

Addendum No. 4
Regional Carrizo Project - Schertz Parkway Pump Station
SAWS Job No. 10-8617
SAWS Solicitation No. B-11-061-RA

ADDENDUM NO. 4

March 27, 2012

This addendum, applicable to work designated above, is an amendment to the proposal 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.

A. Addendum Purpose

1. The purpose of this addendum is to issue revisions to the plans and specifications for the Regional Carrizo Project - Schertz Parkway Pump Station (SAWS Job No. 10-8617; SAWS Solicitation No. B-11-061-RA).

B. Modifications to the Plans

1. Sheet C-250 (93 of 130): Micro-Surface the North East Service Center parking lot per changes to Sheet C-250 which are indicated with revision clouds in the revised drawing included with Addendum No. 4.
2. Sheet C-350 (96 of 130): Revise control station slab and wall height per changes to Sheet C-350 which are indicated with revision clouds in the revised drawing included with Addendum No. 4.
3. Sheet C-351 (97 of 130): Revise Water Line 'Y' alignment per changes to Sheet C-351 which are indicated with revision clouds in the revised drawing included with Addendum No. 4.
4. Sheet M-150 (99 of 130): Revise control station slab and wall height as indicated in the Plan and Detail B per changes to Sheet M-150 which are indicated with revision clouds in the revised drawing included with Addendum No. 4. Add conduits for control station piping as indicated in the Plan per changes to Sheet M-150 which are indicated with revision clouds in the revised drawing included with Addendum No. 4.

ACKNOWLEDGEMENT BY BIDDER

Each respondent is requested to acknowledge receipt of this Addendum No. 4 by his/her signature affixed hereto and to file same and attach with his/her proposal.

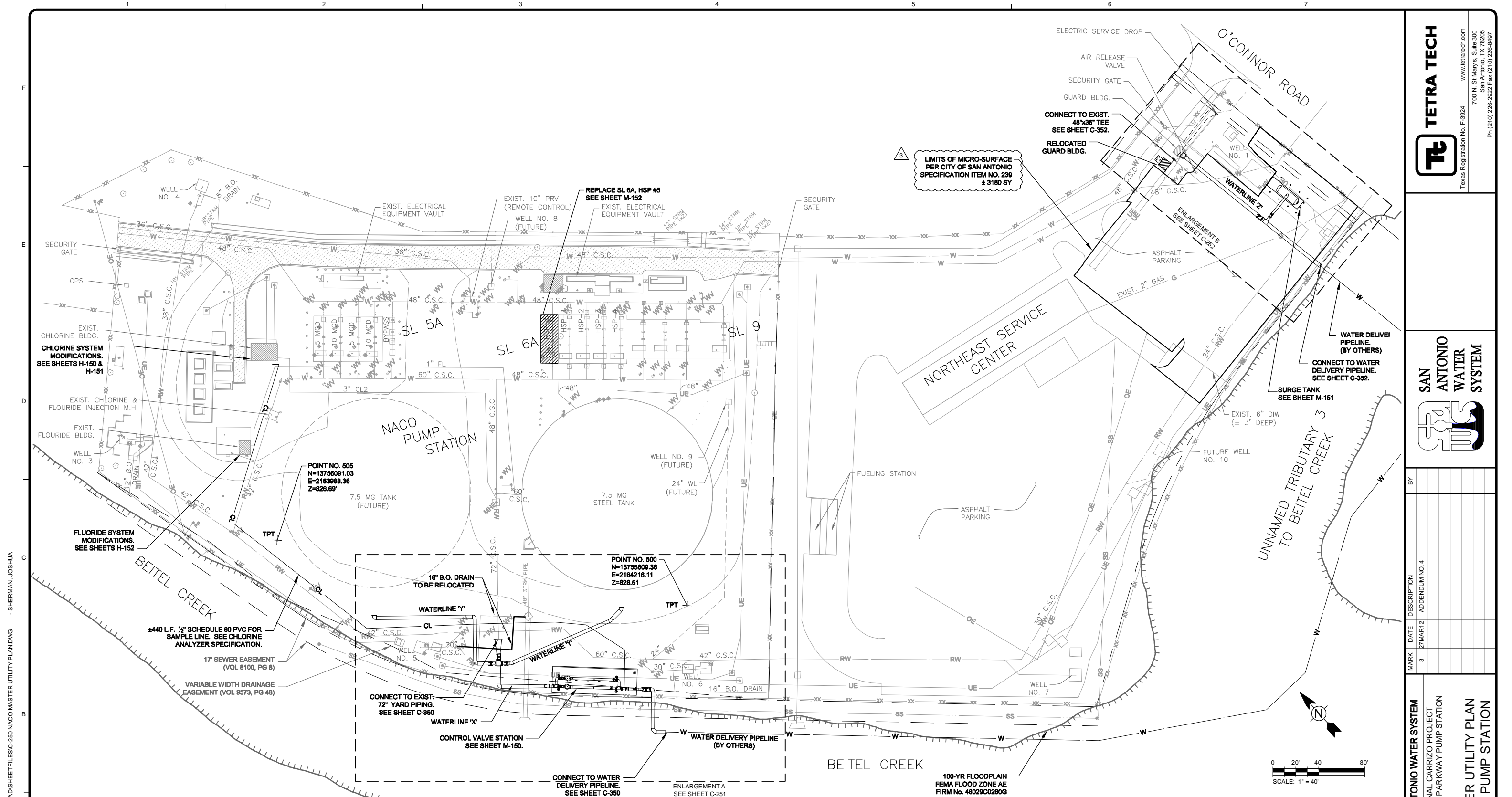
The undersigned acknowledges receipt of this Addendum No. 4 and the proposal submitted herewith is in accordance with the information and stipulations set forth.

