

### CONSTRUCTION NOTES:

- The contractor is advised that additional notes will be found on subsequent drawings and such notes, while pertaining to the specific drawings they are placed in, also supplement the construction notes listed hereon.
- All work and materials shall be in accordance with these plans and project specifications.
- The contractor shall notify the Engineer 72 hours prior to start of work.
- The subject project has coverage under the New York State Department of Environmental Conservation SPDES General Permit for Stormwater Discharges from Construction Activity, permit No. GP-0-20-001. As required by the permit all contractors and subcontractors will be required to sign a certification statement that they understand and agree to comply with the requirements of GP-0-20-001.
- The contractor shall have a representative onsite that is a NYSDEC Trained Contractor at all times site work is being performed under this contract. The contractor shall provide a contractor's certification as contained in the NYSDEC Construction Site Logbook to the project engineer upon start of construction.
- The contractor shall coordinate the layout of the work with the owner, and the project engineer, and eliminate all conflicts including but not limited to utility location conflicts, prior to commencement of any proposed work.
- The contractor shall coordinate their construction operations with the project engineer and any other contractors/subcontractors and construction activities occurring simultaneously on the property.
- The contractor shall be responsible for providing all power, water, and other resources necessary to complete the project work.
- Minimum OSHA site standards must be maintained including personal protective equipment and vests. The contractor shall be responsible for guarding and protecting all open excavations in accordance with the latest edition and current OSHA requirements.
- The contractor shall field verify all dimensions relative to the scope of work.
- The contractor shall stake out the limits of clearing and it shall be reviewed with the project engineer prior to the start of clearing operations. Existing trees to remain outside the limits of clearing shall be protected per the detail.
- It shall be the contractor's responsibility to identify and protect all underground utilities. The contractor shall contact Dig Safely New York at 811 or 1-800-362-7962 and any other required utility locators prior to the start of construction.
- The exact location, size, and type of the existing utilities may differ from what is shown hereon. The contractor shall field verify the location, size and type of the existing utilities by performing a test pit ahead of construction as necessary to permit revisions to meet existing utilities or relocate proposed utilities as required. Horizontal location and elevation of the existing utility as determined by test pit shall be provided to the project engineer.
- The contractor shall field verify the existing grades / utility locations prior to commencement of any work. Any discrepancy shall be reported to the project engineer when identified.
- The contractor shall perform all work with care so that any materials which are to remain in place, or which are to remain on the property, shall not be damaged. The contractor will be held responsible for all damage caused to existing utilities / features / facilities / vegetation during execution of the work not proposed to be modified or removed by these plans. All damage to any existing utilities / features / facilities / vegetation not proposed to be modified by the contract shall be repaired or replaced by the contractor to the satisfaction of the owner at no additional cost.
- Original condition shall mean the condition in which the feature was found (or better) at the start of construction.
- The contractor shall be responsible for the implementation and maintenance of erosion and sediment controls (shown or not) as necessary to prevent erosion and migration of sediment outside of the contract limit line or into the stormwater collection system. Erosion and sediment controls may include but are not limited to silt fence, stabilized construction entrance, berms and inlet protection. All erosion and sediment controls shall be installed in accordance with the New York State Standards and Specifications for Erosion and Sediment Control. Additional erosion and sediment controls may be required during construction by the project engineer. All disturbed areas shall be stabilized in accordance with the Erosion & Sediment Control Notes and details.
- Silt fence shall be installed parallel to the contours.
- Contractor is responsible for protecting soil stockpiles, trenches, and building excavations against weather. No additional fee will be paid to the contractor for removal and replacement of suitable soils due to degradation from weather related events.
- During execution of the work, the contractor shall be responsible for dewatering and control of surface water in accordance with the New York State Standards and Specifications for Erosion and Sediment Control. The New York State Standards and Specifications for Erosion and Sediment Control can be found at <http://www.dec.ny.gov/chemical/29066.html>.
- All existing pavement shall be cleaned and swept prior to the completion of construction.
- The contractor shall provide temporary construction fence for all work areas including the material storage/staging areas.
- All personal vehicles, materials, and construction equipment must be kept within the construction staging area. Use of additional onsite storage areas must be pre-authorized by the owner or the property.
- Topsoil and subsoil shall be stripped, screened, and stockpiled in locations shown for future use. The contractor must keep enough topsoil onsite for final restoration. Four inches of screened topsoil shall be placed and raked to finish grade over all disturbed areas not covered by pavement, concrete and/or gravel surfaces, unless otherwise noted.
- The contractor shall maintain existing grades unless otherwise noted.
- Contractor shall be responsible for removal of all excess rock, topsoil, subsoil, and construction debris from the site.
- There shall be no burning of construction and demolition (C&D) debris or stumps on site. All C&D debris and stumps must be removed by the contractor, and disposed of in accordance with all pertinent regulations.
- All proposed concrete drainage structures shall be precast concrete and all structures, frames, and grates are to meet H-20 loading requirements.
- Design Engineer to approve locations and elevations of all structures prior to placement.
- Unless otherwise shown on the drawings the contractor shall match the material, thickness and quality of all existing pavements that are to be replaced.
- The contractor will be responsible for the implementation of all maintenance and protection of traffic (MP&T) measures if necessary. MP&T shall include but not be limited to placement of traffic cones and warning signs around work zone. Safe and adequate pedestrian vehicular traffic flow shall be maintained at all times to the existing buildings, while the work is in progress.

### REMOVAL NOTES

- The contractor shall provide all removals incidental and necessary to execute the work prescribed in the contract documents. All existing features specified to be removed shall be removed in their entirety unless otherwise authorized in writing by the owner or the project engineer.
- These drawings are intended to show an overall Limit of Disturbance and general features to be removed. Not all features incidental to the general scope of the site work have been shown to be removed. The contractor shall be responsible for all removals within the limits of both above and below grade features, necessary for the construction of the site improvements shown hereon.
- All building materials shall be demolished and removed from the site.
- Remove existing electrical wiring and conduit back to the source panel.

### LOCATION MAP

SCALE: 1" = 500'

### OWNER/APPLICANT:

KJ--Rant Realty LLC  
100 Business Park Drive  
Armonk, NY 10504

### SITE DATA:

Zone: B1, Business 1  
Total Acreage: 4.2± AC  
Tax Map No.: 7056-05-101917  
Watershed: East Branch

### GENERAL NOTES:

- Property line and existing features shown hereon are based on Survey of Property, prepared for KJ--Rant Realty LLC, prepared by Insite Engineering, Surveying, and Landscape Architecture, P.C., dated April 5, 2018.
- Topography shown hereon is based upon actual fieldwork performed by Insite Engineering, Surveying & Landscape Architecture, P.C. and completed December 12, 2005. Elevations shown conform to the National Geodetic Survey Standard Vertical Datum of 1929 (N.G.S.S.V.D. 1929). The contour interval is 2'. Supplemental topographic information on the north side of the side split the limits of existing pavement shown hereon taken from Dutchess County GIS Data.
- Existing poles and overhead wires on southern and western portions of the site to be removed and replaced with underground utilities. All electric, telephone, cable and other utilities to be installed underground. The installation of the underground utilities to be coordinated with the appropriate utility companies.
- It shall be the contractors responsibility to identify and protect all underground utilities. The contractor shall contact Dig Safely New York at 811, and any other required utility locators prior to the start of construction.
- All onsite rock removal to be done by a licensed and insured contractor. No rock processing shall be permitted onsite.
- The Contractor shall contact the Village Street Foreman prior to the start of any construction within the East Main Street right-of-way.
- Any retaining wall with a retained height of soil in excess of 4 feet shall require structural design drawings and calculations signed and sealed by a licensed professional engineer. The signed and sealed drawings and calculations must be provided to the consulting Town Engineer prior to the wall being constructed.
- Tree clearing can only be performed between October 1st and March 31st.

### UTILITY NOTES:

- The locations of existing utilities, water, sewers, and drainage structures have been indicated based on the best available information. It is possible that the actual subsurface utilities and piping may vary from that indicated. Therefore, prior to starting work in any area, the contractor shall take the necessary steps to determine the locations of all existing underground piping, conduit and structures. The contractor shall carry out their operations in such a manner as to prevent interference with lines which are to remain. Any pipe or conduit disturbed in the course of contract shall be repaired by the contractor at no extra cost to the owner.
- Existing utility locations, sizes and elevations to be verified by contractor prior to the start of construction and any discrepancies reported to the project engineer immediately.
- Whenever a connection to an existing pipe or structure is shown, the contractor shall confirm existing pipe materials of construction, dimensions, and connection requirement prior to submitting materials for approval.
- Where interference with other utilities or construction are encountered during construction of new utility lines, the contractor may adjust the alignment or invert elevations of that system only at the direction of the project engineer.
- It shall be the contractor's responsibility to locate all overhead wires and utility poles, if any, in the vicinity of the proposed work. Furthermore, it is the contractor's responsibility to make the necessary arrangements to perform the work in the vicinity of these overhead wires.
- The contractor shall exercise extreme caution when working adjacent to active power and communication lines to prevent damage to these lines. The contractor shall hand excavate test pits to expose those lines prior to performing any other excavation work in the area. The contractor shall repair at their expense, any power or communication interruption immediately.
- Should any utility poles require bracing or relocating to accomplish the proposed work, it shall be the contractor's responsibility to make the appropriate arrangements to properly secure or relocate such utility poles. The contractor will not receive any additional payment for utility pole bracing or relocating. The contractor must include any costs for such work within their bid submittal.

### DRAINAGE NOTE:

- Existing drain inlets noted with "\*" obtained from previous design drawings by Insite Engineering, Surveying & Landscape Architecture, P.C. Contractor to verify elevations prior to start of construction.

### EXCAVATION NOTES:

- All pavement to be saw cut to its full depth by the contractor prior to excavation.
- The Contractor shall provide sheeting, shoring, a benched excavation, or a sloped excavation for all excavations 5.0 feet or greater in depth.
- All sheeting and shoring protective systems used for excavation shall be designed and stamped by a NYS licensed Professional Engineer.
- Where construction crosses or is adjacent to existing utility lines (fuel, water gas, telephone, electric or communication), the contractor shall carefully hand excavate so as to locate, mark and protect the utility lines against disturbance or damage by providing adequate support and protection as approved by the Engineer. The contractor shall repair any power or communication interruption immediately, at no additional cost to the owner.
- Trench excavation outside of temporary construction fence is to be backfilled on the same day as excavation. Temporary orange construction fence is required around these work areas for on going work.
- All utility trenching in and adjacent to roadways shall be backfilled prior to the end of the work day, unless otherwise authorized by the Engineer. Item 4 shall be temporarily brought to the surface of the utility trench flush with the adjacent pavement and maintained until the final pavement is installed. Road plates, if used, shall be designed to meet H25 loading requirements.

### OWNER CONSENT

THE UNDERSIGNED OWNER(S) OF THE PROPERTY HEREON STATE THAT THEY ARE FAMILIAR WITH THIS MAP, ITS CONTENTS AND ITS LEGENDS AND HEREBY CONSENT TO ALL SAID TERMS AND CONDITIONS AS STATED HEREON.

OWNER \_\_\_\_\_ DATE \_\_\_\_\_

### LEGEND

---	EXISTING PROPERTY LINE
---o---	EXISTING STONE RETAINING WALL
==	EXISTING POST & RAIL FENCE
---	EXISTING CONCRETE CURB
---o---	EXISTING UTILITY POLE w/ guy & overhead wires
---	EXISTING UNDERGROUND DRAINAGE PIPE
---	EXISTING UNDERGROUND SEWER MAIN
---	EXISTING UNDERGROUND WATER MAIN
---	EXISTING UNDERGROUND WATER SERVICE
---	EXISTING CATCH BASIN
---	EXISTING SEWER MANHOLE
---	EXISTING POST MOUNTED LIGHT
---	EXISTING WATER VALVE
---	EXISTING 10' CONTOUR
---	EXISTING 2' CONTOUR

### GRAPHIC SCALE

0 15 30 60  
( IN FEET )  
1 inch = 30 ft.

PROJECT:	PAWLING COMMONS ALTERNATE SITE PLAN EXPANSION		
DRAWING:	EXISTING CONDITIONS & REMOVALS PLAN		
PROJECT NUMBER	18135.100	PROJECT MANAGER	J.M.W.
DATE	10-31-23	DRAWN BY	I.B.
SCALE	1" = 30'	CHECKED BY	E.J.P.

DRAWING NO.	SHEET
63-71 EAST MAIN STREET, VILLAGE OF PAWLING, DUTCHESS CO., NY	EX-1

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Carmel, NY 10512  
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INSITE  
ENGINEERING, SURVEYING &  
LANDSCAPE ARCHITECTURE, P.C.

PROJECT: PAWLING COMMONS  
ALTERNATE SITE PLAN EXPANSION  
63-71 EAST MAIN STREET, VILLAGE OF PAWLING, DUTCHESS CO., NY  
DRAWING: EXISTING CONDITIONS & REMOVALS PLAN

PROJECT NUMBER 18135.100  
DATE 10-31-23  
SCALE 1" = 30'

PROJECT MANAGER J.M.W.  
DRAWN BY I.B.  
CHECKED BY E.J.P.

DRAWING NO. SHEET  
EX-1 1/9

ALTERATION OF THIS DOCUMENT, UNLESS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 7209 OF ARTICLE 145 OF THE EDUCATION LAW.

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GENERAL NOTES FOR ACCESSIBLE ROUTES:

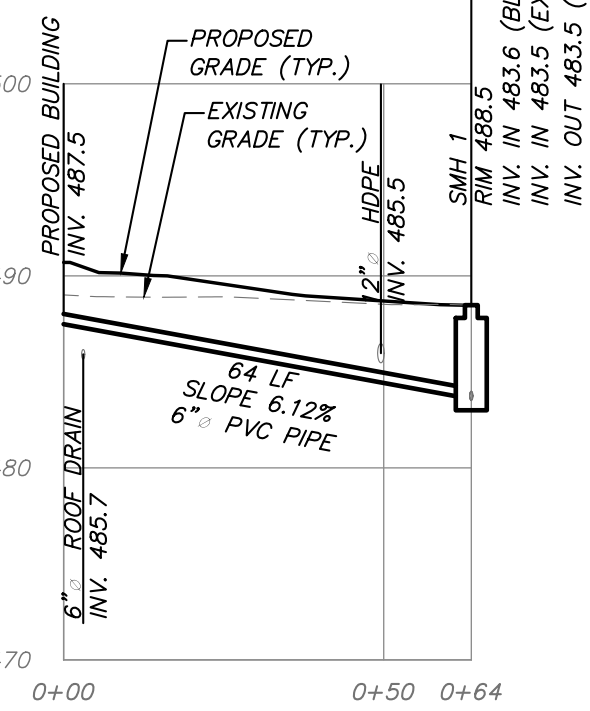
- Accessible routes to and within a site shall be provided from accessible building entrances to accessible pedestrian walkways, accessible facilities, accessible site elements and spaces, accessible parking spaces, access aisles, passenger loading zones, and to the public way, including public transportation stops, public streets and sidewalks.
- These sheets are in accordance with the Americans with Disabilities Act (ADA) and the NYS Building Code for Site Accessibility.
- Dimensions shown in the details as minimums and maximums are the limits for design and field layout. Facilities shall not be constructed with values outside the limits for work acceptance. See table "Design Element Tolerances" on this sheet.
- To check field layout and to verify work acceptance, all slopes and grades will be measured with a 4' long digital level using at least two readings. Where the readings vary, the measurements will be averaged. Grade (running slope) will be measured along the centerline and offset 1' to 1'-6" from the centerline. Cross slopes will be measured perpendicular to centerline at 5' to 10' intervals.
- Grade (running slopes) are measured in the direction of pedestrian travel. Cross slopes are measured perpendicular to the direction of pedestrian travel.
- Joints between sidewalks, curbs, turning spaces and roadways shall be flush and free from abrupt vertical changes greater than 1/4". Vertical surface discontinuities between 1/4" and 1/2" shall be beveled with a slope not steeper than 1V:2H. The bevel shall be applied across the entire joint.
- Sidewalks are connected to roadways by either blended transitions or curb ramps. Blended transitions are connections between the sidewalk level and the roadway level that have a maximum grade (running slope) of 5.0% and transitions greater than 5.0% are considered curb ramps.
- Curb ramps and blended transitions may require the installation of detectable warnings. See additional "Detectable Warning" notes on this sheet, and sidewalk and curb ramp details included in the site plan set.
- Vertical alignment shall be generally planar. Grade breaks within the pedestrian access route shall be perpendicular to the direction of travel and shall not be rounded.
- Sidewalk grade (running slope) shall not exceed 4.5% for design and layout, except when matching into existing sidewalk or when the highway grade is steeper. When adjacent road grade is greater than 5.0%, the sidewalk grade shall not exceed the adjacent road grade.
- The cross slope of pedestrian access routes shall be 1.5% maximum for design and layout, and 2.0% maximum for work acceptance. The following exceptions are allowed:
  - Where pedestrian street crossings are provided at intersections without yield or stop control, or where there is any traffic signal without a flashing red, the cross slope of a pedestrian access route contained within a street crossing shall be 4.5% maximum for design and layout, and 5.0% maximum for work acceptance.
  - Where midblock pedestrian street crossings are provided, the cross slope of a pedestrian access route contained within a midblock street crossing shall be permitted to equal the street or highway grade.
- Marked Accessible Parking Spaces and Access Aisles:
  - Dimensions - accessible parking spaces shall be at least 8' wide and shall have an adjacent access aisle 8' wide measured perpendicular to the stall stripe to accommodate vans with lifts.
  - Common access aisles for 90° parking - two accessible parking spaces may share a common access aisle. For acute angled parking, such as 60° parking, or where one way driveway aisles would prevent vans with passenger side lifts from backing into accessible spaces, an accessible access aisle must be provided for each accessible parking space, width of access aisles and parking spaces are measured perpendicular to the striping.
  - Signing - each accessible parking space shall be marked by permanently installed signs which display the International Symbol of Access. Each access aisle shall be marked by permanently installed signs indicating that stopping is not permitted in the aisle. Signs shall not block the accessible clear width of adjacent walkways. Signs located where they may be hit by vehicles being parked shall be installed in a post base. The bottoms of the signs located on posts installed in paved areas shall be 7" minimum above the walkway surface. The bottoms of signs located in unpaved area shall be 7" minimum above the pavement surface.
  - Surface slopes - slopes at accessible parking spaces, access aisles, and adjoining walkways shall be 1.5% maximum in any direction for design and layout, and 2.0% maximum for work acceptance, while providing positive drainage.
  - Overhead clearance - vehicle access routes to and from accessible parking spaces, including in garages and open parking structures, shall have a minimum vertical clearance of 8'-2".
  - Pavement marking colors - required accessible parking space and access aisle striping and other optional pavement markings, such as the International Symbol of Access, shall be painted white or blue.
  - A smooth, flush transition must be provided between all pedestrian walkways, accessible parking spaces and aisles.
- Where a change in direction is required to access a curb ramp from an access aisle, a turning space 4'-0" x 4'-0" minimum shall be provided at the base or the top of curb ramp, as applicable. The cross slope of turning spaces shall not exceed 1.5% in any direction for design and layout, and 2.0% for work acceptance, while providing positive drainage.
- Sidewalk Curb Ramps:
  - Walking surfaces of sidewalk curb ramps shall be stable, firm and slip resistant.
  - The minimum width of a curb ramp shall be 4'-0". Refer to site plans and sidewalk curb ramp details for curb ramp widths.
  - The grade (running slope) of a curb ramp shall be a minimum of 5.0%. The grade for design and layout shall be 7.5% maximum, and 8.3% maximum for ADA accessibility and work acceptance.
  - The cross slope of the curb ramp shall be as flat as possible and still provide positive drainage. The cross slope of a curb ramp shall not exceed 1.5% for design and layout, and 2.0% maximum for work acceptance.
  - Where provided, side flares for curb ramps where a pedestrian circulation path crosses the curb ramp shall be 3.5% maximum for design and layout, and 10.0% maximum for work acceptance. The slope of flared sides is measured parallel to the curb line.
  - Curb ramps at marked crosswalks shall be wholly contained within the markings, excluding any flared sides.
  - Where a change in direction is required to utilize a curb ramp, a turning space shall be provided at the base or the top of curb ramp as applicable. Turning spaces shall be permitted to overlap clear spaces.
  - Where there are no vertical constraints at the back of sidewalk, (e.g., vertical curb, buildings, fences) the turning space dimensions shall be 4'-0" x 4'-0" minimum. Where the turning space is constrained at the back of sidewalk, the turning space shall be 4'-0" x 5'-0" minimum. The 5'-0" dimension shall be provided perpendicular to the constraint.
  - Turning spaces shall not be designed with cross slope greater than 1.5% in any direction for design and layout, while providing positive drainage. The maximum cross slope for work acceptance is 2.0%.
  - Beyond the bottom grade break, a clear space of 4'-0" x 4'-0" minimum shall be provided within the width of the pedestrian crosswalk, and outside the parallel vehicle travel lane. The clear space may overlap turning spaces, detectable warning surfaces, and drop curb.
- Detectable Warning:
  - Detectable warning surfaces shall be provided at curb ramps and blended transitions at pedestrian street crossings.
  - Detectable warning surfaces shall be provided where the pedestrian access route crosses driveways with signal, yield or stop control. Detectable warning surfaces shall not be provided at crossings of uncontrolled driveway aprons.
  - Some detectable warning products require a concrete border for proper installation. If required, the border shall not exceed 2". Where the back of curb edge is tooled to provide a radius, the border dimension shall be measured from the inside edge of the curb radius.
  - The details provided are not drawn to scale. The quantity of domes depicted on the detectable warning unit is for illustration only. The size of the detectable warning field shall be 2'-0" minimum in the direction of travel and shall extend the full width of the curb ramp or flush surface, excluding any flared sides. The width of the detectable warning field includes a concrete border, if provided.
  - On slopes of 5.0% or greater, the rows of domes shall be aligned to be perpendicular or radial to the lower grade break on the ramp run. Where domes are arrayed radially, they may differ in dome diameter and center-to-center spacing within the ranges specified on sheet 2 of the New York State Department of Transportation (NYSDOT) Standard Sheets 608-01. On slopes less than 5.0%, dome orientation is less critical and may differ from perpendicular or radial alignment to the grade break.
  - The detectable warning field shall be the color specified in the contract documents. Detectable warning surfaces shall contrast visually with adjacent gutter, street, highway, or pedestrian access route surface, either light-on-dark or dark-on-light. Refer to sidewalk curb ramp details for additional information.
- Walkways Along an Accessible Route:
  - Walking surfaces shall be stable, firm and slip resistant.
  - Vertical changes in level along walking surface shall not exceed 1/4". Changes in level greater than 1/4" in height and not more than 1/2" shall be beveled with a slope not steeper than 1V:2H.
  - The running slope of the walking surfaces shall not be steeper than 4.5%.
  - The cross slope of a walking surface shall not be steeper than 1.5%.
  - The clear width of an accessible route shall be 3'-0" minimum.
  - An accessible route with a clear width less than 5'-0" shall provide passing spaces at intervals of 200' maximum. Passing spaces shall be 5'-0" minimum by 5'-0" minimum.
- Ramps along an accessible route:
  - Ramp runs shall have a running slope greater than 5.0%.
  - Vertical changes in level along walking surface shall not exceed 1/4". Changes in level greater than 1/4" in height and not more than 1/2" shall be beveled with a slope not steeper than 1V:2H.
  - The maximum rise for any ramp is 30'-0".
  - Ramps shall have landings at the bottom and top of each ramp run. Landings shall have a slope not to exceed 1.5% for design and layout, and 2.0% maximum for work acceptance, while providing positive drainage. Landings shall have a clear length and width of 5'-0" minimum.
  - Adjacent finished grades along sides of ramp and landings shall not have a vertical drop-off greater than 1/2" within 10" of the edge of the concrete. If the adjacent finished grades do not meet this criterion, a 4" minimum high curb shall be provided (see plan for location).
  - If drop-off to adjacent grade is 2'-6" or greater, "guards" will need to be provided to meet the requirements as specified in the NYS Building Code latest edition.
  - Refer to concrete handicap ramp detail for additional information.

LEGEND

	EXISTING PROPERTY LINE
	EXISTING EASEMENT
	EXISTING STONE RETAINING WALL
	EXISTING POST & RAIL FENCE
	EXISTING CONCRETE CURB
	EXISTING UTILITY POLE w/ guy & overhead wires
	EXISTING UNDERGROUND DRAINAGE PIPE
	EXISTING UNDERGROUND SEWER MAIN
	EXISTING UNDERGROUND WATER MAIN
	EXISTING UNDERGROUND WATER SERVICE
	EXISTING CATCH BASIN
	EXISTING SEWER MANHOLE
	EXISTING POST MOUNTED LIGHT
	EXISTING WATER VALVE
	EXISTING 10' CONTOUR
	EXISTING 2' CONTOUR
	EXISTING SPOT GRADE
	PROPOSED WATER GATE VALVE
	PROPOSED 10' CONTOUR
	PROPOSED 2' CONTOUR
	PROPOSED SPOT ELEVATION
	PROPOSED TOP OF WALL & BOTTOM OF WALL ELEVATIONS
	PROPOSED TOP OF CURB & BOTTOM OF CURB ELEVATIONS
	PROPOSED SEWER MANHOLE
	PROPOSED DRAINAGE MANHOLE
	PROPOSED CATCH BASIN
	PROPOSED END SECTION
	PROPOSED DRAINAGE PIPE
	PROPOSED CONCRETE CURB
	PROPOSED 6" DIP WATER SERVICE LINE
	PROPOSED ELECTRIC SERVICE LINE
	PROPOSED 6" PVC C900 SEWER SERVICE LINE
	PROPOSED CURB STOP
	PROPOSED GATE VALVE
	PROPOSED FIRE HYDRANT
	PITCH TO DRAIN
	PROPOSED DOOR LOCATION

PROPOSED DRAINAGE TABLE

STRUCTURE	RIM	INV.	PIPE SIZE	LENGTH	SLOPE
BLDG	-	491.4	12" HDPE	7 L.F.	1.4%
HDS 13	495.0	491.3	12" HDPE	24 L.F.	1.3%
EX DI	494.0	491.0			
CB 12	490.8	487.8	12" HDPE	113 L.F.	0.6%
HDS 11	490.5	487.1	12" HDPE	9 L.F.	1.0%
DMH 10	489.6	487.0			
BLDG	-	485.9			
HDS 7	490.0	485.5	6" PVC	40 L.F.	1.0%
BLDG	-	487.7			
YD 7A	490.6	486.3	6" PVC	66 L.F.	2.1%
HDS 7	490.0	485.5	12" HDPE	69 L.F.	1.2%
EX DI	488.2	485.0	12" HDPE	49 L.F.	1.0%
CB 6	493.5	490.5	12" HDPE	71 L.F.	1.0%
CB 5	493.0	489.8	12" HDPE	59 L.F.	1.0%
CB 4	493.0	489.2	12" HDPE	78 L.F.	1.0%
FS 3	492.0	488.4	10" HDPE	11 L.F.	0.9%
1.1 P	-	488.0			
1.1P	-	489.8	4" PVC	12 L.F.	0.8%
DMH 2	493.7	489.7			
FS 3	492.0	489.3	12" HDPE	11 L.F.	4.5%
DMH 2	493.7	488.8	12" HDPE	68 L.F.	1.2%
ES 1	-	488.0			



SEWER SERVICE PROFILE

SCALE: HORIZ. 1" = 30'  
VER. 1" = 10'

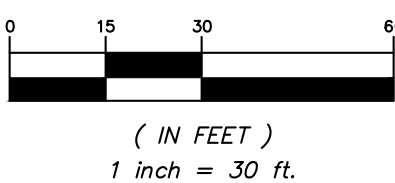
SEWER SERVICE NOTES:

- The proposed sewer service line from the 3-story multi-family residential building shall be 6" PVC C900 watertight pipe as mitigation for not achieving the minimum vertical separation distance to the existing and proposed drainage pipes.
- At the request of the Pawling Joint Sewer Commission (PJSC), the project applicant must inspect and televise the existing sewer service laterals on the project site. Results of the inspection and copies of the video shall be presented to the Dutchess County Department of Health and PJSC's engineer for review. The inspection work shall document the location of all cleanouts, slope of the laterals, and condition of the pipes. Any deficiencies noted will need to be corrected prior to issuance of the Certificate of Occupancy by the Village of Pawling.
- Any repairs made as a result of the inspections shall be tested in accordance with the notes and details on the project drawings.

CROSS-CONNECTION CONTROL NOTES:

- Backflow prevention devices shall be located within each proposed building as required and designed by others. A submission shall be made to the Dutchess County Department of Behavioral and Community Health for review and approval of each backflow prevention device as part of the building permit process with the Village of Pawling. All backflow prevention devices must be approved, installed and certified prior to authorization to operate and obtaining a certificate of occupancy.

GRAPHIC SCALE



ALTERATION OF THIS DOCUMENT, UNLESS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 7209 OF ARTICLE 145 OF THE EDUCATION LAW.

DESIGN ELEMENT TOLERANCES

ELEMENT	DESIGN AND FIELD LAYOUT LIMIT	LIMIT FOR WORK ACCEPTANCE
SIDEWALK/RAMP CROSS SLOPE - SEE NOTES 11, 13, & 16	1.5% MAX. *	2.0% MAX.
SIDEWALK GRADE (RUNNING SLOPE) - SEE NOTES 10 & 13	4.5% MAX.	5.0% MAX.
CURB RAMP GRADE (RUNNING SLOPE) - SEE NOTE 13	7.5% MAX.	8.3% MAX.
BLENDED TRANSITION GRADE (RUNNING SLOPE) - SEE NOTE 7	4.5% MAX.	5.0% MAX.
ACCESSIBLE PARKING SPACES & ACCESS AISLES (SURFACE SLOPES - ALL DIRECTIONS) - SEE NOTE 12	1.5% MAX. *	2.0% MAX.
RAMPS (RUNNING SLOPE) - SEE NOTE 16	7.5% MAX.	8.3% MAX.

\* While providing positive drainage.

