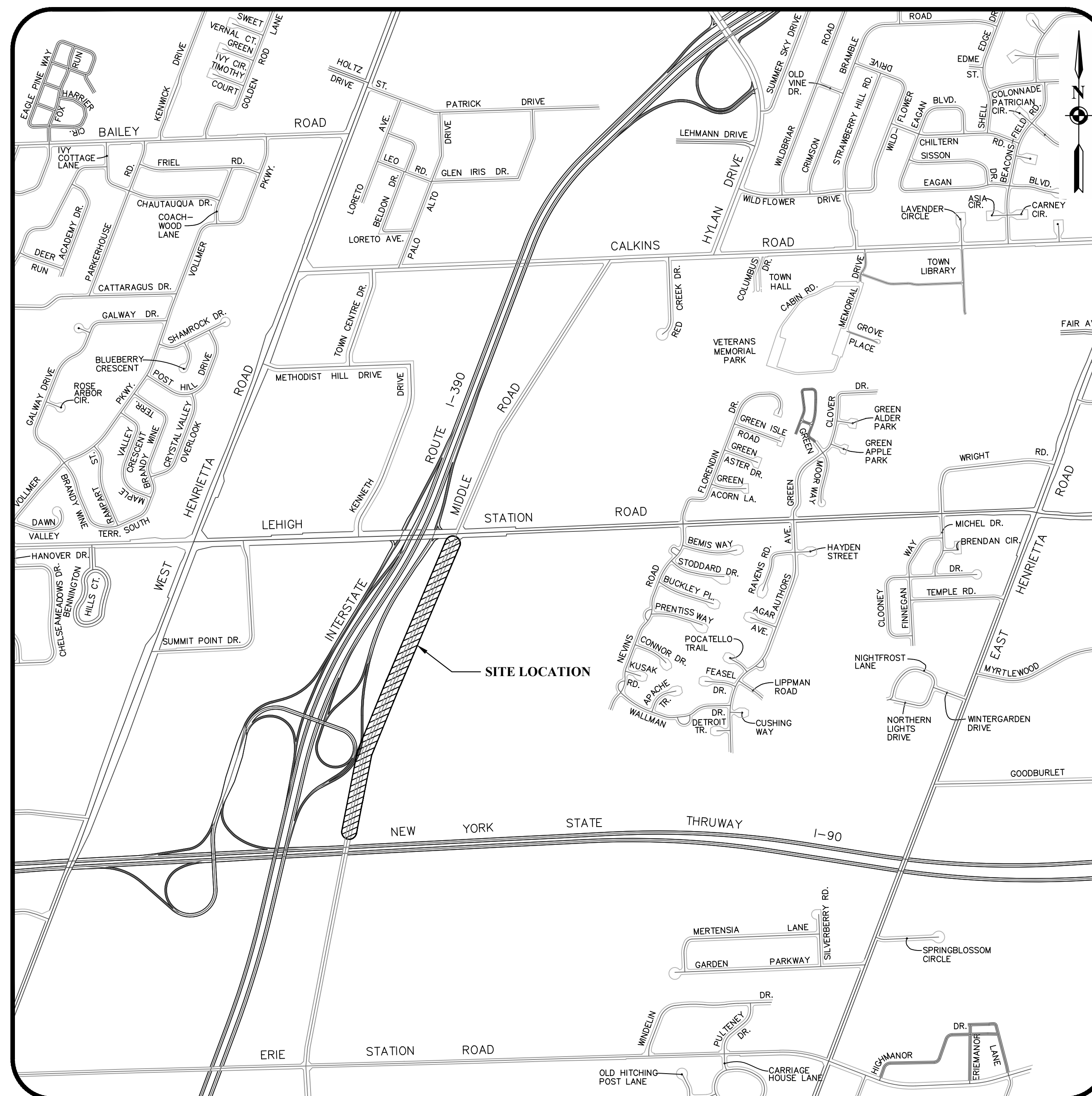


TOWN OF HENRIETTA

2022 MIDDLE ROAD WATER MAIN

PROJECT No. T22-03



PROJECT LOCATION

HENRIETTA TOWN BOARD

STEPHEN L. SCHULTZ	SUPERVISOR
MILLIE C. SEFRANEK	COUNCIL MEMBER
LISA S. BOLZNER	COUNCIL MEMBER
M. RICK PAGE	COUNCIL MEMBER
JOSEPH D. BELLANCA, JR.	COUNCIL MEMBER

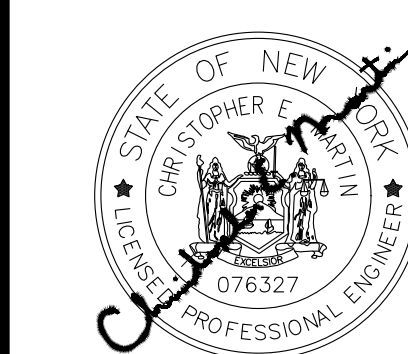
HENRIETTA ADMINISTRATION

CRAIG C. ECKERT	DEPUTY SUPERVISOR
REBECCA WIESNER	TOWN CLERK
MICHAEL CATALANO	COMMISSIONER OF PUBLIC WORKS
TIM LESSING	HIGHWAY SUPERINTENDENT
CHRISTOPHER E. MARTIN, P.E.	DIRECTOR OF ENGINEERING & PLANNING

INDEX OF DRAWINGS

<u>SHEET No.</u>	<u>DWG. No.</u>	<u>DESCRIPTION</u>
1 of 11	T001	TITLE SHEET
2 of 11	C100	GENERAL NOTES & TRAFFIC CONTROL
3 of 11	C101	WATER MAIN PLAN - 1
4 of 11	C102	WATER MAIN PLAN - 2
5 of 11	C103	WATER MAIN PLAN - 3
6 of 11	C104	WATER MAIN PLAN - 4
7 of 11	C105	WATER MAIN PLAN - 5
8 of 11	C106	WATER MAIN PLAN - 6
9 of 11	C107	WATER MAIN PLAN - 7
10 of 11	C200	CONSTRUCTION DETAILS - 1
11 of 11	C201	CONSTRUCTION DETAILS - 2

Town of Henrietta
 Engineering Department
 475 Calkins Road
 Henrietta, New York 14467
 (585) 359-7070
 Fax: (585) 321-6193



DATE: 11/30/2022
DWG. No.: T001
SHEET No.: 1 of 11

GENERAL NOTES:

- 1. THE ACCURACY OF EXISTING UTILITIES ARE NOT GUARANTEED. EXISTING UTILITIES SHOWN ON THE PLANS ARE A RESULT OF INFORMATION OBTAINED FROM FIELD SURVEYS AND RECORD MAPS AND ARE FOR GENERAL INFORMATION ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE LOCATIONS OF ANY PERTINENT UTILITIES BY FIELD INVESTIGATION AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR SHALL TAKE NECESSARY MEASURES TO PROTECT THE EXISTING UTILITIES TO REMAIN IN SERVICE.
2. THE CONTRACTOR SHALL TAKE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN HEREON AND ANY OTHER LINES NOT SHOWN HEREON OR OF RECORD. THE CONTRACTOR IS CAUTIONED TO NOTIFY CENTRAL STAKEOUT. TELEPHONE NO. 1-800-962-7962, FOR FIELD STAKE-OUT OF UNDERGROUND UTILITIES BEFORE COMMENCING CONSTRUCTION.
3. THE CONTRACTOR SHALL OBTAIN ALL PERMITS, LICENSES, INSURANCE, AND BONDS AS REQUIRED BY THE MUNICIPALITY OR ANY AGENCY PRIOR TO INITIATING CONSTRUCTION ACTIVITIES.
4. DURING CONSTRUCTION THE CONTRACTOR SHALL MAINTAIN ALL EXISTING STORM SEWERS, CULVERTS, DITCHES, MANHOLES, LATERALS, AND CATCH BASINS, AND ALL EXISTING SANITARY SEWERS, MANHOLES AND LATERALS, THAT ARE TO REMAIN IN SERVICE UPON COMPLETION OF THE PROJECT. ANY DAMAGE OR CHANGES TO THESE FACILITIES (INCLUDING CLEANING ALL DEBRIS) SHALL BE BORNE BY THE CONTRACTOR AT HIS EXPENSE.
5. THE CONTRACTOR SHALL COMPLY WITH THE NEW YORK STATE INDUSTRIAL CODE, RULE 23, SUBPART 23-4 "EXCAVATION OPERATIONS" TO PROVIDE SAFE EXCAVATION PRACTICES AND PROCEDURES.
6. THE CONTRACTOR SHALL USE DUE CAUTION IN PROTECTING ALL PROPERTY MARKERS AND ALL CONSTRUCTION ELEVATION AND LOCATION SURVEY STAKES.
7. ANY DAMAGE TO EXISTING PAVEMENT, SHOULDER, DRIVES, CURBS, SIDEWALKS, LANDSCAPING, ETC. WHICH ARE SCHEDULED TO REMAIN SHALL BE REPAIRED AT THE CONTRACTORS EXPENSE.
8. THE CONTRACTOR SHALL COMPLY WITH ALL THE APPLICABLE FEDERAL, STATE, AND LOCAL STATUTES REGARDING THE PREVENTION, CONTROL AND ABATEMENT OF SOIL EROSION, SEDIMENTATION AND WATER POLLUTION.
9. THE CONTRACTOR SHALL PROVIDE EROSION CONTROL BARRIERS DURING CONSTRUCTION AND FOR THE REMOVAL OF THE SAME AFTER GRADING AND SURFACE RESTORATION HAS BEEN PERFORMED.
10. THE CONTRACTOR SHALL BE REQUIRED TO CLEAN MUD AND DEBRIS FROM PUBLIC ROADS AND PRIVATE DRIVEWAYS AND PARKING AREAS SERVICING THE CONSTRUCTION SITE DURING AND AFTER THE COMPLETION OF THE PROJECT AND AS REQUESTED BY THE MUNICIPALITY OR AGENCIES.
11. REFERENCES TO NYSDOT STANDARDS SHALL MEAN THE LATEST "STANDARD SPECIFICATIONS, CONSTRUCTION AND MATERIALS, OFFICE OF ENGINEERING, NEW YORK STATE DEPARTMENT OF TRANSPORTATION, MAY 2019", US CUSTOMARY UNITS WITH ALL CURRENT ADDENDA.

MCDOT NOTES:

- 1. THE CONTRACTOR SHALL LOCATE, MARK, SAFEGUARD AND PRESERVE ALL SURVEY CONTROL MONUMENTS AND R.O.W. MONUMENTS IN THE AREAS OF CONSTRUCTION. IF THERE ARE ANY MONROE COUNTY SURVEY MONUMENTS IN THE AREA, A \$1,500.00 LETTER OF CREDIT WILL BE REQUIRED TO PROTECT THEM. CONTACT THE MONROE COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES (MCDES) SURVEY OFFICE AT (585) 753-7530.
2. THE CONTRACTOR SHALL DETERMINE EXACT LOCATION AND ELEVATION OF UNDERGROUND UTILITIES BEFORE COMMENCING CONSTRUCTION. CONTRACTOR SHALL MAKE EXPLORATION EXCAVATIONS TO LOCATE EXISTING UNDERGROUND FACILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT REVISIONS AS REQUIRED TO MEET EXISTING CONDITIONS.
3. HIGHWAY DRAINAGE ALONG THE COUNTY HIGHWAY MUST BE MAINTAINED. THE APPLICANT WILL BE RESPONSIBLE FOR ALL REQUIRED GRADING IN THE COUNTY RIGHT-OF-WAY.
4. AFTER MCDOT APPROVES THIS PROJECT, A 136 HIGHWAY PERMIT WILL BE REQUIRED. INSPECTION OF ALL CONSTRUCTION IN THE RIGHT-OF-WAY WILL BE A CONDITION OF THESE PERMITS.
5. EXCAVATIONS WITHIN THE COUNTY R.O.W. SHALL NOT BE LEFT OPEN OVERNIGHT.
6. ALL MATERIALS INSTALLED IN THE COUNTY RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH THE MONROE COUNTY DEPARTMENT OF TRANSPORTATION STANDARDS AND DETAILS IN EFFECT WHEN INSTALLED.

WORK ZONE TRAFFIC CONTROL NOTES:

- 1. THE CONTRACTOR SHALL BE AWARE THAT THE MAINTENANCE AND PROTECTION OF TRAFFIC IS A VERY CRITICAL ITEM OF THE CONTRACT AND SHALL BE PROVIDED IN ACCORDANCE WITH SECTION 619 "MAINTENANCE AND PROTECTION OF TRAFFIC" OF THE STANDARD SPECIFICATIONS, AND THE NEW YORK STATE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
2. ACTUAL FIELD CONDITIONS MAY REQUIRE OTHER SIGNS AND OTHER ARRANGEMENTS OF SIGNS.
3. DISTANCES SHALL BE ADAPTED TO PREVAILING CONDITIONS. SIGNS SHALL BE LOCATED TO PROVIDE OPTIMUM VISIBILITY.
4. SIGNS THAT ARE NOT APPLICABLE SHALL BE COVERED OR OBLSCURED FROM SIGHT.
5. THE CONTRACTOR MAY SUBMIT REVISIONS TO THIS PLAN FOR APPROVAL BUT ANY CHANGE THAT ALTERS THE BASIC CONCEPTS OF THE PLAN MUST BE APPROVED BY THE DIRECTOR OF ENGINEERING AND PLANNING OR HIS DESIGNEE.
6. ALL SIGN NUMBERS REFER TO THE NEW YORK STATE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
7. DURING NON-WORKING HOURS, CONSTRUCTION EQUIPMENT AND MATERIALS SHALL NOT BE STORED WITHIN 30 FEET OF THE EDGE OF PAVEMENT.
8. VEHICLES BELONGING TO THE CONTRACTOR OR WORKERS SHALL NOT BE PARKED WITHIN 30 FEET OF THE EDGE OF PAVEMENT ALONG A ROADWAY BEING USED BY THE GENERAL PUBLIC, UNLESS THEY ARE PARKED WITHIN A PROTECTED WORK ZONE.
9. DURING WORKING HOURS, NO CONSTRUCTION MATERIAL SHALL BE STORED OR PLACED ON THE ROADWAY OR ROADWAY BED EXCEPT IN A PROTECTED WORK ZONE.
10. NO DROP-OFF GREATER THEN SIX INCHES SHALL BE LEFT OVERNIGHT WITHIN 30 FEET OF THE EDGE OF PAVEMENT. DROP-OFFS LESS THAN SIX INCHES WILL BE PERMITTED IF PROPER DELINEATION AND SIGNAGE IS PROVIDED. PROPER DELINEATION SHALL CONSIST OF DRUMS, VERTICAL PANELS OR BARRICADES, PROVIDED THEY ARE PROPERLY PAINTED AND REFLECTORIZED IN ACCORDANCE WITH THE NYS M.U.T.C.D. PROPER SIGNAGE SHALL CONSIST OF A W20-1 ROAD SIGN SERIES WHICH INCLUDES A W20-5R 'NO SHOULDER' SIGN. A DROP-OFF IS CONSIDERED ELIMINATED IF TAPERED AWAY BY A 1 ON 6 SLOPE OR FLATTER. REFERENCE SECTION 619-3.01G OF THE STANDARD SPECIFICATIONS. WHEN DRUMS ARE USED FOR DELINEATION OR THE CHANNELIZATION OF TRAFFIC, ONLY APPROVED PLASTIC DRUMS MAY BE USED. THESE DRUMS SHALL BE INSTALLED ACCORDING TO THE MANUFACTURER'S DIRECTIONS AND IN ACCORDANCE WITH THE PROVISIONS OF TABLE 619-1 OF THE STANDARD SPECIFICATIONS.
11. W8-22 "FLAGGER" SIGNS SHALL BE USED WHENEVER FLAGGING OCCURS FOR MORE THAN A BRIEF PERIOD OF TIME. THE SIGNS SHALL BE PROMPTLY REMOVED, COVERED, OR FACED AWAY FROM TRAFFIC WHEN THE FLAGGING OPERATION CEASES.
12. THE FLAGGING STATIONS AND LANE CLOSURES SHOULD BE LOCATED TO ENSURE MAXIMUM VISIBILITY.
13. LIGHTED BARRICADES SHALL BE PROVIDED AROUND ANY EQUIPMENT OR MATERIAL STORED ADJACENT TO THE RIGHT OF WAY.

