALE
HORZ: 1" = 40'
VERT: 1" = 10'

PLAN VIEW LEGEND

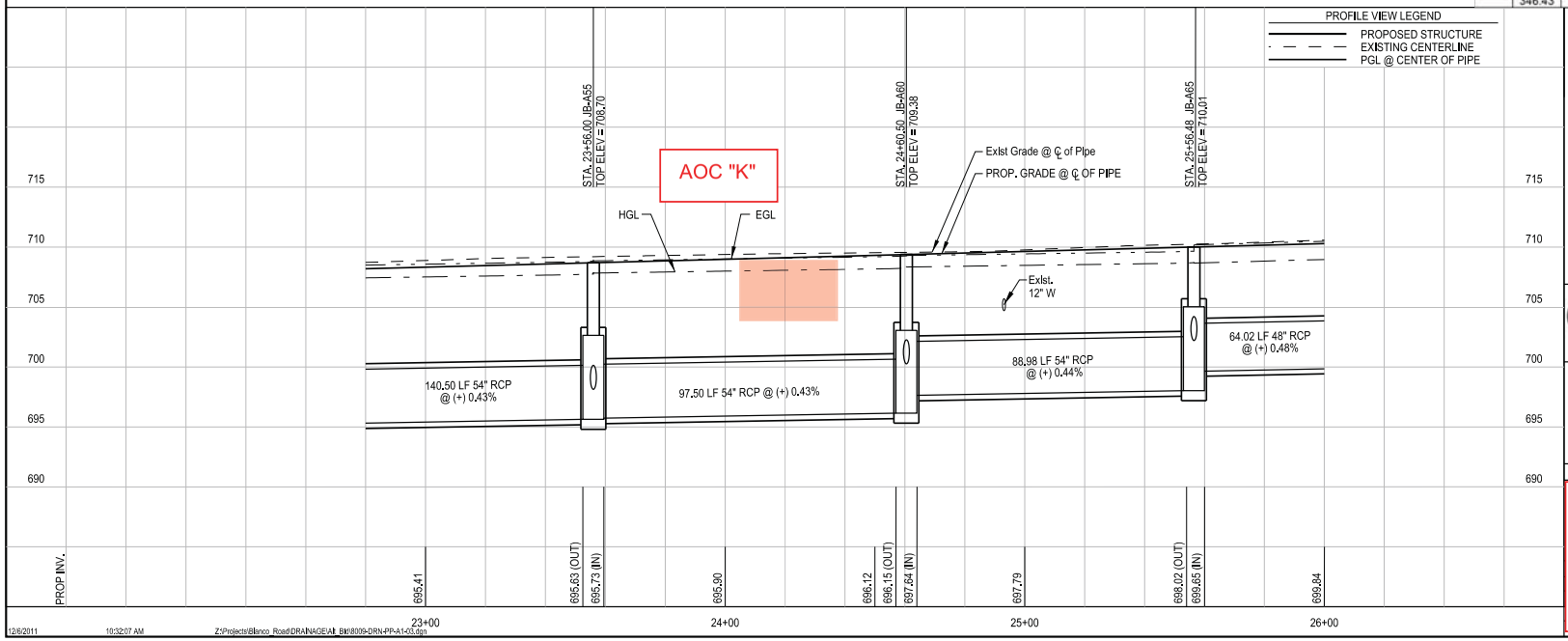
CI = CURB INLET
JB = JUNCTION BOX
MH = MANHOLE
TI = TRAFFIC INLET

- PROPOSED STRUCTURE
- PROPOSED CURB
- EXIST EDGE OF ROADWAY
- EXISTING FEATURES
- EXISTING RIGHT OF WAY
- PROPOSED RIGHT OF WAY
- UG TEL — UNDGR TELEPHONE
- X GAS — GAS LINE
- X SS — SANITARY SEWER LINE
- X WTR — WATER LINE
- UG FO — UNDGR FIBER OPTIC
- FENCE

PROPOSED WATER, SANITARY SEWER, TELEPHONE, AND GAS UTILITIES SHOWN ARE APPROXIMATE. SEE RELEVENT PLANS FOR DETAILS.

FINAL	EST	UNIT	DESCRIPTION
	1420.8	CY	Excavation, Trenching and Backfilling*
	47.43	LF	Reinforced Concrete Pipe (24") Class III
	40.02	LF	Reinforced Concrete Pipe (48") Class IV
	258.98	LF	Reinforced Concrete Pipe (54") Class III
	3	EA	Junction Box 7'x7'x7'
	3	EA	Inlet (TY III)
	55.5	CY	Gravel Subgrade Filler
	197.8	CY	Flowable Backfil
	346.43	LF	Trench Excavation Safety Protection

*NOT PAID FOR DIRECTLY, SUBSIDIARY TO VARIOUS BID ITEMS



1" = 40'

MAESTAS & ASSOCIATES, INC
11550 IH 10 WEST, STE. 320 SAN ANTONIO, TX 78230
(210) 366-1988 (210) 366-1980 fax TBPE No.: F-333

CITY OF SAN ANTONIO
CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT

BLANCO ROAD SEG 1 ADD. ALT. 1

FIGURE 10
AOC "K"

12/6/2011 10:32:07 AM Z:\Projects\Blanco_Road\DRAINAGE\All_Bkt\8009-DRN-PP-A1-03.dgn

FOR LOCATION OF UNDERGROUND ELECTRIC AND GAS FACILITIES, TELEPHONE CABLES, AND TIME WARNER CABLE TV CALL TEXAS STATE WIDE ONE CALL LOCATOR NUMBER 1-800-545-6005 48 HOURS PRIOR BEFORE BEGINNING ANY EXCAVATION.

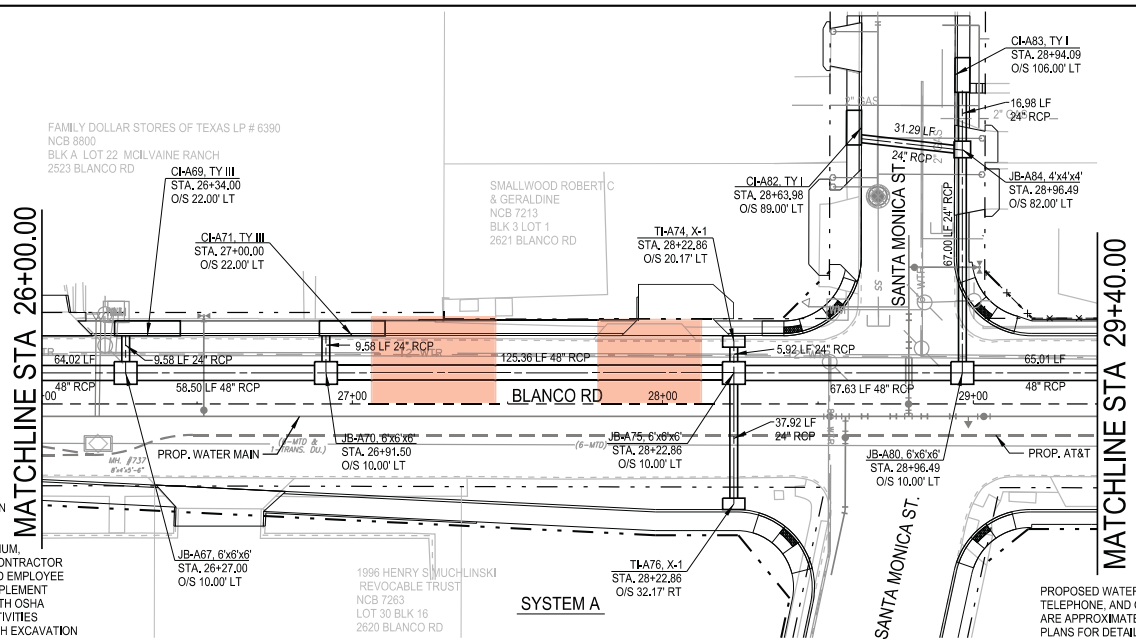
DUE TO FEDERAL REGULATION TITLE 49, PART 192.181, C.P.S. MUST MAINTAIN ACCESS TO GAS VALVES AT ALL TIMES. THE CONTRACTOR MUST PROTECT AND WORK AROUND ANY GAS VALVES THAT ARE IN THE PROJECT AREA.