4	3-26-24	REVISED FOR PLANNING BOARD SUBMISSION	EUP
3	2-27-24	REVISED FOR PLANNING BOARD SUBMISSION	CMS
2	1-30-24	REVISED FOR PLANNING BOARD SUBMISSION	JUS
1	12-29-23	REVISED FOR PLANNING BOARD SUBMISSION	EUP
NO.	DATE	REVISION	BY

**INSITE**  
ENGINEERING, SURVEYING &  
LANDSCAPE ARCHITECTURE, P.C.

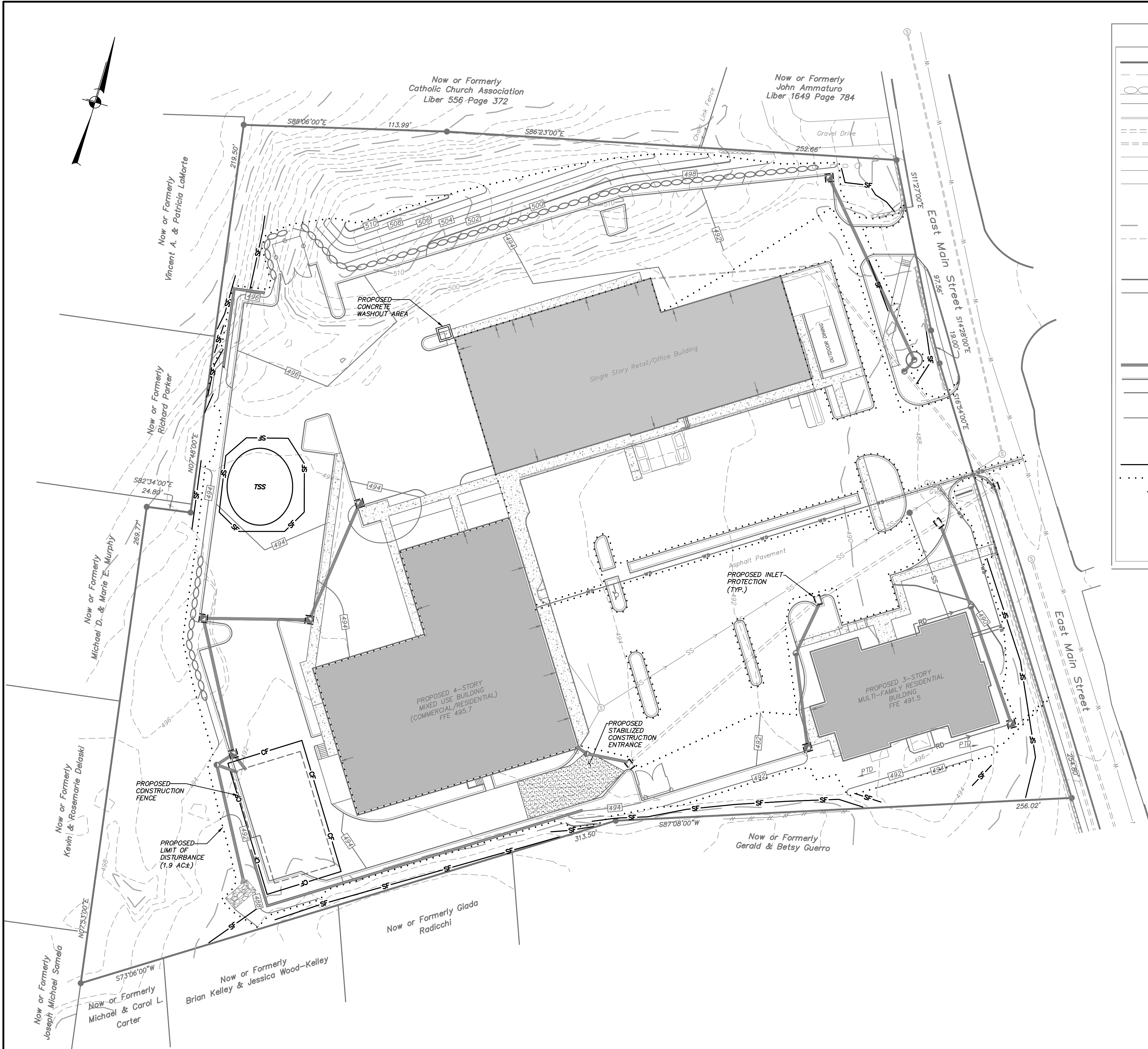
3 Garrett Place  
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(845) 225-9717 fax  
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PROJECT: PAWLING COMMONS ALTERNATE SITE PLAN EXPANSION 63-71 EAST MAIN STREET, VILLAGE OF PAWLING, DUTCHESS CO., NY			
DRAWING: GRADING, DRAINAGE & UTILITY PLAN			
PROJECT NUMBER	18135.100	PROJECT MANAGER	J.M.W.
DATE	10-31-23	DRAWN BY	I.B.
SCALE	1" = 30'	CHECKED BY	E.J.P.
DRAWING NO.	SHEET		
GU-1		2	9





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LEGEND	
	EXISTING PROPERTY LINE
	EXISTING EASEMENT
	EXISTING STONE RETAINING WALL
	EXISTING POST & RAIL FENCE
	EXISTING CONCRETE CURB
	EXISTING UNDERGROUND DRAINAGE PIPE
	EXISTING UNDERGROUND SEWER MAIN
	EXISTING UNDERGROUND SEWER SERVICE
	EXISTING UNDERGROUND WATER MAIN
	EXISTING UNDERGROUND WATER SERVICE
	EXISTING CATCH BASIN
	EXISTING SEWER MANHOLE
	EXISTING 10' CONTOUR
	EXISTING 2' CONTOUR
	EXISTING SPOT GRADE
	PROPOSED WATER GATE VALVE
	PROPOSED 10' CONTOUR
	PROPOSED 2' CONTOUR
	PROPOSED SEWER MANHOLE
	PROPOSED DRAINAGE MANHOLE
	PROPOSED CATCH BASIN
	PROPOSED END SECTION
	PROPOSED DRAINAGE PIPE
	PROPOSED CONCRETE CURB
	PROPOSED WATER SERVICE LINE
	PROPOSED ELECTRIC SERVICE LINE
	PROPOSED SEWER SERVICE LINE
	PITCH TO DRAIN
	PROPOSED DOOR LOCATION
	PROPOSED SILT FENCE
	PROPOSED LIMITS OF DISTURBANCE
	PROPOSED TEMPORARY SOIL STOCKPILE
	PROPOSED STABILIZED CONSTRUCTION ENTRANCE
	PROPOSED DRAINAGE STRUCTURE W/ INLET PROTECTION

#### EROSION & SEDIMENT CONTROL NOTES:

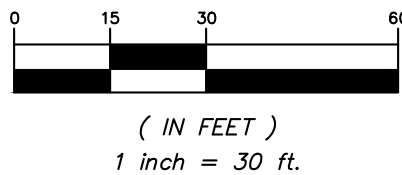
- The Erosion and Sediment Control Plan is only to be referred to for the installation of erosion and sediment control measures. For all other construction related activities, including, but not limited to, grading and utilities, refer to the appropriate drawings.
- Each contractor or subcontractor responsible for soil disturbance shall have a NYSDEC trained contractor onsite during soil disturbing activities. The NYSDEC trained contractor will be responsible to comply with the stormwater pollution prevention plan and for the implementation and maintenance of erosion and sediment control measures on this site prior to and during construction. The NYSDEC trained contractor shall sign a certification statement required by GP-0-20-001.
- All construction activities involving the removal or disposition of soil are to be provided with appropriate protective measures to minimize erosion and contain sediment disposition within. Minimum soil erosion and sediment control measures shall be implemented as shown on the plans and shall be installed in accordance with "New York Standards and Specifications For Erosion and Sediment Control," latest edition.
- Wherever feasible, natural vegetation should be retained and protected. Disturbance shall be minimized in the areas required to perform construction. No more than 5 acres of unprotected soil shall be exposed at any one time.
- When land is exposed during development, the exposure shall be kept to the shortest practical period of time, but in no case more than 7 days after the construction activity in that portion of the site has ceased. Disturbance shall be minimized in the areas required to perform construction.
- All construction vehicles shall be kept clear of the watercourses and wetland control areas outside the areas of proposed development. Silt fence and orange construction fence shall be installed in the areas where the grading is in close proximity of the watercourses or wetland control areas.
- The stabilized construction entrances, silt fence, and orange construction fence shall be installed as shown on the plans prior to beginning any clearing, grubbing or earthwork.
- All topsoil to be stripped from the area being developed shall be stockpiled and immediately seeded for temporary stabilization. Ryegrass (annual or perennial) at a rate of 30 lbs. per acre shall be used for temporary seeding in spring, summer or early fall. 'Aristoak' Winter Rye (cereal rye) shall be used for temporary seeding in late fall and winter.
  - Any graded areas not subject to further disturbance or construction traffic shall, within 7 days of final grading, receive permanent vegetation cover in combination with a suitable mulch. All seeded areas to receive a minimum 4" topsoil (from stockpile area) and be seeded and mulched between March 21 and May 20 or between August 15 and October 15 or as directed by project representative, with specified seed mixes as shown in the General Site Seeding Notes.
    - Mulch: Salt hay or small grain straw applied at a rate of 90 lbs./1000 S.F. or 2 tons/acre, to be applied and anchored according to "New York Standards and Specification For Erosion and Sediment Control," latest edition.
- Grass seed mix may be applied by either mechanical or hydroseeding methods. Seeding shall be performed in accordance with the current edition of the "NYSDEC Standard Specification, Construction and Materials, Section 610-3.02, Method No. 1". Hydroseeding shall be performed using materials and methods as approved by the site engineer.
- Cut or fill slopes steeper than 2:1 shall be stabilized immediately after grading with Curlex I Single Net Erosion Control Blanket, or approved equal.
- Paved roadways shall be kept clean at all times.
- The site shall at all times be graded and maintained such that all stormwater runoff is diverted to soil erosion and sediment control facilities.
- All storm drainage outlets shall be stabilized, as required, before the discharge points become operational.
- Stormwater from disturbed areas must be passed through erosion control barriers before discharge beyond disturbed areas or discharged into other drainage systems.
- Erosion and sediment control measures shall be inspected and maintained on a daily basis by the NYSDEC Trained Contractor, to insure that channels, temporary and permanent ditches and pipes are clear of debris, that embankments and berms have not been breached and that all straw bales and silt fences are intact. Any failure of erosion and sediment control measures shall be immediately repaired by the contractor and inspected for approval by the site engineer.
- Dust shall be controlled by sprinkling or other approved methods as necessary, or as directed by the trained contractor or site engineer.
- Cut and fills shall not endanger adjoining property, nor divert water onto the property of others.
- All fills shall be placed and compacted in 6" lifts to provide stability of material and to prevent settlement.
- The NYSDEC Trained Contractor shall inspect downstream conditions for evidence of sedimentation on a weekly basis and after rainstorms.
- As warranted by field conditions, special additional erosion and sediment control measures, as specified by the site engineer and/or the Town Engineer shall be installed by the contractor.
- Erosion and sediment control measures shall remain in place until all disturbed areas are suitably stabilized.
- After completion of the site improvements, the owner will assume responsibility for maintenance of the roads, parking lots, drainage systems and stormwater facilities. Each spring the paved areas shall be cleaned to remove the winter accumulation of traction sand. After this is completed all drain inlet and catch basin sumps should be cleaned. All pipes should be checked for debris and blockage and cleaned as required. During the cleaning process, the drain inlets, catch basins and pipes should be inspected for structural integrity and overall condition. Repairs and/or replacements should be made as required.
- Inspection of the stormwater practices should be performed every 6 months and after large storm events. These inspections should, at a minimum, check the outlet pipes for blockage and the general overall integrity of the basin and appurtenances.
- Refer to the Stormwater Pollution Prevention Plan for additional details regarding long-term maintenance of the storm drainage facilities.
- Cover all soil stockpiles on asphalt areas with tarps in lieu of silt fence.

#### CONSTRUCTION SEQUENCE:

- Install stabilized construction entrance/anti-tracking pad at driveway entrance.
- Install silt fence in general locations indicated on the plan and cordon off infiltration area with construction fence.
- Begin removal of existing asphalt pavement in area of proposed multi-family building.
- Begin excavation and construction of multi-family building.
- Install roof drains, hydrodynamic separator and water/sewer service connections for multi-family building.
- Begin demolition of existing building.
- Begin clearing and grubbing operations associated with parking lot expansion.
- Strip and stockpile topsoil on site for later use in lawn and landscape areas.
- Begin construction of proposed mixed use building.
- Install drainage on north and west side of site including subsurface infiltration system and hydrodynamic separator. Infiltration system shall remain offline until all contributing areas are stabilized.
- Begin construction of parking lot expansion on north and west side of site.
- Upon completion of grading operations, install finished driveway surfaces.
- Topsoil, seed, and mulch all disturbed areas as soon as practical in accordance with the Erosion and Sediment Control Notes contained on this sheet.
- Upon final stabilization, remove all temporary erosion and sediment control facilities.

ALTERATION OF THIS DOCUMENT, UNLESS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 7209 OF ARTICLE 145 OF THE EDUCATION LAW.

GRAPHIC SCALE



4	3-26-24	REVISED FOR PLANNING BOARD SUBMISSION	EUP
3	2-27-24	REVISED FOR PLANNING BOARD SUBMISSION	CMS
2	1-30-24	REVISED FOR PLANNING BOARD SUBMISSION	JUS
1	12-29-23	REVISED FOR PLANNING BOARD SUBMISSION	EUP
NO.	DATE	REVISION	BY

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(845) 225-9717 fax  
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PROJECT:  
**PAWLING COMMONS  
ALTERNATE SITE PLAN EXPANSION**

63-71 EAST MAIN STREET, VILLAGE OF PAWLING, DUTCHESS CO., NY

DRAWING:  
**EROSION AND SEDIMENT  
CONTROL PLAN**

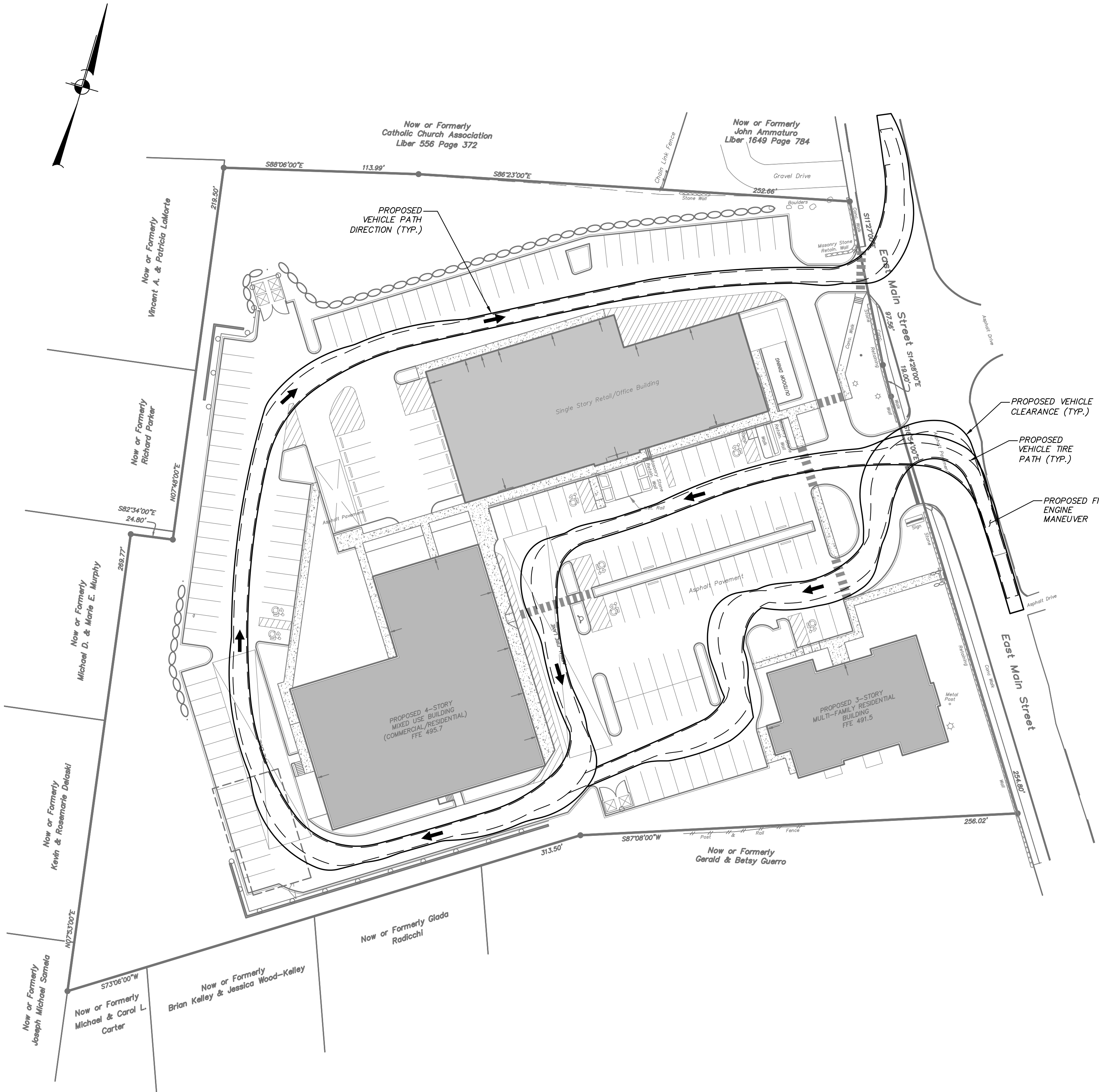
PROJECT NUMBER	18135.100	PROJECT MANAGER	J.M.W.	DRAWING NO.		SHEET	
DATE	10-31-23	DRAWN BY	I.B.				
SCALE	1" = 30'	CHECKED BY	E.J.P.				

**EC-1** <sup>3</sup>/<sub>9</sub>



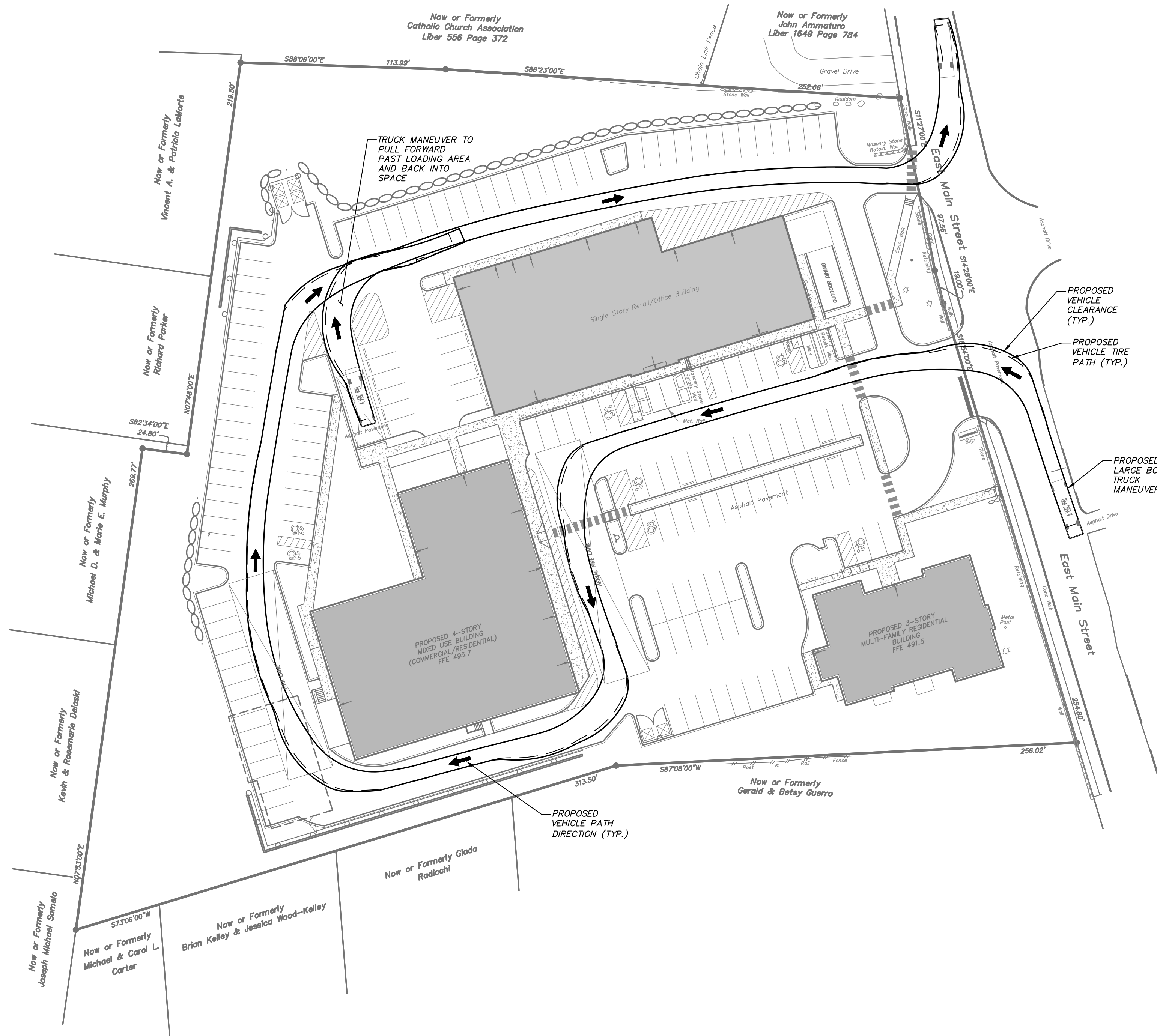
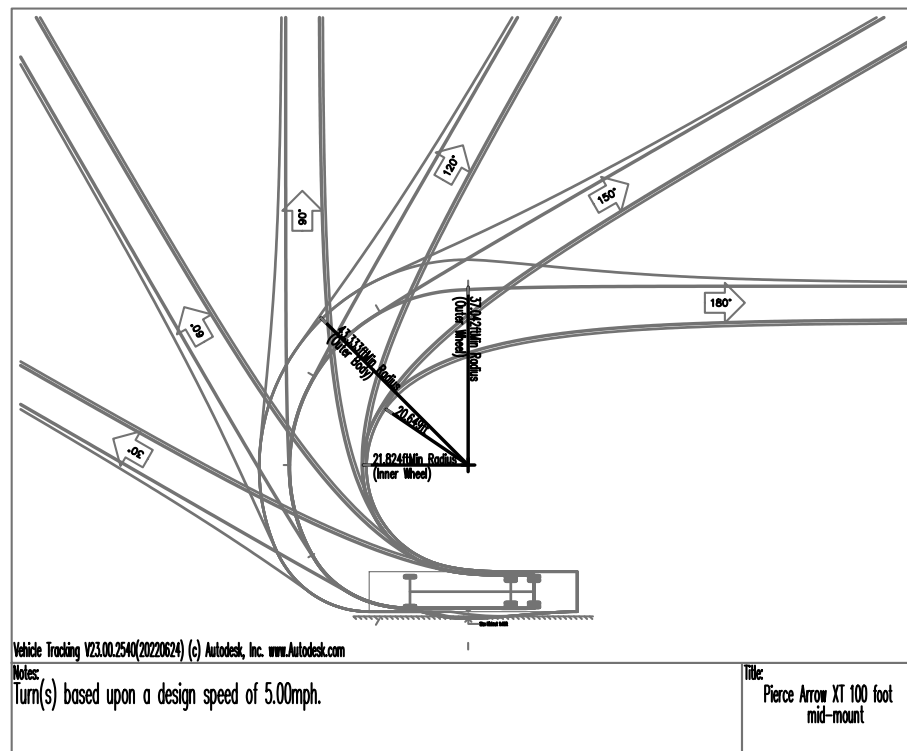
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ALTERATION OF THIS DOCUMENT, UNLESS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 7209 OF ARTICLE 145 OF THE EDUCATION LAW.



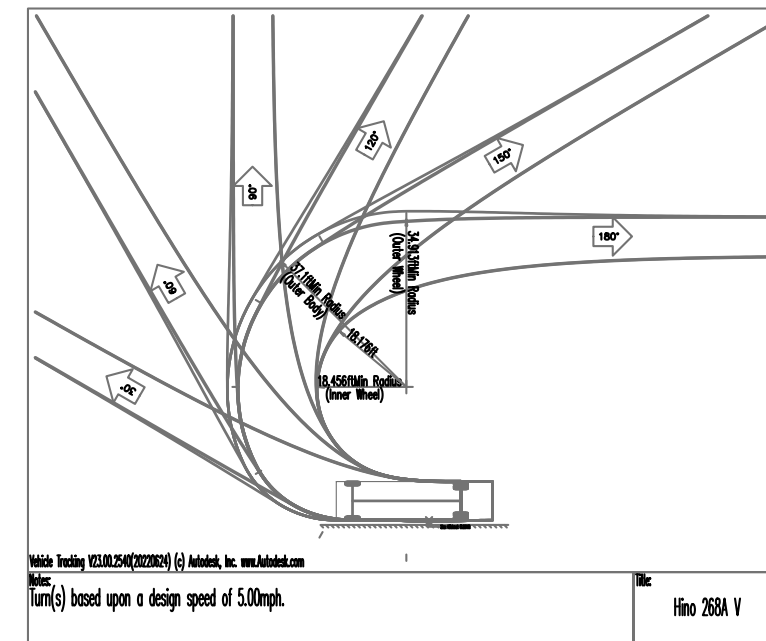
**FIRE ENGINE VEHICLE MANEUVERING PLAN:**

SCALE : 1" = 40'



**LARGE BOX TRUCK VEHICLE MANEUVERING PLAN:**

SCALE : 1" = 40'




**GRAPHIC SCALE**

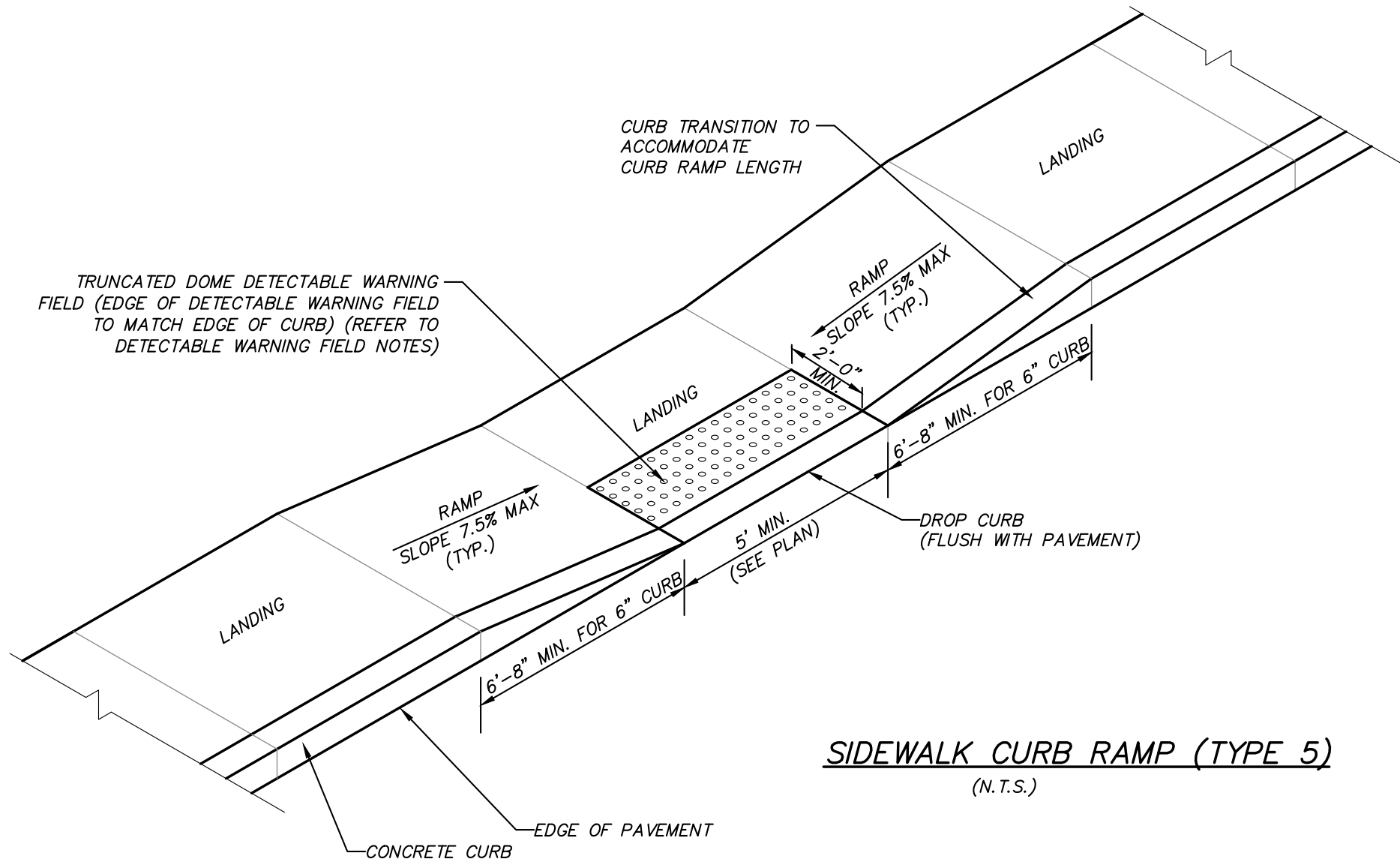
0 20 40 60 80  
( IN FEET )  
1 inch = 40 ft.