EROSION AND SEDIMENT CONTROL NOTES

- 1. IN ACCORDANCE WITH SECTIONS 107-12 AND 209-3.01 OF THE NYSDOT STANDARD SPECIFICATIONS, THE CONTRACTOR SHALL REVIEW THE EROSION AND SEDIMENT CONTROL PLAN INCLUDED IN THE CONTRACT DOCUMENTS, AND IF NECESSARY, MODIFY THE PLAN WITH THE CONTRACTOR'S INTENDED SEQUENCE, OR TYPES OF OPERATIONS.
2. FOR THE DURATION OF THE PROJECT, THE CONTRACTOR SHALL PROTECT ALL ON-SITE, ADJACENT AND/OR DOWNSTREAM RIVERS, STORM/SANITARY SEWERS, AND/OR WATER COURSES FROM CONTAMINATION BY WATER-BORNE SILTS, SEDIMENTS, WET OR FRESH CONCRETE, LEACHATE, MATERIALS, DEBRIS, FUELS, SOLVENTS, LUBRICANTS OR OTHER POLLUTANTS ORIGINATING FROM ANY WORK DONE ON, OR IN SUPPORT OF THIS PROJECT. ANY MATERIAL OR DEBRIS ACCIDENTALLY DROPPED INTO THE CHANNEL SHALL BE IMMEDIATELY AND COMPLETELY REMOVED AND DEPOSITED IN AN UPLAND AREA.
3. THE CONTRACTOR SHALL UTILIZE CONSTRUCTION METHODS/TECHNIQUES, WHICH MINIMIZE DISTURBED AREAS AND MINIMIZE THE EFFECT OF EARTH DISTURBANCE ACTIVITIES ON SOIL EROSION.
4. THE CONTRACTOR SHALL MAINTAIN SITE CONDITIONS WHICH PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY OR INTERFERE WITH THE OPERATION OF THE EXISTING FACILITY. THE CONTRACTOR SHALL KEEP CLEAN AND FREE ALL SIDEWALKS, STREETS, DRIVES AND OTHER PAVEMENTS FROM DIRT, MUD, STONES AND OTHER HAULED MATERIALS BECAUSE OF HIS/HER WORK.
5. THE SITE SHALL AT ALL TIMES BE GRADED AND MAINTAINED SUCH THAT ALL STORM WATER RUNOFF FROM DISTURBED AREAS IS DIVERTED TO SOIL EROSION AND SEDIMENT CONTROL DEVICES BEFORE ENTERING A WATER BODY OR WETLAND.
6. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY SOIL DISTURBANCE FOR WHICH THEY ARE INTENDED AND SHALL REMAIN IN PLACE UNTIL DISTURBED SOILS OR PERMANENTLY STABILIZED.
7. IN ACCORDANCE WITH SECTIONS 107-12 AND 209-3.01 OF THE NYSDOT STANDARD SPECIFICATIONS, THE CONTRACTOR SHALL SUBMIT THE NAMES OF INDIVIDUALS WHO SHALL BE RESPONSIBLE FOR IMPLEMENTING THE EROSION AND SEDIMENT CONTROL PLAN AND FOR INSPECTING AND MAINTAINING THE CONTROL MEASURES. THE NAMES AND QUALIFICATIONS (TRAINING AND EXPERIENCE) OF THESE INDIVIDUALS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO STARTING EARTHWORK.
8. IN AREAS WHERE SOIL DISTURBANCE ACTIVITY HAS TEMPORARY OR PERMANENTLY CEASED, SOIL STABILIZATION MEASURES SHALL BE INITIATED WITHIN ONE BUSINESS DAY AND COMPLETED WITHIN FOURTEEN (14) DAYS FROM THE DATE THE CURRENT SOIL DISTURBANCE ACTIVITY CEASED. STABILIZE THESE AREAS WHERE SOIL DISTURBANCE ACTIVITY HAS TEMPORARILY CEASED WITH TEMPORARY SEED AND MULCH. MAINTENANCE OF THESE AREAS SHALL INCLUDE RE-SEEDING AND RE-MULCHING AS NEEDED TO ESTABLISH A SATISFACTORY STAND OF GRASS. THERE SHALL BE NO ADDITIONAL PAYMENT FOR RE-SEEDING AND MULCHING.

CONCRETE WASH OUT

- 1. CONCRETE WASH OUT PITS SHALL BE UTILIZED FOR ALL CONCRETE WORK TO PREVENT DISCHARGE TO DRAINAGE WAYS, STREAMS, WETLANDS AND INFILTRATION TO GROUND WATER IN ACCORDANCE WITH SECTION 107-12 OF THE STANDARD SPECIFICATIONS, AND NYS ENVIRONMENTAL CONSERVATION LAW. WASH OUT PITS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE 2016 NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL (NYSDEC BLUE BOOK). WASH OUT FACILITIES SHALL BE SELF-CONTAINED, AND LINED WITH PLASTIC SHEETING WITH A MINIMUM THICKNESS OF 10 MILS. ACCUMULATED HARDENED CONCRETE MAY BE DISPOSED OF IN A SPOIL SITE. ANY EXCESS WASH WATER SHALL BE PUMPED TO A CONTAINMENT VESSEL AND TRANSPORTED TO A DISPOSAL FACILITY. THE COSTS FOR THE CONTAINMENT, COLLECTION, TRANSPORT AND DISPOSAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR RELATED ITEMS.

SOIL RESTORATION

- 1. PER THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION, SOIL RESTORATION IS REQUIRED. SOIL RESTORATION SHALL BE PERFORMED ON SOIL THAT HAS BEEN COMPACTED (PERMANENTLY AND TEMPORARILY DISTURBED SOILS) AND IS LOCATED ON A 1 ON 3 SLOPE OR FLATTER. AREAS REQUIRING SOIL RESTORATION ARE IDENTIFIED IN THE CONTRACT DOCUMENTS.

SOIL RESTORATION STEPS:

- A. APPLY 3" OF COMPOST OVER EXISTING SOIL AS PER ITEM 610.1000309 - SURFACE APPLIED COMPOST.
A. CULTIVATE COMPOST INTO SOIL TO A DEPTH OF 12" AND REMOVE ALL LOOSE STONES AND OTHER OBJECTS OVER 4" IN SIZE PER ITEM 610.10120208 - SOIL CULTIVATION - SUBSOILING.
B. APPLY 6" OF TOPSOIL, ITEM 610.1402 - TOPSOIL ROADSIDE OR ITEM 610.1403 - TOPSOIL LAWNS PER THE CONTRACT DOCUMENTS. NOTE THAT THE SUBSOILING ALREADY PERFORMED UNDER STEP 2 SATISFIED THAT "SCARIFICATION" REQUIREMENTS OF SECTION 610-3.01.
C. ESTABLISH TURF OR PLANT AS INDICATED IN THE CONTRACT DOCUMENTS.

TURF ESTABLISHMENT NOTES

- 1. ALL TURF ESTABLISHMENT SHALL BE IN ACCORDANCE WITH NYSDOT STANDARD SPECIFICATIONS SECTION 610. SEEDS SHALL MEET THE MATERIAL REQUIREMENTS OF SECTION 713-04.
2. ITEM 610.1602 TURF ESTABLISHMENT - LAWNS IS SPECIFIED FOR ALL LOCATIONS.
3. IMMEDIATELY AFTER SEEDING, SPREAD STRAW UNIFORMLY IN A CONTINUOUS BLANKET OVER SEED TO HIDE THE SOIL FROM VIEW. STRAW SHALL MEET THE MATERIAL REQUIREMENTS OF SECTION 713-19. HAY IS NOT ALLOWED. MULCH ANCHORAGE SHALL BE IMMEDIATELY APPLIED OVER STRAW.
4. ITEM 610.19 WATERING VEGETATION IS SPECIFIED FOR ALL TURF ESTABLISHMENT LOCATIONS. WATERING TURF SHALL BE IN ACCORDANCE WITH SECTION 610-3.10. WATER SHALL MEET THE MATERIAL REQUIREMENTS OF SECTION 712-01.
5. ITEM 610.13 WEED REMOVAL IS SPECIFIED FOR ALL TURF ESTABLISHMENT LOCATIONS. WEED REMOVAL SHALL BE IN ACCORDANCE WITH SECTION 610-3.11.
6. ITEM 610.21 MOWING IS SPECIFIED FOR TURF ESTABLISHMENT LOCATIONS. MOWING SHALL BE IN ACCORDANCE WITH SECTION 610-3.12.
7. THE ACCEPTANCE STANDARD FOR ITEM 610.1602 - TURF ESTABLISHMENT - LAWNS SHALL BE TURF ESTABLISHMENT - LAWNS IN ACCORDANCE WITH SECTION 610-3.03.
8. THE CONTRACTOR SHALL REPEAT THE WORK OF SECTION 610-3.03 IF AN ACCEPTABLE STAND OF TURF HAS NOT BEEN PRODUCED IN ANY SEEDED AREA WITHIN 6 WEEKS OF SEEDING, OR BY MAY 12 FOR DORMANT SEEDING. DORMANT SEEDING OCCURS BETWEEN SEPTEMBER 16 AND MARCH 31.

TREE NOTES

- 1. UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL PRESERVE AND PROTECT ALL TREES FROM DAMAGE LOCATED WITHIN THE RIGHT-OF-WAY AND OUTSIDE OF THE RIGHT-OF-WAY.
2. NO TREES SHALL BE REMOVED OR TRIMMED WITHOUT THE APPROVAL OF THE ENGINEER AND PROPERTY OWNER. NO TREE SHALL BE REMOVED OTHER THAN SHOWN ON THE PLANS AND WITHOUT WRITTEN AUTHORIZATION FROM THE PROPERTY OWNER IF OUTSIDE OF THE RIGHT-OF-WAY. TREE REMOVALS SHALL INCLUDE STUMP REMOVAL.

PUBLIC WATER MAIN NOTES:

WATER SERVICE LINES (LATERALS) SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE REGULATIONS AND SPECIFICATIONS OF THE MONROE COUNTY WATER AUTHORITY. WATER MAINS AND APPURTENANCES TO BE CONSTRUCTED IN ACCORDANCE WITH THE REGULATIONS AND SPECIFICATIONS OF THE WATER AUTHORITY:

MATERIAL:

- WATER MAIN(S) SHALL BE 8-INCH DUCTILE IRON CEMENT-LINED CLASS 52. (BID NOTE: ALTERNATE WATER MAIN PIPE MATERIAL SHALL BE C909 MOLECULARLY ORIENTED POLYVINYL CHLORIDE PIPE. REFER TO PROJECT SPECIFICATIONS AND BID FORM)
• WATER SERVICE(S) SHALL BE 1-INCH OR 2-INCH TYPE K COPPER FROM THE WATER MAIN TO THE CURB BOX AND 1-INCH OR 2-INCH (TYPE K SOFT COPPER OR PE #4710) FROM THE CURB BOX TO THE METER.
• WATER METER(S) SHALL BE LOCATED ON THE INTERIOR OF EXTERIOR WALLS IMMEDIATELY UPON SERVICE ENTRANCE INTO THE BUILDING(S). ON METERED SERVICES REQUIRING A 1 1/2-INCH OR LARGER METER A BYPASS AROUND THE METER IS REQUIRED.
• ALL GATE VALVES SHALL HAVE STAINLESS STEEL BODY AND BONNET BOLTS AND SHALL OPEN RIGHT.

TESTS:

- SOIL TEST. THE CONTRACTOR SHALL PROVIDE A SOIL TEST EVALUATION TO DETERMINE THE NEED FOR POLYETHYLENE ENCASUREMENT PER ANSI/AWWWS C105/AZ1.5-82 PRIOR TO WATER MAIN INSTALLATION. SOIL TESTING SHALL BE CONDUCTED BY AN APPROVED SOIL TESTING LABORATORY IN ACCORDANCE WITH WATER AUTHORITY STANDARDS.
• PRESSURE TEST. WATER MAINS TO BE PRESSURE TESTED IN ACCORDANCE WITH THE LATEST WATER AUTHORITY SPECIFICATIONS. A WATER AUTHORITY REPRESENTATIVE MUST WITNESS THIS TEST.
• HEALTH SAMPLE. THE WATER MAIN SHALL BE DISINFECTED EQUAL TO AWWA STANDARD SPECIFICATIONS, DESIGNATION C-651, BY USING THE CONTINUOUS FEED METHOD. AFTER FLUSHING AND DISINFECTING THE WATER MAIN, WATER SAMPLES SHALL BE COLLECTED FROM THE MAIN BY THE MONROE COUNTY HEALTH DEPARTMENT. FIRE HYDRANTS ARE NOT ACCEPTABLE SAMPLING POINTS. APPROVAL AND NOTIFICATION BY THE HEALTH DEPARTMENT MUST BE RECEIVED BEFORE THE MAIN IS PLACED IN SERVICE.

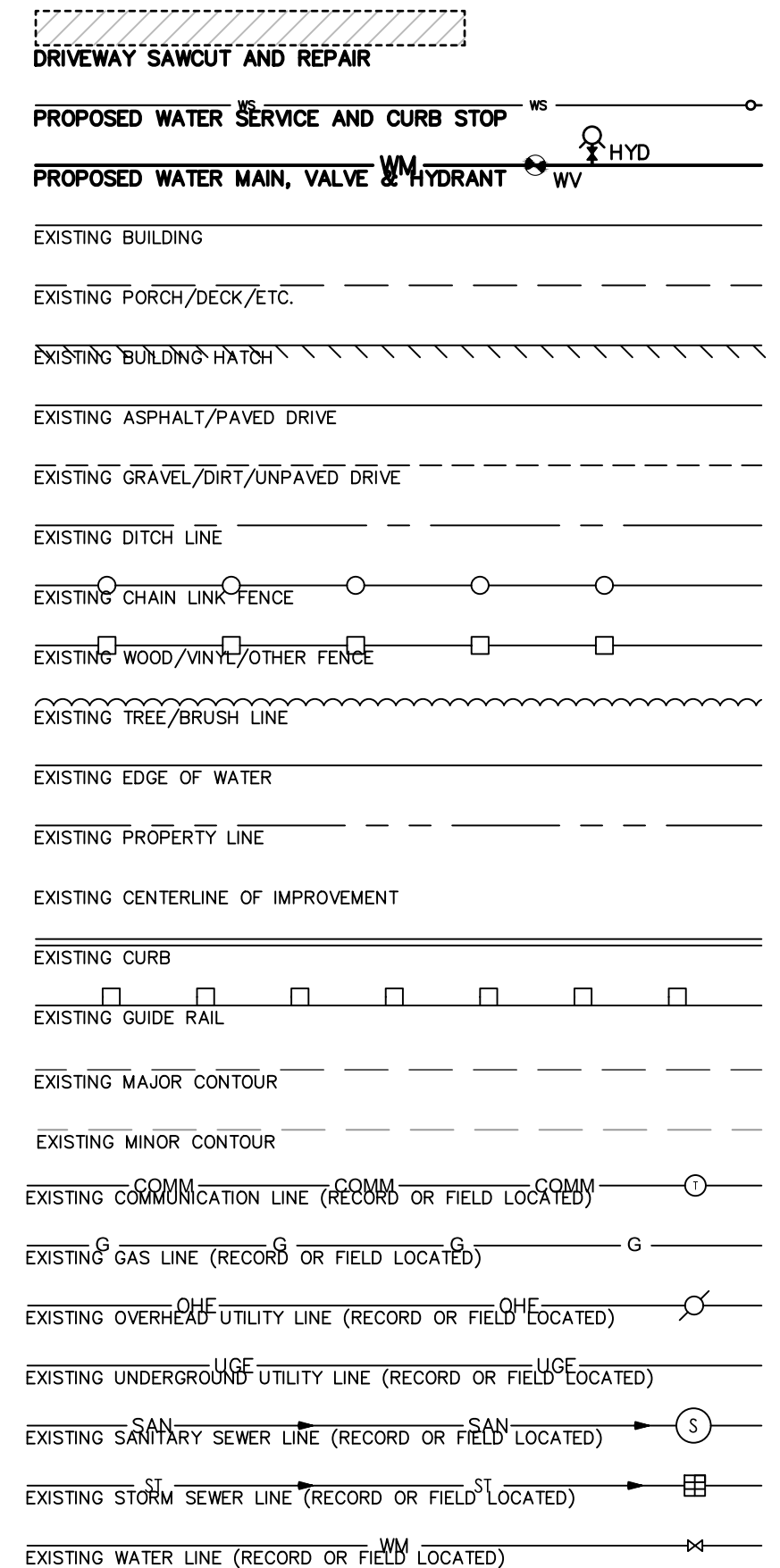
INSTALLATION:

- WATER MAINS AND ALL WATER SERVICE LINES SHALL HAVE A MINIMUM OF FIVE FEET OF COVER FROM FINISHED GRADE IN LAWN AREAS AND A MINIMUM OF SIX FEET OF COVER FROM FINISHED GRADE IN PAVED AREAS.
• MINIMUM VERTICAL SEPARATION BETWEEN WATER MAIN AND SEWER MAINS SHALL BE 18" MEASURED FROM THE OUTSIDE OF THE PIPES AT THE POINT OF CROSSING. MINIMUM HORIZONTAL SEPARATION BETWEEN WATER MAINS AND SEWER MAINS SHALL BE TEN FEET MEASURED FROM THE OUTSIDE OF THE ONE FULL LENGTH OF WATER MAIN SHALL BE CENTERED UNDER OR OVER THE SEWER SO THAT BOTH JOINTS WILL BE AS FAR FROM THE SEWER AS POSSIBLE. WHERE A WATER MAIN CROSSES UNDER A SEWER, ADEQUATE STRUCTURAL SUPPORT (COMPACTED SELECTED FILL) SHALL BE PROVIDED FOR THE SEWERS TO PREVENT EXCESSIVE DEFLECTION OF JOINTS AND SETTLING ON AND BREAKING THE WATER MAINS.
• FIRE HYDRANT WEEP HOLES (DRAINS) SHALL BE PLUGGED WHEN GROUND WATER IS ENCOUNTERED WITHIN SEVEN FEET OF THE FINISHED GRADE.
• ALL MECHANICAL JOINT FITTINGS (TEES, BENDS, PLUGS, ETC.) SHALL BE BACKED WITH 2500 PSI CONCRETE THRUST BLOCKS OF APPROPRIATE SIZE TO PROVIDE THRUST RESTRAINT.

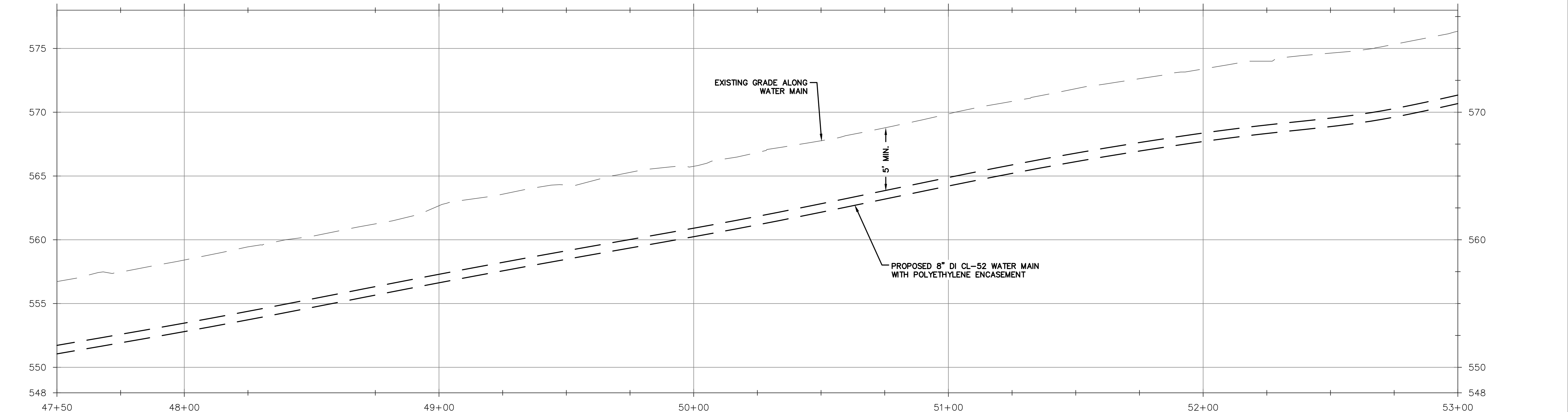
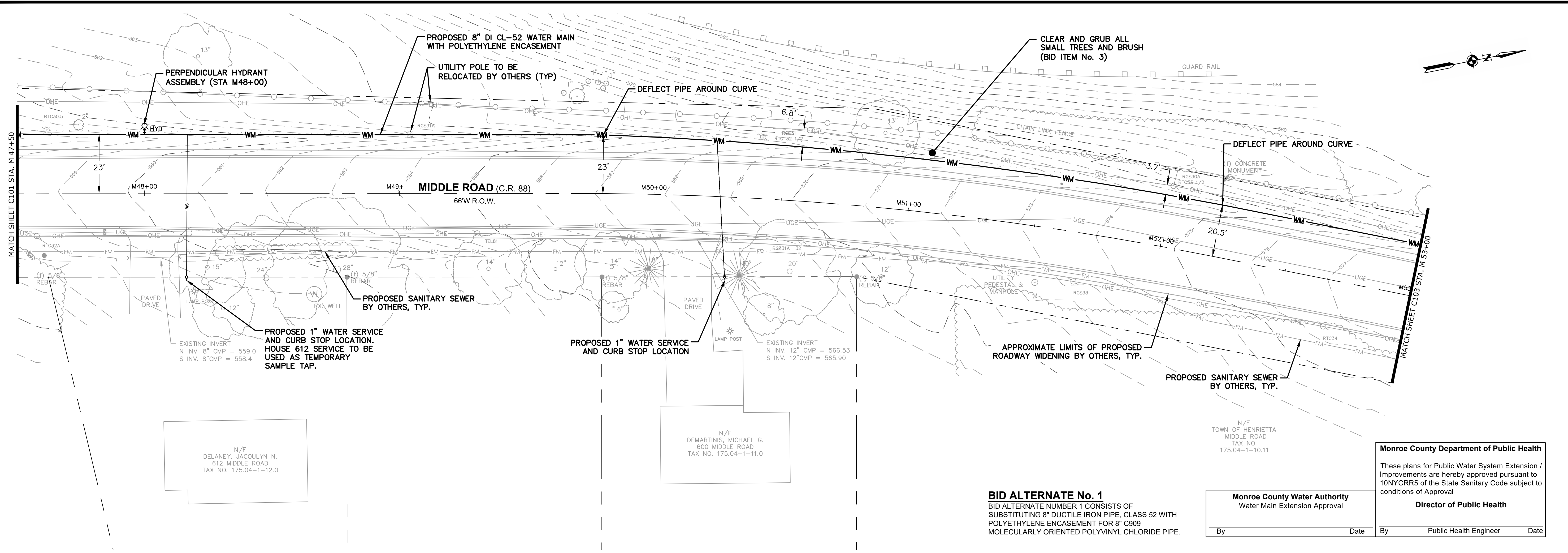
SERVICES:

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING THE PUBLIC PORTION OF THE WATER SERVICES SHOWN ON THE PLANS, FROM THE WATER MAIN TO THE CURB BOX. THE PRIVATE PORTION OF THE WATER SERVICES, FROM THE CURB BOX TO THE WATER METER, SHALL BE THE RESPONSIBILITY OF THE INDIVIDUAL HOMEOWNERS.
• WATER SERVICES THAT EXTEND TO THE EAST SIDE OF MIDDLE ROAD SHALL BE INSTALLED TO ENSURE THAT A MINIMUM OF 18" OF VERTICAL SEPARATION IS MAINTAINED FROM THE SANITARY SEWER LINE.

LEGEND:



Scale: N.T.S. Date: 11/30/2021 Job No: T22-03 Designed By: L. BUSHEN Drawn By: L. BUSHEN Checked By: C. MARTIN Approved By: C. MARTIN. Includes professional engineer seal for Charles B. Martin, State of New York, License No. 078327. Project title: 2022 MIDDLE ROAD WATER MAIN EXTENSION. Location: 475 CALKINS ROAD, HENRIETTA, N.Y. 14467. DWG. NO. C-100. SHEET NO. 2 of 11.



PROFILE
 SCALE: V. 1"=4
 H. 1"=20

BID ALTERNATE No. 1
 BID ALTERNATE NUMBER 1 CONSISTS OF
 SUBSTITUTING 8" DUCTILE IRON PIPE, CLASS 52 WITH
 POLYETHYLENE ENCASEMENT FOR 8" C909
 MOLECULARLY ORIENTED POLYVINYL CHLORIDE PIPE.

Monroe County Water Authority
 Water Main Extension Approval
 By _____ Date _____
 By _____ Date _____
 Public Health Engineer

Monroe County Department of Public Health
 These plans for Public Water System Extension /
 Improvements are hereby approved pursuant to
 10NYCRR5 of the State Sanitary Code subject to
 conditions of Approval
 Director of Public Health

SCALE	1" = 20'
DATE	11/30/2022
JOB NO.	T22-03
DESIGNED BY	L. BUSHEN
DRAWN BY	L. BUSHEN
CHECKED BY	C. MARTIN
APPROVED BY	C. MARTIN

STATE OF NEW YORK
 LICENSED PROFESSIONAL ENGINEER
 C. MARTIN
 076327

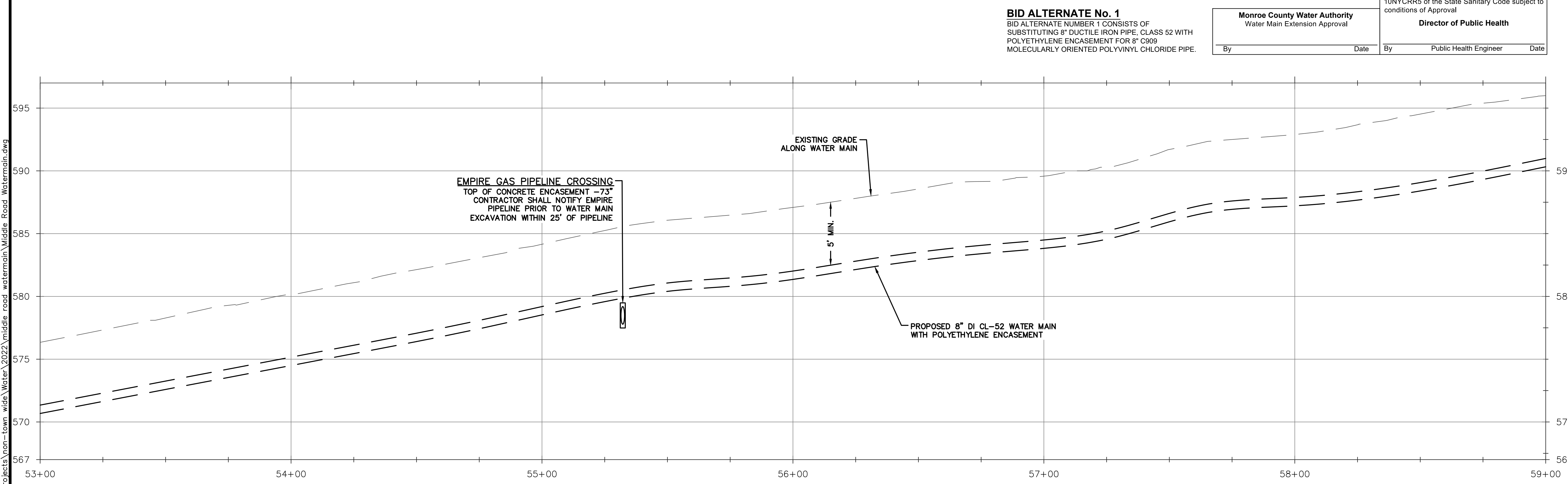
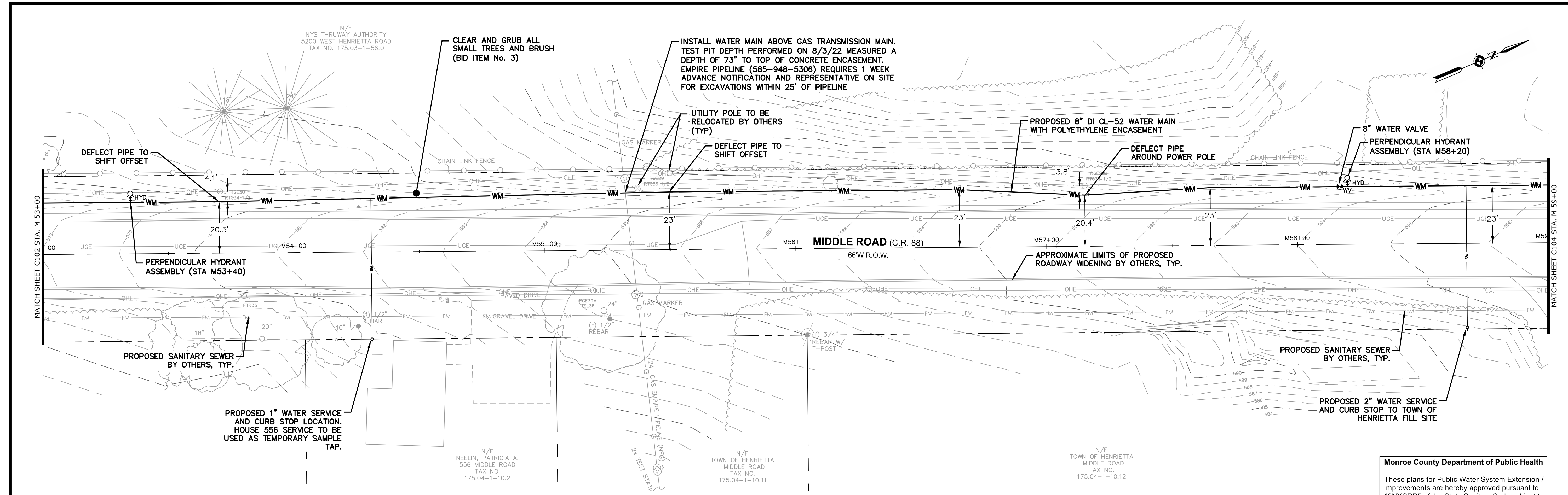
TOWN OF HENRIETTA

TOWN OF HENRIETTA
 475 CALKINS ROAD
 HENRIETTA, N.Y. 14467

2022 MIDDLE ROAD WATER MAIN EXTENSION
 WATER MAIN PLAN - 2

REVISIONS	DESCRIPTION	INITIALS	DATE

DWG. NO. C-102
 SHEET NO. 4 of 11



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PROFILE
 SCALE: V. 1"=4
 H. 1"=20

