

- 2. TRENCH BACKFILL SHALL BE A NATURAL RUN-OF-BANK (R.O.B.) OR PROCESSED GRAVEL OR EXCAVATED MATERIAL FREE OF SOFT, NONDURABLE PÀRTICLÉS, ORGANIC MATERIALS AND ELONGATED PARTICLES, AND SHALL BE WELL GRADED FROM FINE TO COARSE PARTICLES. TRENCH BACKFILL GRADATIONS SHALL BE APPROVED BY THE ENGINEER AND SHALL MEET THE FOLLOWING GRADATION REQUIREMENTS: SIEVE DESIGNATION
- IN NON-TRAFFIC UNPAVED AREAS TRENCH BACKFILL CAN BE MATERIALS EXCAVATED FROM THE TRENCH AS APPROVED BY THE ENGINEER AND COMPACTED TO 90% MODIFIED 3. INSTALL CONTINUOUS DETECTABLE MARKING TAPE DURING BACKFILLING OF TRENCH FOR UNDERGROUND PIPING. LOCATE TAPE 12" BELOW FINISHED GRADE, DIRECTLY OVER PIPING, EXCEPT 6" BELOW SUBGRADE UNDER PAVEMENTS & SLAB. 4. TRENCHING SHALL BE IMPLEMENTED IN ACCORDANCE WITH O.S.H.A. STANDARDS. 5. 5'-0" MIN COVER SHALL BE APPLIED TO WATER MAIN OR SANITARY SEWER FORCE MAINS
- 6. WIDTH DIFFERS WHERE WATER LINE IS PLACED IN ROCK BELOW FIVE-FEET. REFER TO TECHNICAL SPECIFICATIONS.

PIPE TRENCH DETAIL (TYPICAL) SCALE: NOT TO SCALE

SCALE: NOT TO SCALE

FINISHED GRADE

OR STORM SEWER

. WHEN THE ELEVATION OF THE SEWER CAN NOT BE VARIED TO

2. WHEN IT IS IMPOSSIBLE TO OBTAIN VERTICAL SEPARATION AS

10' EACH SIDE OF CROSSING AND SHALL BE PRESSURE

TESTED TO 150 PSI TO ASSURE WATER TIGHTNESS.

SCALE: NOT TO SCALE

INDICATED ABOVE, BOTH THE WATER MAIN AND THE SEWER

WATERLINE OFFSET DETAIL

MAIN SHALL BE CONSTRUCTED OF MECHANICAL JOINT DUCTILE

IRON PIPE OR PVC WATER WORKS GRADE PRESSURE PIPE FOR

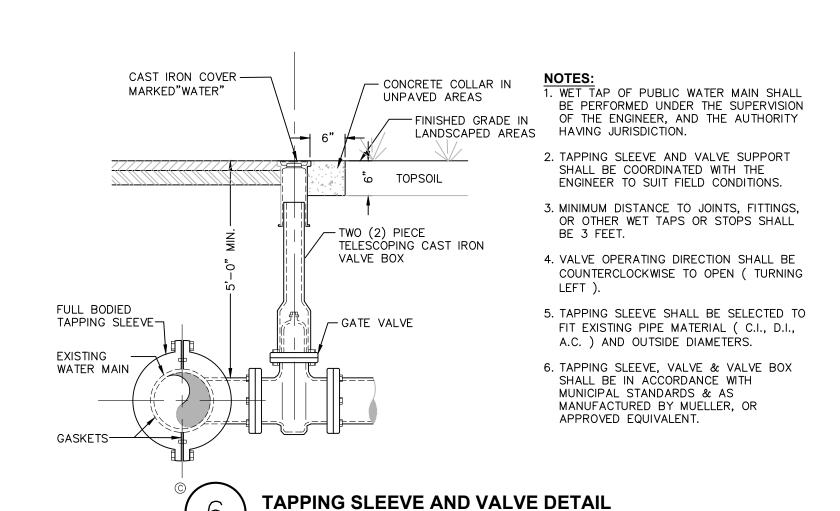
RELOCATED TO PROVIDE THIS REQUIRED SEPARATION.