THE CONTRACTOR WILL BE RESPONSIBLE FOR PROTECTING C.P.S. OVERHEAD AND UNDER-GROUND ELECTRIC FACILITIES IF ADJACENT TO WORK AREAS.

THE CONTRACTOR WILL HAVE RESPONSIBILITY TO PROTECT AND SUPPORT CABLE TV AND TELEPHONE COMPANY PLANT DURING CONSTRUCTION.

THE EXISTENCE AND LOCATION OF UTILITIES INDICATED ON THE PLAN ARE TAKEN FROM AVAILABLE RECORDS AND ARE NOT GUARANTEED TO BE ACCURATE.

CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL/SAFETY EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICALINFORMATION AND THE ANTICAPATED INSTALLATION SITE(S) IN ORDER TO DEVELOP THE CONTRACTOR'S PLANS TO IMPLEMENT THE PROJECT DESCRIBED IN THE CONTRACT COUMDNTS. THE CONTRACTOR'S PLANS SHALL PROVIED FOR ADEQUATE TRENCH SAFETY SYSTEMS THAT COMPLY WITH, AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. CONTRACTOR AND/OR CONTRACOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL DEVELOP AND IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION



PROPOSED WATER, SANITARY SEWER, TELEPHONE, AND GAS UTILITIES SHOWN ARE APPROXIMATE. SEE RELEVENT PLANS FOR DETAILS.

SCALE
HORZ: 1" = 40'
VERT: 1" = 10'

PLAN VIEW LEGEND

CI = CURB INLET
JB = JUNCTION BOX
MH = MANHOLE
TI = TRAFFIC INLET

- PROPOSED STRUCTURE
- PROPOSED CURB
- EXIST EDGE OF ROADWAY
- EXISTING FEATURES
- EXISTING RIGHT OF WAY
- PROPOSED RIGHT OF WAY
- UG TEL — UNDGR TELEPHONE
- X GAS — GAS LINE
- X SS — SANITARY SEWER LINE
- X WTR — WATER LINE
- UG FO — UNDGR FIBER OPTIC
- FENCE

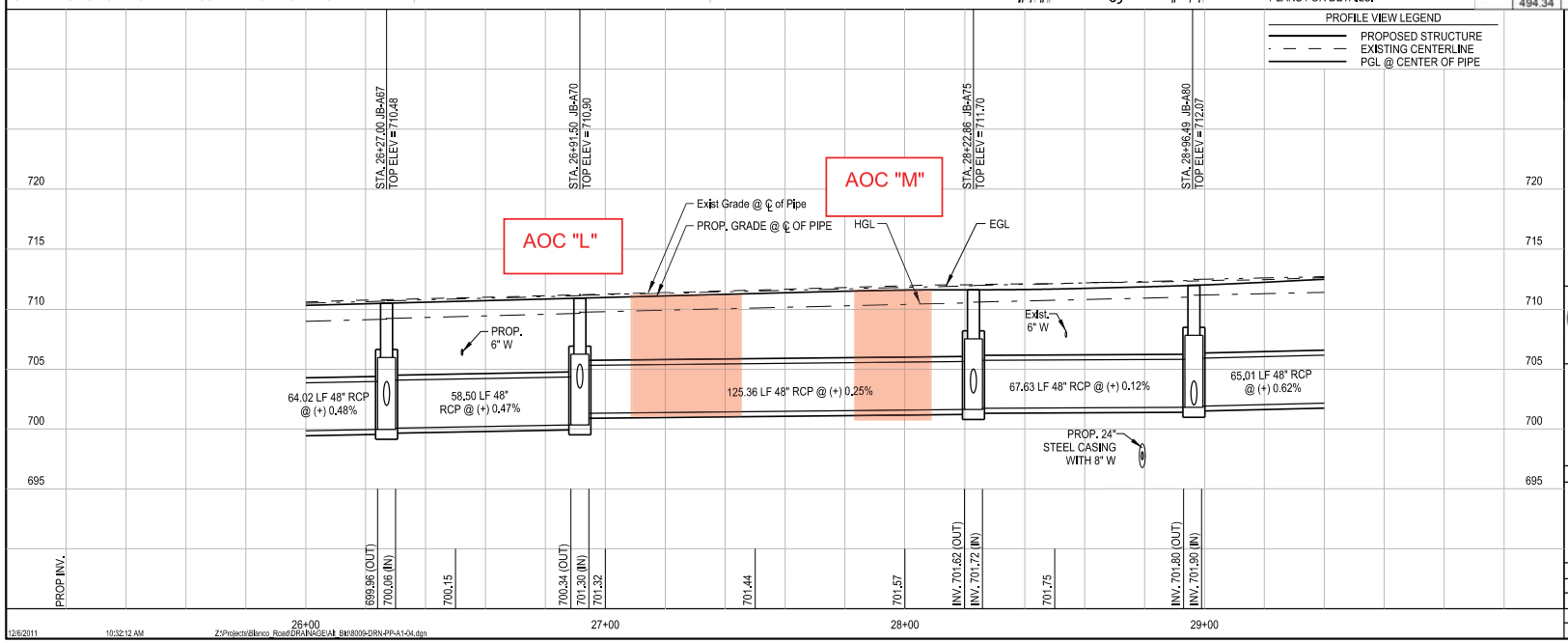
FINAL	EST	UNIT	DESCRIPTION
	1402.9	CY	Excavation, Trenching and Backfilling*
	178.34	LF	Reinforced Concrete Pipe (24") Class III
	316.00	LF	Reinforced Concrete Pipe (48") Class IV
	1	EA	Junction Box 4'x4'x4'
	4	EA	Junction Box 5'x6'x6'
	2	EA	Inlet (TY I)
	2	EA	Inlet (TY III)
	2	EA	Ty X-1
	66.0	CY	Gravel Subgrade Filler
	201.8	CY	Flowable Backfil
	494.34	LF	Trench Excavation Safety Protection

*NOT PAID FOR DIRECTLY, SUBSIDIARY TO VARIOUS BID ITEMS

20 10 0 20 40 60
1" = 40'

PROFILE VIEW LEGEND

- PROPOSED STRUCTURE
- EXISTING CENTERLINE
- PGL @ CENTER OF PIPE



MAESTAS & ASSOCIATES, INC
11550 IH 10 WEST, STE. 320 SAN ANTONIO, TX 78230
(210) 366-1988 (210) 366-1980 fax TBPE No.: F-333

CITY OF SAN ANTONIO
CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT

BLANCO ROAD SEG 1 ADD. ALT. 1

FIGURE 11
AOC "L" & "M"

12/6/2011 10:32:12 AM Z:\Projects\Blanco_Road\DRAINAGE\AB_Blt\8009-DRN-PP-A1-04.dgn

FOR LOCATION OF UNDERGROUND ELECTRIC AND GAS FACILITIES, TELEPHONE CABLES, AND TIME WARNER CABLE TV CALL TEXAS STATE WIDE ONE CALL LOCATOR NUMBER 1-800-545-6005 48 HOURS PRIOR BEFORE BEGINNING ANY EXCAVATION.

