

SAN ANTONIO WATER SYSTEM
S&S HILLS SUBDIVISION 12-INCH WATER LINE
EXTENSION PROJECT

SAWS Job No. 09-7008,
Solicitation No. B-10-037-DG

ADDENDUM NO. 1

June 11, 2010

This addendum, applicable to work designated above, is an amendment to the bidding and specification documents and as such shall be a part of and included in the Contract. Acknowledge receipt of this addendum by entering the addendum number and issue date in the spaces provided on all submitted copies of the proposal.

1.0 Addendum Purpose:

The purpose of this addendum is to issue a revision to respond to contractor questions and provide revisions to Contract Documents and Construction Plans for the S&S Hills Subdivision 12-inch Water Line Extension Project (SAWS Job No. 09-7008).

2.0 The following are questions ~~were~~ received by SAWS in writing by Contractors:

Q1. I had a quick question about trench line density testing. There wasn't any information in specifications associated with project documents. I was looking into S.A.W.S. standard specifications for construction, specifically item 804.7 Quality Control. In that specification, paragraph no. 2 states that "Payment for such tests shall be the responsibility of the **Owner**, including the material proctor tests and density tests." Later in that same paragraph it calls out for contractor's responsibility. "The **Contractor** shall provide access to the test area, associated trench excavation safety protection, and backfilling of the test areas." I would appreciate any and all help in clarifying this matter.

R1. The Contractor will be responsible for Quality Control Testing with accordance with SAWS Specification, Item 804.7 – paragraph 3. Quality Control Testing will be required as part of the project and there is no direct payment shall be made for these testing.

SAWS may perform Quality Assurance Testing, Per SAWS Specification Item 804.7 – Paragraph 2. SAWS may have an independent testing laboratory perform Quality Assurance Testing for the project to ensure

proper excavation, trenching and backfill has been performed by the Contractor. Payment of independent testing laboratory services for the Quality Assurance Testing will be the responsibility of SAWS. The contractor shall provide access to the test area, where required. It is not anticipated that the contractor will incur any additional costs associated to the Quality Assurance Testing.

3.0 The following are questions received during the non-mandatory pre-bid meeting held on June 8, 2010:

- Q2.** Can the concrete vault be a larger than 10-ft x 8-ft?
- R2.** The vault dimensions shown on the plans are the minimum allowable dimensions for the concrete vault. A larger concrete vault maybe used, provided the PRV assembly is centered horizontal within the vault.
- Q3.** Is it possible to move the bore pit on sheet C5 away from the existing guy wires and utility pole?
- R3.** The bore pit will be moved away from the utility pole and guy wires. See Section 5.0.
- Q4.** Can the proposed 12-inch gate valve at the intersection along Serene Hills at Scenic Hills be relocated outside of the pavement?
- R4.** The proposed gate valve will be relocated further east along Serene Hills Drive. See Section 5.0.
- Q5** Is there an existing gate valve located 9+46?
- R5** There is an existing 2-inch gate valve located at 9+46. See Section 5.0.
- Q6** Can SAWS make available the existing block maps for the area?
- R6** SAWS Block Maps may not properly reflect the existing waterline network for S&S Hills Subdivisions. The Contractor will be responsible for verifying exact location of all existing utilities.
- Q7** The pipe material for the 2-inch line has not be indentified for the PRV assembly? Will SAWS allow a 2-inch galvanized pipe?
- R7** Sheet C8, SAWS Detail DD-901-06 specifies the pipe material to be steel.
- Q8** Will a factory representative be required to be onsite for the PRV assembly?

R8 SAWS may require a representative onsite for the PRV assembly.

4.0 Clarification:

- A. Proposed and existing valves located at tie-in points shall be set closed, unless otherwise directed by SAWS. See Section 5.0

5.0 Modifications to the Construction Plans:

A. Sheet C2, NOTES, SHEET INDEX AND LEGEND SHEET – Quantities Tables has been updated to reflect new pipeline quantities.

B. Sheet C4, LINE ‘A’ – ADD the following note to the sheet:
“ISOLATION VALVE WILL BE SET TO CLOSED”

C. Sheet C5, LINE ‘B’ – Revisions include:

- i. ADDED the following note to the sheet:
“ISOLATION VALVE WILL BE SET TO CLOSED”
- ii. INSERTED existing general waterline alignment from the well site to the existing waterline easement.
- iii. ADDED the following note to the sheet:
“WARNING CONTRACTOR VERIFY PRESENCE AND EXACT LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION”
- iv. RELOCATED bore pit and pipeline eastward to avoid any potential impact to the existing utility pole, guy wires and existing trees.
- v. RELOCATED proposed 12-inch gate valve located along Serene Hills Drive at Scenic Hills Drive, eastward along Serene Hills Drive.
- vi. LABELED additional trees near 16-inch waterline connection.

D. Sheet C6, LINE ‘C’ – Revisions include:

- i. ADDED the following note to the sheet:
“WARNING CONTRACTOR VERIFY PRESENCE AND EXACT LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION”
- ii. INSERTED existing general waterline alignment from the well site to the existing waterline easement.
- iii. ADDED the following note to the sheet:
“WARNING CONTRACTOR VERIFY PRESENCE AND EXACT LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION”
- iv. INSERTED callout for existing fire hydrant near station 1+00.
- v. INSERTED callout for existing 2-inch gate valve located near station 9+46.

E. Sheet C7, PRESSURE REDUCING VALVE DETAIL – Revisions include:

- i. INSERTED “MINIMUM” to the concrete vault dimensions:
- ii. INSERTED Item 28 for the 2-inch Steel Pipe.
- iii. LABELED 2-inch pipe material on Pressure Reducing Valve Detail 1 and 2.

F. Sheet C16, TEMPORARY EROSION AND SEDIMENTATION CONTROL AND TREE PROTECTION – Revisions include:

- i. ADDED additional tree protection near 16-inch waterline tie-in.
- ii. INSERTED the following note:
“WHEN IT IS NECESSARY TO CUT TREE ROOTS TO PROVIDE ROOM FOR NEW CONSTRUCTION, CONTRACTOR SHALL SAW CUT TREE ROOTS GREATER THAN 1-INCH DIAMETER.”
- iii. UPDATED Tree Protection Table to reflect additional trees within the project area.