BID ALTERNATE No. 1
 BID ALTERNATE NUMBER 1 CONSISTS OF
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Monroe County Water Authority
 Water Main Extension Approval
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Monroe County Department of Public Health
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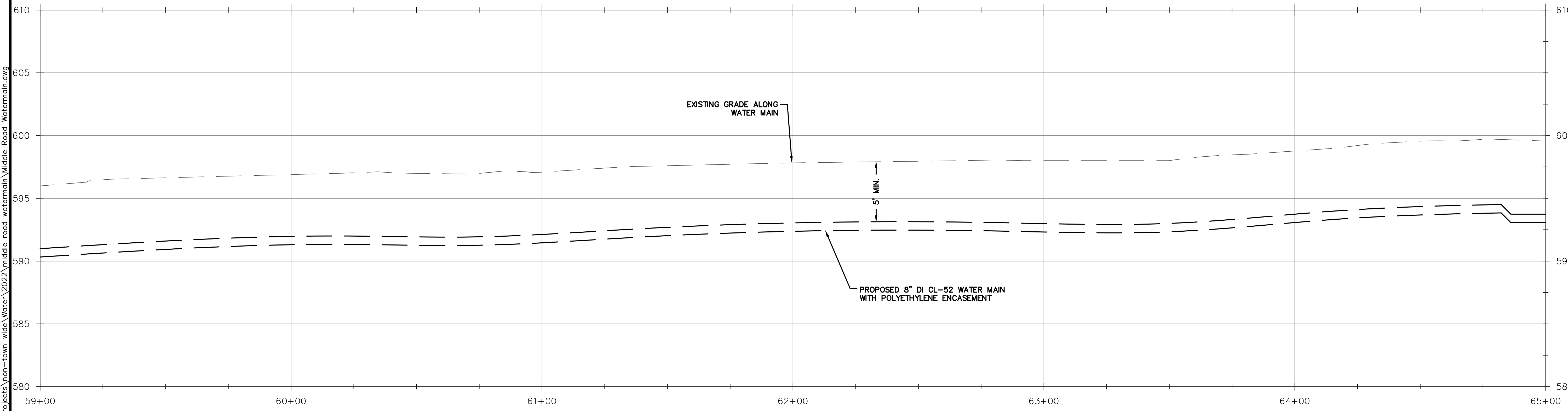
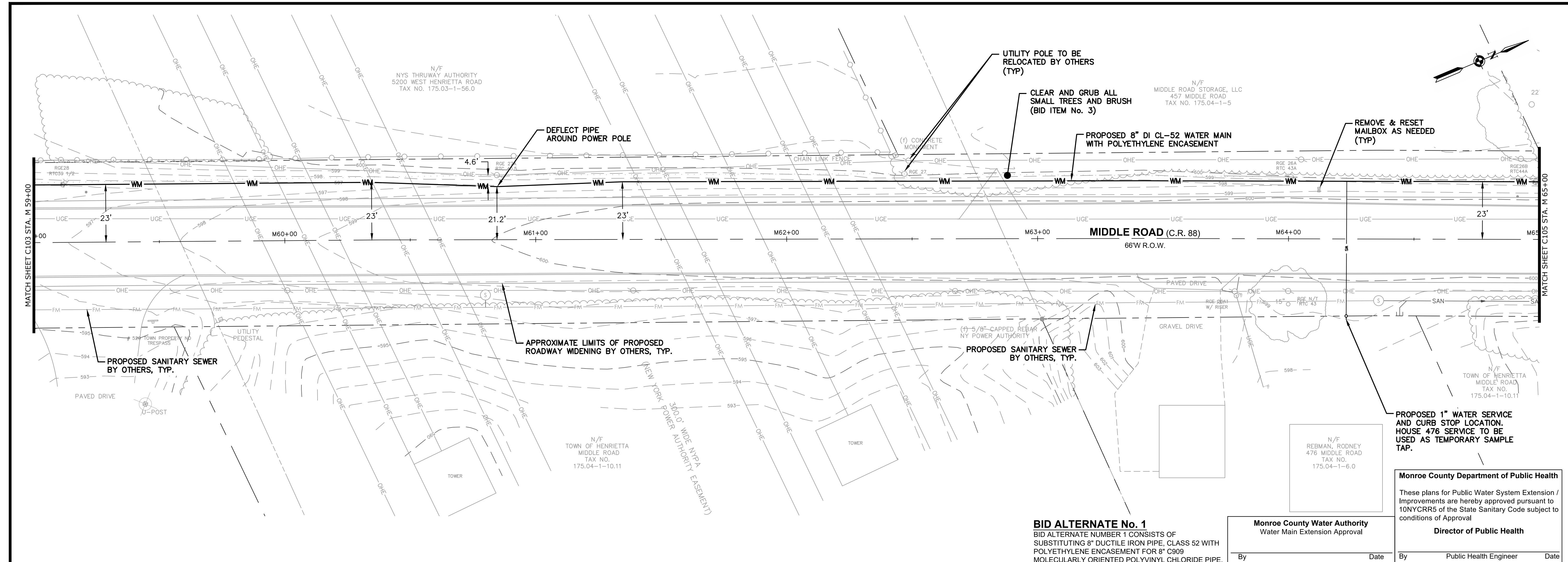
SCALE	1" = 20'
DATE	11/30/2022
JOB NO.	T22-03
DESIGNED BY	L. BUSHEN
DRAWN BY	L. BUSHEN
CHECKED BY	C. MARTIN
APPROVED BY	C. MARTIN

TOWN OF HENRIETTA
 475 CALKINS ROAD
 HENRIETTA, N.Y. 14467

2022 MIDDLE ROAD WATER MAIN EXTENSION
 WATER MAIN PLAN - 3

NO.	DESCRIPTION	INITIALS	DATE

DWG. NO. C-103
 SHEET NO. 5 of 11

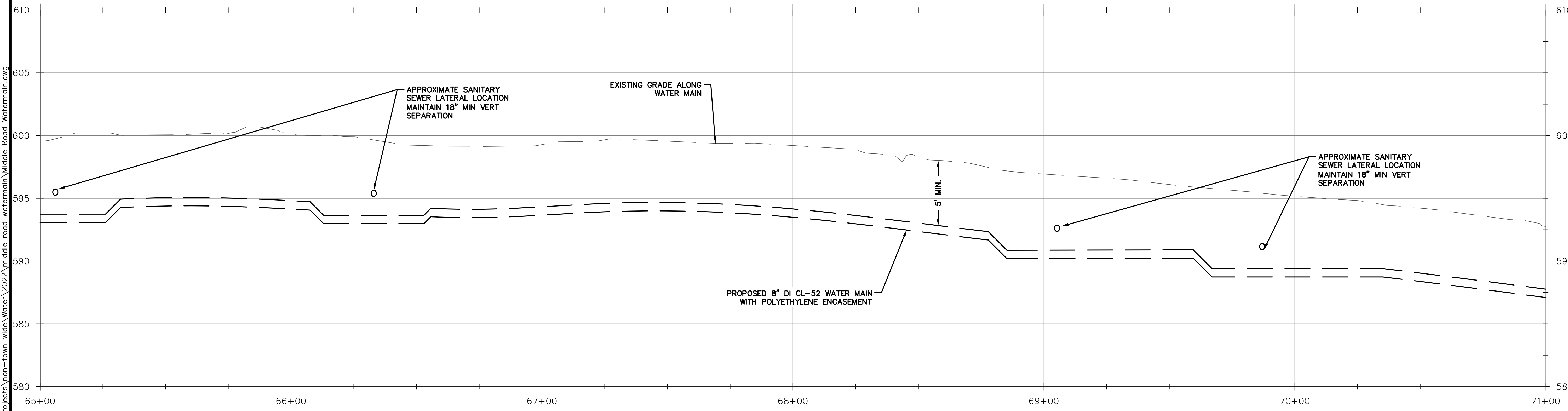
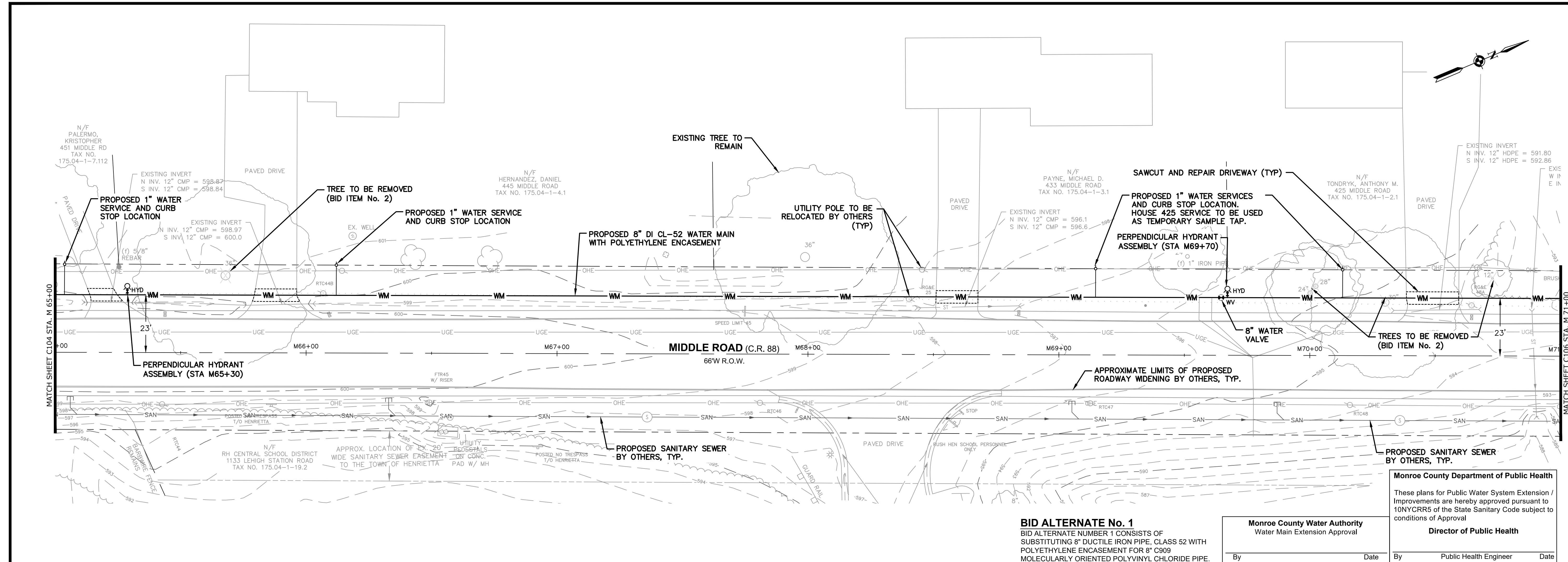


PROFILE
 SCALE: V. 1"=4
 H. 1"=20

BID ALTERNATE No. 1
 BID ALTERNATE NUMBER 1 CONSISTS OF
 SUBSTITUTING 8" DUCTILE IRON PIPE, CLASS 52 WITH
 POLYETHYLENE ENCASEMENT FOR 8" C909
 MOLECULARLY ORIENTED POLYVINYL CHLORIDE PIPE.

Monroe County Water Authority Water Main Extension Approval By _____ Date _____	Monroe County Department of Public Health These plans for Public Water System Extension / Improvements are hereby approved pursuant to 10NYCRR5 of the State Sanitary Code subject to conditions of Approval Director of Public Health By _____ Date _____
--	---

DWG. NO. C-104	SHEET NO. 6 of 11
TOWN OF HENRIETTA 475 CALKINS ROAD HENRIETTA, N.Y. 14467	
2022 MIDDLE ROAD WATER MAIN EXTENSION WATER MAIN PLAN - 4	
SCALE 1" = 20'	DATE 11/30/2022
JOB NO. T22-03	DESIGNED BY L. BUSHEN
DRAWN BY L. BUSHEN	CHECKED BY C. MARTIN
APPROVED BY C. MARTIN	
REVISIONS	
DESCRIPTION	INITIALS
DATE	



PROFILE
 SCALE: V. 1"=4
 H. 1"=20

BID ALTERNATE No. 1
 BID ALTERNATE NUMBER 1 CONSISTS OF
 SUBSTITUTING 8" DUCTILE IRON PIPE, CLASS 52 WITH
 POLYETHYLENE ENCASEMENT FOR 8" C909
 MOLECULARLY ORIENTED POLYVINYL CHLORIDE PIPE.

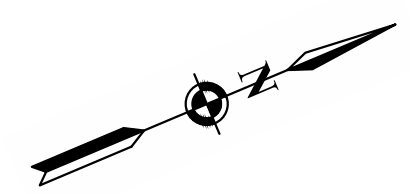
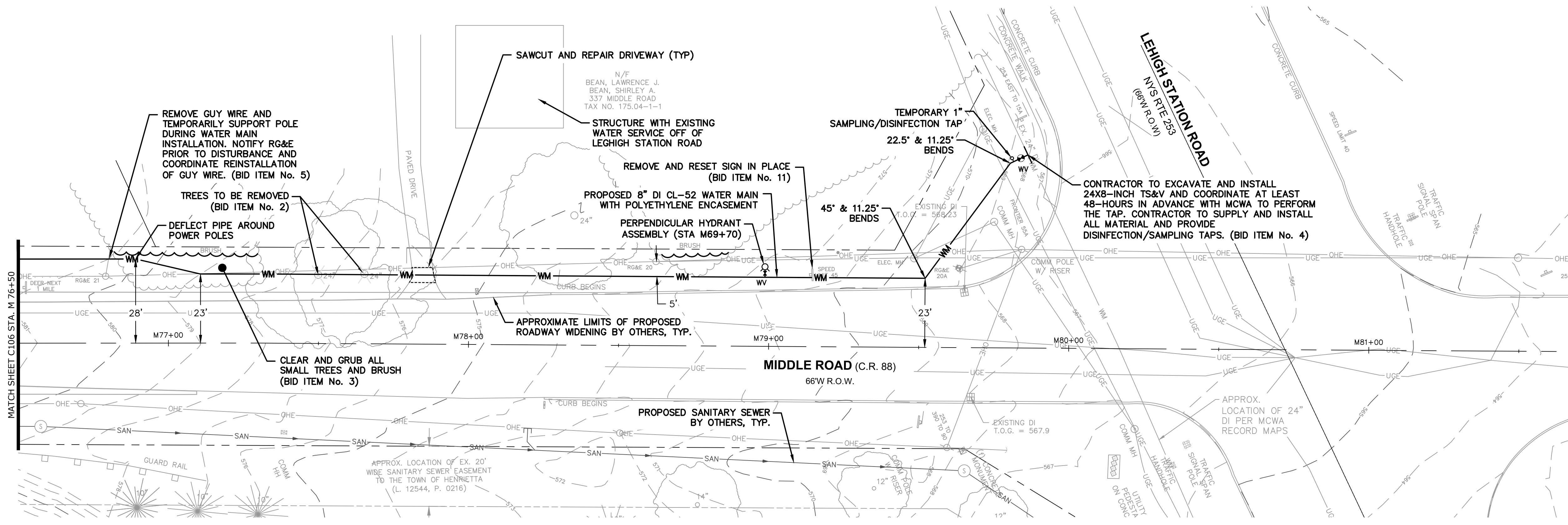
Monroe County Water Authority Water Main Extension Approval		Monroe County Department of Public Health These plans for Public Water System Extension / Improvements are hereby approved pursuant to 10NYCRR5 of the State Sanitary Code subject to conditions of Approval Director of Public Health	
By _____	Date _____	By _____	Date _____

SCALE	1" = 20'
DATE	11/30/2022
JOB NO.	T22-03
DESIGNED BY	L. BUSHEN
DRAWN BY	L. BUSHEN
CHECKED BY	C. MARTIN
APPROVED BY	C. MARTIN