3	3-26-24	REVISED FOR PLANNING BOARD SUBMISSION	EJP
2	2-27-24	REVISED FOR PLANNING BOARD SUBMISSION	CMS
1	1-30-24	REVISED FOR PLANNING BOARD SUBMISSION	JUS
NO.	DATE	REVISION	BY

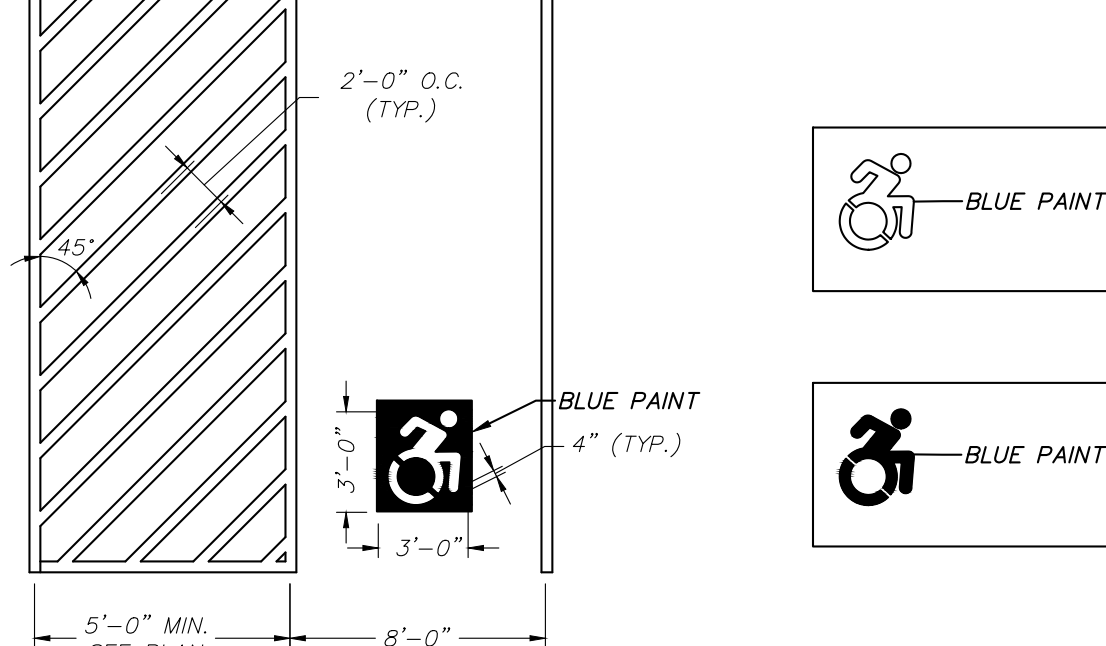
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PROJECT: <u>PAWLING COMMONS</u> <u>ALTERNATE SITE PLAN EXPANSION</u> 63-71 EAST MAIN STREET, VILLAGE OF PAWLING, DUTCHESS CO., NY			
DRAWING: <u>VEHICLE MANEUVERING</u> <u>PLAN</u>			
PROJECT NUMBER	18135.100	PROJECT MANAGER	J.M.W.
DATE	12-29-23	DRAWN BY	K.J.K.
SCALE	1" = 40'	CHECKED BY	E.J.P.
DRAWING NO.		SHEET	
VM-1		4 9	

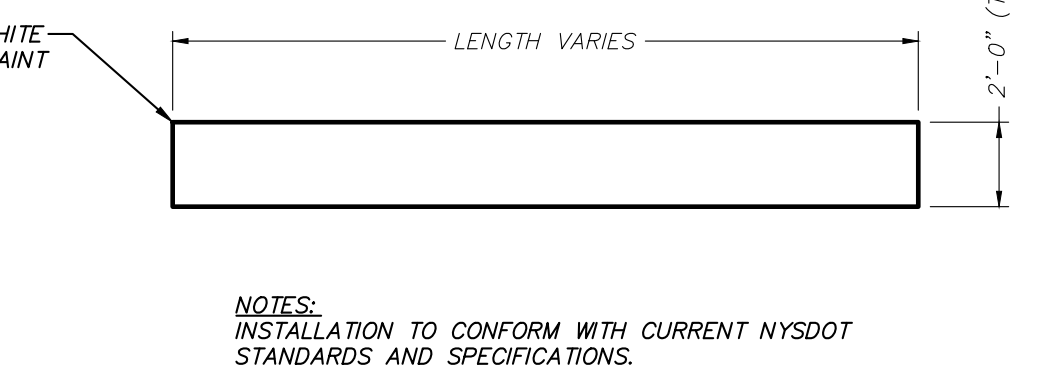




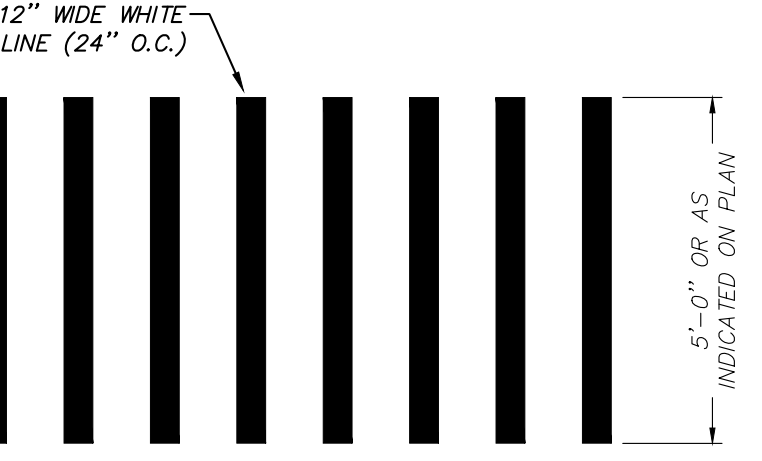
SIDEWALK CURB RAMP (TYPE 5)  
(N.T.S.)



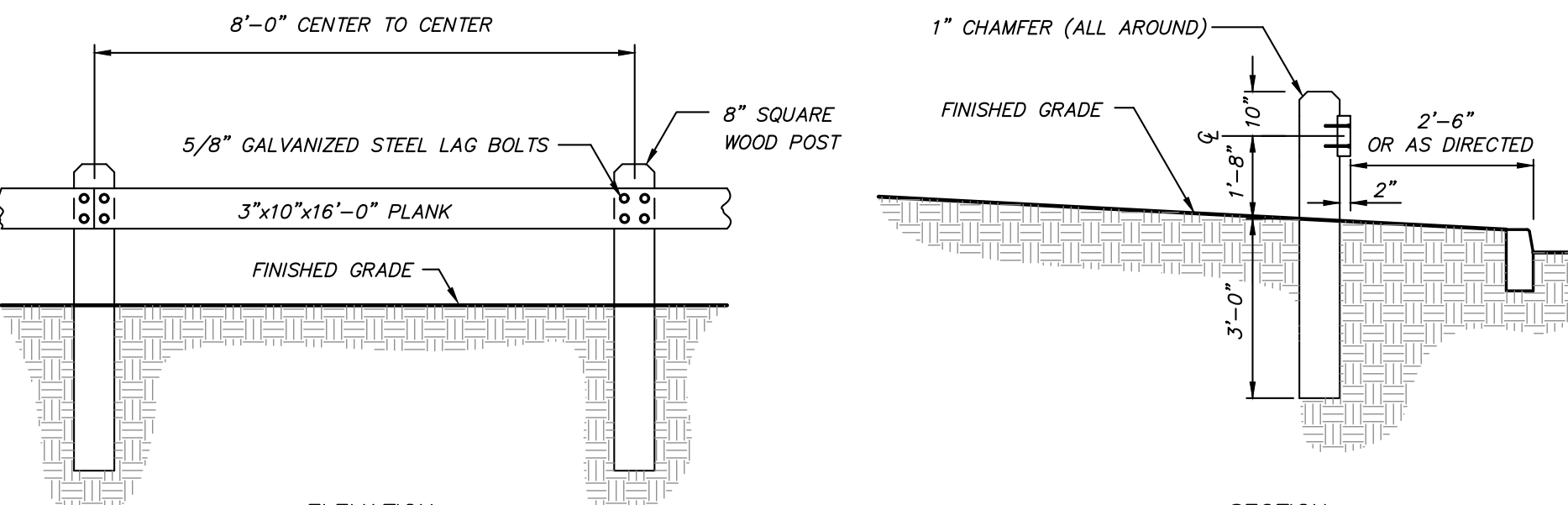
PAINTED NYS ACCESSIBLE PARKING DETAIL  
(N.T.S.)



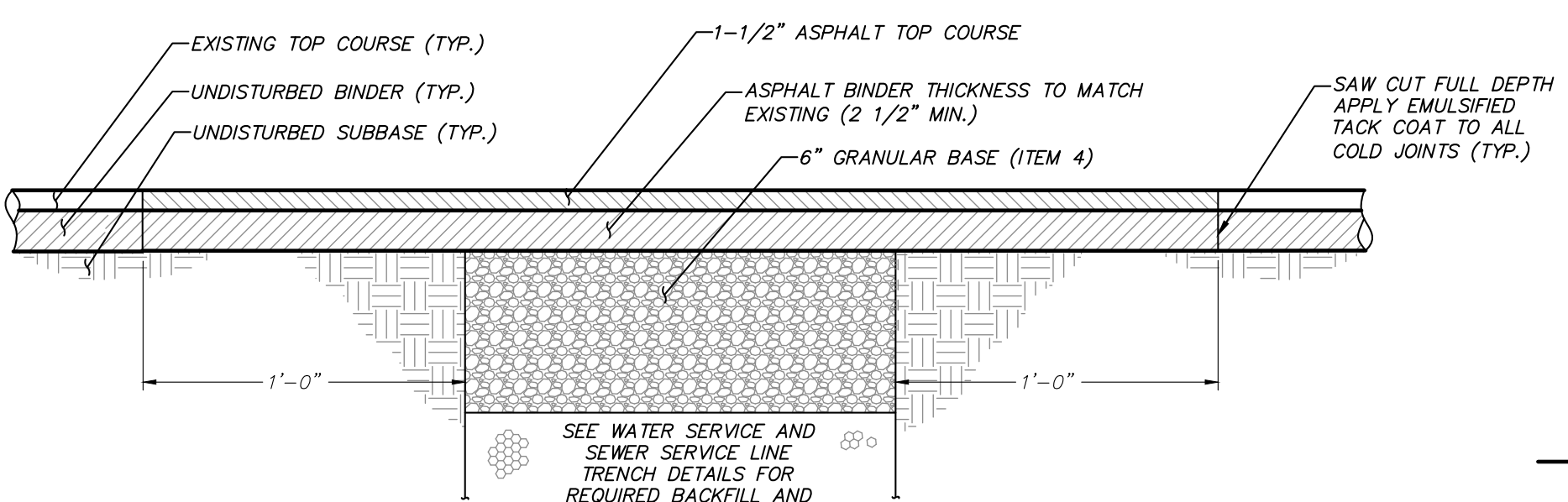
PAINTED STOP BAR DETAIL  
(N.T.S.)



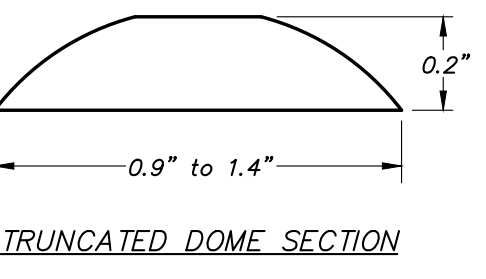
CROSSWALK MARKING DETAIL  
(N.T.S.)



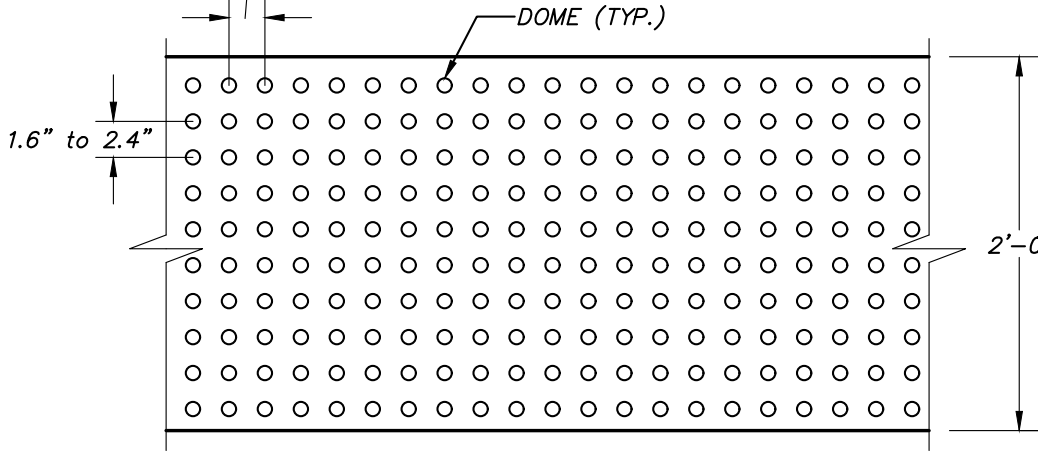
WOOD GUIDE RAIL DETAIL  
(N.T.S.)



PAVEMENT REPLACEMENT DETAIL  
(N.T.S.)



TRUNCATED DOME SECTION

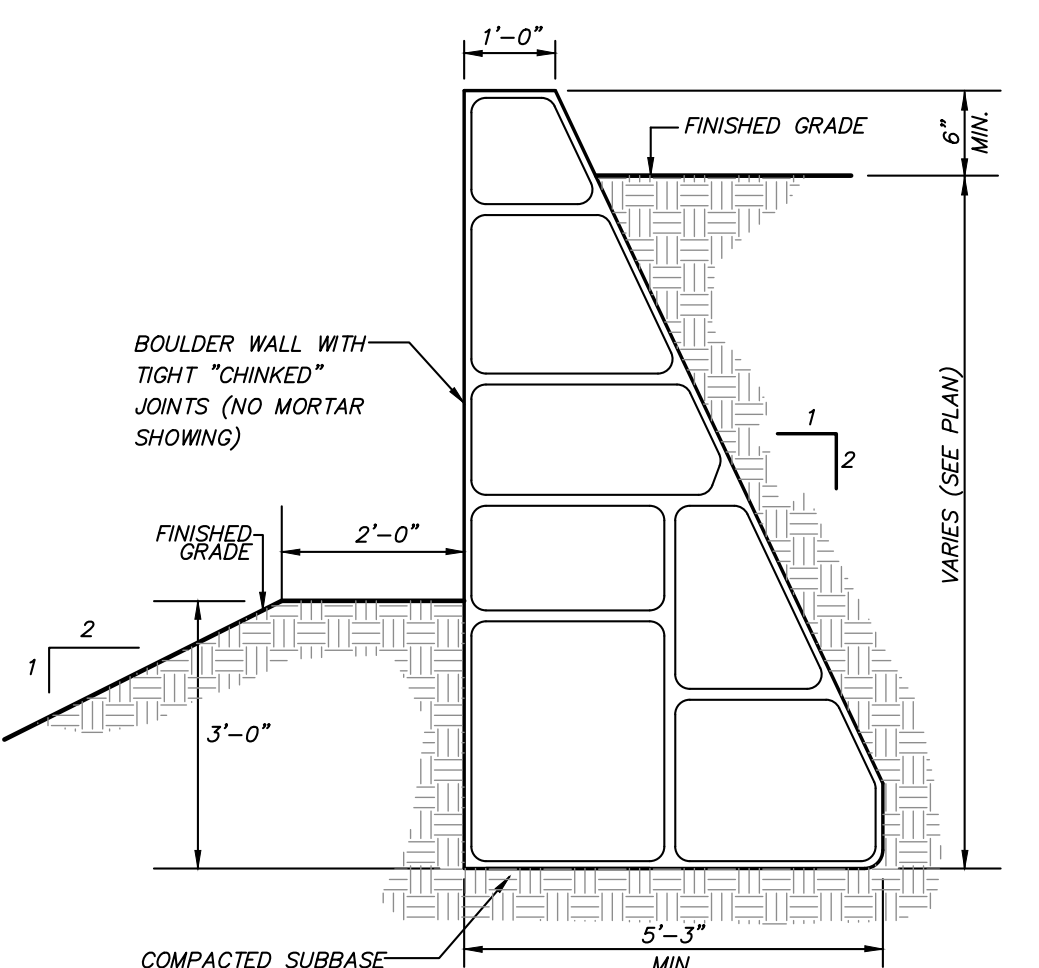


TRUNCATED DOME SPACING

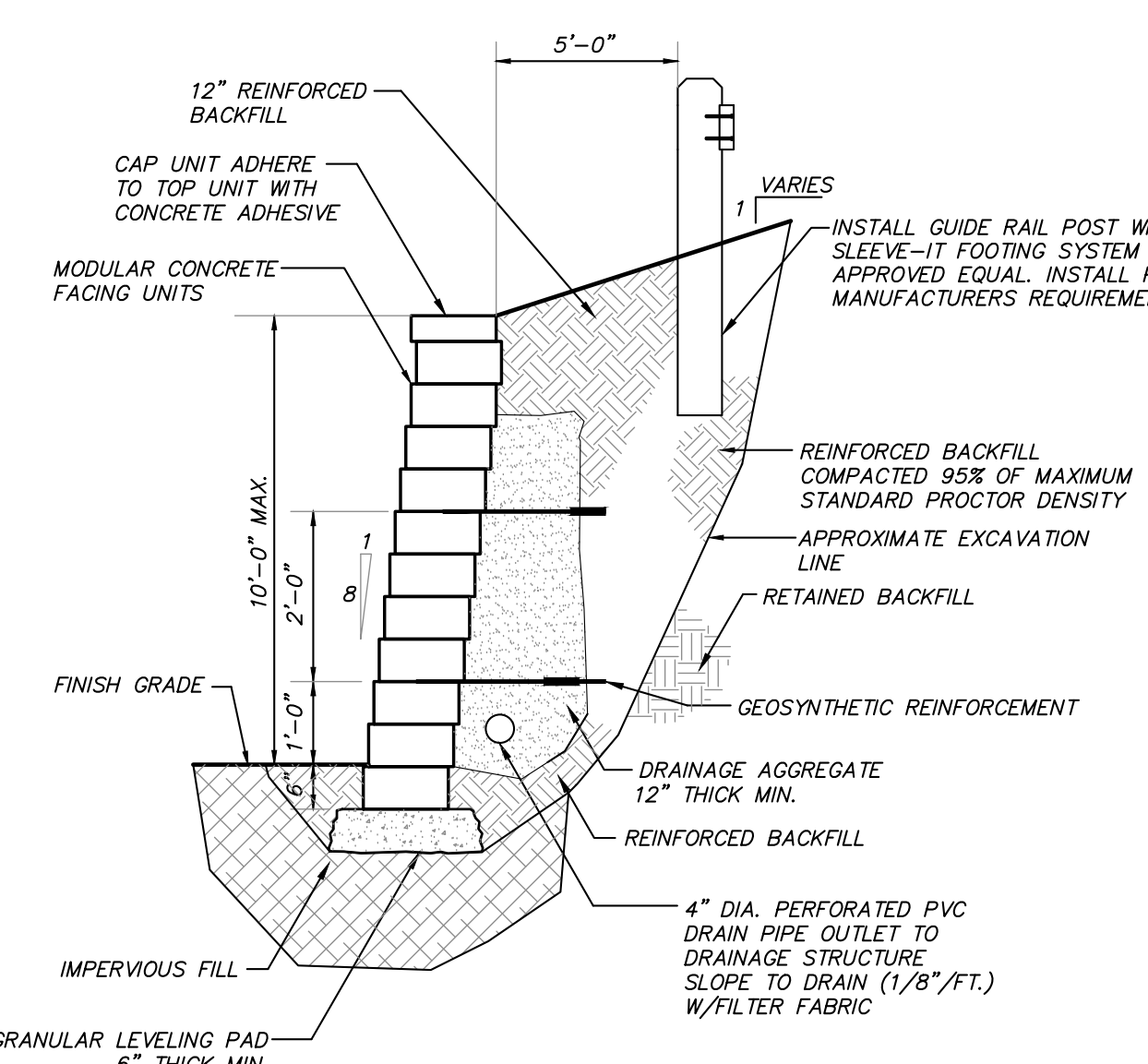
TRUNCATED DOME DETECTABLE WARNING FIELD NOTES:

1. The detectable warning field shall consist of raised truncated domes with a nominal diameter of 0.9 inches, a nominal height of 0.2 inches, and a nominal spacing of 2.35 inches on center in accordance with the Department of Justice-Code of Federal Regulations, 28 CFR Part 36, Chapter 4 "ADA Standards for Accessible Design", revised as of July 1, 1994.
2. The details provided are not drawn to scale. The quantity of domes depicted on the detectable warning field (the domes and the entire 24 inch level surface) is for illustration only.
3. The size of the detectable warning field shall be 24 inches in the direction of travel and shall extend the full width of the curb ramp or flush surface, exclusive of side flares.
4. Detectable warnings shall be located so that the edge of the warning field nearest to the roadway or street surface is 6 inches to 9 inches from the edge of the roadway/street, or from the front of the dropped curb, where a dropped curb continues across the bottom of the sidewalk curb ramp.
5. Domes shall be aligned on a square grid in the predominant direction of travel.
6. The detectable warning field shall be yellow.

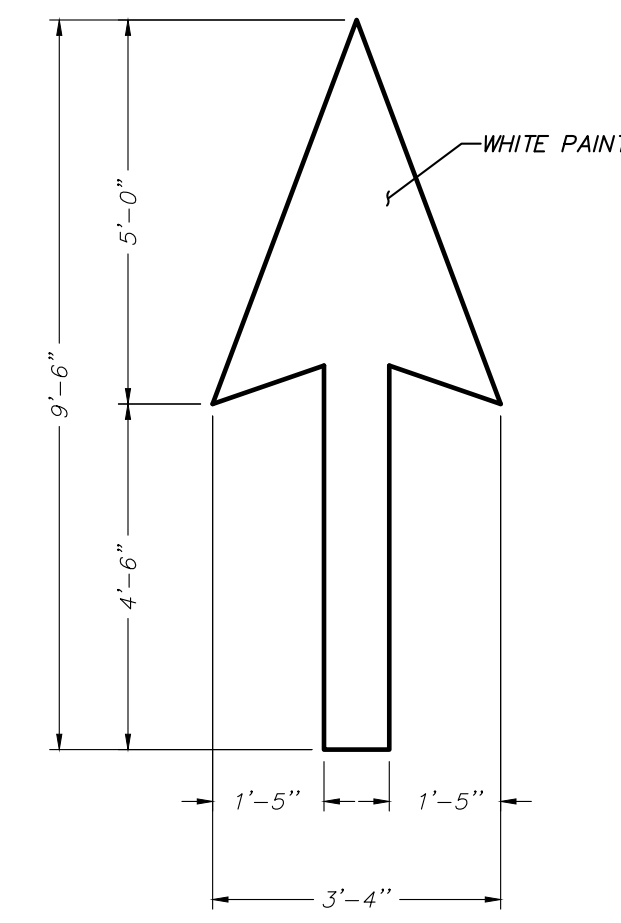
TRUNCATED DOME DETAIL  
(N.T.S.)



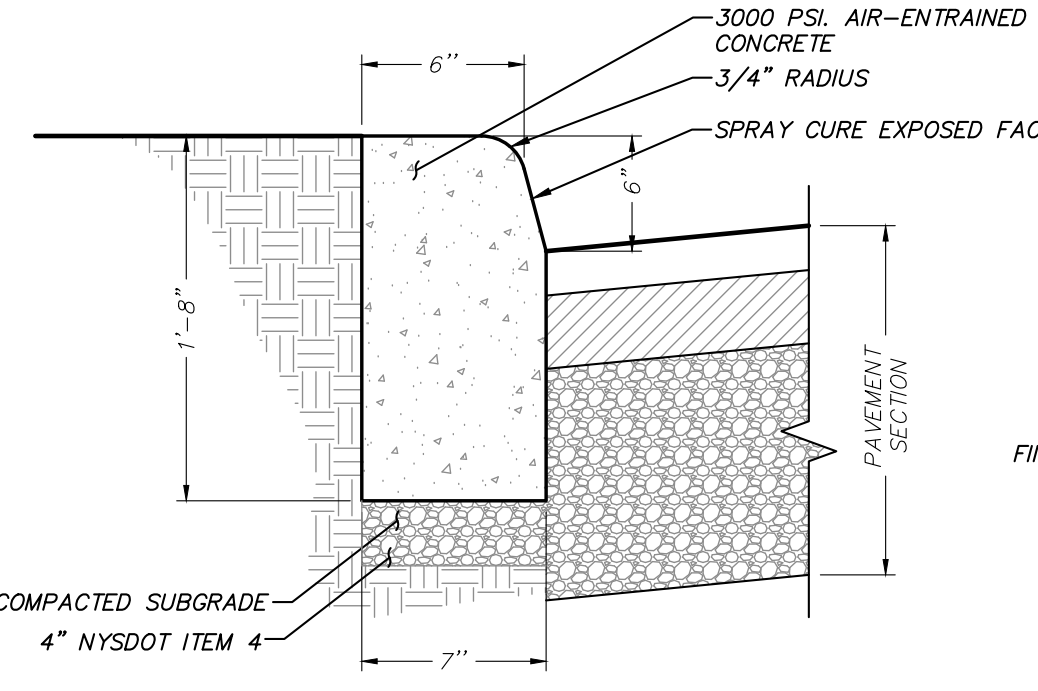
BOULDER RETAINING WALL  
(N.T.S.)



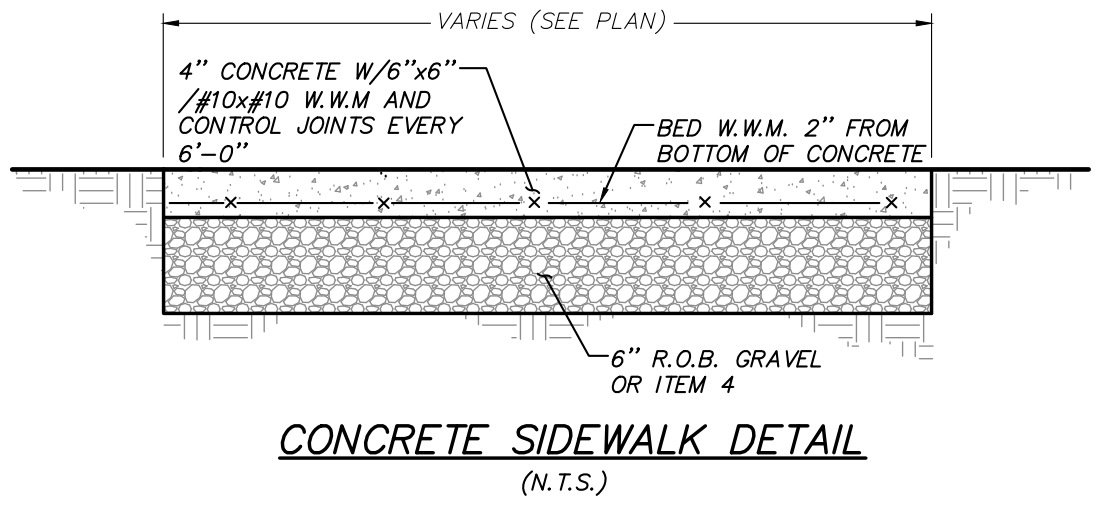
MECHANICALLY STABILIZED EARTH RETAINING WALL DETAIL  
(N.T.S.)



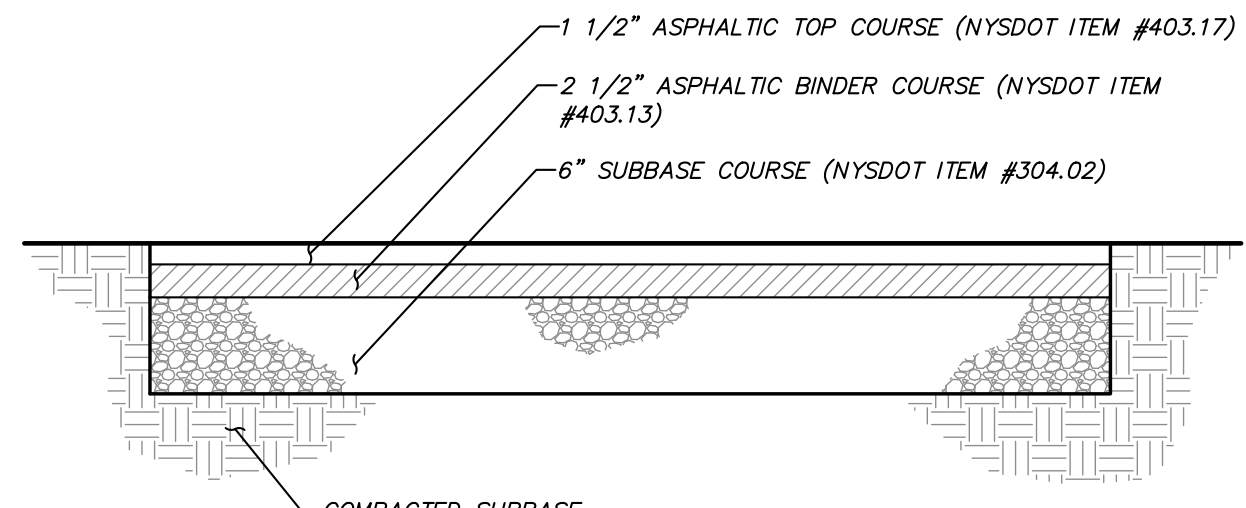
DIRECTIONAL ARROWS DETAIL  
(N.T.S.)



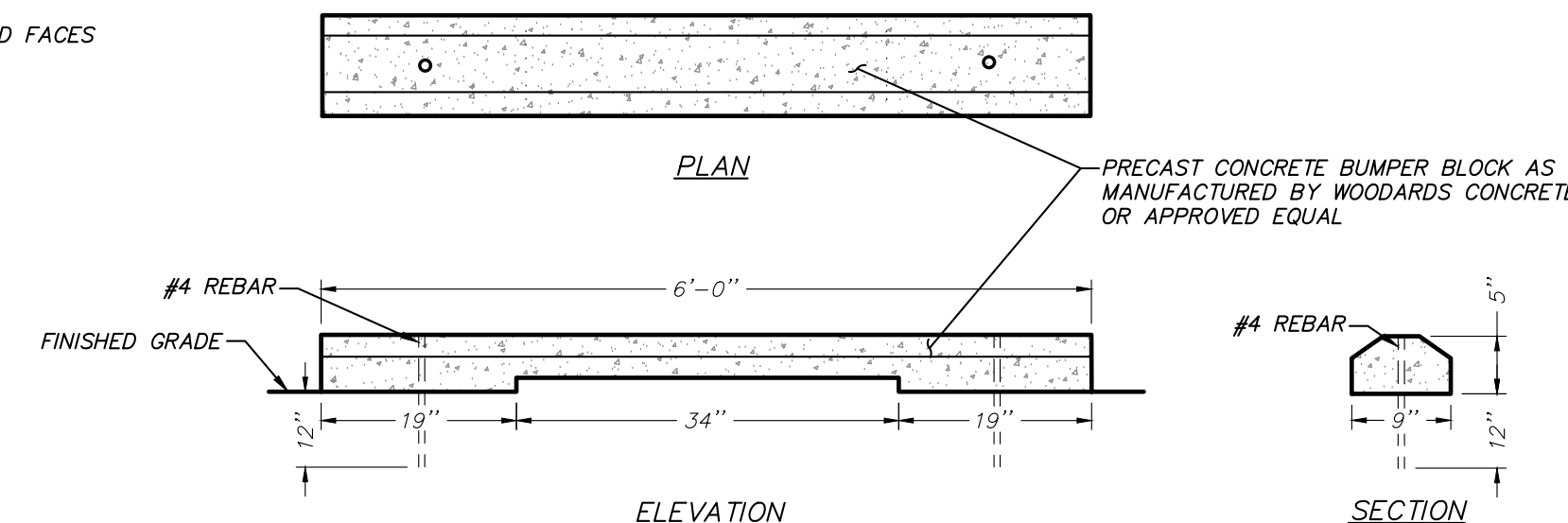
CONCRETE CURB DETAIL  
(N.T.S.)



