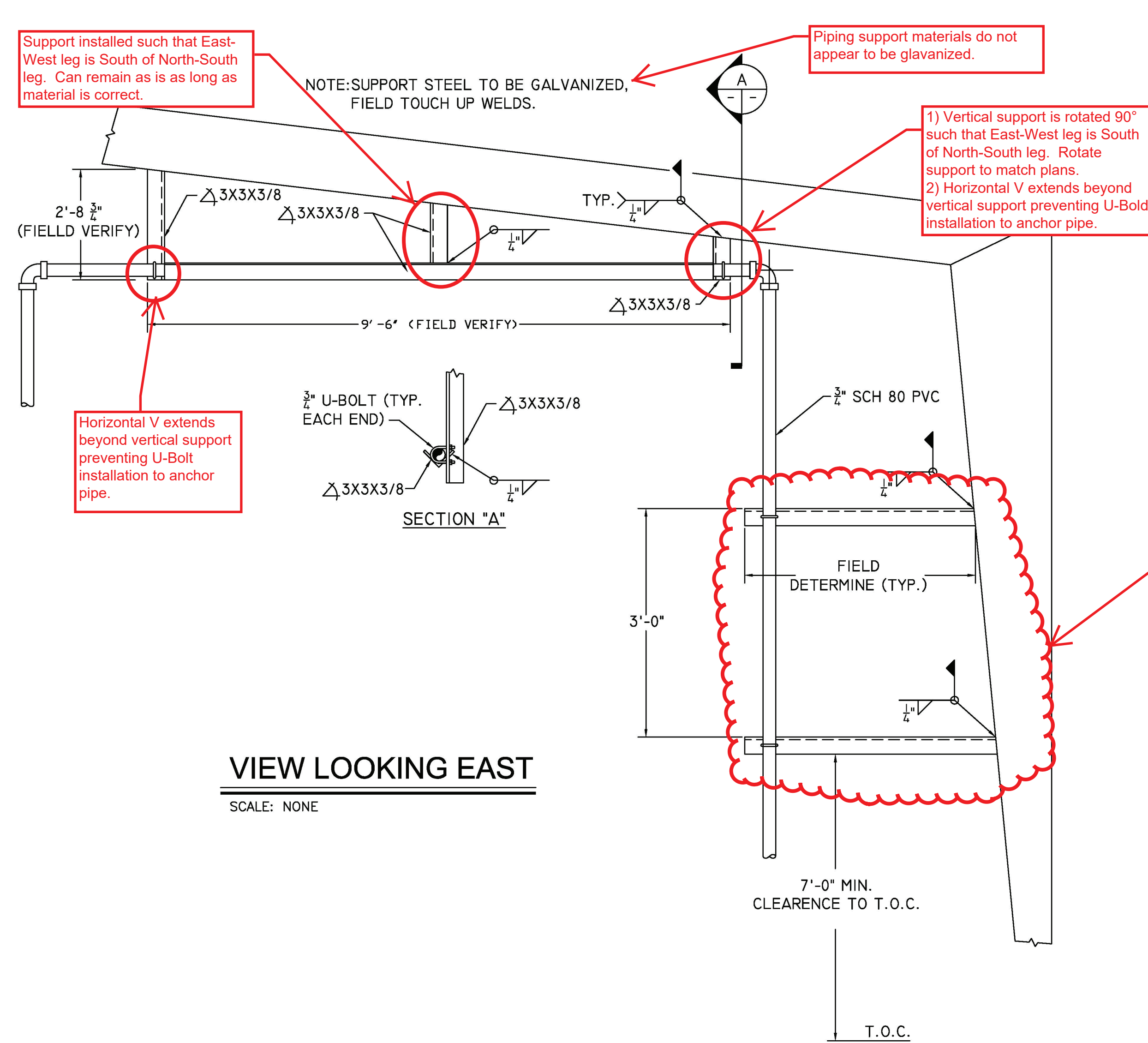