6.0 Modifications to the Contract Documents

A. BID PROPOSAL – Revisions Include:

- i. Pipeline length and Trench Safety Protection quantities have been updated and reflects the new pipeline crossing under Toutant Beauregard Road near Serene Hills Drive. Bore Pit has been relocated eastward away from existing utility pole and guy wires.
- ii. REVISED Item 2000 to read:
2 EA – PRV Assembly (including Vault);

ACKNOWLEDGEMENT BY BIDDER

Each bidder is requested to acknowledge receipt of this Addendum No. 1 by his/her signature affixed hereto and to file same and attach with his/her bid.

The undersigned acknowledges receipt of this Addendum No. 1 and the bid submitted herewith is in accordance with the information and stipulations set forth.

Date

Signature



PROPOSAL

PROPOSAL OF _____, a corporation a partnership consisting
 of _____ an individual doing business as
 _____.

TO THE SAN ANTONIO WATER SYSTEM:

Pursuant to Instructions and Invitations to Bidders, the undersigned proposes to furnish all labor and materials as specified and perform the work required for the construction of pipelines and appurtenances, San Antonio Water System Job Number 10-4519 in accordance with the Plans and Specifications for the following prices to wit:

Item No.	Description & Estimated Quantities (Unit Price to be written in words)	Unit Price (Figures)	Total Price (Figures)
500	1 LS –Tree Protection; per Lump Sum _____ Dollars _____ Cents	\$ _____	\$ _____
503.1	134 SY – Driveway Repair (Concrete); Per Square Yard _____ Dollars _____ Cents	\$ _____	\$ _____
503.4	135 SY – Driveway Repair (Asphalt); Per Square Yard _____ Dollars _____ Cents	\$ _____	\$ _____
503.6	4 EA – Misc. Driveway Repair; Per Each _____ Dollars _____ Cents	\$ _____	\$ _____
511.3	31 SY – Trench Repair (Roadway); Per Square Yard _____ Dollars _____ Cents	\$ _____	\$ _____
316	1 LS – Surface Treatment, as directed by Bexar County; per Lump Sum _____ Dollars _____ Cents	\$ _____	\$ _____

Job No 09-7008
 S&S Hills Subdivision 12-Inch Waterline Extension
 Solicitation No. B-10-037-DG

Item No.	Description & Estimated Quantities (Unit Price to be written in words)	Unit Price (Figures)	Total Price (Figures)
540	1 LS –Erosion and Sedimentation Control; per Lump Sum		
	Dollars	\$ _____	\$ _____
	Cents		
550	1877 LF – Trench Safety Program; Per Linear Foot		
	Dollars	\$ _____	\$ _____
	Cents		
530	1 LS – Barricades, Signs and Traffic Handling; Per Lump Sum		
	Dollars	\$ _____	\$ _____
	Cents		
818	570 LF – 12-inch Waterline (Unrestrained); per Linear Foot		
	Dollars	\$ _____	\$ _____
	Cents		
818	1307 LF – 12-inch Waterline (Restrained); per Linear Foot		
	Dollars	\$ _____	\$ _____
	Cents		
828	2 EA – 4-inch Gate Valves; Per Each		
	Dollars	\$ _____	\$ _____
	Cents		
828	5 EA – 12-inch Gate Valves; Per Each		
	Dollars	\$ _____	\$ _____
	Cents		
832	2 EA – 16-inch x 12-inch Tapping Saddles and Valves; Per Each		
	Dollars	\$ _____	\$ _____
	Cents		
834	2 EA – Fire Hydrant Assembly; Per Each		
	Dollars	\$ _____	\$ _____
	Cents		
836	2 Ton – Pipe Fittings, All size and types; Per Tonnage		
	Dollars	\$ _____	\$ _____
	Cents		

Item No.	Description & Estimated Quantities (Unit Price to be written in words)	Unit Price (Figures)	Total Price (Figures)
840	1 EA – 2-inch Water Tie-ins; Per Each _____ Dollars _____ Cents	\$ _____	\$ _____
840	2 EA – 4-inch Water Tie-ins; Per Each _____ Dollars _____ Cents	\$ _____	\$ _____
841	3 EA – Hydrostatic Testing; Per Each _____ Dollars _____ Cents	\$ _____	\$ _____
856.1	110 LF – Jacking, Boring, or Tunneling, 36-inch; Per Linear Foot _____ Dollars _____ Cents	\$ _____	\$ _____
856.2	110 LF – 12-inch Carrier Pipe; Per Linear Foot _____ Dollars _____ Cents	\$ _____	\$ _____
856.3	110 LF – 36-inch Casing or Liner; Per Linear Foot _____ Dollars _____ Cents	\$ _____	\$ _____
2000	2 EA – PRV Assembly (including Vault); per Assembly _____ Dollars _____ Cents	\$ _____	\$ _____

LINE ITEM "A"

SUBTOTAL BASE BID AMOUNT (WATER) \$ _____
 _____ **DOLLARS and** _____ **CENTS.**

	Unit Price (Figures)	Total Price (Figures)
100 MOBILIZATION 1 LUMP SUM-Percent of the <u>Line Item "A"</u> Sub total Base Bid written in words		
_____ %Percent	_xxxxxxx_	\$ _____
(Maximum of 10% of the <u>Line Item "A"</u> Sub-total Base Bid amount)		

	Unit Price (Figures)	Total Price (Figures)
101 PREPARING R.O.W. 1 LUMP SUM- Percent of the <u>Line Item "A"</u> Sub total Base Bid written in words		
_____ % Percent	_xxxxxxxx_	\$ _____
(Maximum of 5% of the <u>Line Item "A"</u> Sub-total Base Bid amount)		

Mobilization lump sum bid shall be limited to a maximum 10% of the Line Item "A" Sub-total Base Bid amount. Preparing Right-of-Way lump sum bid shall be limited to a maximum of 5% of the Line Item "A" Sub-total Base Bid amount. The Line Item "A" Sub-total base bid is defined as all bid items **EXCLUDING** Item 100, Mobilization and Item 101, Preparing Right-of-Way. **In the event of a discrepancy between the written percentage and dollar amount shown for Mobilization and Preparation of ROW bid items the written percentage will govern. If the percentage written exceeds the allowable maximum stated for mobilization and or preparation of ROW, SAWS reserves the right to cap the amount at the percentages shown and adjust the extensions of the bid items accordingly.**

TOTAL BID AMOUNT

TOTAL BID AMOUNT (Line Item "A", Mobilization, and Preparing ROW) \$ _____

_____ DOLLARS AND _____ CENTS

DATE

BIDDER'S SIGNATURE & TITLE

FIRM'S NAME (TYPE OR PRINT)

FIRM'S ADDRESS

FIRM'S PHONE NO. /FAX NO.