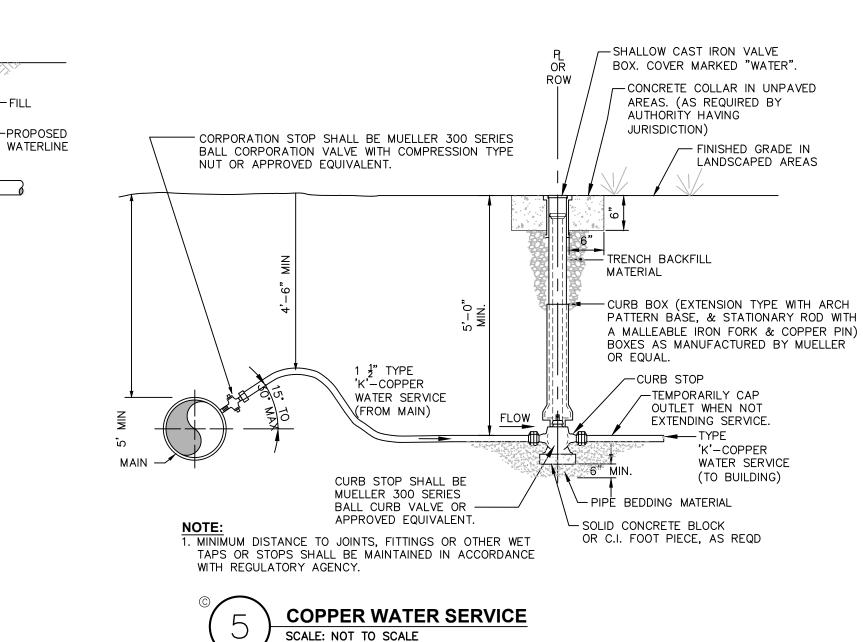
MEET THE ABOVE REQUIREMENTS, THE WATER MAIN SHALL BE

COMPACTED

PIPE BEDDING-

ELBOW



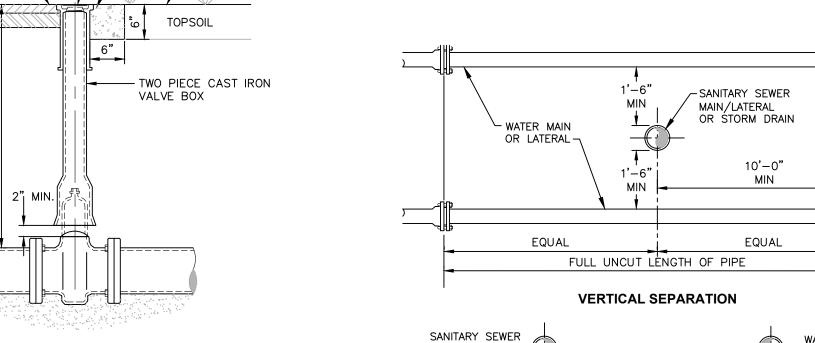


FEET (7') OF FINISHED GRADE.

FINISHED GRADE IN-

PAVED AREAS

CAPACITY PER THE FIRE DEPARTMENT REQUIREMENTS.



- WATER MAIN

BEDDING

SHALL BE COUNTERCLOCKWISE TO OPEN. 2. MINIMUM DISTANCE TO JOINTS, FITTINGS, OR OTHER WET TAPS OR STOPS SHALL BE 3 FEET. 3. RESTRAIN VALVE WITH MEGALUG CONNECTION.

