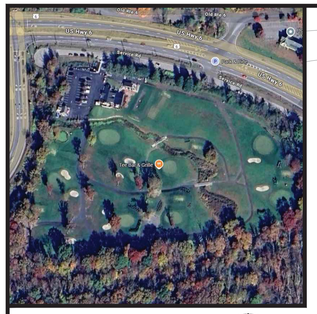

LOCATION MAP
NOT TO SCALE

SITE DATA:

OWNER / DEVELOPER:	TOWN OF YORKTOWN
STREET ADDRESS:	363 UNDERHILL AVE YORKTOWN HEIGHTS, NY 10598
PROJECT LOCATION:	TOWN OF YORKTOWN 795 ROUTE 6 SHRUB OAK, NY 10588
TOWN TAX MAP DATA:	SECTION 16.07, BLOCK 1, LOT 38
SITE AREA :	12.50 ACRES (544,500 SF)

Bench Mark Set
Box Cut in Headwall
Elevation = 426.05'

EXISTING SEPTIC TANK TO BE CONVERTED TO PUMP. LOCATION TO BE VERIFIED.

PROPOSED SEWER LINE JACKING PIT 10' X 18' X 6' D

LIMIT OF NYSDEC A-4 AS PER AUGUST 22, 2005 DELINEATION

PROPOSED SEWER LINE JACKING PIT 10' X 18' X 6' D

EXISTING GRAVEL PATH

PROPOSED CLEANOUT MANHOLE AS PER DETAIL, 5' DEPTH (TYP.)

1 1/2 " Ø PVC SCHEDULE 40 SOLID OR FLEXIBLE FORCEMAIN (TYP.)

PATH TO BE RESTORED TO OPTIMAL CONDITION (AT THE DISCRETION OF THE OWNER) IMMEDIATELY AFTER COMPLETION OF SEWER LINE

PROPOSED CLEANOUT MANHOLE AS PER DETAIL, 5' DEPTH (TYP.)

GROUND TO BE RESTORED TO OPTIMAL CONDITION (AT THE DISCRETION OF THE OWNER) IMMEDIATELY AFTER COMPLETION OF SEWER LINE

GROUND TO BE RESTORED TO OPTIMAL CONDITION (AT THE DISCRETION OF THE OWNER) IMMEDIATELY AFTER COMPLETION OF SEWER LINE

PROPOSED SANITARY MANHOLE
RIM ELEV: 422.08
INV ELEV: 417.58

PROPOSED SEWER LINE JACKING PIT 10' X 18' X 6' D

PROPOSED 6"Ø PVC SDR35 PIPE
L= 150' S= 15%

PROPOSED SEWER LINE JACKING PIT 10' X 18' X 6' D

EXISTING WESTCHESTER COUNTY SMH
RIM ELEV: 425.14
INV ELEV: 408.72
CONTRACTOR SHALL PROTECT EXISTING SMH FROM ANY DAMAGE

RESTORE DISTURBED AREAS AS PER PERMANENT SPECIFICATIONS

CONTRACTOR SHALL USE SOURING TO SUPPLY EXCAVATION FOR PIPE TRENCH. THE CONTRACTOR SHALL USE TRENCH BOXES OR PROVIDE DESIGN OF TEMPORARY SOURING

LIMIT OF NYSDEC A-4 AS PER AUGUST 22, 2005 DELINEATION

100' WETLAND ADJACENT AREA (TYP.)

SCALE: 1"=40'-0"

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Project No. 24-31

Engineer: Joseph C. Riina, P.E.
NYS Lic. No. 64431

Revisions:

No.	Date	Comments:

SCALE: ########
DRAWN BY: JPT
DATE: 3-12-25

SEWER CONNECTION PLAN

PREPARED FOR
TOWN OF YORKTOWN
GOLF COURSE
795 EAST MAIN STREET (ROUTE 6)
Town of Yorktown — Westchester, NY

Sheet 1 of 6

NOTE: UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 7209 (2) OF THE NEW YORK STATE EDUCATION LAW.

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EXISTING CONDITIONS

PREPARED FOR

TOWN OF YORKTOWN GOLF COURSE

795 EAST MAIN STREET (ROUTE 6)

Town of Yorktown — Westchester, NY

NOTE: UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 7209 (2) OF THE NEW YORK STATE EDUCATION LAW.

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Engineer:
STATE OF NEW YORK · JOSEPH CARLO RIINA · NO. 64431 · LICENSED PROFESSIONAL ENGINEER
Joseph C. Riina, P.E.
NYS Lic. No. 64431

Revisions:

No.	Date	Comments:

SCALE: ########
DRAWN BY: JPT
DATE: 3-12-25

EROSION & SEDIMENT CONTROL PLAN

PREPARED FOR
TOWN OF YORKTOWN GOLF COURSE
795 EAST MAIN STREET (ROUTE 6)
Town of Yorktown
Westchester, NY

GENERAL NOTES:

1. THE ENGINEER WHOSE SEAL APPEARS HEREON IF NOT RETAINED FOR SUPERVISION OF CONSTRUCTION, IS NOT RESPONSIBLE FOR CONSTRUCTION AND THEREFORE ASSUMES NO RESPONSIBILITY FOR CONSTRUCTION PRACTICES, PROCEDURES, AND RESULTS THEREFROM.
2. THE ENGINEER SHALL NOT BE HELD RESPONSIBLE OR HELD ACCOUNTABLE FOR THE INTEGRITY OF ANY STRUCTURES CONSTRUCTED OR UNDER CONSTRUCTION PRIOR TO THE APPROVAL OF THE PLANS.
3. ALL WORK IS TO BE IN ACCORDANCE WITH THE YORKTOWN TOWN CODE AND NEW YORK STANDARDS AND SPECIIFICATIONS FOR EROSION AND SEDIMENT CONTROL.
4. ALL CONDITIONS, LOCATIONS, AND DIMENSIONS SHALL BE FIELD VERIFIED AND THE ENGINEER SHALL BE IMMEDIATELY NOTIFIED OF ANY DISCREPANCIES.
5. ALL CHANGES MADE TO THE PLANS SHALL BE APPROVED BY THE ENGINEER WHOSE SEAL APPEARS ON THESE DRAWINGS. ANY SUCH CHANGES SHALL BE FILED AS AMENDMENTS TO THE STORMWATER POLLUTION PREVENTION PLAN.
6. ALL WRITTEN DIMENSIONS ON THE DRAWINGS SHALL TAKE PRECEDENCE OVER ANY SCALED DIMENSIONS.
7. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CALL IN A "CODE 753" PRIOR TO CONSTRUCTION FOR UNDERGROUND UTILITY LOCATIONS.
8. SUBSTRUCTURES AND THEIR ENCROACHMENTS BELOW GRADE, IF ANY, ARE NOT SHOWN.
9. ANY PROPOSED ELECTRIC AND/OR TELEPHONE SERVICE LINES ARE TO BE PLACED UNDERGROUND.
10. THE DESIGN ENGINEER DISCLAIMS ANY LIABILITY FOR DAMAGE OR LOSS INCURRED DURING OR AFTER CONSTRUCTION.
11. ALL CONDITIONS, LOCATIONS AND DIMENSIONS SHALL BE FIELD VERIFIED BY THE CONTRACTOR AND THE OWNER/ENGINEER NOTIFIED IN WRITING OF ANY DISCREPANCIES PRIOR TO THE START OF WORK. THE OWNER/ENGINEER WILL EVALUATE THE SITUATION AND MODIFY THE PLAN AS NECESSARY.