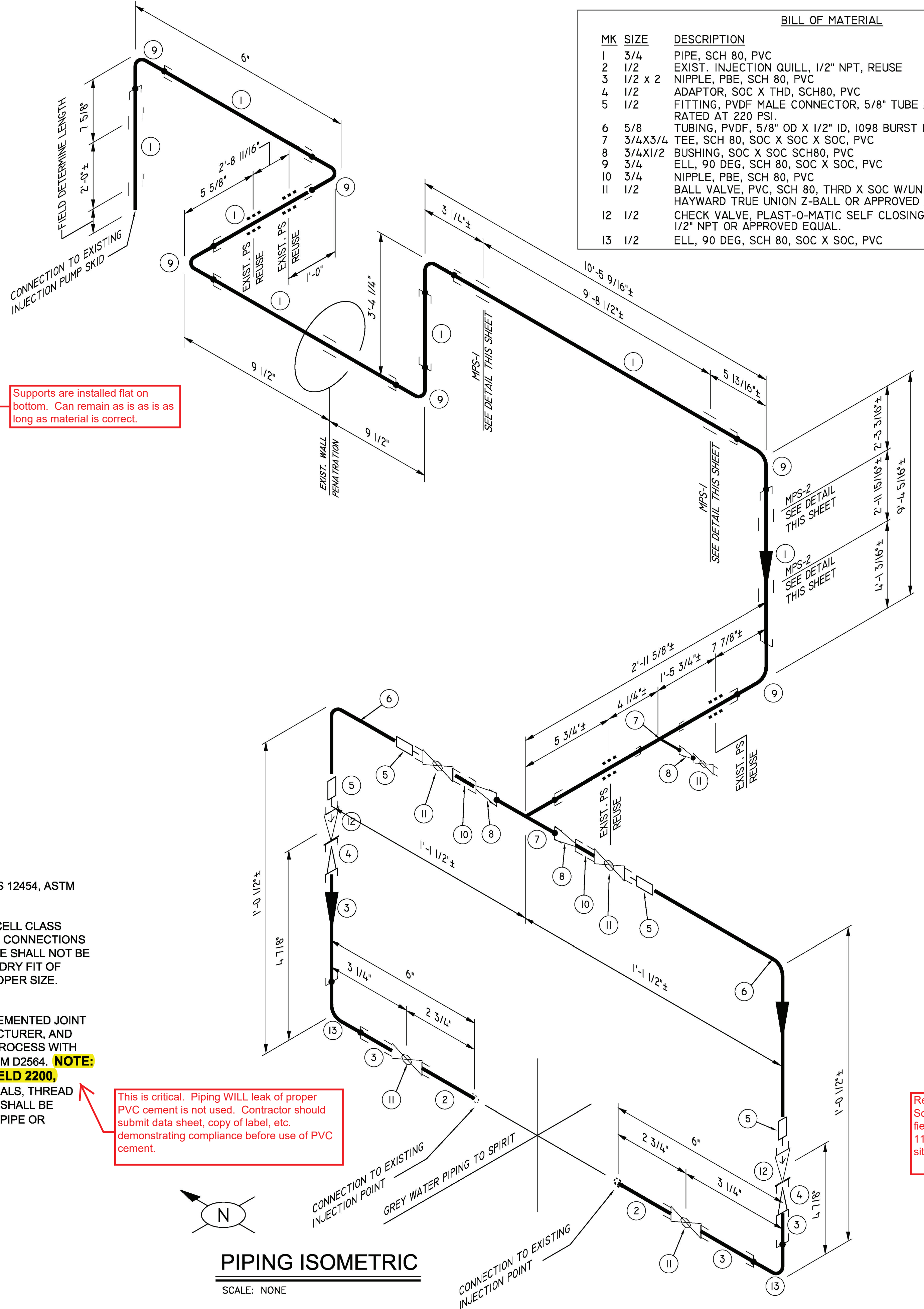


