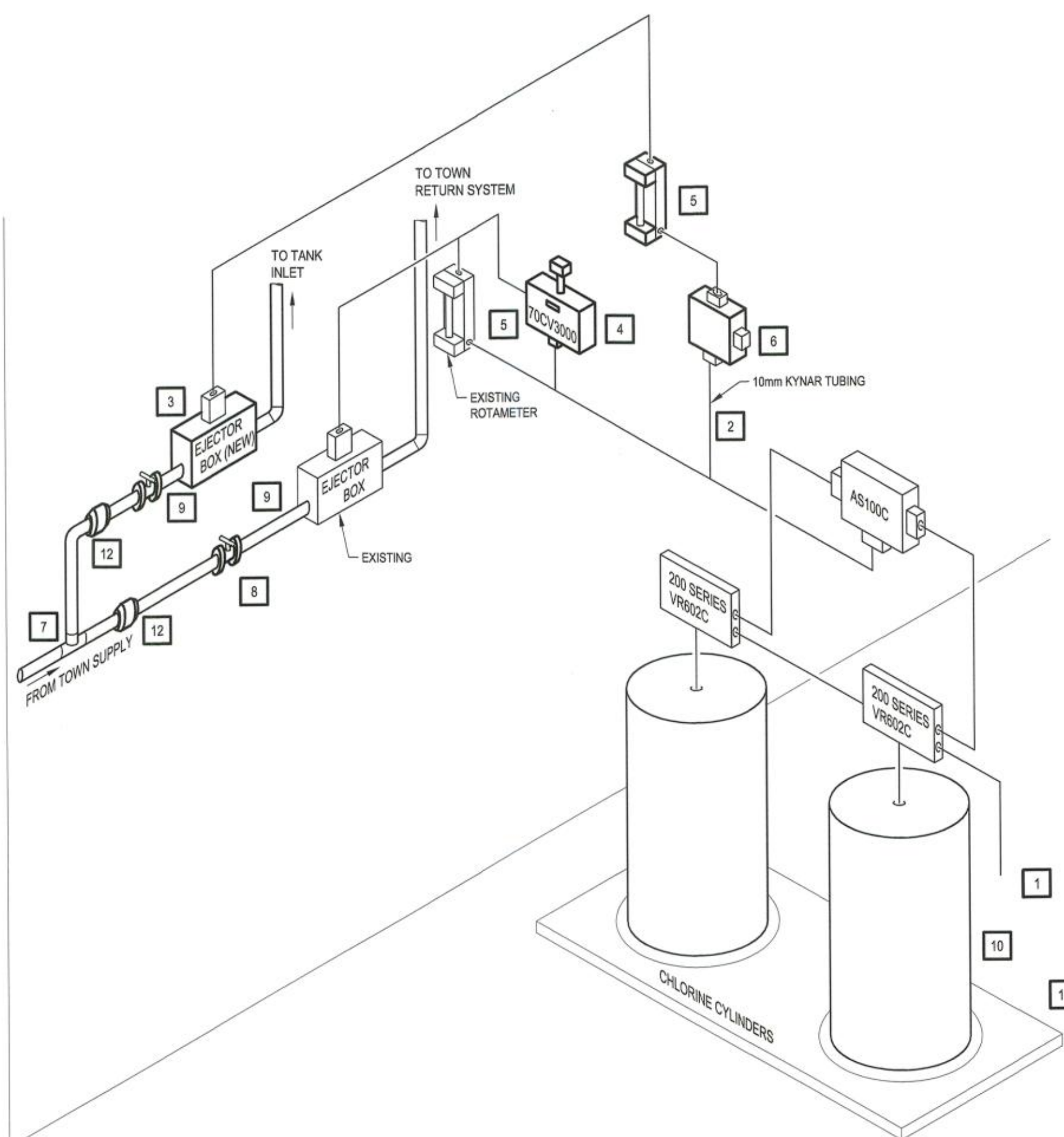
