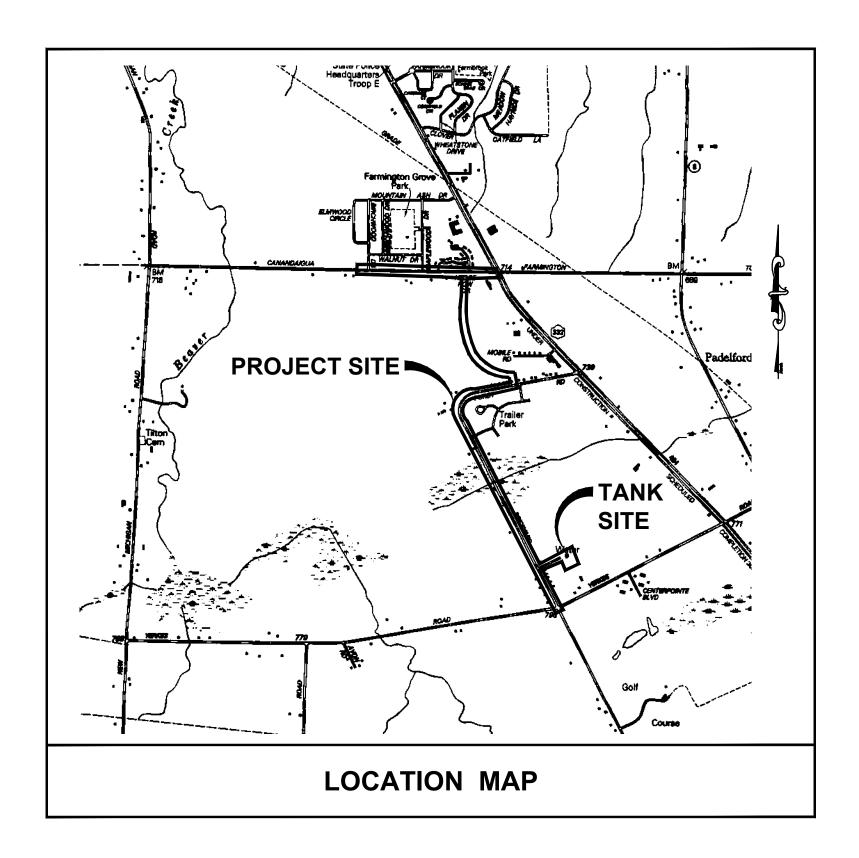
# CONTRACT DRAWINGS FOR THE

# BRICKYARD ROAD TANK AND TRANSMISSION MAIN

FOR THE

CANANDAIGUA-FARMINGTON WATER DISTRICT



WATER & SEWER SUPERINTENDENT. TOWN OF FARMINGTON

MRB/GROUP, IS RESPONSIBLE FOR THE DESIGN OF THIS PROJECT. GREGORY HOTALING, P.E. IS THE DESIGNER AND IS FAMILIAR WITH NYSDOT STANDARDS AND REQUIREMENTS AND SHALL BE CONTACTED AT 585-381-9250 TO RESOLVE ISSUES OR PROBLEMS DURING CONSTRUCTION. ALL REVISIONS, INCLUDING REVISIONS NECESSARY DUE TO FIELD CONDITIONS, SHALL BE APPROVED BY THE NYSDOT.

AS ISSUED FOR REVIEW

# TOWN OF CANANDAIGUA ONTARIO COUNTY NEW YORK

# **CONSTRUCTION CONTRACTS:**

CONTRACT #1 GENERAL (GC)

CONTRACT #2 TANK (TC)

CONTRACT #3 ELECTRICAL (EC)

# MRB group

Engineering, Architecture, Surveying, D.P.C.

The Culver Road Armory, 145 Culver Road, Suite 160, Rochester, New York 14620 Phone: 585-381-9250

www.mrbgroup.com

PROJECT # 0610.19002

IMG PROJECT No. 18352

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### **GENERAL NOTES**

- . ALL MATERIALS USED WITHIN THE RIGHT-OF-WAY MUST COMPLY WITH THE CURRENT NEW YORK STATE DEPARTMENT OF TRANSPORTATION SPECIFICATIONS ALONG WITH ANY APPROPRIATE CURRENT NYS DEPARTMENT OF TRANSPORTATION STANDARD SHEETS.
- 2. ALL MATERIALS PROVIDED SHALL BE PROVIDED BY NYSDOT APPROVED SUPPLIERS AND MANUFACTURERS.
- 3. THE WORK SHALL BE IN GENERAL COMPLIANCE WITH NYSDOT STANDARDS AND SPECIFICATIONS.
- UNDERGROUND UTILITIES ARE SHOWN IN THEIR APPROXIMATE LOCATIONS. CALL CENTRAL STAKEOUT (1-800-962-7962) AT LEAST 48 HOURS PRIOR TO COMMENCING WORK TO HAVE UTILITIES STAKED IN THE FIFLD
- 5. THE CONTRACTOR SHALL PERFORM THE WORK IN SUCH A MANNER THAT THE SAFETY OF THE WORKERS IS REASONABLY ASSURED. THIS SHALL INCLUDE PROVISIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA).
- THE CONTRACTOR SHALL SUPPORT GAS MAINS AND SERVICES EXPOSED BY THEIR EXCAVATION. SUPPORT SYSTEMS SHALL BE AS RECOMMENDED BY THE RESPECTIVE UTILITY OWNERS AND BE PROVIDED AT NO COST TO THE OWNER.
- 7. CONTRACTOR SHALL REQUEST TEMPORARY POLE SUPPORT SERVICES PROVIDED BY THE UTILITY OWNERS AT ANY POLE THAT MAY BE UNDERCUT BY TRENCH OPERATIONS. CONTRACTOR SHALL PROVIDE THE UTILITY COMPANY(S) WITH A MINIMUM OF THREE (3) WORKING DAYS NOTICE OF THE NEED FOR POLE SUPPORT.
- 8. CONTRACTOR SHALL BE RESPONSIBLE TO PROTECT ALL EXISTING SHRUBS AND TREES. ANY SHRUBS OR TREES THAT ARE DAMAGED DURING CONSTRUCTION SHALL BE REPLACED IN KIND OR AS NOTED ON PLANS. CONTRACTOR SHALL BORE OR TUNNEL WITHOUT CASING WATERMAIN WITHIN 5' OF TREES WITH A CALIPER OF 12" OR LARGER UNLESS DIRECTED OTHERWISE AS NOTED ON PLANS.
- . CONTRACTOR SHALL MAINTAIN MAIL BOXES OF RESIDENTS ALONG THE PROJECT. MAIL BOXES SHALL BE REMOVED FROM THE WORK SITE WHEN THEY INTERFERE AND REPLACED WITH TEMPORARY BOXES DURING CONSTRUCTION. WHEN WORK IS COMPLETE, THE ORIGINAL BOXES SHALL BE RESET ON NEW OR EXISTING POST, 42" HIGH AND 12" OFF THE EDGE OF PAVEMENT OR GUTTER.
- 10. PAVEMENT MARKINGS, TRAFFIC SIGNALS AND/OR SIGNS THAT HAVE BEEN DISTURBED BY THE CONSTRUCTION OPERATIONS SHALL BE RESTORED IN A MANNER CONFORMING TO NYSDOT
- 11. EROSION CONTROL MEASURES TO BE ESTABLISHED AND MAINTAINED BY CONTRACTOR AT LOCATIONS DETERMINED BY THE OWNER OR ENGINEER AND AS SHOWN IN THE S.W.P.P.P...
- 12. ALL PAVEMENT CUTS SHALL BE MADE BY A PAVEMENT SAW. SAW CUTS SHALL BE PERPENDICULAR TO THE LENGTH OF THE TRAVELED WAY. SAW CUTTING SHALL BE REQUIRED PRIOR TO ALL EXCAVATION WORK. NO ADDITIONAL PAYMENT SHALL BE MADE.
- 13. CONTRACTOR WILL PROTECT AND MAINTAIN AT ALL TIMES DRAINAGE SWALES, PIPES, TILES, ETC., PROTECT AND MAINTAIN AT ALL TIMES ALL SEPTIC SYSTEMS/LEACH FIELDS. ALSO PROTECT AND PRESERVE ALL PROPERTY CORNERS, MONUMENTS, MARKERS, ETC. ANY GUIDE RAILING DAMAGED OR DISTURBED BY THE CONTRACTOR SHALL BE REPAIRED OR REPLACED IN KIND.
- 14. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY TESTING SERVICES. CONCRETE AND COMPACTION TESTING SHALL BE PROVIDED BY AN INDEPENDENT FIRM AT CONTRACTOR'S EXPENSE.
- 15. COMPACTED STONE SHALL BE 95% OF MAXIMUM DRY DENSITY IN ACCORDANCE THE MODIFIED PROCTOR TEST (ASTM D1557).
- 16. CONTRACTOR SHALL SAFEGUARD AND PRESERVE ALL RIGHT-OF-WAY MONUMENTS AND PROPERTY CORNERS ALONG THE PROJECT ROUTE. ALL PROPERTY CORNERS THAT ARE DISTURBED DURING CONSTRUCTION ARE TO BE REPLACED AND CERTIFIED BY A N.Y.S. LICENSED LAND SURVEYOR.
- NO OVERNIGHT OPEN TRENCHES WILL BE PERMITTED WITHIN THE RIGHT-OF-WAY OR TOWN/VILLAGE/COUNTY PAVEMENT AREAS.
- 18. PROVIDE PUMPS, WELL POINTS OR OTHER METHODS OF DEWATERING EXCAVATIONS SO FIRM BEDDING AND FOUNDATION CONDITIONS CAN BE MAINTAINED.
- 19. IN ACCORDANCE WITH BASIC MAINTENANCE AND PROTECTION OF TRAFFIC, MAINTAIN DRAINAGE FACILITIES AND OTHER HIGHWAY ELEMENTS, OLD OR NEW. DEVOTE PARTICULAR ATTENTION TO ALL DRAINAGE FACILITIES KEEPING THEM FULLY OPERATIVE AT ALL TIMES. DITCHES WITH SILT FENCES SHALL BE PROVIDED AT ALL TIMES EVEN DURING GRADING OPERATIONS AND PERIODS OF ACCUMULATED PLOWED SNOW, TO ADEQUATELY DRAIN THE TRAVELED WAY AND THE REMAINDER OF THE RIGHT-OF-WAY AREAS.
- 20. ROAD TO BE KEPT CLEAN OF MUD AND DEBRIS AT ALL TIMES.
- 21. ROADSIDE DRAINAGE TO BE MAINTAINED AT ALL TIMES.
- 22. MATERIALS, EQUIPMENT AND VEHICLES ARE NOT TO BE STORED OR PARKED WITHIN THE RIGHT-OF-WAY OUTSIDE OF THE WORK AREA.
- 23. MAINTENANCE AND PROTECTION OF TRAFFIC MUST COMPLY WITH THE CURRENT NATIONAL MUTCD WITH NEW YORK STATE SUPPLEMENT, SECTION 619 OF THE CURRENT NYSDOT STANDARD SPECIFICATIONS AND THESE PLANS
- 24. NO NIGHT WORK IS PLANNED. ADDITIONAL MAINTENANCE AND PROTECTION OF TRAFFIC MAY BE REQUIRED INCLUDING THE ADDITION OF REFLECTIVE MATERIALS AND LIGHTING IN NIGHT WORK IS PERFORMED.
- 25. HAZARDOUS WASTE NOTIFICATION SHOULD THE CONTRACTOR FIND SOME PREVIOUSLY UNKNOWN UNDERGROUND IMPEDIMENTS TO ITS WORK, IT SHALL BE REMOVED, MODIFY OR OTHERWISE DEAL WITH SUCH UNDERGROUND TANKS, STRUCTURES, FEATURES OR IMPEDIMENTS IN A MANNER WHICH MEETS ACCEPTABLE ENGINEERING PRACTICE AND APPLICABLE REGULATIONS.
- 26. ANY INFRASTRUCTURE DAMAGED SHALL BE REPLACED AND/OR REPAIRED IN ACCORDANCE WITH APPLICABLE NYSDOT SPECIFICATIONS.
- 27. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGE TO EXISTING PAVEMENT, CURBS, SIDEWALKS, LAWN AREAS, TREES, AND OTHER EXISTING FEATURES OUTSIDE OF THE CONSTRUCTION LIMITS. ALL SUCH DAMAGE SHALL BE REPAIRED OR REPLACED IN KIND.
- 28. RESTORATION WITHIN THE R.O.W. SHALL CONFORM TO SPECIFICATIONS AND REQUIREMENTS.
- 29. IT IS RECOMMENDED THAT PROTECTIVE MATS OR BARRIERS BE USED TO HELP DISPERSE THE WEIGHT OF EQUIPMENT THAT MUST OPERATE ON THE ROAD AND SHOULDERS.
- 30. NO VEHICLES ARE TO BE PARKED WITHIN THE CLEAR ZONE DURING CONSTRUCTION HOURS. ALL EQUIPMENT IS TO BE REMOVED OUTSIDE THE CLEAR ZONE FOR OVERNIGHT STORAGE.
- 31. OPEN CUTS SHALL BE FILLED AT THE END OF EACH WORKING DAY OR BARRICADED
- 32. CHANNELIZING DEVICES
  - A. WHERE POSSIBLE ALL CHANNELIZING AND GUIDING DEVICES ARE TO BE PLACED SO AS TO PROVIDE A MINIMUM 2' LATERAL CLEARANCE TO THE TRAVELED WAY
  - B. DRUMS SHALL BE USED FOR ANY LANE CLOSURES OR SHOULDER CLOSURES WHICH ARE TO REMAIN OVERNIGHT

### 30. PUBLIC ACCESS

- CONTRACTOR AT LEAST 24 HOURS PRIOR TO RESTRICTING USE OF THE DRIVEWAY. FOR MULTIPLE ACCESS PROPERTIES, AT LEAST ONE DRIVEWAY SHALL BE OPEN AT ALL TIMES. ACCESS SHALL BE RESTORED TO ALL DRIVEWAYS AS SOON AS POSSIBLE.
- B. SUITABLE RAMPS SHALL BE INSTALLED TO MAINTAIN SMOOTH TRANSITIONS FROM RESIDENTIAL AND COMMERCIAL DRIVEWAYS TO AND FROM THE WORK AREA.

PROPERTY OWNERS WHOSE DRIVEWAYS WILL BE MADE INACCESSIBLE SHALL BE NOTIFIED BY THE

- 31. LANE CLOSURES
  - A. LOCATE LANE CLOSURES TO PROVIDE OPTIMUM VISIBILITY, I.E. BEFORE CURVES AND CRESTS, TO THE EXTENT CONDITIONS PERMIT.
  - B. ALL LANES MAYBE BE RE-OPENED AT ANY TIME IF THE ROUTE IS NEEDED FOR EMERGENCY PURPOSES. THIS COULD INCLUDE ACCIDENTS AT LOCATIONS OUTSIDE THE CONTRACT LIMITS.

### 32. LANE WIDTHS

A. THE MINIMUM LANE WIDTHS FOR WORK ZONE TRAVEL LANES SHALL BE AS FOLLOWS: FREEWAYS AND/OR EXPRESSWAYS IS 11'. THE MINIMUM LANE WIDTH FOR ALL OTHER TYPES OF ROADS IS 10'.

### WATER NOTES

- 1. MATERIALS
- A. ALL WATER MAIN MATERIALS SHALL BE ANSI/NSF-61:

POLYVINYL CHLORIDE (PVC) PIPE MUST BE WITH INTEGRAL BELL AND SPIGOT JOINTS; CLASS 305 DR-14; CONFORMING WITH THE LATEST REVISION OF NSI/AWWA C900 (FOR 4"-12" PIPE) OR CLASS 235 DR-18; CONFORMING WITH LATEST REVISION OF NSI/AWWA C905 (FOR 14"-24" PIPE). INSTALLATION TO INCLUDE TRACER WIRE & TAPE AS PER MANUFACTURER'S INSTRUCTIONS.

HIGH DENSITY POLYETHYLENE (HDPE) WATER DISTRIBUTION (200 PSI W.P.) DR-11 SHALL CONFORM TO ANSI/AWWA C 901-205, POLYETHYLENE PRESSURE PIPE AND TUBING SIZES IPS .5" THROUGH 3" AND ANSI/AWWA C 906-2006 POLYTHENE PIPE AND FITTINGS, SIZES DIPS 4" THROUGH 63". INSTALLATION TO INCLUDE TRACER WIRE & TAPE AS PER MANUFACTURER'S INSTRUCTIONS.

<u>DUCTILE IRON (DI)</u> PIPE SHALL CONFORM TO REQUIREMENTS OF ANSI/AWWA C151/A21.51; PUSH ON JOINTS IN ACCORDANCE WITH ANSI/AWWA C111/A21.11, CEMENT LINED IN ACCORDANCE WITH ANSI/AWWA C104/A21.4, PRESSURE CLASS 350.