Date

Signature

Tetra Tech, Inc.
Texas Registered Engineering Firm F-3924
700 N. Saint Mary's Street, Ste. 300
San Antonio, TX 78205





- NOTES:**
- EXISTING TOPOGRAPHIC SURVEY FOR NACO PUMP STATION PROVIDED BY BAIN MEDINA BAIN, INC., DATED MAY 2011.
 - EXISTING TOPOGRAPHIC SURVEY FOR WELL NO. 1 SITE PROVIDED BY AERIAL TOPOGRAPHY DATED OCTOBER 2011.
 - EXISTING LINE WORK FOR THE NORTHEAST SERVICE CENTER, NOT COVERED BY TOPOGRAPHIC SURVEY, WAS TAKEN FROM NACO PUMP STATION PLANS OF RECORD DATED 12-19-89.
 - COORDINATES AND DISTANCES ARE IN U.S. SURVEY FEET. DISPLAYED VALUES ARE NAD 83 (HARN) TX SOUTH CENTRAL SURFACE VALUES DERIVED BY MULTIPLYING GRID COORDINATES BY 1.00017.

- ALL HORIZONTAL AND VERTICAL CONTROL VALUES WERE OBTAINED BY GPS RTK OBSERVATIONS USING THE FOLLOWING CONTINUOUSLY OPERATING REFERENCE STATIONS.
 CORS ID - EZSA
 DESIGNATED - EASY SAN ANT COOP CORS ARP
 PID - DG5157
 STATE/COUNTY - TX/BEXAR
- VERTICAL DATUM IS BASED ON CONVENTIONAL LEVEL LOOP THRU CONTROL POINTS HOLDING CONTROL POINT 100.

7. DESIGN PRESSURE FOR WELDED STEEL PIPE SHALL BE AS FOLLOWS:

PIPELINE	DESCRIPTION	PIPE DIAMETER	WORKING PRESSURE (PSI)	TRANSIENT/TEST PRESSURE (PSI)
WATERLINE 'X'	SUPPLY PIPE	36 INCH	113	170
WATERLINE 'Y'	TANK INLET	36 INCH	61	146
PUMP SUCTION PIPING	PUMP SUCTION PIPING	24 INCH & 30 INCH	25	38
PUMP DISCHARGE PIPING	PUMP DISCHARGE PIPING	24 INCH	115	173
WATERLINE 'Z'	EMERGENCY RETURN	24 INCH	111	167

* CONTRACTOR SHALL TEST WATERLINE 'X' PRIOR TO CONNECTION TO EXISTING 72" CROSS.

TETRA TECH
 Texas Registration No. F-3924
 www.tetra-tech.com
 700 N. St Mary's, Suite 300
 San Antonio, TX 78205
 Ph (210) 226-2922 F. ax (210) 226-6497

SAN ANTONIO WATER SYSTEM

MARK	DATE	DESCRIPTION
3	27MAR12	ADDENDUM NO. 4

SAN ANTONIO WATER SYSTEM
 REGIONAL CARRIZO PROJECT
 SCHERTZ PARKWAY PUMP STATION

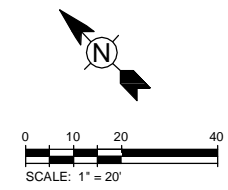
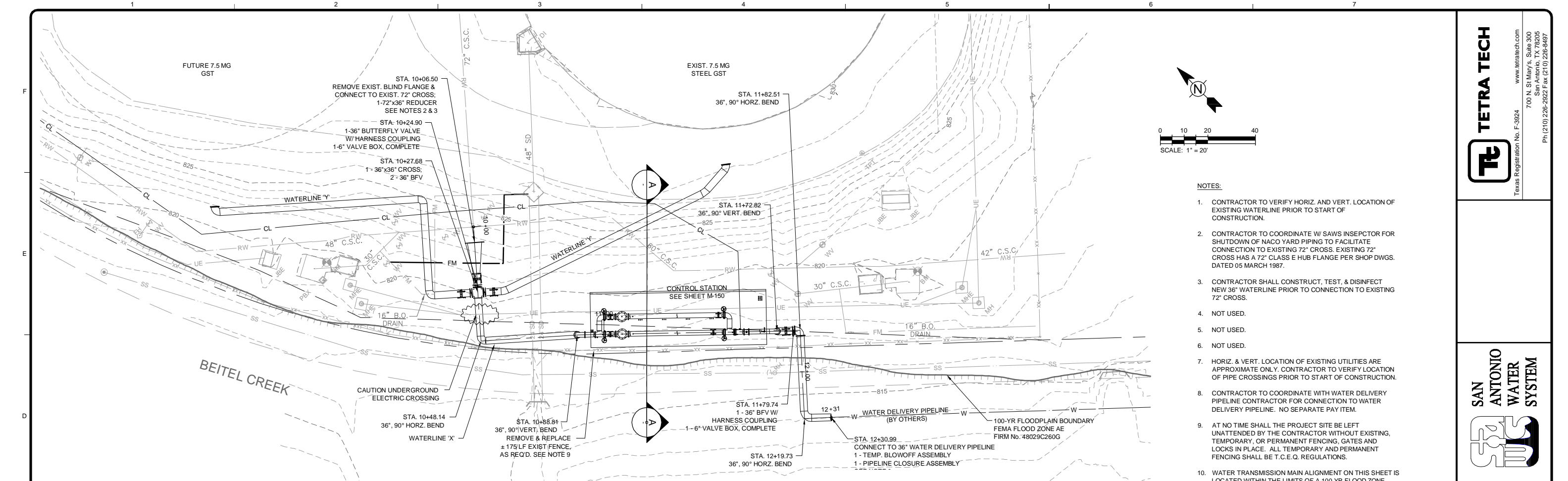
MASTER UTILITY PLAN
NACO PUMP STATION