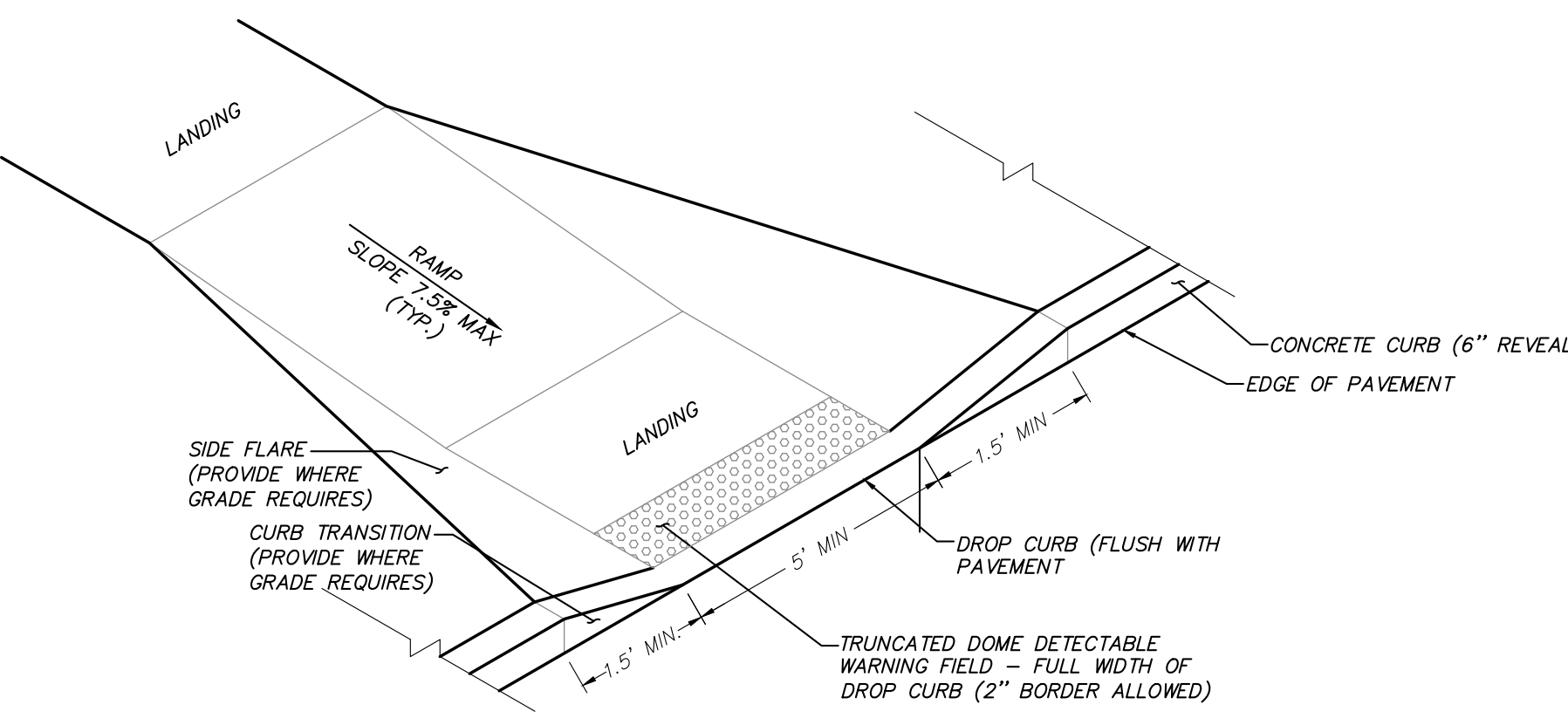
CONCRETE SIDEWALK DETAIL  
(N.T.S.)



ASPHALT PAVEMENT DETAIL  
(N.T.S.)



PRECAST CONCRETE BUMPER BLOCK DETAIL  
(N.T.S.)



SIDEWALK CURB RAMP  
(N.T.S.)

4	3-26-24	REVISED FOR PLANNING BOARD SUBMISSION	EJP
3	2-27-24	REVISED FOR PLANNING BOARD SUBMISSION	CMS
2	1-30-24	REVISED FOR PLANNING BOARD SUBMISSION	JUS
1	12-29-23	REVISED FOR PLANNING BOARD SUBMISSION	EJP
NO.	DATE	REVISION	BY

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PROJECT: <b>PAWLING COMMONS ALTERNATE SITE PLAN EXPANSION</b>		DRAWING NO. <b>5</b>	
63-71 EAST MAIN STREET, VILLAGE OF PAWLING, DUTCHESS CO., NY		SHEET <b>D-1</b>	
DRAWING: <b>SITE DETAILS</b>		BY <b>E.J.P.</b>	
PROJECT NUMBER 18135.100	PROJECT MANAGER J.M.W.	DRAWING NO. 5	SHEET 9
DATE 10-31-23	DRAWN BY I.B.	CHECKED BY E.J.P.	
SCALE AS NOTED	CHECKED BY E.J.P.		



REQUIRED SWPPP CONTENTS PER GP-0-20-001:

1. Pursuant to the NYSDC "SPDES General Permit for Stormwater Discharges from Construction Activity" (GP-0-20-001), all Stormwater Pollution Prevention Plan's (SWPPP) shall include erosion and sediment control practices designed in conformance with the most current version of the technical standard, "New York Standards and Specifications for Erosion and Sediment Control." Where erosion and sediment control practices are not designed in conformance with this technical standard, the owner or operator must demonstrate equivalence to the technical standard. The following list of required SWPPP components is provided in accordance with Part III.B.1a-1 of General Permit GP-0-20-001:

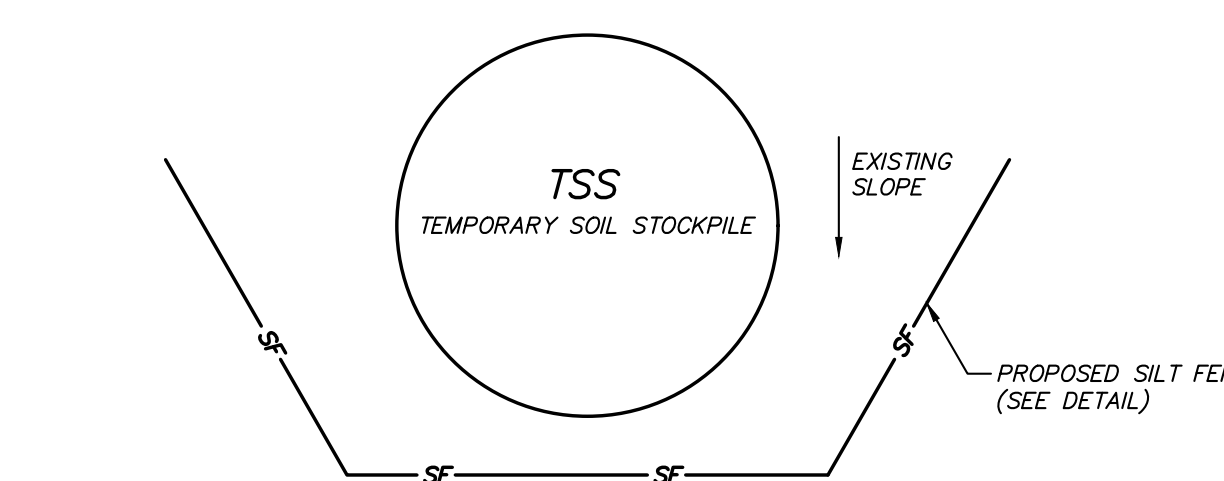
- a. Background Information: The subject project consists of the expansion of an existing parking lot, a new multi-family building, and the redevelopment of an existing building.
- b. Site map / construction drawing: These plans serve to satisfy this SWPPP requirement.
- c. Description of the soils present at the site: Onsite soils located within the proposed limits of disturbance consist of Galway-Farmington Urban land complex, undulating, rocky (GIB), as identified on the Soil Conservation Service Web Soil Survey. These soil types belong to the Hydrologic Soil Group "C."
- d. Construction phasing plan / sequence of operations: The Construction Sequence and phasing found on these plans provide the required phasing. A Construction Sequence and Erosion and Sediment Control Maintenance Schedule has been provided. The Erosion and Sediment Control Notes contained hereon outline a general sequence of operations for the proposed project. In general all erosion and sediment control measures shall be installed prior to commencement with land disturbing activities, and areas of disturbance shall be limited to the shortest period of time as practicable.
- e. Description of erosion and sediment control practices: This plan, and details / notes shown hereon serve to satisfy this SWPPP requirement.
- f. Temporary and permanent soil stabilization plan: The Sedimentation and Erosion Control Notes and Details provided hereon identify temporary and permanent stabilization measures to be employed with respect to specific elements of the project, and at the various stages of development.
- g. Site map / construction drawing: This plan serves to satisfy this SWPPP requirement.

- h. The dimensions, material specifications, installation details, and operation and maintenance requirements for all erosion and sediment control practices: The details, Erosion and Sediment Control Notes, and Erosion and Sediment Control Maintenance Schedule serve to satisfy this SWPPP requirement.
- i. An inspection schedule: Inspections are to be performed twice weekly and by a qualified professional as required by the General Permit GP-0-20-001. In addition the NYSDC Trained Contractor shall perform additional inspections as cited in the Sedimentation and Erosion Control Notes.
- j. A description of pollution prevention measures that will be used to control litter, construction chemicals and construction debris: In general, all construction litter / debris shall be collected and removed from the site. The general contractor shall supply either waste barrels or dumpster for proper waste disposal. Any construction chemicals utilized during construction shall either be removed from site daily by the contractor or stored in a structurally sound and weatherproof building. No hazardous waste shall be disposed of onsite, and shall ultimately be disposed of in accordance with all federal, state and local regulations. Material Safety Data Sheets (MSDS), material inventory, and emergency contact numbers shall be maintained by the general contractor for all construction chemicals utilized onsite. Finally, temporary sanitary facilities (portable toilets) shall be provided onsite during the entire length of construction, and inspected weekly for evidence of leaking holding tanks.
- k. A description and location of any stormwater discharges associated with industrial activity other than construction at the site: There are no known industrial stormwater discharges present or proposed at the site.
- l. Identification of any elements of the design that are not in conformance with the technical standard, "New York Standards and Specifications for Erosion and Sediment Control." All proposed elements of this SWPPP have been designed in accordance with the "New York Standards and Specifications for Erosion and Sediment Control."

2. Pursuant to the NYSDC "SPDES General Permit for Stormwater Discharges from Construction Activity" (GP-0-20-001), all construction projects needing post-construction stormwater management practices shall prepare a SWPPP that also includes practices designed in conformance with the most current version of the technical standard, New York State Stormwater Management Design Manual ("Design Manual"). Where post-construction stormwater management practices are not designed in conformance with this technical standard, the owner or operator must demonstrate equivalence to the technical standard. The following list of SWPPP components is provided in accordance with Part III.B.2a-f and III.B.3.

- a. Identification of all post-construction stormwater management practices to be constructed as part of the project: This plan, and details/notes shown hereon serve to satisfy this SWPPP requirement.
- b. A site map/construction drawing(s) showing the specific location and size of each post-construction stormwater management practice: This plan, and details/notes shown hereon serve to satisfy this SWPPP requirement.
- c. A Stormwater Modeling and Analysis Report including pre-development conditions, post-development conditions, the results of the stormwater modeling, a summary table demonstrating that each practice has been designed in conformance with the sizing criteria, identification of and justification for any deviations from the Design Manual, and identification of any design criteria that are not required. The required analysis is provided in the report titled Stormwater Pollution Prevention Plan for Pawling Commons.
- d. Soil testing results and locations: This SWPPP requirement is provided in the report titled Stormwater Pollution Prevention Plan for Pawling Commons.
- e. Infiltration testing results: This SWPPP requirement is provided in the report titled Stormwater Pollution Prevention Plan for Pawling Commons.
- f. An operations and maintenance plan that includes inspection and maintenance schedules and actions to ensure continuous and effective operation of each post-construction stormwater management practice. The plan shall identify the entity that will be responsible for the long term operation and maintenance of each practice. The Permanent Stormwater Facilities Maintenance Schedule provided on these plans serves to satisfy this requirement.

3. Enhanced Phosphorus Removal Standards - Beginning on September 30, 2008, all construction projects identified in Table 2 of Appendix B that are located in the watersheds identified in Appendix C shall prepare a SWPPP that includes post-construction stormwater management practices designed in conformance with the Enhanced Phosphorus Removal Standards included in the most current version of the technical standard, New York Stormwater Management Design Manual. At a minimum, the post-construction stormwater management practice component of the SWPPP shall include items 2.a - 2.f above. The permanent stormwater practices for this project have been sized according to chapter 10 of the Design Manual Enhanced Phosphorus Removal Standards. Please see 2.a - 2.f above.



- NOTES:
1. AREA CHOSEN FOR STOCKPILE LOCATION SHALL BE DRY AND STABLE.
  2. MAXIMUM SLOPE OF STOCKPILE SHALL BE 2:1.
  3. UPON COMPLETION OF SOIL STOCKPILING, EACH PILE SHALL BE IMMEDIATELY SEEDED WITH K31 PERENNIAL TALL FESCUE.
  4. ALL STOCKPILES SHALL BE PROTECTED WITH SILT FENCING INSTALLED ON THE DOWNGRADIENT SIDE.

TEMPORARY SOIL STOCKPILE DETAIL  
(N.T.S.)

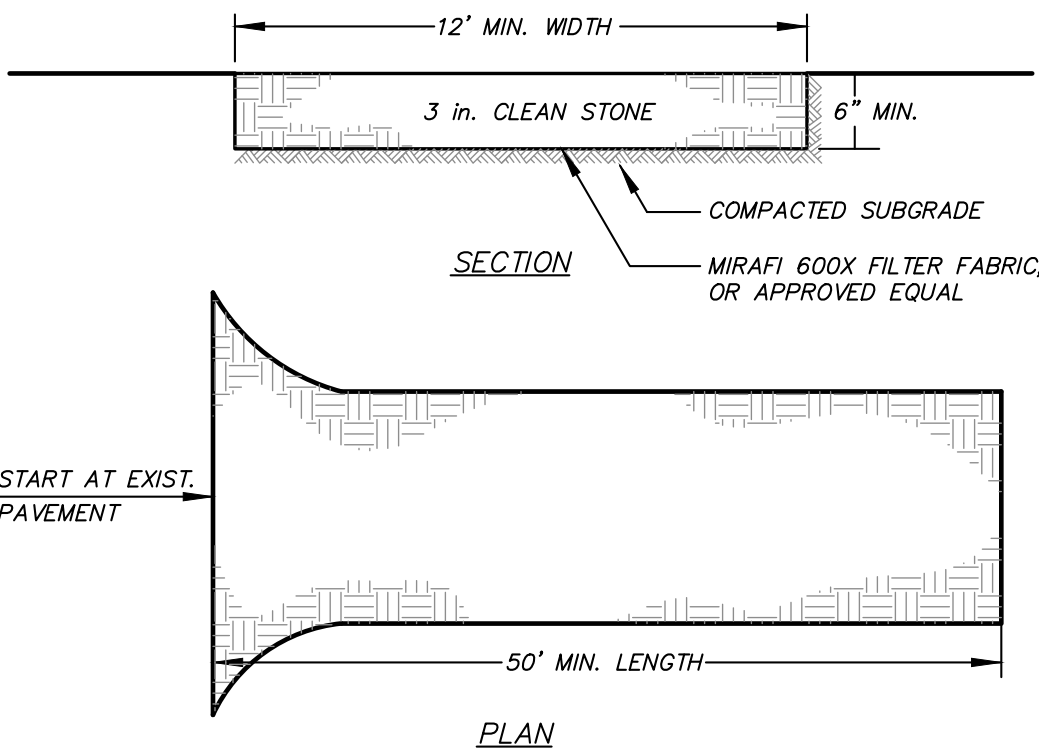
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SOIL RESTORATION REQUIREMENTS		
The contractor shall be required to perform the following soil restoration techniques prior to installing topsoil, seed and mulch. Items stricken in the following table do not need to be performed.		
Type of Soil Disturbance	Soil Restoration Requirement	Comments/Examples
No soil disturbance	Restoration not permitted	Preservation of Natural Features
Minimal soil disturbance	Restoration not required	Clearing and grubbing
Areas where topsoil is stripped only - no change in grade	HSG A&B	HSG C&D
	Apply 6 inches of topsoil	Aerate* and apply 6 inches of topsoil
Areas of cut or fill	HSG A&B	HSG C&D
	Aerate* and apply 6 inches of topsoil	Apply full Soil Restoration**
Heavy traffic areas on site (especially in a zone 5-25 feet around buildings but not within a 5 foot perimeter around foundation walls)	Apply full Soil Restoration (decompaction and compost enhancement)	
Areas where Runoff Reduction and/or Infiltration practices are applied	Restoration not required, but may be applied to enhance the reduction specified for appropriate practices.	Keep construction equipment from crossing these areas. To protect newly installed practice from any ongoing construction activities construct a single phase operation fence area
Redevelopment projects	Soil Restoration is required on redevelopment projects in areas where existing impervious area will be converted to pervious area.	

\* Aeration includes the use of machines such as tractor-drawn implements with coulters making a narrow slit in the soil, a roller with many spikes making indentations in the soil, or prongs which function like a mini-subsoiler.  
\*\* Per "Deep Ripping and De-compaction, DEC 2008"

EROSION AND SEDIMENT CONTROL MAINTENANCE SCHEDULE					
MONITORING REQUIREMENTS			MAINTENANCE REQUIREMENTS		
PRACTICE	DAILY	WEEKLY	AFTER RAINFALL	DURING CONSTRUCTION	AFTER CONSTRUCTION
SILT FENCE BARRIER	-	Inspect	Inspect	Clean/Replace	Remove
STABILIZED CONSTRUCTION ENTRANCE	Inspect	-	Inspect	Clean/Replace Stone and Fabric	Remove
INLET PROTECTION	-	Inspect	Inspect	Clean/Repair/Replace	Remove
DUST CONTROL	Inspect	-	Inspect	Mulching/ Spraying Water	N/A
*VEGETATIVE ESTABLISHMENT	-	Inspect	Inspect	Water/Reseed/ Remulch	Reseed to 80% Coverage
SOIL STOCKPILES	-	Inspect	Inspect	Mulching/ Silt Fence Repair	Remove
CONCRETE DRAINAGE STRUCTURES	-	Inspect	Inspect	Clean Sumps/ Remove Debris/ Repair/Replace	See Permanent Stormwater Facilities Maintenance Schedule on Drawing D-10
DRAINAGE PIPES	-	Inspect	Inspect	Clean/Repair	
ACCESS ROAD / PAVEMENT	-	Inspect	Inspect	Clean	Clean

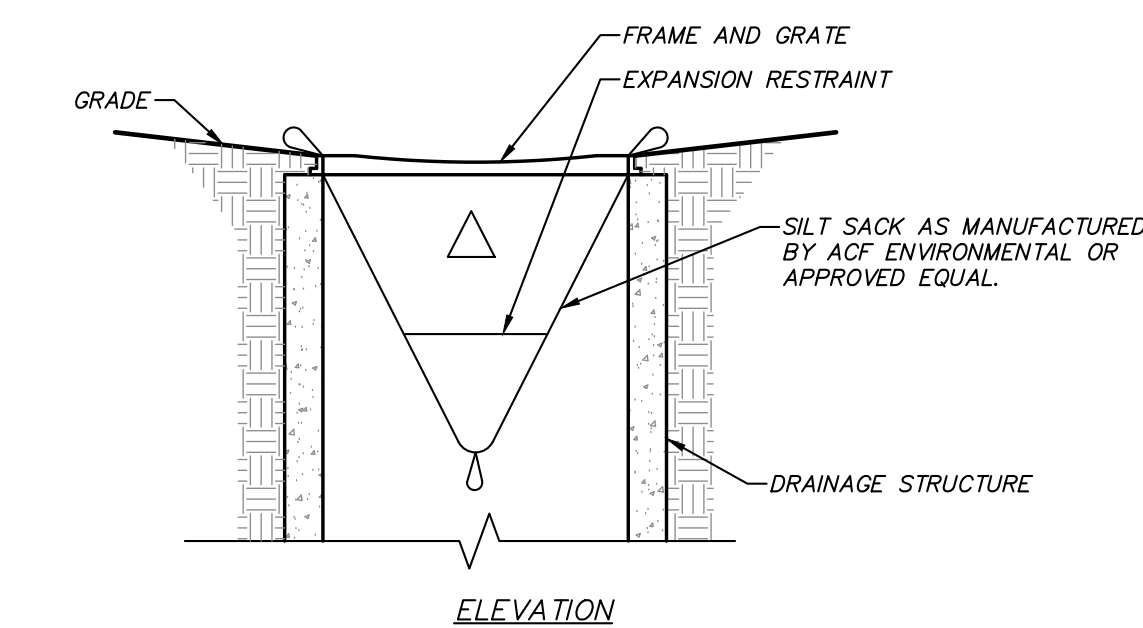
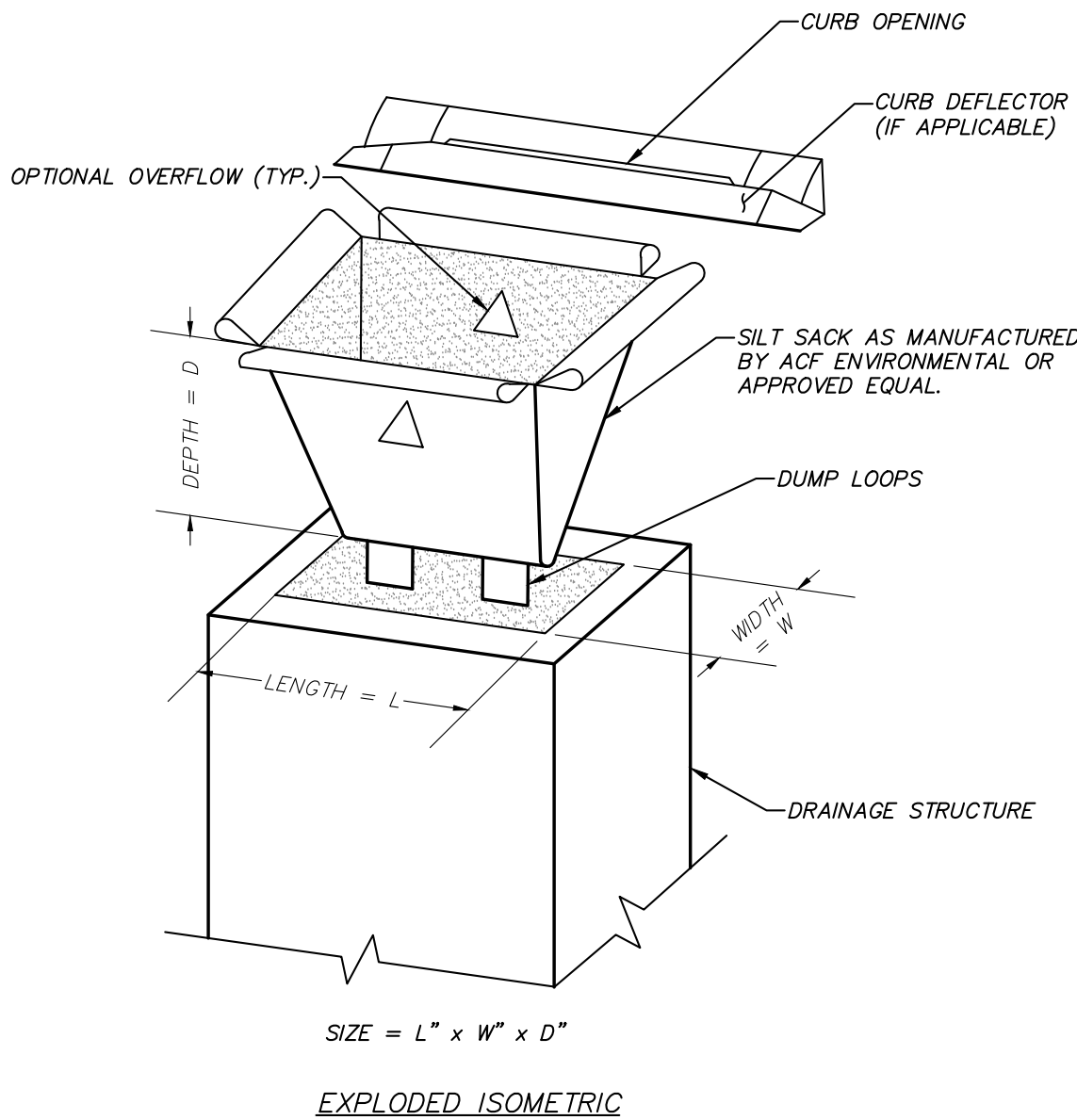
\* Permanent vegetation is considered stabilized when 80% of the plant density is established. Erosion control measures shall remain in place until all disturbed areas are permanently stabilized.



INSTALLATION NOTES

1. STONE SIZE - USE 3" STONE
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 - 12 FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCUR. TWENTY FOUR (24) FOOT IF SINGLE ACCESS TO SITE.
5. FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE. FILTER CLOTH WILL NOT BE REQUIRED ON A SINGLE FAMILY RESIDENCE LOT.
6. 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.
7. 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 CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHT OF WAY MUST BE REMOVED IMMEDIATELY.
8. 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.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

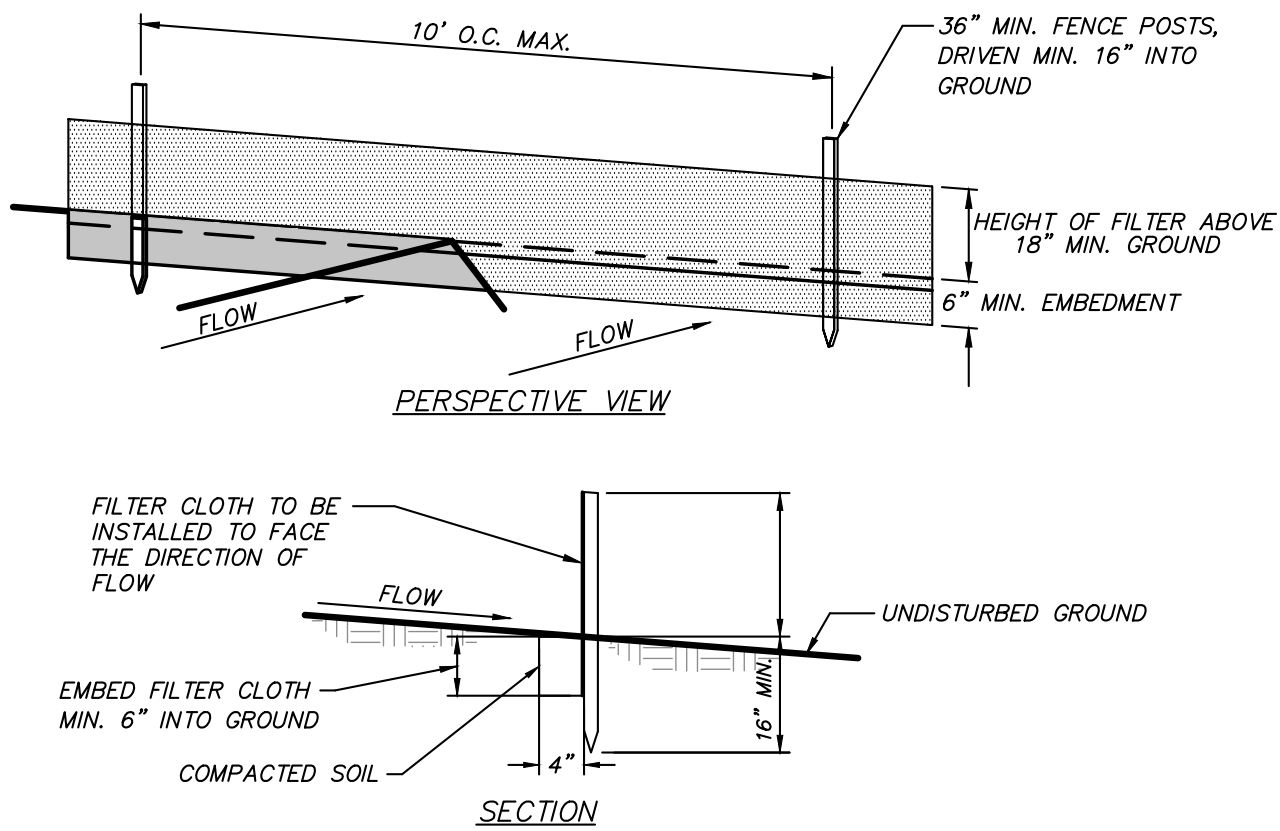
STABILIZED CONSTRUCTION ACCESS DETAIL  
(N.T.S.)