SERVICE PIPING SHALL BE 1" (CTS) MUNICIPEX PIPE CONFORMING WITH THE LATEST REVISIONS

- B. <u>GATE VALVES</u> SHALL CONFORM TO AWWA SPECIFICATION C-509 OF C-515 LATEST REVISION AND SHALL HAVE NON-RISING STEMS, "O" RING PACKING AN SHALL OPEN LEFT. ALL VALVES SHALL HAVE MECHANICAL JOIN ENDS AND BE FURNISHED WITH SUFFICIENT QUANTITIES OF ACCESSORIES. VALVES SHALL BE MUELLER, KENNEDY. ALL VALVES TO HAVE STAINLESS STEEL BONNET BOLTS.
- C. HYDRANTS SHALL BE MANUFACTURED IN ACCORDANCE WITH AWWA SPECIFICATION C-502 LATEST REVISION. THEY SHALL BE DESIGNED FOR 150 PSI WORKING PRESSURE AND TESTED TO 300 PSI HYDROSTATIC PRESSURE. HYDRANTS SHALL BE MANUFACTURED FOR FIVE-FOOT SIX INCH (5'-6") BURY WITH BREAKAWAY FLANGE CONSTRUCTION AND SIX-INCH MECHANICAL JOINT INLETS. THEY SHALL OPEN LEFT AND BE PAINTED YELLOW WITH RED BONNETS. MAIN VALVE OPENING SHALL BE FIVE AND ONE-QUARTER INCHES (5-¼") AND PACKING SHALL CONSIST OF "O" RING. THE MANUFACTURER SHALL BE KENNEDY K81D, WITH NATIONAL STANDARD THREADS. HYDRANT EXTENSION RISERS SHALL BE PROVIDED AT NO EXTRA COST TO OWNER.
- ALL HYDRANTS SHALL HAVE HYDRA-5 FIRE HYDRANT MARKER W/SPRING AND FLAT BRACKET, 5' FIBER GLASS RED-WHITE REFERENCE MARKS)
- D. <u>CORPORATION STOPS</u> SHALL BE CAST BRASS WITH "O" RING SEALS, COMPRESSION TYPE, MUELLER H-15008 WITH LINER NO. 504385. AN EQUIVALENT FORD PRODUCT, OR EQUAL. THE SIZE OF THE CORPORATION STOP SHALL BE THE SAME AS THE SIZE OF THE SERVICE PIPE.
- E. <u>CURB STOPS</u> SHALL HAVE CAST BRASS BODIES WITH "O" RING SEALS, COMPRESSION TYPE, MUELLER H-15209 MARK II, WITH LINER NO 504385, AN EQUIVALENT FORD PRODUCT, OR EQUAL. THE SIZE OF THE CURB STOP SHALL BE THE SAME AS THE SIZE OF THE SERVICE PIPE.
- F. <u>CURB BOXES</u> SHALL BE TWO (2) PIECE BOXES WITH A SLOPE TYPE EXTENSION, A CAST IRON ARCH PATTERN LOWER SECTION, A CAST IRON LID AND STAINLESS STEEL STATIONARY SHUT OFF ROD, MUELLER H-10314, FIVE FEET (5') LONG, OR EQUIVALENT FORD PRODUCT, OR EQUAL.
- G. TAPPING SADDLES ARE REQUIRED FOR ALL SERVICES OFF THE P.V.C. WATER MAIN. THEY SHALL BE DOUBLE BOLT, STAINLESS STEEL STRAPS MATCHED TO THE OUTSIDE DIAMETER OF THE PIPE. THEY MUST BE PROVIDED WITH AN "O" RING GASKET CEMENTED IN PLACE FOR A PRESSURE—TIGHT SEAL ON THE MAIN, MINIMUM 7" BAND WIDTH, SMITH—BLAIR 372, CASCADE CSC2, OR APPROVED EQUAL.
- H. DEAD ENDS SHALL BE LIMITED TO 5' BEYOND THE LAST ACTIVE TEE.
- 2. <u>DEPTH</u> WATER PIPING MUST HAVE A MINIMUM OF 5 FEET OF COVER FROM FINISHED GRADE IN ALL NON-TRAFFIC AREAS AND UNDER THE LOCAL / TOWN ROADS. UNDER ALL COUNTY ROADS THE WATER PIPING MUST HAVE A MINIMUM OF 7 FEET OF COVER FROM THE CENTERLINE OF THE ROAD.
- 3. <u>CROSSINGS</u> ADEQUATE SEPARATION BETWEEN WATER MAINS AND STORM OR SANITARY SEWERS MUST BE PROVIDED AS SHOWN IN THE WATER MAIN/SEWER CROSSING DETAIL ON SHEET D-2. MINIMUM HORIZONTAL SEPARATION BETWEEN WATER MAINS AND STORM AND /OR SANITARY SEWERS TO BE 10 FEET, MEASURED FROM THE OUTSIDE OF THE PIPES.
- 4. HYDRANTS HYDRANT TYPE SHALL BE AS NOTED ON THE PLANS OR AS REQUIRED BY THE OWNER. GUARD VALVES SHALL BE USED AND ALL HYDRANT STUB PIPING SHALL BE MECHANICAL JOINT. SHOULD EVIDENCE OF GROUND WATER BE ENCOUNTERED WITHIN SEVEN (7) FEET OF THE FINISHED GRADE, HYDRANT WEEP HOLES (DRAINS) HALL BE PLUGGED USING MECHANICAL METAL PLUGS. ALL HYDRANTS WITH PLUGGED WEEP HOLES SHALL BE APPROPRIATELY TAGGED.
- 5. THRUST BLOCKS ALL TEES, STUBS, BENDS AND OTHER FITTINGS, OR OTHER AREAS AS ORDERED BY ENGINEER, SHALL BE BACKED WITH MINIMUM 3000 PSI CONCRETE THRUST BLOCKS AS INDICATED ON THIS SHEET. MECHANICAL RESTRAINTS MAY BE USED IN LIEU OF THRUST BLOCKS WITH THE APPROVAL OF THE ENGINEER.
- 6. <u>FLUSHING/PRESSURE AND LEAKAGE TESTING</u> WATER PIPING SHALL BE FLUSHED AND TESTED IN CONFORMANCE WITH THE LATEST REVISION OF ANSI/AWWA C605. FLUSHING VELOCITY SHALL BE 3.0 FT/SEC MIN. AS REQUIRED PER AWWA C651.
- 7. <u>DISINFECTION</u> THE PROPOSED WORKS MUST FOLLOW ANSI/AWWA C651 LATEST EDITION STANDARD, TABLET METHOD NOT ACCEPTED. FOLLOWING FLUSHING AND TESTING, THE ENGINEER SHALL OVERSEE COLLECTION OF AN APPROPRIATE NUMBER OF BACTERIOLOGICAL SAMPLES, MINIMUM OF 2 SAMPLES FOR EACH LOCATION SEPARATED BY 24 HOURS, FOR TOTAL AND FECAL COLIFORM AND FOR STANDARD BACTERIAL PLATE COUNT AFTER THE FIELD FREE CHLORINE RESIDUAL IS LESS THAN 1.5 PPM AND THE SAMPLING POINTS HAVE BEEN DECONTAMINATED. PRIOR TO SAMPLING, THE ENGINEER SHALL COORDINATE THE APPROPRIATE NUMBER AND LOCATION OF SAMPLES TO BE COLLECTED WITH THE STATE HEALTH DEPARTMENT. IF EXCESS TRENCH WATER IS ENCOUNTERED, THE CONTRACTOR SHALL CHLORINATE THE TRENCH WATER AND/OR PROVIDE SAMPLING/DISINFECTION TAPS AT 200' INTERVALS (AND SAMPLE ACCORDING TO AWWA C651 LATEST EDITION) AS ORDERED BY THE ENGINEER AT NO ADDITIONAL COST TO THE OWNER.
- 8. PLACING INTO OPERATION THE WATER MAIN SHALL NOT BE PLACED INTO SERVICE UNTIL AN APPROVAL OF COMPLETED WORKS FORM IS ISSUED BY THE STATE HEALTH DEPARTMENT. PRIOR TO ISSUANCE, A NYS LICENSED PROFESSIONAL ENGINEER MUST SUBMIT CERTIFICATION THAT: THEY OR THEIR DESIGNATED REPRESENTATIVE WITNESSED THAT CONSTRUCTION WAS IN CONFORMANCE WITH THE PLANS AS APPROVED; FLUSHING, TESTING, AND DISINFECTION PROCEDURES NOTED HEREIN HAD BEEN PROPERLY PERFORMED; AND, MICROBIOLOGICAL SAMPLE RESULTS FROM THE COMPLETED WORKS WERE ACCEPTABLE. COPIES OF THE OFFICIAL LABORATORY RESULTS ARE TO BE INCLUDED WITH THE CERTIFICATION.
- EROSION ADEQUATE CONTROL MEASURES SHALL BE EMPLOYED DURING ALL PHASES OF CONSTRUCTION IN ACCORDANCE WITH ALL APPROPRIATE STANDARDS AND REQUIREMENTS. BEST MANAGEMENT PRACTICES ARE TO BE FOLLOWED.
- 10. <u>FILL AREAS</u> WHERE PIPING IS TO BE PLACED WITHIN FILL AREAS, THE FILL SHALL BE PLACED AND COMPACTED TO AT LEAST 95% MODIFIED PROCTOR PRIOR TO TRENCH EXCAVATION.
- 11. <u>SERVICE INTERRUPTION</u> SHUTDOWN OF EXISTING WATER MAINS SHALL BE IN ACCORDANCE WITH THE LOCAL WATER DEPARTMENT. THE WATER DEPARTMENT MUST BE NOTIFIED IN ADVANCE OF ALL PROPOSED SHUTDOWNS IN ACCORDANCE WITH THEIR DIRECTION. WATER MUST BE TURNED BACK ON AS SOON AS POSSIBLE. ALL ENDS OF WATER MAINS MUST BE PROVIDED WITH ADEQUATE PLUG, BLOCK, AND BLOW—OFF AS INDICATED ON THE PLANS, AS PER DETAILS HEREIN.
- 12. <u>DISCONNECTION OF WELLS</u> PRIOR TO TURNING ON A NEW SERVICE TO AN EXISTING FACILITY SERVED BY A PRIVATE, ON—SITE WATER SUPPLY, THE EXISTING SOURCE PIPING MUST BE PHYSICALLY DISCONNECTED AND REMOVED FROM THE FACILITY (WITH NO MEANS OF INTERCONNECTION BETWEEN THE ON—SITE SERVICE AND THE PUBLIC SUPPLY SERVICE) OR THE SERVICE PROVIDED WITH A REDUCED PRESSURE ZONE (RPZ) BACKFLOW PREVENTION PROTECTOR (VIA PROPER APPLICATION TO AND APPROVAL BY THE STATE HEALTH DEPARTMENT HAVING JURISDICTION).
- 13. ALL LONG SIDE SERVICES SHALL BE DIRECTIONALLY DRILLED/JACKED/MISSLED UNDER EXISTING HIGHWAY/ROAD PAVEMENT AREA UNLESS OTHERWISE NOTED
- 14. THE CONTRACTOR SHALL PROVIDE POLYETHYLENE ENCASEMENT OF FITTINGS, VALVES AND OTHER APPURTENANCES OF WHICH THE FACTORY INSTALLED COATING HAS BEEN DAMAGED.
- 15. THE POLYETHYLENE ENCASEMENT SHALL BE INSTALLED IN SUCH A WAY THAT IT SHALL PREVENT CONTACT BETWEEN THE PIPE AND PIPE FITTINGS AND THE SURROUNDING BACKFILL AND BEDDING MATERIAL WITHOUT INTENDING TO BE A COMPLETELY AIRTIGHT OR WATERTIGHT ENCLOSURE. THE POLYETHYLENE FILM SHALL BE FITTED TO THE CONTOUR OF THE PIPE AND PIPE FITTINGS WITH SUFFICIENT SLACK TO PREVENT STRETCHING THE POLYETHYLENE BRIDGING IRREGULAR SURFACES.

### **EROSION CONTROL NOTES**

- I. ALL SWALES AND SEDIMENTATION TRAPS MUST BE CLEANED AND MAINTAINED AT ALL TIMES TO ALLOW ADEQUATE DRAINAGE.
- 2. PROTECT AT ALL TIMES ADJACENT PROPERTIES AND ROADWAYS FROM SEDIMENTATION, EROSION,
- RUNOFF, DEBRIS AND/OR ANY OTHER EFFECTS FROM THE SITE CONSTRUCTION

  3. UPON INSTALLATION OF DRAINAGE CULVERTS MAINTAIN AND PERIODICALLY FLUSH THOSE CULVERTS TO
- 4. TAKE PRECAUTIONS AS NECESSARY AND/OR APPROPRIATE FOR DUST CONTROL AND FLYING DEBRIS PROTECTION. (ie. WATER, FENCE, MATTING, COVERS, ETC.)
- 5. DURING CONSTRUCTION, BEFORE SUFFICIENT SEEDING COVER IS ESTABLISHED ON STEEPER SLOPES, PLACE MATTING, BLANKETS, OR OTHER MEASURES TO PROTECT SLOPES AGAINST EROSION AS NECESSARY AND/OR AS DIRECTED BY ENGINEER.
- 6. TOWN SHALL BE RESPONSIBLE FOR FULL COMPLIANCE WITH THE STORM WATER POLLUTION PREVENTION PLAN AS REQUIRED UNDER THE PHASE 2 STORMWATER REGULATIONS
- 7. ALL EROSION CONTROL MEASURES WITHIN NYS HIGHWAY BOUNDARY SHALL CONFORM TO NYS STANDARD SPECIFICATION.

### **SHORING NOTES**

ALLOW DRAINAGE FLOWS.

- 1. ELEVATIONS AND SECTIONS OF EXISTING STRUCTURES ARE APPROXIMATE AND FOR REFERENCE ONLY. THE TOWN SHALL FIELD VERIFY EXACT ELEVATIONS, GRADES, SUB-SURFACE CONDITIONS ETC. TO OBTAIN ACCURATE INFORMATION REGARDING ACTUAL FIELD CONDITIONS.
- 2. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR FOR SAFELY AND COMPLETELY EXCAVATING, SHORING, AND DE-WATERING. WELL POINTS, DEEP WELLS, PILES, COFFERDAMS, ETC. SHALL BE UTILIZED AS NECESSARY AND SHALL CONFORM TO THE NYSDOT STANDARD SPECIFICATIONS, CONSTRUCTION AND MATERIALS, SECTIONS 551 & 552. ALL WORK AND MATERIALS SHALL MEET REQUIREMENTS OF TITLE 29, CODE OF FEDERAL REGULATIONS, PART 1926, SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION (OSHA) AND OTHER APPLICABLE CODES.
- 3. THE CONTRACTOR SHALL SUPPORT AND PROTECT ALL EXISTING STRUCTURES, PIPING, UTILITIES, ETC. THROUGHOUT THE PROJECT.
- 4. THE CONTRACTOR. SHALL COMPLETELY REMOVE ALL PILES, SHEET PILES, WELL POINTS, DEEP WELLS, COFFERDAMS, ETC. ALL WELLS, HOLES AND EXCAVATIONS SHALL BE COMPLETELY BACKFILLED AND COMPACTED BY THE TOWN.

### **CONSTRUCTION SEQUENCE**

- 1. INSTALL ALL EROSION CONTROL DEVICES AS SHOWN ON THE PLANS, PRIOR TO EARTHWORK CONSTRUCTION. BASED ON FIELD PERFORMANCE AND WEATHER CONDITIONS, ADDITIONAL EROSION CONTROL DEVICES MAY BE REQUIRED. DISTURBANCE TO THE SITE TO BE LIMITED.
- 2. CONTRACTOR SHALL RESTRICT GRADING OPERATIONS TO THE AREAS INDICATED ON THE CONTRACT DRAWINGS. PERFORMING WORK OUTSIDE THE IDENTIFIED LIMITS SHALL NOT BE PERMITTED WITHOUT APPROVAL OF THE ENGINEER.
- 3. PROTECT EXISTING VEGETATION AND OTHER ENVIRONMENTAL FEATURES TO BE PRESERVED WITH CONSTRUCTION BARRIERS.
- 4. CONSTRUCTION OF UNDERGROUND UTILITIES MAY BEGIN AT THIS TIME. A MAXIMUM OF 1 ACRES OF DISTURBED SOIL IS PERMITTED AT ANY ONE TIME PRIOR TO STABILIZATION.
- 5. RESTORE EROSION CONTROL MEASURES AS NEEDED FOLLOWING THE UTILITY INSTALLATION. ALL EROSION CONTROL AND SEDIMENTATION FACILITIES SHALL BE COMPLETED TO THE SATISFACTION OF THE ENGINEER PRIOR TO THE COMMENCEMENT OF WORK WITHIN THE WORK AREA.
- 6. COMPLETE FINAL GRADING OF SITE. AREAS TO REMAIN UNDISTURBED FOR GREATED THAN 14 DAYS WILL BE SEEDED/MULCHED. REAPPLY TOPSOIL, INSTALL PERMANENT SEEDING, FERTILIZER AND MULCH.
- 7. ALL TEMPORARY EROSION CONTROL DEVICES SHALL BE MAINTAINED BY THE CONTRACTOR.
- 8. EROSION CONTROL DEVICCES SHALL REMAIN IN PLACE UNTIL AN APPROVED PERMANENT COVER OF VEGETATION IS ESTABLISHED. REMOVAL OF DEVICES TO BE COORDINATED WITH THE OWNER, LOCAL MUNICIPALITY OR REPRESENTATIVE THEREOF.