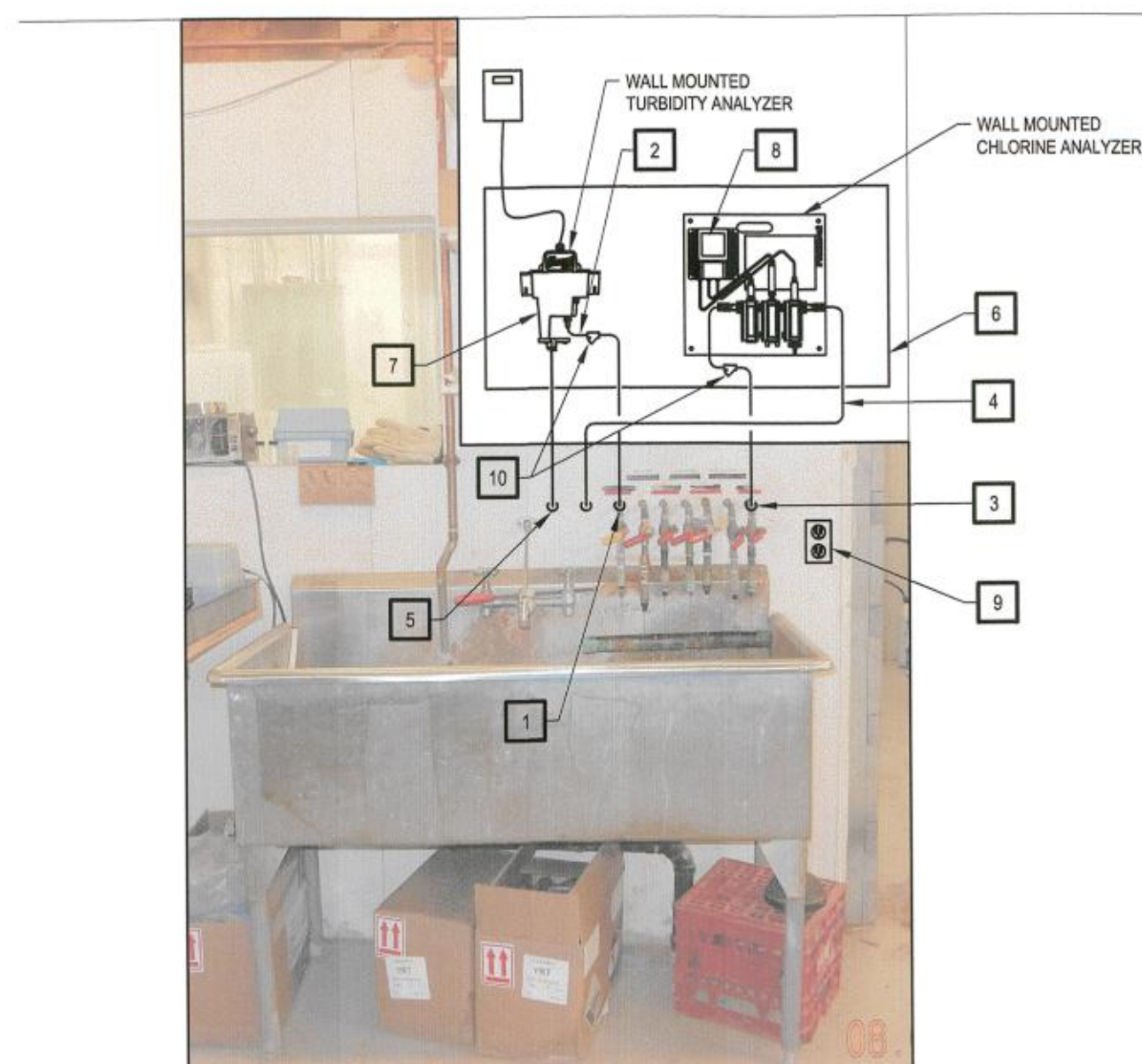