4. DIRECT BURY VALVE SHALL BE MODEL A-2360 RESILIENT WEDGE GATE VALVE WITH MECHANICAL JOINT ENDS AS MANUFACTURED BY MUELLER CO. OR APPROVED EQUIVALENT. VALVE SHALL COMPLY WITH AWWA C-509 AND NSF/ANSI 61 STANDARDS.

1. NON-RISING STEM GATE VALVE, OPERATING DIRECTION

4. EACH NEWLY INSTALLED FIRE HYDRANT SHALL BE FLOW TESTED BY THE FIRE DEPARTMENT TO DETERMINE ITS CAPACITY. EACH FIRE HYDRANT SHOULD BE PAINTED WITH APPROPRIATE

- CAST IRON COVER

MARKED"WATER"

CONCRETE COLLAR IN

- FINISHED GRADE IN

LANDSCAPED AREAS

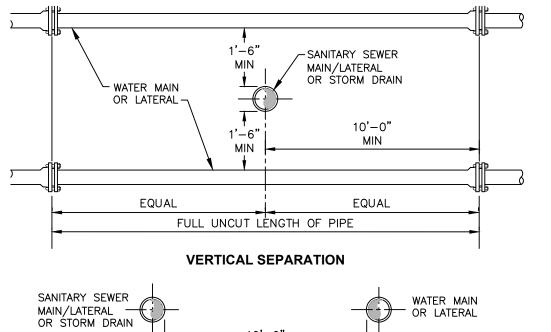
UNPAVED AREAS

MARKINGS OR PROVIDED WITH A REFLECTIVE HYDRANT COLLAR TO IDENTIFY ITS FLOW

HYDRANT ASSEMBLY DETAIL

5. VALVE BOX SHALL BE 2-PIECE SLIDING TYPE WITH 5 4" SHAFT EXTENSION SERIES 6850 AS MANUFACTURED BY TYLER/UNION OR APPROVED EQUIVALENT.

TYPICAL GATE VALVE DETAIL SCALE: NOT TO SCALE



HORIZONTAL SEPARATION . NO DEVIATION IN THE SEPARATION REQUIREMENTS WILL BE PERMITTED WITHOUT THE EXPRESS APPROVAL OF THE NYS HEALTH DEPARTMENT. OFFSETTING OF WATERLINE SHALL BE REQUIRED WHERE SEPARATION DISTANCES CANNOT BE

2. WHEN IT IS IMPOSSIBLE TO OBTAIN VERTICAL SEPARATION AS INDICATED ABOVE, BOTH THE WATER MAIN AND THE SEWER MAIN SHALL BE CONSTRUCTED OF MECHANICAL JOINT, DUCTILE IRON PIPE OR PVC WATER WORKS GRADE PRESSURE PIPE FOR 10' EACH SIDE OF CROSSING AND SHALL BE PRESSURE TESTED TO 150 PSI TO ASSURE WATER TIGHTNESS.