SAWS Job No.: 10-8617
 Designed By: JAS
 Drawn By: JAS
 Checked By: FJR

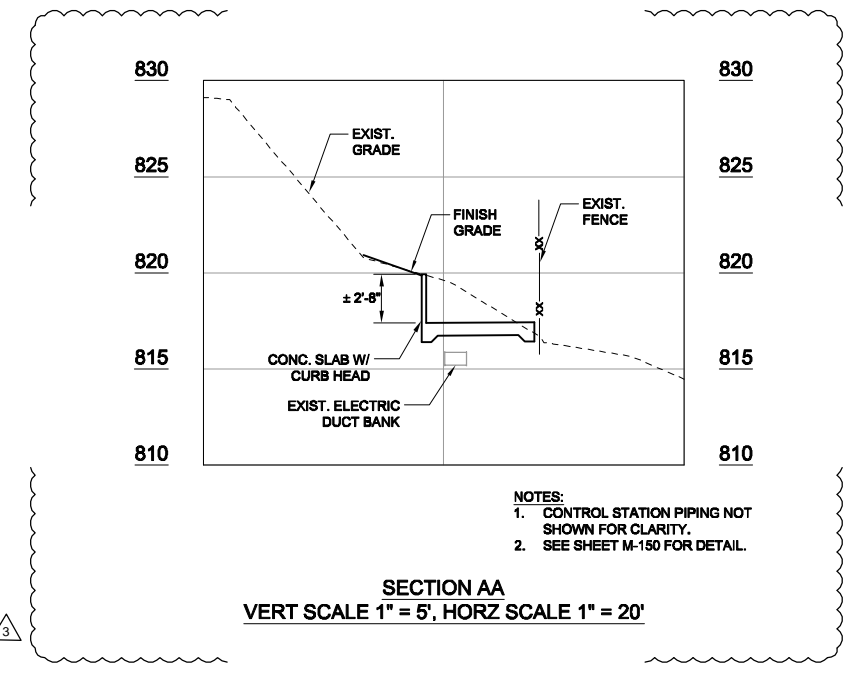
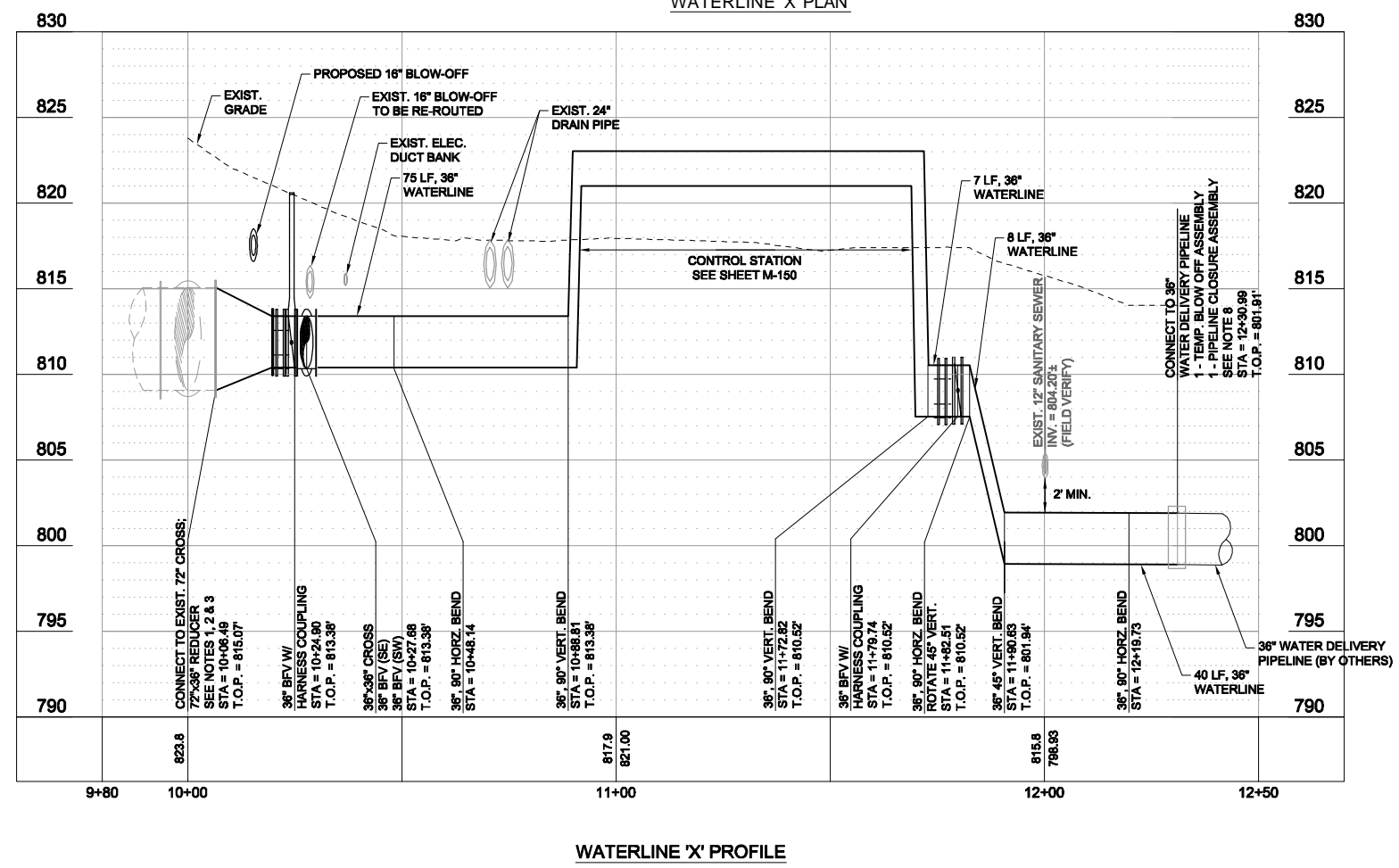
C-250
 Sheet: 93 of 130