FIRM'S EMAIL ADDRESS

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The Contractor herein acknowledges receipt of the following:

Addendum Nos. _____ Addendum Nos. _____
Addendum Nos. _____ Addendum Nos. _____

OWNER RESERVES THE RIGHT TO ACCEPT THE OVERALL MOST RESPONSIBLE BID.

The bidder offers to construct the Project in accordance with the Contract Documents for the contract price, and to complete the Project with **180** calendar days after the start date, as set forth in the Authorization to Proceed. **The bidder understands and accepts the provisions of the contract Documents relating to liquidated damages of the project if not completed on time.**

Complete the additional requirements of the Proposal which are included on the following pages.

GENERAL NOTES

1. ALL MATERIALS AND CONSTRUCTION PROCEDURES WITHIN THE SCOPE OF THIS CONTRACT SHALL BE APPROVED BY THE SAN ANTONIO WATER SYSTEM (SAWS) AND COMPLY WITH THE FOLLOWING AS APPLICABLE:
 - A. CURRENT TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) FOR SEWERAGE SYSTEMS [31 TAC 317.1, 31 TAC 317.2, 31 TAC 317.3, AND 31 TAC 317.13 AND 2131]
 - B. CURRENT TxDOT "STANDARD SPECIFICATIONS FOR CONSTRUCTION OF HIGHWAYS, STREETS AND DRAINAGE."
 - C. CURRENT "SAN ANTONIO WATER SYSTEM STANDARD SPECIFICATIONS FOR CONSTRUCTION."
 - D. CURRENT CITY OF SAN ANTONIO "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION."
2. THE CONTRACTOR IS TO NOTIFY AND MAKE ARRANGEMENTS WITH THE SAWS CONSTRUCTION INSPECTION DIVISION AT 233-3500 AND THE INVOLVED HOME RESIDENTS AND/OR PROPERTY OWNERS 48 HOURS PRIOR TO EXCAVATION.
3. THE LOCATION AND DEPTHS OF EXISTING UTILITIES, INCLUDING SERVICE LATERALS, SHOWN ON THE PLANS ARE APPROXIMATE ONLY. ACTUAL LOCATIONS AND DEPTHS MUST BE FIELD VERIFIED BY THE CONTRACTOR 48 HOURS PRIOR TO CONSTRUCTION AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE UTILITY SERVICE LINES AS REQUIRED FOR IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE UTILITY SERVICE LINES AS REQUIRED FOR CONSTRUCTION AND TO PROTECT THEM DURING CONSTRUCTION.
4. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF UNDERGROUND UTILITIES AND DRAINAGE STRUCTURES AT LEAST 48 HOURS PRIOR TO CONSTRUCTION WHETHER SHOWN ON PLANS OR NOT, AND TO PROTECT THE SAME DURING CONSTRUCTION.

SAN ANTONIO WATER SYSTEM:
UTILITY RELOCATES 233-2010
PRODUCTION CONTROL CENTER 233-2016
COSA DRAINAGE 207-8048
COSA TRAFFIC SIGNAL OPERATIONS 207-7720
TEXAS STATE WIDE ONE CALL LOCATOR 1-800-545-6005
BEXAR METROPOLITAN WATER DISTRICT 354-6536
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING TO ITS ORIGINAL OR BETTER CONDITION FROM DAMAGES DONE TO EXISTING FENCES, CURBS, STREETS, DRIVEWAYS, SIDEWALKS, LANDSCAPING AND STRUCTURES.
6. THE CONTRACTOR SHALL AVOID CUTTING ROOTS LARGER THAN ONE INCH IN DIAMETER WHEN EXCAVATING NEAR EXISTING TREES. EXCAVATION IN VICINITY OF TREES SHALL PROCEED WITH CAUTION. THE CONTRACTOR SHALL CONTACT THE CITY ARBORIST AT 207-8053 FOR GUIDANCE. SAWS CONSTRUCTION INSPECTOR SHALL ALSO BE NOTIFIED.
7. THE CONTRACTOR SHALL NOT PLACE ANY WASTE MATERIALS IN THE 100-YEAR FLOOD PLAIN WITHOUT FIRST OBTAINING AN APPROVED FLOOD PLAIN PERMIT.
8. PRIOR TO THE-INS, ANY SHUTDOWNS OF EXISTING MAINS OF ANY SIZE MUST BE COORDINATED WITH THE SAWS INSPECTION AND/OR SAWS PRODUCTION GROUPS AT LEAST ONE WEEK OR MORE IN ADVANCE OF THE SHUTDOWN. THE CONTRACTOR MUST ALSO PROVIDE A SEQUENCE OF WORK AS RELATED TO THE THE-INS. THIS IS AT NO ADDITIONAL POST TO SAWS OR THE PROJECT AND IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO SEQUENCE THE WORK ACCORDINGLY.

LEGEND

— OHE —	OHE	OVERHEAD ELECTRIC
— CBL —	CBL	UNDERGROUND CABLE
— OHC —	OHC	OVERHEAD CABLE
— G —	G	GAS LINE
— XX" W —	XX" W	WATERLINE EXISTING
— FENCE LINE —	FENCE LINE	FENCE LINE
— RIGHT OF WAY —	RIGHT OF WAY	RIGHT OF WAY
— FENCE LINE —	FENCE LINE	FENCE LINE
— CONTOUR MINOR —	CONTOUR MINOR	CONTOUR MINOR
— CONTOUR MAJOR —	CONTOUR MAJOR	CONTOUR MAJOR
— TRIANGULAR FILTER DIKE —	TRIANGULAR FILTER DIKE	TRIANGULAR FILTER DIKE
— FILTER DAM (ROCK BERM) —	FILTER DAM (ROCK BERM)	FILTER DAM (ROCK BERM)
— SEDIMENT FENCE —	SEDIMENT FENCE	SEDIMENT FENCE
— TREE PROTECTION FENCE —	TREE PROTECTION FENCE	TREE PROTECTION FENCE
— TREE-EXISTING —	TREE-EXISTING	TREE-EXISTING
— TREE-TO BE REMOVED —	TREE-TO BE REMOVED	TREE-TO BE REMOVED
— BORE HOLE —	BORE HOLE	BORE HOLE
— POWER POLE —	POWER POLE	POWER POLE
— SIGN EXISTING —	SIGN EXISTING	SIGN EXISTING
— FIRE HYDRANT EXISTING —	FIRE HYDRANT EXISTING	FIRE HYDRANT EXISTING
— FIRE HYDRANT PROPOSED —	FIRE HYDRANT PROPOSED	FIRE HYDRANT PROPOSED
— WATER VALVE EXISTING —	WATER VALVE EXISTING	WATER VALVE EXISTING
— WATER VALVE PROPOSED —	WATER VALVE PROPOSED	WATER VALVE PROPOSED
— MAILBOX EXISTING —	MAILBOX EXISTING	MAILBOX EXISTING
— WATER METER EXISTING —	WATER METER EXISTING	WATER METER EXISTING