SANITARY/STORM SEWER AND WATERMAIN SEPARATION DETAIL SCALE: NOT TO SCALE

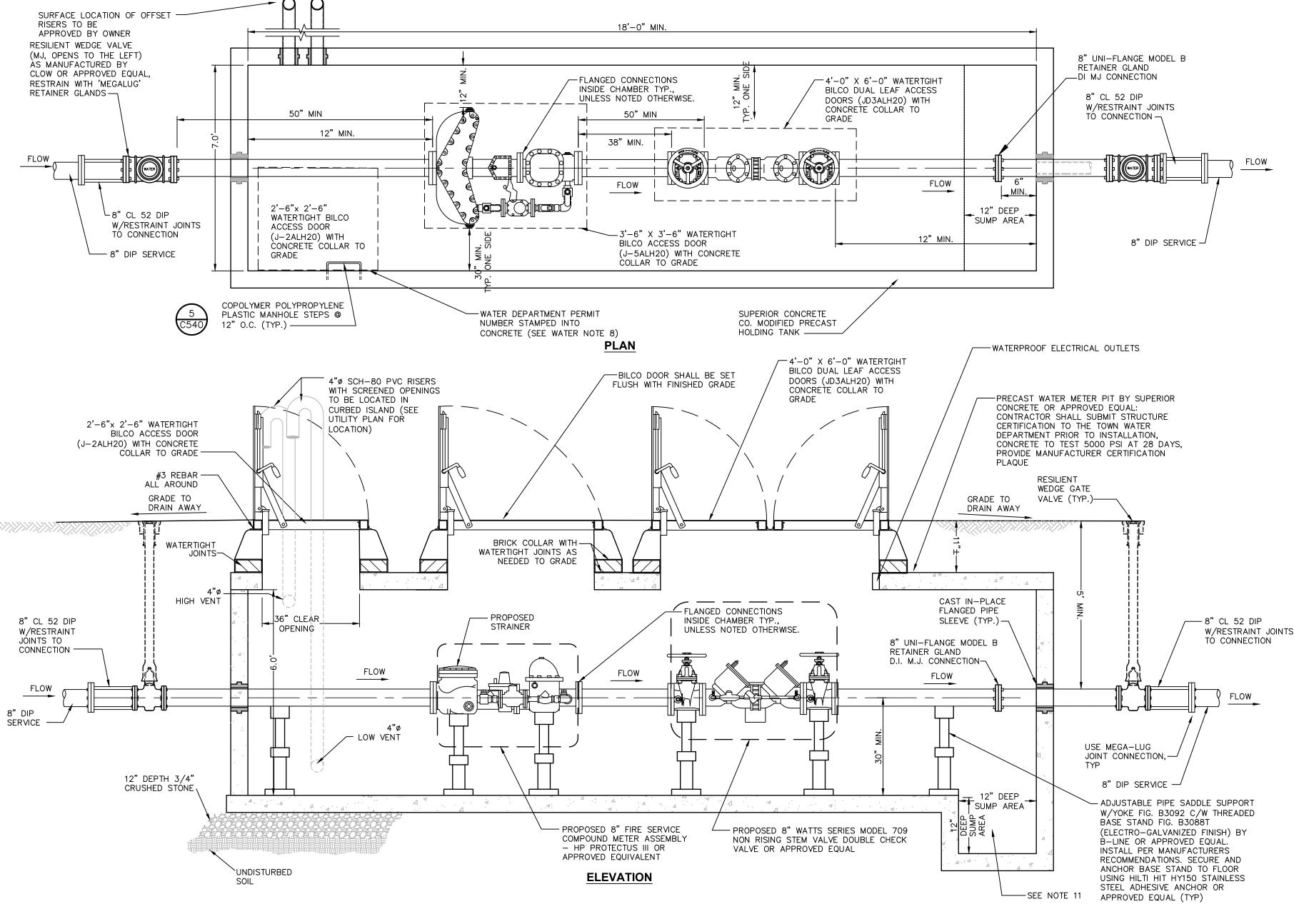
SCHEDULE OF JOINT RESTRAINT BARE DIP (NOT POLYWRAPPED) (LENGTH OF PIPE EACH SIDE OF FITTING TO BE RESTRAINED IN FEET "L")														
PIPE SIZE (INCHES)	FITTING TYPE													
	90°	45°	22 1 °	11 1 °	TEE	VALVE	DEAD	REDUCER						
							END	6"	8"	10"	12"	16"	18"	24"
6"	43	18	8	4	29	31	31							
8"	56	23	11	5	38	41	41	17						
10"	68	28	14	7	48	50	50	31	17					
12"	81	34	16	8	57	59	59	43	31	17				
16"	106	44	21	10	76	78	78	66	57	46	33			
18"	119	49	24	12	85	88	88		69	59	48	18		
24"	156	65	31	15	116	116	116				86	63	50	
30"	192	80	38	19	142	144	144						91	50
NOTES:														