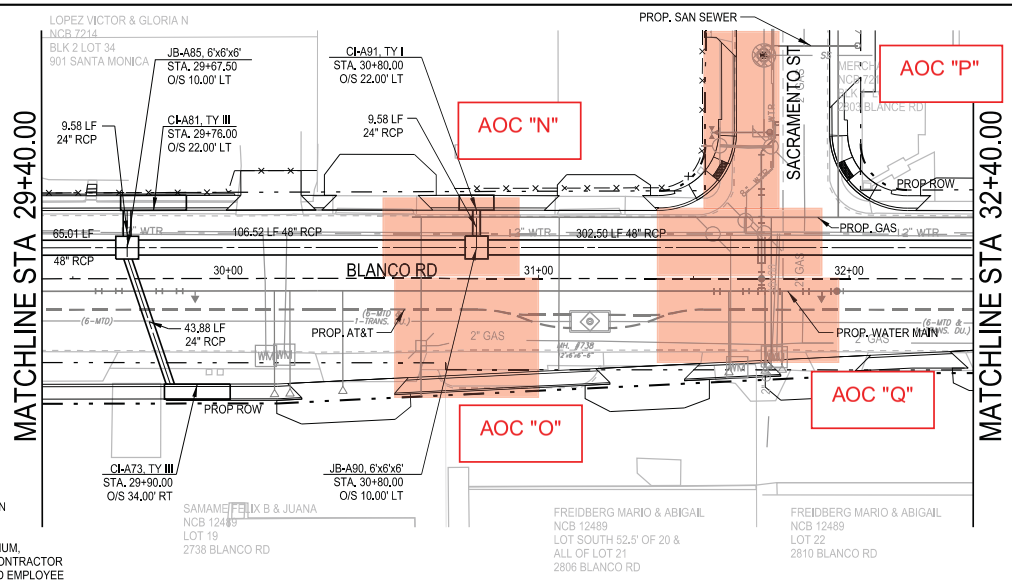
DUE TO FEDERAL REGULATION TITLE 49, PART 192.181, C.P.S. MUST MAINTAIN ACCESS TO GAS VALVES AT ALL TIMES. THE CONTRACTOR MUST PROTECT AND WORK AROUND ANY GAS VALVES THAT ARE IN THE PROJECT AREA.

THE CONTRACTOR WILL BE RESPONSIBLE FOR PROTECTING C.P.S. OVERHEAD AND UNDER-GROUND ELECTRIC FACILITIES IF ADJACENT TO WORK AREAS.

THE CONTRACTOR WILL HAVE RESPONSIBILITY TO PROTECT AND SUPPORT CABLE TV AND TELEPHONE COMPANY PLANT DURING CONSTRUCTION.

THE EXISTENCE AND LOCATION OF UTILITIES INDICATED ON THE PLAN ARE TAKEN FROM AVAILABLE RECORDS AND ARE NOT GUARANTEED TO BE ACCURATE.

CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL/SAFETY EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICALINFORMATION AND THE ANTICAPATED INSTALLATION SITE(S) IN ORDER TO DEVELOP THE CONTRACTOR'S PLANS TO IMPLEMENT THE PROJECT DESCRIBED IN THE CONTRACT COUMDNTS. THE CONTRACTOR'S PLANS SHALL PROVIED FOR ADEQUATE TRENCH SAFETY SYSTEMS THAT COMPLY WITH, AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. CONTRACTOR AND/OR CONTRACOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL DEVELOP AND IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION



SYSTEM A

SCALE
HORZ: 1" = 40'
VERT: 1" = 10'

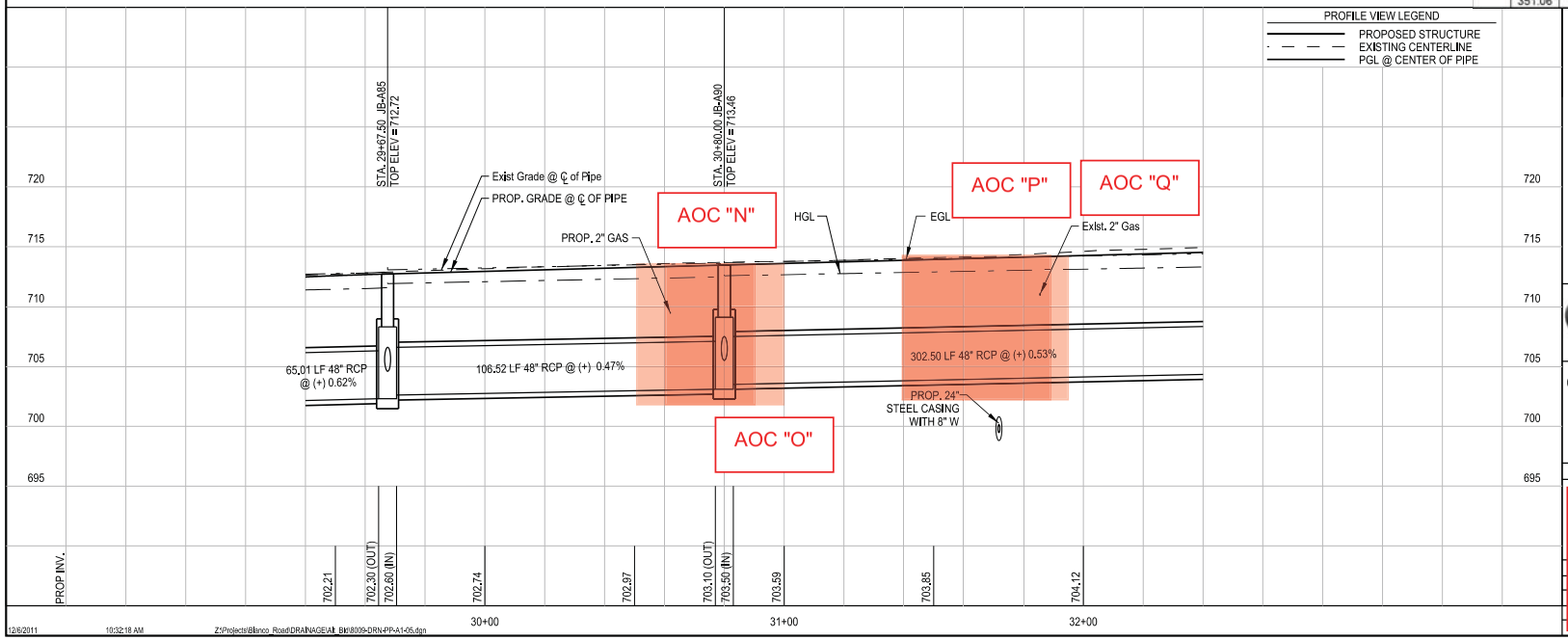
PLAN VIEW LEGEND

CI = CURB INLET
JB = JUNCTION BOX
MH = MANHOLE
TI = TRAFFIC INLET

- PROPOSED STRUCTURE
- PROPOSED CURB
- EXIST EDGE OF ROADWAY
- EXISTING FEATURES
- EXISTING RIGHT OF WAY
- PROPOSED RIGHT OF WAY
- UG TEL — UNDGR TELEPHONE
- X GAS — GAS LINE
- X SS — SANITARY SEWER LINE
- X WTR — WATER LINE
- UG FO — UNDGR FIBER OPTIC
- FENCE

PROPOSED WATER, SANITARY SEWER, TELEPHONE, AND GAS UTILITIES SHOWN ARE APPROXIMATE. SEE RELEVENT PLANS FOR DETAILS.

FINAL	EST	UNIT	DESCRIPTION
	1067.9	CY	Excavation, Trenching and Backfilling*
	63.04	LF	Reinforced Concrete Pipe (24") Class III
	288.02	LF	Reinforced Concrete Pipe (48") Class IV
	2	EA	Junction Box 5'x6'x6'
	1	EA	Inlet (TY I)
	2	EA	Inlet (TY III)
	52.1	CY	Gravel Subgrade Filler
	175.6	CY	Flowable Backfil
	351.06	LF	Trench Excavation Safety Protection



PROFILE VIEW LEGEND

- PROPOSED STRUCTURE
- EXISTING CENTERLINE
- PGL @ CENTER OF PIPE

*NOT PAID FOR DIRECTLY, SUBSIDIARY TO VARIOUS BID ITEMS

20 10 0 20 40 60
1" = 40'

MAESTAS & ASSOCIATES, INC
11550 IH 10 WEST, STE. 320 SAN ANTONIO, TX 78230
(210) 366-1988 (210) 366-1980 fax TBPE No.: F-333

CITY OF SAN ANTONIO
CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT

BLANCO ROAD SEG 1 ADD. ALT. 1

FIGURE 12
AOC "N","O","P" & "Q"

12/6/2011 10:32:18 AM Z:\Projects\Blanco_Road\DRAINAGE\All_Bill\8009-DRN-PP-A1-05.dgn

FOR LOCATION OF UNDERGROUND ELECTRIC AND GAS FACILITIES, TELEPHONE CABLES, AND TIME WARNER CABLE TV CALL TEXAS STATE WIDE ONE CALL LOCATOR NUMBER 1-800-545-6005 48 HOURS PRIOR BEFORE BEGINNING ANY EXCAVATION.