SHEET INDEX

SHEET	DESCRIPTION
C1	COVER
C2	NOTES, SHEET INDEX AND LEGEND SHEET
C3	SITE LAYOUT AND CONTROL POINT SHEET
C4	LINE A BEGIN TO STA. 3+46
C5	LINE B BEGIN TO STA. 8+74.27
C6	LINE C BEGIN TO STA. 9+46
C7	PRESSURE REDUCING VALVE DETAIL
C8	WATERLINE DETAIL SHEET 1 OF 7
C9	WATERLINE DETAIL SHEET 2 OF 7
C10	WATERLINE DETAIL SHEET 3 OF 7
C11	WATERLINE DETAIL SHEET 4 OF 7
C12	WATERLINE DETAIL SHEET 5 OF 7
C13	WATERLINE DETAIL SHEET 6 OF 7
C14	WATERLINE DETAIL SHEET 7 OF 7
C15	TEMPORARY EROSION AND SEDIMENTATION CONTROL
C16	AND TREE PROTECTION SHEET 1 OF 3
C17	TEMPORARY EROSION AND SEDIMENTATION CONTROL
C18	AND TREE PROTECTION SHEET 2 OF 3
C19	TEMPORARY EROSION AND SEDIMENTATION CONTROL
C20	AND TREE PROTECTION SHEET 3 OF 3
C21	TEMPORARY EROSION AND SEDIMENTATION CONTROL
C22	AND TREE PROTECTION SHEET 4 OF 3
C23	TEMPORARY EROSION AND SEDIMENTATION CONTROL
C24	AND TREE PROTECTION SHEET 5 OF 2

QUANTITIES TABLE

ITEM NO.	DESCRIPTION	QUANTITY
500	TREE PROTECTION	1 LS
503.1	DRIVEWAY REPAIR (CONCRETE)	134 SY
503.4	DRIVEWAY REPAIR (ASPHALT)	135 SY
503.6	MISC DRIVEWAY REPAIR	4 EA
511.3	TRENCH REPAIR (ROADWAY)	31 SY
316	SURFACE TREATMENT (PER BEXAR COUNTY DIRECTION)	1 LS
540.0	EROSION AND SEDIMENTATION CONTROL	1 LS
550	TRENCH SAFETY PROGRAM BARRICADES, SIGNS & TRAFFIC HANDLING	1877 LF
530	12" PVC WATERLINE (RESTRAINED)	1 LS
818	4" GATE VALVES	1
818	12" X 12" TAPPING SLEEVES & VALVES	570 LF
828	16" X 12" TAPPING SLEEVES & VALVES	1307 LF
832	12" GATE VALVES	2 EA
834	12" X 12" TAPPING SLEEVES & VALVES	5 EA
836	FIRE HYDRANT	2 EA
840	PIPE FITTINGS, ALL SIZES AND TYPES	2 TON
840	2" WATER THE-INS	1 EA
840	4" WATER THE-INS	2 EA
841	HYDROSTATIC TESTING	3 EA
856.1	JACKING, BORING, OR TUNNELING 36" LINE	3 EA
856.2	12" CARRIER PIPE FOR JACKING, BORING, TUNNELING	110 LF
856.3	36" CASING OR LINER	110 LF
2000	PRV ASSEMBLY AND VAULT MOBILIZATION	2 EA
100	PREPARING RIGHT OF WAY	1 LS
101		1 LS