NOTE:  
FABRIC FOR INSERT SHALL MEET THE FOLLOWING:

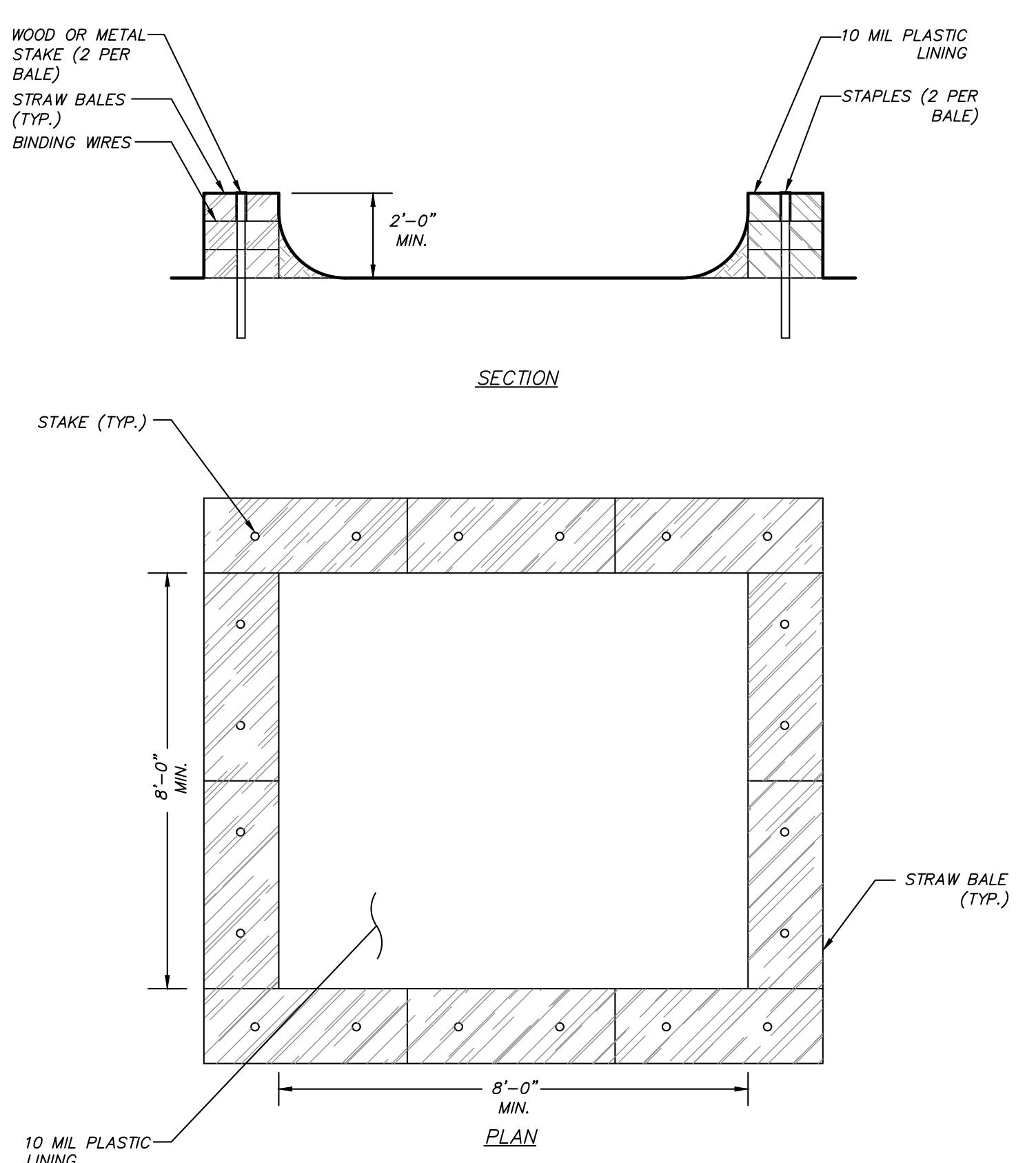
FABRIC PROPERTIES	MINIMUM ACCEPTABLE VALUE	TEST METHOD
Grab Tensile Strength (lbs)	110	ASTM D 4632
Mullen Burst Strength (PSI)	300	ASTM D 3786
Puncture Strength (lbs)	60	ASTM D 4833
Minimum Trapezoidal Tear Strength (lbs)	50	ASTM D 4533
Flow Through Rate (gal/min/sf)	25	ASTM D 4491
Equivalent Opening Size	40-80	US Std Sieve ASTM D 4751

MANUFACTURED INSERT INLET PROTECTION DETAIL  
(N.T.S.)



- CONSTRUCTION NOTES FOR FABRICATED SILT FENCE
1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES. POSTS SHALL BE STEEL EITHER "I" OR "U" TYPE OR HARDWOOD.
  2. FILTER CLOTH TO BE TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION. FENCE SHALL BE WOVEN WIRE, 6" MAXIMUM MESH OPENING.
  3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA 1140N, OR APPROVED EQUIVALENT.
  4. PREFABRICATED UNITS SHALL BE GEOFAB, ENVROFENCE, OR APPROVED EQUIVALENT.
  5. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

STANDARD SILT FENCE DETAIL  
(N.T.S.)



CONCRETE TRUCK WASHOUT DETAIL  
(N.T.S.)

NOTES

1. TEMPORARY CONCRETE WASHOUT TYPE ABOVE GRADE WILL BE CONSTRUCTED AS SHOWN ABOVE, WITH RECOMMENDED MINIMUM LENGTH AND MINIMUM WIDTH OF 8 FT.
2. THE WASHOUT WILL BE MINIMUM OF 100 FT FROM DRAINAGE SWALES, STORM DRAIN INLETS, WETLANDS, STREAMS AND OTHER SURFACE WATERS.
3. PLASTIC LINING WILL BE FREE OF HOLES, TEARS, OR OTHER DEFECTS THAT COMPROMISE THE IMPERMEABILITY OF THE MATERIAL.

4	3-26-24	REVISED FOR PLANNING BOARD SUBMISSION	EUP
3	2-27-24	REVISED FOR PLANNING BOARD SUBMISSION	CMS
2	1-30-24	REVISED FOR PLANNING BOARD SUBMISSION	JUS
1	12-29-23	REVISED FOR PLANNING BOARD SUBMISSION	EUP
NO.	DATE	REVISION	BY

3 Garrett Place  
Carmel, NY 10512  
(845) 225-9690  
(845) 225-9717 fax  
www.insite-eng.com

PROJECT: PAWLING COMMONS ALTERNATE SITE PLAN EXPANSION 63-71 EAST MAIN STREET, VILLAGE OF PAWLING, DUTCHESS CO., NY			
DRAWING: EROSION & SEDIMENT CONTROL DETAILS			
PROJECT NUMBER	18135.100	PROJECT MANAGER	J.M.W.
DATE	10-31-23	DRAWN BY	I.B.
SCALE	AS NOTED	CHECKED BY	E.J.P.
DRAWING NO.		SHEET	
D-2		6	
		9	



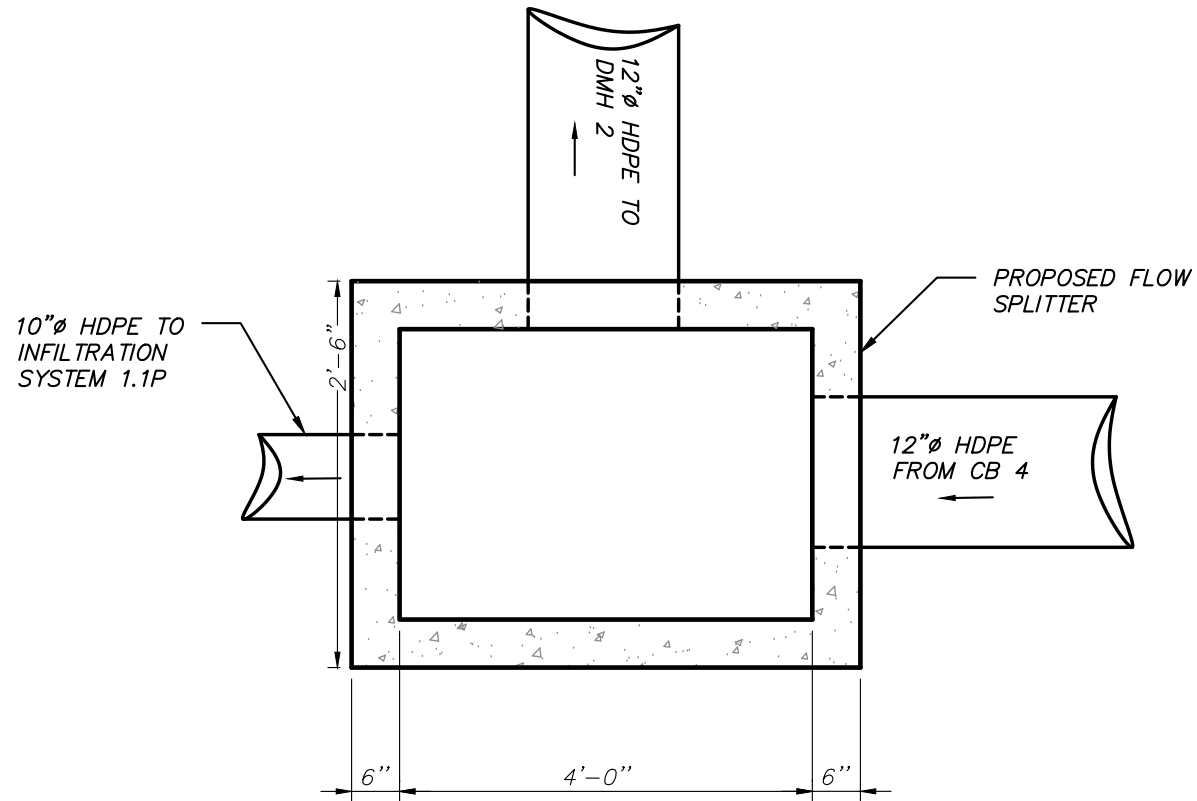


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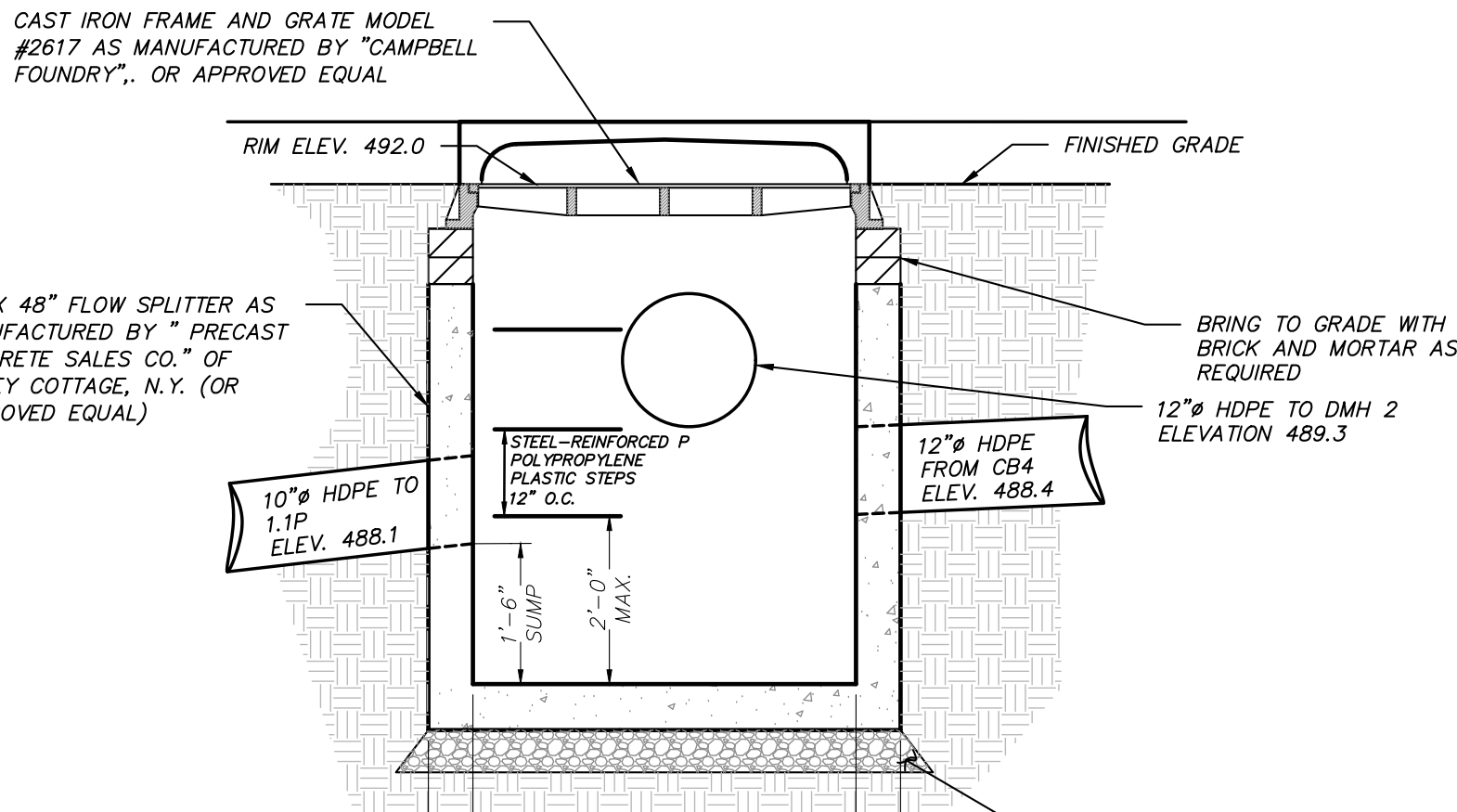
PERMANENT STORMWATER FACILITIES MAINTENANCE SCHEDULE					
PRACTICE/FACILITY	MONTHLY	AFTER MAJOR STORM EVENTS	BI-ANNUALLY	YEARLY	EVERY 5 to 10 YEARS
INFILTRATION UNITS	-	Confirm infiltrators dewater within 40 hours	Inspect & clean	Inspect outlet structures & remove accumulated sediment.	Clean isolator row per manufactures recommendations
SUBSURFACE STORMWATER COLLECTION SYSTEMS	-	-	Inspect & clean	Inspect, clean, repair and/or replace structures. Remove debris.	-
HYDRODYNAMIC SEPARATOR	Refer to manufacturer's Operation and Maintenance Manual contained in the project SWPPP.				

Note: The party responsible for implementation of the maintenance schedule during and after construction is:

KJ-Rant Realty LLC  
100 Business Park Drive  
Armonk, NY 10504



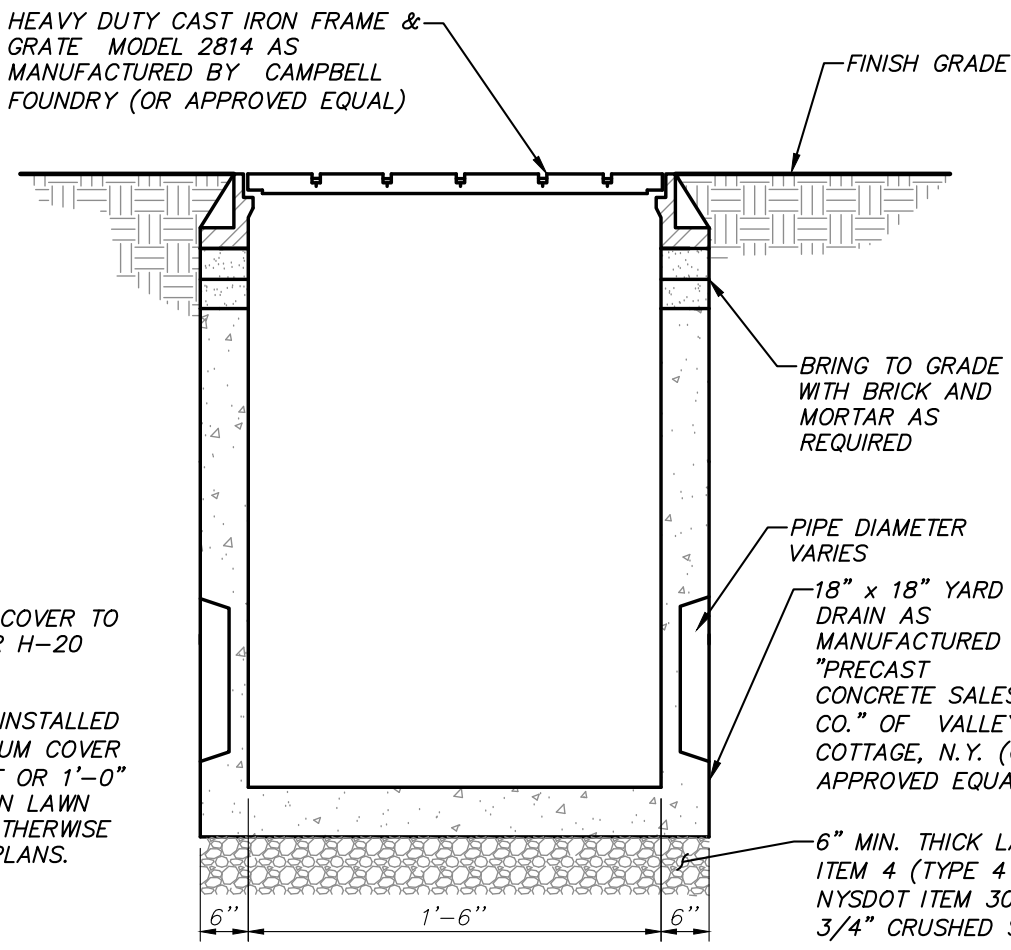
PLAN



SECTION

FLOW SPLITTER DETAIL

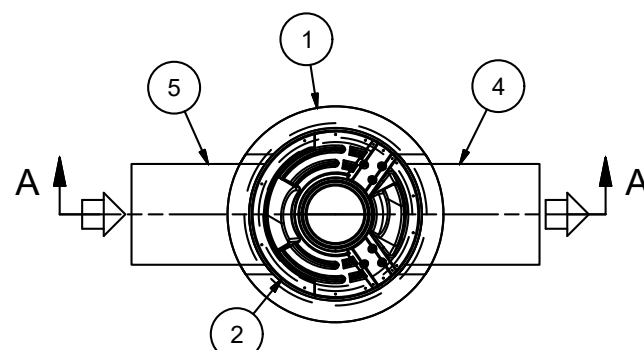
(N.T.S.)



18" X 18" YARD DRAIN DETAIL

(N.T.S.)

ALTERATION OF THIS DOCUMENT, UNLESS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 7209 OF ARTICLE 145 OF THE EDUCATION LAW.

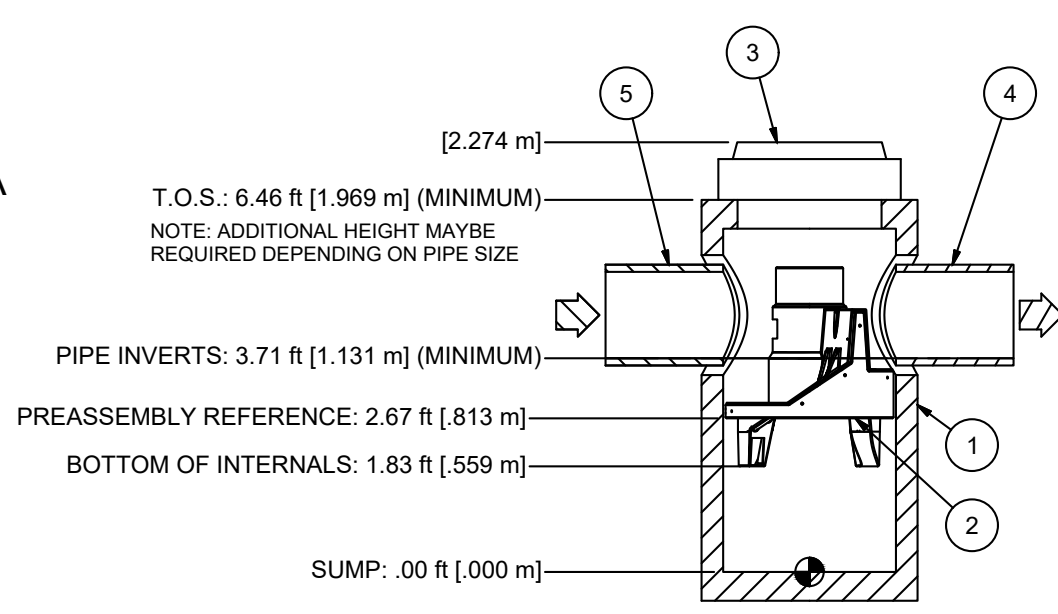


PLAN VIEW



HYDRO FRAME AND COVER (INCLUDED)

GRADE RINGS BY OTHERS AS REQUIRED

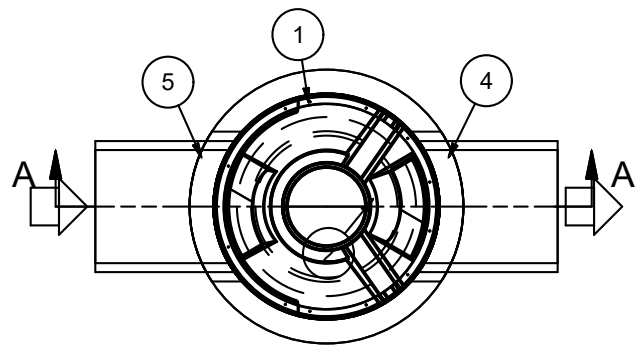


SECTION A-A

1. MANHOLE WALL AND SLAB THICKNESSES ARE NOT TO SCALE.
2. CONTACT HYDRO INTERNATIONAL FOR A BOTTOM OF STRUCTURE ELEVATION PRIOR TO SETTING FIRST DEFENSE MANHOLE.
3. CONTRACTOR TO CONFIRM RIM, PIPE INVERTS, PIPE DIA. AND PIPE ORIENTATION PRIOR TO RELEASE OF UNIT TO FABRICATION.

FIRST DEFENSE OPTIMUM HYDRODYNAMIC SEPARATOR FDO-3 (HDS 7, HDS 8, & HDS 13)

(N.T.S.)

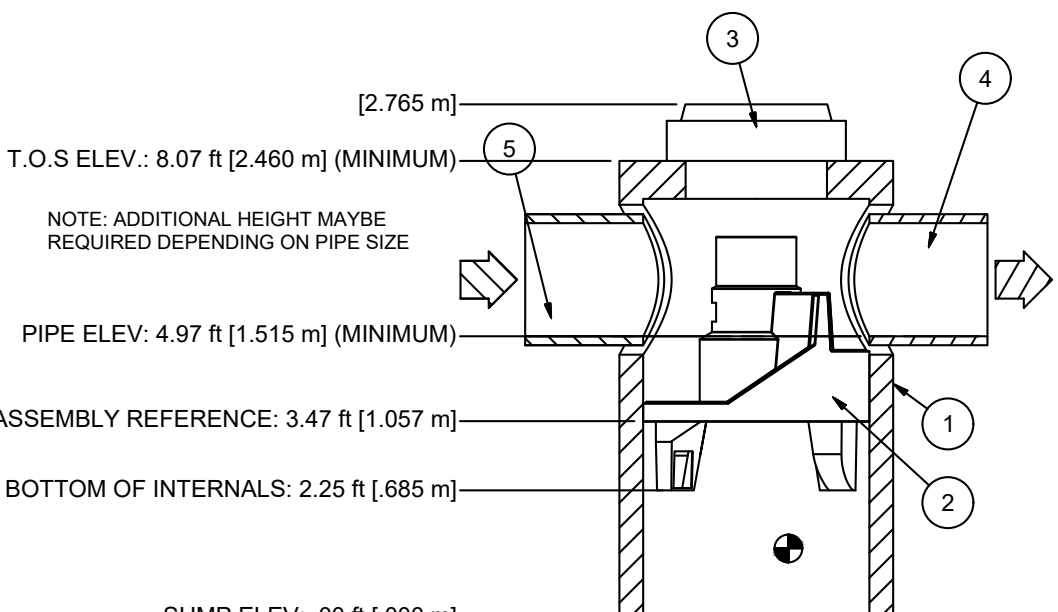


PLAN VIEW



HYDRO FRAME AND COVER (INCLUDED)

GRADE RINGS BY OTHERS AS REQUIRED

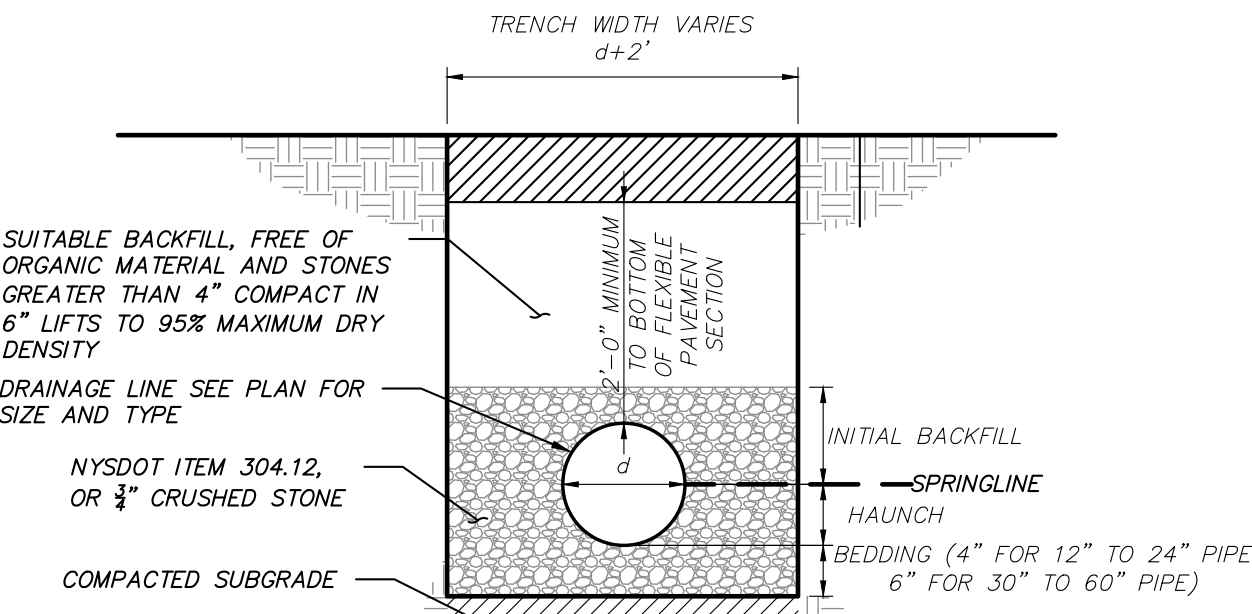


SECTION A-A

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3. CONTRACTOR TO CONFIRM RIM, PIPE INVERTS, PIPE DIA. AND PIPE ORIENTATION PRIOR TO RELEASE OF UNIT TO FABRICATION.

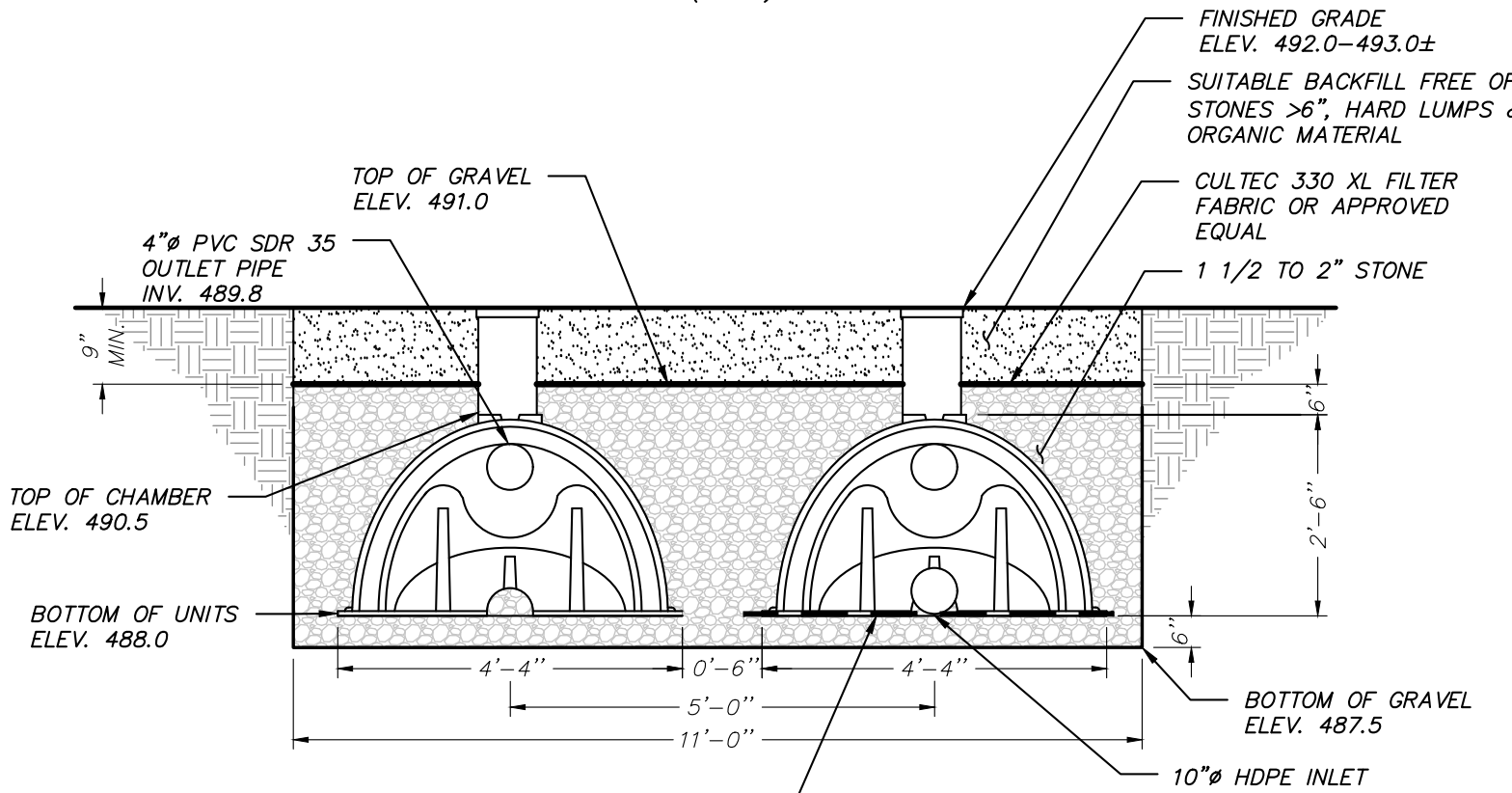
FIRST DEFENSE OPTIMUM HYDRODYNAMIC SEPARATOR FDO-4 (HDS 11)

(N.T.S.)