CONTRACTOR RESPONSIBILITIES:

1. ALL WORK ON THE PROJECT SHALL BE PERFORMED IN A WORKMAN LIKE MANNER AND SHALL BE IN ACCORDANCE WITH THE STANDARDS OF THE INDUSTRY. THE OWNER WILL BE THE SOLE JUDGE OF THE ACCEPTABILITY OF THE WORK. MATERIALS AND WORK DEEMED UNACCEPTABLE WILL BE REMOVED AND REDONE AT THE SOLE COST AND RESPONSIBILITY OF THE CONTRACTOR.
2. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROTECT HIS WORK AND WILL BE HELD RESPONSIBLE FOR CONSEQUENTIAL DAMAGES DUE TO HIS ACTIVITIES. THE CONTRACTOR SHALL BE RESPONSIBLE TO THE OWNER FOR THE ACTS AND OMISSIONS OF HIS EMPLOYEE, AND THEIR AGENTS AND EMPLOYEES, AND ANY OTHER PERSONS PERFORMING ANY OF THE WORK UNDER A SEPARATE CONTRACT WITH THE CONTRACTOR.
3. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROPERLY SHORE EXISTING UTILITIES IF REQUIRED BY CONSTRUCTION.
4. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE THE TOWN ENGINEER IN ADVANCE OF HIS WORK OR AS THE INSPECTOR DEEMS APPROPRIATE.
5. ALL CONDITIONS, LOCATIONS AND DIMENSIONS SHALL BE FIELD VERIFIED BY THE CONTRACTOR AND THE OWNER/ENGINEER NOTIFIED IN WRITING OF ANY DISCREPANCIES PRIOR TO THE START OF WORK. THE OWNER/ENGINEER WILL EVALUATE THE SITUATION AND MODIFY THE PLAN AS NECESSARY.
6. ALL CHANGES MADE TO THIS PLAN SHALL BE APPROVED BY THE ENGINEER WHOSE SEAL APPEARS ON THESE DRAWINGS. ANY UNAUTHORIZED ALTERATION OR ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 7209 (2) OF THE NEW YORK STATE EDUCATION LAW.
7. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK USING HIS BEST SKILL AND ATTENTION. HE SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THIS CONTRACT.
8. THE CONTRACTOR SHALL BE RESPONSIBLE TO THE OWNER FOR THE ACTS AND OMISSIONS OF HIS EMPLOYEES, SUBCONTRACTORS, AND THEIR AGENTS AND EMPLOYEES, AND ANY OTHER PERSONS PERFORMING ANY OF THE WORK UNDER A CONTRACT WITH THE CONTRACTOR.
9. THE CONTRACTOR SHALL VERIFY ALL SUBSTRUCTURES ENCOUNTERED DURING CONSTRUCTION.
10. THE CONTRACTOR SHALL SECURE & PAY FOR A BUILDERS RISK POLICY TO COVER THE PERIOD OF CONSTRUCTION. THE ENGINEER & OWNER SHALL BE NAMED AS ADDITIONAL INSURED. ALL CONTRACTORS EMPLOYED AT THE SITE SHALL BE COVERED BY WORKMAN'S COMPENSATION.

GENERAL CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL REQUEST A BENCH MARK FROM THE SURVEYOR IN THE SAME DATUM AS THE DESIGN PLANS.
2. FINISHED GRADES SHALL BE OF SUCH ELEVATION THAT THE GROUND WILL SLOPE AWAY FROM IT IN ALL DIRECTIONS.
3. CONSTRUCTION ACTIVITY SHALL BE LIMITED FROM 8:00 A.M. TO 6 P.M., AND NO CONSTRUCTION ACTIVITY SHALL OCCUR ON SUNDAYS OR LEGAL NEW YORK STATE HOLIDAYS. WHERE BLASTING IS NECESSARY, IT SHALL OCCUR FROM MONDAY THROUGH FRIDAY BETWEEN THE HOURS OF 8:00 A.M. AND 6:00 P.M. NO BLASTING SHALL OCCUR ON HOLIDAYS, SATURDAY OR SUNDAY. ALL BLASTING SHALL ALSO BE COMPLETED IN ACCORDANCE WITH THE TOWN OF YORKTOWN AND NEW YORK STATE BLASTING ORDINANCES.
4. NO CRUSHING/PROCESSING IS PERMITTED ON THE SITE WITHOUT PRIOR APPROVAL BY THETOWN OF YORKTOWN PLANNING BOARD.
5. ALL DEMOLITION DEBRIS SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN ACCORDANCE WITH FEDERAL, STATE, OR LOCAL STANDARDS. IF NECESSARY THE REMOVAL SHALL BE DONE BY A CONTRACTOR LICENSED TO REMOVE AND DISPOSE OF VARIOUS MATERIALS

SANITARY SEWER NOTES (NON-GRAVITY SYSTEM):