NO.	DESCRIPTION	INITIALS	DATE

TOWN OF HENRIETTA
 475 CALKINS ROAD
 HENRIETTA, N.Y. 14467
2022 MIDDLE ROAD WATER MAIN EXTENSION
 WATER MAIN PLAN - 5

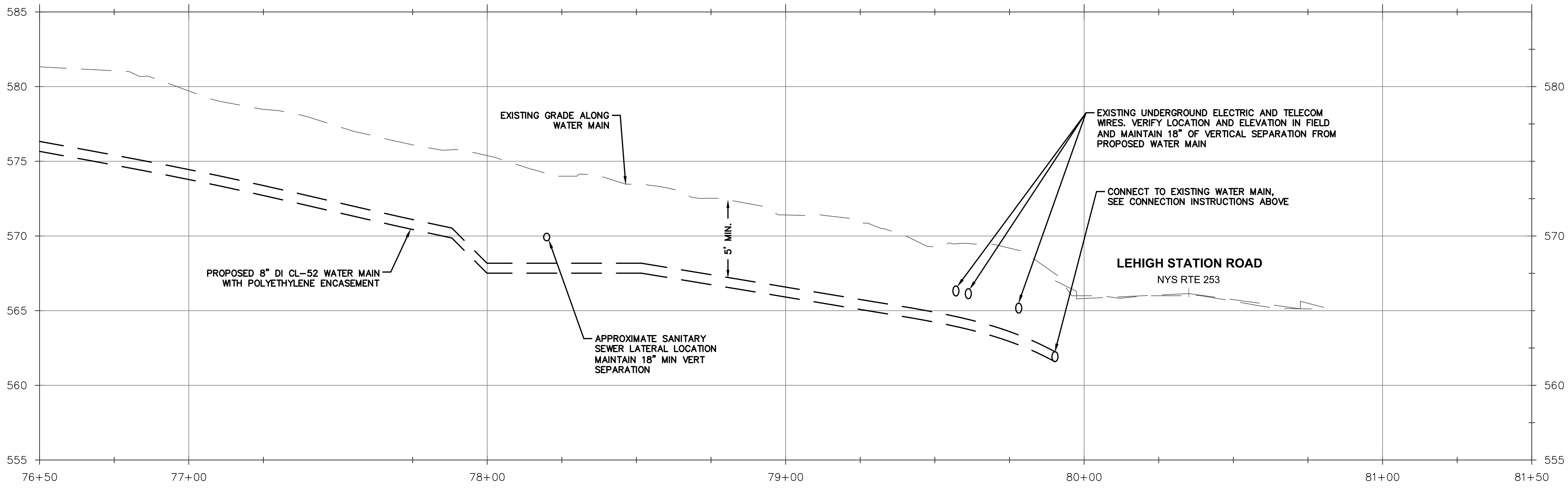
DWG. NO. C-105
 SHEET NO. 7 of 11



Monroe County Department of Public Health
 These plans for Public Water System Extension / Improvements are hereby approved pursuant to 10NYCRR5 of the State Sanitary Code subject to conditions of Approval
Director of Public Health

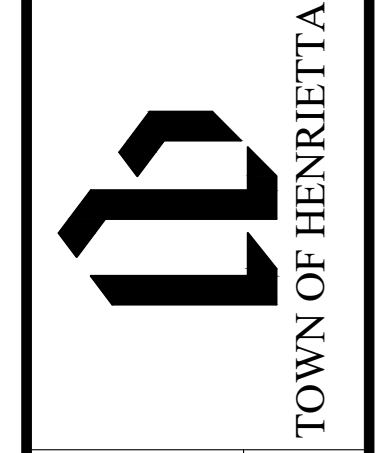
By _____ Date _____
 By _____ Date _____

BID ALTERNATE No. 1
 BID ALTERNATE NUMBER 1 CONSISTS OF SUBSTITUTING 8" DUCTILE IRON PIPE, CLASS 52 WITH POLYETHYLENE ENCASEMENT FOR 8" C909 MOLECULARLY ORIENTED POLYVINYL CHLORIDE PIPE.



PROFILE
 SCALE: V. 1"=4
 H. 1"=20

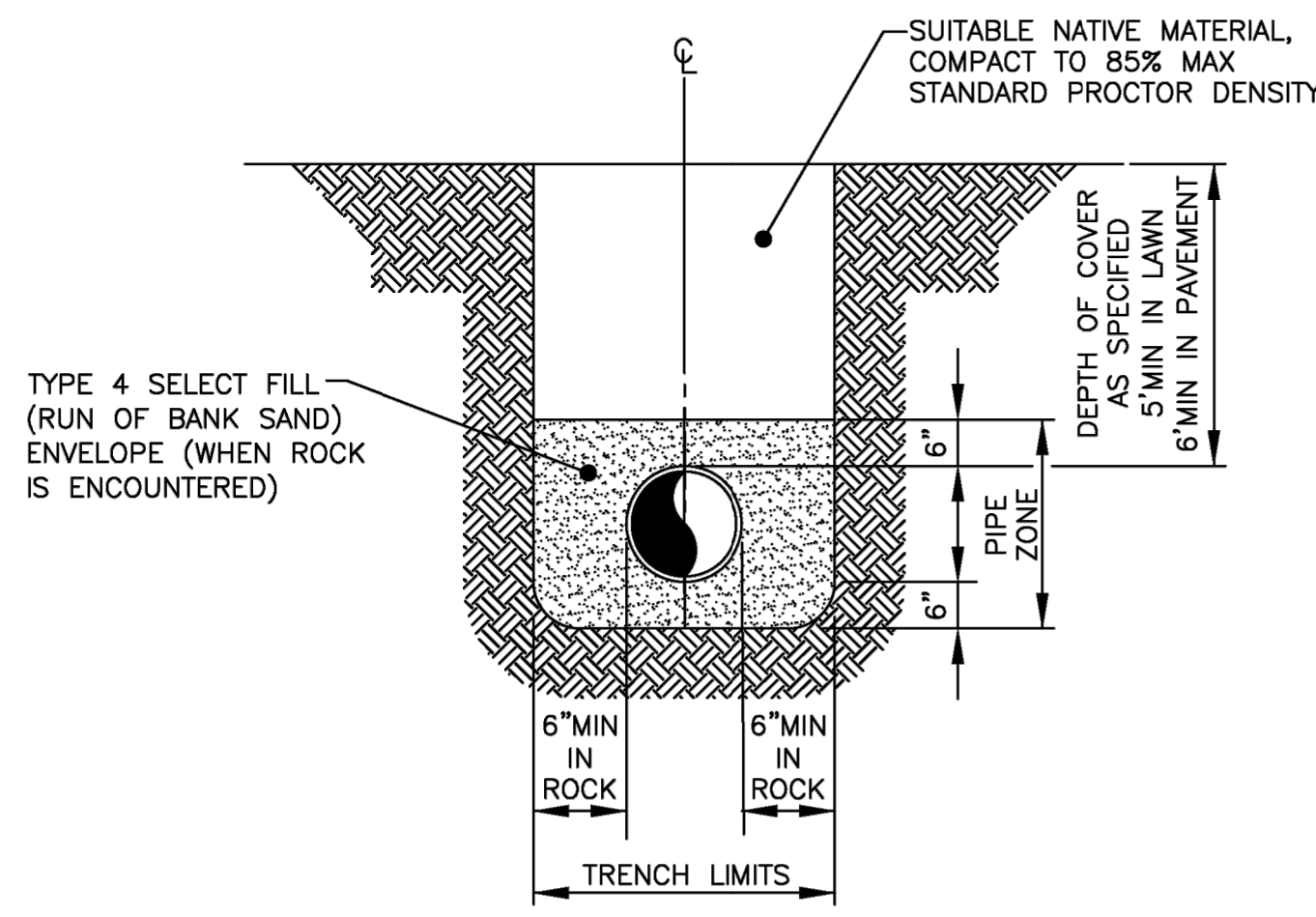
SCALE	1" = 20'
DATE	11/30/2022
JOB NO.	T22-03
DESIGNED BY	L. BUSHEN
DRAWN BY	L. BUSHEN
CHECKED BY	C. MARTIN
APPROVED BY	C. MARTIN
DESCRIPTION	2022 MIDDLE ROAD WATER MAIN EXTENSION
REVISIONS	
INITIALS	
DATE	



TOWN OF HENRIETTA
 475 CALKINS ROAD
 HENRIETTA, N.Y. 14467

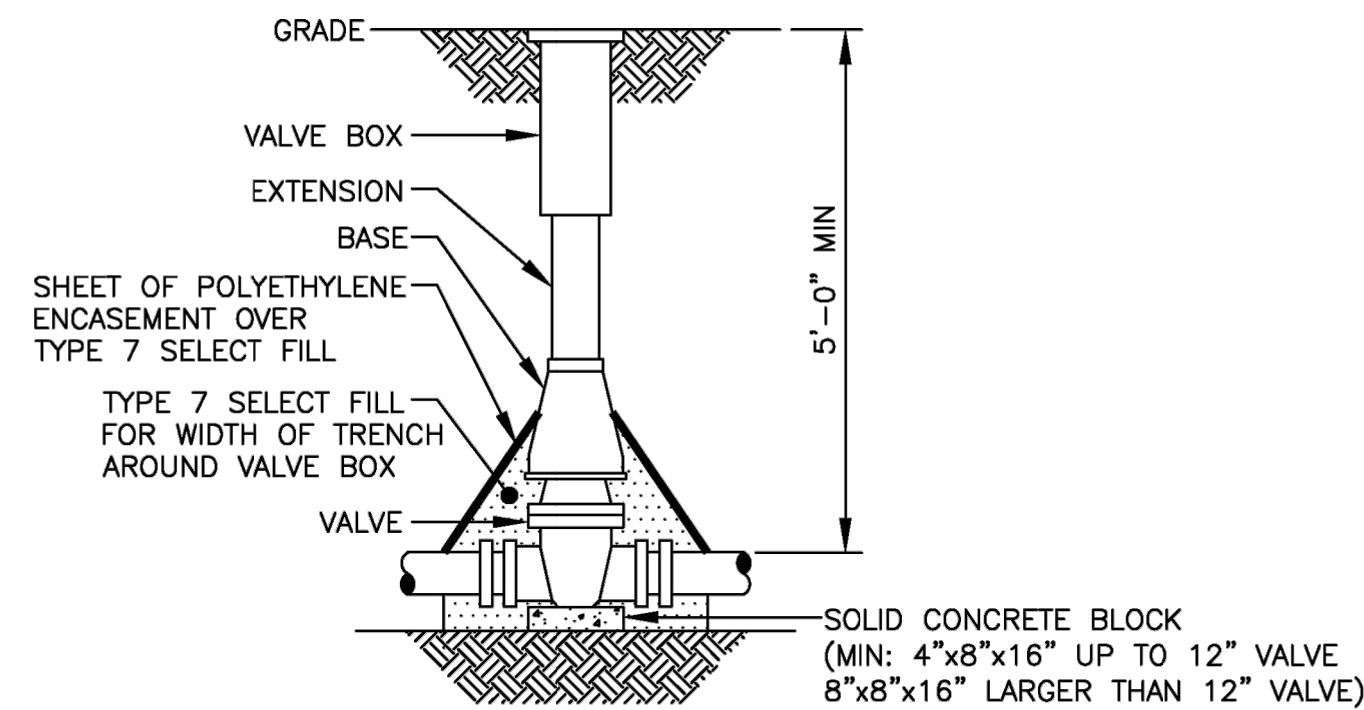
2022 MIDDLE ROAD WATER MAIN EXTENSION
 WATER MAIN PLAN - 7

DWG. NO. C-107
 SHEET NO. 9 of 11



NOTE: EXCAVATION TO MEET OSHA REQUIREMENTS.

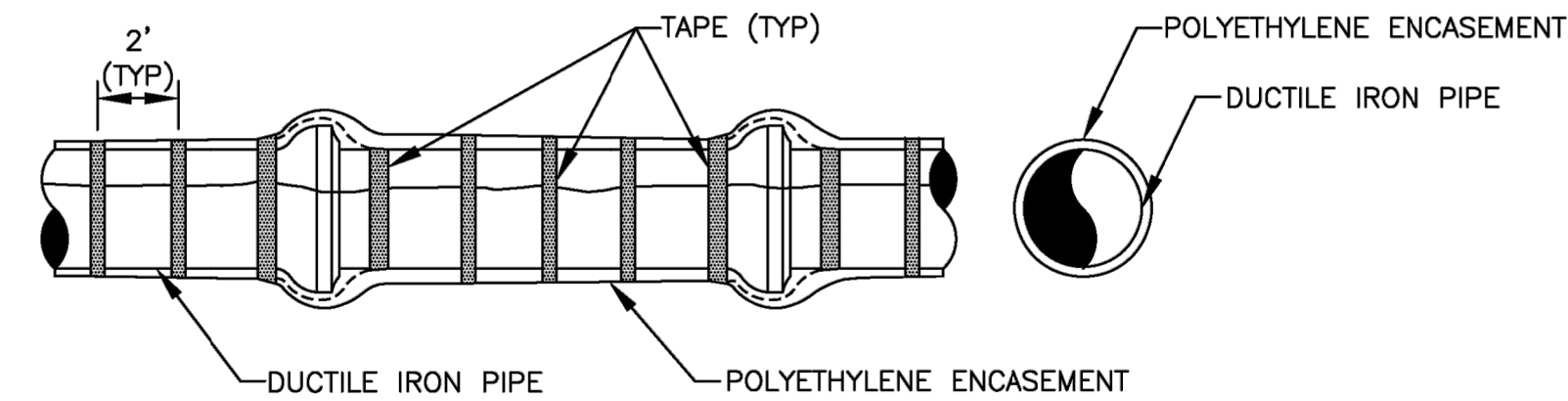
DIP TRENCH
NOT TO SCALE



NOTES:

1. VALVE BOX SHALL BE CENTERED ON VALVE AND SET ON COMPACTED BACKFILL.
2. VALVE SHALL NOT SUPPORT VALVE BOX.
3. ALL VALVES SHALL BE OPEN LEFT EXCEPT:
TOWN OF WEBSTER - VALVES 12" AND SMALLER SHALL OPEN RIGHT.
TOWN OF HENRIETTA - SHALL OPEN RIGHT

VALVE
NOT TO SCALE



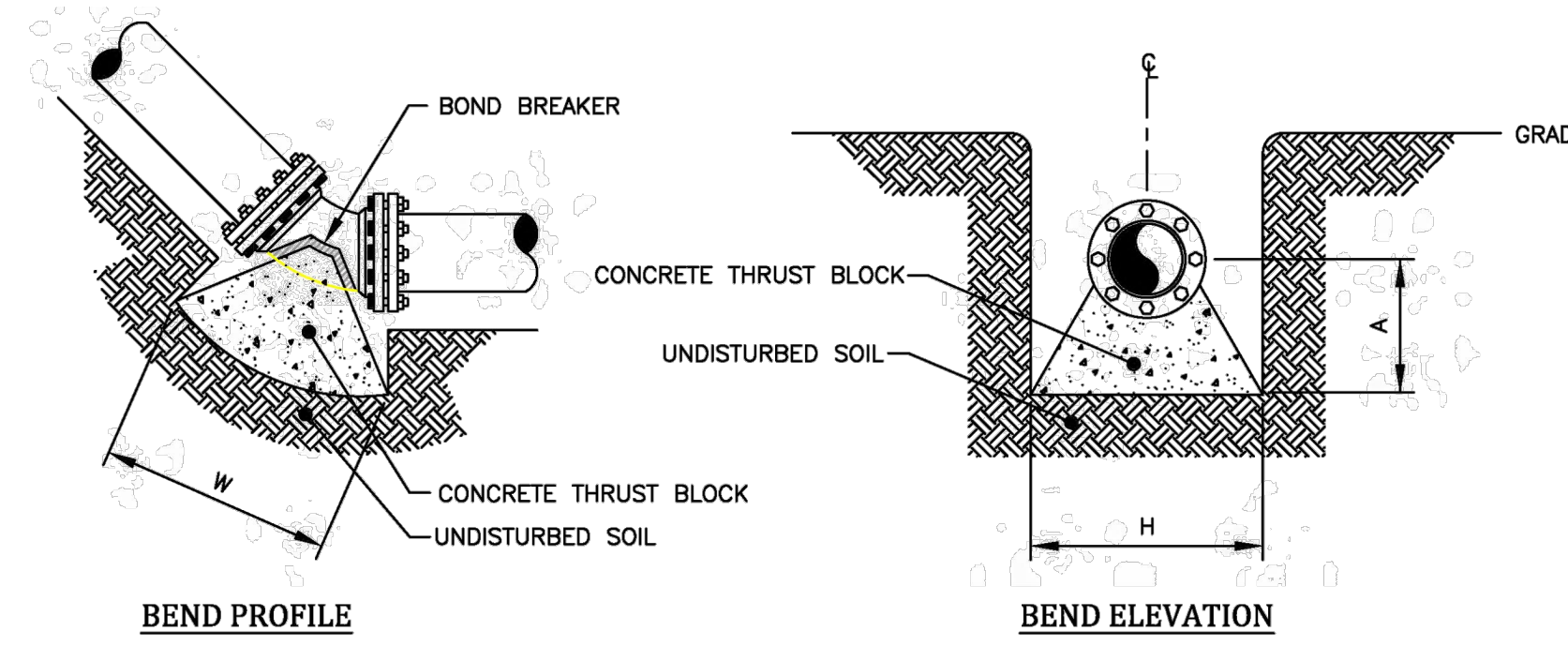
POLYETHYLENE ENCASEMENT

NOT TO SCALE
STND 02/15

PIPE DIAMETER	BEND OR FITTING														
	11% DEGREE			22% DEGREE			45 DEGREE			90 DEGREE			TEE* CAP OR PLUG		
	H (FT)	W (FT)	A (CY)	H (FT)	W (FT)	A (CY)	H (FT)	W (FT)	A (CY)	H (FT)	W (FT)	A (CY)	H (FT)	W (FT)	A (CY)
8"	1.5	1.5	1.5	2.0	2.0	1.5	2.0	4.0	1.5	4.0	1.5	2.5	4.0	1.5	