DRAINAGE LINE TRENCH DETAIL

(N.T.S.)

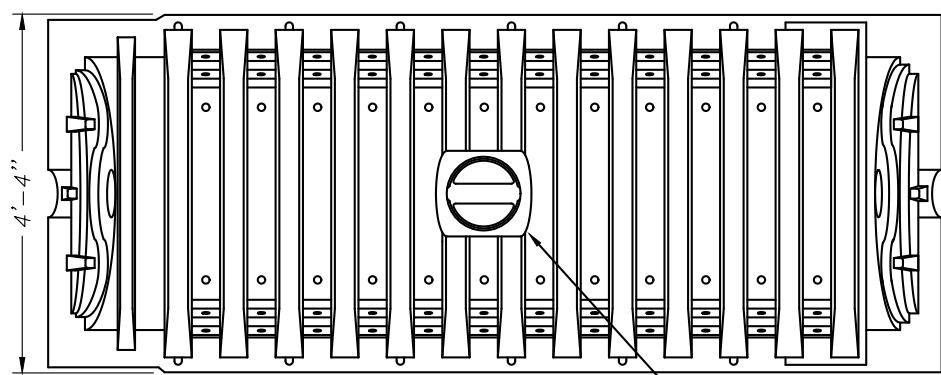


SECTION

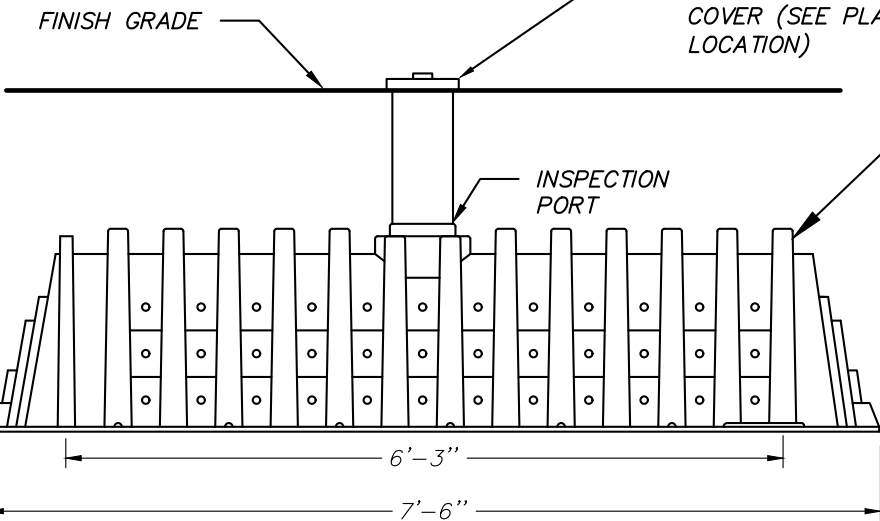
GEOTEXTILE TO BE INSTALLED BETWEEN CHAMBER AND STONE FOR ISOLATION ROWS PER MANUFACTURER'S SPECIFICATIONS

STORMWATER INFILTRATION SYSTEM DETAIL

(N.T.S.)

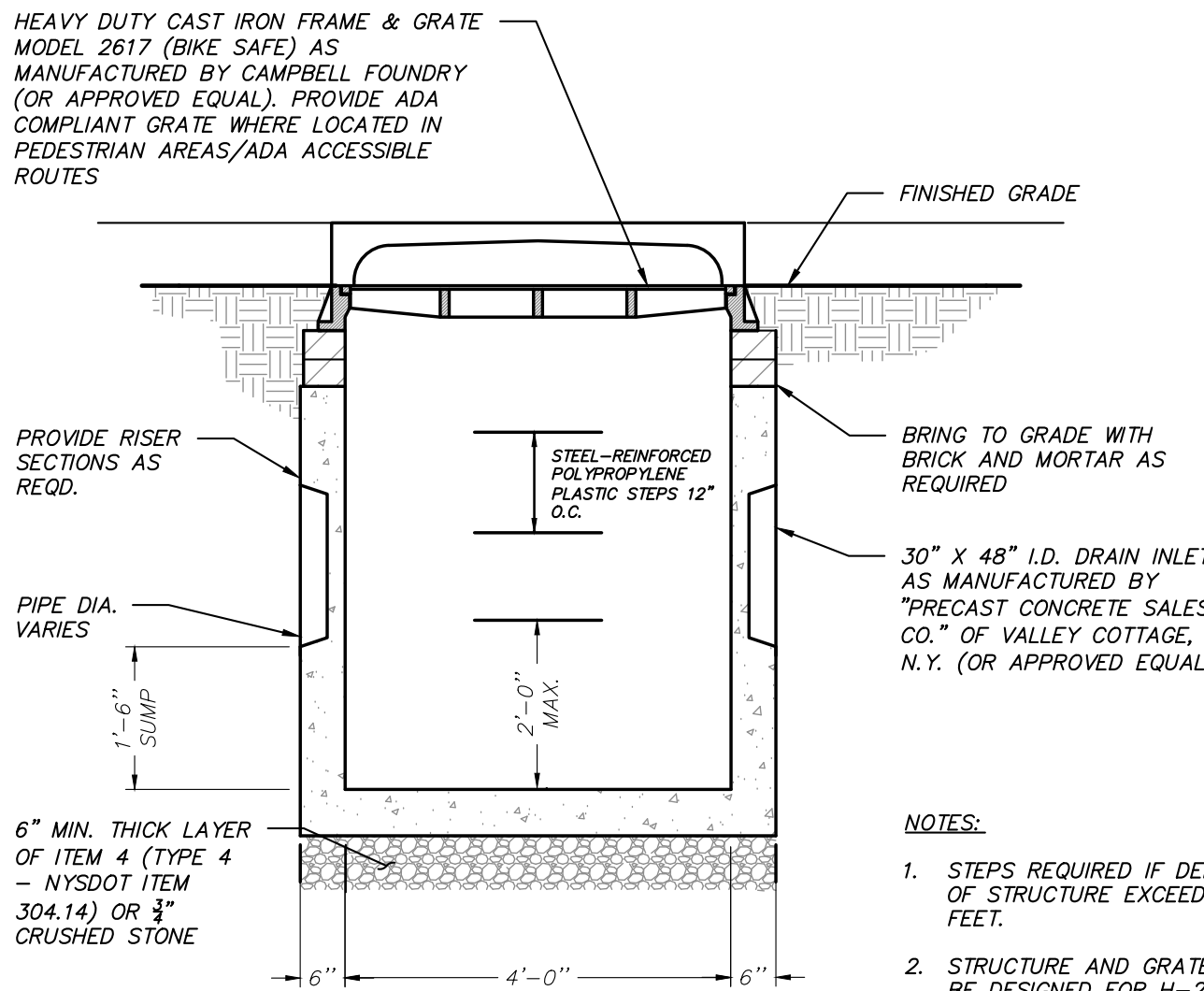


PLAN



ELEVATION

NOTE: THE DESIGN ENGINEER SHALL BE CONTACTED 48 HOURS PRIOR TO GRAVEL BACKFILL OF THE INFILTRATION SYSTEM. ALL SYSTEM COMPONENTS INCLUDING THE CONNECTOR PIPES MUST BE EXPOSED AND INSPECTED PRIOR TO BACKFILL.

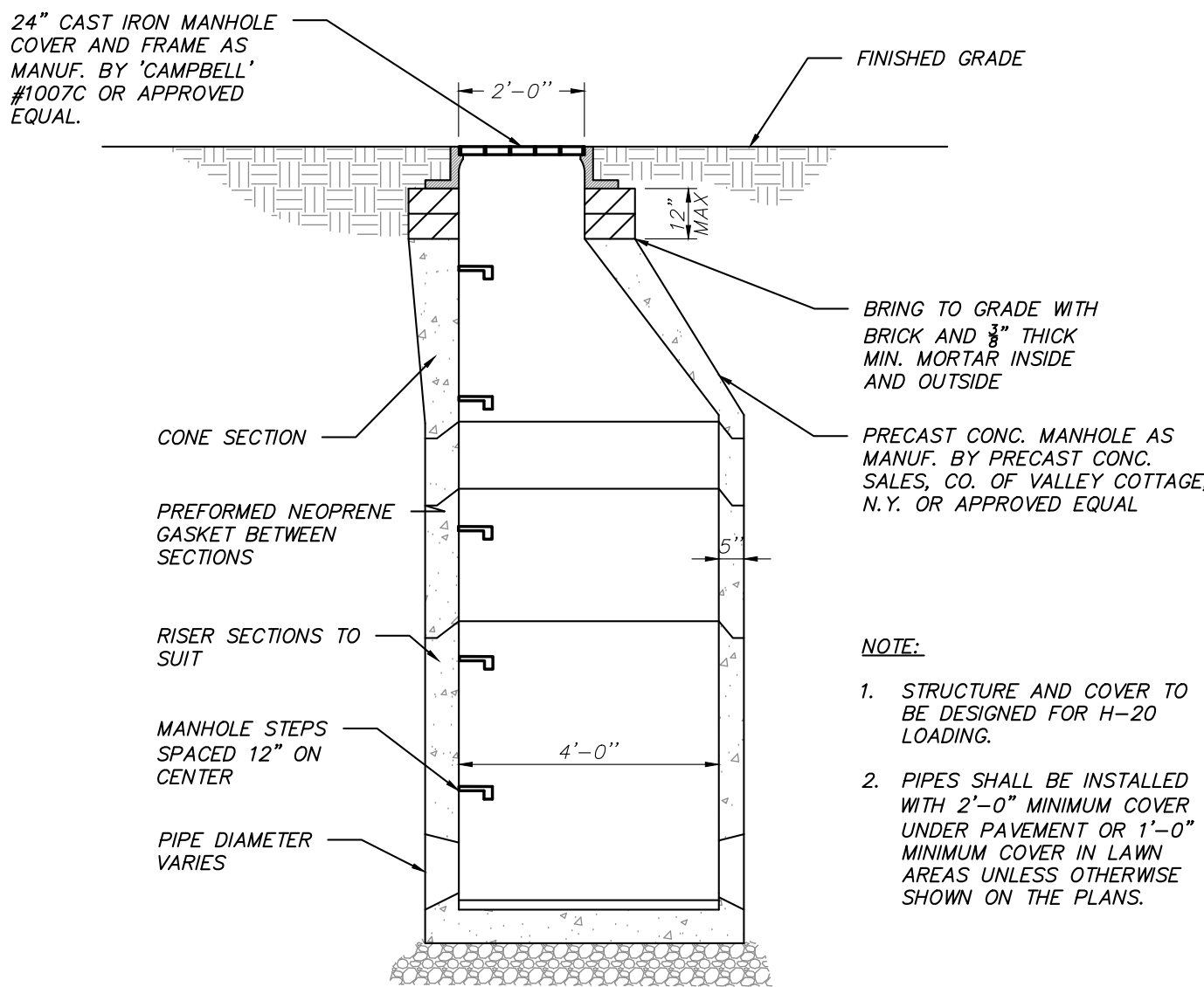


30" X 48" CATCH BASIN DETAIL

(N.T.S.)

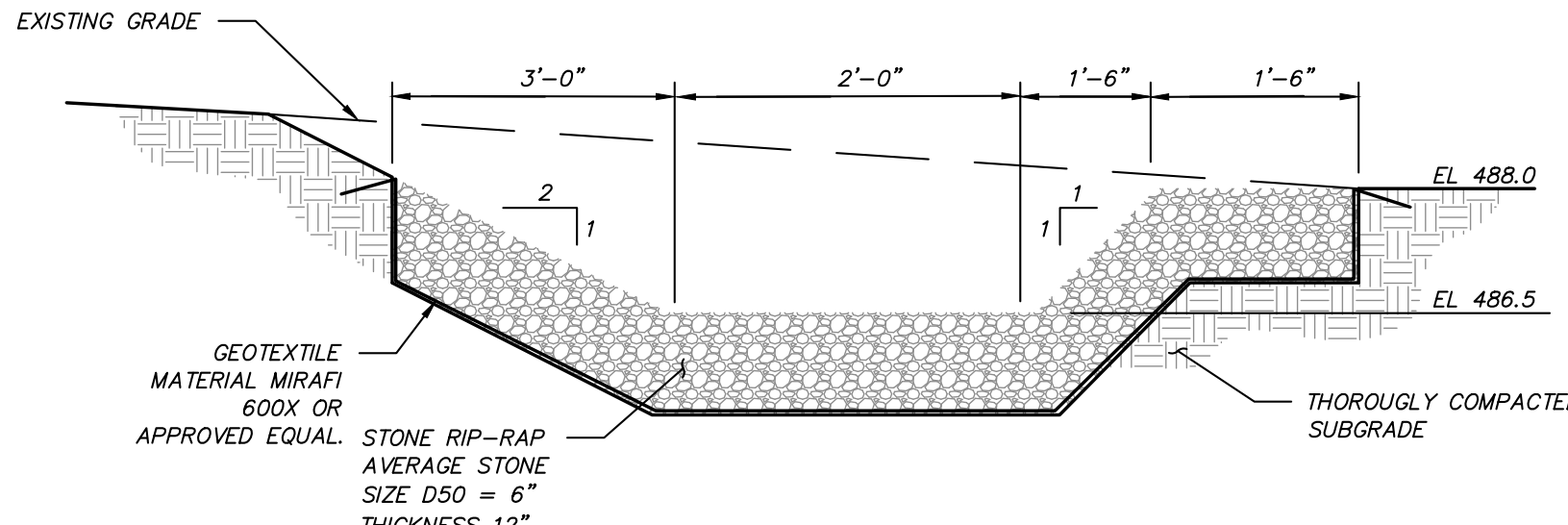
NOTES:

1. STEPS REQUIRED IF DEPTH OF STRUCTURE EXCEEDS 4 FEET.
2. STRUCTURE AND GRATE TO BE DESIGNED FOR H-20 LOADING.
3. PIPES SHALL BE INSTALLED WITH 2'-0" MINIMUM COVER UNDER PAVEMENT OR 1'-0" MINIMUM COVER IN LAWN AREAS UNLESS OTHERWISE SHOWN ON THE PLANS.



DRAINAGE MANHOLE DETAIL

(N.T.S.)



FLOW SPREADER DETAIL

(N.T.S.)

3	3-26-24	REVISED FOR PLANNING BOARD SUBMISSION	EJP
2	2-27-24	REVISED FOR PLANNING BOARD SUBMISSION	CMS
1	1-30-24	REVISED FOR PLANNING BOARD SUBMISSION	JUS
NO.	DATE	REVISION	BY

**INSITE**  
ENGINEERING, SURVEYING &  
LANDSCAPE ARCHITECTURE, P.C.

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Coronel, NY 10512  
(845) 225-9690  
(845) 225-9717 fax  
www.insite-eng.com

PROJECT: PAWLING COMMONS ALTERNATE SITE PLAN EXPANSION			
63-71 EAST MAIN STREET, VILLAGE OF PAWLING, DUTCHESS CO., NY			
DRAWING: STORMWATER DETAILS			
PROJECT NUMBER	18135.100	PROJECT MANAGER	J.M.W.
DATE	12-29-23	DRAWN BY	I.B.
SCALE	AS NOTED	CHECKED BY	E.J.P.
DRAWING NO.	D-3		
SHEET	7		
	9		

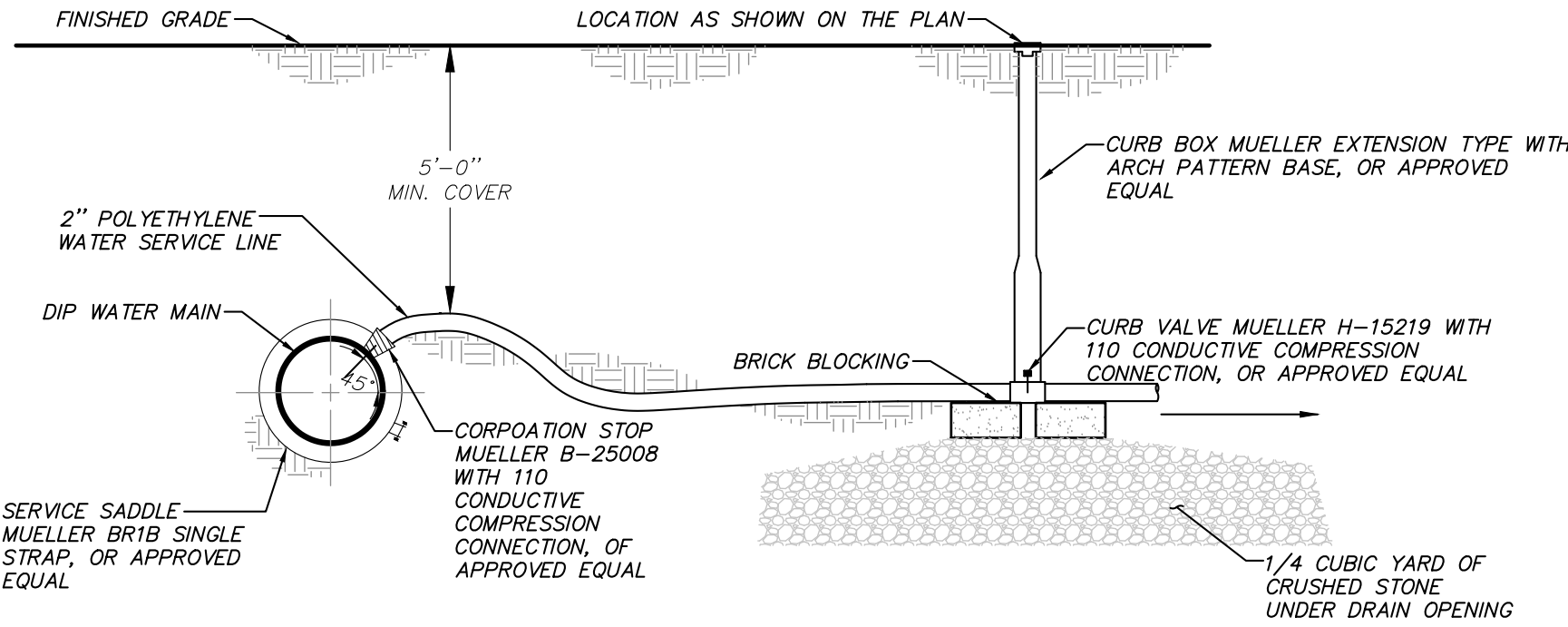


DUCTILE IRON PIPE WATER MAIN NOTES:

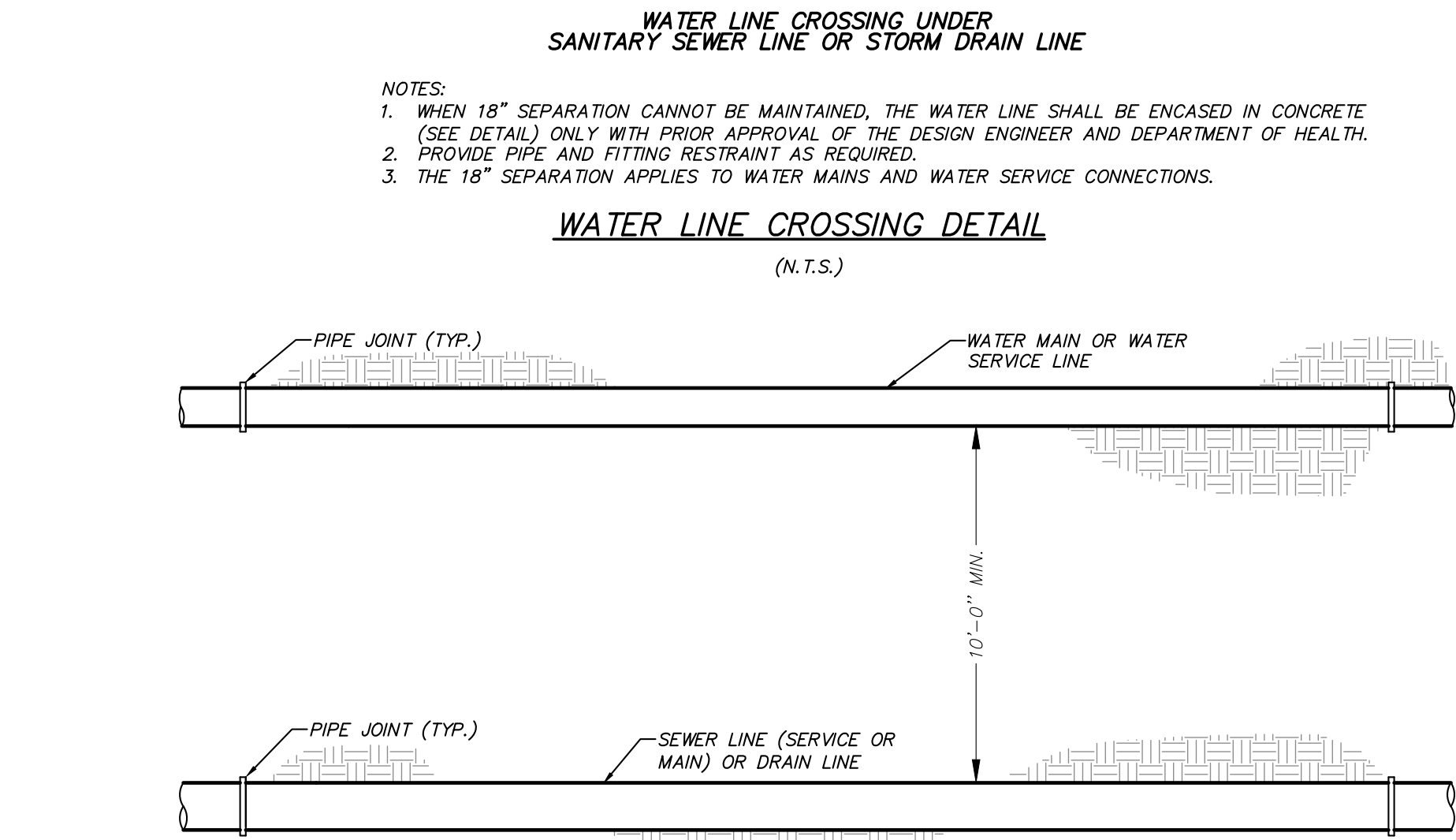
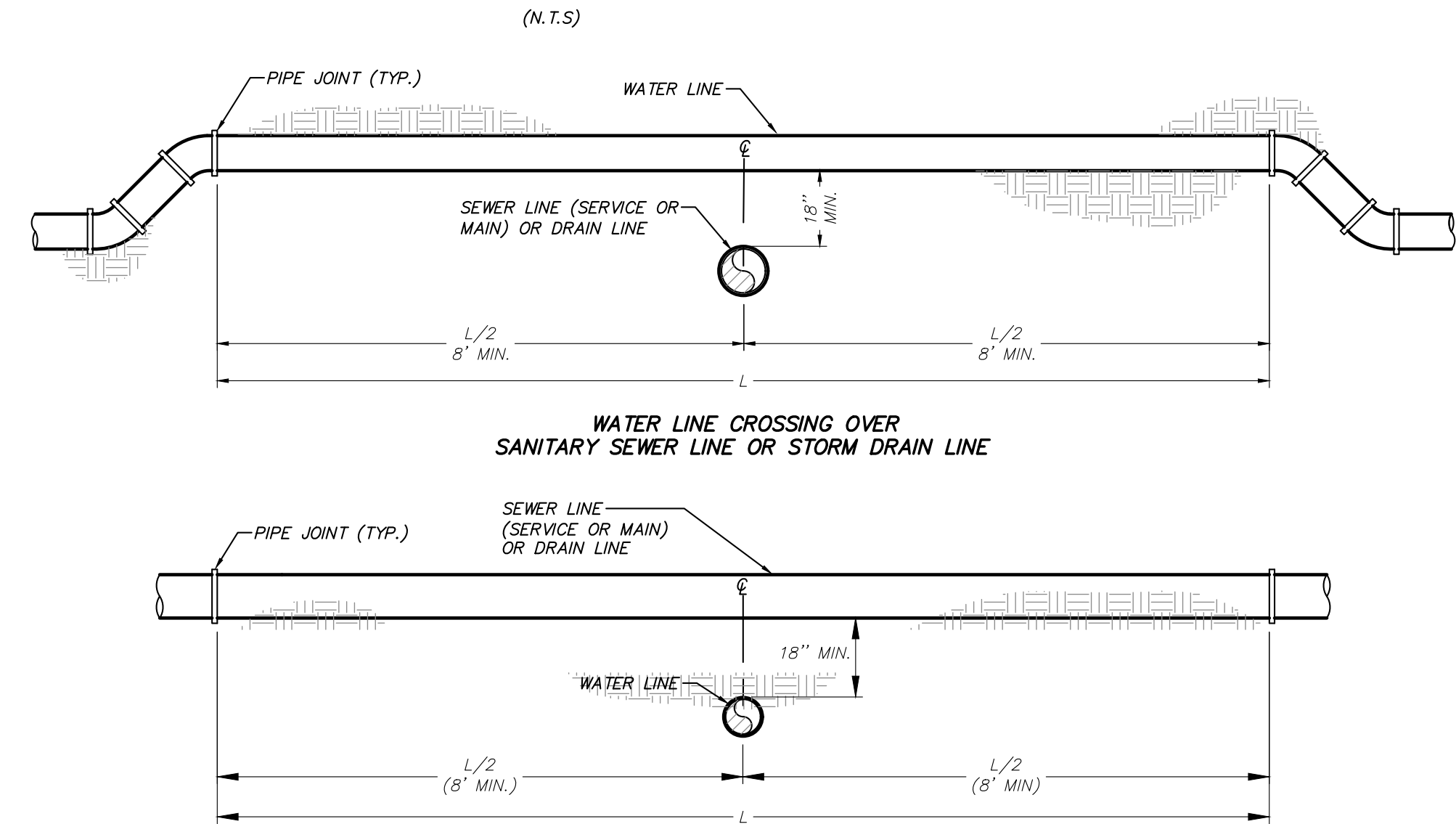
1. All water mains shall be class 52 cement lined tyton joint ductile iron pipe, push on (rubber gasket) type and installed with 2 bronze wedges for continuous electrical conductivity per joint. All pipe and appurtenances shall be in accordance with the latest edition of AWWA/ANSI standard C600, C150/A21.50, C151/A21.51, C110/A21.10 and C104/A21.4.
2. All water main fittings shall be Class 350 ductile iron mechanical joints (as manufactured by U.S. Pipe Foundry Co., or approved equal) with "Mega Lug" restraining glands in accordance with the latest AWWA/ANSI standard C111/A21.11.
3. All water mains and appurtenances shall be installed in accordance with the latest edition of AWWA C600.
4. Gate valves shall be "Mueller" or approved equal, iron body, non-rising stem conventional packing, mechanical joint with restrained joint gaskets, pressure class 50, opening shall be left (CCW) and operation shall be by 2" square wrench nut.
5. Every pipe joint and every fitting shall be secured with "Field Lok 350" restrained joint gaskets (as manufactured by U.S. Pipe Foundry Co., or approved equal) unless otherwise authorized by the Design Engineer, and with prior approval.
6. All water mains and appurtenances (including water service lines up to the curb stop) shall be pressure tested and leakage tested to the satisfaction of the Design Engineer, and the Dutchess County Department of Health. This shall be done in accordance with the latest edition of AWWA Standard C600.
7. All water mains and appurtenances shall be flushed, disinfected, and tested to the satisfaction of the Design Engineer, and the Dutchess County Department of Health. This shall be done in accordance with the latest edition of AWWA Standard C651, except for section 4.4.2 "the tablet method" will not be allowed.
8. Water mains shall be laid at least 10 feet horizontally from any existing or proposed sanitary or storm sewer main. The distance shall be measured edge to edge. In cases where it is not practical to maintain a 10 foot separation, the Design Engineer and Dutchess County Department of Health may allow deviation with prior approval on a case-by-case basis, if supported by data from the Design Engineer prior to the installation of the water line.
9. Water mains crossing sanitary or storm sewer mains shall be laid to provide a minimum vertical distance of 18 inches between the outside of the water main and the outside of the sewer. This shall be the case where the water main is either above or below the sewer. The crossing shall be arranged so that the sewer joints will be equidistant and as far as possible from the water main joints. Where a water main crosses under a sewer, adequate structural support shall be provided for the sewer to maintain line and grade. The vertical separation also applies to water service connections. In cases where it is not practical to maintain a 10 foot separation, the Design Engineer and Dutchess County Department of Health may allow deviation with prior approval on a case-by-case basis, if supported by data from the Design Engineer prior to the installation of the water line.
10. The Design Engineer, Dutchess County Department of Health, and Village of Pawling shall be notified forty eight (48) hours before construction is started.
11. The water mains shall not be placed into service until a certificate of construction compliance has been submitted to and accepted by the Dutchess County Department of Health.
12. The Dutchess County Department of Health and the Village of Pawling must be notified forty eight (48) hours prior to pressure testing the water main improvements.
13. Deflection of joints on water main shall not exceed 50% of the maximum deflection recommended by the manufacturer, or as ordered by the Design Engineer.
14. Exact location of all fittings shall be approved in the field by the Design Engineer.
15. The Design Engineer shall inspect all thrust blocks and sewer/drainage crossings prior to backfill.
16. The contractor shall notify the Design Engineer every day that water main construction shall occur.