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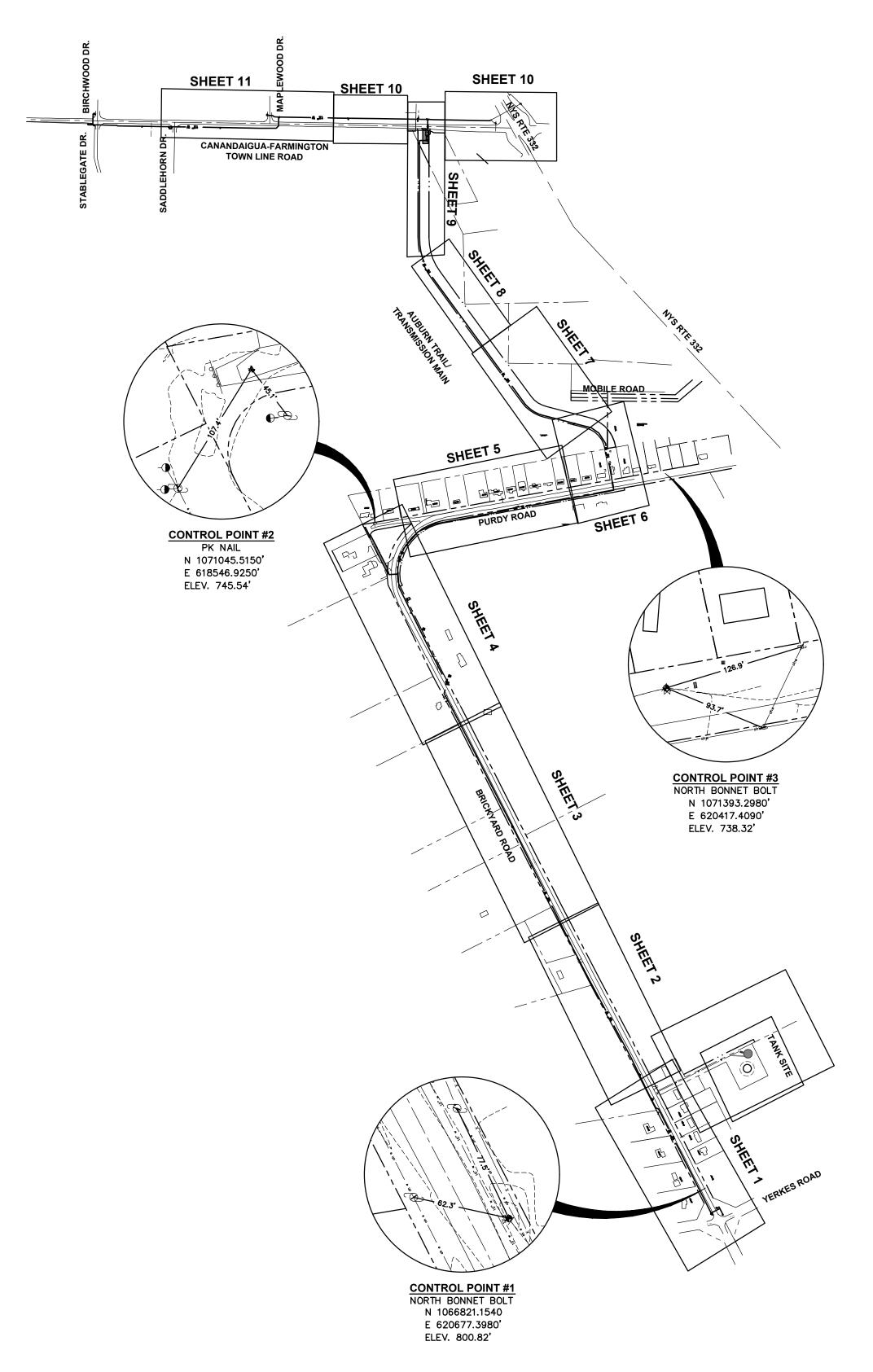
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Project No. **0610.19002** 

DRAWING ACLERATION
THE FOLLOWING IS AN EXCERPT FROM THE NEW YORK EDUCATION LAW ARTICLE 145 SECTION 7209 AND APPLIES TO THIS DRAWING.
"IT IS A VIOLATION OF THIS LAW FOR ANY PERSON UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR TO ALTER AN ITEM
IN ANY WAY, IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL
AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION AND A SPECIFIC DESCRIPTION OF THE ALTERATION".

## **LEGEND**

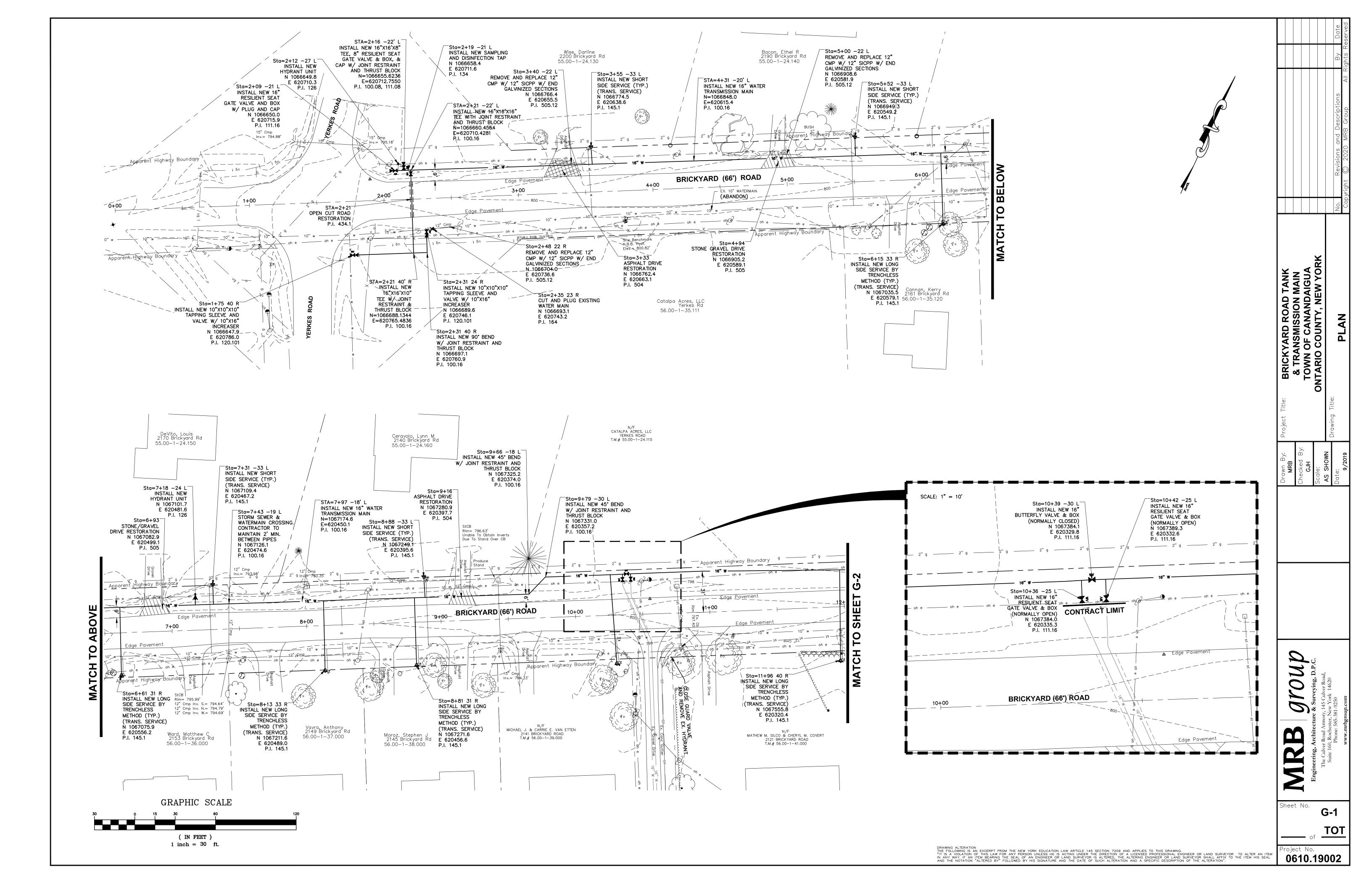
	EXISTING	<u>PROPOSED</u>
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RIGHT-OF-WAY LINE		
PROPERTY LINE		
UTILITY POLE	$^{\circ}$	
UTILITY POLE W/GUY WIRE	<sup>U</sup> PO <del>2</del> GUY ◆	
LIGHT POLE	0	
GAS VALVE	GV ⋈	
LAMP POST	<b>\$</b>	
SANITARY SEWER/W MANHOLE & FLOW DIRECTION	Ex. San—	<del></del>
PUMP STATION	•	•
FORCEMAIN & FLOW DIRECTION	— <b>⊸</b> — — — FM— —	
GAS MAIN	2" Gas	
UNDERGROUND ELECTRIC,	UGE	
TELEPHONE, CABLE	UGT	
CULVERT	12" Cmp	
CATCHBASIN		
STORM SEWER	—————————————————————————————————————	<del></del>
WATERMAIN	· · w	w
GATE VALVE	w ⋈	H
HYDRANT	Ä	<b>^</b>
EASEMENT LINE		··-
TREE LINE	······	
DECIDUOUS TREE	○ ●	
CONIFEROUS TREE	**	
TREES TO BE REMOVED		X
FENCE		
IRON PIN	<b>∭</b> IP	
IRON PIPE	×	
PK NAIL	×	
SPIKE	×	
MONUMENT	$\triangle$ MON	
OFFSET	8	
BENCHMARK	Хвм	
CONTOUR		650
SILT FENCE		
STRAW BALES		
SIGNS	<del>-0</del>	* **
GUARD RAIL	0 0 0	• • • • • •
MAIL BOX	•	
REFLECTOR	o ref	
FLAGPOLE	FP ∞	
CLEAN OUT	○ co	● CO
CURB STOP		*
SIDEWALK		