NOTES, SHEET INDEX AND LEGEND SHEET

CAS CONSULTING & SERVICES INC
700 E. SONTEIRA BLVD, SUITE 1206
SAN ANTONIO, TEXAS 78258
REG. No. E-003572

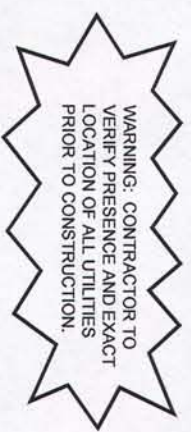
S&S HILLS SUBDIVISION
12-INCH WATERLINE EXTENSION
SAWS HIGH PRESSURE ZONE

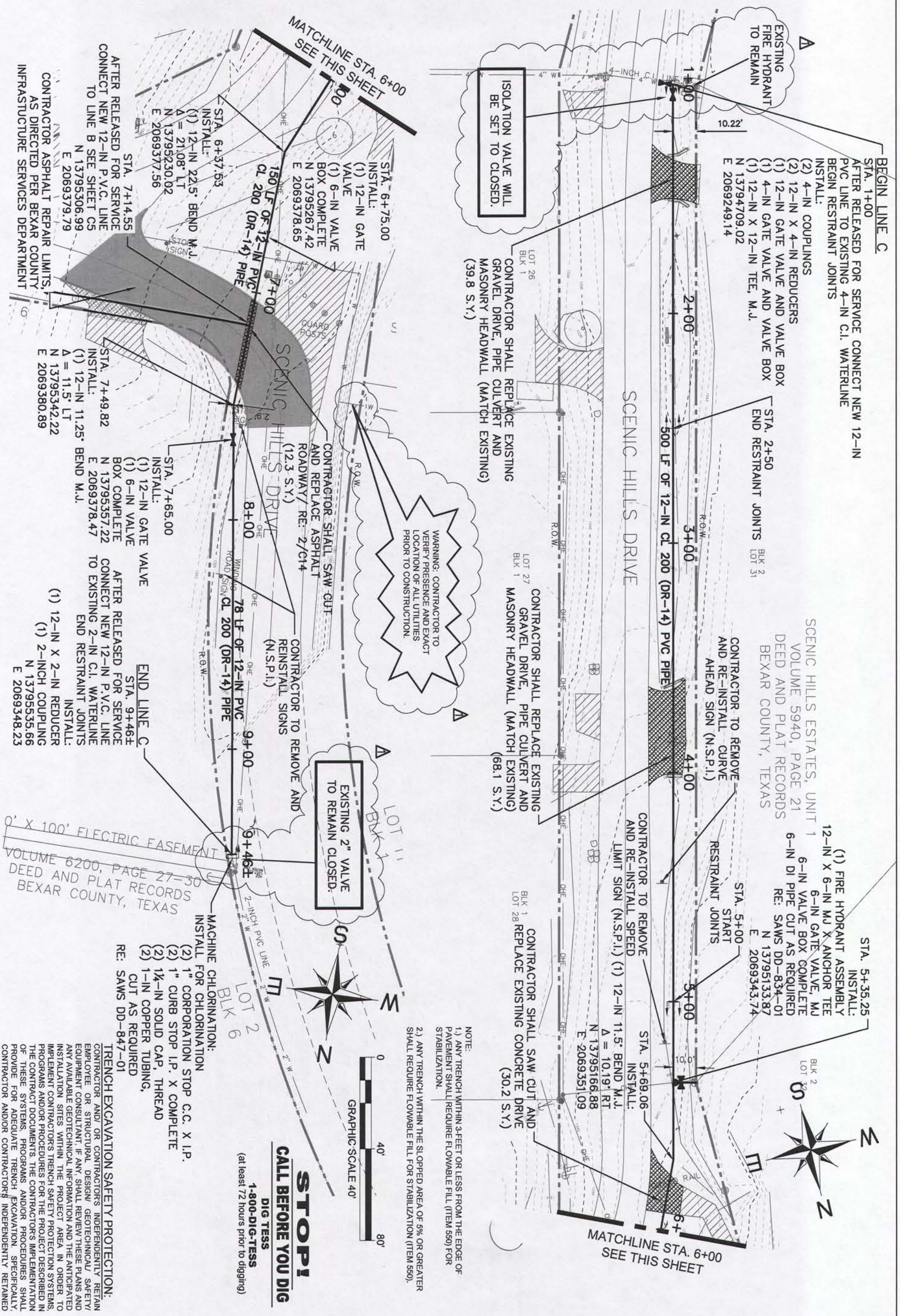


REV. NO.	DATE	DESCRIPTION
1	JUV 5/11/10	ADDENDUM 1

DATE: APRIL 2010
DRAWN: JUV
CHECKED: CAS
CAS JOB NUMBER: 2469003
SCALE: AS SHOWN
SAWS JOB NO: 09-7008

C2
SHEET





BEGIN LINE C
 STA. 1+00
 AFTER RELEASED FOR SERVICE CONNECT NEW 12-IN PVC LINE TO EXISTING 4-IN C.I. WATERLINE BEGIN RESTRAINT JOINTS
 INSTALL:
 (2) 4-IN COUPLINGS
 (2) 12-IN X 4-IN REDUCERS
 (1) 12-IN GATE VALVE AND VALVE BOX
 (1) 4-IN GATE VALVE AND VALVE BOX
 (1) 12-IN X 12-IN TEE, M.J.
 N 13794709.02
 E 2069249.14

SCENIC HILLS ESTATES, UNIT 1
 VOLUME 5940, PAGE 21
 DEED AND PLAT RECORDS
 BEXAR COUNTY, TEXAS

STA. 5+35.25
 INSTALL:
 (1) FIRE HYDRANT ASSEMBLY
 12-IN X 6-IN MJ X ANCHOR TEE
 6-IN GATE VALVE, MJ
 6-IN VALVE BOX COMPLETE
 6-IN DI PIPE CUT AS REQUIRED
 RE: SAWS DD-834-01
 N 13795133.87
 E 2069343.74

CONTRACTOR SHALL REPLACE EXISTING GRAVEL DRIVE, PIPE CULVERT AND MASONRY HEADWALL (MATCH EXISTING) (39.8 S.Y.)

CONTRACTOR SHALL REPLACE EXISTING GRAVEL DRIVE, PIPE CULVERT AND MASONRY HEADWALL (MATCH EXISTING) (68.1 S.Y.)

CONTRACTOR SHALL SAW CUT AND REPLACE EXISTING CONCRETE DRIVE (30.2 S.Y.)

WARNING: CONTRACTOR TO VERIFY PRESENCE AND EXACT LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION.

NOTE:
 1.) ANY TRENCH WITHIN 3 FEET OR LESS FROM THE EDGE OF PAVEMENT SHALL REQUIRE FLOWABLE FILL (ITEM 550) FOR STABILIZATION.
 2.) ANY TRENCH WITHIN THE SLOPPED AREA OF 5% OR GREATER SHALL REQUIRE FLOWABLE FILL FOR STABILIZATION (ITEM 550).

CONTRACTOR ASPHALT REPAIR LIMITS, AS DIRECTED PER BEXAR COUNTY INFRASTRUCTURE SERVICES DEPARTMENT

CONTRACTOR SHALL SAW CUT AND REPLACE ASPHALT ROADWAY/ RE: 2/C14 (12.3 S.Y.)

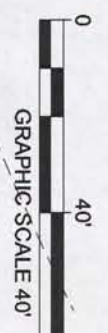
CONTRACTOR TO REMOVE AND RE-INSTALL CURVE AHEAD SIGN (N.S.P.I.)

CONTRACTOR TO REMOVE AND RE-INSTALL SPEED LIMIT SIGN (N.S.P.I.) (1) 12-IN 11.5' BEND M.J.
 N 13795166.88
 E 2069351.09

MACHINE CHLORINATION:
 (2) 1" CORPORATION STOP C.C. X I.P.
 (2) 1" CURB STOP I.P. X COMPLETE
 (2) 1 1/4-IN SOLID CAP, THREAD
 (2) 1-IN COPPER TUBING, CUT AS REQUIRED
 RE: SAWS DD-847-01

TRENCH EXCAVATION SAFETY PROTECTION:
 CONTRACTOR AND/OR CONTRACTORS INDEPENDENTLY RETAIN EMPLOYEE OR STRUCTURAL DESIGN/ GEOTECHNICAL/ SAFETY/ EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITES WITHIN THE PROJECT AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES FOR THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR'S IMPLEMENTATION OF THESE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION, SPECIFICALLY, CONTRACTOR AND/OR CONTRACTORS INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