PLOTTED: Thursday, September 14, 2017 @ 03:51 PM
 J:\PROJECTS\2017\150100623_COW_REUSE_WATER_SUPPLY_SYSTEM_150623_CAD\BIB707_MECH_PIPING\SMAXX_PIPING ISOMETRIC2.DWG



VIEW LOOKING EAST
SCALE: NONE



PIPING ISOMETRIC
SCALE: NONE

MK	SIZE	DESCRIPTION	QTY
1	3/4	PIPE, SCH 80, PVC	2' 11"
2	1/2	EXIST. INJECTION QUILL, 1/2" NPT, REUSE	2
3	1/2 x 2	NIPPLE, PBE, SCH 80, PVC	4
4	1/2	ADAPTOR, SOC X THD, SCH80, PVC	2
5	1/2	FITTING, PVDF MALE CONNECTOR, 5/8" TUBE X 1/2" NPT, RATED AT 220 PSI	4
6	5/8	TUBING, PVDF, 5/8" OD X 1/2" ID, 1098 BURST PSI @ 70 DEG. F.	4' 0"
7	3/4 X 3/4	TEE, SCH 80, SOC X SOC X SOC, PVC	2
8	3/4 X 1/2	BUSHING, SOC X SOC SCH80, PVC	3
9	3/4	ELL, 90 DEG, SCH 80, SOC X SOC, PVC	7
10	3/4	NIPPLE, PBE, SCH 80, PVC	2
11	1/2	BALL VALVE, PVC, SCH 80, THRD X SOC W/UNION ENDS, HAYWARD TRUE UNION Z-BALL OR APPROVED EQUAL.	5
12	1/2	CHECK VALVE, PLAST-O-MATIC SELF CLOSING DIAPHRAM 1/2" NPT OR APPROVED EQUAL.	2
13	1/2	ELL, 90 DEG, SCH 80, SOC X SOC, PVC	2

Support installed such that East-West leg is South of North-South leg. Can remain as is as long as material is correct.

NOTE: SUPPORT STEEL TO BE GALVANIZED, FIELD TOUCH UP WELDS.

Piping support materials do not appear to be galvanized.

1) Vertical support is rotated 90° such that East-West leg is South of North-South leg. Rotate support to match plans.
2) Horizontal V extends beyond vertical support preventing U-Bolt installation to anchor pipe.

Horizontal V extends beyond vertical support preventing U-Bolt installation to anchor pipe.

Supports are installed flat on bottom. Can remain as is as long as material is correct.