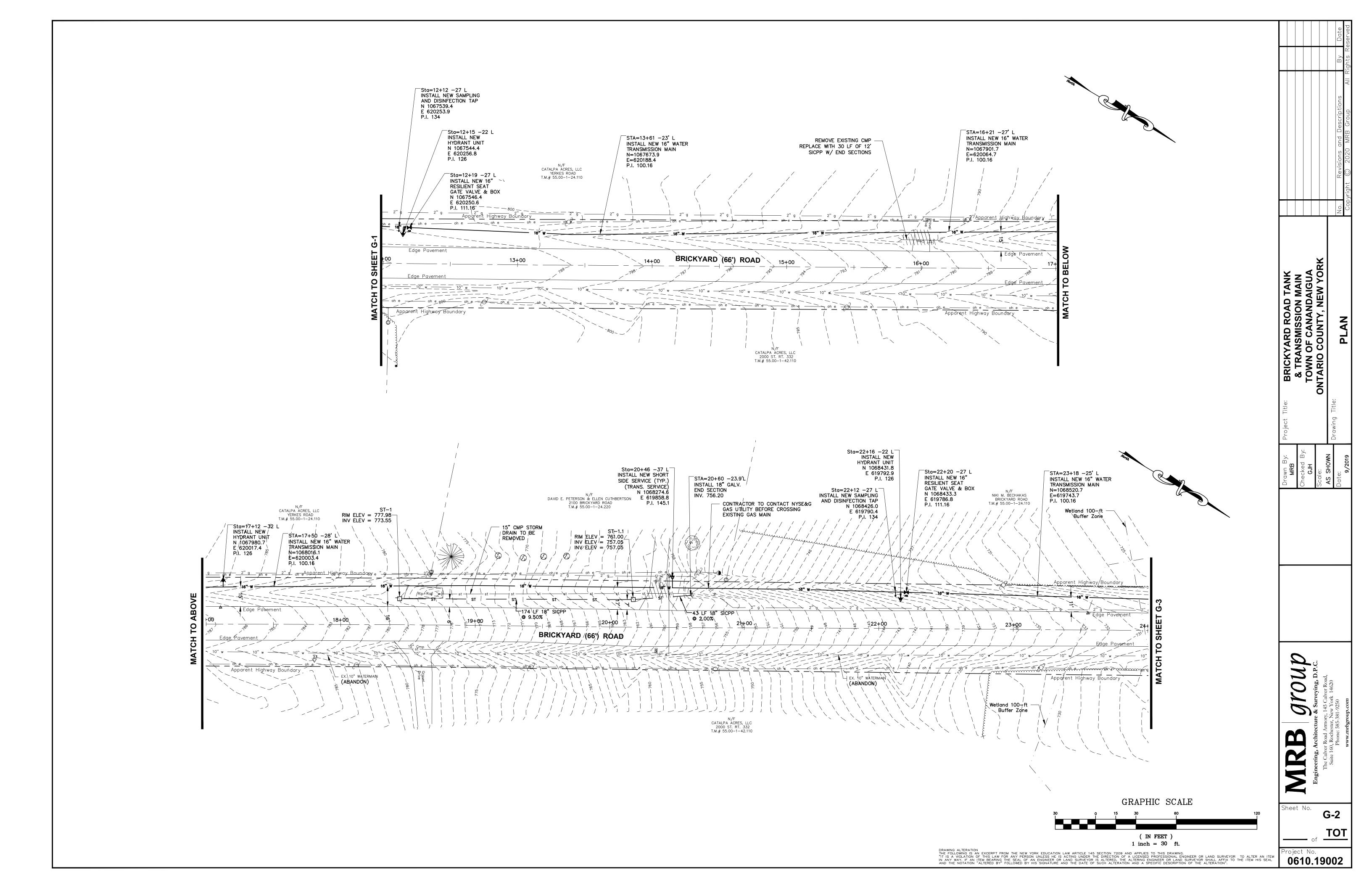


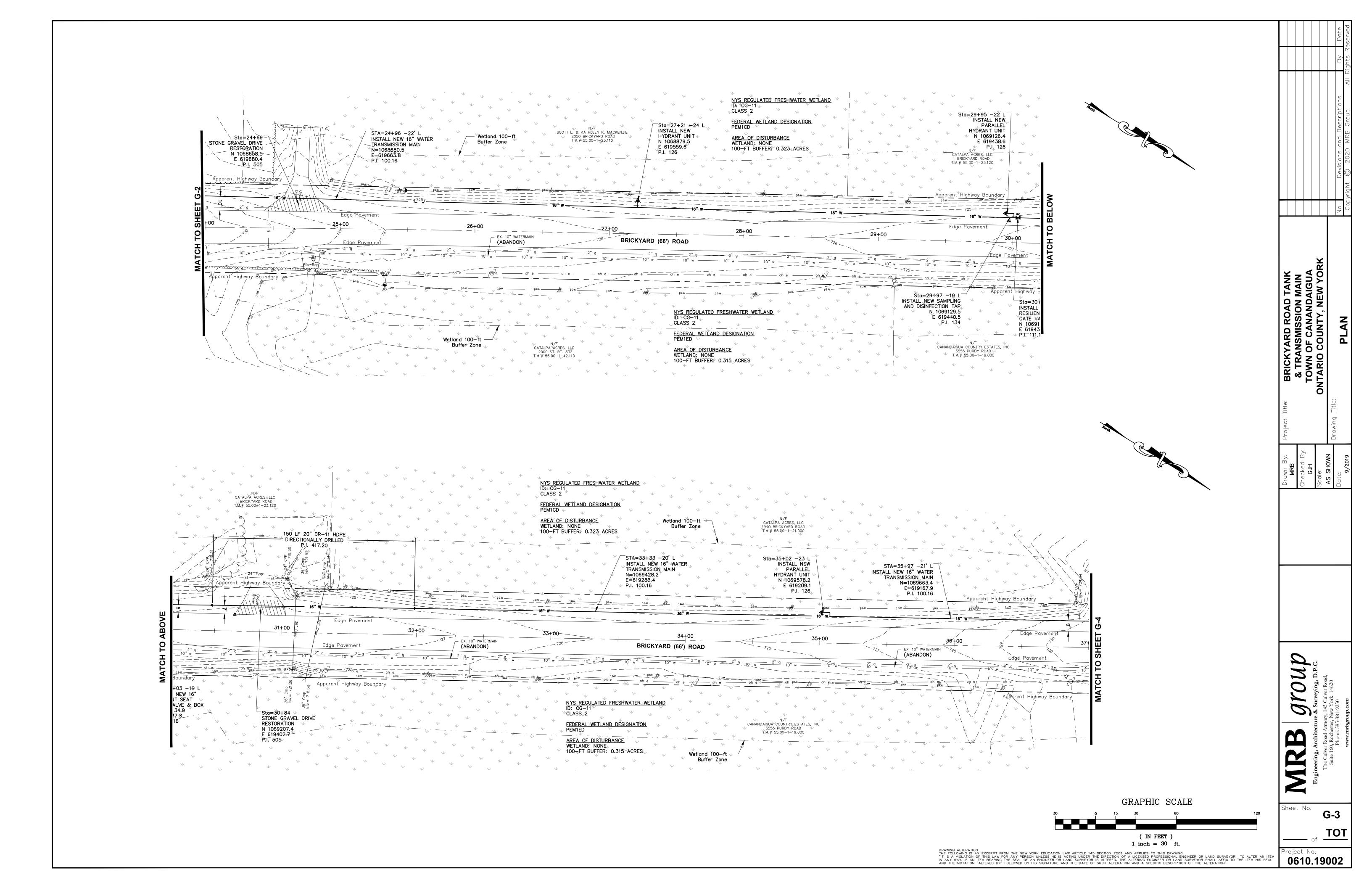
SHEET INDEX

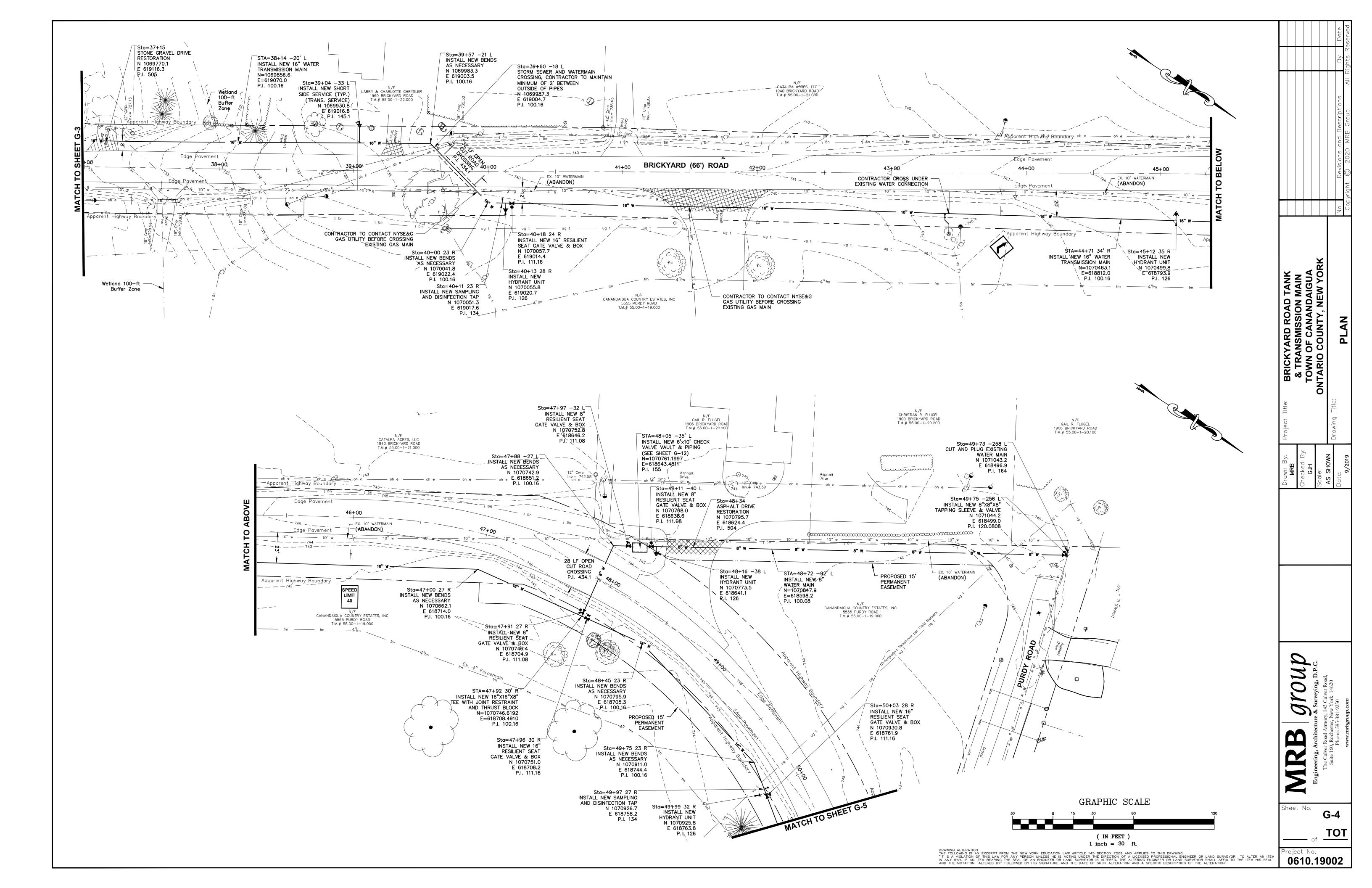
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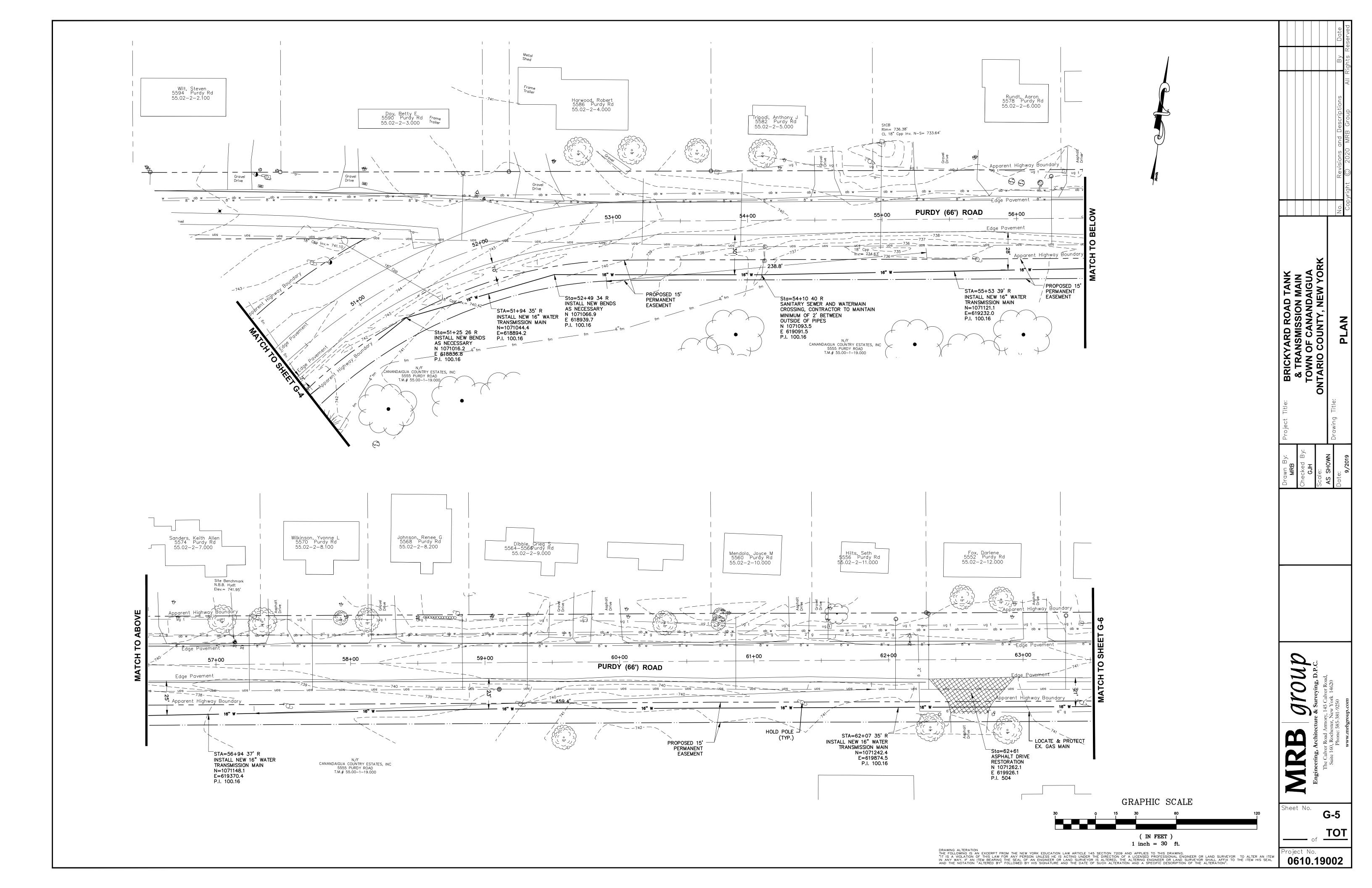
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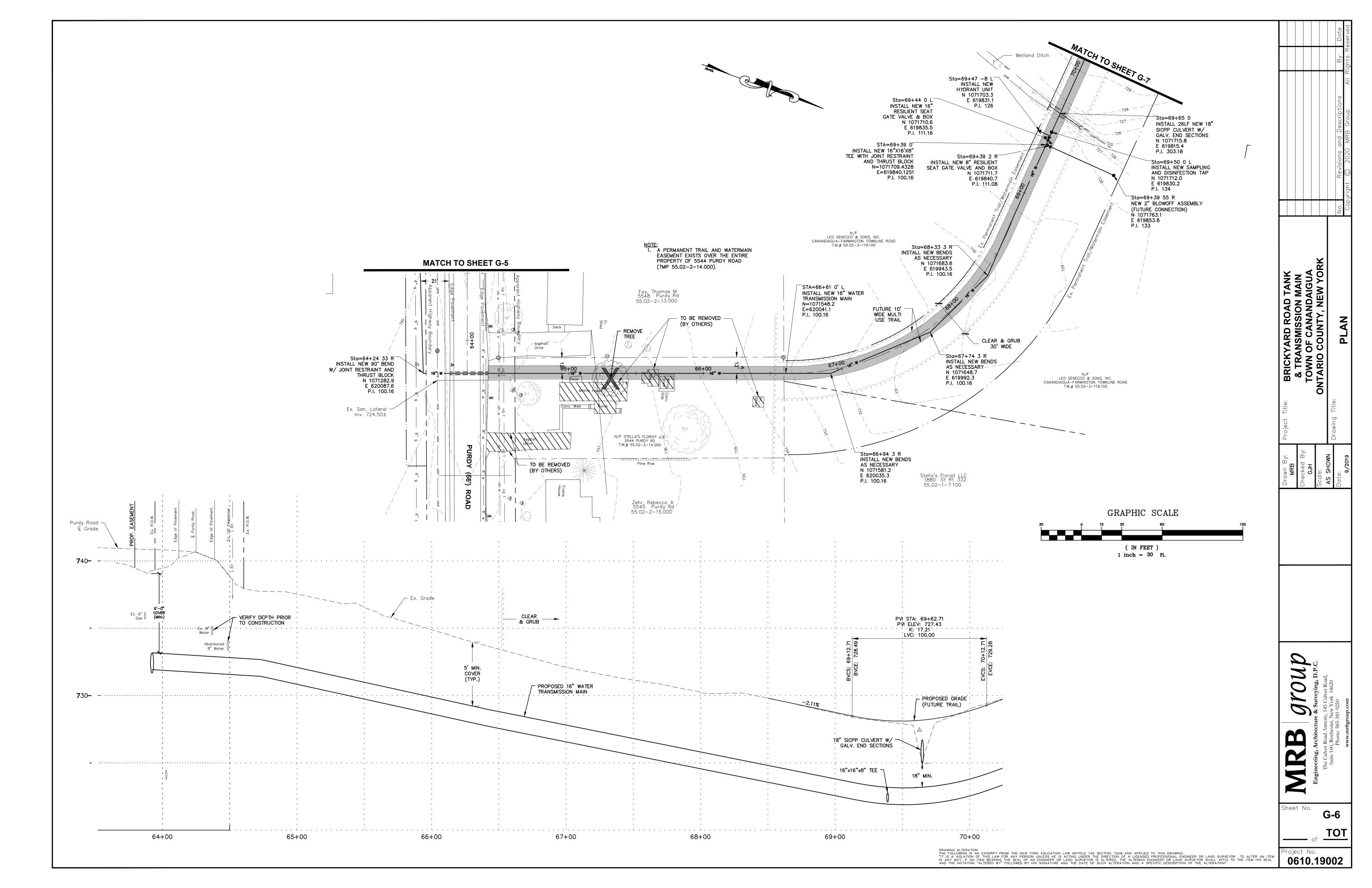