1. ALL WORK TO BE DONE IN ACCORDANCE WITH THE CODE OF THE TOWN OF YORKTOWN AND THE REGULATIONS OF THE WESTCHESTER COUNTY DEPARTMENT OF ENVIRONMENTAL FACILITIES.
2. SANITARY MANHOLES/CLEANOUT MANHOLES SHALL BE PRECAST CONCRETE.
3. ALL WORK SHALL BE MANUFACTURED IN ACCORDANCE WITH APPROVED STANDARDS. MANHOLE POSITIONING SHALL BE AS TO PREVENT THE ENTRANCE OF SURFACE WATER DURING STORMS. MANHOLE RIMS ARE TO BE WATER TIGHT IN AREAS SUBJECT TO POSSIBLE FLOODING CONDITIONS.
4. SANITARY SEWER CONSTRUCTION SHALL MEET ALL SEWER CONSTRUCTION SPECIFICATIONS FOR THE TOWN OF YORKTOWN.
5. THE TOWN ENGINEER SHALL BE NOTIFIED 48 HOURS PRIOR TO THE START OF ANY WORK AND THE WCDEF.
6. A CODE 753 SHALL BE CALLED BEFORE THE START OF ANY EXCAVATION WORK.
7. ALL SEWERS SHALL BE LAID AT LEAST 10 FT HORIZONTALLY FROM ANY EXISTING OR PROPOSED WATER MAIN. THE DISTANCE SHALL BE MEASURED EDGE TO EDGE.
8. MANHOLE STEPS SHALL BE CAST IRON NEENAH NO. R-1981-0 OR CAMPBELL FOUNDRY NO. 2588-1 OR POLYPROPYLENE COATED STEEL (SEE SPECIFICATIONS) OR APPROVED EQUAL.
9. UNLESS OTHERWISE SPECIFIED, SANITARY SEWER MANHOLES SHALL HAVE THE LETTERS "SEWER" CAST ON THE COVER.
10. MANHOLE COVERS AND STRUCTURES SHALL MEET OR EXCEED A.S.T.M. AND O.S.H.A. REQUIREMENTS AND MUST BE RATED FOR H-20 LOADING. MANHOLES MUST BE MIN. 48" DIAMETER.
11. ALL SANITARY STRUCTURES SHALL RECEIVE 2 MIL COATS OF BITUMINOUS MATERIAL "INERTOL NO. 49" KOPPERS SUPPER SERVICE BLACK OR APPROVED EQUAL, APPLIED IN ACCORDANCE WITH MANUFACTURE'S SPECIFICATIONS.
12. 0-RING JOINTS TO CONFORM TO A.S.T.M. DESIGNATION C-443 LATEST REVISION. JOINTS TO BE MORTARED INSIDE AND OUT USING NON-SHRINKING MORTAR.
13. PRE-CAST MANHOLE SECTIONS TO BE IN ACCORDANCE WITH "PRE-CAST REINFORCED CONCRETE MANHOLE SECTIONS" A.S.T.M. DESIGNATION C-478, LATEST REVISION, MINIMUM COMPRESSIVE STRENGTH TO BE 4000 P.S.I. 22. WHERE SEWER MAIN IS TO BE INSTALLED 10' DEEP OR GREATER, PVC SDR-26 SHALL BE USED.
14. WATER MAINS CROSSING HOUSE SEWERS, STORM SEWERS OR SANITARY SEWERS SHALL BE LAID TO PROVIDE A VERTICAL SEPARATION OF A MINIMUM OF 18" BETWEEN THE BOTTOM OF WATER MAIN AND TOP OF SEWER. IN ADDITION, ADEQUATE STRUCTURAL SUPPORT SHALL BE PROVIDED FOR THE SEWER TO PREVENT EXCESSIVE DEFLECTION OF THE JOINTS AND THE SEWER SETTLING AND BREAKING THE WATER MAIN. IN ADDITION THE LENGTH OF WATER PIPE IS TO BE CENTERED AT THE POINT OF CROSSING SO THAT THE JOINTS WILL BE EQUIDISTANT AND AS FAR AS POSSIBLE FROM THE SEWER. NO WATER MAIN SHALL PASS THROUGH OR COME IN CONTACT WITH ANY PART OF A SEWER OR SEWER MANHOLE.
15. MANHOLES AND SANITARY SEWER LINES SHALL BE TESTED TO CONFORM WITH WESTCHESTER COUNTY AS PER SANITARY SEWER TESTING NOTES BELOW.
16. THE WESTCHESTER COUNTY TOWN ENGINEER SHALL BE PROVIDED A 48 HOUR NOTICE PRIOR TO THE TESTING OF THE INSTALLED UTILITIES TO ALLOW WITNESSING OF TESTING BY THE DEPARTMENT.
17. ALL INSTALLATIONS AND TESTING SHALL BE IN ACCORDANCE WITH THE TEN STATES STANDARDS, LATEST VERSION.

SANITARY SEWER TESTING

PROCEDURE AND METHOD OF TESTING - THE TEST LENGTH INTERVALS AND TYPE OF LEAKAGE TEST SHALL BE APPROVED BY THE OWNER'S FIELD REPRESENTATIVE AND SITE ENGINEER. IN THE CASE OF SEWERS LAID ON STEEP GRADES, THE LENGTH OF LINE TO BE TESTED BY EXFILTRATION AT ANY ONE TIME MAY BE LIMITED BY THE MAXIMUM ALLOWABLE INTERNAL PRESSURE ON THE PIPE AND JOINTS AT THE LOWER END OF THE LINE. DEPENDING ON FIELD CONDITIONS AND/OR DESIRE OF THE CONTRACTOR, THE FOLLOWING TESTS FOR LEAKAGE MAY BE EMPLOYED:

1. LOW-PRESSURE AIR TEST OF PIPE LINES -
PLUG ALL OPENINGS IN THE TEST SECTION. ADD AIR UNTIL THE INTERNAL PRESSURE OF THE LINE IS RAISED TO APPROXIMATELY 4.0 PSI. AFTER THIS PRESSURE IS REACHED, ALLOW THE PRESSURE TO STABILIZE. THE PRESSURE WILL NORMALLY DROP AS THE AIR TEMPERATURE STABILIZES. THIS USUALLY TAKES 2 TO 5 MIN. DEPENDING ON THE PIPE SIZE. THE PRESSURE MAY BE REDUCED TO 3.5 PSI BEFORE STARTING THE TEST.

WHEN THE PRESSURE HAS STABILIZED AND IS AT OR ABOVE THE STARTING TEST PRESSURE OF 3.5 PSI, START THE TEST. IF THE PRESSURE DROPS MORE THAN 1.0 PSI DURING THE TEST TIME, THE LINE IS PRESUMED TO HAVE FAILED THE TEST. IF A 1.0-PSI DROP DOES NOT OCCUR WITHIN THE TEST TIME, THE LINE HAS PASSED THE TEST.

TEST TIMES ARE FOR A 1.0 PSI PRESSURE DROP FROM 3.5 TO 2.5 PSI. IF THE SECTION OF LINE TO BE TESTED INCLUDES MORE THAN ONE PIPE SIZE, CALCULATE THE TEST TIME FOR EACH SIZE AND ADD THE TEST TIMES TO ARRIVE AT THE TOTAL TEST TIME FOR THE SECTION. MINIMUM TEST TIMES FOR VARIOUS PIPE SIZES IN INCHES ARE AS FOLLOWS:

SIZE (INCHES)	TIME (MIN./100 FT.)
UP TO 8	1.2
10	1.5
12	1.8

Trenchless Installation:
Sub-Sections A through H are directly quoting sections of the NYS DOT guidance EI 07-017 Title: DESIGN GUIDANCE FOR TRENCHLESS INSTALLATION OF CASING

GENERAL
The intent of the specification is to pay the Contractor for opening a cased hole from one point to another, as indicated in the contract documents. For instances where a utility is to be installed, the item may be used to open a hole/pathway for the placement of the utility carrier pipe.
The specification is organized by casing size (XX denotes casing diameter size).