1/27/2012 3:07:02 PM - P:\093981\31-09398-11002\CAD\SHEETLESS-C-250 NACO MASTER UTILITY PLAN.DWG - SHERMAN, JOSHUA



- NOTES:**
- CONTRACTOR TO VERIFY HORIZ. AND VERT. LOCATION OF EXISTING WATERLINE PRIOR TO START OF CONSTRUCTION.
 - CONTRACTOR TO COORDINATE W/ SAWS INSEPECTOR FOR SHUTDOWN OF NACO YARD PIPING TO FACILITATE CONNECTION TO EXISTING 72" CROSS. EXISTING 72" CROSS HAS A 72" CLASS E HUB FLANGE PER SHOP DWGS. DATED 05 MARCH 1987.
 - CONTRACTOR SHALL CONSTRUCT, TEST, & DISINFECT NEW 36" WATERLINE PRIOR TO CONNECTION TO EXISTING 72" CROSS.
 - NOT USED.
 - NOT USED.
 - NOT USED.
 - HORIZ. & VERT. LOCATION OF EXISTING UTILITIES ARE APPROXIMATE ONLY. CONTRACTOR TO VERIFY LOCATION OF PIPE CROSSINGS PRIOR TO START OF CONSTRUCTION.
 - CONTRACTOR TO COORDINATE WITH WATER DELIVERY PIPELINE CONTRACTOR FOR CONNECTION TO WATER DELIVERY PIPELINE. NO SEPARATE PAY ITEM.
 - AT NO TIME SHALL THE PROJECT SITE BE LEFT UNATTENDED BY THE CONTRACTOR WITHOUT EXISTING, TEMPORARY, OR PERMANENT FENCING, GATES AND LOCKS IN PLACE. ALL TEMPORARY AND PERMANENT FENCING SHALL BE T.C.E.Q. REGULATIONS.
 - WATER TRANSMISSION MAIN ALIGNMENT ON THIS SHEET IS LOCATED WITHIN THE LIMITS OF A 100 YR FLOOD ZONE.



TETRA TECH

Texas Registration No. F-3924 www.tetra-tech.com

700 N. St Mary's, Suite 300
San Antonio, TX 78205
Ph (210) 226-2922 Fax (210) 226-6487

SAN ANTONIO WATER SYSTEM

MARK	DATE	DESCRIPTION
3	27MAR12	ADDENDUM NO. 4

SAN ANTONIO WATER SYSTEM
REGIONAL CARRIZO PROJECT
SCHERTZ PARKWAY PUMP STATION

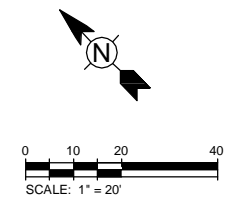
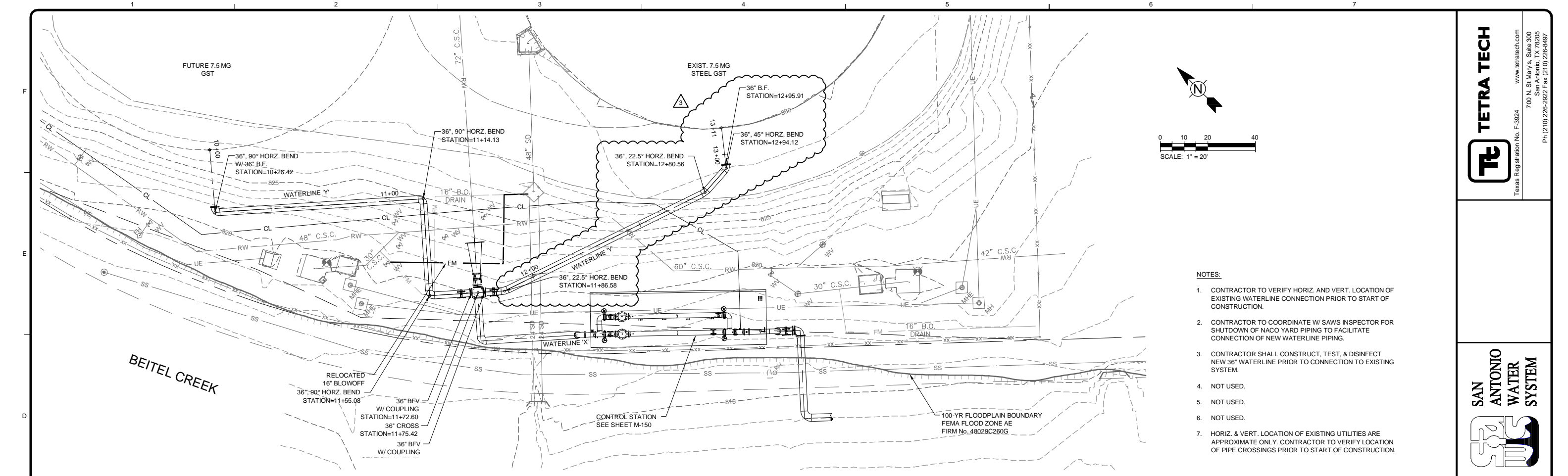
WATERLINE 'X' PLAN & PROFILE