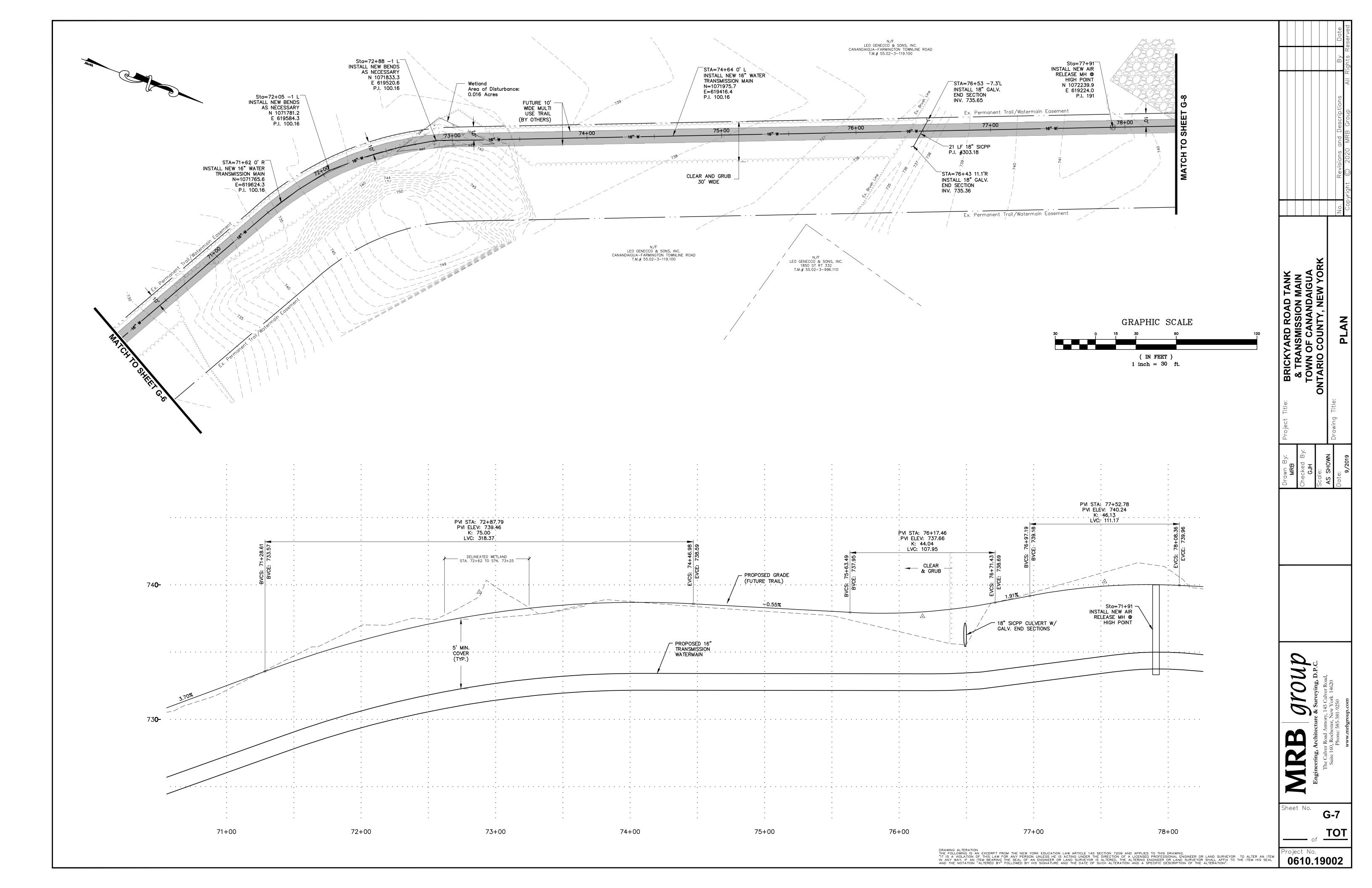


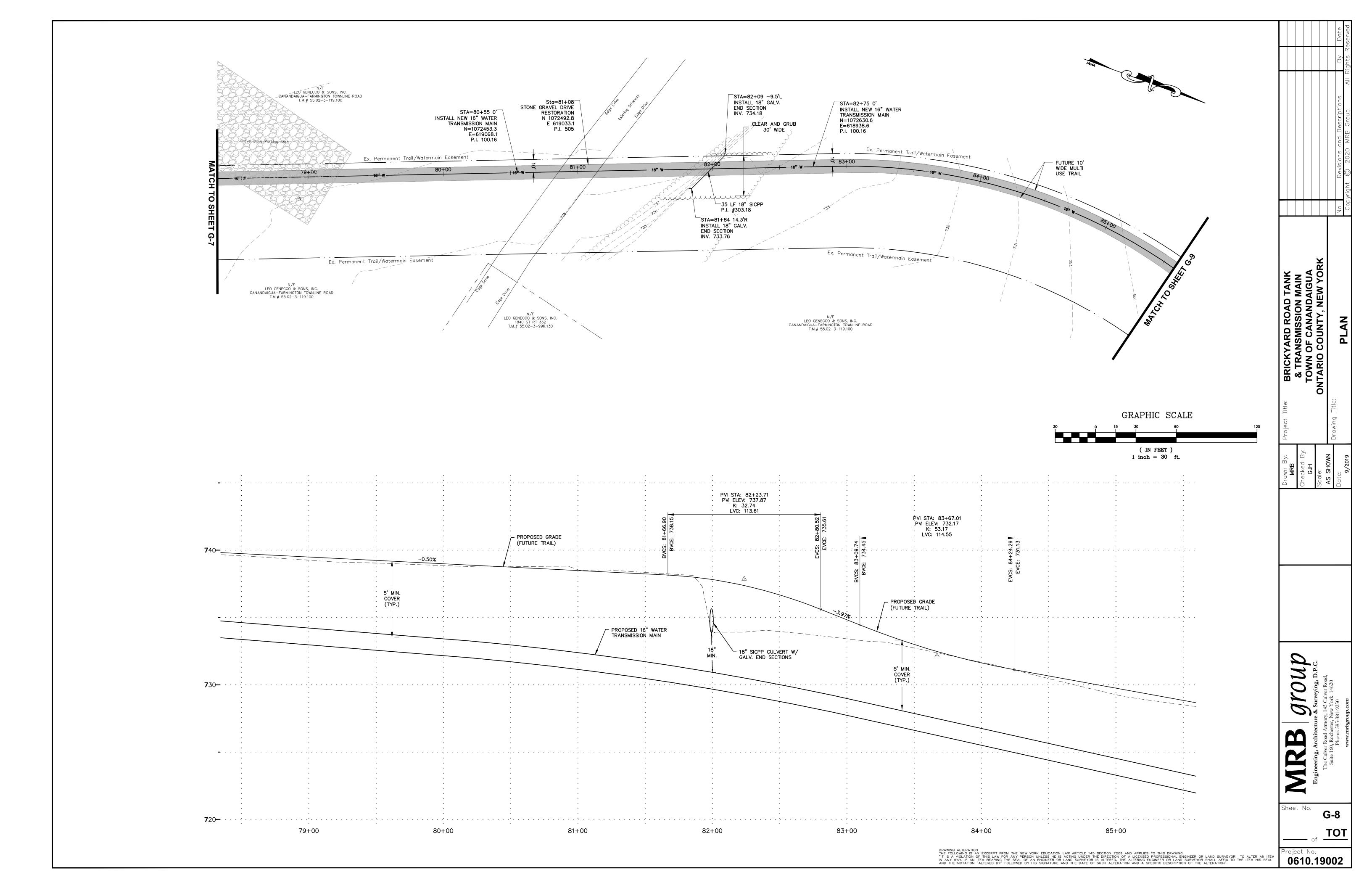


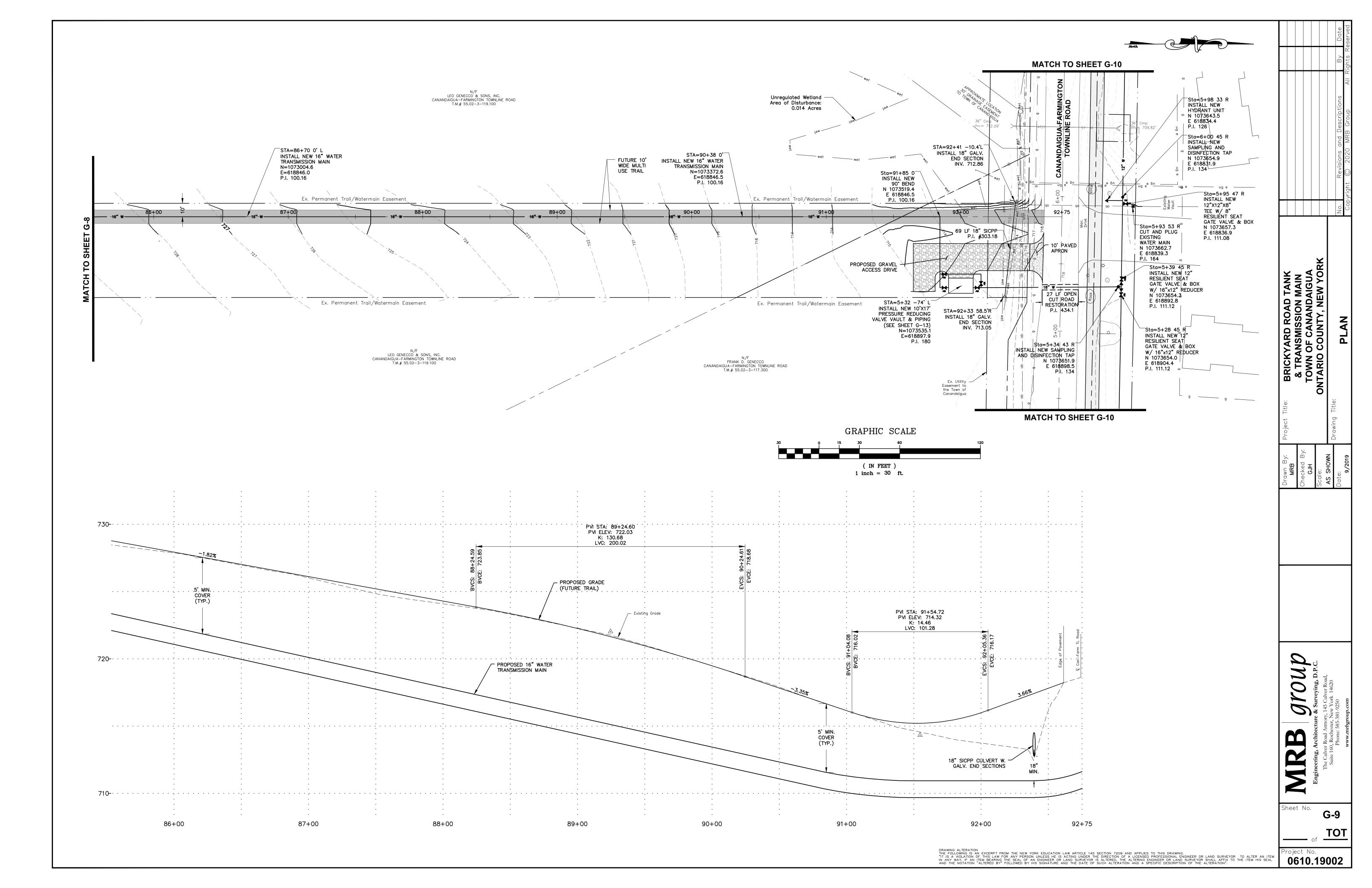


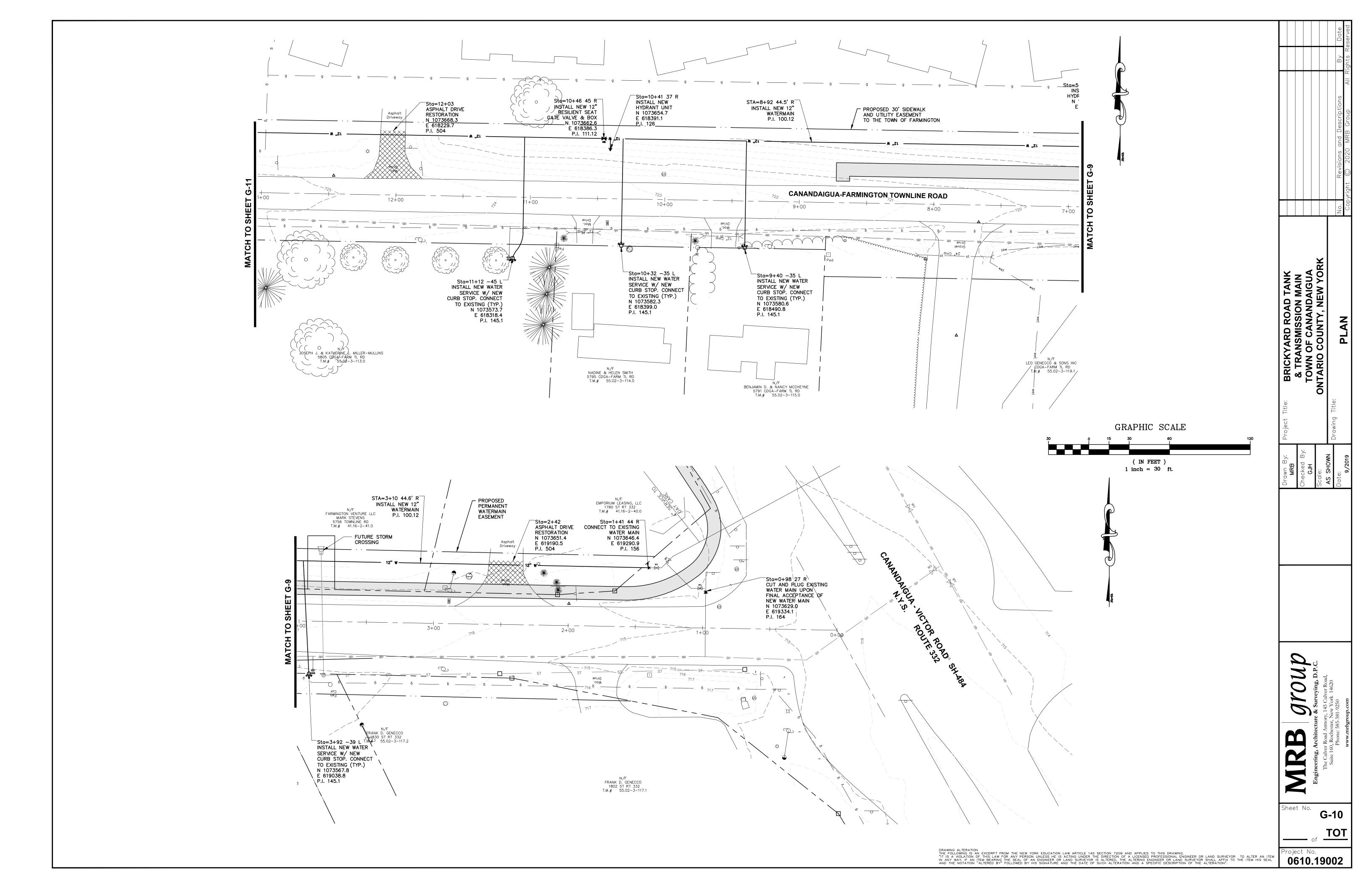


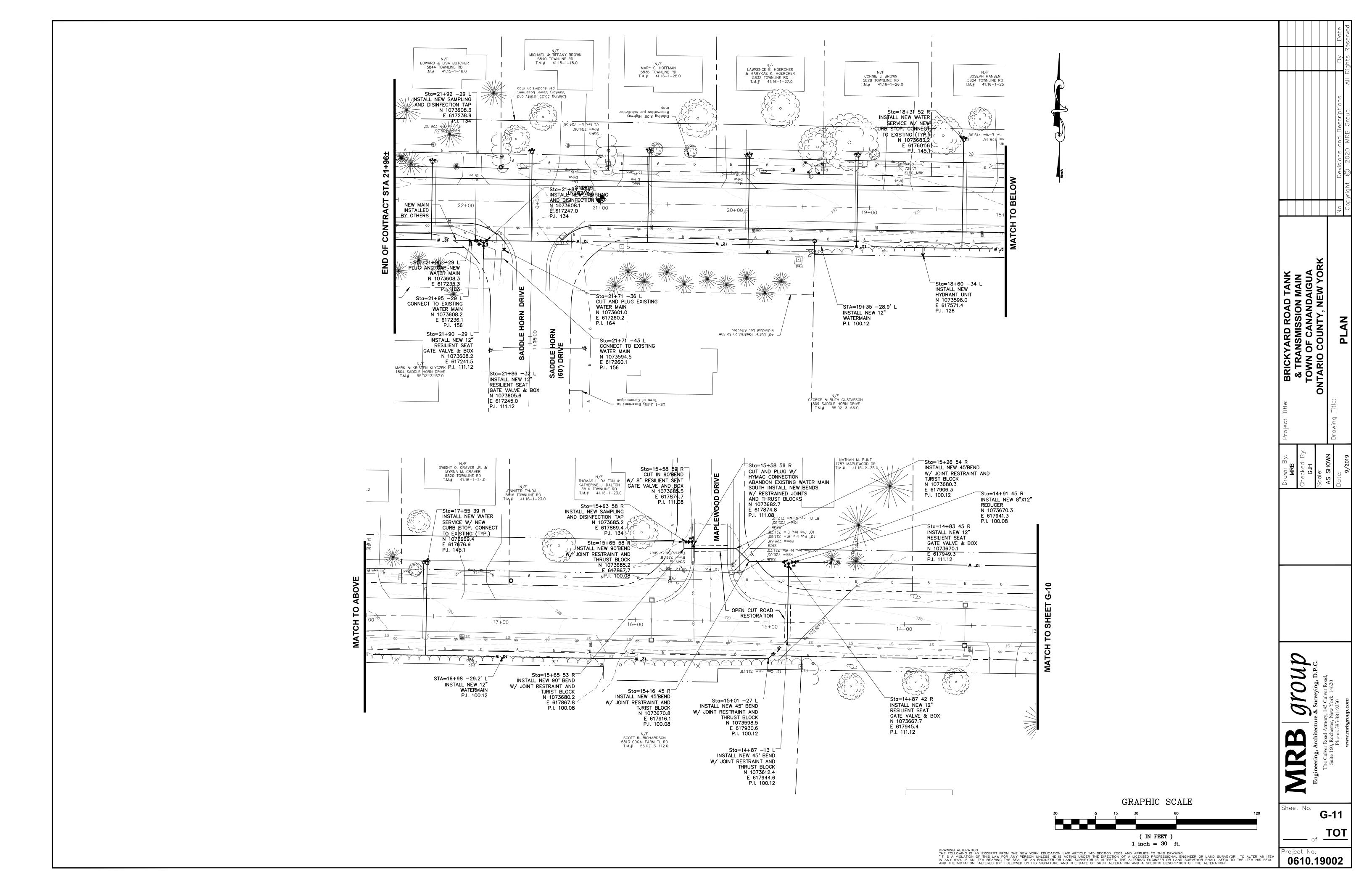


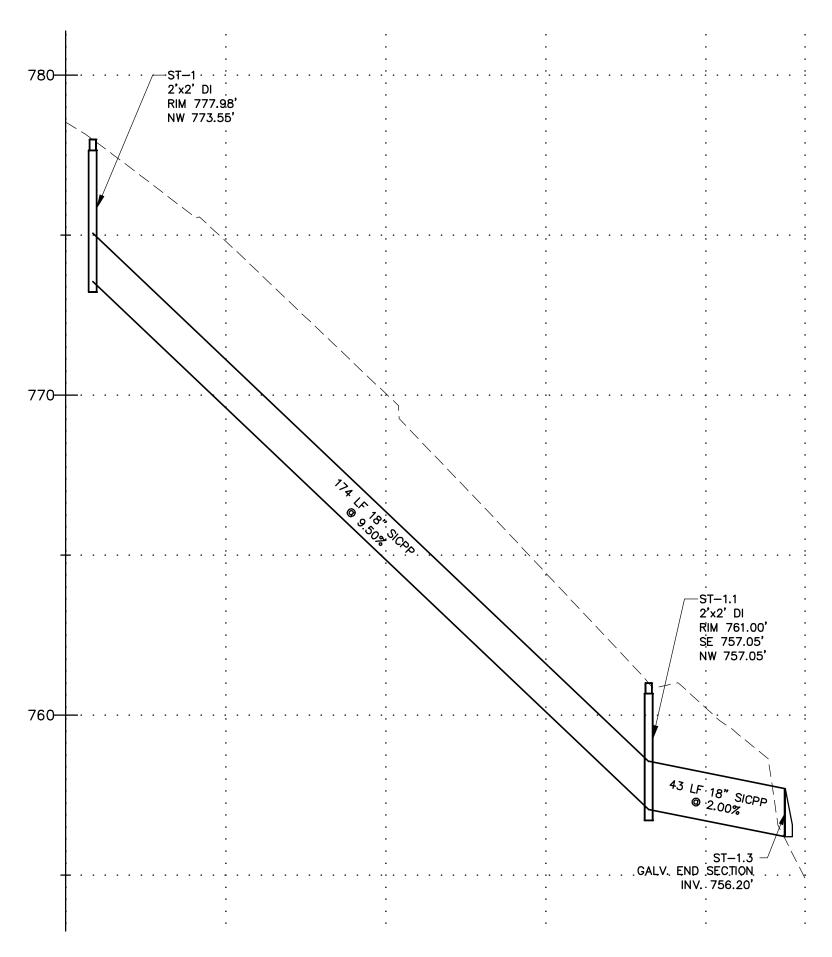




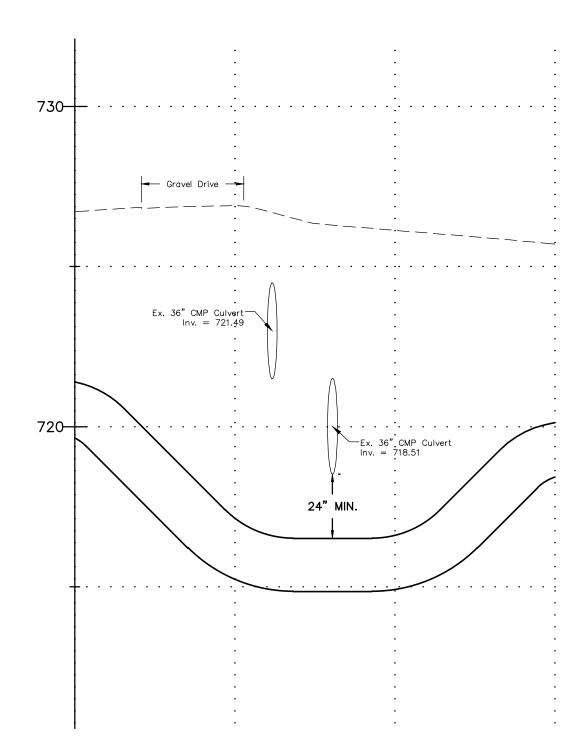




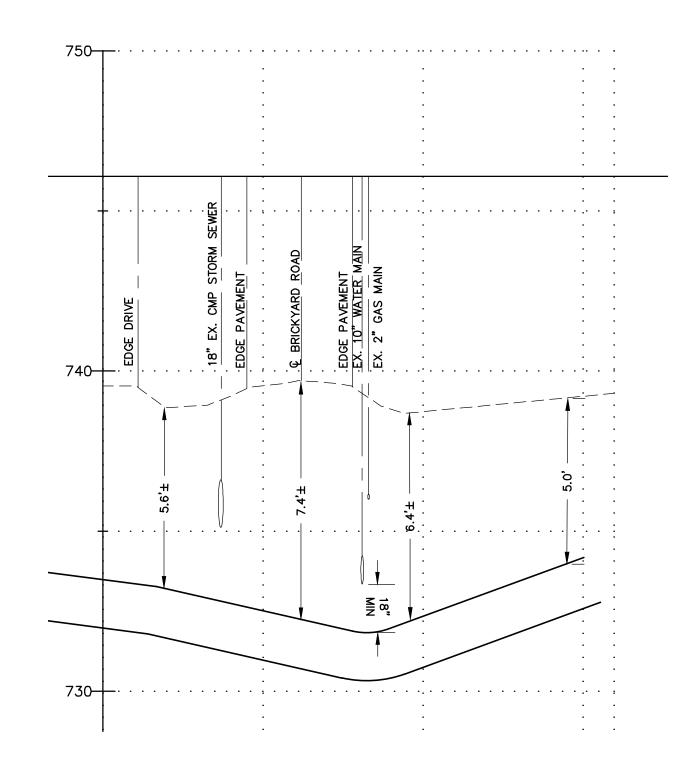