A. Pipe Jacking (PJ). A technique for installing a prefabricated pipe through the ground from a drive shaft to a reception shaft. The pipe is propelled by jacks located in the drive shaft. The jacking force is transmitted through the pipe to the face of the PJ excavation. The excavation is accomplished, and the spoil is transported out of the jacking pipe and shaft manually or mechanically. Both the excavation and spoil removal processes require workers to be inside the pipe during the jacking operation.
B. Microtunneling (MT). A remotely controlled, guided pipe-jacking process that provides continuous support to the excavation face. The guidance system usually consists of a laser mounted in the drive shaft communicating a reference line to a target mounted inside the MT machine's articulated steering head. The MT process provides ability to control excavation face stability by applying mechanical or fluid pressure to counterbalance the earth and hydrostatic pressures.
C. Horizontal Directional Drilling (HDD). A 2-stage process that consists of drilling a small diameter pilot directional hole along a predetermined path and then developing the pilot hole into a suitable bore hole that will accommodate the desired utility and then pulling the utility into place. The HDD process provides the ability to track the location of the drill bit and steer it during the drilling process. The vertical profile of the bore hole is typically in the shape of an arc entrapping drilling fluid to form a slurry pathway rather than an open hole. This entrapped slurry provides continuous support to the bore hole.
D. Because trenchless installations are typically specified to minimize/eliminate disturbance to the surrounding area, the specification dictates monitoring tasks for the Contractor to perform. A survey of the existing ground surface along the proposed path of casing installation, prior to the start of work, will establish baseline data. The trenchless installation process will be closely monitored during its operation to minimize/eliminate ground movements. The designer should ensure that the project contains Item 625.01 Survey and Stakeout.
E. If Pipe Jacking or Utility Tunneling is determined to be the method of installation during construction (both the excavation and spoil removal processes require workers to be inside the pipe during the jacking operation), work will proceed in accordancewith§107-05 R. Confined Spaces and a written confined space plan (addresses prevention of unauthorized entry, type of hazard, work practices, monitoring, provision for attendant, duties of employees, rescue and emergency medical services, multi-employer operations, and provisions for review procedures).
F. Pipe Jacking (PJ). The pipe jacking method installs a prefabricated pipe through the ground from a drive shaft to a reception shaft by propelling it by jacks located in the drive shaft. The jacking force is transmitted through the pipe to the face of the PJ excavation. Therefore, the type of casing must be capable of transmitting the required jacking forces from the thrust plate to the jacking shield. Steel casing, reinforced concrete pipe (RCP), or glass-fiber reinforced plastic pipe (GFRP) are the most common types of casing used.
● Steel pipe shall be bare steel casing pipe meeting the requirement of ASTM A53, Grade B, Types E or S, or approved equal. The ends shall be prepared for butt welding and beveledat37½degrees.
● Reinforced concrete pipe shall meet the requirements of §706-02 Reinforced Concrete Pipe for Class V, except that the exterior barrier shall be smooth.
G. Microtunneling (MT). The microtunneling method is a remotely controlled, guided pipe-jacking process. Since the microtunneling process is cyclic pipe jacking process, the discussion on the pipe jacking method applies. Steel casing, reinforced concrete pipe (RCP), or glass-fiber reinforced plastic pipe (GFRP) are the most common types of casing used.● Steel pipe shall be bare steel casing pipe meeting the requirement of ASTM A53, GradeB, Types E or S, or approved equal. The ends shall be prepared for butt welding andbeveledat37½degrees.● Reinforced concrete pipe shall meet the requirements of §706-02 Reinforced ConcretePipe for Class V, except that the exterior barrier shall be smooth.
H. Horizontal Directional Drilling (HDD). The horizontal directional drilling method consists of drilling a small diameter pilot directional hole along a predetermined path and then developing the pilot hole into a suitable bore hole that will accommodate the desired utility and then pulling the utility into place. The type of casing is limited to one which can be joined together continuously, while maintaining sufficient strength to resist the high tensile stresses imposed during the pullback operation. Steel casing or butt-fused, high density polyethylene pipe (HDPE) are the most common types of casing used.● Steel pipe shall be bare steel casing pipe meeting the requirements of ASTM A53,Grade B, Types E or S, or approved equal. The ends shall be prepared for butt weldingandbeveledat37½degrees.● High Density Polyethylene (HDPE) pipe shall be SDR-9 or SDR-11 and shall meet the requirements of AWWA C906, PPI PE 3408 and ASTM D3350 B PE 345444C.

Continuation of Construction Sequence
STREAM CROSSING JACKING PIT CONSTRUCTION SEQUENCE:

REFER TO THE PLAN SET FOR ALL PLANS AND DETAILS WHICH RELATE TO CONSTRUCTION SEQUENCE.
1. PRIOR TO ANY WORK, A LICENSED SURVEYOR MUST DEFINE INFRASTRUCTURE LOCATIONS, LIMITS OF DISTURBANCE, STORMWATER BASIN LIMITS, AND GRADES IN THE FIELD. LIMITS OF DISTURBANCE SHALL BE MARKED WITH THE INSTALLATION OF CONSTRUCTION FENCE OR APPROVED EQUAL.
2. INSTALL ALL PERIMETER EROSION CONTROL MEASURES, CONSTRUCTION ACCESS AS SHOWN ON THE EROSION AND SEDIMENT CONTROL PLAN AND THE ASSOCIATED DETAILS. INSTALL SILT FENCING AT THE BOTTOM OF SLOPES. DELINEATE CLEARING LIMIT WITH ORANGE CONSTRUCTION FENCE.
3. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK USING HIS BEST SKILL AND ATTENTION. HE SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES AND FOR COORDINATING ALL PARTS OF THE WORK UNDER HIS CONTRACT.
4. THE CONTRACTOR WILL ENSURE ALL DEC REGULATIONS AND STANDARDS ARE ADHERED TO FOR THE PROTECTION OF LOCAL FAUNA, FLORA, WATERWAYS AND OVERALL ENVIRONMENT.
5. THE CONTRACTOR SHALL SUBMIT FOR APPROVAL THE CHOSEN METHOD AND MATERIALS FOR THE TRENCHLESS UTILITY OPERATION.
6. EXCAVATE JACKING PIT AS PER PLAN TO THE DEPTH REQUIRED TO ACHEIVE ADEQUATE DEPTH FOR BORING UNDER STREAM. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING FINAL ELEVATIONS FOR CROSSING UNDER THE STREAM. THE PITS SHALL BE EXCAVATED WITH A SAFE SIDE SLOPE 2H:2V OR PROVIDE SHEETING. SHEETING SHALL BE DESIGNED BY A LICENSED PROFESSIONAL ENGINEER.
7. THE CONTRACTOR SHALL INSTALL TEMPORARY THE DEWATERING PIT, SILT BAG, AND PUMP TO REMOVE WATER FROM THE EXCAVATION.
8. THE CONTRACTOR SHALL PROCEED WITH THE BORING OPERATION INSTALLING ADEQUATE SLEEVING FOR ENCASING THE PROPOSED SEWER LINES 1 $\frac{1}{2}$" Ø PVC SCH40 SOLID OR FLEXIBLE FORCE MAIN AND 8" Ø SDR 35 PIPE ACROSS THE BROOK.
9. ONCE THE PIPES ARE IN PLACE AND ALL CONNECTIONS MADE THE PIT MAY BE BACKFILLED. THE PIPES SHOULD FIRST BE COVERED WITH AT LEAST 12" OF DENSE SAND. THE PIT CAN THEN BE BACKFILLED WITH THE NATIVE SOIL IN TWO FOOT COMPACTED LIFTS. SOIL MUST BE DRY. BACKFILLING WITH WET, MOIST OR DAMP SOIL IS NOT PERMISSIBLE.
10. ONCE BACKFILLING IS COMPLETE RESTORE SURFACE CONDITIONS AS SPECIFIED BY THE OWNER.