DUCTILE IRON PIPE WATER TESTING PROCEDURES  
TESTS ON PRESSURE PIPING FOR TRANSPORT OF WATER

- A. Hydrostatic Pressure Test  
Hydrostatic testing shall be performed in accordance with the revision of AWWA C600, Section 5.2, "Hydrostatic Testing".
1. Test pressure shall be as scheduled or, where no pressure is scheduled, shall be 150% of the maximum working pressure or 150 psi, whichever is higher.
2. Test pressure shall be held on the piping for a period of at least 2 hours, unless a longer period is requested by the Engineer.
3. The test medium shall be water.
4. The contractor shall furnish all labor, materials, and equipment necessary for all required pipe testing.
- B. Hydrostatic Leakage Test  
1. The leakage test shall be conducted concurrently with the pressure test.
2. The rate of leakage shall be determined at 15-minute intervals by means of volumetric measurement of the makeup water added to maintain the test pressure. The test shall proceed until the rate of leakage has stabilized or is decreasing below an allowable value, for three consecutive 15-minute intervals. After this, the test pressure shall be maintained for at least another 15 minutes.
- a. At the completion of the test, the pressure shall be released at the furthestmost point from the point of application.
3. All exposed piping shall be examined during the test and all leaks, defective material or joints shall be repaired or replaced before repeating the tests.
4. The allowable leakage will be determined by the following formula.
- $$Q = \frac{148,000}{L}$$
- Where:
- Q = quantity of makeup water, in gallons per hour  
L = length of pipe tested, in feet  
D = nominal diameter of the pipe, in inches  
P = average test pressure during the hydrostatic test, in pounds per square inch (gauge)
5. Regardless of the above allowables, any visible leaks shall be permanently stopped.
6. The test medium shall be water.
- C. Disinfection  
Prior to placing the water main into service, the new pipe shall be cleaned and disinfected in accordance with the latest revision of AWWA C651, Section 4.4.3, "The Continuous Feed Method". The "Tablet Method" will not be accepted.
1. All work under this section shall be performed in the presence of the Design Engineer, and a representative of the public health authority having jurisdiction, as required.
2. Chlorination shall be scheduled such that sampling and flushing will be performed during normal daylight working hours. The contractor shall provide acceptable backflow prevention on all supply water to prevent any potential backflow contamination or cross connection.
3. Chlorination shall be by the use of a solution of water and liquid chlorine, calcium hypochlorite or sodium hypochlorite and the solution shall be contained in the pipe or structure as specified.
4. Prior to chlorination, all dirt and foreign matter shall be removed by a thorough cleaning and flushing of the pipeline or structure.
5. The chlorine solution shall be introduced to pipelines through corporation stops placed in the horizontal one of the pipe, to structures by means of tubing extending directly into the structure, or other approved methods.
6. The application of the chlorine solution shall be by means of a controlled solution feed device. The rate of chlorine solution flow shall be in such proportion to the rate of water entering the pipe or structure that the resulting free chlorine residual shall be between 25 and 50 parts per million (PPM) or milligrams per liter (mg/L).
7. The chlorine treated water shall be retained in the pipe or structure at least 24 hours, unless otherwise directed. During the retention period, all valves and hydrants within the treated sections shall be operated.
8. The chlorine residual shall be not less than 10 PPM (or mg/L) at any point in the pipe or structure at the end of the 24-hour retention period.
9. When making reports to, or when specified, structures and portions of pipelines shall be chlorinated by a concentrated chlorine solution containing not less than 200 PPM (mg/L) of free chlorine. The solution shall be applied with a brush or sprayed on the entire inner surface of the empty pipes or structures. The structures disinfected shall remain in contact with the strong chlorine solution for at least 30 minutes.
10. After the required retention of chlorinated water in the pipe or structures, they shall be thoroughly flushed until the replacement water shall, upon test, both chemically and bacteriologically, be proven equal to water quality served by the public from the existing water supply system.
11. The disposal of chlorinated water from any pipe or structure shall be such that it will not cause damage to any vegetation, fish, or animal life.
12. The Contractor shall make all arrangements for the testing of water quality by an approved independent laboratory. Two acceptable bacteriological test, taken at least 24 hours apart, shall be collected from the new water main. At least 1 set of samples must be collected from every 1,000 LF of the new water main, plus one set from the end of the line and at least one set from each branch. Sampling point(s) will be decontaminated by flaming. Bacteria sampling will be performed by a New York State Licensed and or registered professional laboratory. Collection samples will be made for free chlorine residual, total chlorine and 24 hour fecal & coliform bacteria plate count. The results for all tests shall be forwarded to the Design Engineer, the Village of Pawling Water Department and the public health authority having jurisdiction.
13. All water quality requirements shall be fulfilled prior to the passage of any water through the new system to a public supply or the use of the new system.

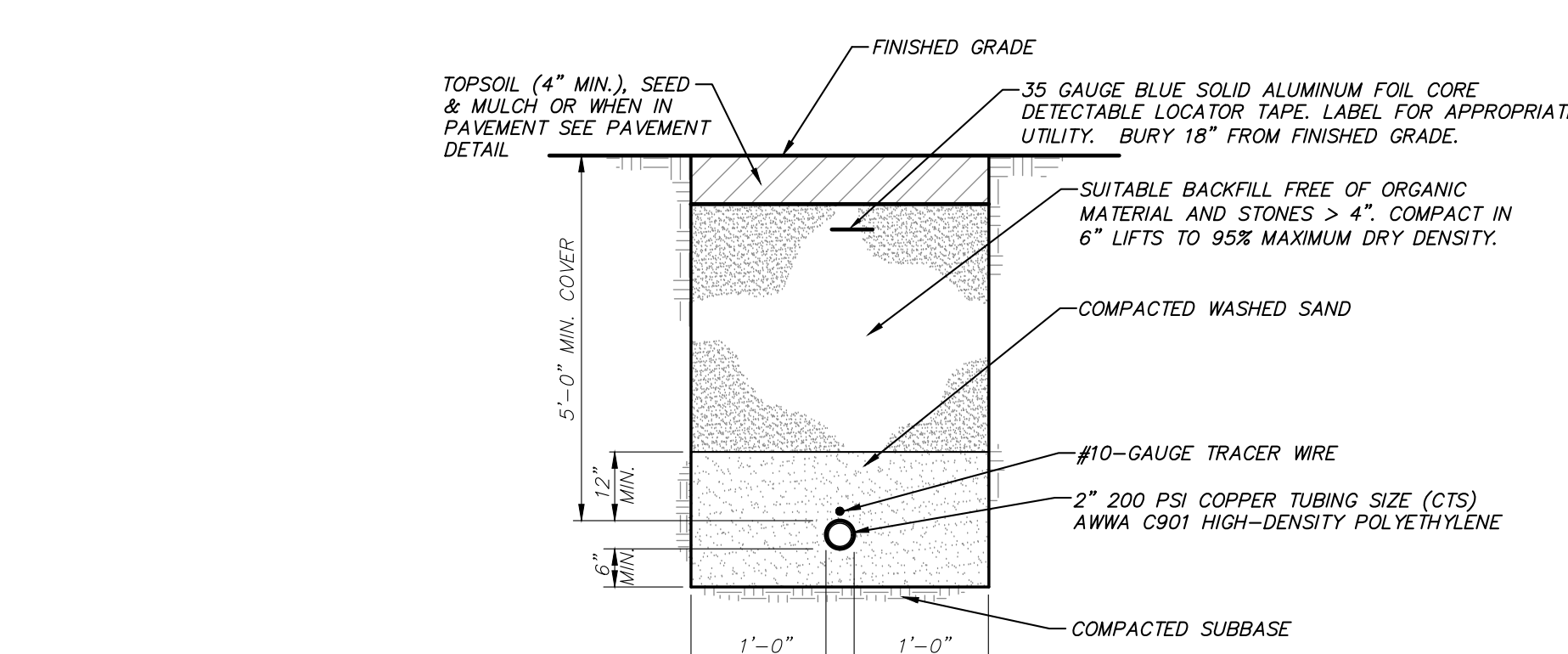
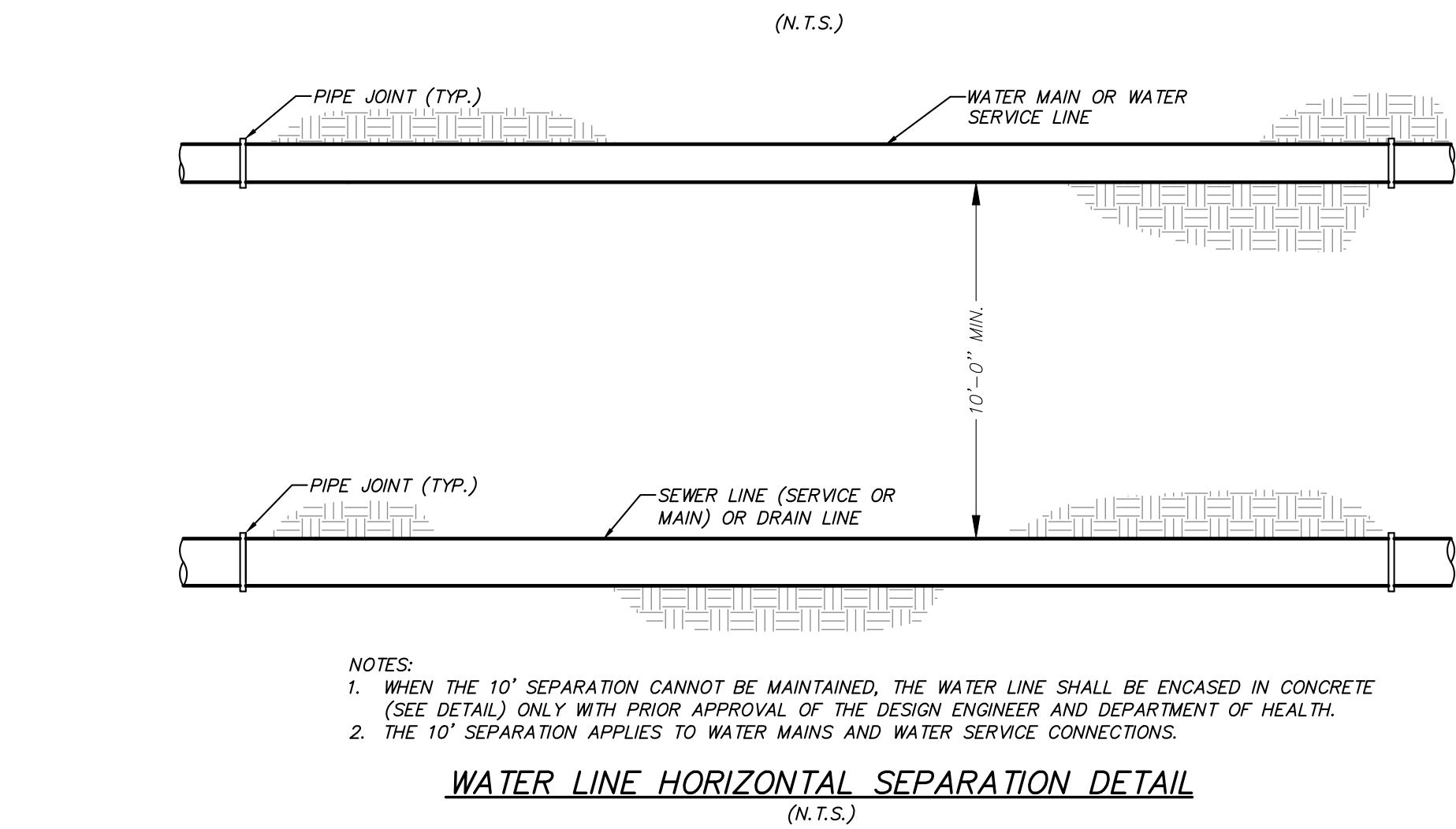


PE WATER SERVICE LINE CONNECTION TO DIP WATER SERVICE LINE DETAIL

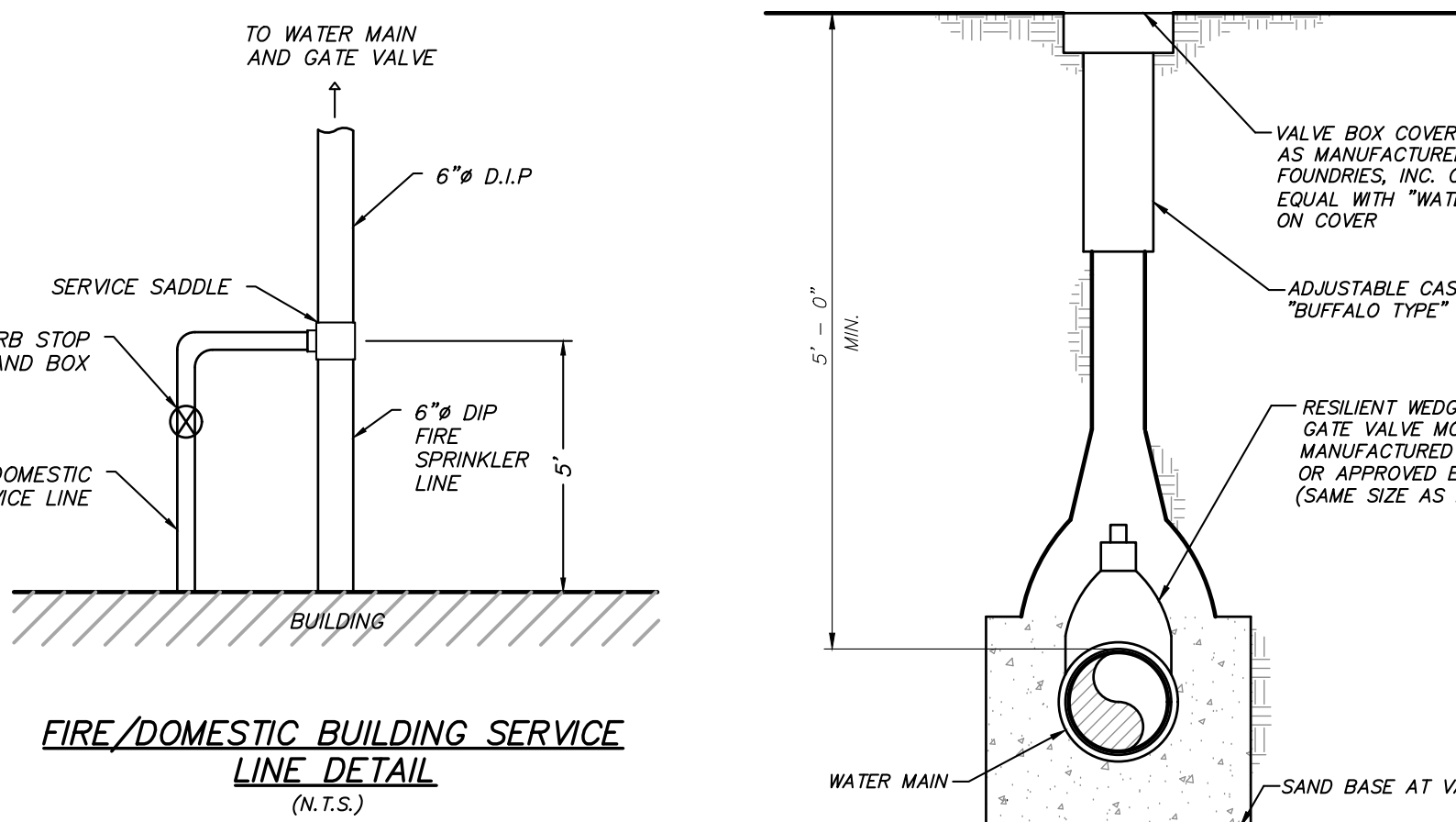


- NOTES:
1. WHEN 18" SEPARATION CANNOT BE MAINTAINED, THE WATER LINE SHALL BE ENCASED IN CONCRETE (SEE DETAIL), ONLY WITH PRIOR APPROVAL OF THE DESIGN ENGINEER AND DEPARTMENT OF HEALTH.
2. PROVIDE PIPE AND FITTING RESTRAINT AS REQUIRED.
3. THE 18" SEPARATION APPLIES TO WATER MAINS AND WATER SERVICE CONNECTIONS.

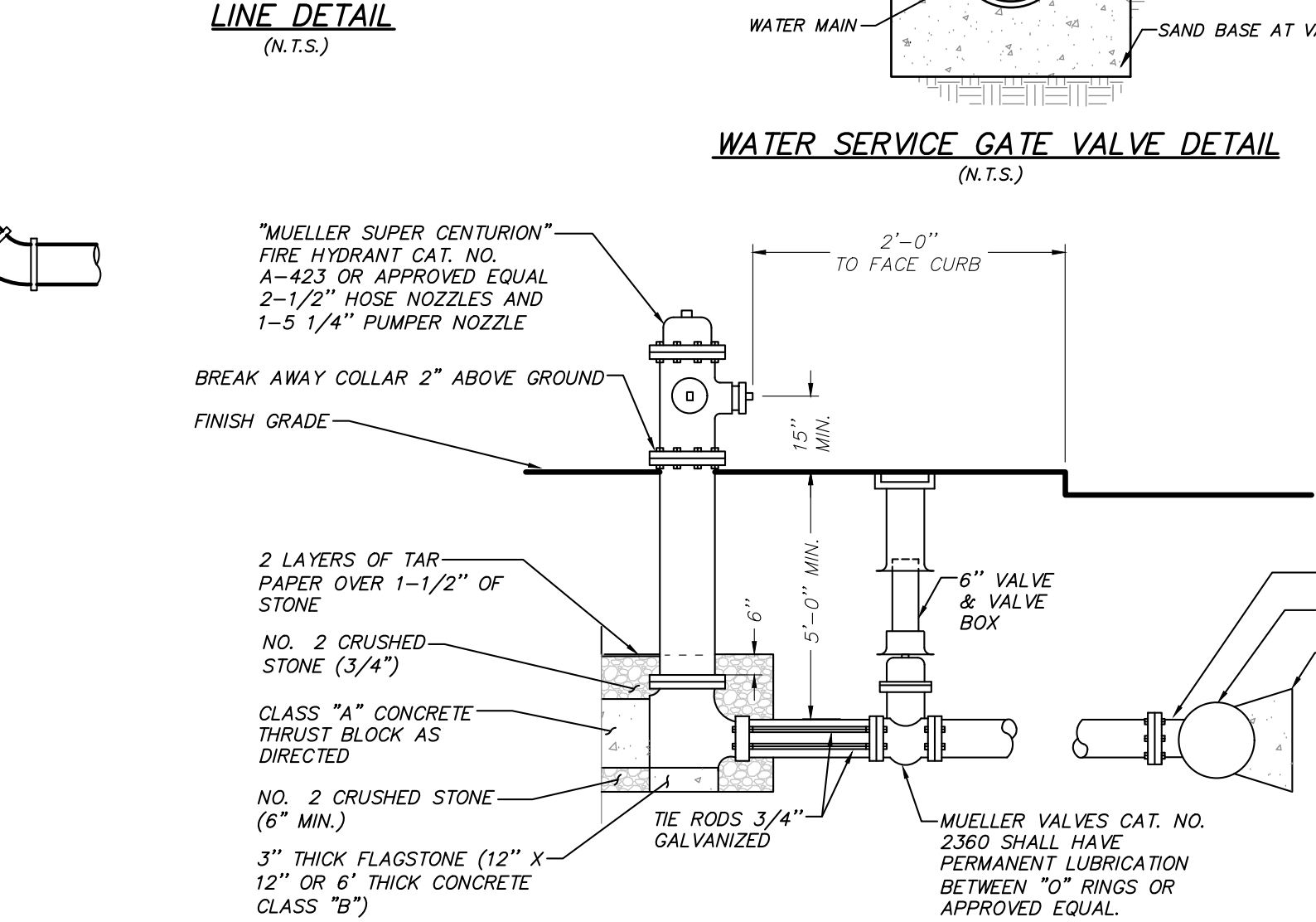
WATER LINE CROSSING DETAIL



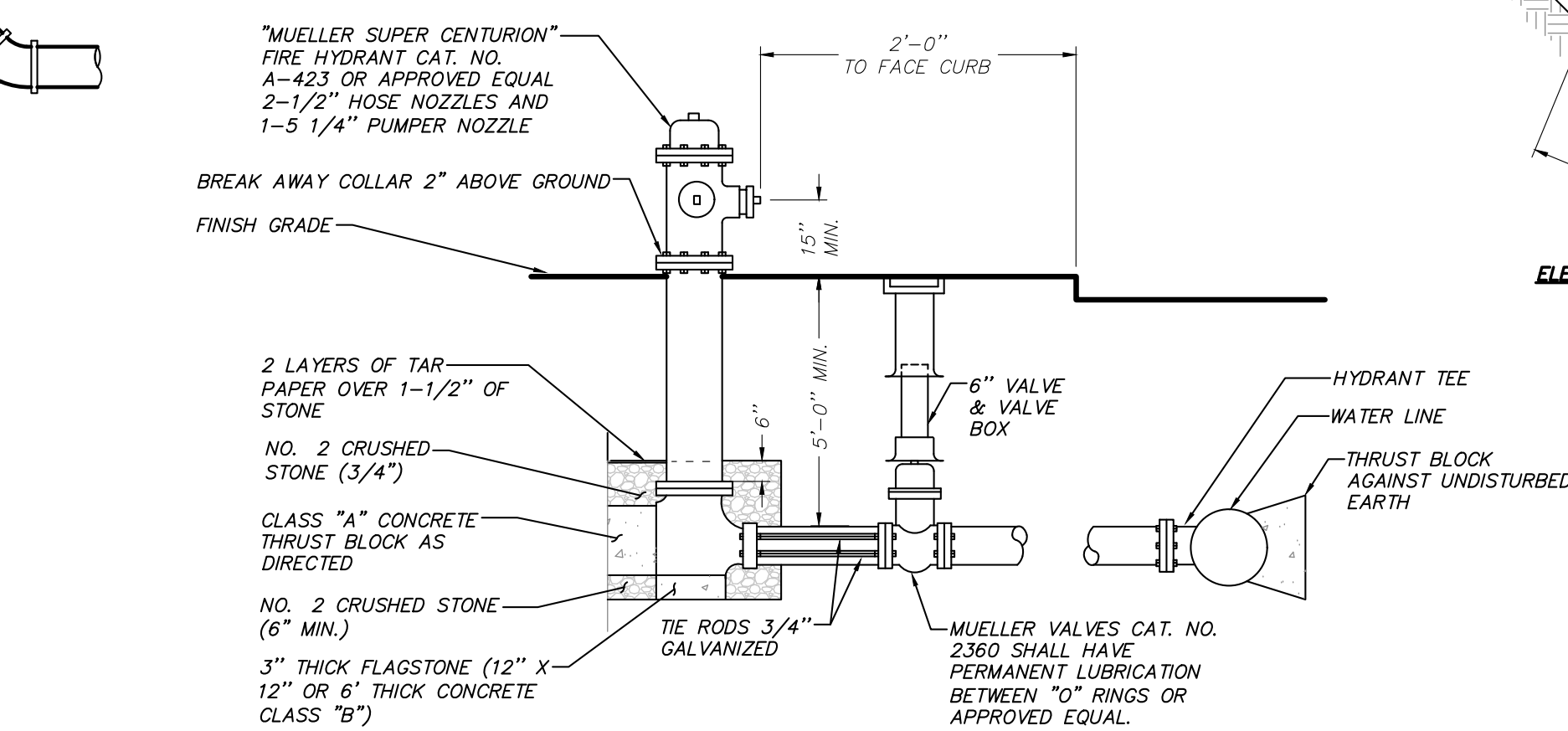
2" PE WATER SERVICE LINE TRENCH DETAIL



FIRE/DOMESTIC BUILDING SERVICE LINE DETAIL

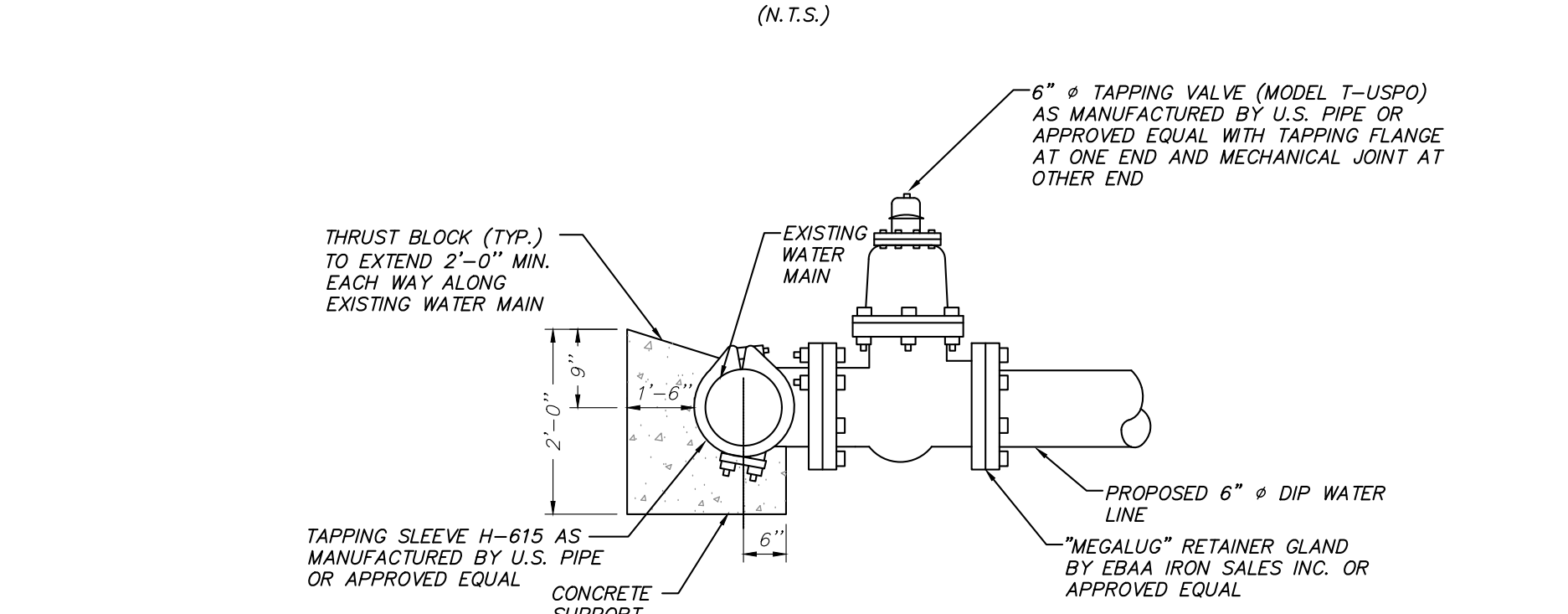


WATER SERVICE GATE VALVE DETAIL

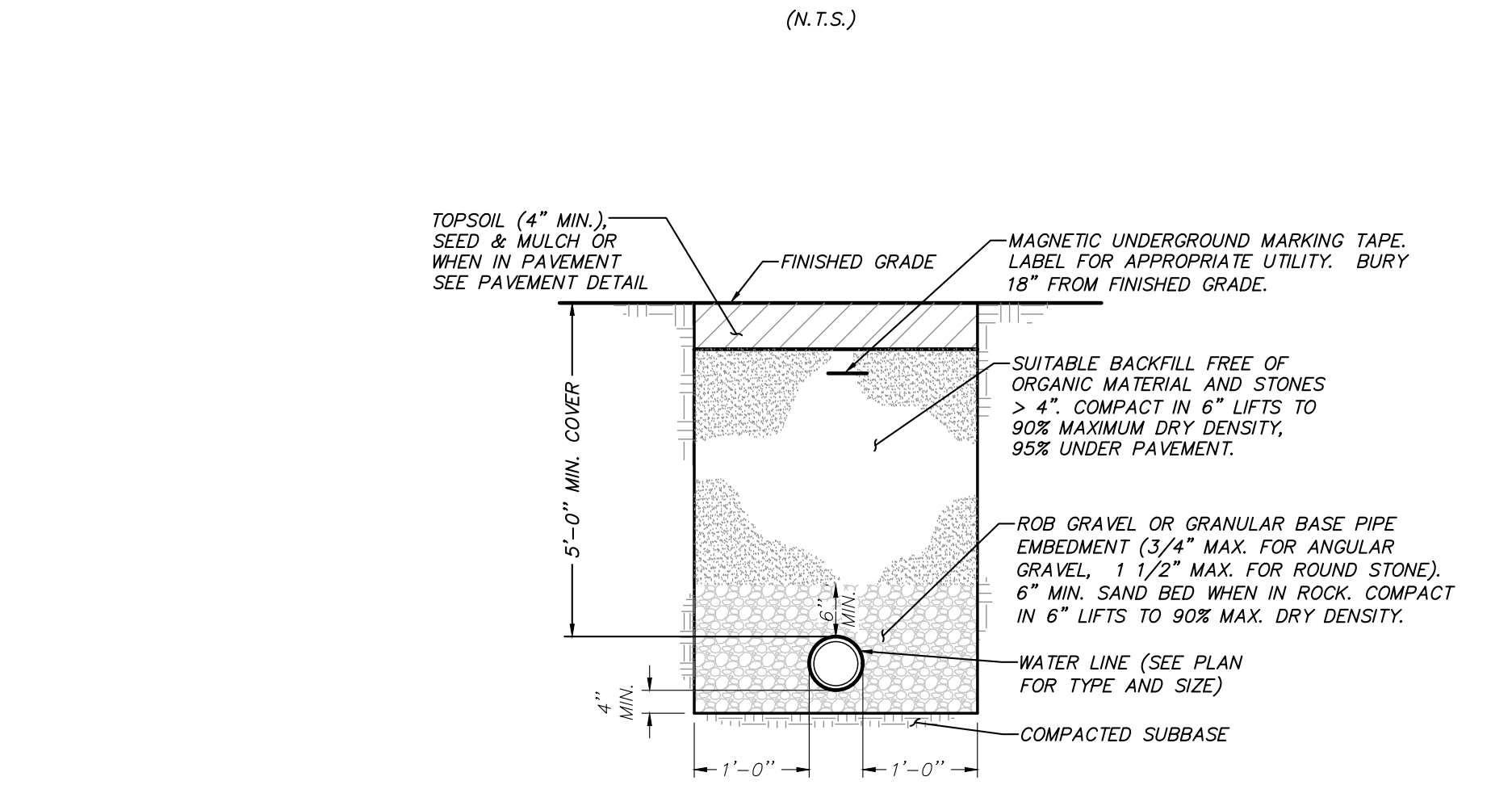


- HYDRANT NOTES:
1. PUMPER OUTLET SHALL FACE STREET.
2. HOSE OUTLETS SHALL BE PARALLEL TO STREET.
3. 1-1/2" STONE SHALL BE PLACED AROUND THE HYDRANT FROM THE BOTTOM OF THE TRENCH, BUT AT LEAST 6" BELOW THE BASE OF THE HYDRANT TO 6" ABOVE THE WASTE OPENING AND TO A DISTANCE OF 12" AROUND THE ELBOW.
4. IF GROUND WATER IS ENCOUNTERED WITHIN 7" OF SURFACE, THEN HYDRANT DRAINS SHOULD BE PLUGGED, THE BARRELS MUST BE PUMPED DRY AFTER USE DURING FREEZING WEATHER, WHERE HYDRANT DRAINS ARE NOT PLUGGED, A GRAVEL POCKET OR DRY WELL SHALL BE PROVIDED UNLESS THE NATURAL SOILS WILL PROVIDE ADEQUATE DRAINAGE. HYDRANT DRAINS SHALL NOT BE CONNECTED TO OR LOCATED WITHIN 10 FEET OF SANITARY SEWERS OR STORM DRAINS.