BRICKYARD ROAD STORM SEWER STA 18+50 TO STA 20+50 **HORIZ SCALE: 1" = 30' VERT SCALE: 1" = 3'** 



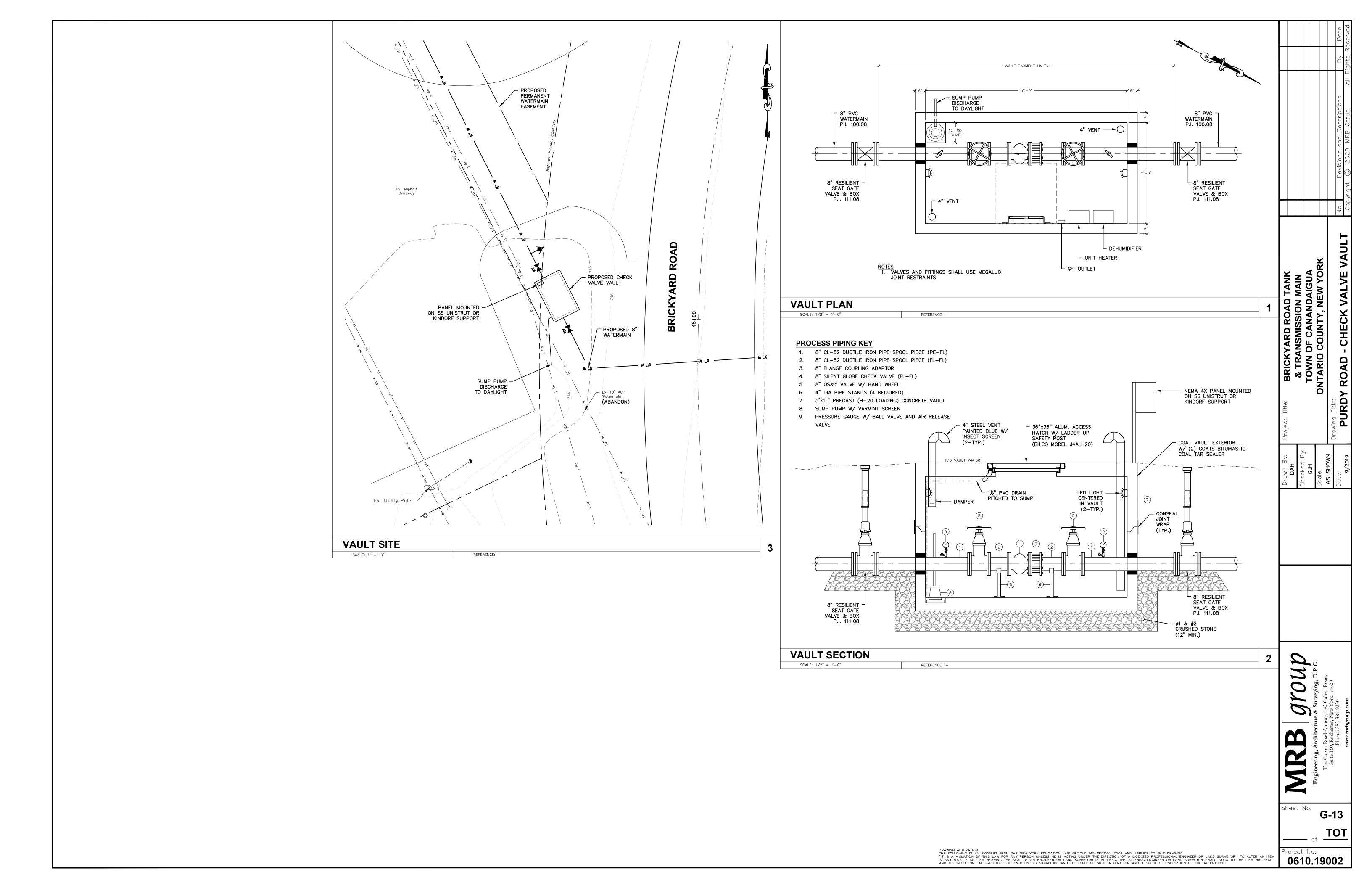
DIRECTIONAL DRILL @ STA 31+00 HORIZ SCALE: 1" = 30' VERT SCALE: 1" = 3'

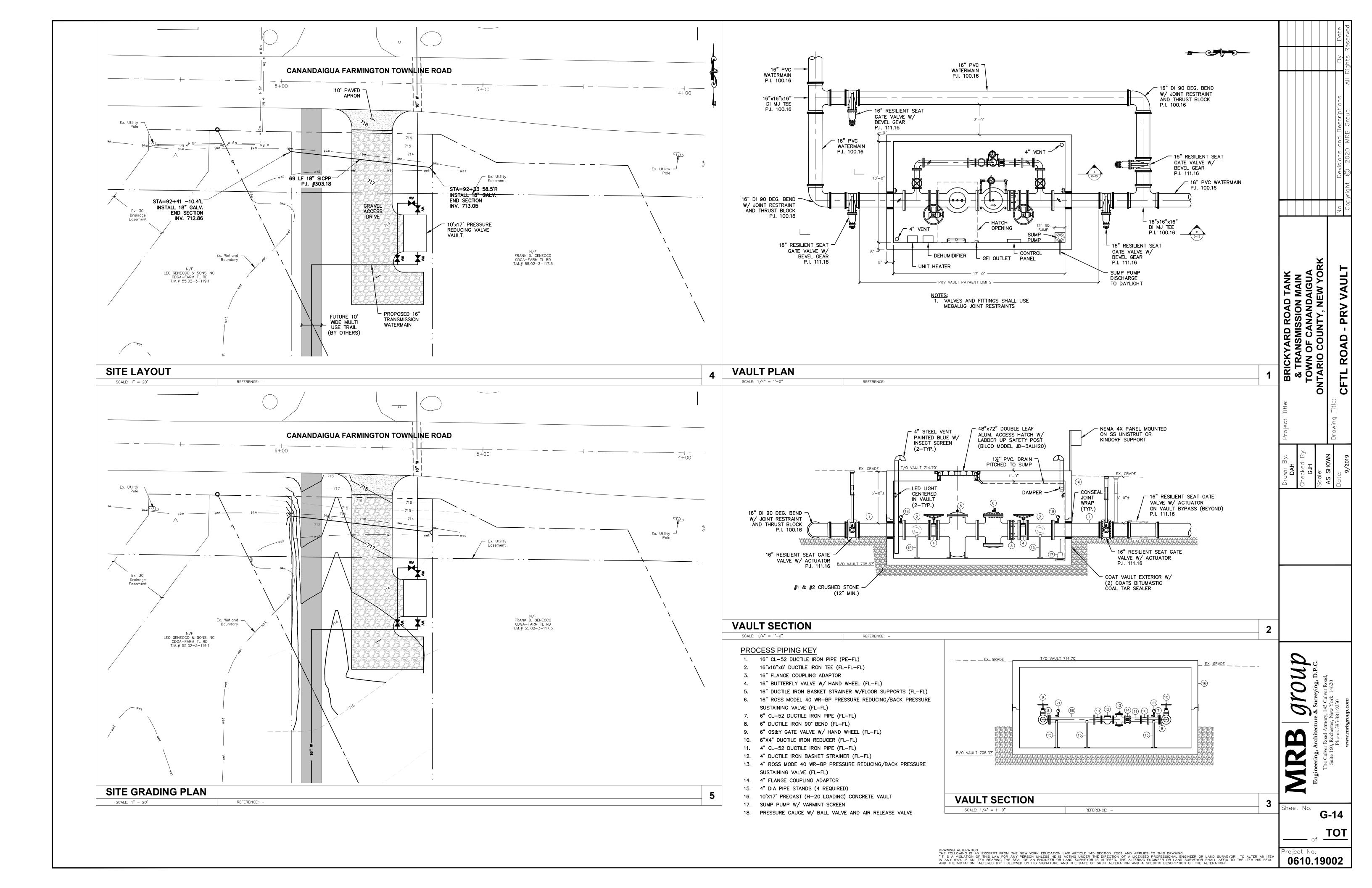


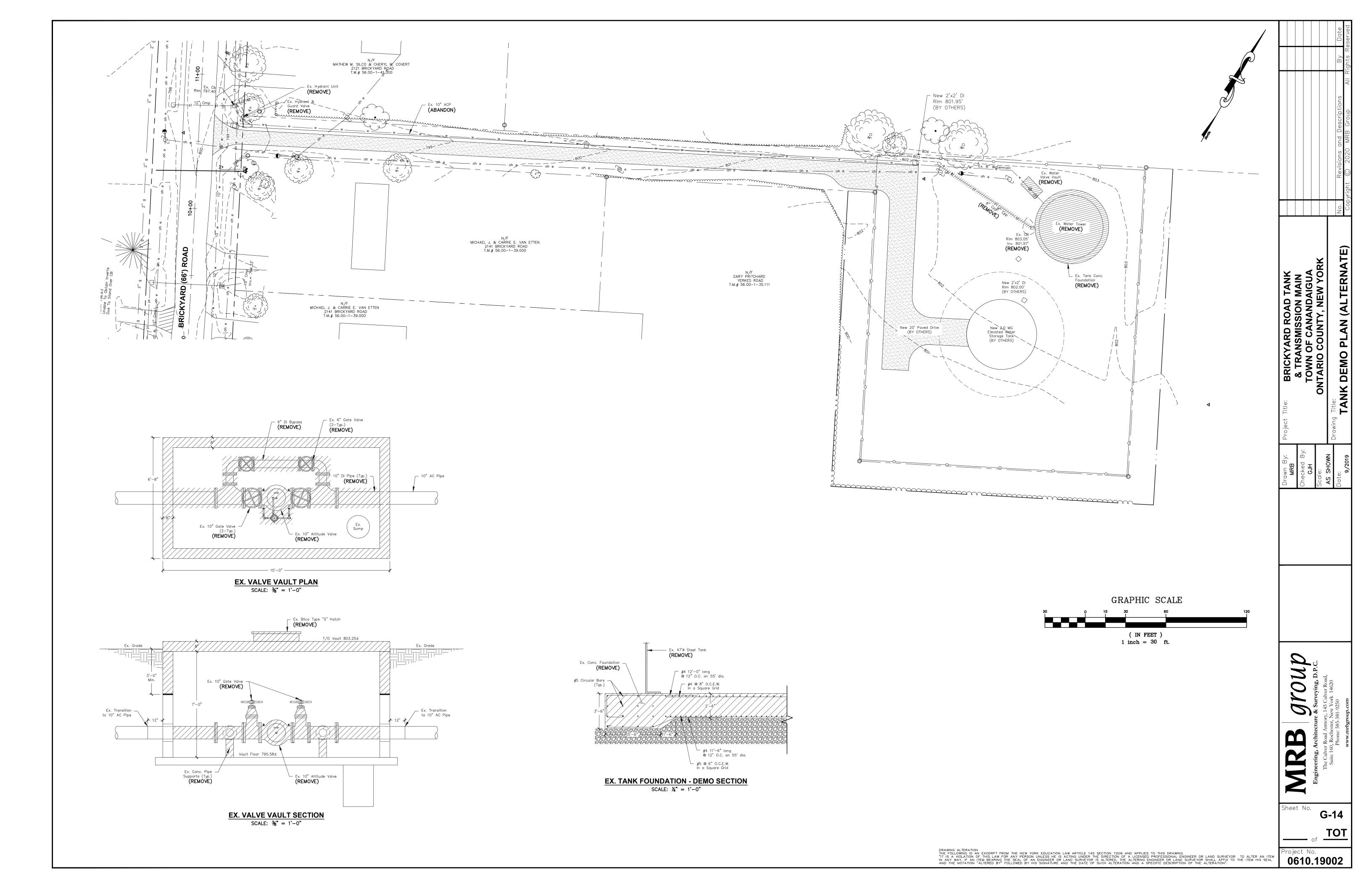
DIRECTIONAL DRILL @ STA 31+00 HORIZ SCALE: 1" = 30' VERT SCALE: 1" = 3'