0 5 10 20
SCALE: 1"=10'-0"

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Project No. 24-31

Engineer:
Joseph C. Riina, P.E.
NYS Lic. No. 64431

Revisions:

No.	Date	Comments:

SCALE: ########
DRAWN BY: JPT
DATE: 3-12-25

PROJECT NOTES

PREPARED FOR
TOWN OF YORKTOWN GOLF COURSE
795 EAST MAIN STREET (ROUTE 6)
Town of Yorktown Westchester, NY

Sheet 4 of 6

GENERAL EROSION CONTROL NOTES:

1. Contractor shall be responsible for compliance with all sediment and erosion control practices. The sediment and erosion control practices are to be installed prior to any major soil disturbances, and maintained until permanent protection is established. Road surface flows from the site should be dissipated with tracking pad or appropriate measures during adjacent road shoulder regrading. Contractor is responsible for the installation and maintenance of all soil erosion and sedimentation control devices throughout the course of construction.
2. Catch basin inlet protection must be installed and operating at all times until tributary areas have been stabilized. When possible flows should be stabilized before reaching inlet protection structure. Timely maintenance of sediment control structures is the responsibility of the Contractor.
3. All structures shall be maintained in good working order at all times. The sediment level in all sediment traps shall be closely monitored and sediment removed promptly when maximum levels are reached or as ordered by the engineer. All sediment control structures shall be inspected on a regular basis, and after each heavy rain to insure proper operation as designed. An inspection schedule shall be set forth prior to the start of construction.
4. The locations and the installation times of the sediment capturing standards shall be as specified in these plans, as ordered by the Engineer, and in accordance with the latest edition of the "New York Standards and Specifications for Erosion and Sediment Control" (NYSSESC).
5. All topsoil shall be placed in a stabilized stockpile for reuse on the site. All stockpile material required for final grading and stored on site shall be temporarily seeded and mulched within 7 days. Refer to soil stockpile details.
6. Any disturbed areas that will be left exposed more than 7 days and not subject to construction traffic, shall immediately receive temporary seeding. Mulch shall be used if the season prevents the establishment of a temporary cover. Disturbed areas shall not be limed and fertilized prior to temporary seeding.
7. All disturbed areas within 500 feet of an inhabited dwelling shall be wetted as necessary to provide dust control.
8. The contractor shall keep the roadways within the project clear of soil and debris and is responsible for any street cleaning necessary during the course of the project.
9. Sediment and erosion control structures shall be removed and the area stabilized when the drainage area has been properly stabilized by permanent measures.
10. All sediment and erosion control measures shall be installed in accordance with current edition of NYSSESC.
11. All regraded areas must be stabilized appropriately prior to any rock blasting, cutting, and/or filling of soils. Special care should be taken during construction to insure stability during maintenance and integrity of control structures.
12. Any slopes graded at 3:1 or greater shall be stabilized with erosion blankets to be staked into place in accordance with the manufactures requirements. Erosion blankets may also be required at the discretion of Town officials or Project Engineer. When stabilized blanket is utilized for channel stabilization, place all of the volume of seed mix prior to laying net, or as recommended by the manufacturer.
13. To prevent heavy construction equipment and trucks from tracking soil off-site, construct a pervious crushed stone pad. Locate and construct pads as detailed in these plans.
14. Contractor is responsible for controlling dust by sprinkling exposed soil areas periodically with water as required. Contractor to supply all equipment and water.
15. Contractor shall be responsible for construction inspections as per NYSDEC GP-0-25-001 and Town of Yorktown.

MAINTENANCE OF TEMPORARY EROSION AND SEDIMENT CONTROL STRUCTURES:

N.Y.S.D.E.C. GP-0-25-001 EXPOSURE RESTRICTIONS - States that any exposed earthwork shall be stabilized in accordance with the guidelines of this plan.

1. Trees and vegetation shall be protected at all times as shown on the detail drawing and as directed by the Engineer.
2. Care should be taken so as not to channel concentrated runoff through the areas of construction activity on the site.
3. Fill and site disturbances should not be created which causes water to pond off site or on adjacent properties.
4. Runoff from land disturbances shall not be discharged or have the potential to discharge off site without first being intercepted by a control structure, such as a sediment trap or silt fence. Sediment shall be removed before exceeding 50% of the retention structure's capacity.
5. For finished grading, adequate grade shall be provided so that water will not pond on lawns for more than 24 hours after rainfall, except in swale flow areas which may drain for as long as 48 hours after rainfall.
6. All swales and other areas of concentrated flow shall be properly stabilized with temporary control measures to prevent erosion and sediment travel. Surface flows over cut and fill areas shall be stabilized at all times.
7. All sites shall be stabilized with erosion control materials within 7 days of final grading.
8. Temporary sediment trapping devices shall be removed from the site within 30 days of final stabilization.

MAINTENANCE SCHEDULE:

	DAILY	WEEKLY	MONTHLY	AFTER RAINFALL	NECESSARY TO MAINTAIN FUNCTION	AFTER APPROVAL OF INSPECTOR
SILT FENCE	– – –	– – – –	INSP.	INSP.	CLEAN/ REPLACE	REMOVE

MAINTENANCE OF PERMANENT CONTROL STRUCTURES DURING CONSTRUCTION:

The stormwater management system and outlet structure shall be inspected on a regular basis and after every rainfall event. Sediment build up shall be removed from the inlet protection regularly to insure detention capacity and proper drainage. Outlet structure shall be free of obstructions. All piping and drain inlets shall be free of obstruction. Any sediment build up shall be removed.

MAINTENANCE OF CONTROLS AFTER CONSTRUCTION:

Controls (including respective outlet structures) should be inspected periodically for the first few months after construction and on an annual basis thereafter. They should also be inspected after major storm events.

DEBRIS AND LITTER REMOVAL:

Twice a year, inspect outlet structure and drain inlets for accumulated debris. Also, remove any accumulations during each mowing operation.

STRUCTURAL REPAIR/REPLACEMENT:

Outlet structure must be inspected twice a year for evidence of structural damage and repaired immediately.

EROSION CONTROL:

Unstable areas tributary to the basin shall immediately be stabilized with vegetation or other appropriate erosion control measures.

SEDIMENT REMOVAL:

Sediment should be removed after it has reached a maximum depth of five inches above the stormwater management system floor.

TOPSOIL:

Existing topsoil will be removed and stored in piles sufficiently as to avoid mixing with other excavation. Stockpiles shall be surrounded by erosion control as outlined on these plans. The furnishing of new topsoil shall be of a better or equal to the following criteria (SS713.01 NYSDOT):

1. The pH of the material shall be 5.5 to 7.6.
2. The organic content shall not be less than 2% or more than 70%.
3. Gradation:

SIEVE SIZE	% PASSING BY WGT.
2 INCH	100
1 INCH	85 TO 100
1/4 INCH	65 TO 100
NO. 200 MESH	20 TO 80

PERMANENT VEGETATIVE COVER:

1. Site preparation:
   - 1.1. Install erosion control measures.
   - 1.2. Scarify compacted soil areas.
   - 1.3. Lime as required to ph 6.5.
   - 1.4. Fertilize with 10-6-4 4 lbs/1,000 S.F.
   - 1.5. Incorporate amendments into soil with disc harrow.
2. Seed mixtures for use on swales and cut and fill areas.

MIXTURE		LBS./ACRE
ALT. A	KENTUCKY BLUE GRASS	20
	CREEPING RED FESCUE	28
	RYE GRASS OR REDTOP	5
ALT. B	CREEPING RED FESCUE	20
	REDTOP	2
	TALL FESCUE/SMOOTH BLOOMGRASS	20

3. SEEDING
   - 3.1. Prepare seed bed by raking to remove stones, twigs, roots and other foreign material.
   - 3.2. Apply soil amendments and integrate into soil.
   - 3.3. Apply seed uniformly by cyclone seeder culti-packer or hydro-seeder at rate indicated.
   - 3.4. Stabilize seeded areas in drainage swales.
   - 3.5. Irrigate to fully saturate soil layer, but not to dislodge planting soil.
   - 3.6. Seed between April 1st and May 15th or August 15th and October 15th.
   - 3.7. Seeding may occur May 15th and August 15th if adequate irrigation is provided.