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KEYNOTES

- | | |
|----|---|
| 1 | INSTALLATION INTENT: TO INSTALL AN AUTOMATED CHLORINE CONTROL VALVE TO RUN IN PARALLEL WITH THE EXISTING ROTAMETER FOR THE CURRENT CHLORINE INJECTION CONFIGURATION. ALSO TO INSTALL A NEW CHLORINE INJECTION POINT ON AN ADDITIONAL FEED WATER LINE THAT WILL CONSIST OF THE EJECTOR AND A ROTAMETER ON A LINE ROUTED TO THE TANK FILL PIPE. |
| 2 | ALL GAS TUBING IS TO 10mm WHITE KYNAR PVDF OR APPROVED EQUAL FOR GAS CHLORINE SERVICE. ALL FITTINGS ARE TO BE PVDF OR APPROVED EQUAL. ADDITIONAL SPARE TUBING FOR ONE COMPLETE TUBING CHANGE OUT WILL BE SUPPLIED. |
| 3 | EJECTOR IS TO BE SEVERN TRENT EJ100C (1 REQUIRED). |
| 4 | CONTROL VALVE IS TO BE SEVERN TRENT 70C/300 (1 REQUIRED). |
| 5 | ROTAMETER IS TO BE SEVERN TRENT RM100C (1 REQUIRED). |
| 6 | EMERGENCY SHUT OFF SEVERN TRENT BM-682-1, 110V (1 REQUIRED). WIRING TO BE FIELD ROUTED TO PLC CONTROL ROOM FOR TERMINATION BY OWNER. 1m EXCESS WIRE TO BE COILED IN PLC ROOM. |
| 7 | 50mm PVP PIPING WITH SOCKET WELDED JOINTS. THE EXISTING LINE IS TO HAVE A TEE INSTALLED, AND IS TO SUPPLY 2 EJECTORS. |
| 8 | 50mm TO BE REDUCED AND 25mm PVC BALL VALVES SOCKET WELDED JOINTS. |
| 9 | 25mm M-NPT THREADED CONNECTION TO EJECTOR. LIQUID TEFLO PIPE DOPE TO BE USED. |
| 10 | EXISTING EQUIPMENT TO REMAIN IN SERVICE INCLUDES: <ul style="list-style-type: none"> - CHLORINE SCALE (1) - 200 SERIES VR602C VACUUM REGULATOR (2) - AS100C SWITCH OVER MODULE (1) - ROTAMETER (1) - EJECTOR EJ100C (1) |
| 11 | ALL SEVERN TRENT SUPPLIED EQUIPMENT WILL COME WITH SPARE PARTS / REPAIR KITS THAT ARE CONSIDERED ADEQUATE FOR 2 YEARS OF FUTURE OPERATION. |
| 12 | PVC CHECK VALVE (50mm). |



KEYNOTES

- 1 ON TAP MARKED "STORAGE TANK" Tie INTO EXISTING 10mm COPPER PIPING WITH TEE. INSTALL SECOND ISOLATION VALVE ON TEE. SAMPLE LOCATION IS TO BE MAINTAINED. CONNECTION ROUTED TO TURBIDITY ANALYZER.
- 2 USING 10mm TUBING CONNECT TO INLET OF TURBIDITY METER. ALL TUBING IS TO BE SECURED TO BACKBOARD TO HAVE A 'NEAT AND CLEAN' FINISHED PRODUCT.
- 3 ON TAP MARKED "TOWN SUPPLY" Tie INTO EXISTING 10mm COPPER PIPING WITH TEE. INSTALL SECOND ISOLATION VALVE ON TEE. SAMPLE LOCATION IS TO BE MAINTAINED. CONNECTION ROUTED TO CHLORINE ANALYZER.
- 4 USING 10mm TUBING CONNECT TO INLET OF CHLORINE ANALYZER.
- 5 USING 10mm TUBING (OR LARGER), DRAIN ANALYZER TO SINK. ALL TUBING IS TO BE SECURED TO BACKBOARD TO HAVE A 'NEAT AND CLEAN' FINISHED PRODUCT.
- 6 SHELVING IS TO BE REMOVED AND 19mm (3/4") PLYWOOD IS TO BE INSTALLED AS A BACKBOARD ABOVE THE SINK. NO NEW HOLES IN THE WALL ARE PERMITTED. ALL INSTRUMENTS AND PIPING ARE TO BE ATTACHED TO THE PLYWOOD. BACKBOARD IS TO BE PAINTED WHITE WITH MOLD / MILDEW RESISTANT PAINT. (1200mm x 2400mm)
- 7 TURBIDITY ANALYZER AND DATA LOGGER TO BE PROVIDED:
 - HACH 1720E & SC2200 LOW NTU TURBIDITY ANALYZER AND DATA LOGGER (120V)
 - COMPLETE SET OF LOW NTU STANDARDS TO BE PROVIDED ALONG WITH SPARE PARTS KIT FOR 2 YEARS OF RECOMMENDED MAINTAINED
- 8 CHLORINE ANALYZER TO BE PROVIDED:
 - PROMINENT DASH 2 CHANNEL MONITOR AND CONTROLLER (120V)
 - FREE CHLORINE PROBE (CBR) (2 PROBES TO BE SUPPLIED, 1, INSTALLED, 1 SPARE)
 - TO BE CONNECTED WITH OPEN LOOP CONTROL TO EXISTING FLOWMETER AND NEW CHLORINE CONTROL VALVE
 - SPARE PARTS KIT FOR 2 YEARS OF RECOMMENDED MAINTENANCE
- 9 NEW QUAD 120V RECEPTACLE CONNECTED TO EXISTING BACKUP POWER.
- 10 WYE STRAINER ON EACH LINE (2).