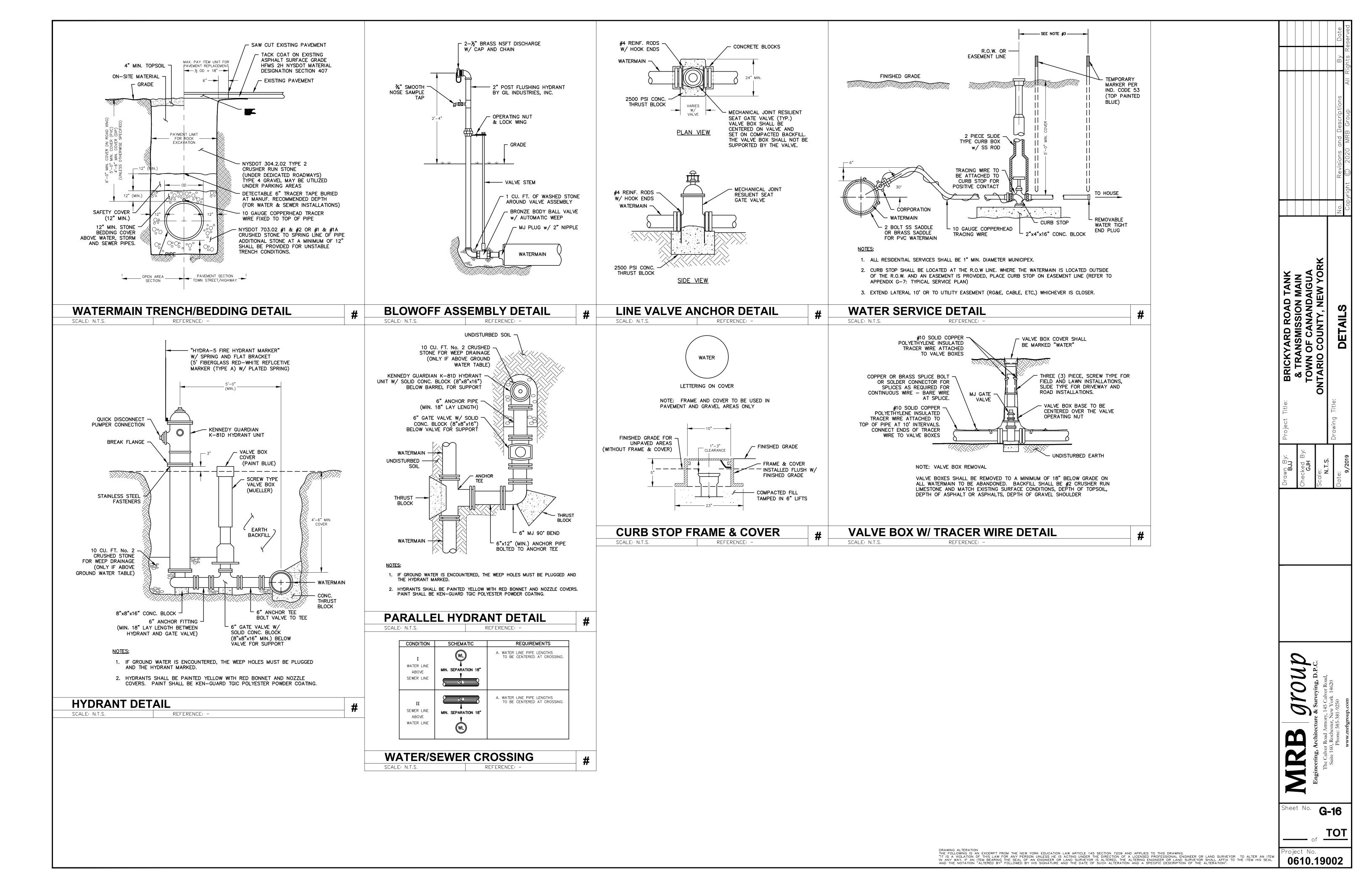
Sheet No. G-12

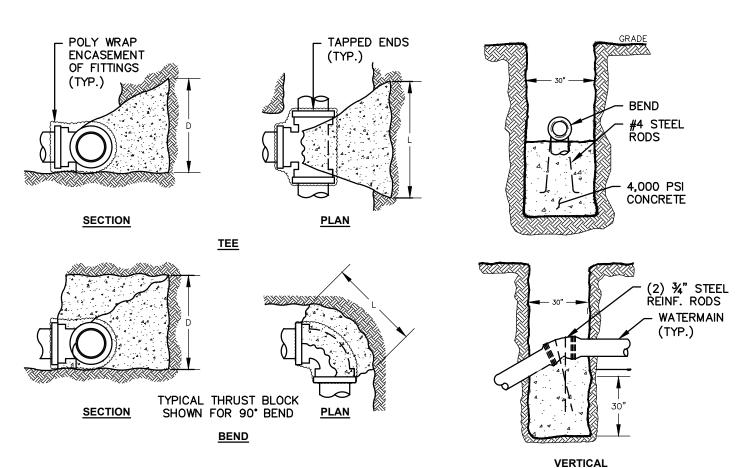
DRAWING ALTERATION
THE FOLLOWING IS AN EXCERPT FROM THE NEW YORK EDUCATION LAW ARTICLE 145 SECTION 7209 AND APPLIES TO THIS DRAWING.
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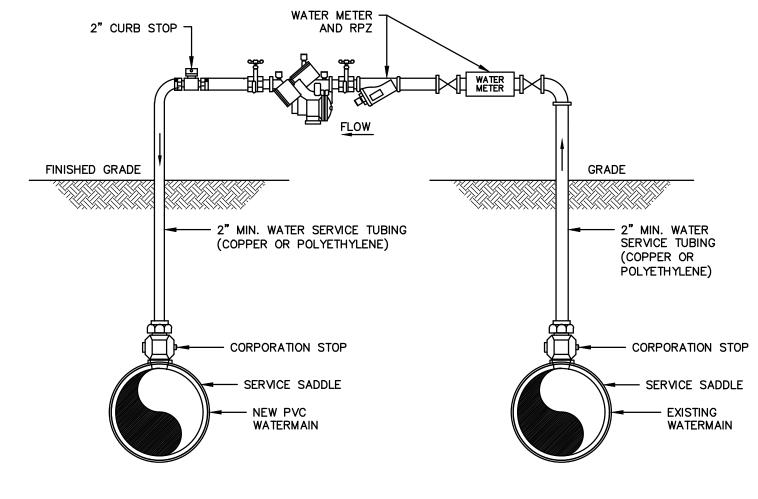




PIPE SIZE (INCHES)	WORKING PRESSURE	TEE OF	PLUG	90° E	BEND	45° E	BEND	22-1/2	* BEND
(**************************************	(PSIG)	L	D	L	D	L	D	L	D
4	150	2.00	1.25	2.75	1.25	2.00	1.00	1.25	.75
1 7	250	2.75	1.50	3.00	2.00	2.50	1.25	1.50	1.00
6	150	2.75	2.00	4.00	2.00	2.75	1.50	2.25	1.00
	250	4.00	2.25	5.25	2.50	3.50	2.00	2.75	1.25
8	150	4.50	2.25	5.25	2.75	3.75	2.00	3.75	2.00
	250	5.50	3.00	6.75	3.50	5.25	2.50	3.75	1.75
10	150	5.25	3.00	6.75	3.25	4.75	2.50	3.50	1.75
	250	7.50	3.50	8.75	4.25	6.25	3.25	4.50	2.25
12	150	6.50	3.50	8.00	4.00	5.75	3.00	4.50	2.00
12	250	8.75	4.25	10.25	5.25	7.75	3.75	5.25	2.75
14	150	150 7.75 4.00 9.00 4.75 6.75 3.50 5.00 2.	2.40						
14	250	10.25	5.00	12.00	6.00	8.75	4.50	6.25	3.25
16	150	9.00	4.50	10.75	5.25	7.75	4.00	5.75	2.75
10	250	11.50	5.75	14.00	6.75	10.25	5.00	7.00	3.75

- 1. ALL DIMENSIONS ARE IN FEET.
- 2. BEARING AREAS ARE BASED ON ALLOWABLE SOIL BEARING PRESSURE OF 2000 PSF.
- TO OR LESS THAN ½ THE DEPTH FROM THE GROUND SURFACE TO THE BASE OF THE
- 4. ALL THRUST BLOCKS SHALL CURE A MINIMUM OF SEVEN (7) DAYS BEFORE ANY PRESSURE TESTS ARE CONDUCTED.
- 5. CONCRETE SHALL BE MINIMUM 3000 PSI.
- 6. RESTRAINING RODS MAY BE USED IN LEIU OF THRUST BLOCKS. METHOD TO USED SHALL BE APPROVED BY ENGINEER PRIOR TO PLACEMENT.

### THRUST BLOCK DETAIL SCALE: N.T.S.



COST FOR TEMPORARY FILLING/BLOW-OFF TAP TO BE INCLUDED IN PIPE ITEM.

### **NEW WATERMAIN FILLING DETAIL**

SCALE: N.T.S. REFERENCE: -

12 33 FT. 14 FT. 7 FT. 4 FT. 23 FT. 76 FT. 
 14
 38 FT.
 16 FT.
 7 FT.
 4 FT.
 32 FT.
 97 FT.

 16
 44 FT.
 18 FT.
 9 FT.
 4 FT.
 46 FT.
 110 FT.

### NOTES:

- 1. RECOMMENDED RESTRAINED LENGTHS FOR STRAIGHT TEES ASSUME A MINIMUM 10' LENGTH OF PIPE ATTACHED TO EACH SIDE OF THE RUN.
- P. BR. ONLY INDICATES RESTRAINT AT TEE BRANCH ONLY. 3. ALL BENDS (DEGREE CHANGES) ARE CALCULATED AS HORIZONTAL
- 4. DEAD-END SERVICE CONSTITUTES CAPS, PLUGS, VALVES AND HYDRANTS.

PIPE SIZE (INCHES)	90, BEND	45° BEND	22.5° BEND	11.25 <b>°</b> BEND
6	35/10	14/6	7/3	4/2
8	45/13	22/10	11/5	5/2
12	65/19	31/14	16/7	7/3
14		40/16	19/8	10/4
16		45/18	22/9	11/4

HORIZONTAL BEND RESTRAINT

1. ALL BENDS (DEGREE CHANGES) ARE CALCULATED AS VERTICAL.THE FIRST RESTRAINED LENGTH (FEET) IS FOR THE HIGH-SIDE BEND(S) AND THE SECOND RESTRAINED LENGTH (FEET) INDICATES THE LOW-SIDE BEND(S). LENGTHS WERE CALCULATED USING A CONSISTENT 5 FOOT DEPTH OF COVER

### **VERTICAL BEND RESTRAINT**

PIPE SIZE	TEE	STRAIGHT			
(INCHES)	(REDUC.)	REDUCER			
8 X 4	BR.	55/29			
8 X 6	BR.	22/17			
12 X 6	BR.	81/42			
12 X 8	BR.	54/36			
12 X 10	BR.	20/17			
16X 10	BR.	48/30			
16 X 12	BR.	29/32			
RESTRAINED					

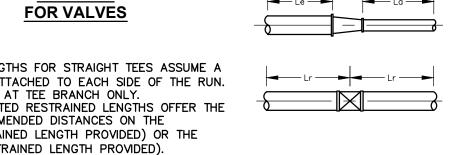
**LENGTHS FOR** 

**REDUCING FITTINGS** 

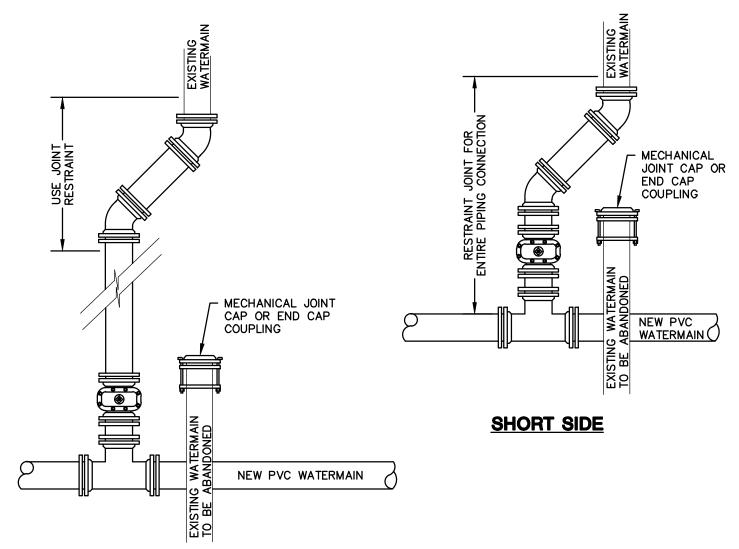
FOR THE WATERMAIN.

**RESTRAINED LENGTHS** 

- 1. RECOMMENDED RESTRAINED LENGTHS FOR STRAIGHT TEES ASSUME A MINIMUM 10' LENGTH OF PIPE ATTACHED TO EACH SIDE OF THE RUN. . BR. ONLY INDICATES RESTRAINT AT TEE BRANCH ONLY.
- 3. STRAIGHT REDUCER UNOBSTRUCTED RESTRAINED LENGTHS OFFER THE OPTION OF RESTRAINING RECOMMENDED DISTANCES ON THE SMALL-END SIDE (FIRST RESTRAINED LENGTH PROVIDED) OR THE LARGE-END SIDE (SECOND RESTRAINED LENGTH PROVIDED).



### MECHANICAL JOINT PIPE RESTRAINT SCALE: N.T.S. REFERENCE: -



**LONG SIDE** 

SIDE STREET CONNECT TO EXISTING (TYP.) SCALE: N.T.S. REFERENCE:

FINISH GRADE ■ 2" MIN. WATER SERVICE TUBING (COPPER OR POLYETHYLENE) **HORIZONTAL BEND** D<del>-</del> CORPORATION STOP SERVICE SADDLE -**NEW WATERMAIN** 

2" CURB STOP

SCALE: N.T.S.

**→** Lis

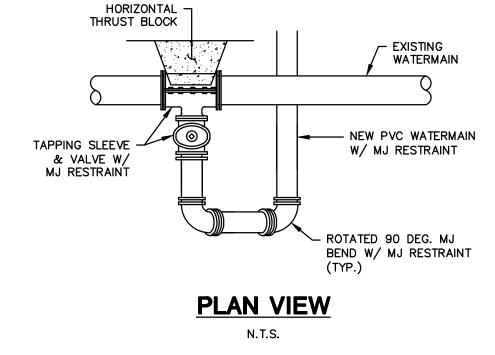
**VERTICAL DOWN BEND** 

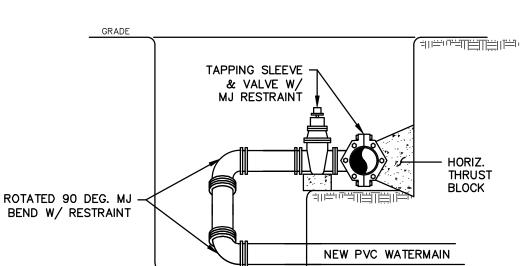
**AND OFFSET** 

Lr — Lr —

**TEE** 

- UPON NOTIFICATION FROM THE HEALTH DEPARTMENT THAT A SATISFACTORY WATER SAMPLE HAS BEEN OBTAINED, SHUT DOWN CORPORATION STOP AND REMOVE THE SERVICE TUBING.
- 2. IMMEDIATELY PRIOR TO PLACING THE WATER MAIN IN SERVICE THE CONTRACTOR SHALL REMOVE ALL CORPORATIONS ASSOCIATED WITH TEMPORARY FACILITIES ( I.E. SAMPLING TAPS, ETC.) AND REPLACE WITH THREADED BRASS PLUGŠ.
- 3. FOR DISINFECTION\SAMPLING TAPS THAT ARE NOT NEEDED TO BLOW-OFF, 1" DISINFECTION\SAMPLING TAPS ARE ACCEPTABLE.
- 4. 1000 LF MAXIMUM DISTANCE BETWEEN SAMPLE TAPS UNLESS OTHERWISE SPECIFIED BY ENGINEER.





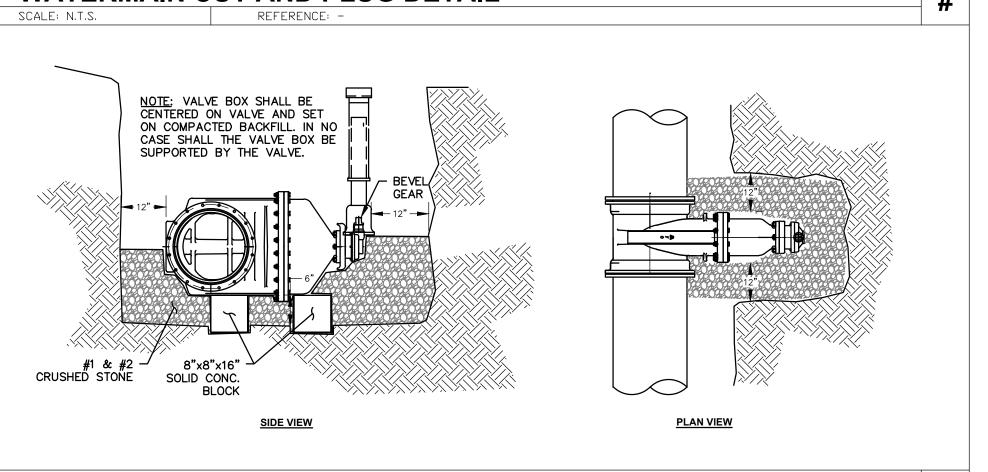
### **SIDE ELEVATION** N.T.S.

SAMPLING/DISINFECTION TAP REFERENCE: -

**BACKSIDE TAP DETAIL** SCALE: N.T.S. REFERENCE: -

- UNDISTURBED SOIL - ½" PLYWOOD 2500 PSI CONCRETE MJ CAP OR END -CAP COUPLING - WOOD WEDGES WATERMAIN TO -- MJ CAP OR END REMAIN IN SERVICE CAP COUPLING - ABANDONED WATERMAIN 6x6 PRESSURE TREATED TIMBER -

# WATERMAIN CUT AND PLUG DETAIL



(3 FT. MAX. LENGTH) SEE TYPICAL THRUST BLOCK DETAIL FOR MINIMUM SURFACE BEARING AREA.