TEMPORARY VEGETATIVE COVER:

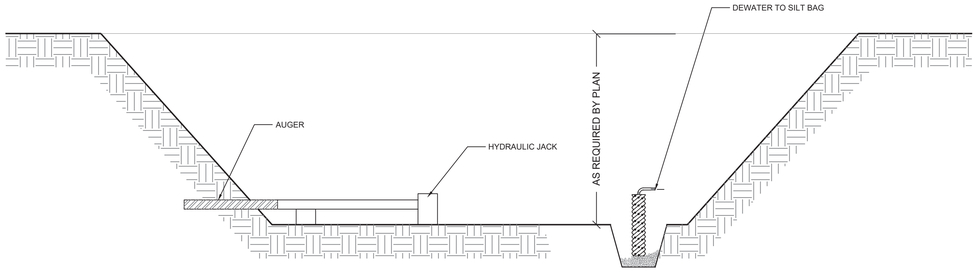
SITE PREPARATION:

1. Install erosion control measures.
2. Scarify areas of compacted soil.
3. Fertilize with 10-10-10 at 400/acre.
4. Lime as required to ph 6.5.

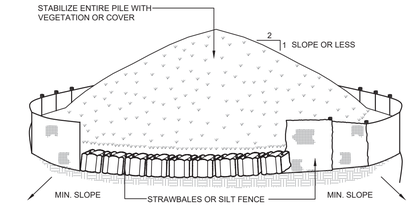
SEED SPECIES:

MIXTURE	LBS./ACRE
Rapidly germinating annual ryegrass (or approved equal)	20
Perennial ryegrass	20
Cereal oats	36

SEEDING:
Same as permanent vegetative cover



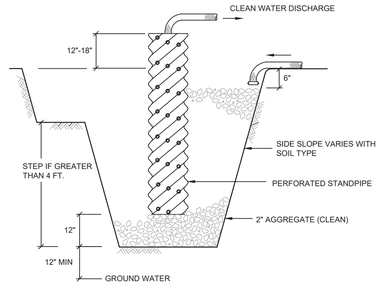
JP-1 — JACKING PIT DETAIL
NOT TO SCALE



SYMBOL: SS

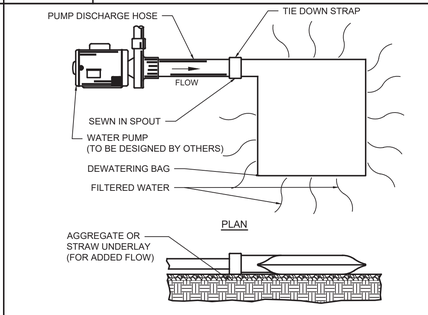
NOTES:
1. Area chosen for stockpiling operations shall be dry and stable.
2. Maximum slope of stockpile shall be 1:2.
3. Upon completion of soil stockpiling, each pile shall be surrounded with either silt fencing or strawbales, then stabilized with vegetation or covered.
4. See detail for installation of silt fence.

E-1 — SOIL STOCKPILE DETAIL
NOT TO SCALE



INSTALLATION NOTES:
1. Pit dimensions are variable.
2. The standpipe should be a perforated 12" to 24" diameter corrugated metal, PVC or HDPE pipe.
3. A base of 2" clean aggregate should be placed in the pit to a depth of 12". After installing the standpipe, the pit surrounding the standpipe should then be backfilled with 2" aggregate.
4. The standpipe should extend 12" - 18" above the lip of the pit.
5. If discharge will be pumped directly to a storm drainage system, the standpipe should be wrapped with filter fabric before installation. If desired, 1/4" - 1/2" hardware cloth may be placed around the standpipe, prior to attaching the filter fabric, this will increase the rate of water seepage into the pipe.

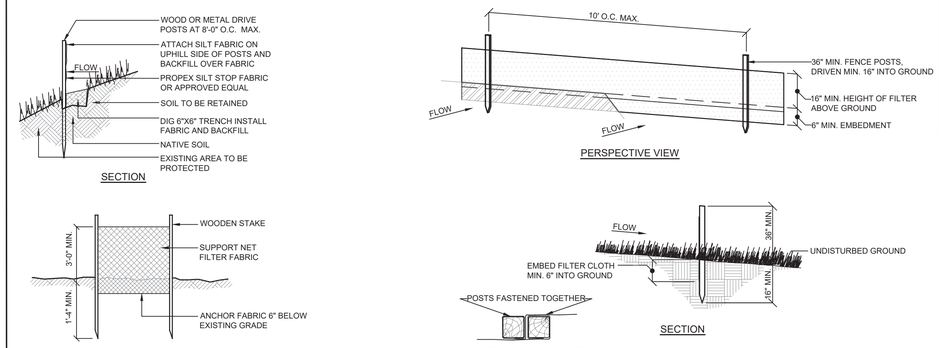
E-2 — DEWATERING PIT DETAIL
NOT TO SCALE



NOTE: THE DANDY DEWATERING BAG© WILL BE MANUFACTURED IN THE U.S.A. FROM A NONWOVEN POLYPROPYLENE FABRIC THAT MEETS OR EXCEEDS THE FOLLOWING SPECIFICATIONS:

Mechanical Properties	Test Method	Units	MARV
Grab Tensile Strength	ASTM D 4632	kN (lbs)	0.9 (205) x 0.9 (205)
Grab Tensile Elongation	ASTM D 4632	%	50 x 50
Puncture Strength	ASTM D 4833	kN (lbs)	0.58 (130)
Mullen Burst Strength	ASTM D 3786	kPa (psi)	2618 (380)
Trapezoid Tear Strength	ASTM D 4533	kN (lbs)	0.36 (80) x 0.36 (80)
UV Resistance	ASTM D 4355	%	70
Apparent Opening Size	ASTM D 4751	Mm (US Std Sieve)	0.180 (80)
Flow Rate	ASTM D 4491	l/min/m² (gal/min/ft²)	3866 (95)
Permittivity	ASTM D 4491	Sec⁻¹	1.2

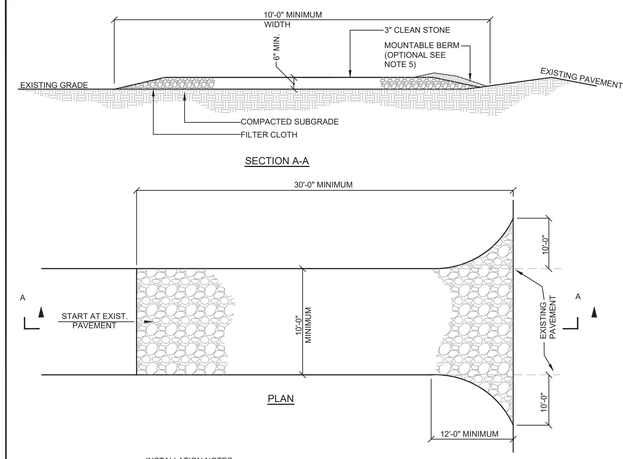
E-3 — DEWATERING BAG DETAIL
NOT TO SCALE



NOTES:
1. Filter cloth to be fastened securely to upgrade side of post: steel posts (either T or U Type) or 2" hardwood posts at top and mid section.
2. When two sections of filter cloth adjoin each other they shall be overlapped by 6 inches and folded. Filter cloth shall be Mirafi 100x, Stabilinka T140n or approved equal
3. Maintenance shall be performed as needed and material removed when "bulges" develop in the silt fence or the capacity reaches 50%.
4. Excavate 6 inch trench along the silt fence line and bury the fabric.
5. Unroll a section at a time and position the post against the back (downstream) wall of the trench.
6. Drive the post into the ground until the netting is approximately 2 inches from the trench bottom.
7. Lay the toe-in flap of fabric onto the undisturbed bottom of the trench, backfill the trench and tamp the soil. Steeper slopes require an intercept trench.
8. Join sections as shown above.