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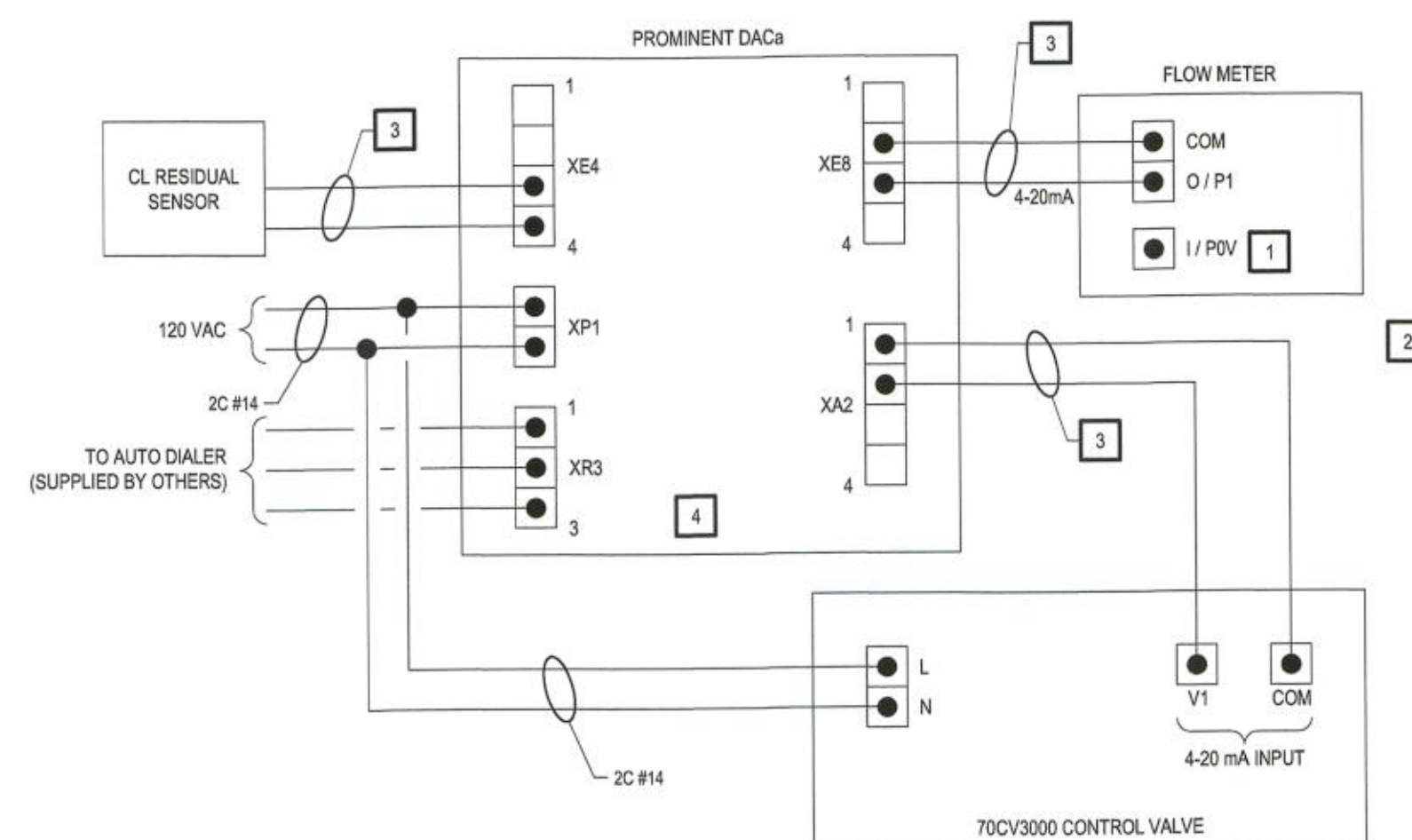