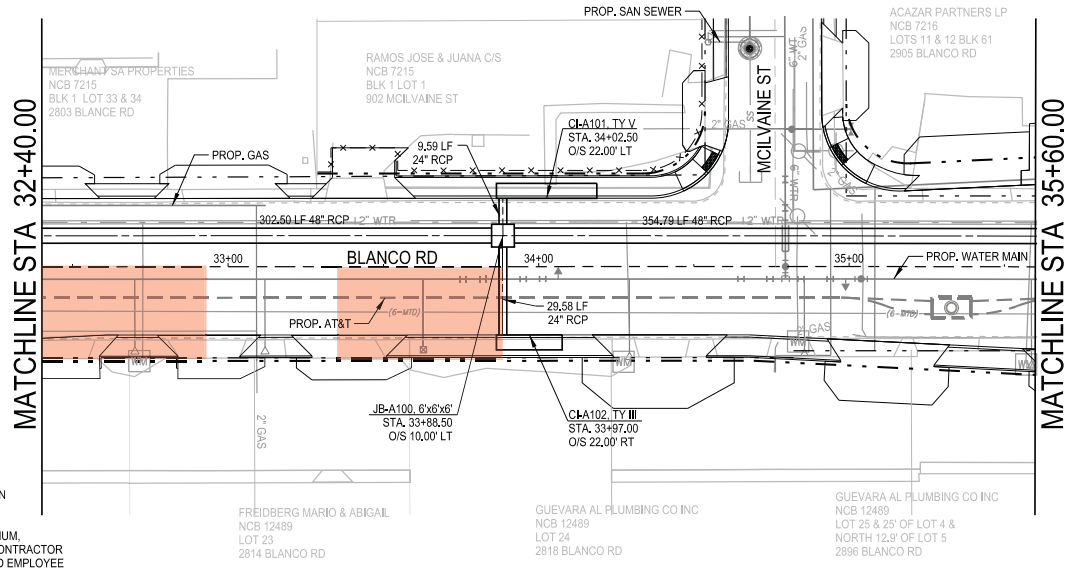
DUE TO FEDERAL REGULATION TITLE 49, PART 192.181, C.P.S. MUST MAINTAIN ACCESS TO GAS VALVES AT ALL TIMES. THE CONTRACTOR MUST PROTECT AND WORK AROUND ANY GAS VALVES THAT ARE IN THE PROJECT AREA.

THE CONTRACTOR WILL BE RESPONSIBLE FOR PROTECTING C.P.S. OVERHEAD AND UNDER-GROUND ELECTRIC FACILITIES IF ADJACENT TO WORK AREAS.

THE CONTRACTOR WILL HAVE RESPONSIBILITY TO PROTECT AND SUPPORT CABLE TV AND TELEPHONE COMPANY PLANT DURING CONSTRUCTION.

THE EXISTENCE AND LOCATION OF UTILITIES INDICATED ON THE PLAN ARE TAKEN FROM AVAILABLE RECORDS AND ARE NOT GUARANTEED TO BE ACCURATE.

CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL/SAFETY EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICALINFORMATION AND THE ANTICAPATED INSTALLATION SITE(S) IN ORDER TO DEVELOP THE CONTRACTOR'S PLANS TO IMPLEMENT THE PROJECT DESCRIBED IN THE CONTRACT COUMDNTS. THE CONTRACTOR'S PLANS SHALL PROVIED FOR ADEQUATE TRENCH SAFETY SYSTEMS THAT COMPLY WITH, AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. CONTRACTOR AND/OR CONTRACOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL DEVELOP AND IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION



SYSTEM A

SCALE
HORZ: 1" = 40'
VERT: 1" = 10'

PLAN VIEW LEGEND

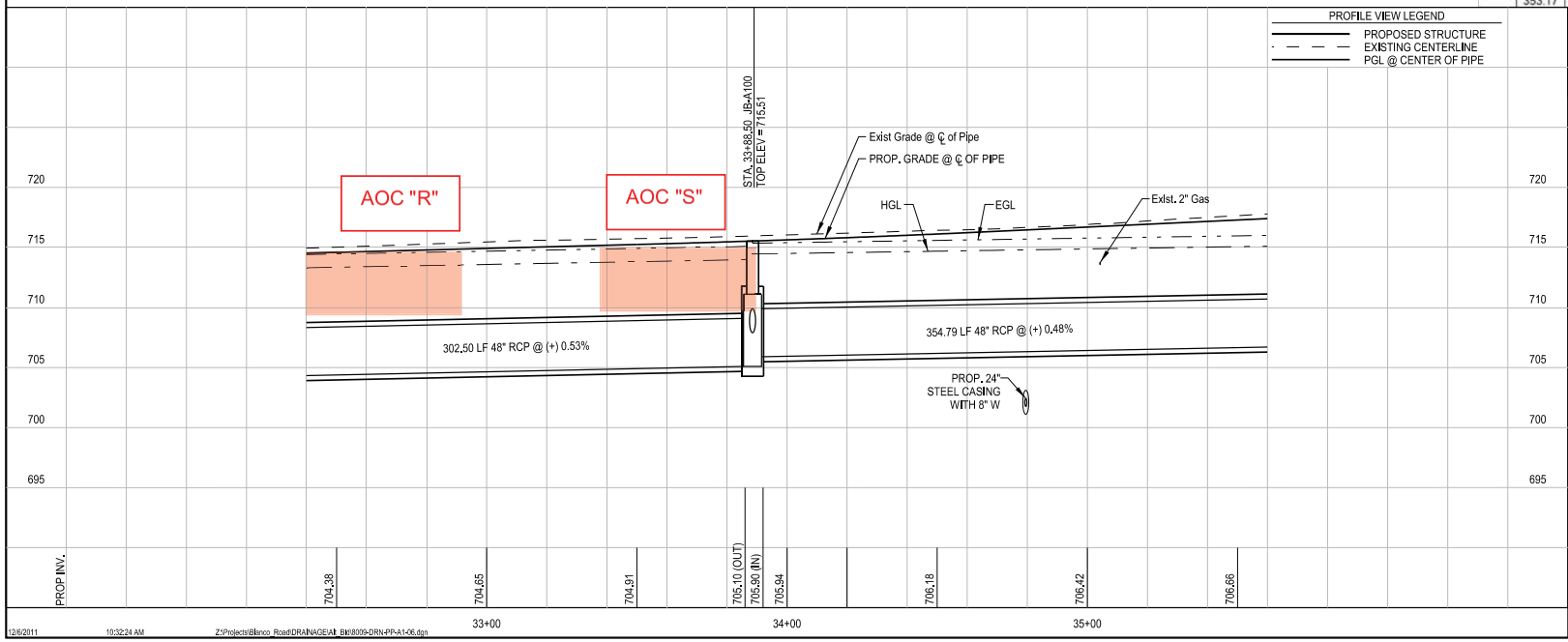
CI = CURB INLET
JB = JUNCTION BOX
MH = MANHOLE
TI = TRAFFIC INLET

- PROPOSED STRUCTURE
- PROPOSED CURB
- EXIST EDGE OF ROADWAY
- EXISTING FEATURES
- EXISTING RIGHT OF WAY
- PROPOSED RIGHT OF WAY
- UG TEL — UNDGR TELEPHONE
- X GAS — GAS LINE
- X SS — SANITARY SEWER LINE
- X WTR — WATER LINE
- UG FO — UNDGR FIBER OPTIC
- FENCE

PROPOSED WATER, SANITARY SEWER, TELEPHONE, AND GAS UTILITIES SHOWN ARE APPROXIMATE. SEE RELEVENT PLANS FOR DETAILS.