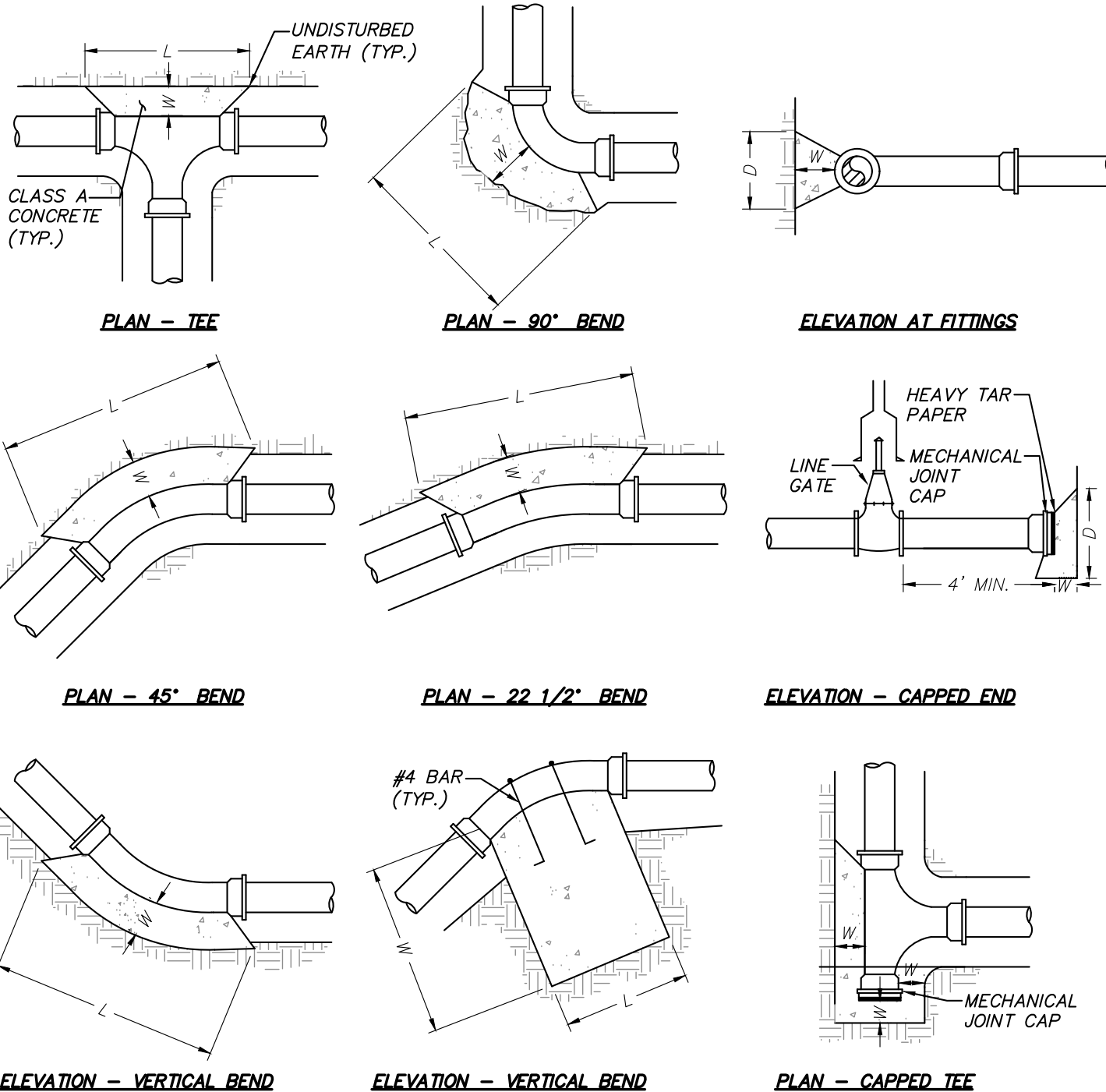
HYDRANT DETAIL



TAPPING SLEEVE, VALVE, AND THRUST BLOCK DETAIL

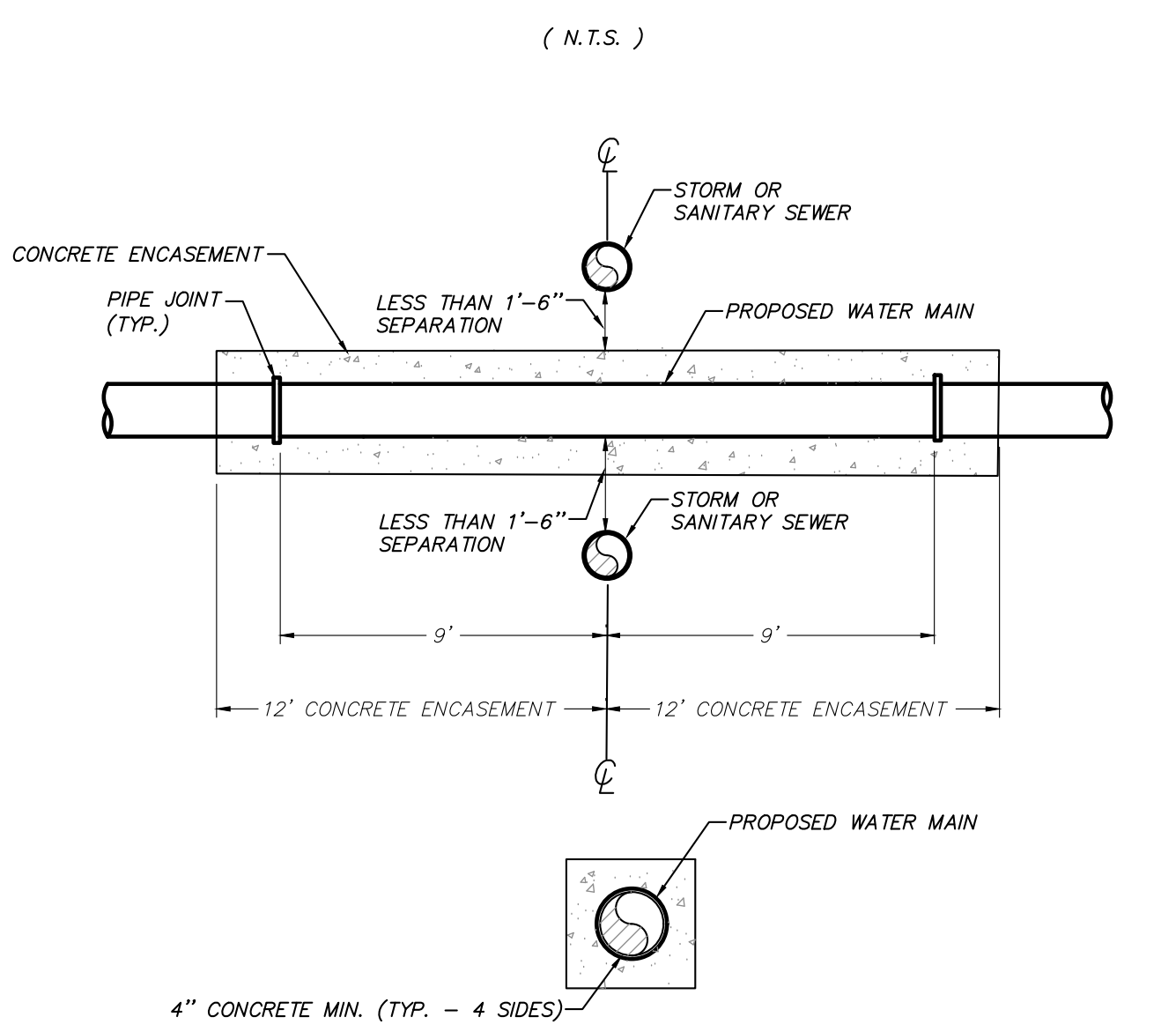


WATER SERVICE LINE (GREATER THAN 2") DETAIL




THRUST BLOCK SCHEDULE									
PIPE SIZE	CAP/TEE		22 1/2°		45°		90°		W
	L	D	L	D	L	D	L	D	
6"	2'	1.5'	2'	1.5'	2'	1.5'	2'	1.5'	1.5'

THRUST BLOCK DETAILS



WATER MAIN CONCRETE ENCASEMENT DETAIL

NOTE: CONCRETE ENCASEMENT IS ONLY TO BE USED WHEN 18" MINIMUM SEPARATION IS NOT POSSIBLE. CONCRETE ENCASEMENT REQUIRES PRIOR APPROVAL BY THE DESIGN ENGINEER & THE DEPARTMENT OF HEALTH.

3	3-26-24	REVISED FOR PLANNING BOARD SUBMISSION	EJP
2	2-27-24	REVISED FOR PLANNING BOARD SUBMISSION	CMS
1	1-30-24	REVISED FOR PLANNING BOARD SUBMISSION	JUS
NO.	DATE	REVISION	BY
<div><div><b>INSITE</b> ENGINEERING, SURVEYING &amp; LANDSCAPE ARCHITECTURE, P.C.</div></div> <div>3 Garrett Place Carmel, NY 10512 (845) 225-9690 (845) 225-9717 fax www.insite-eng.com</div>			
PROJECT: <u>PAWLING COMMONS</u> <u>ALTERNATE SITE PLAN EXPANSION</u> 63-71 EAST MAIN STREET, VILLAGE OF PAWLING, DUTCHESS CO., NY			
DRAWING: <u>WATER DETAILS</u>			
PROJECT NUMBER	18135.100	PROJECT MANAGER	J.M.W.
DATE	12-29-23	DRAWN BY	I.B.
SCALE	AS NOTED	CHECKED BY	E.J.P.
DRAWING NO.		SHEET	
D-4		8 9	

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SEWER TESTING PROCEDURES

TESTS FOR NON-PRESSURE PIPELINES FOR TRANSPORT OF SEWAGE

The leakage shall be determined by exfiltration, infiltration or low pressure air.

- A. Exfiltration Testing
- Exfiltration tests shall be made by filling a section of pipeline with water and measuring the quantity of leakage.
  - The head of water at the beginning of the test shall be at least 2 feet above the highest pipe within the section being tested.
    - Should groundwater be present within the section being tested, the head of water for the test shall be 2 feet above the hydraulic gradient of the groundwater.
    - Should the requirement of 2 feet of water above the highest pipe subject any joint at the lower end of the test section to a differential head of greater than 11.5 feet, another method of testing shall be employed.
- B. Infiltration Testing
- Infiltration tests will be allowed only when the water table gauges determine the groundwater level to be 2 feet or more above the highest pipe of the section being tested.
  - Infiltration test shall be made by measuring the quantity of water leaking into a section of pipeline.
  - Measurement of the infiltration shall be by means of a calibrated weir constructed at the outlet of the section being tested.
- C. Allowable Leakage for Non-Pressure Pipelines
- The allowable leakage (exfiltration or infiltration) for non-pressure pipelines shall not exceed the following in gallons per 24 hours per inch of diameter mile feet of pipe:

Type of Pipe	Leakage
Ductile iron — mechanical or push-on joints	100
Polyvinyl chloride, thermal plastic or fiberglass with rubber joints	100
Cast iron soil pipe	0
  - Regardless of the above allowable leakage, any spurting leaks detected shall be permanently stopped.
- D. Low Pressure Air Testing
- Air testing for acceptance shall not be performed until the backfilling has been completed.
  - Low pressure air tests shall conform to ASTM C 828 or ASTM F1417-16, Section 8.2.2, Time-Pressure Drop Method for 0.5 psi drop, except as specified herein and shall not be limited to type or size of pipe.
  - All sections of pipelines shall be cleaned and flushed prior to testing.
  - The air test shall be based on the starting pressure of 3.5 to 4.0 psi gauge. The time allowed for the 0.5 psi drop in pressure, measured in seconds, will be computed based on the size and length of the test section by the Engineer.
    - When groundwater is present, the average test pressure of 3 psig shall be above any back pressure due to the groundwater level.
    - The maximum pressure allowed under any condition in air testing shall be 10 psig. The maximum groundwater level for air testing is 13 feet above the top of the pipe.
  - The equipment required for air testing shall be furnished by the Contractor and shall include the necessary compressor, valves, gauges and plugs to allow for the monitoring of the pressure, release of pressure and a separable test gauge.
    - The test gauge shall be sized to allow for the measuring of the 0.5 psig loss allowed during the test period and shall be on a separate line to the test section.
- E. Deflection Testing
- Deflection testing shall be performed 30 days after backfilling. The test shall be made by passing a ball or cylinder no less than 95% of the pipe diameter through the pipe. The test shall be performed without mechanical pulling devices.
- F. Manhole Testing
- General
    - Each manhole shall be tested by either exfiltration, infiltration or vacuum testing.
    - A manhole will be acceptable if the leakage does not exceed an allowance of one gallon per vertical foot of depth for 24 hours. Regardless of the allowable leakage, any leaks detected shall be permanently stopped.
  - Exfiltration tests shall be performed after backfilling. The test shall be made by filling the manhole with water and observing the level for a minimum of eight hours.
  - Infiltration tests shall be performed after backfilling when the groundwater level is above the joint of the top section of a precast manhole.
  - Vacuum testing shall be performed after backfilling in accordance with the latest revision of ASTM C1244-11R17 as follows:
    - The test head shall be placed at the top of the manhole in accordance with the manufacturer's recommendations.
    - A vacuum of 10 in. of mercury shall be drawn on the manhole, the valve on the vacuum line of the test head closed, and the vacuum pump shut off. The time shall be measured for the vacuum to drop to 9 in. of mercury.
    - The manhole shall pass if the time for the vacuum reading to drop from 10 in. of mercury to 9 in. of mercury meets or exceeds the values indicated below:

Minimum Test Times for Various Manhole Diameters in Seconds:

Depth (ft)	Diameter (Inches)	48	60
Time (seconds)			
8 or less		20	26
10		25	33
12		30	39
14		35	46
16		40	52
18		45	59
20		50	65

- If the manhole fails the initial test, necessary repairs shall be made by an approved method. The manhole shall then be retested until a satisfactory test is obtained.

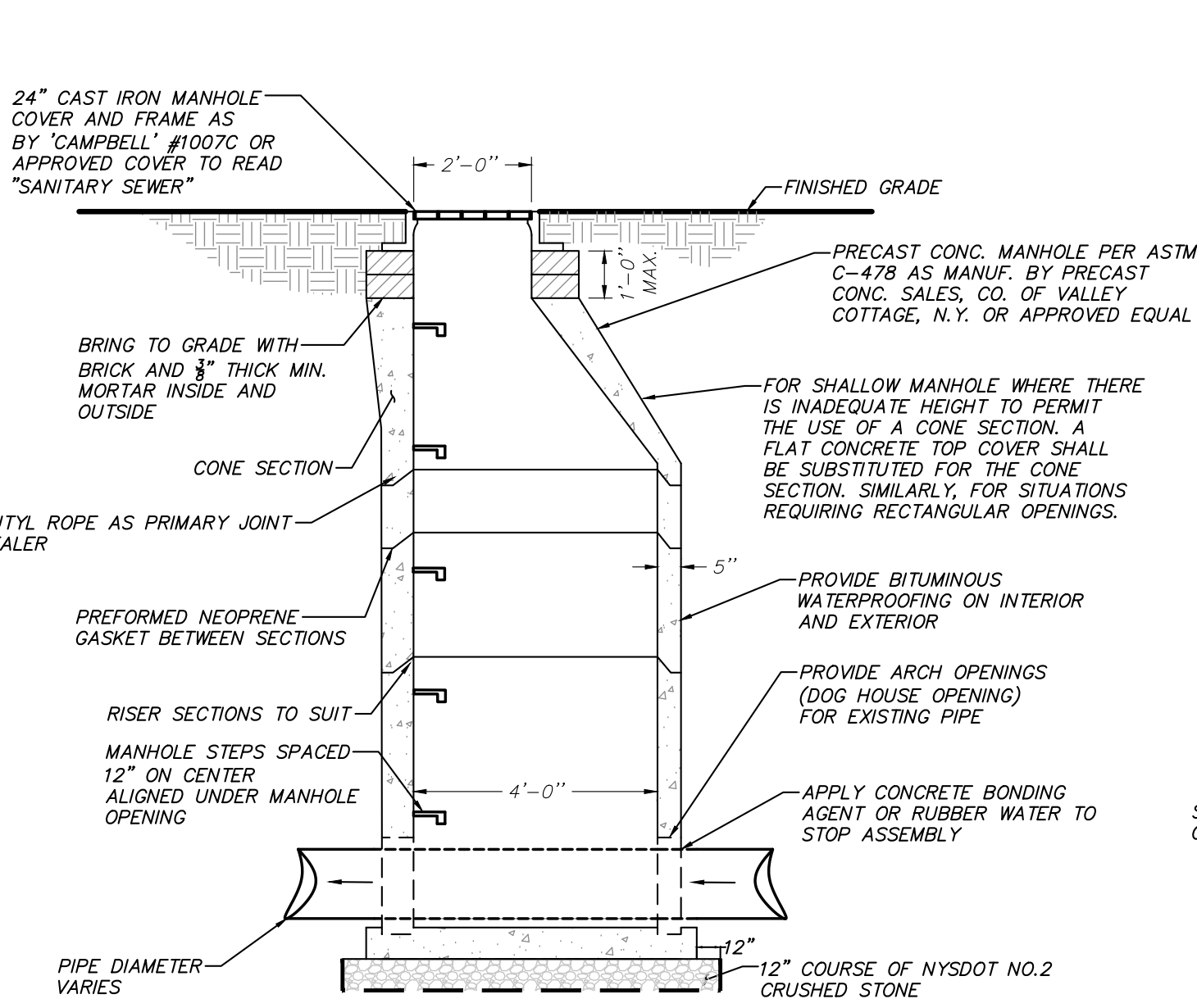
SEWER MAIN NOTES

- All sewer mains & sewer services shown on these plans shall be polyvinyl chloride (PVC) SDR 35 where depth is less than 10 feet. Where depth exceeds 10 feet, PVC SDR 26 shall be used.
- Sewers shall be laid at least 10 feet horizontally from any existing or proposed water main. The distance shall be measured edge to edge. In cases where it is not practical to maintain a 10 foot horizontal separation, the Design Engineer and Dutchess County Department of Health may allow deviation with prior approval on a case-by-case basis, if supported by data from the Design Engineer prior to sewer line installation. The horizontal separation also applies to service connections.
- Sewers crossing water mains shall be laid to provide a minimum vertical distance of 18 inches between the outside of the water main and the sewer. The crossing shall be arranged so that the sewer joints will be equidistant and as far as possible from the water main joints. Where a water main crosses under a sewer, adequate structural support shall be provided for the sewer to maintain line and grade. In cases where it is not practical to maintain a 10 foot horizontal separation, the Design Engineer and Dutchess County Department of Health may allow deviation with prior approval on a case-by-case basis, if supported by data from the Design Engineer prior to the sewer line installation. The vertical separation also applies to service connections.
- Sanitary sewer service lines shall be tested in conjunction with the sewer mains to the property line or easement line, and in accordance with the latest Dutchess County Department of Health Rules & Regulations.
- Testing of the manholes with the pipeline shall not be permitted. Manholes & sanitary sewer lines shall be tested independently of each other.
- The owner/applicant shall be responsible for acquiring supervision of the construction of the sanitary sewer main system by a person or firm qualified to practice professional engineering in the state of New York.
- The owner/applicant shall be responsible for providing Three (3) copies of as-built drawings signed and sealed by a licensed and registered New York State Professional Engineer to the Dutchess County Department of Health at the completion of the construction.
- The Design Engineer, Dutchess County Department of Health, and Village of Pawling shall be notified forty eight (48) hours before construction is started.
- The sanitary sewer mains shall not be placed into service until a certificate of construction compliance has been submitted to and accepted by the Dutchess County Department of Health.
- The Dutchess County Department of Health must be notified forty eight (48) hours prior to pressure testing the sewer main improvements.
- Manhole frames & covers to be campbell pattern #1007C for 24" opening or approved equal. M.H. covers to be marked "SEWER" and to have six 3/4" hole vents. (use solid covers where necessary.)
- The exterior of all manholes shall be covered with an approved asphalt waterproofing.
- Concrete base slabs shall be air entrained concrete with a minimum design strength of 3,000 psi.
- The contractor shall submit shop drawings of the precast manholes to the Design Engineer for review and acceptance.
- Precast manholes shall have minimum reinforcement of 0.12 sq. in. per lin. ft. for 48" barrel & be designed in accordance with A.S.T.M. C-478, and withstand an H-20 design loading.
- Precast base sections to have the required number of gaskets and openings as shown and specified.
- Precast manhole sections shall employ a watertight gasket arrangement between each section approved by the Design Engineer.
- Openings for pipes shall be precast or machine cored. Gaskets or collars for pipe connections to manholes shall be resilient and watertight and compatible with the type of pipe being used.
- The length of pipes entering or leaving any manhole shall be greater than 2'-0".
- Precast manholes under 6'-0" deep shall have a "Flat Top" slab roof.
- Gaskets or collars for pipe connections to manhole shall provide a minimum of 0.1' drop across the manhole.
- The contractor shall notify the Design Engineer every day that sewer main installation shall occur.
- Existing sewer manholes where extensions are proposed must comply with leakage testing requirements.
- Exfiltration / Infiltration test leakage shall not exceed 100 gallons per inch of pipe diameter per mile per day. Water tests shall be performed under a minimum positive head of two (2) feet. Low pressure air testing is permitted for pipe lines and shall conform to ASTM C-828. Vacuum testing is permitted for manholes, but not permissible for pipelines. Refer to specific procedures below.

DUTCHESS COUNTY DEPARTMENT OF BEHAVIORAL & COMMUNITY HEALTH NOTES:

- The design, construction and installation shall be in accordance with this plan and generally accepted standards in effect at the time of construction which include:

"New York State Design Standards for Intermediate Sized Wastewater Treatment Systems", NYSDEC. "Recommended Standards for Sewage Treatment Works, (Ten States)." "Recommended Standards for Water Works, (Ten States)." "Rural Water Supply, New York State Department of Health" "New York State Department of Health and Dutchess County Environmental Health Services Division (DC EHSD)." "Dutchess County and New York State Sanitary Codes." "DC EHSD Certificate of Approval letter."
- This plan is approved as meeting the appropriate and applied technical standards, guidelines, policies and procedures for arrangement of sewage disposal.
- Upon completion of the facilities, the finished works shall be inspected, tested, and certified complete to the DC EHSD by the New York State registered design professional supervising construction. No part of the facilities shall be placed into service until accepted by the DC EHSD.
- Approval of any plan(s) or amendment thereto shall be valid for a period of five (5) years from the date of approval. Following the expiration of said approval, the plan(s) shall be re-submitted to the Commissioner of Health for consideration for re-approval. Re-submission or revised submission of plans and/or associated documents shall be subject to compliance with the technical standards, guidelines, policies and procedures in effect at the time of the re-submission.
- The DC EHSD shall be notified sixty days prior to any change in use; use changes may require re-approval by the DC EHSD.
- All required Erosion & Sediment Control and Storm Water Pollution Prevention Water Quality & Quantity Control structures, permanent and temporary, are shown on the plans.
- No buildings are to be occupied and the new water system shall not be placed into service, until a "Completed Works Approval" is issued under section 5-1-.22(d) of Part 5 of the New York State Sanitary Code (10NYCRRS).
- No buildings are to be occupied and the new wastewater collection system and water distribution system shall not be placed into service until, a "Certificate of Construction Compliance" is issued under section 19.7 of Article 19 of the Dutchess County Sanitary Code.
- No footing, cellar, floor, garage, cooler or roof drains shall be discharge into the sewage collection system.
- The sewer mains shall be the responsibility of the Village of Pawling Sewer Department. Village of Pawling Sewer Department shall not be responsible for grease traps or pipes entering and exiting grease traps, even if located within an easement. The Village of Pawling Water Department shall be responsible for the water main and appurtenances from the proposed connection to the existing water main up to and including the valve prior to the meter pit. Property owner to be responsible for the water main, meter pit and appurtenances after the gate valve prior to the meter pit. Property owner shall also be responsible for owning and maintaining for the existing on-site sewer service lines and sewer manholes. All service lines from the buildings are the responsibility of the owner. The sewer department shall be responsible for all sewer mains. The property owner shall be responsible for all piping leading to the manhole.
- All buildings shall be constructed at an elevation high enough to ensure gravity flow to the sewer main, or a pump pit shall be provided.
- The DC EHSD shall be contacted prior to the commencement of construction and/or issuance of a building permit for a pre-construction inspection to ensure that the arrangements for water supply and sewage disposal are commenced in accordance with the approved plans and amendments thereto and generally accepted standards.
- The retaining walls and slope stabilization shown on these plans are not part of the approval of the Dutchess County Department of Behavioral & Community Health.
- Any deficiencies within the sewer laterals shall be repaired in accordance with current standards and tested.

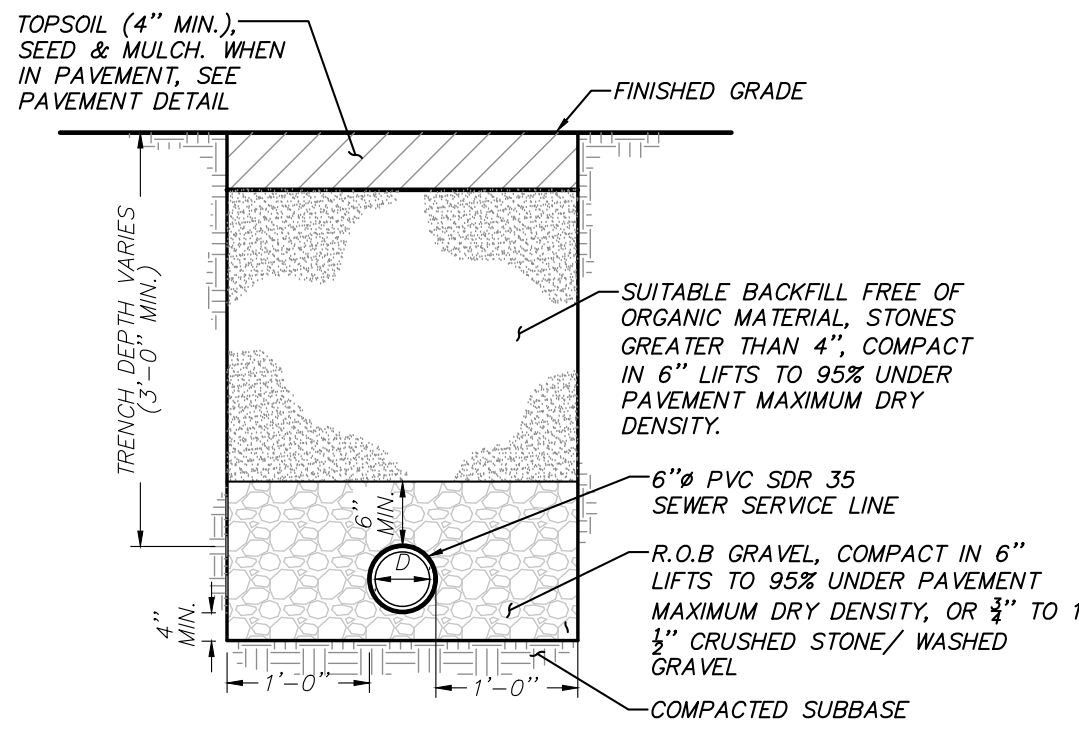


NOTE:

- THE CONTRACTOR SHALL NOT CUT NOR COMPROMISE THE EXISTING SEWER MAIN DURING DOG HOUSE MANHOLE INSTALLATION. THE INSTALLATION AND REQUIRED SEWER TESTING SHALL BE COMPLETED AND APPROVED BY THE DESIGN ENGINEER PRIOR TO CUTTING THE EXISTING SEWER LINE.
- INVERT SHALL BE FILLETED.
- REINFORCEMENT FOR MANHOLE COMPONENTS SHALL BE DESIGNED BY A LICENSED NEW YORK STATE PROFESSIONAL ENGINEER PRIOR TO CONSTRUCTION. SHOP DRAWINGS SHALL BE SUBMITTED FOR REVIEW. STRUCTURE SHALL BE DESIGNED FOR HS-20 VEHICULAR LOADING.
- CONCRETE TO TEST 4,500 PSI. AT 28 DAYS IN CONFORMANCE WITH A.S.T.M C-478.
- BENCH SHALL BE BUILT FOR FLOW BETWEEN INLET AND OUTLET.
- EACH MANHOLE EXTERIOR SHALL RECEIVE TWO BITUMINOUS COATS.
- BENCH SHALL BE BUILT FOR FLOW BETWEEN INLET AND OUTLET.

DOGHOUSE SEWER MANHOLE DETAIL

(N.T.S.)



SEWER SERVICE LINE TRENCH DETAIL

(N.T.S.)

3	3-26-24	REVISED FOR PLANNING BOARD SUBMISSION	EJP
2	2-27-24	REVISED FOR PLANNING BOARD SUBMISSION	CMS
1	1-30-24	REVISED FOR PLANNING BOARD SUBMISSION	JUS
NO.	DATE	REVISION	BY

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PROJECT: **PAWLING COMMONS  
ALTERNATE SITE PLAN EXPANSION**

63-71 EAST MAIN STREET, VILLAGE OF PAWLING, DUTCHESS CO., NY

DRAWING: **SEWER DETAILS**

PROJECT NUMBER	18135.100	PROJECT MANAGER	J.M.W.	DRAWING NO.		SHEET	
DATE	12-29-23	DRAWN BY	I.B.			9	
SCALE	AS NOTED	CHECKED BY	E.J.P.				9