STOP!
 DIG TESS
 1-800-DIG-TESS
 (at least 72 hours prior to digging)



LINE 'C'
 BEGIN TO 9+46

CAS CONSULTING & SERVICES INC
 700 E. SONTERRA BLVD. SUITE 1206
 SAN ANTONIO, TEXAS 78258
 REG. NO. E-003572

S&S HILLS SUBDIVISION
 12-INCH WATERLINE EXTENSION
 SAWS HIGH PRESSURE ZONE



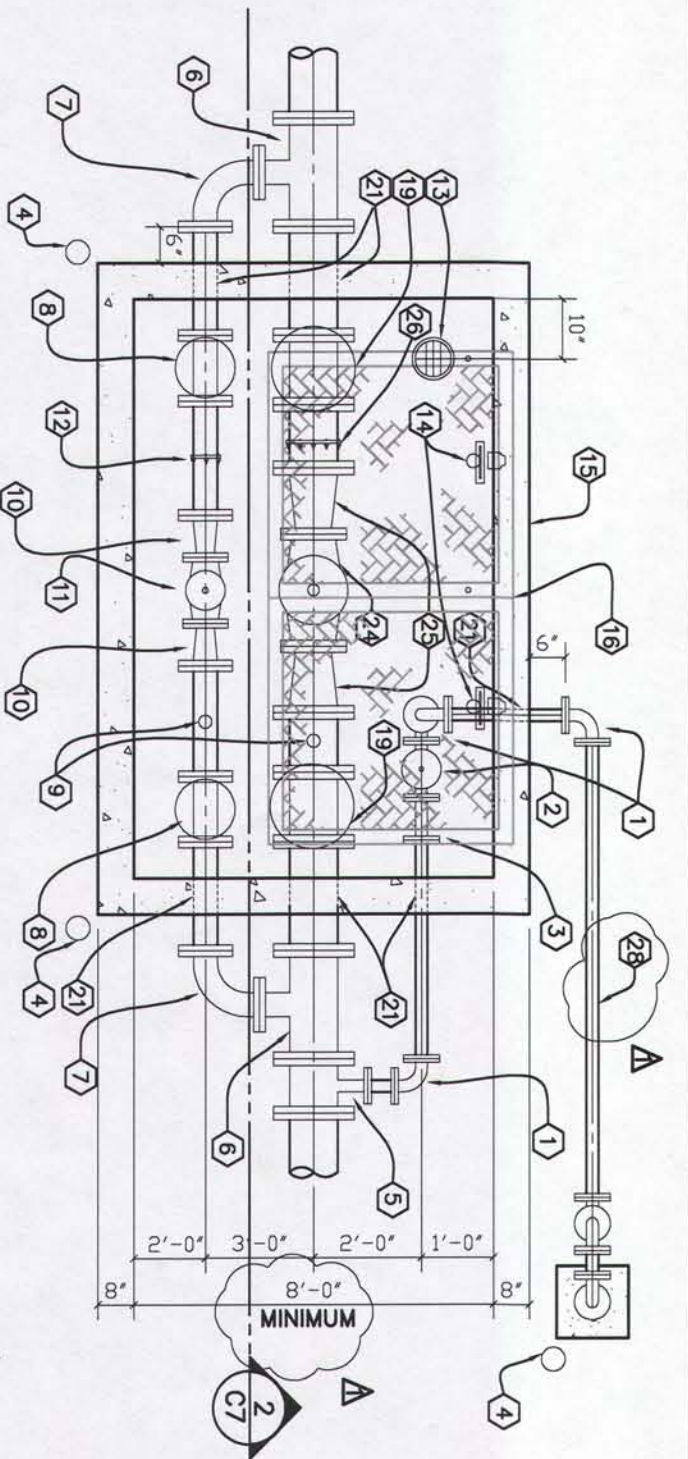
REV. NO.	BY	DATE	REVISION DESCRIPTION
1	JDV	5/11/10	ADDENDUM 1

DATE: APRIL 2010
DESIGN: JDV
DRAWN: JDV
CHECKED: CAS
CAS JOB NUMBER: 2489093
SCALE: AS SHOWN
SAWS JOB NO: 09-7008
SHEET

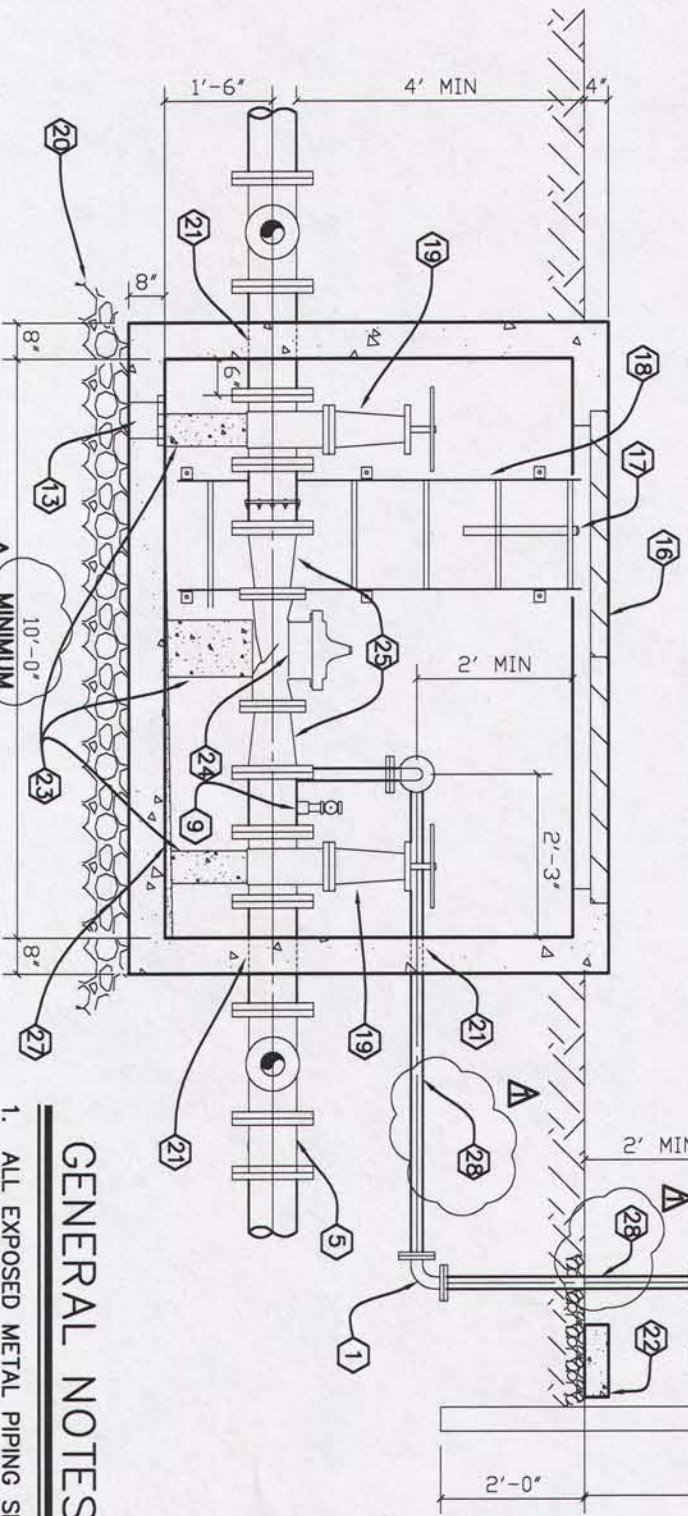
C6

PRESSURE REDUCING VALVE EQUIPMENT LIST

- 1 2" 90° BEND
- 2 2" PRESSURE RELIEF VALVE
- 3 2" GATE VALVE, FLG. W/ HAND WHEEL (OPEN LEFT)
- 4 4" CREOSOTED TIMBER POST OR EQUAL, LOCATION DETERMINED BY S.A.W.S
- 5 12" X 2" TEE
- 6 12" X 4" TEE
- 7 4" 90° LONG BEND
- 8 4" GATE VALVE, FLANGED W/ HAND WHEEL (OPEN LEFT)
- 9 2" SAMPLE TAP
- 10 4" x 3" CONCENTRIC REDUCER
- 11 3" PRESSURE REDUCING VALVE
- 12 4" FLANGED COUPLING ADAPTOR
- 13 6" DIA. DRAIN HOLE TO FIT 6" P.V.C. PIPE WITH POLYMER GRATING RECESSED INTO FLOOR
- 14 DROP HANDLES AND PADLOCK HASP LOCATION AND SIZE TO BE APPROVED BY S.A.W.S PRODUCTION
- 15 PRECAST CONCRETE VAULT WITH TRAFFIC BEARING ALUMINUM COVER BY OLDCASTLE (OR EQUAL VAULT).
- 16 DOUBLE LEAF (3' x 3' EACH OPENING) H-20 TRAFFIC BEARING FRAME AND COVER CAST IN FLUSH WITH TOP OF CONCRETE VAULT. LID IS TO BE 1/4" SAFETY FLOOR PLATE SPRING ASSISTED FOR EASY OPENING AND PAINTED ALUMINUM. DOUBLE LEAF HATCH SHALL BE EQUIPPED WITH LADDER SAFETY GRATES, PAINTED SAFETY ORANGE.