FINAL	EST	UNIT	DESCRIPTION
	1146.2	CY	Excavation, Trenching and Backfilling*
	39.17	LF	Reinforced Concrete Pipe (24") Class III
	314.00	LF	Reinforced Concrete Pipe (48") Class IV
	1	EA	Junction Box 5'x6'x6'
	1	EA	Inlet (TY III)
	1	EA	Inlet (TY V)
	54.4	CY	Gravel Subgrade Filler
	189.0	CY	Flowable Backfil
	353.17	LF	Trench Excavation Safety Protection

*NOT PAID FOR DIRECTLY, SUBSIDIARY TO VARIOUS BID ITEMS



20 10 0 20 40 60
1" = 40'

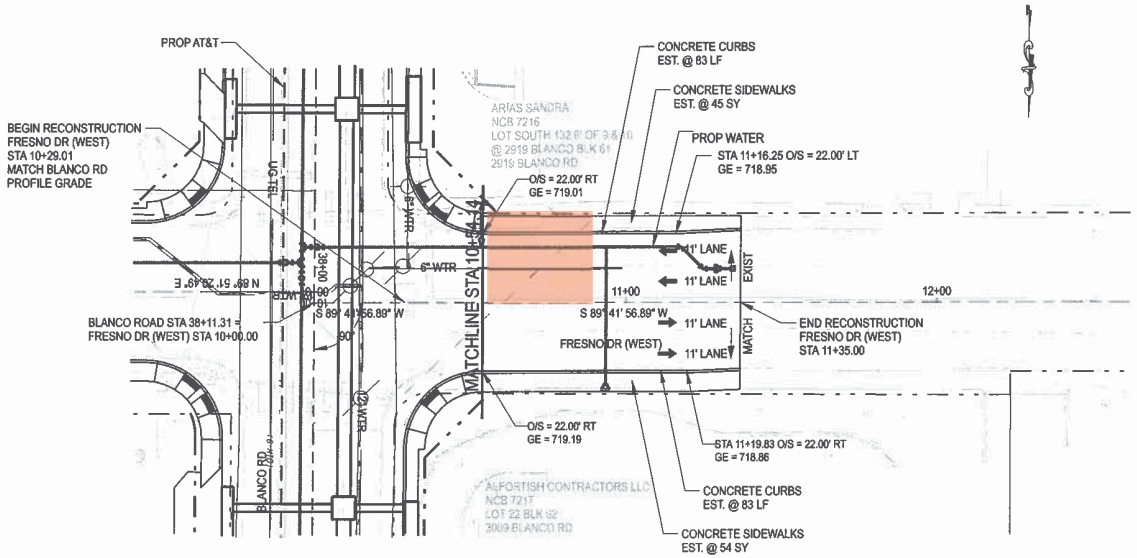
MAESTAS & ASSOCIATES, INC
11550 IH 10 WEST, STE. 320 SAN ANTONIO, TX 78230
(210) 366-1988 (210) 366-1980 fax TBPE No.: F-333

CITY OF SAN ANTONIO
CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT

BLANCO ROAD SEG 1 ADD. ALT. 1

FIGURE 13
AOC "R" & "S"

12/6/2011 10:32:24 AM Z:\Projects\Blanco_Road\DRAINAGE\AB_Bill\8009-DRN-PP-A1-06.dgn



ITEM	UNIT	QTY
FLEX BASE 6" COMP TY C - 1 Alt	SY	
CONC PAV (10")(BUS PAD)	SY	
FLEX PAV FULL DEPTH REPAIR (6")	SY	17
CONC PAV FULL DEPTH REPAIR (6")	SY	
CONCRETE CURBS	LF	166
CONCRETE SIDEWALKS	SY	99
PORTLAND CEM CONC DRVWY	SY	
PORTLAND CEM CONC DRVWY COMM	SY	
ASPHALTIC CONCRETE DRVWY	SY	
GRAVEL DRIVEWAY	SY	
CONC RET WALL-COMM. TY E	CY	
CHAIN LINK WIRE FENCE(4')	LF	
CHAIN LINK WIRE FENCE(6')	LF	
GATES-VEHICULAR	EA	
BERMUDA SODDING	SY	3
ST AUGUSTINE SODDING	SY	3
CONCRETE STEPS	CY	

PLAN VIEW LEGEND

- PROPOSED CURB
- EXIST EDGE OF ROADWAY
- EXISTING FEATURES
- EXISTING RIGHT OF WAY
- PROPOSED RIGHT OF WAY
- (5-7) / PAS 1-1 DRIVEWAY
- GE GUTTER ELEVATION
- PROPOSED FLOW ARROW

FRESNO DR (WEST) - ALIGNMENT DATA

Beginning chain RXCFREW description

Point FREW01 N 13,722,610.8033 E 2,125,442.6842 Sta 10+00.00

Course from FREW01 to FREW02 S 89° 41' 56.89" W Dist 22.0001

Point FREW02 N 13,722,610.6878 E 2,125,420.6844 Sta 10+22.00

Course from FREW02 to FREW03 S 89° 41' 56.89" W Dist 277.6772

Point FREW03 N 13,722,609.2297 E 2,125,143.0111 Sta 12+99.68

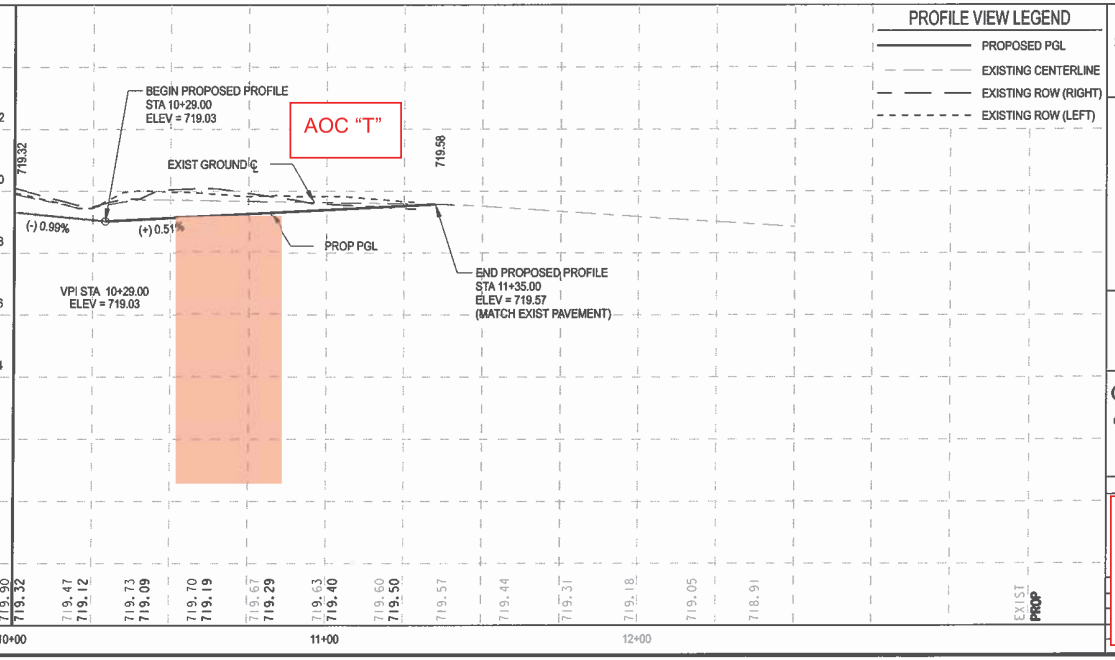
Ending chain RXCFREW description

FRESNO DR (WEST) - PROFILE DATA

Beginning profile RPCFREW description:

	STATION	ELEV	GRADE	TOTAL L	BACK L	AHEAD L
VPI 1	10+00.00	719.3200				
VPI 2	10+29.00	719.0330	-0.9897			
VPI 3	11+35.00	719.5775	0.5137			

Ending profile RPCFREW description



PROFILE VIEW LEGEND

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

GRAPHIC SCALE
(IN FEET)
20 10 0 20 40 60
1" = 40'
Vert: 1" = 4'

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

CITY OF SAN ANTONIO
CAPITAL IMPROVEMENTS
MANAGEMENT SERVICES
DEPARTMENT

BLANCO ROAD SEG 1 ADD. ALT. 1

FIGURE 14
AOC "T"

.../ROADWAY/12FREW_PP_01.dgn 12/13/2011 3:56:01 PM

FOR LOCATION OF UNDERGROUND ELECTRIC AND GAS FACILITIES, TELEPHONE CABLES, AND TIME WARNER CABLE TV CALL TEXAS STATE WIDE ONE CALL LOCATOR NUMBER 1-800-545-6005 48 HOURS PRIOR BEFORE BEGINNING ANY EXCAVATION.