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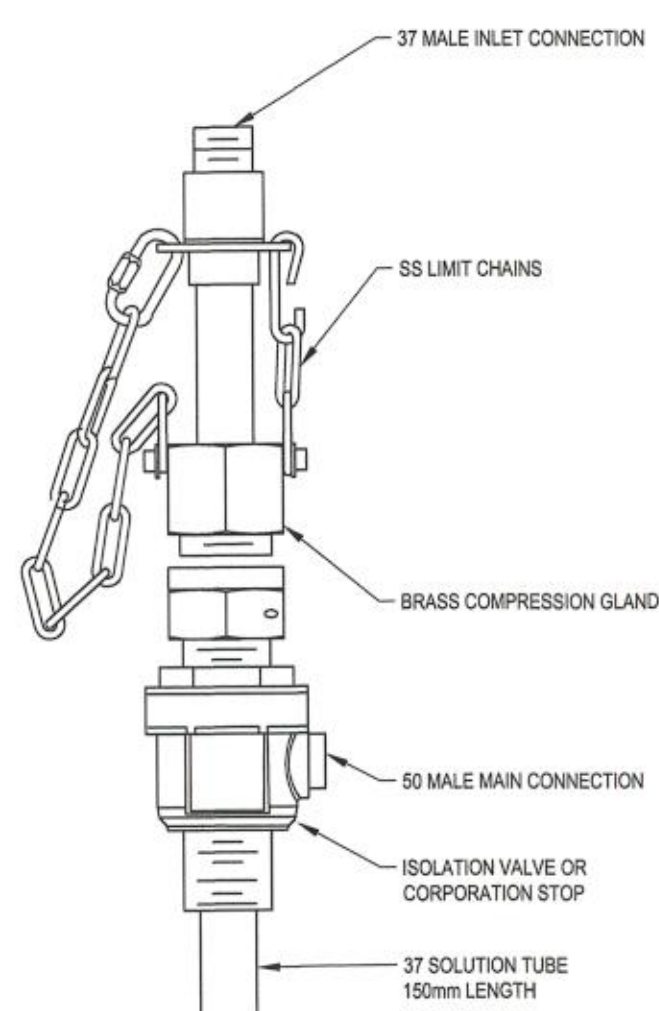
3 DETAIL