SYMBOL

E-4 — SILT FENCE DETAIL
NOT TO SCALE



INSTALLATION NOTES:
1. Stone size - use 3" min. Stone, or reclaimed or recycled concrete equivalent.
2. Length - as required, but not less than 50 feet (except on a single residence lot where a 30 foot minimum length would apply.
3. Thickness - not less than six (6) inches.
4. Width - 10 foot minimum, but not less than the full width at points where ingress or egress occur. 24 ft if single entrance to site.
5. Surface water - all surface water flowing or diverted toward construction entrances shall be piped across the entrance. If piping is impractical, a mountable berm with 5:1 slopes will be permitted.
6. Maintenance - the entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto public right of way this may require periodic top dressing with additional stone as conditions demand and repair and/or cleanouts of any measures used to trap sediment. All sediment spilled, dropped, washed or tracked onto public right of way must be removed immediately.
7. Washing - wheels shall be cleaned to remove sediment prior to entrance onto public right of way. When washing is required, it shall be done on an area stabilized with stone and which drains into an approved sediment trapping device.
8. Periodic inspection and needed maintenance shall be provided after each rain

SYMBOL

E-5 — STABILIZED CONSTRUCTION ENTRANCE DETAIL
NOT TO SCALE

Site Design Consultants
Civil Engineers • Land Planners
251-F Underhill Avenue, Yorktown Heights, NY 10598
(914) 962-4488 - Fax: (914) 962-7386
www.sitedesignconsultants.com

Project No. 24-31

Engineer: Joseph C. Riina, P.E. NYS Lic. No. 64431

Revisions:

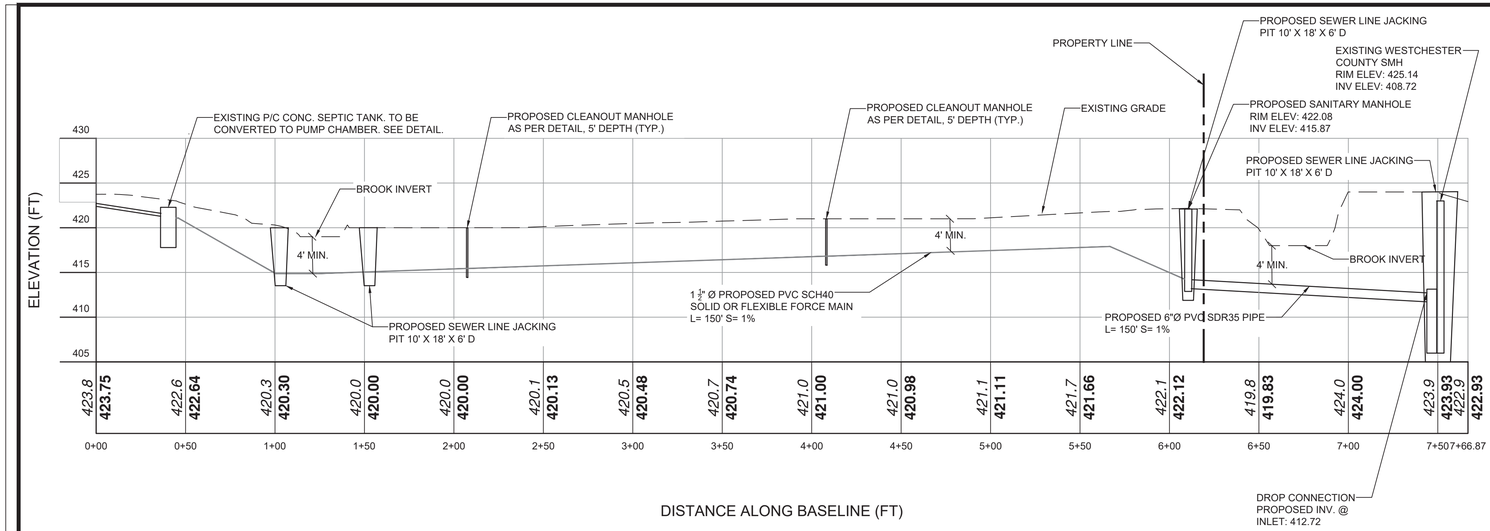
No:	Date	Comments:

SCALE: ########
DRAWN BY: JPT
DATE: 3-12-25

E & SC DETAILS

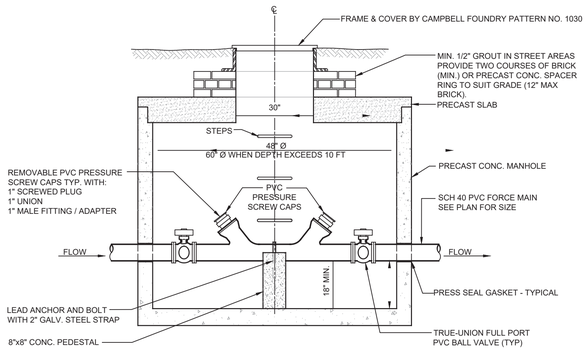
PREPARED FOR
TOWN OF YORKTOWN
GOLF COURSE
795 EAST MAIN STREET (ROUTE 6)
Town of Yorktown — Westchester, NY

Sheet 5 of 6



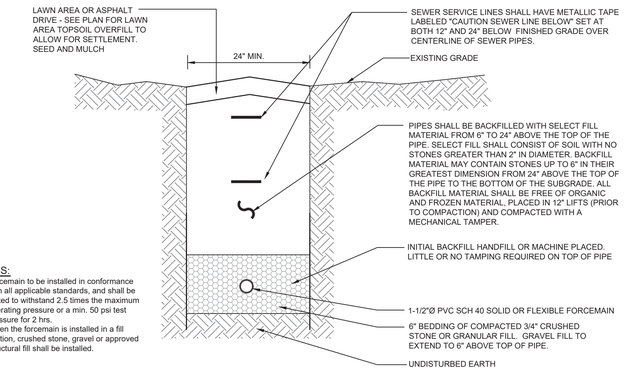
DISTANCE ALONG BASELINE (FT)

SEWER PROFILE
VERT. SCALE: 1" = 8
HORIZ. SCALE: 1" = 40



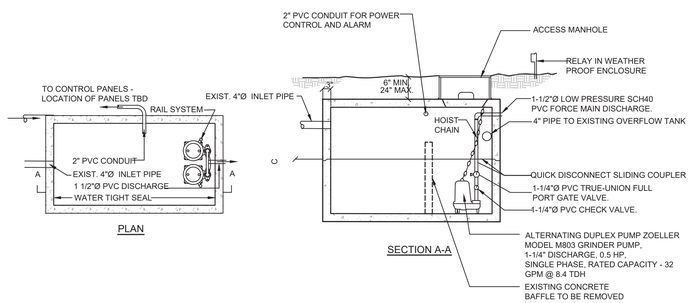
NOTES:
1. All fittings to be white H.D. as manufactured by GPK Products Inc. or approved equal.
2. Valves shall be PVC as manufactured by Nibco or equal.
3. Concrete manhole shall be rated for H-20 vehicle loading.