* SIZE BLOCK BASED ON BRANCH DIAMETER.
SOIL BEARING STRENGTH - 1500 PSF
150 PSI TEST PRESSURE

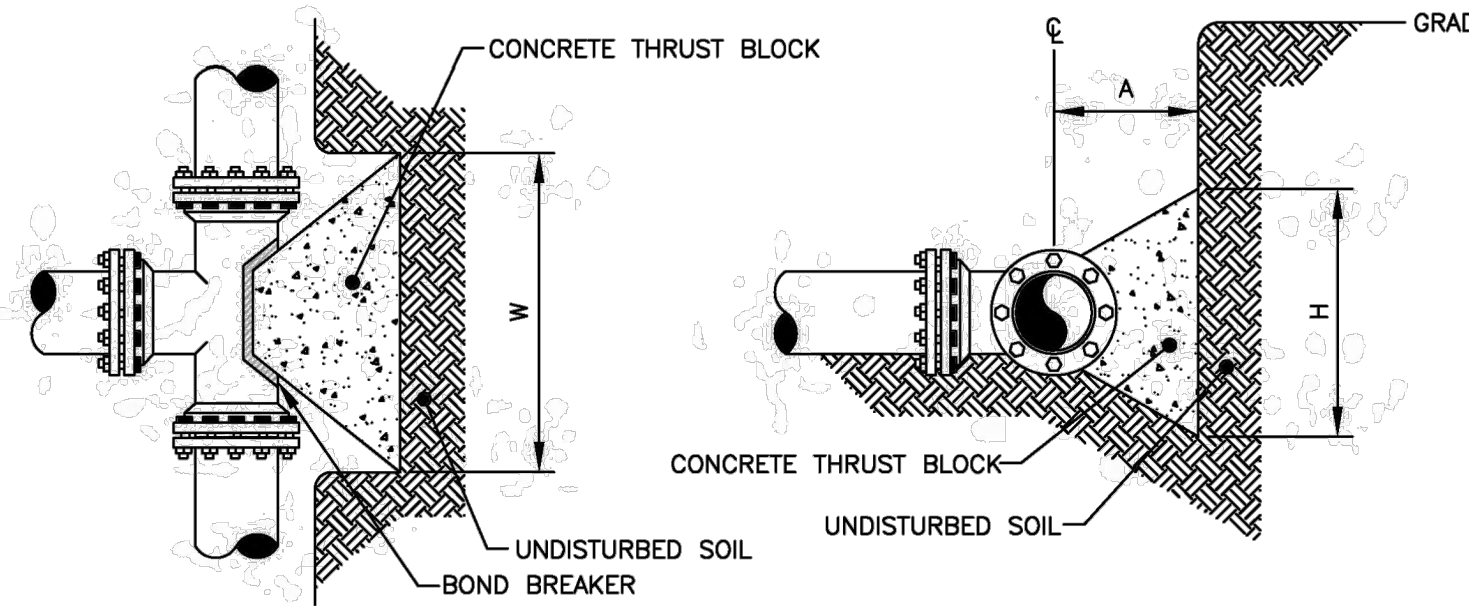
HORIZONTAL AND VERTICAL UP THRUST BLOCKS



BEND PROFILE

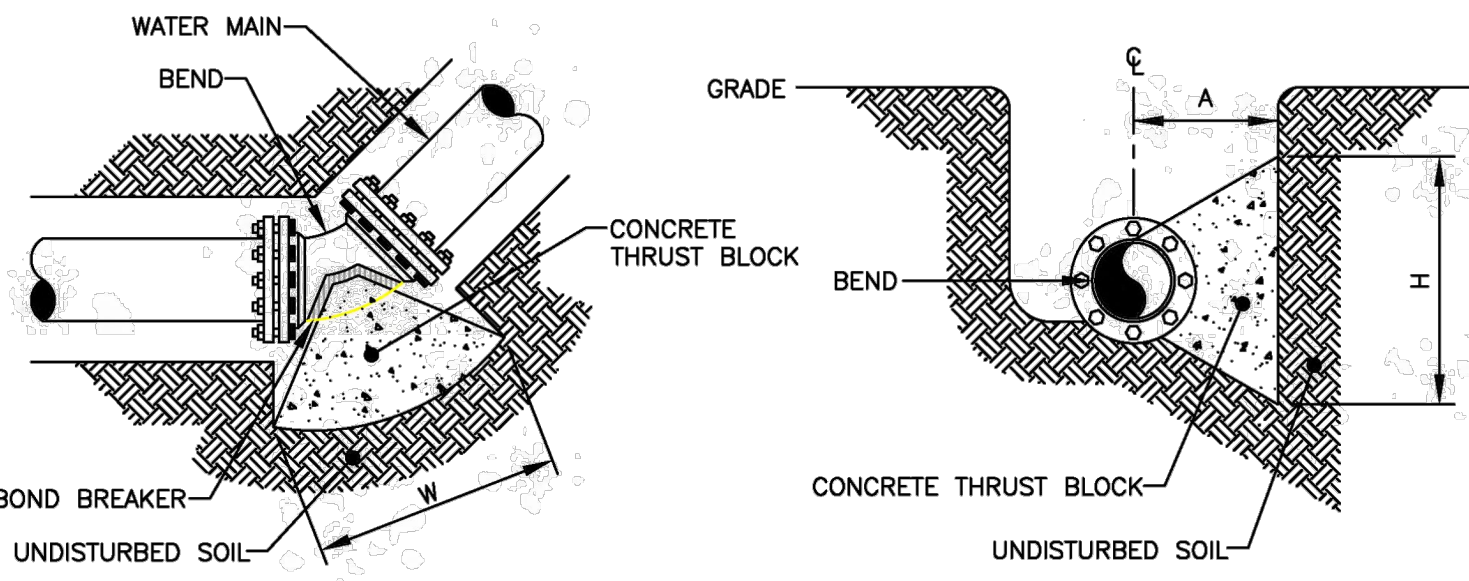
BEND ELEVATION

VERTICAL UP THRUST BLOCKS
NOT TO SCALE



TEE PLAN

TEE ELEVATION



BEND PLAN

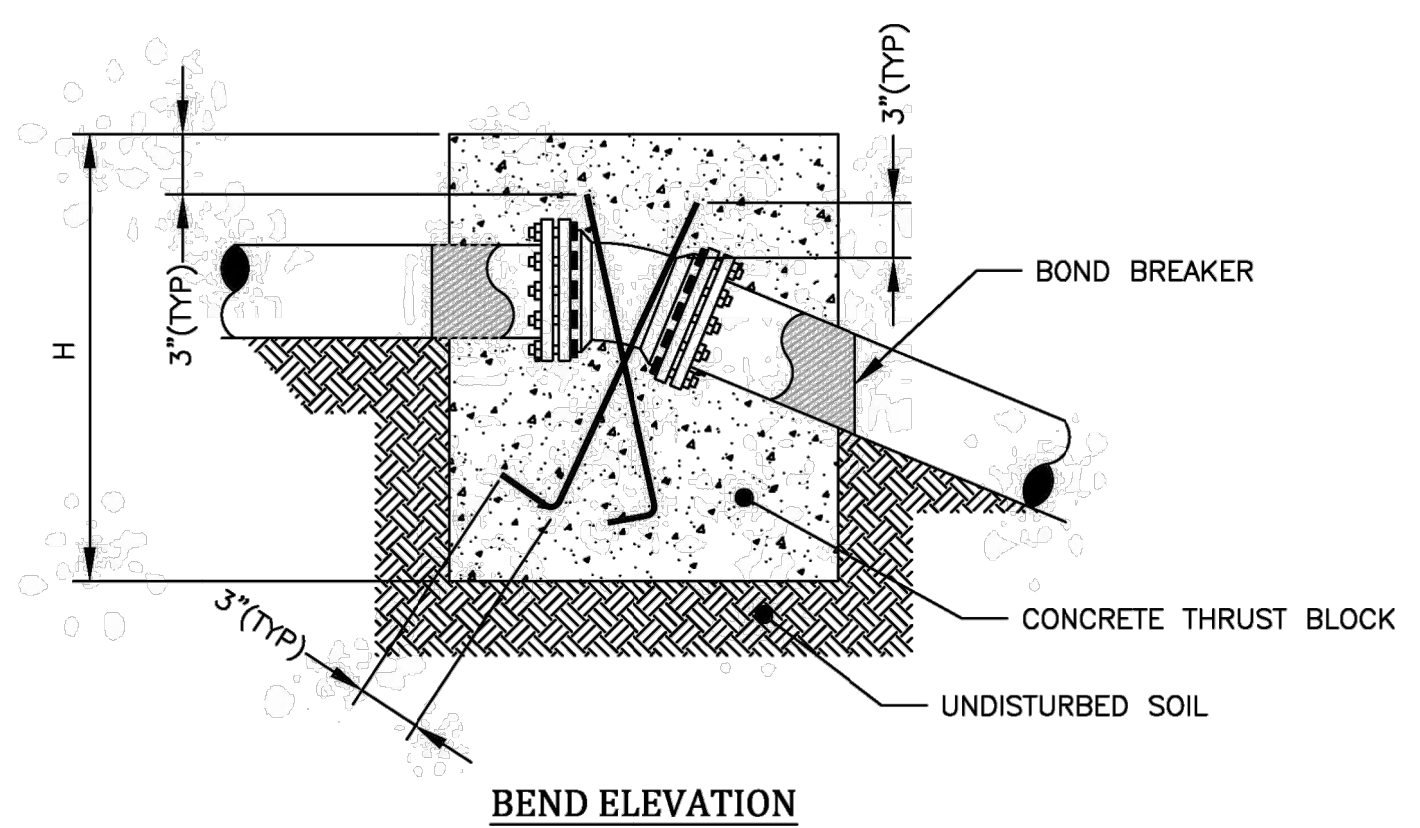
BEND ELEVATION

HORIZONTAL THRUST BLOCKS
NOT TO SCALE

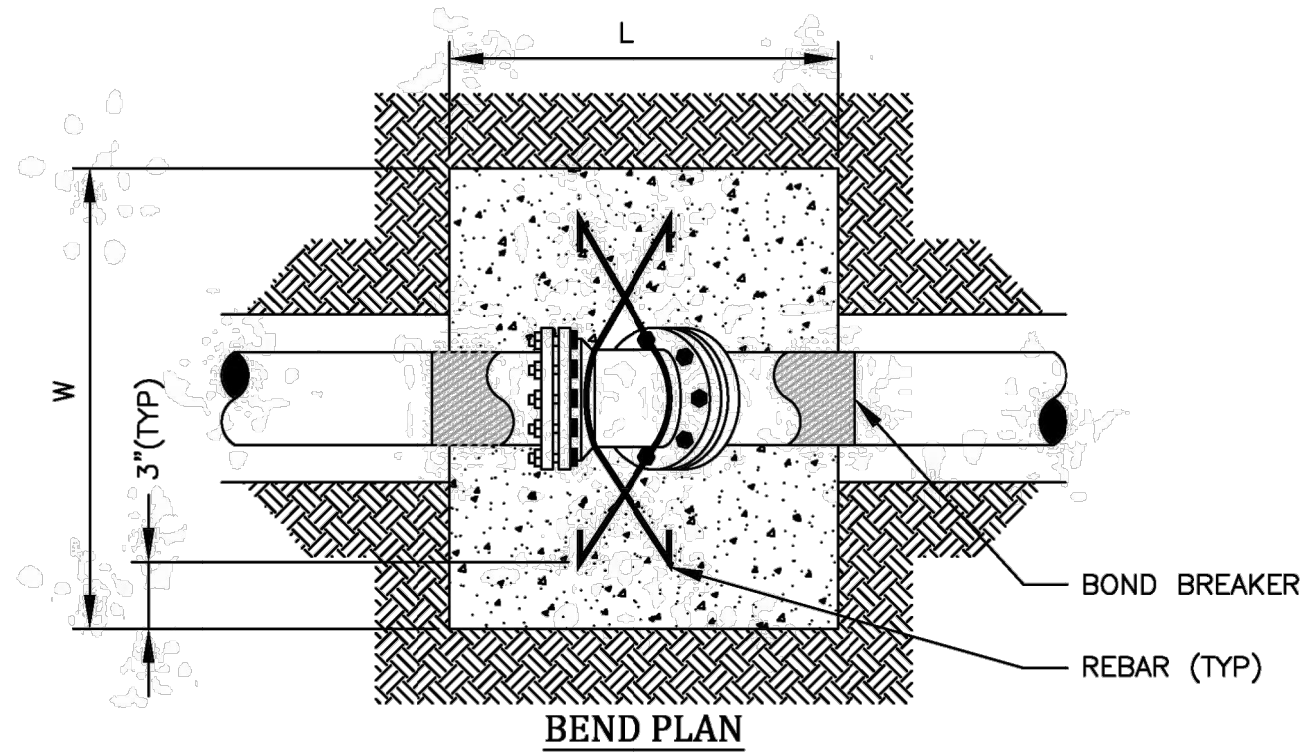
PIPE DIAMETER	BEND														
	11% DEGREE			22% DEGREE			45 DEGREE			90 DEGREE					
	H (FT)	W (FT)	A (CY)	H (FT)	W (FT)	A (CY)	H (FT)	W (FT)	A (CY)	H (FT)	W (FT)	A (CY)			
6"	2.0	3.0	2.0	3.0	2.5	0.8	4.0	3.5	3.0	1.6	3.5	4.5	4.0	2.3	
8"	3.0	2.5	3.0	0.8	4.0	3.0	3.5	1.5	4.5	4.5	3.5	2.6	3.5	5.5	3.9