SAWS Job No.:	10-8617
Designed By:	JAS
Drawn By:	JWL
Checked By:	FJR

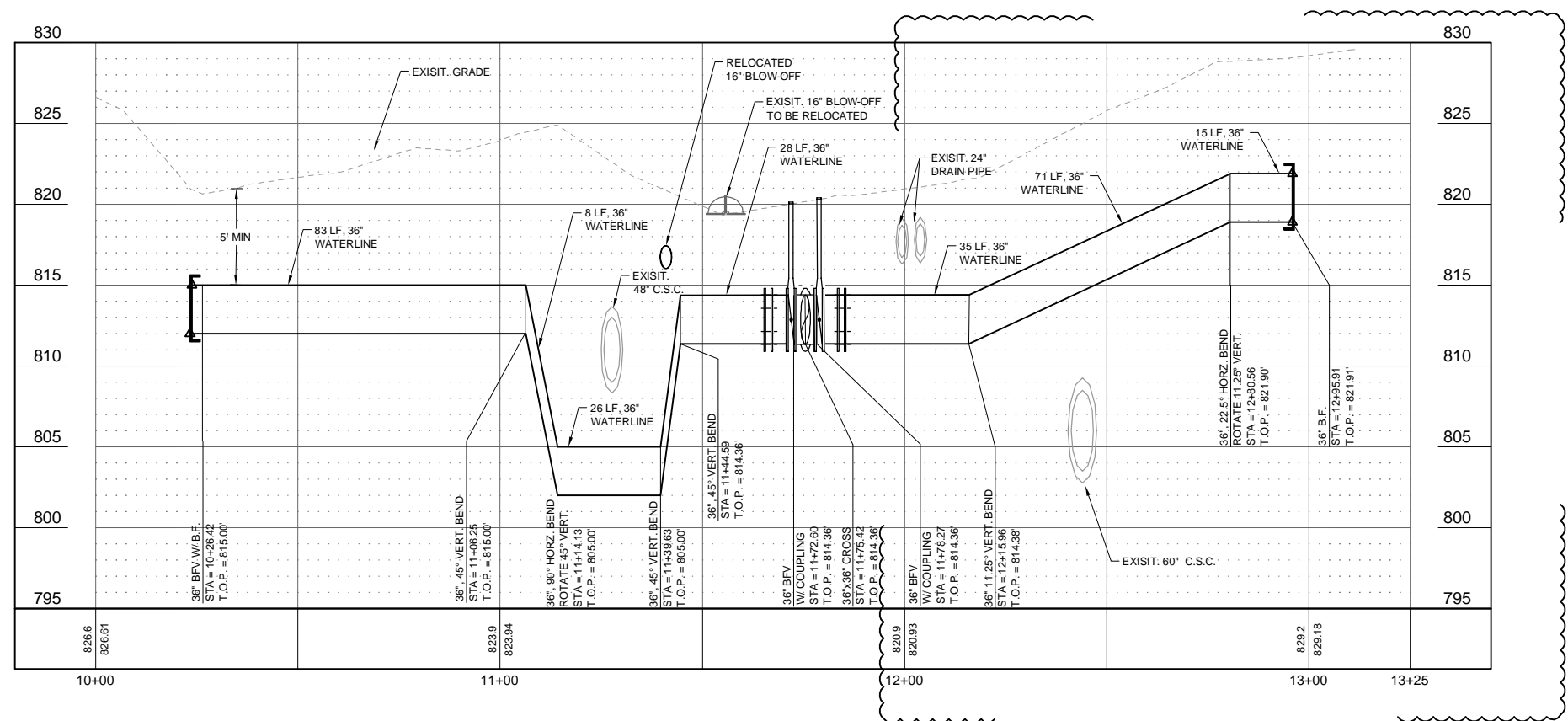


C-350
Sheet: 96 of 130

1/27/2012 3:06:16 PM - P:\09308131-09308-11002\CAD\SHEETFILES\C-350 WATERLINE X - P&P.DWG - SHERMAN, JOSHUA



- NOTES:**
1. CONTRACTOR TO VERIFY HORIZ. AND VERT. LOCATION OF EXISTING WATERLINE CONNECTION PRIOR TO START OF CONSTRUCTION.
 2. CONTRACTOR TO COORDINATE W/ SAWS INSPECTOR FOR SHUTDOWN OF NACO YARD PIPING TO FACILITATE CONNECTION OF NEW WATERLINE PIPING.
 3. CONTRACTOR SHALL CONSTRUCT, TEST, & DISINFECT NEW 36" WATERLINE PRIOR TO CONNECTION TO EXISTING SYSTEM.
 4. NOT USED.
 5. NOT USED.
 6. NOT USED.
 7. HORIZ. & VERT. LOCATION OF EXISTING UTILITIES ARE APPROXIMATE ONLY. CONTRACTOR TO VERIFY LOCATION OF PIPE CROSSINGS PRIOR TO START OF CONSTRUCTION.