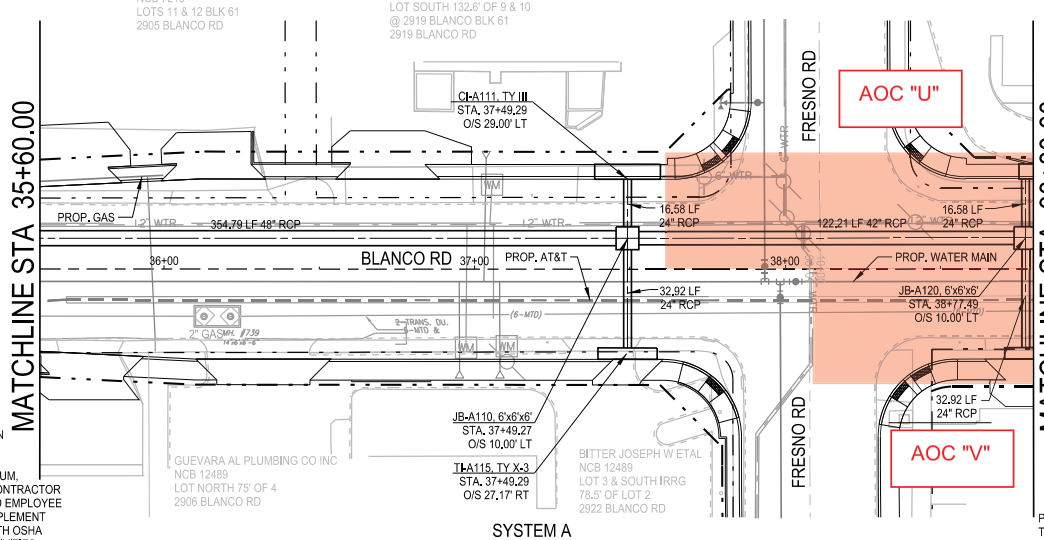
DUE TO FEDERAL REGULATION TITLE 49, PART 192.181, C.P.S. MUST MAINTAIN ACCESS TO GAS VALVES AT ALL TIMES. THE CONTRACTOR MUST PROTECT AND WORK AROUND ANY GAS VALVES THAT ARE IN THE PROJECT AREA.

THE CONTRACTOR WILL BE RESPONSIBLE FOR PROTECTING C.P.S. OVERHEAD AND UNDER-GROUND ELECTRIC FACILITIES IF ADJACENT TO WORK AREAS.

THE CONTRACTOR WILL HAVE RESPONSIBILITY TO PROTECT AND SUPPORT CABLE TV AND TELEPHONE COMPANY PLANT DURING CONSTRUCTION.

THE EXISTENCE AND LOCATION OF UTILITIES INDICATED ON THE PLAN ARE TAKEN FROM AVAILABLE RECORDS AND ARE NOT GUARANTEED TO BE ACCURATE.

CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL/SAFETY EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICALINFORMATION AND THE ANTICAPATED INSTALLATION SITE(S) IN ORDER TO DEVELOP THE CONTRACTOR'S PLANS TO IMPLEMENT THE PROJECT DESCRIBED IN THE CONTRACT COUMDNTS. THE CONTRACTOR'S PLANS SHALL PROVIED FOR ADEQUATE TRENCH SAFETY SYSTEMS THAT COMPLY WITH, AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. CONTRACTOR AND/OR CONTRACOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL DEVELOP AND IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION



SYSTEM A

SCALE
HORZ: 1" = 40'
VERT: 1" = 10'

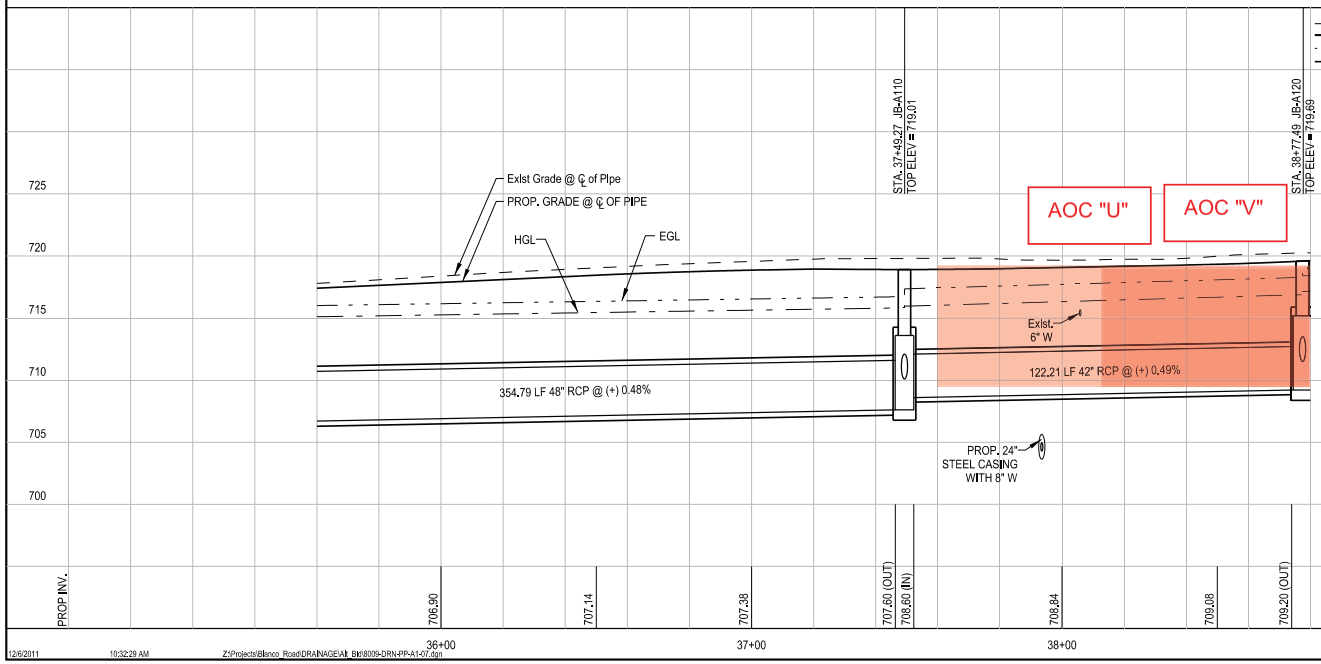
PLAN VIEW LEGEND

CI = CURB INLET
JB = JUNCTION BOX
MH = MANHOLE
TI = TRAFFIC INLET

- PROPOSED STRUCTURE
- PROPOSED CURB
- EXIST EDGE OF ROADWAY
- EXISTING FEATURES
- EXISTING RIGHT OF WAY
- PROPOSED RIGHT OF WAY
- UG TEL — UNDGR TELEPHONE
- X GAS — GAS LINE
- X SS — SANITARY SEWER LINE
- X WTR — WATER LINE
- UG FO — UNDGR FIBER OPTIC
- FENCE

PROPOSED WATER, SANITARY SEWER, TELEPHONE, AND GAS UTILITIES SHOWN ARE APPROXIMATE. SEE RELEVENT PLANS FOR DETAILS.