- 1. THE LENGTH OF PIPE REQUIRING RESTRAINT IS BASED UPON THE FOLLOWING
- A. BEDDING TYPE 2 FLAT BOTTOM TRENCH, BACKFILL LIGHTLY CONSOLIDATED TO B. SOIL TYPE CLAY 1 - CLAY OF MEDIUM TO LOW PLASTICITY, LL<50, <25% COURSE PARTICLES [CL & CL-ML]:
- CL INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY GRAVELY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS ML - INORGANIC SILTS, VERY FINE SAND, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS. C. PIPE IS BARE DUCTILE IRON PIPE (NOT POLYWRAPPED)
- D. DEPTH TO TOP OF PIPE 5'-0" MINIMUM E. MAXIMUM OPERATING PRESSURE OF 150 PSI F. FACTOR OF SAFETY OF 1.5
- 2. FOR END PLUGS, RESTRAIN PIPE LENGTH GIVEN FOR DEAD END FITTING. 3. THE LENGTH OF NEW PIPE TO BE RESTRAINED IS THE LENGTH FOR EACH SIDE OF

4. THE ABOVE INFORMATION WAS PROVIDED USING THE THRUST RESTRAINT PROGRAM

- ISSUED BY THE DUCTILE IRON PIPE RESEARCH ASSOCIATION (DIPRA) AND IS BASED ON THE ASSUMPTIONS LISTED IN NOTE 1. RESTRAINED LENGTH REQUIREMENTS FOR FIELD CONDITIONS AND PIPE SIZES DIFFERING FROM THOSE LISTED ABOVE SHOULD BE EVALUATED SEPARATELY. 5. RESTRAINED JOINT PIPE AND FITTINGS SHALL BE USED ONLY AS ALLOWED BY THE
 - PROJECT PLANS AND/OR SPECIFICATION.