S-1 FORCE MAIN CLEAN-OUT DETAIL
NOT TO SCALE



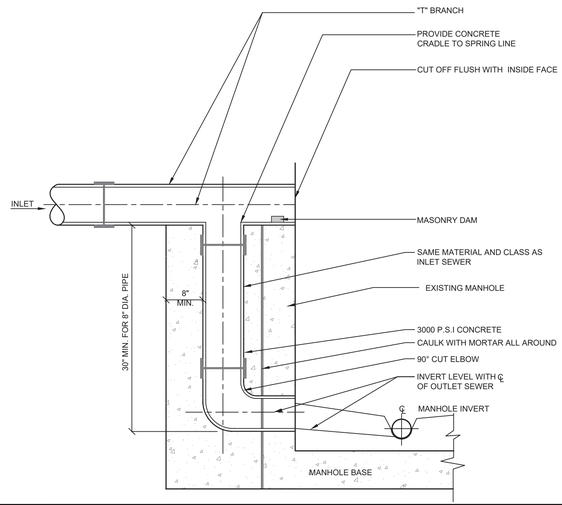
NOTES:
1. Forcemain to be installed in conformance with all applicable standards, and shall be tested to withstand 2.5 times the maximum operating pressure or a min. 50 psi test pressure for 2 hrs.
2. When the forcemain is installed in a fill section, crushed stone, gravel or approved structural fill shall be installed.

S-2 LOW PRESSURE FORCE MAIN DETAIL
NOT TO SCALE

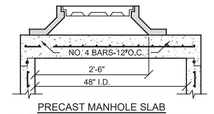


NOTES:
1. Pump shall be an Alternating Duplex Zoeller Model M803 Grinder Pump, 1-1/4" Discharge, 0.5 HP, Single Phase, Rated Capacity - 32 GPM @ 8.4 TDH
2. The Contractor shall provide one (1) spare pump of equal size to be maintained on site at all times.
3. Contractor shall supply and install pump control panel and alarm within the building or other approved location.
4. All electrical work and material for pump installations shall comply with the National Electric Code.
5. An Electrical Underwriter's Certificate for the pump chamber must be provided to the Town Engineer prior to the Department's conducting a final inspection of the pump chamber.

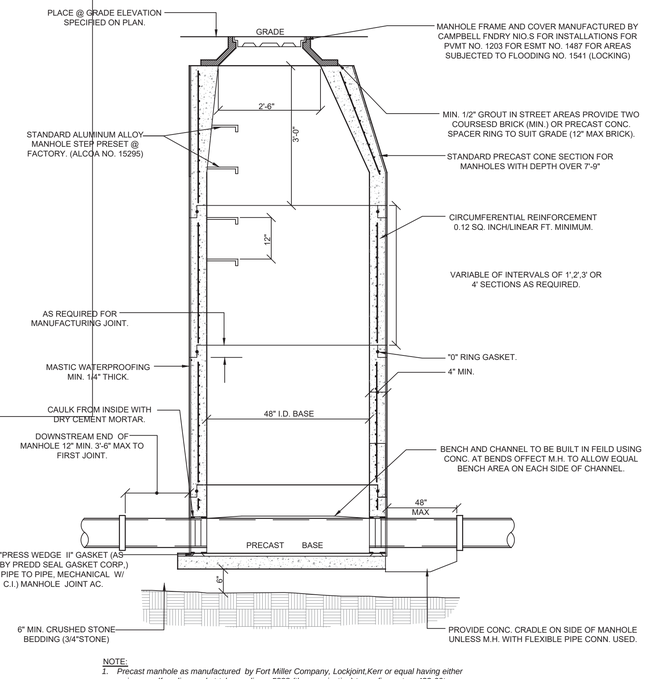
S-3 PUMP CHAMBER DETAIL
NOT TO SCALE



S-4 DROP MANHOLE DETAIL
NOT TO SCALE

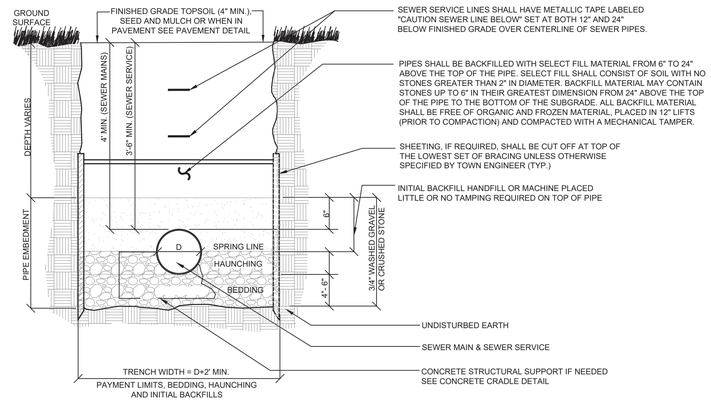


PRECAST MANHOLE SLAB
TO BE USED ON MANHOLES HAVING A DEPTH LESS THAN 7'-9" DESIGNED FOR H-20 TRUCK LOADING WITH 50% IMPACT



NOTE:
1. *Precast manhole as manufactured by Fort Miller Company, Lockjoint,Kerr or equal having either o-ring or self sealing gasket-tylex-cr-die no.5888 (three projection) to confirm astm-c433-60t*

S-6 SEWER MANHOLE DETAIL
NOT TO SCALE



NOTES:
1. Sewer pipe shall be PVC SDR-35 in all cases except where depth of cover exceeds 10 ft. In cases where cover exceeds 10 ft, sewer pipe shall be a min. PVC SDR-26. When a sewer main is installed in a fill section, the fill shall be compacted to a min. 95% standard proctor and certified to the Town of Cortlandt.
2. No rock is to project into within the edges of the trench. In rock excavation pipe shall be a min. of 6" over and away from rock.
3. Backfill shall be placed so as to not disturb the pipe alignment.
4. In areas where adequate cover can not be maintained for sewer main, proper protection shall be provided against freezing and superimposed loading.

S-5 SEWER MAIN / SEWER SERVICE TRENCH DETAIL
NOT TO SCALE

Site Design Consultants
Civil Engineers • Land Planners
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SEWER DETAILS

PREPARED FOR
TOWN OF YORKTOWN
GOLF COURSE
795 EAST MAIN STREET (ROUTE 6)
Yorktown, NY
Town of Yorktown
Westchester, NY

Sheet 6 of 6