LARGE VALVE DETAIL

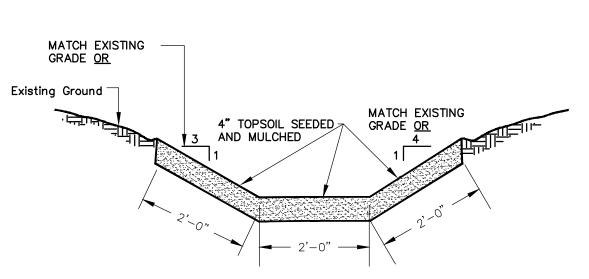
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Sheet No. G-17

0610.19002

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AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION AND A SPECIFIC DESCRIPTION OF THE ALTERATION".

**VERTICAL** 3. HEIGHT OF THRUST BLOCK SHOULD BE EQUAL



## **ROADSIDE DITCH RESTORATION**

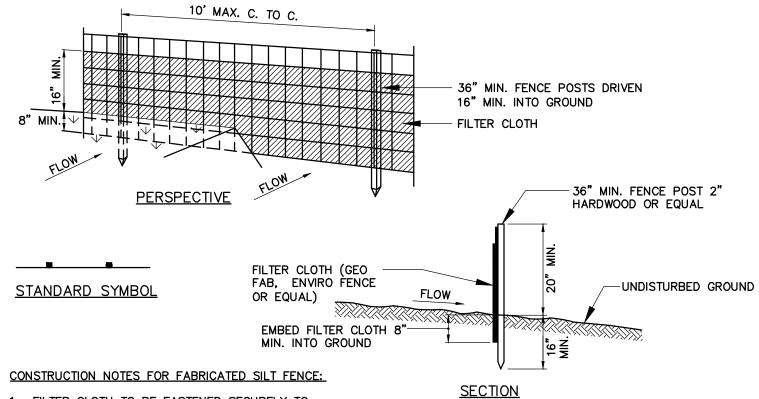
(N.T.S.)

SUPPORT NET POST —

> CROSS SECTION DRAINAGE SWALE SEED & MULCH

### SEDIMENTATION CONTROL DETAIL

(WHEN REQUIRED) N.T.S.



- 1. FILTER CLOTH TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
- 2. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
- 3. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN 'BULGES' DEVELOP

### POST: STEEL, EITHER T OR U TYPE OR 2" HARDWOOD

FILTER CLOTH: FILTER X, MIRAFI 100X, STABILINKA T140N OR PREFABRICATED GEOFAB, ENVIROFENCE OR APPROVED EQUAL

EXISTING TREE

1. FENCE SHALL BE INSTALLED BY

2. FENCING SHALL BE MAINTAINED

**VEGETATION PROTECTION BARRIER** 

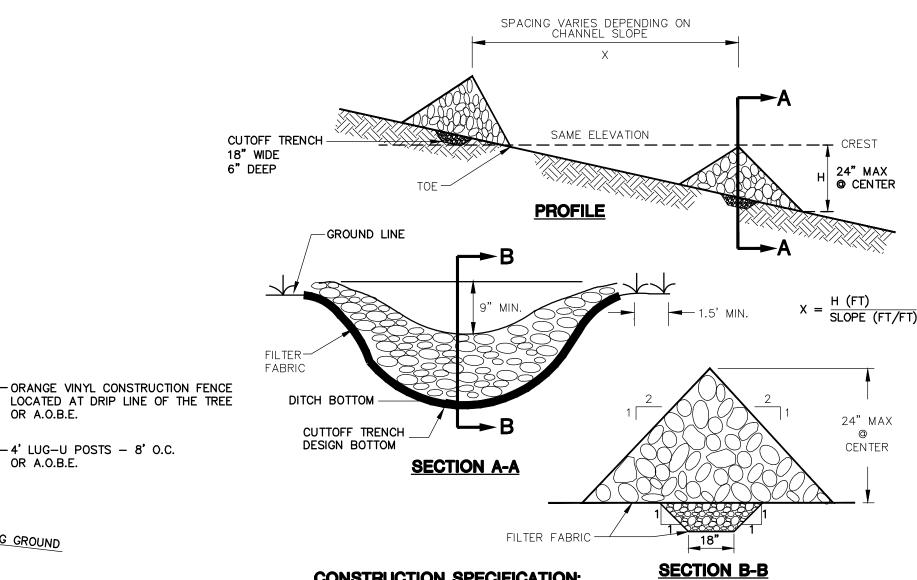
NOT TO SCALE

BY CONTRACTOR A.O.B.E.

CONTRACTOR PRIOR TO CONSTRUCTION.

### SILT FENCE

N.T.S.



### **CONSTRUCTION SPECIFICATION**

- 1. STONE WILL BE PLACED ON A FILTER FABRIC FOUNDATION TO THE LINES, GRADES AND LOCATION SHOWN IN THE PLAN.
- 2. SET SPACING OF CHECK DAMS TO ASSUME THAT THE ELEVATIONS OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION OF THE TOE OF THE UPSTREAM DAM.
- 3. EXTEND THE STONE A MINIMUM OF 1.5 FEET BEYOND THE DITCH BANKS TO PREVENT CUTTING AROUND THE DAM.
- 4. PROTECT THE CHANNEL DOWNSTREAM OF THE LOWEST CHECK DAM FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE.
- 5. ENSURE THAT CHANNEL APPURTENANCES SUCH AS CULVERT ENTRANCES BELOW CHECK DAMS ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONES. MAXIMUM

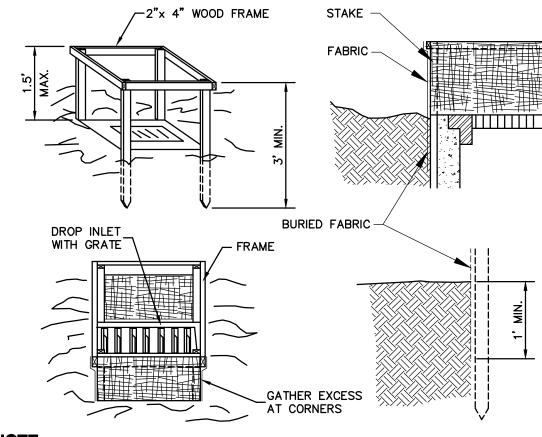
## STONE CHECK DAM DETAIL

### **EROSION CONTROL & CONSTRUCTION SEQUENCE:**

- 1. INSTALL ALL EROSION CONTROL DEVICES AS SHOWN ON THE PLANS, PRIOR TO EARTHWORK CONSTRUCTION. BASED ON FIELD PERFORMANCE AND WEATHER CONDITIONS, ADDITIONAL EROSION CONTROL DEVICES MAY BE REQUIRED. DISTURBANCE TO THE SITE TO BE LIMITED.
- 2. CONTRACTOR SHALL RESTRICT GRADING OPERATIONS TO THE AREAS INDICATED ON THE CONTRACT DRAWINGS. PERFORMING WORK OUTSIDE THE IDENTIFIED LIMITS SHALL NOT BE PERMITTED WITHOUT APPROVAL OF THE ENGINEER.
- 3. PROTECT EXISTING VEGETATION AND OTHER ENVIRONMENTAL FEATURES TO BE PRESERVED WITH CONSTRUCTION BARRIERS.
- 4. CONSTRUCTION OF UNDERGROUND UTILITIES MAY BEGIN AT THIS TIME. A MAXIMUM OF 5 ACRES OF DISTURBED SOIL IS PERMITTED AT ANY ONE TIME PRIOR TO STABILIZATION.
- 5. RESTORE EROSION CONTROL MEASURES AS NEEDED FOLLOWING THE UTILITY INSTALLATION. ALL EROSION CONTROL AND SEDIMENTATION FACILITIES SHALL BE COMPLETED TO THE SATISFACTION OF THE ENGINEER PRIOR TO THE COMMENCEMENT OF WORK WITHIN EACH
- 6. COMPLETE FINAL GRADING OF SITE. AREAS TO REMAIN UNDISTURBED FOR GREATER THAN 21 DAYS WILL BE SEEDED/MULCHED WITHIN 14 DAYS. REAPPLY TOPSOIL, INSTALL PERMANENT SEEDING, FERTILIZER AND MULCH.
- 7. ALL TEMPORARY EROSION CONTROL DEVICES SHALL BE MAINTAINED BY THE CONTRACTOR.
- 8. EROSION CONTROL DEVICES SHALL REMAIN IN PLACE UNTIL AN APPROVED PERMANENT COVER OF VEGETATION IS ESTABLISHED. REMOVAL OF DEVICES TO BE COORDINATED WITH THE OWNER, LOCAL MUNICIPALITY OR REPRESENTATIVE THEREOF.

### **SOIL STABILIZATION - SEED MIX NOTES:**

- 1. <u>TEMPORARY SEED MIX</u> SHALL BE USED FOR STABILIZATION DURING CONSTRUCTION. USE THE FOLLOWING PROPORTIONS BY WEIGHT:
  - 100% RYE GRASS (ANNUAL OR PERENNIAL)
  - SEEDING RATE: 50 LBS./ACRE
  - FERTILIZER: 5:10:10 AT A RATE OF 600 LBS./ACRE
  - MULCH WITH STRAW AT A RATE OF 4000 LBS/.ACRE - SUBSTITUTE WINTER RYE AT 100 LBS./ACRE IF SEEDING IN OCTOBER/NOVEMBER.



- 1. FILTER FABRIC SHALL HAVE AN EOS OF 40-85. BURLAP MAY BE USED FOR SHORT TERM
- 2. CUT FABRIC FROM A CONTINUOUS ROLL TO ELIMINATE JOINTS. IF JOINTS ARE NEEDED T HEY WILL BE OVERLAPPED TO THE NEXT STAKE.
- 3. STAKE MATERIALS WILL BE STANDARD 2" X 4" WOOD OR EQUIVALENT. METAL WITH A MINIMUM LENGTH OF 3 FEET.
- 4. SPACE STAKES EVENLY AROUND INLET 3 FEET APART AND DRIVE A MINIMUM 18 INCHES DEEP. SPANS GREATER THEN 3 FEET MAY BE BRIDGED WITH THE USE OF WIRE MESH BEHIND THE FILTER FABRIC FOR SUPPORT.
- 5 FABRIC SHALL BE EMBEDDED 1 FOOT MINIMUM BELOW GROUND AND BACKFILLED. IT SHALL BE SECURELY FASTENED TO THE STAKES AND FRAME.
- 6. A 2" X 4" WOOD FRAME SHALL BE COMPLETED AROUND THE CREST OF THE FABRIC FOR OVER FLOW STABILITY.

### FILTER FABRIC DROP INLET PROTECTION

N.T.S.

### **EROSION CONTROL NOTES:**

- EROSION CONTROL DEVICES SHALL BE INSTALLED ON SITE PER THE EROSION CONTROL SEQUENCE AND THE NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL. THE CONTRACTOR SHALL COMPLY WITH ALL PROVISIONS OF THE N.Y.S. DEPARTMENT OF ENVIRONMENTAL CONSERVATION WATER QUALITY CERTIFICATION AND/OR FRESH WATER WETLANDS PERMIT AND/OR CORPS OF ENGINEER'S PERMIT (IF APPLICABLE).
- 2. IT IS THE CONTRACTORS RESPONSIBILITY TO MAINTAIN ALL EROSION CONTROL DEVICES AND TEMPORARY SEEDING UNTIL A PERMANENT COVER OF VEGETATION IS ESTABLISHED. MAINTENANCE SHALL INCLUDE, BUT IS NOT LIMITED TO, REMOVAL OF ACCUMULATED SEDIMENT, PREVENTATIVE AND REMEDIAL WORK, REPAIR, REPLACEMENT, WATERING SEEDED AREAS, RESEEDING AND REMULCHING.
- 3. ON-SITE BURIAL OF WASTE MATERIAL CLEARED FROM THE WORK AREA IS NOT PERMITTED. CONTRACTOR SHALL DISPOSE OF OFF-SITE IN A LOCATION APPROVED BY LOCAL AND STATE ORDINANCES. ANY DEBRIS OR EXCESS MATERIAL EXPOSED ALONG A CREEK BED OR BANK SHALL BE IMMEDIATELY AND COMPLETELY REMOVED FROM THE BED OR BANK TO AN AREA UPLAND FOR DISPOSAL.
- 4. ALL STREAM CHANNEL WORK SHALL BE LIMITED TO WITHIN THE DESIGNATED RIGHT-OF-WAY, EASEMENT, OR T.O. LIMITS, OR RELEASE.
- 5. ALL NECESSARY PRECAUTIONS SHALL BE TAKEN TO PREVENT CONTAMINATION OF THE STREAMS BY SILT, SEDIMENT, FUELS, SOLVENTS, LUBRICANTS, EPOXY COATINGS, CONCRETE LEACHATE, OR ANY OTHER POLLUTANT ASSOCIATED WITH CONSTRUCTION AND CONSTRUCTION PROCEDURES.
- 6. DURING CONSTRUCTION, NO WET OR FRESH CONCRETE OR LEACHATE SHALL BE ALLOWED TO ESCAPE INTO THE WATERS OF NEW YORK STATE, NOR SHALL WASHINGS FROM CONCRETE TRUCKS, MIXERS, OR OTHER DEVICES BE ALLOWED TO ENTER ANY WETLAND OR
- 7. ALL DREDGED AND EXCAVATED MATERIAL SHALL BE DISPOSED OF ON AN UPLAND SITE AND BE SUITABLY STABILIZED SO THAT IT CANNOT REASONABLY RE-ENTER ANY WATER BODY OR WETLAND AREA.
- 8. ALL AREAS OF SOIL DISTURBANCE RESULTING FROM THIS PROJECT SHALL BE SEEDED WITH AN APPROPRIATE PERENNIAL GRASS SEED AND MULCHED WITH HAY AND STRAW WITHIN ONE WEEK OF FINAL GRADING. MULCH SHALL BE MAINTAINED UNTIL A SUITABLE VEGETATIVE COVER IS ESTABLISHED.
- 9. IF REQUIRED, CONTRACTOR SHALL PROVIDE ADDITIONAL TEMPORARY EROSION CONTROL MEASURES TO PREVENT SILTATION OF DOWN STREAM PROPERTIES, WITH APPROVAL FROM THE OWNER AND AT THE CONTRACTORS EXPENSE.
- 10. IN THE EVENT THERE IS A FAILURE OF AN EROSION CONTROL DEVICE, THE CONTRACTOR IS RESPONSIBLE TO RESTORE DOWNSTREAM AREAS AT CONTRACTORS EXPENSE.
- 11. THE COST OF INSTALLING, CLEANING AND REMOVING TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL DEVICES SHALL BE INCLUDED IN THE OTHER ITEMS.
- 12. WHERE SILT FENCE IS USED IN AREAS OF CONCENTRATED FLOW THE ENGINEER IN CHARGE MAY CALL FOR BACKING THE FENCE WITH HAY BALES.
- 13. HAY BALE DIKES MAY BE SUBSTITUTED FOR SILT FENCE AS APPROVED BY THE ENGINEER.
- 14. THE CONTRACTOR SHALL PROVIDE DUST CONTROL BY WATERING AS NEEDED.
- 15. THE CONTRACTOR SHALL KEEP PAVED SURFACES CLEAN OF MUD AND DEBRIS AT ALL
- 16. A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) AND NOTICE OF INTENT (NOI) HAVE BEEN PREPARED FOR THIS PROJECT ON BEHALF OF THE OWNER AND IN CONFORMANCE WITH THE NYSDEC GENERAL PERMIT GP-02-01. IT IS THE OWNERS RESPONSIBILITY TO IMPLEMENT THE SWPPP AND HAVE THE CONTRACTOR AND SUBCONTRACTOR BE FAMILIAR WITH ITS CONTENTS. THE SWPPP, NOI AND ALL INSPECTION REPORT FORMS SHALL BE KEPT ON-SITE AT ALL TIMES.
- 17. THE OWNER SHALL BE RESPONSIBLE TO PROVIDE ON-SITE INSPECTIONS BY A QUALIFIED PROFESSIONAL IN ACCORDANCE WITH THE SWPPP AND NYSDEC GENERAL PERMIT GP-02-01

Sheet No. **G-18** 

0610.19002

DRAWING ALIERATION
THE FOLLOWING IS AN EXCERPT FROM THE NEW YORK EDUCATION LAW ARTICLE 145 SECTION 7209 AND APPLIES TO THIS DRAWING.
"IT IS A VIOLATION OF THIS LAW FOR ANY PERSON UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR TO ALTER AN ITEM
IN ANY WAY, IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL
AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION AND A SPECIFIC DESCRIPTION OF THE ALTERATION".