SOIL BEARING STRENGTH - 1500 PSF
150 PSI TEST PRESSURE

VERTICAL DOWN THRUST BLOCKS



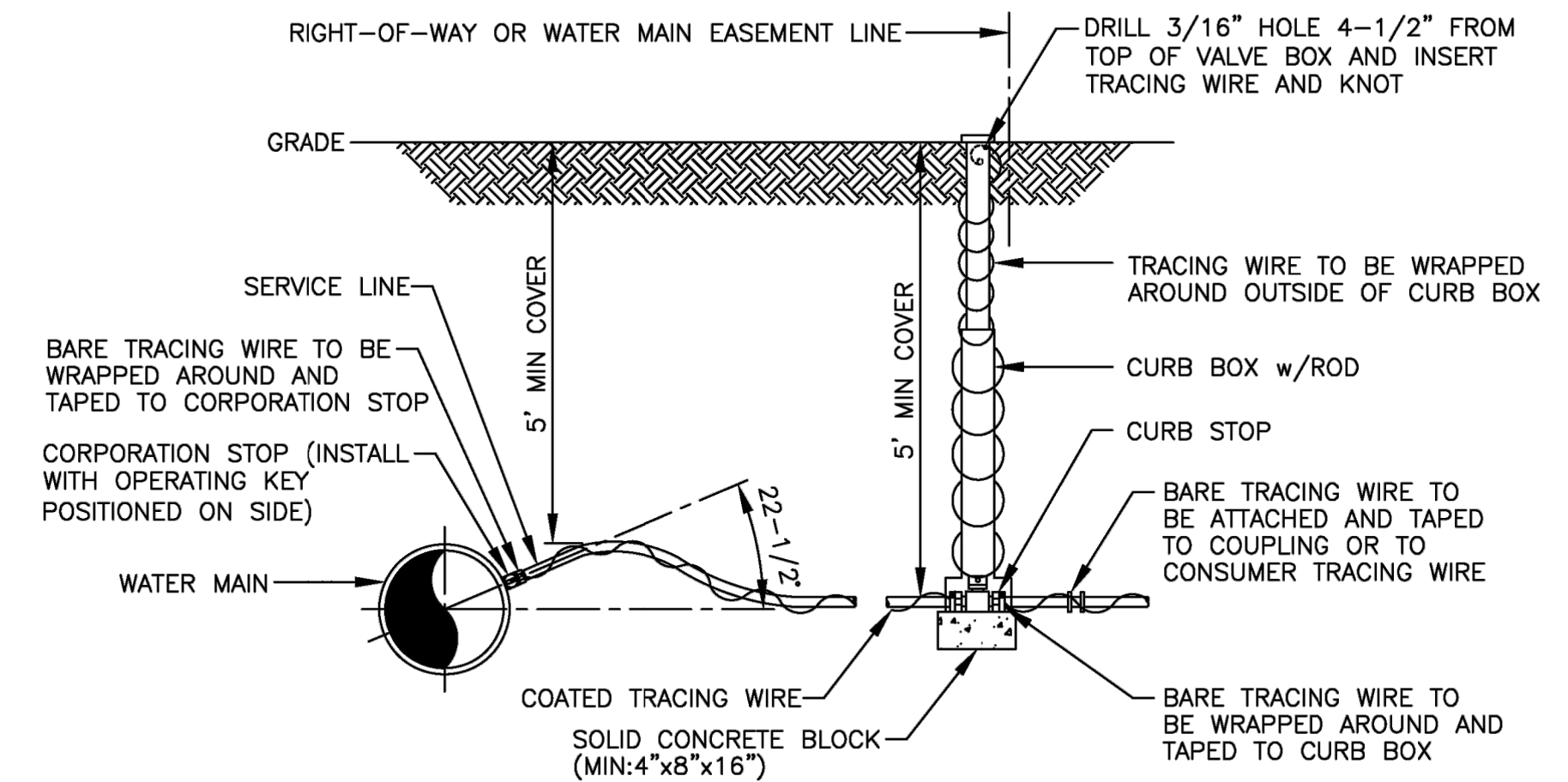
BEND ELEVATION



BEND PLAN

NOTES:
1. THRUST BLOCKS SHALL BE CENTERED HORIZONTALLY ON BENDS.
2. VOLUMES SHOWN IN CHART ARE MINIMUMS.

VERTICAL DOWN THRUST BLOCKS
NOT TO SCALE



NOTES:

1. COPPER SERVICE TO BE USED UNLESS OTHERWISE APPROVED BY THE ENGINEER.
2. TRACING WIRE TO BE USED WITH POLYETHYLENE SERVICE ONLY.

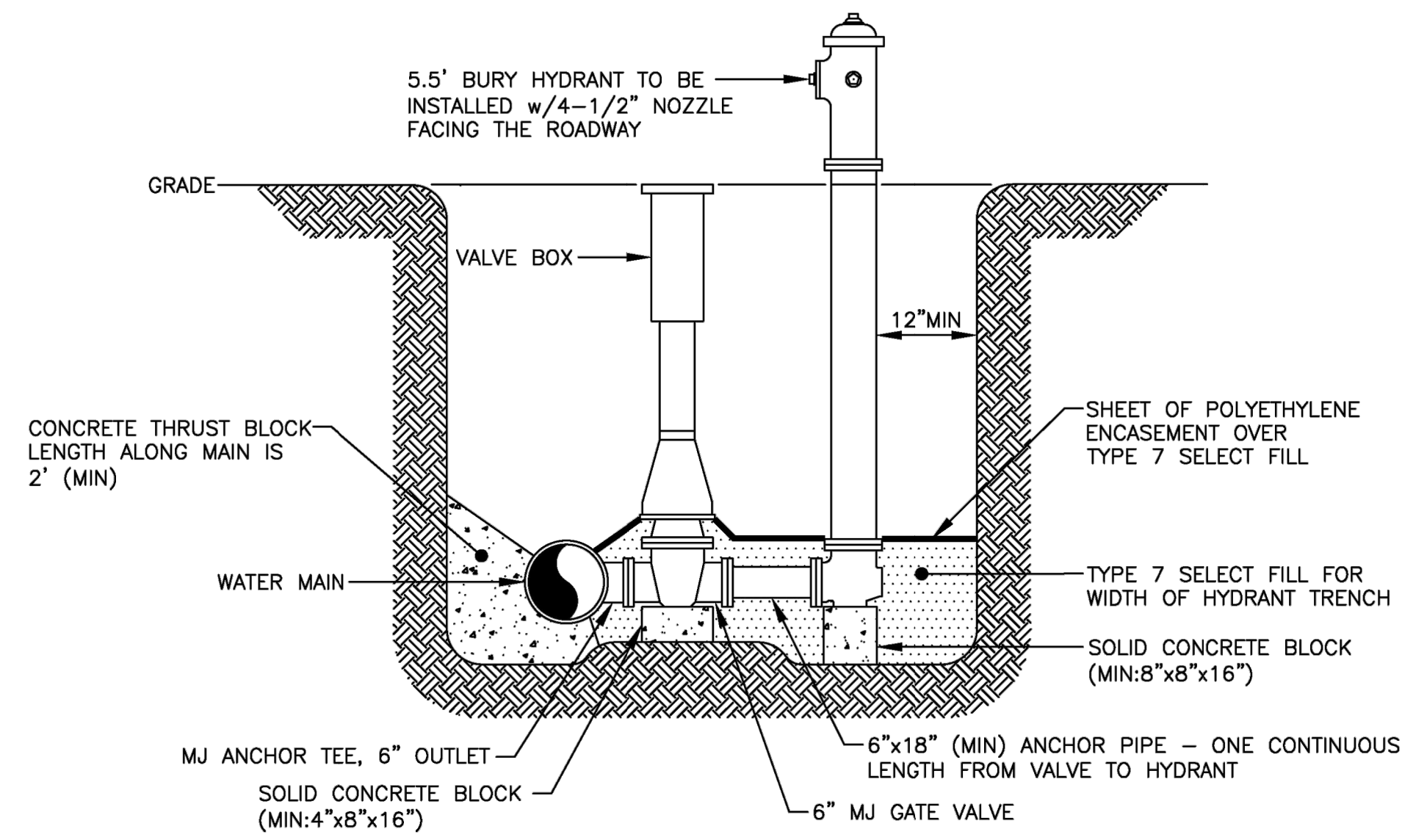
SERVICE INSTALLATION

NOT TO SCALE

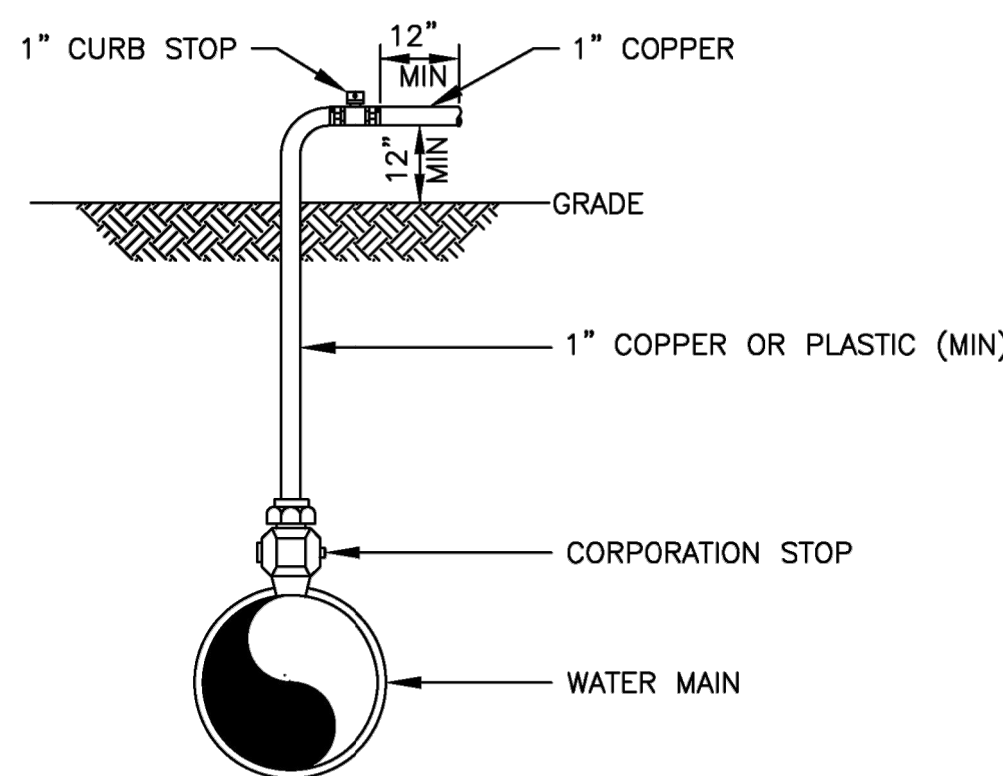
SCALE	N.T.S.	DATE	11/30/2022	DESIGNED BY	L. BUSHEN	DRAWN BY	L. BUSHEN	CHECKED BY	C. MARTIN	APPROVED BY	C. MARTIN	
JOB NO.	TZ2-03	DESIGNED BY	L. BUSHEN	DRAWN BY	L. BUSHEN	CHECKED BY	C. MARTIN	APPROVED BY	C. MARTIN	DESCRIPTION	INITIALS	DATE
TOWN OF HENRIETTA 475 CALKINS ROAD HENRIETTA, N.Y. 14467 2022 MIDDLE ROAD WATER MAIN EXTENSION CONSTRUCTION DETAILS - 1												
DWG. NO. C-200 SHEET NO. 10 of 11												

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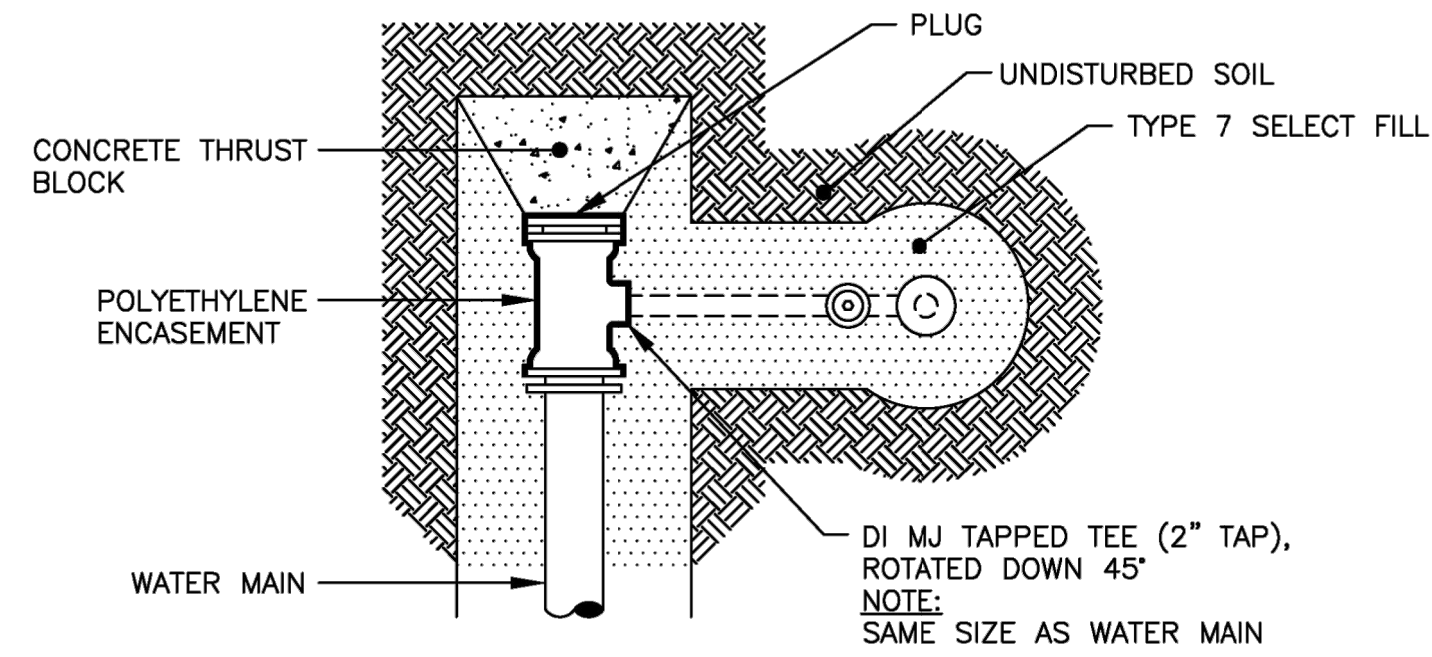
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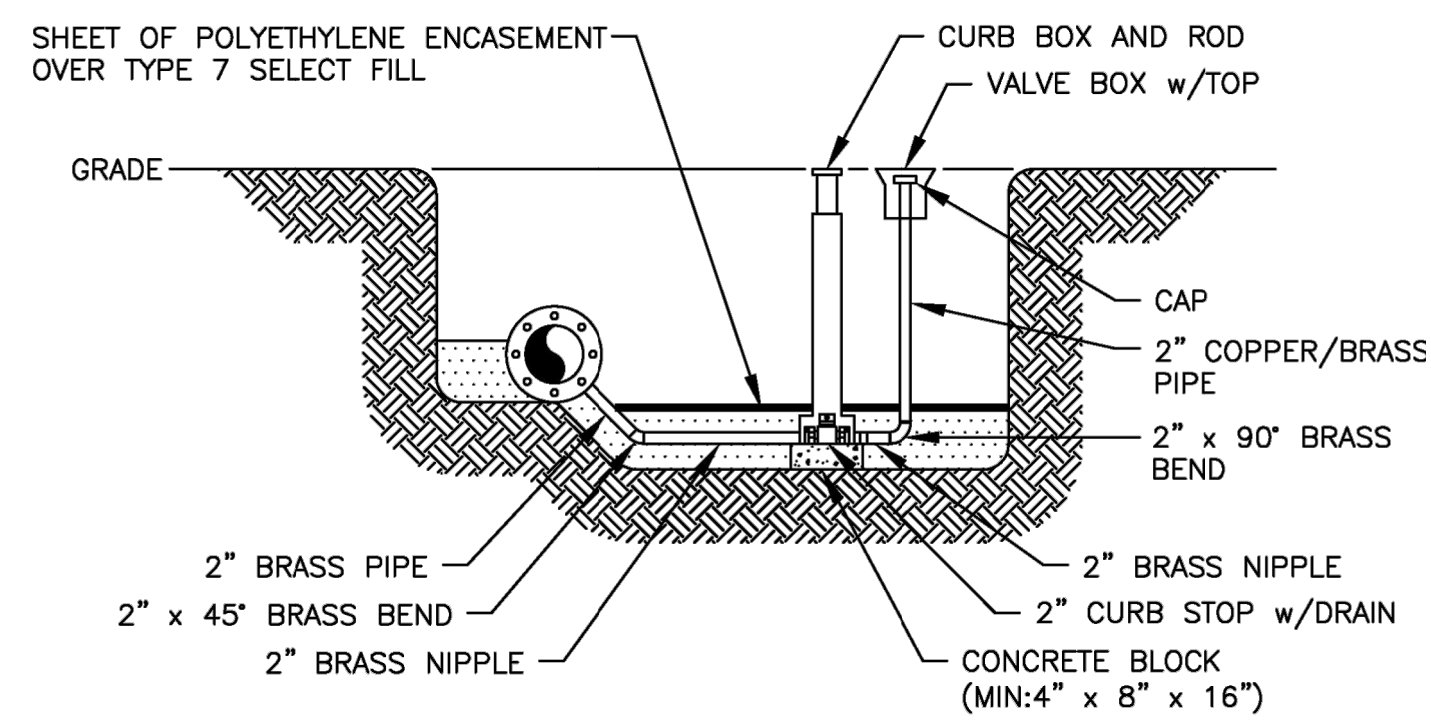
PERPENDICULAR HYDRANT ASSEMBLY
NOT TO SCALE