WATERLINE 'Y' PROFILE
 VERT SCALE 1" = 5', HORIZ SCALE 1" = 20'

TETRA TECH
 Texas Registration No. F-3924
 www.tetra-tech.com
 700 N. St Mary's, Suite 300
 San Antonio, TX 78205
 Ph (210) 226-2922 Fax (210) 226-6497

SAN ANTONIO WATER SYSTEM

MARK	DATE	DESCRIPTION
3	27MAR12	ADDENDUM NO. 4

SAN ANTONIO WATER SYSTEM
 REGIONAL CARRIZO PROJECT
 SCHERTZ PARKWAY PUMP STATION

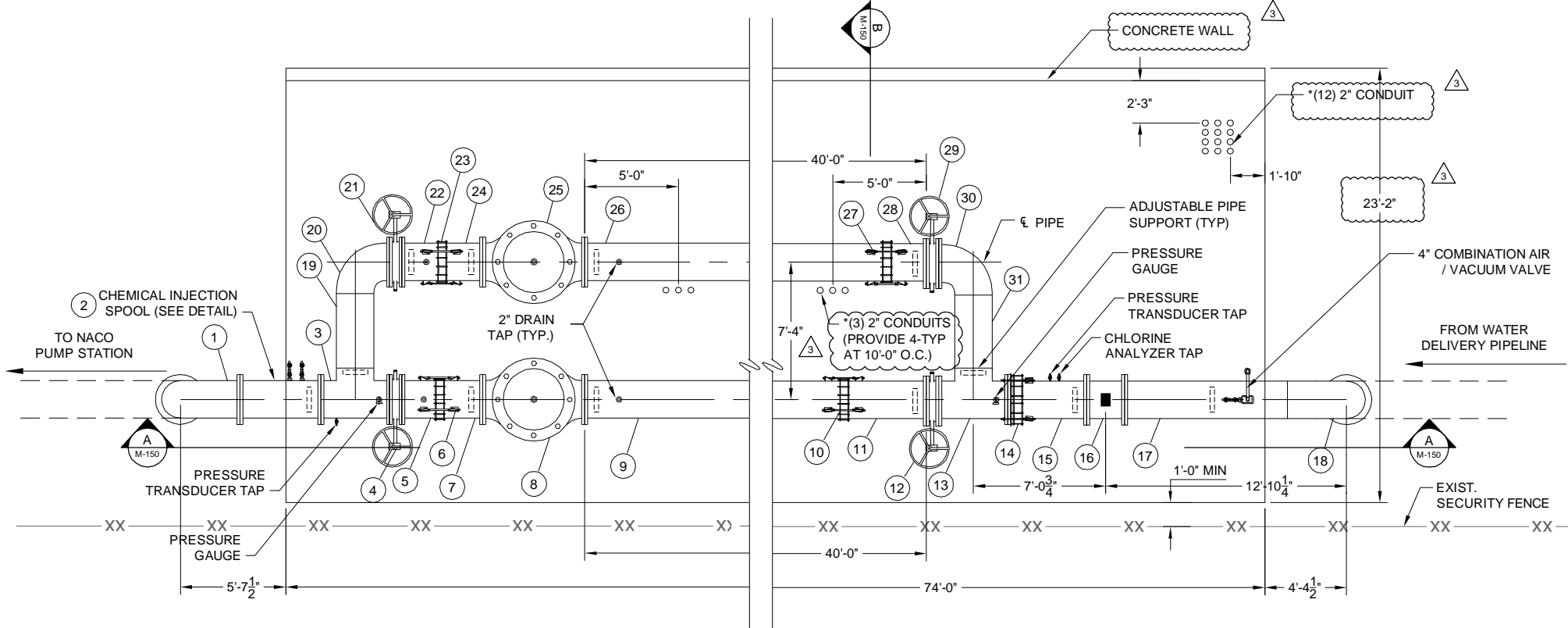
WATERLINE 'Y' PLAN & PROFILE

SAWS Job No.:	10-8617
Designed By:	JAS
Drawn By:	JAS
Checked By:	FJR



C-351
 Sheet: 97 of 130

2/27/2012 3:10:05 PM - P:\09308\131-09308-11002\CAD\SHEETFILES\C-351 WATERLINE Y - P&P.DWG - SHERMAN, JOSHUA

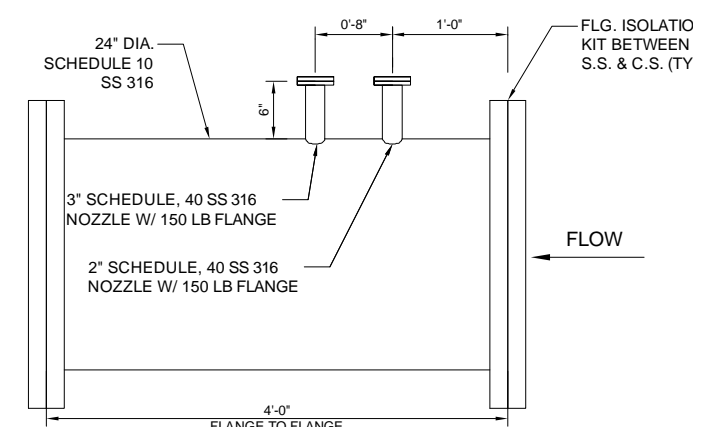


EQUIPMENT LIST:

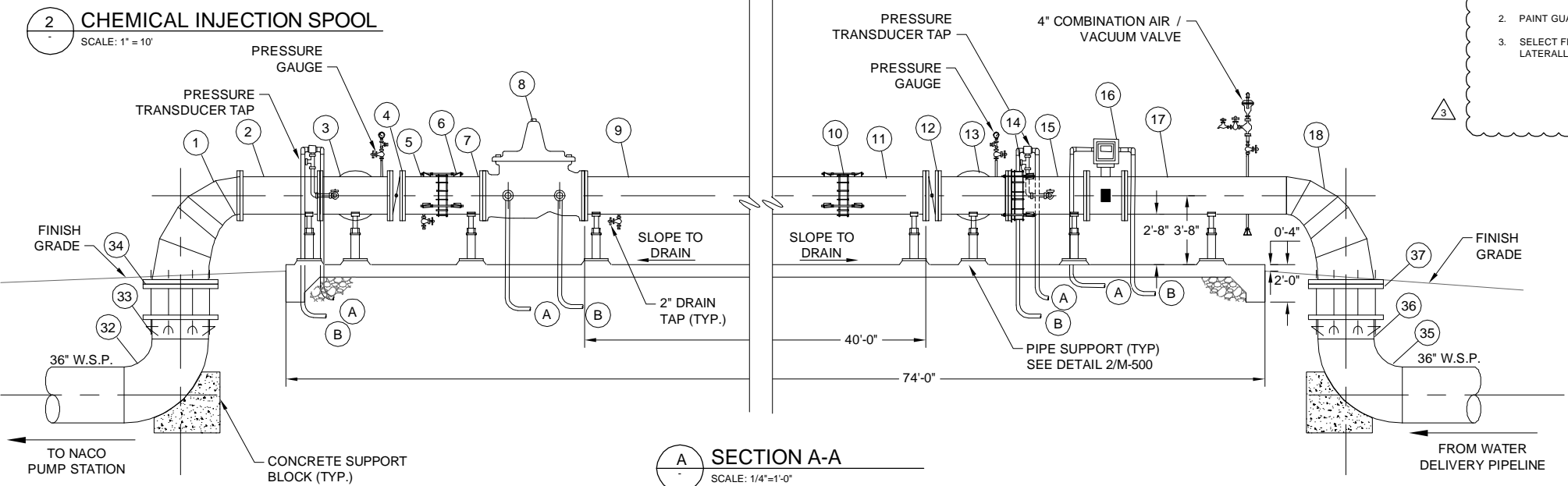
- | | |
|---|----------------------------------|
| 1. 36" x 24" FAB, RED. 90° BEND, FLG x FLG | 28. 24" SPOOL (L.A.R.), PE X FLG |
| 2. 24" S.S. SPOOL (4'-0"), FLG x FLG | 29. 24" BFV |
| 3. 24" x 24" TEE, FLG x FLG x WLD | 30. 24" 90° BEND, FLG x WLD |
| 4. 24" BFV | 31. 24" SPOOL (L.A.R.), WLD |
| 5. 24" SPOOL (L.A.R.), FLG x PE | 32. 36" 90° BEND, WLD |
| 6. 24" HARNESS COUPLING | 33. 36" SPOOL (L.A.R.), WLD x PE |
| 7. 24" SPOOL (L.A.R.), PE x FLG | 34. 36" RESTRAINED FCA |
| 8. 24" CONTROL VALVE | 35. 36" 90° BEND, WELD |
| 9. 24" SPOOL (L.A.R.), FLG X PE | 36. 36" SPOOL (L.A.R.), WLD x PE |
| 10. 24" HARNESS COUPLING | 37. 36" RESTRAINED FCA |
| 11. 24" SPOOL (L.A.R.), PE X FLG | |
| 12. 24" BFV | |
| 13. 24" X 24" TEE, FLG x FLG x WLD | |
| 14. 24" RESTRAINED FCA | |
| 15. 24" SPOOL (L.A.R.), PE x FLG | |
| 16. 24" MAG METER | |
| 17. 24" SPOOL (L.A.R.), FLG x WLD | |
| 18. 36" x 24" FAB, RED. 90° BEND, WLD x FLG | |
| 19. 24" SPOOL (L.A.R.), WLD | |
| 20. 24" 90° BEND, WLD x FLG | |
| 21. 24" BFV | |
| 22. 24" SPOOL (L.A.R.), FLG X PE | |
| 23. 24" HARNESS COUPLING | |
| 24. 24" SPOOL (L.A.R.), PE x FLG | |
| 25. 24" CONTROL VALVE | |
| 27. 24" HARNESS COUPLING | |