GENERAL NOTED AND SPECIFICATIONS

- CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS AND LOCATION OF EQUIPMENT.
- COORDINATE EXACT LOCATION OF NEW PIPING AND VALVES WITH EXISTING EQUIPMENT, SUPPORTS, PIPING, CONDUITS, AND STRUCTURES.
- PVC PIPING SYSTEM SPECIFICATIONS:
 - PIPE: 3 INCH AND SMALLER PIPE SHALL BE DOMESTICALLY PRODUCED BY AN ISO 9001 MANUFACTURER OF TYPE I, GRADE I, PVC CELL CLASS 12454, ASTM D1784, ASTM D1785, SCHEDULE 80 MATERIAL.
 - FITTINGS: 3 INCH AND SMALLER FITTINGSS SHALL BE DOMESTICALLY PRODUCED BY AN ISO 9001 MANUFACTURER OF TYPE I, GRADE I, PVC CELL CLASS 12454, ASTM D1784, ASTM D1785, SCHEDULE 80 MATERIAL, SCHEDULE 80, SOCKET WELD TYPE CONFORMING TO ASTM D2467. ALL THREADED CONNECTIONS SHALL UTILIZE SOCKET WELD BY THREAD ADAPTERS, AND WHERE POSSIBLE, FEMALE THREADED FITTINGS SHALL BE REINFORCED. THE PIPE SHALL NOT BE THREADED. FLANGE CONNECTIONS SHALL UTILIZE SOCKET WELD VAN STONE STYLE FLANGES WITH 1/8 INCH, FULL FACE, VITON GASKETS. DRY FIT OF FITTING SOCKETS MUST BE SNUG. LOOSE FITTINGS SHALL CAUSE REJECTION OF THE PIPE AND/OR FITTINGS AS FAULTY BECAUSE OF IMPROPER SIZE. BUILDING UP JOINT TO OVERCOME LOOSE FIT WILL NOT BE PERMITTED.
 - INSTALLATION: INSTALLATION SHALL COMPLY WITH THE LATEST REVISION OF ASTM D2855 "STANDARD PRACTICES FOR MAKING SOLVENT-CEMENTED JOINT WITH POLYVINYL CHLORIDE (PVC) PIPE AND FITTINGS", THE LATEST REVISION OF INSTALLATION INSTRUCTIONS PUBLISHED BY THE MANUFACTURER, AND SHALL CONFORM TO ALL PUMBING, BUILDING, AND FIRE CODE REQUIREMENTS. SOLVENT CEMENT JOINTS SHALL BE MADE IN A TWO STEP PROCESS WITH PRIMER MANUFACTURED FOR THERMOPLASTIC PIPING SYSTEMS IN POTABLE WATER SERVICE AND SOLVENT CEMENT CONFORMING TO ASTM D2564. **NOTE: PVC GLUE USED FOR SOLVENT WELDING SHALL BE FREE OF FUMED AND AMORPHOUS SILICA COMPOUNDS, SUCH AS UNI-WELD 2200, HARVEY P-4, OR ENGINEER APPROVED EQUAL.** THE SYSTEM SHALL BE PROTECTED FROM CHEMICAL AGENTS, FIRE STOPPING MATERIALS, THREAD SEALANT, PLASTICIZED VINYL PRODUCTS, OR OTHER AGGRESSIVE CHEMICAL AGENTS NOT COMPATIBLE WITH PVC COMPOUNDS. SYSTEMS SHALL BE HYDROSTATICALLY TESTED AFTER INSTALLATION. **WARNING!** NEVER TEST WITH OR TRANSPORT/STORE COMPRESSED AIR OR GAS IN PVC PIPE OR FITTINGS.

REFERENCED STANDARDS:

- ANSI/NSF-14 - PLASTIC PIPING COMPONENTS AND RELATED MATERIALS
- ASTM D1784 - RIGID POLY(VINYL CHLORIDE) (PVC) COMPOUNDS AND CHLORINATED POLY(VINYL CHLORIDE) (CPVC) COUMPOUNDS
- ASTM D1785 - POLY(VINYL CHLORIDE) (PVC) PLASTIC PIPE, SCHEDULES 40, 80, AND 120
- ASTM D2464 - THREADED POLY(VINYL CHLORIDE) (PVC) FITTINGS, SCHEDULE 80
- ASTM D2467 - POLY(VINYL CHLORIDE) (PVC) PLASTING PIPE FITTINGS, SCHEDULE 80
- ASTM D2564 - SOLVENT CEMENTS FOR POLY(VINYL CHLORIDE) PLASTIC PIPING SYSTEMS
- ASTM D2855 - MAKING SOLVENT-CEMENTED JOINTS WITH POLY(VINYL CHLORIDE) (PVC) PIPE AND FITTINGS

This is critical. Piping WILL leak if proper PVC cement is not used. Contractor should submit data sheet, copy of label, etc. demonstrating compliance before use of PVC cement.

Redline comments by Keith Scarberry of MKEC based on field observations at 9:00 am 11/01/2017 at the construction site.



CITY OF WICHITA, KANSAS
RE-USE WATER PUMP STATION
 TO SERVE SPIRIT AEROSYSTEMS

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BLEACH LINE ISOMETRIC

PROJECT NO.	468-85112	
DATE	08/11/17	
SCALE	AS NOTED	
DESIGNED	DRAWN	CHECKED
BWT	BWT	KTS

ISSUED FOR CONSTRUCTION 08/14/17
 NO. REVISION DATE

SHEET NO. M5.4