FINAL	EST	UNIT	DESCRIPTION
	1282.0	CY	Excavation, Trerching and Backfilling*
	99.01	LF	Reinforced Concrete Pipe (24") Class III
	122.21	LF	Reinforced Concrete Pipe (42") Class III
	186.27	LF	Reinforced Concrete Pipe (48") Class IV
	2	EA	Junction Box 5'x6'x6'
	1	EA	Inlet (TY III)
	1	EA	Ty X-3
	57.0	CY	Gravel Subgrade Filler
	182.9	CY	Flowable Backfil
	407.49	LF	Trench Excavation Safety Protection



PROFILE VIEW LEGEND

- PROPOSED STRUCTURE
- EXISTING CENTERLINE
- PGL @ CENTER OF PIPE

*NOT PAID FOR DIRECTLY, SUBSIDIARY TO VARIOUS BID ITEMS

20 10 0 20 40 60
1" = 40'

MAESTAS & ASSOCIATES, INC
11550 IH 10 WEST, STE. 320 SAN ANTONIO, TX 78230
(210) 366-1988 (210) 366-1980 fax TBPE No.: F-333

CITY OF SAN ANTONIO
CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT

BLANCO ROAD SEG 1 ADD. ALT. 1

FIGURE 15
AOC "U" & "V"

12/6/2011 10:32:29 AM Z:\Projects\Blanco_Road\DRAINAGE\All_Bill\8009-DRN-PP-A1-07.dgn

FOR LOCATION OF UNDERGROUND ELECTRIC AND GAS FACILITIES, TELEPHONE CABLES, AND TIME WARNER CABLE TV CALL TEXAS STATE WIDE ONE CALL LOCATOR NUMBER 1-800-545-6005 48 HOURS PRIOR BEFORE BEGINNING ANY EXCAVATION.

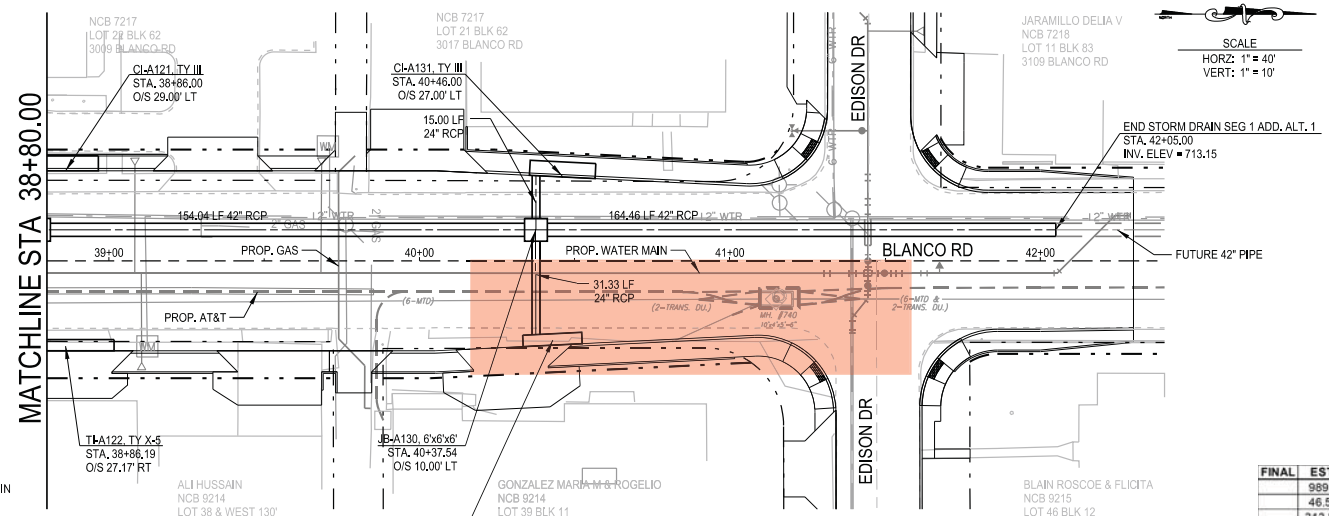
DUE TO FEDERAL REGULATION TITLE 49, PART 192.181, C.P.S. MUST MAINTAIN ACCESS TO GAS VALVES AT ALL TIMES. THE CONTRACTOR MUST PROTECT AND WORK AROUND ANY GAS VALVES THAT ARE IN THE PROJECT AREA.

THE CONTRACTOR WILL BE RESPONSIBLE FOR PROTECTING C.P.S. OVERHEAD AND UNDER-GROUND ELECTRIC FACILITIES IF ADJACENT TO WORK AREAS.

THE CONTRACTOR WILL HAVE RESPONSIBILITY TO PROTECT AND SUPPORT CABLE TV AND TELEPHONE COMPANY PLANT DURING CONSTRUCTION.

THE EXISTENCE AND LOCATION OF UTILITIES INDICATED ON THE PLAN ARE TAKEN FROM AVAILABLE RECORDS AND ARE NOT GUARANTEED TO BE ACCURATE.

CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL/SAFETY EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICALINFORMATION AND THE ANTICAPATED INSTALLATION SITE(S) IN ORDER TO DEVELOP THE CONTRACTOR'S PLANS TO IMPLEMENT THE PROJECT DESCRIBED IN THE CONTRACT COUMDNTS. THE CONTRACTOR'S PLANS SHALL PROVIED FOR ADEQUATE TRENCH SAFETY SYSTEMS THAT COMPLY WITH, AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. CONTRACTOR AND/OR CONTRACOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL DEVELOP AND IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION



SYSTEM A

SCALE
HORZ: 1" = 40'
VERT: 1" = 10'

PLAN VIEW LEGEND

CI = CURB INLET
JB = JUNCTION BOX
MH = MANHOLE
TI = TRAFFIC INLET

- PROPOSED STRUCTURE
- PROPOSED CURB
- EXIST EDGE OF ROADWAY
- EXISTING FEATURES
- EXISTING RIGHT OF WAY
- PROPOSED RIGHT OF WAY
- UG TEL — UNDGR TELEPHONE
- X GAS — GAS LINE
- X SS — SANITARY SEWER LINE
- X WTR — WATER LINE
- UG FO — UNDGR FIBER OPTIC
- FENCE

PROPOSED WATER, SANITARY SEWER, TELEPHONE, AND GAS UTILITIES SHOWN ARE APPROXIMATE. SEE RELEVENT PLANS FOR DETAILS.