L.A.R. - LENGTH AS REQ'D
 WLD - WELDED
 FLG - FLANGED
 PE - PLAIN END
 FCA - FLANGED COUPLING ADAPTE

A. CONDUIT TO SCADA
 B. CONDUIT TO POWER



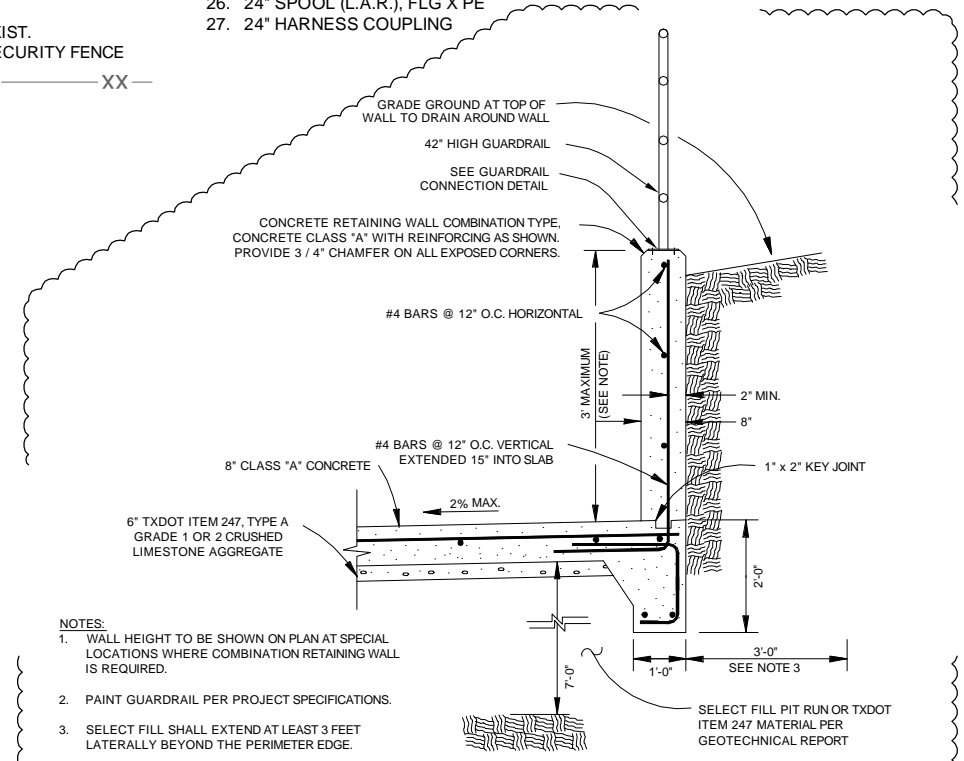
2 CHEMICAL INJECTION SPOOL
 SCALE: 1" = 10"



A SECTION A-A
 SCALE: 1/4"=1'-0"

NOTES:

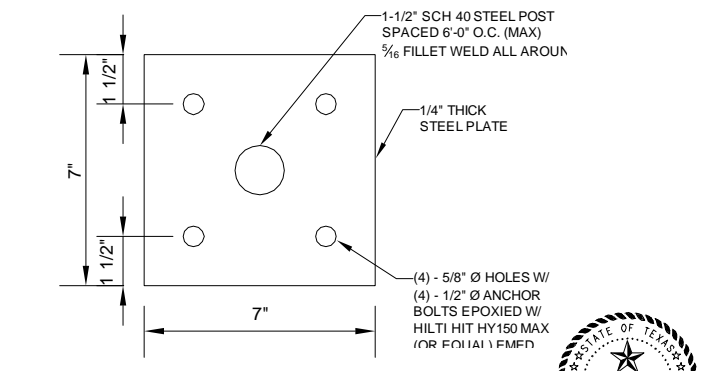
- ALL ABOVE GRADE PIPING SHALL BE WELDED STEEL PIPE WITH RESTRAINED JOINTS, UNLESS OTHERWISE NOTED.
- ALL VALVES IN THE PRODUCTION FACILITY SHALL BE "OPEN LEFT".
- ALL PIPING AND FITTINGS TO BE PAINTED PER PROJECT SPECIFICATIONS.
- SLOPE TOP OF CONCRETE SLAB TO DRAIN.



NOTES:

- WALL HEIGHT TO BE SHOWN ON PLAN AT SPECIAL LOCATIONS WHERE COMBINATION RETAINING WALL IS REQUIRED.
- PAINT GUARDRAIL PER PROJECT SPECIFICATIONS.
- SELECT FILL SHALL EXTEND AT LEAST 3 FEET Laterally BEYOND THE PERIMETER EDGE.

B CONCRETE RETAINING WALL
 SCALE: NTS



C GUARDRAIL CONNECTION DETAIL
 SCALE: NTS

TETRA TECH
 Texas Registration No. F-3924
 www.tetratech.com
 700 N. St Mary's, Suite 300
 San Antonio, TX 78205
 Ph (210) 226-2922 Fax (210) 226-6497

SAN ANTONIO WATER SYSTEM

MARK	DATE	DESCRIPTION
3	27MAR12	ADDENDUM NO. 4

SAN ANTONIO WATER SYSTEM
 REGIONAL CARRIZO PROJECT
 SCHERTZ PARKWAY PUMP STATION
CONTROL STATION
NACO PS

SAWS Job No.: 10-8617
 Designed By: JAS
 Drawn By: JWL
 Checked By: FJR

M-150
 Sheet: 99 of 130

1/27/2012 3:21:57 PM - P:\09398\131-09398-11002\CAD\SHHEET\ES\M-150-PRESSURE RELIEF_BACK PRESSURE CTRL VALVE.DWG - SHERMAN, JOSHUA