JOINT RESTRAINT SCHEDULE AND NOTES SCALE: NOT TO SCALE



- 1. WATER METER PIT AND ASSEMBLY SHALL BE SUBJECT TO REVIEW AND FINAL APPROVAL BY THE TOWN OF POUGHKEEPSIE WATER DEPARTMENT. WATER METER SHALL BE A SENSUS OMNI OR APPROVED EQUAL. 2. WATER METER SHALL BE PROVIDED WITH A REMOTE READING SYSTEM WITH BRONZE WATERTIGHT ENCLOSURE. WATER PROOF REGISTERS SHALL BE PROVIDED. LOCATION SHALL BE APPROVED BY THE TOWN OF POUGHKEEPSIE WATER DEPARTMENT PRIOR TO
- 3. AN ALUMINUM WARNING PLATE SHALL BE RIVETED OR OTHERWISE PERMANENTLY ATTACHED TO THE MANHOLE COVER. THE PLATE SHALL BE A MINIMUM OF 12"x12" AND SHALL BE ENGRAVED WITH THE FOLLOWING LANGUAGE: "WARNING: CONFINED SPACE — ENTRY PROHIBITED WITHOUT AUTHORIZATION - CALL OWNER FOR APPROVAL TO ACCESS". VENTILATION SHALL CONFORM TO EXISTING LOCAL AND/OR STATE CODES AND AS PER SECTION 6.2.5 OF "RECOMMENDED STANDARDS FOR WATER WORKS - 1997" (TEN STATES
- 4. PREPARED SURFACE (I.E., BOTTOM) OF EXCAVATION FOR PLACEMENT OF WATER METER PIT SHALL CONSIST OF A MINIMUM 6" DEPTH OF 3/4" CRUSHED STONE, LEVELED AND LAID OVER STABLE NATIVE SOIL. IF EXCAVATION REVEALS UNSTABLE SOIL MATERIAL, THIS BEDDING REQUIREMENT SHALL BE MODIFIED BY THE PROJECT ENGINEER.
- 5. WHEN INSTALLING TURBO METERS WITH A STRAINER, A MINIMUM OF FIVE (5) PIPE DIAMETERS OF STRAIGHT RUN PIPE OR EQUIVALENT FULL OPEN COMPONENTS IS REQUIRED UPSTREAM OF THE METER INLET FLANGE. A MINIMUM OF THREE (3) PIPE DIAMETERS OF STRAIGHT PIPE OR EQUIVALENT IS REQUIRED DOWN STREAM OF THE METER.
- 6. DO NOT INSTALL ELBOWS, BENDS, NONCONCENTRIC REDUCERS, CHECK VALVES, BACK FLOW PREVENTORS AND/OR PERSSURE REDUCING DEVICES WITHIN TEN (10) PIPE DIAMETERS UPSTREAM OR FIVE (5) PIPE DIAMETERS DOWNSTREAM OF THE METER. 7. EXTERIOR OF METER PIT SHALL RECEIVE TWO COATS OF BITUMINOUS COATING.
- 8. WITHIN 30 DAYS OF INSTALLATION, THE BACKFLOW PREVENTION DEVICE SHALL BE TESTED BY A CERTIFIED TESTER. FOLLOWING TESTING, A NYS DOH-1013 REPORT MUST BE COMPLETED AND SUBMITTED TO THE TOWN OF POUGHKEEPSIE, TOWN CLERK AND DUTCHESS COUNTY HEALTH DEPARTMENT TO CERTIFY THAT DEVICE WAS INSTALLED PER APPROVED PLANS.
- 9. ALL BACKFLOW PREVENTION DEVICES MUST BE TESTED AT LEAST ANNUALLY BY A NYS CERTIFIED TESTER WITH A COPY OF THE INSPECTION AND TEST REPORT (DOH-1013) FORWARDED TO TOWN OF POUGHKEEPSIE, TOWN ADMINISTRATOR OF PUBLIC WORKS AND THE DUTCHESS COUNTY DEPARTMENT OF HEALTH.
- 10. REINFORCEMENT FOR MANHOLE COMPONENTS SHALL BE DESIGNED BY A LICENSED NEW YORK STATE PROFESSIONAL ENGINEER PRIOR TO CONSTRUCTION. SHOP DRAWINGS SHALL BE SUBMITTED FOR REVIEW. STRUCTURE SHALL BE DESIGNED FOR HS20-44 VEHICULAR

11. PROVIDE WATERPROOF ELECTRIC OUTLET FOR SUMP PUMP IN THE EVENT WATER ACCUMULATES IN SUMP AREA.

WATER METER AND BACKFLOW PREVENTION PIT DETAIL SCALE: NOT TO SCALE

ISSUED FOR SITE PLAN APPROVAL

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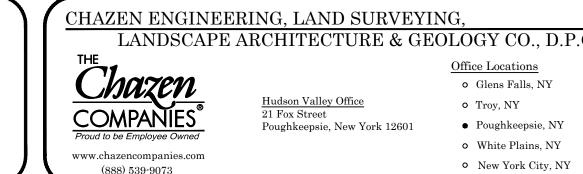
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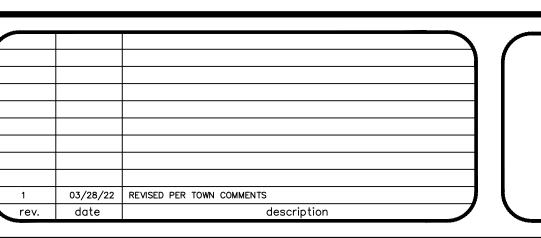
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1998 SOUTH ROAD - STORAGE FACILITY

WATER SYSTEM DETAILS & NOTES

TOWN OF POUGHKEEPSIE, DUTCHESS COUNTY, NEW YORK

Xref's Attached: XTB_82133-00_H30x42 Date Printed: Jul 06, 2022, 10:58am

ORIGINAL SCALE IN INCHES