DISINFECTION/BLOW-OFF/SAMPLING TAP (TEMPORARY)
NOT TO SCALE



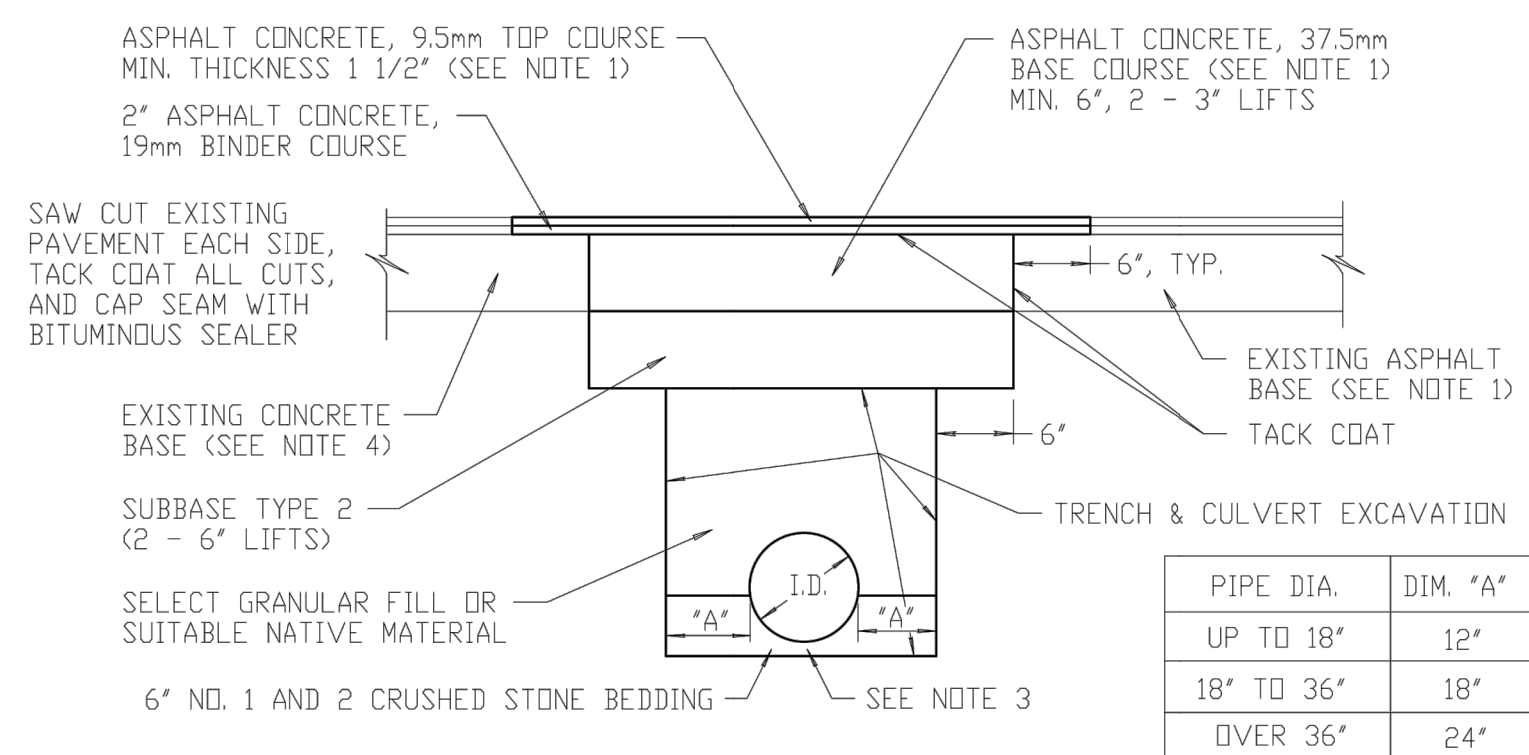
PLAN



ELEVATION

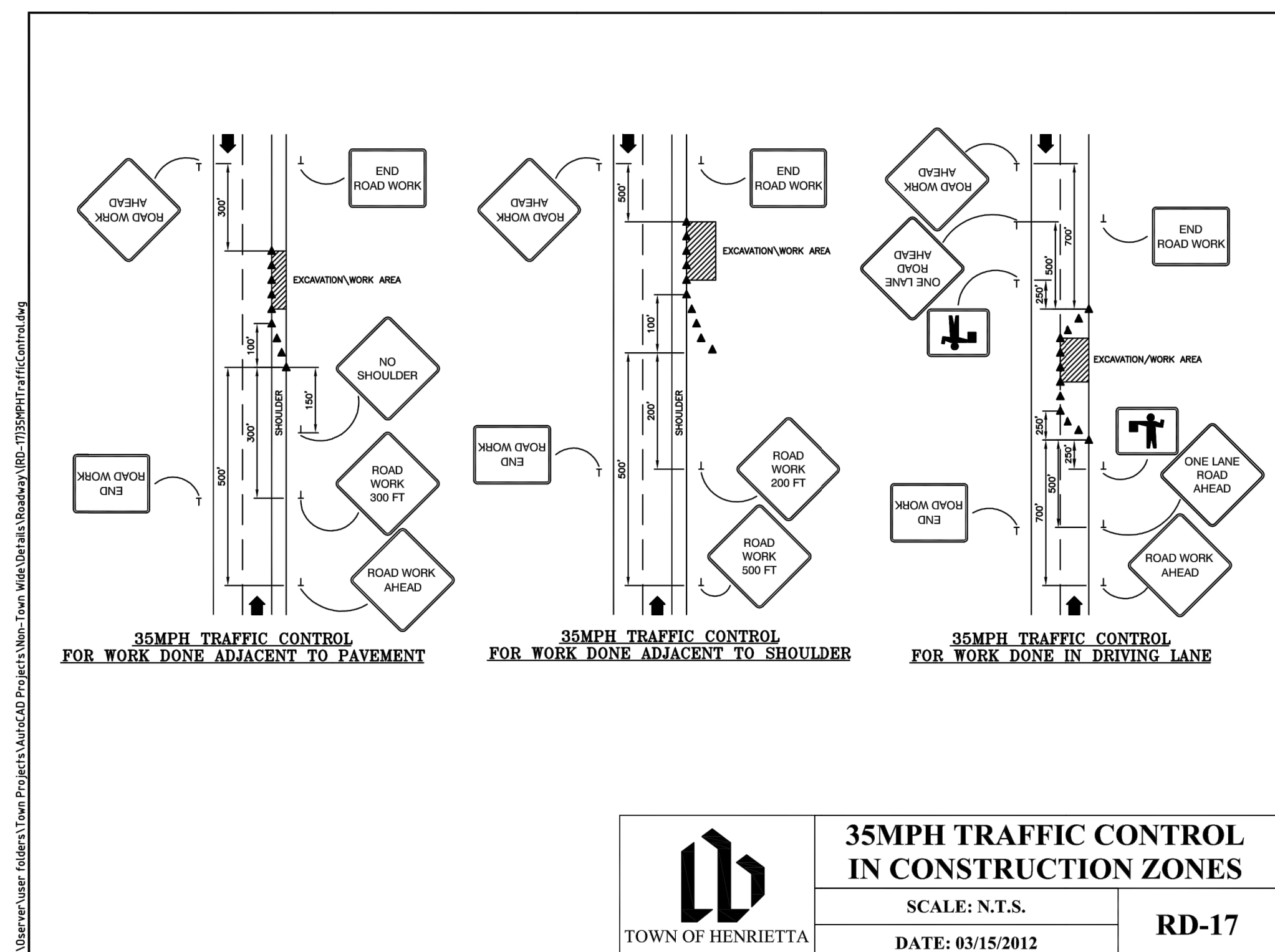
TEE w/2\"/>

REVISED
11/18/14

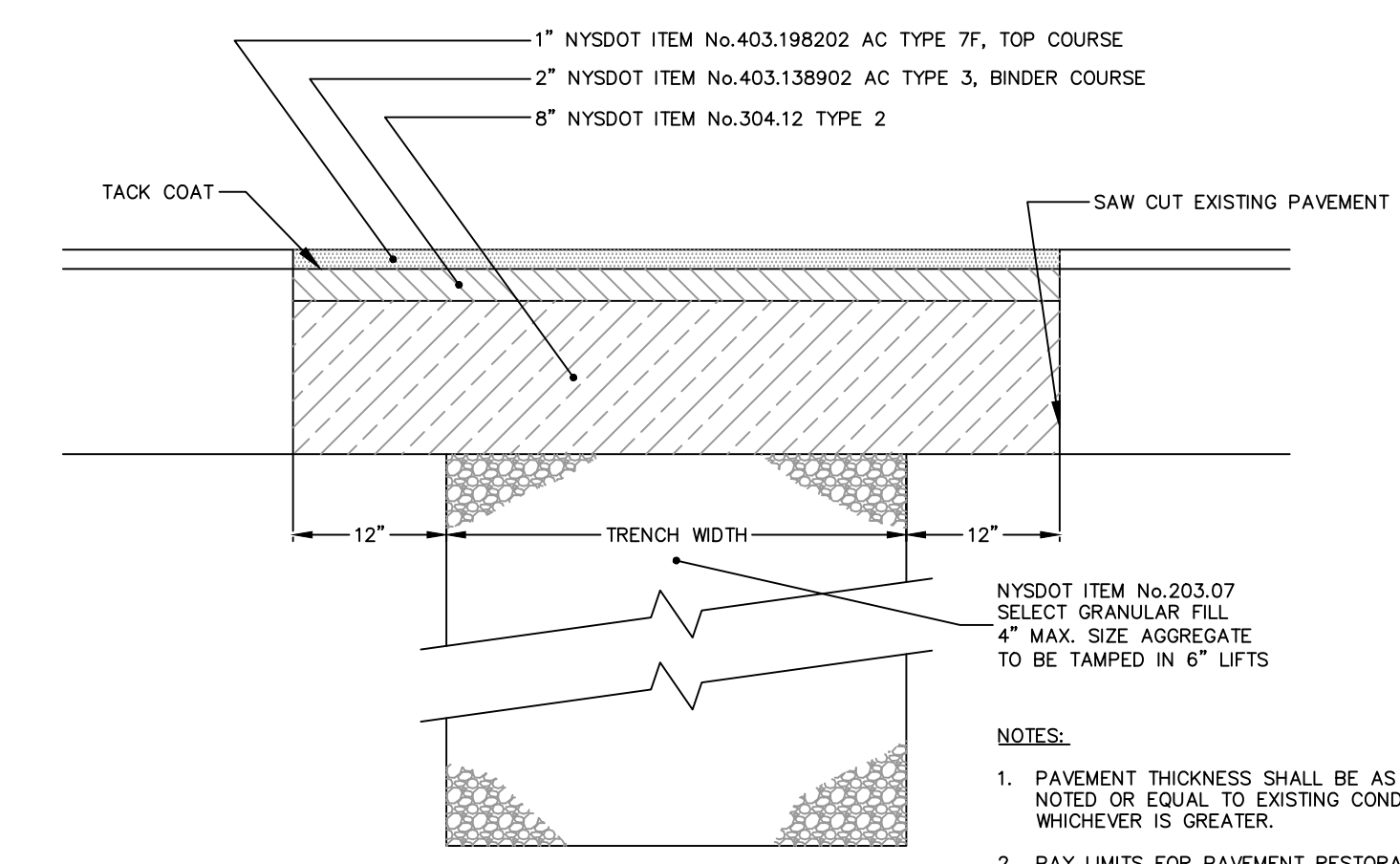


TRENCH AND PAVEMENT RESTORATION FOR ROAD CUT
NOT TO SCALE

1. REPLACE PAVEMENT IN KIND WITH WHAT IS EXISTING, UNLESS CONDITIONS EXIST WHERE THAT ISN'T FEASIBLE, THEN INSTALL SECTION AS APPROVED BY THE DEPARTMENT'S ENGINEER OR HIGHWAY MAINTENANCE MANAGER. THE MINIMUM APPROVABLE SECTION SHALL BE 6" OF TYPE 2 SUBBASE (CRUSHER RUN STONE), 2" OF ASPHALT BINDER AND 1 1/2" OF ASPHALT TOP. SEE NOTE 6 FOR TRENCHES LESS THAN 24" WIDTH.
2. SELECT GRANULAR FILL OR SUITABLE NATIVE MATERIAL, AS APPROVED BY THE DEPARTMENT'S ENGINEER OR HIGHWAY MAINTENANCE MANAGER, SHALL BE COMPACTED IN A MAXIMUM OF 6" LIFTS AT 95% COMPACTION.
3. 6" OF STONE BEDDING, CONSISTING OF A BLENDING OF #1 AND 2 STONE, IS REQUIRED FOR SANITARY OR STORM SEWER INSTALLATIONS WITH CRUSHED STONE HAUNCHING TO A MINIMUM OF 1/2 OF THE PIPE DIAMETER ON THE SIDE OF THE PIPE.
4. IF CONCRETE BASE IS EXISTING, IT MUST BE REPLACED WITH A MINIMUM OF 6" OF ASPHALT BASE.
5. IF PAVEMENT MARKINGS OR SIGNAL LOOPS ARE DESTROYED, THEY MUST BE REPLACED.
6. WHEN TRENCH WIDTH IS LESS THAN 24", FLOWABLE FILL MUST BE PLACED ABOVE THE 6" OF #1 AND 2 STONE BEDDING TO BINDER GRADE. A 2" LIFT OF BINDER AND A 1 1/2" LIFT OF TOP ASPHALT MUST BE THEN INSTALLED TO FINISH GRADE.



35MPH TRAFFIC CONTROL IN CONSTRUCTION ZONES
SCALE: N.T.S.
DATE: 03/15/2012
RD-17



PAVEMENT TRENCH RESTORATION (RESIDENTIAL DRIVEWAY)
SCALE: N.T.S.
DATE: 3/14/2012
RD-20a

SCALE	N.T.S.	DATE	11/30/2022	DESIGNER	L. BUSHEN	CHECKED BY	C. MARTIN	APPROVED BY	C. MARTIN
JOB NO.	T22-03	DESIGNED BY	L. BUSHEN	DRAWN BY	L. BUSHEN	PROJECT NO.	076327	PROFESSIONAL ENGINEER	STATE OF NEW YORK
TOWN OF HENRIETTA 475 CALKINS ROAD HENRIETTA, N.Y. 14467 2022 MIDDLE ROAD WATER MAIN EXTENSION CONSTRUCTION DETAILS - 2									
DWG. NO.	C-201			SHEET NO.					
				11 of 11					