CHLORINE CYLINERS SCHEMATIC



KEYNOTES

- 1 A CONNECTION MAY BE REQUIRED HERE TO GET THE FM SIGNAL AT SAME REF. POTENTIAL.
- 2 POWER AND SENSOR CONNECTIONS NOT SHOWN. REFER TO FLOW METER MANUAL FOR REQUIREMENTS AND CONNECTION DETAILS.
- 3 2C #18 BELDEN 8760 TWISTED PAIR SHIELDED.
- 4 SCHEMATIC ASSUMES DaCa IS EQUIPPED WITH AN EXPANSION MODULE.

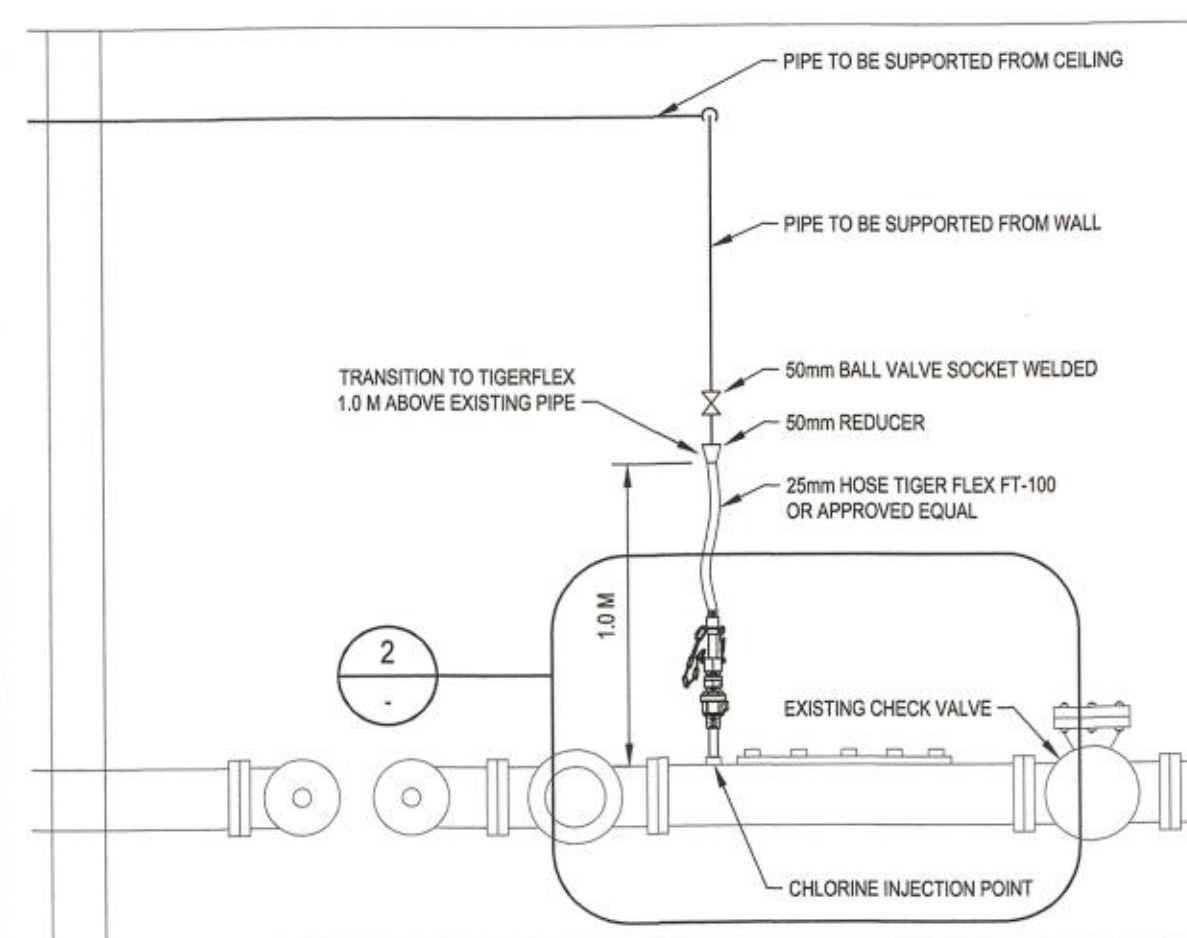


DETAIL

CHLORINE INJECTION QUILL

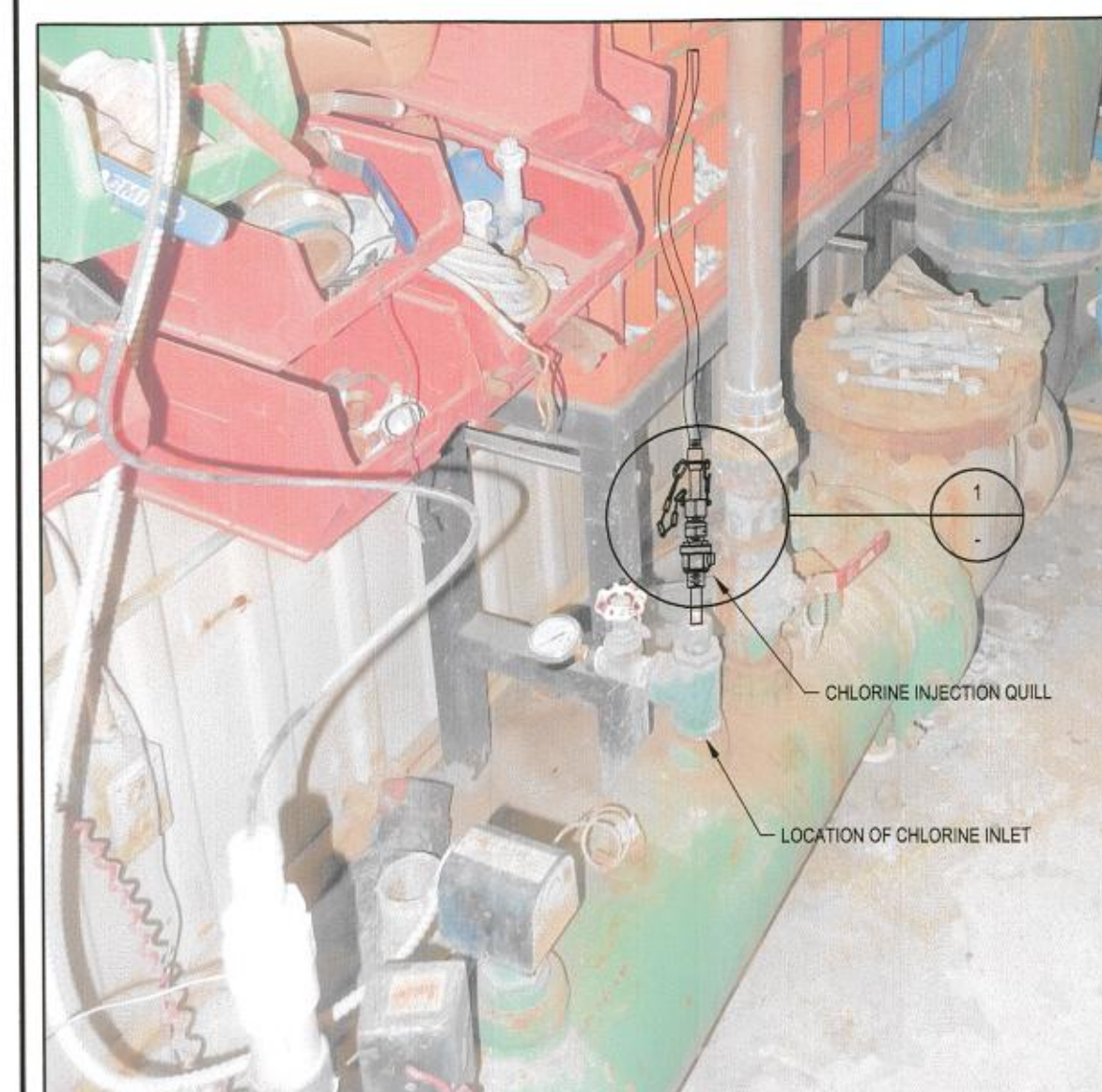
B SECTION

CHLORINE AND TURBIDITY ANALYZER



A SECTION

CHLORINE WATER LINE



DETAIL

INJECTION QUILL LOCATION

NOT TO SCALE

1-25

NOT TO SCALE

ISSUED FOR TENDER

Professional Seal(s)



Drawn By:	SET
Dwg Standards Ckd By:	SET
Designed By:	EAB
Design Approved By:	<i>[Signature]</i>
Scale:	AS SHOWN

Project Title

COMMUNITY AND
GOVERNMENT SERVICES
GOVERNMENT OF NUNAVUT
WILLIAMSON LAKE
PUMP HOUSE

Dwg. Title

**CHLORINATION
SECTIONS AND DETAILS**

Project No. OTT-00227159-A0

Dwg. No.	4-2	Rev. No.	
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