- 17 LADDER SAFETY POST BY BILCO MODEL NO. 1 (OR EQUAL).
- 18 ALUMINUM LADDER - RE: 1/C13
- 19 12" GATE VALVE W/ HAND WHEEL (OPEN LEFT)
- 20 6" DEEP 1/2" GRAVEL BEDDING EXTEND 6" ALL AROUND
- 21 PLACE 3/8" EXPANSION JOINT FILLER AROUND PIPE AND GROUT (TYPICAL)
- 22 SPLASH CONCRETE BLOCK 1'-0" x 1'-0" x 4"
- 23 CONCRETE BLOCKS CUT TO HEIGHT AS REQUIRED OR EQUAL
- 24 8" PRESSURE REDUCING VALVE
- 25 12" x 6" CONCENTRIC REDUCER
- 26 12" FLANGED COUPLING ADAPTER
- 27 GROUT TO SLOPE TO DRAIN
- 28 2" STEEL PIPE



1
PRESSURE REDUCING VALVE
DETAIL (TYPICAL)
SCALE: NOT TO SCALE



2
PRESSURE REDUCING VALVE
SECTION (TYPICAL)
SCALE: NOT TO SCALE

GENERAL NOTES

1. ALL EXPOSED METAL PIPING SHALL BE PAINTED ACCORDING TO THE OWNER'S SPECIFICATIONS. COORDINATE COLOR WITH OWNER.
2. CONTRACTOR SHALL VERIFY SIZE, TYPE AND LOCATION ORIENTED TO MINIMIZE THE POSSIBILITY OF AIR ENTRAPMENT.
3. WELDED STEEL THRUST HARNESS SHALL BE CONSTRUCTED IN ACCORDANCE WITH AWWA M11 FOR HARNESSSED COUPLING ADAPTERS. THE RODS SHALL BE IN ACCORDANCE WITH SAWS STANDARD DRAWING DD-816-02.
4. PRESSURE REDUCING VALVE SHALL BE CENTERED HORIZONTALLY IN THE CONCRETE VAULT, UNLESS OTHERWISE DIRECTED BY S.A.W.S.

STOP!
CALL BEFORE YOU DIG

1-800-DIG-TESS
(at least 72 hours prior to digging)

WARNING: CONTRACTOR TO VERIFY PRESENCE AND EXACT LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION.