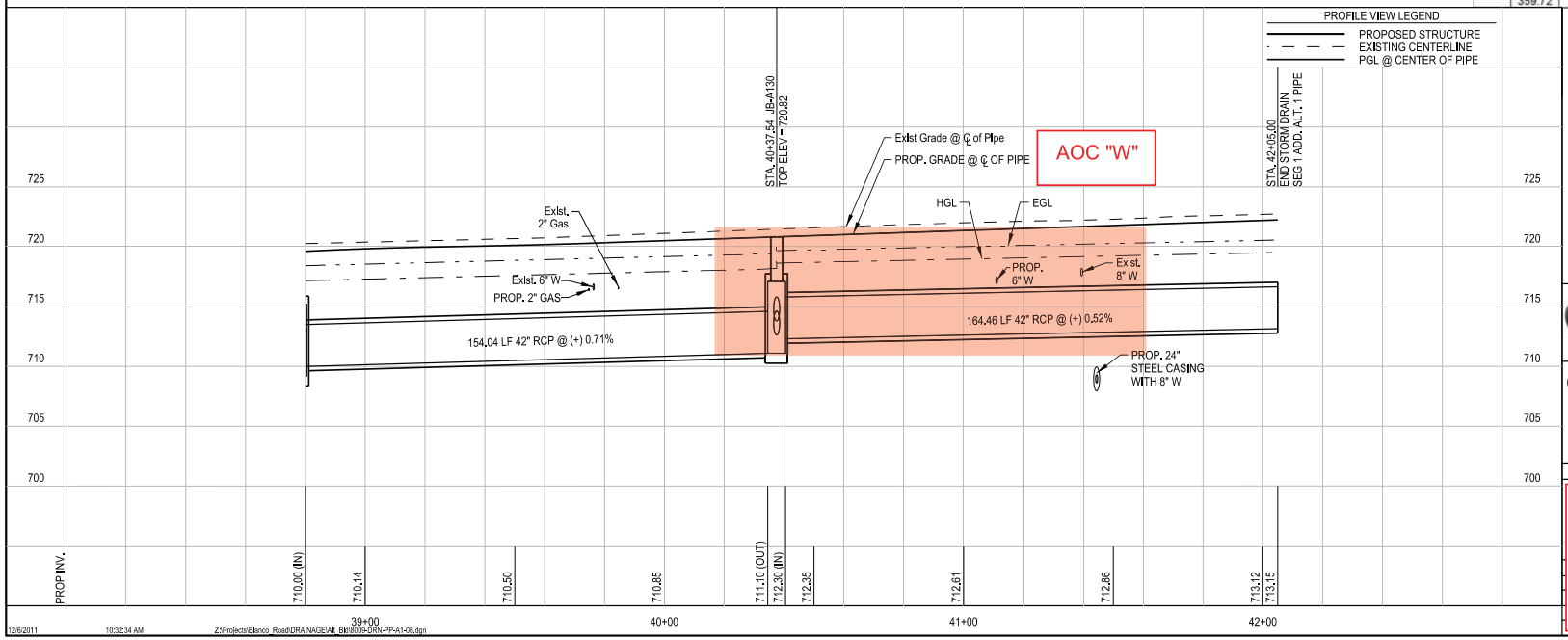
FINAL	EST	UNIT	DESCRIPTION
	989.0	CY	Excavation, Trenching and Backfilling*
	46.50	LF	Reinforced Concrete Pipe (24") Class III
	313.22	LF	Reinforced Concrete Pipe (42") Class IV
	1	EA	Junction Box 5'x6'x6'
	2	EA	Inlet (TY III)
	1	EA	Ty X-3
	1	EA	Ty X-5
	51.4	CY	Gravel Subgrade Filler
	169.0	CY	Flowable Backfil
	359.72	LF	Trench Excavation Safety Protection

*NOT PAID FOR DIRECTLY, SUBSIDIARY TO VARIOUS BID ITEMS

20 10 0 20 40 60
1" = 40'

PROFILE VIEW LEGEND

- PROPOSED STRUCTURE
- EXISTING CENTERLINE
- PGL @ CENTER OF PIPE



12/6/2011 10:32:34 AM Z:\Projects\Blanco_Road\DRAINAGE\All_Bid\8009-DRN-PP-A1-08.dgn

MAESTAS & ASSOCIATES, INC
11550 IH 10 WEST, STE. 320 SAN ANTONIO, TX 78230
(210) 366-1988 (210) 366-1980 fax TBPE No.: F-333

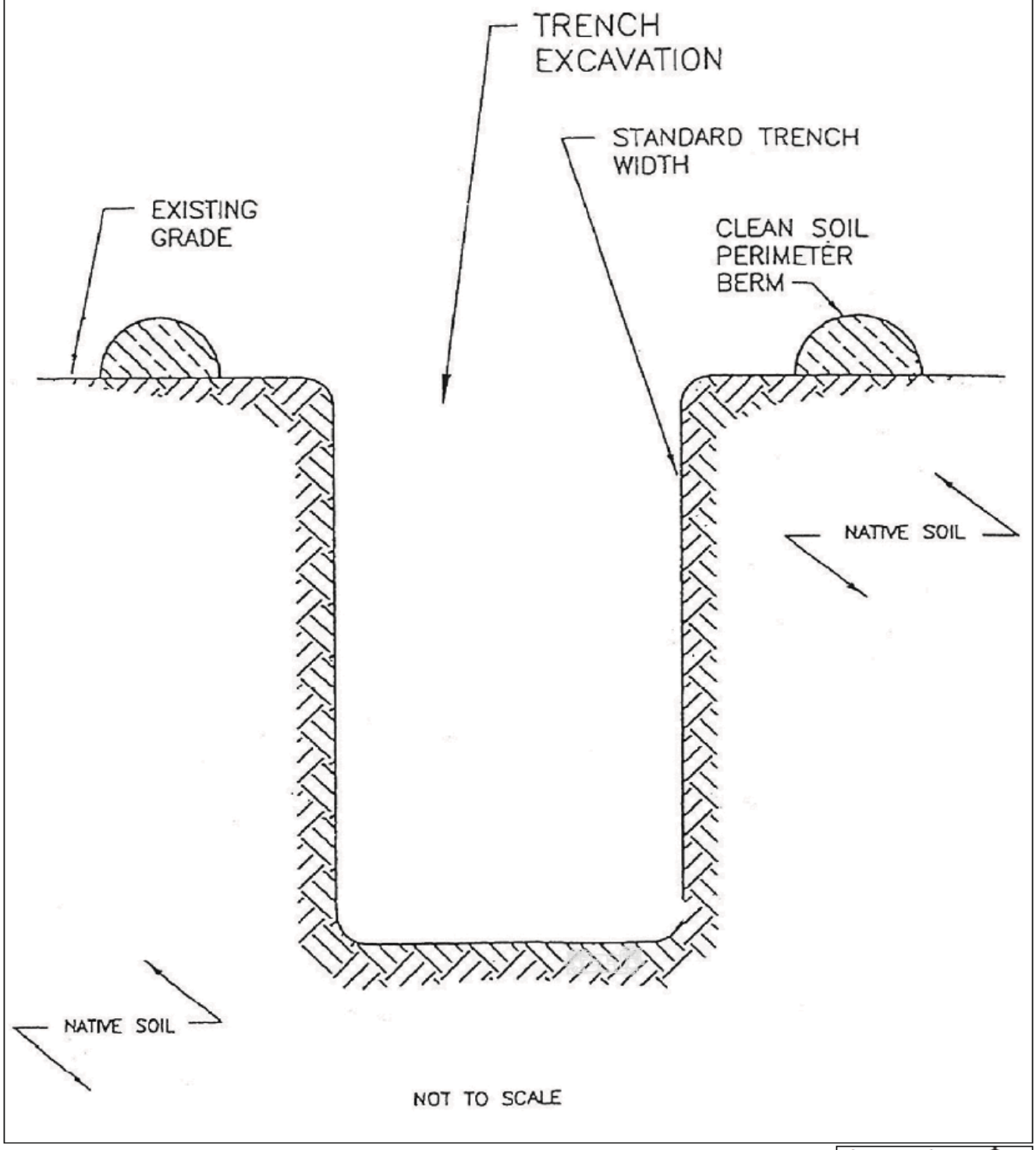
CITY OF SAN ANTONIO
CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT

BLANCO ROAD SEG 1 ADD. ALT. 1

FIGURE 16
AOC "W"

FIGURE 17

OPEN EXCAVATION RUN-ON PREVENTION



City of San Antonio

Open Excavation Run-On Prevention

Created by: Belen L. Garcia
File location: \\fscommon\Misc40\Technical Services CIMS\GIS\PROJECTS\ENVIRONMENTAL\OpenExcavationRunOnPrevention\OpenExcavationRun_OnPrevention.mxd

Map Last Edited: 30th November 2009
PDF Filename: 0911TB18.pdf

City of San Antonio
Capital Improvements
Management Services
Environmental Services
Director Mike Frisbie, P.E.
Municipal Plaza Building
114 West Commerce Street
San Antonio, TX 78205

CITY OF SAN ANTONIO
DEPARTMENT OF CAPITAL IMPROVEMENTS MANAGEMENT SERVICES
CONTRACT SERVICES DIVISION

RECEIPT OF ADDENDUM NUMBER(S) **1** IS HEREBY ACKNOWLEDGED FOR PLANS AND

SPECIFICATIONS FOR CONSTRUCTION OF **BLANCO ROAD – FROM HILDEBRAND TO JACKSON KELLER**

FOR WHICH BIDS WILL BE OPENED ON **TUESDAY, FEBRUARY 21, 2012 AT 2:00 P.M.**

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

Company Name: _____

Address: _____

City/State/Zip Code: _____

Date: _____

_____
Signature

_____
Print Name/Title