REV. NO.	BY	DATE	REVISION DESCRIPTION
1	JDV	5/11/10	ADDENDUM 1



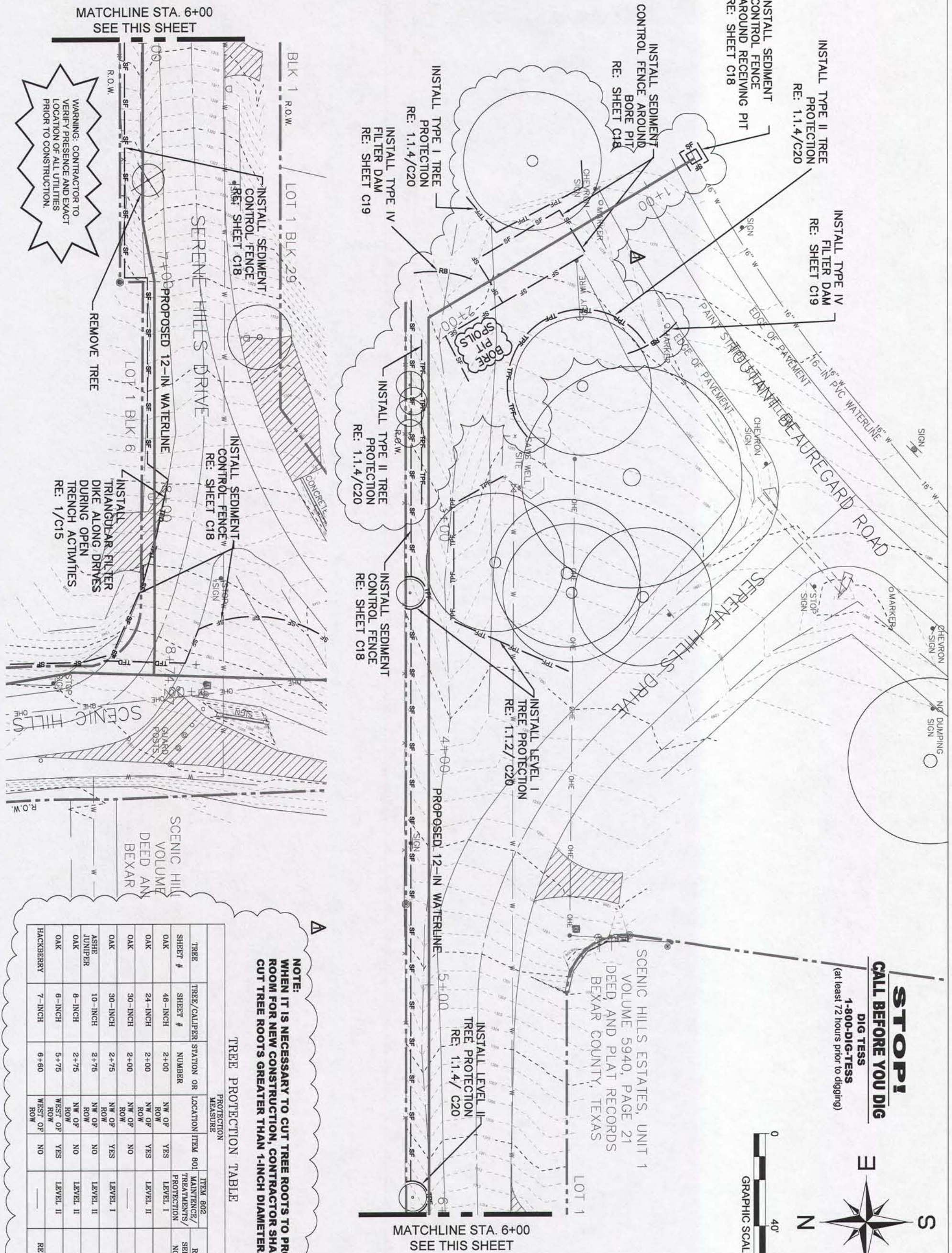
CAS CONSULTING & SERVICES INC
700 E. SONTERRA BLVD. SUITE 1206
SAN ANTONIO, TEXAS 78258
REG. No. E-003572

S&S HILLS SUBDIVISION
12-INCH WATERLINE EXTENSION
SAWS HIGH PRESSURE ZONE

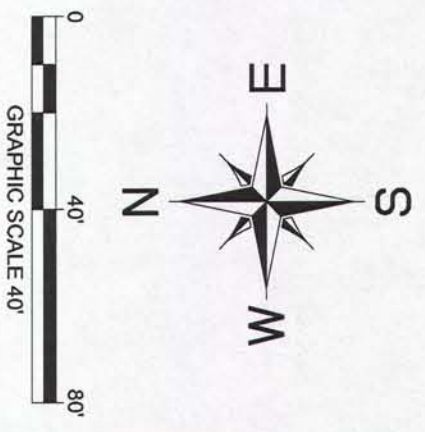
PRESSURE REDUCING VALVE DETAIL

DATE: APRIL 2010
DESIGN: JDV
DRAWN: JDV
CHECKED: CAS
CAS JOB NUMBER: 2489083
SCALE: AS SHOWN
SAWS JOB NO: 09-7008

SHEET
C7



STOP!
CALL BEFORE YOU DIG
 DIG TESS
 1-800-DIG-TESS
 (at least 72 hours prior to digging)



SCENIC HILLS ESTATES, UNIT 1
 VOLUME 5940, PAGE 21
 DEED AND PLAT RECORDS
 BEXAR COUNTY, TEXAS

MATCHLINE STA. 6+00
 SEE THIS SHEET

NOTE:
 WHEN IT IS NECESSARY TO CUT TREE ROOTS TO PROVIDE ROOM FOR NEW CONSTRUCTION, CONTRACTOR SHALL SAW CUT TREE ROOTS GREATER THAN 1-INCH DIAMETER.

TREE PROTECTION TABLE

TREE SHEET #	TREE/CALIPER SHEET #	STATION OR NUMBER	LOCATION ITEM	BOI	MAINTENANCE/TREATMENTS/PROTECTION	REMOVAL
OAK	48-INCH	2+00	NW OP ROW	YES	LEVEL I	SEE GENERAL NOTE No. 2
OAK	24-INCH	2+00	NW OP ROW	YES	LEVEL I	
OAK	30-INCH	2+00	NW OP ROW	NO	LEVEL II	
OAK	30-INCH	2+75	NW OP ROW	YES	LEVEL I	
ASH	10-INCH	2+75	NW OP ROW	NO	LEVEL II	
JUNIPER	8-INCH	2+75	NW OP ROW	NO	LEVEL II	
OAK	6-INCH	5+75	WEST OP ROW	YES	LEVEL II	
HACKBERRY	7-INCH	6+60	WEST OP ROW	NO		REMOVAL

TEMPORARY EROSION AND SEDIMENTATION CONTROL AND TREE PROTECTION SHEET 2 OF 3

CAS CONSULTING & SERVICES INC
 700 E. SONTERRA BLVD. SUITE 1206
 SAN ANTONIO, TEXAS 78258
 REG. No. E-003572

S&S HILLS SUBDIVISION
 12-INCH WATERLINE EXTENSION
 SAWS HIGH PRESSURE ZONE



REV	BY	DATE	REVISION DESCRIPTION
1	JOV	5/11/10	ADDENDUM 1

C16
 SHEET

DATE: APRIL 2010
 DESIGN: JIV
 DRAWN: JIV
 CHECKED: CAS
 CAS JOB NUMBER: 2489083
 SCALE: AS SHOWN
 SAMS JOB NO: 08-7008