



**TOWN OF NEWBURGH
PLANNING BOARD
TECHNICAL REVIEW COMMENTS**

PROJECT NAME: AVION VENTURES-WAREHOUSE
PROJECT NO.: 24-16
PROJECT LOCATION: SECTION 86, BLOCK 1, LOT 37.222
REVIEW DATE: 14 FEBRUARY 2025
MEETING DATE: 20 FEBRUARY 2025
PROJECT REPRESENTATIVE: COLLIERS ENGINEERING AND DESIGN

1. Compliance with the Tree Preservation Ordinance, Chapter 172 of the Zoning Code is required.
2. Project proposes stormwater management facilities within the NYSDEC regulated buffer area for on-site wetlands. NYSDEC wetlands permit will be required.
3. Show NYSDEC wetland buffer on the utility plans to clearly demarcate impacted areas.
4. A Preliminary SWPPP has been submitted and is under review by this office.
5. This office circulated Notice of Intent for Lead Agency on 27 November 2024. The Planning Board would be in a position to declare its self-lead agency for SEQRA review.
6. The utility plans identify a 3,000-gallon septic tank prior to the pump station. A grinder type pump station should be proposed in order not to discharge anaerobic septic effluent into the Town sewer system.
7. Dominic Cordisco's comments regarding access across the private roadway should be received.
8. Plans were submitted to the Coldenham Fire District during the Lead Agency circulation.
9. Comments from jurisdictional Fire Department should be received.
10. A City of Newburgh flow acceptance letter will be required. Hydraulic loading from the site should be calculated. The applicant's representative should submit a letter to the Town identifying anticipated hydraulic loading rate. The Town will coordinate with the City of Newburgh.

NEW YORK OFFICE

33 Airport Center Drive, Suite 202, New Windsor, NY 12553
845-567-3100 | F: 845-567-3232 | mheny@mhepc.com

PENNSYLVANIA OFFICE

111 Wheatfield Drive, Suite 1, Milford, PA 18337
570-296-2765 | F: 570-296-2767 | mhepa@mhepc.com

11. A Stormwater Facilities Maintenance Agreement will be required.
12. Health Department approval of the water main extension w/hydrants will be required. Design report should be submitted to Town when transmitted to Health Department.
13. Design for the sewer pump station should be submitted.

Respectfully submitted,

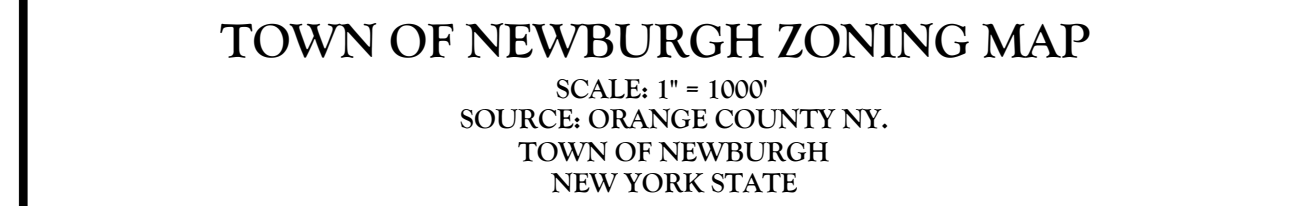
MHE Engineering, D.P.C.



Patrick J. Hines
Principal
PJH/kmm



Michael W. Weeks, P.E.
Principal



SOURCE: NEW YORK STATE CLEARINGHOUSE

INDEX OF SHEETS	
SHT. No.	DESCRIPTION
C-100	COVER SHEET
C-200	SITE DEMOLITION PLAN
C-300	OVERALL DIMENSION PLAN
C-401	GRADING PLAN
C-501	UTILITY PLAN
C-601	LANDSCAPE PLAN
C-701	LIGHTING PLAN
C-801	SOIL EROSION & SEDIMENT CONTROL PLAN
C-802	SOIL EROSION & SEDIMENT CONTROL DETAILS
C-901-905	CONSTRUCTION DETAILS

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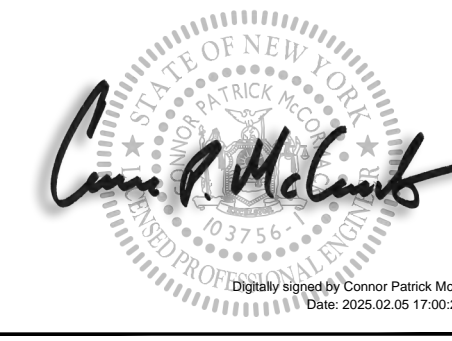
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REV	DATE	DESCRIPTION
1	10/1/2025	POWER PER SET PLAN HANDBOOK
2	10/1/2025	2
3	10/1/2025	3
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Connor Patrick McCormack
NEW YORK LICENSED PROFESSIONAL ENGINEER
LICENSE NUMBER: 103756
COLLIERS ENGINEERING & DESIGN CT, P.C.
N.Y. C.O.A #: 0017609

FOR
AVION VENTURES
POMARICO DRIVE

TOWN OF NEWBURGH
ORANGE COUNTY
NEW YORK STATE



SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	06/06/2024	KAS	CPM
PROJECT NUMBER:		DRAWING NAME:	
24002169A		C-CVER	

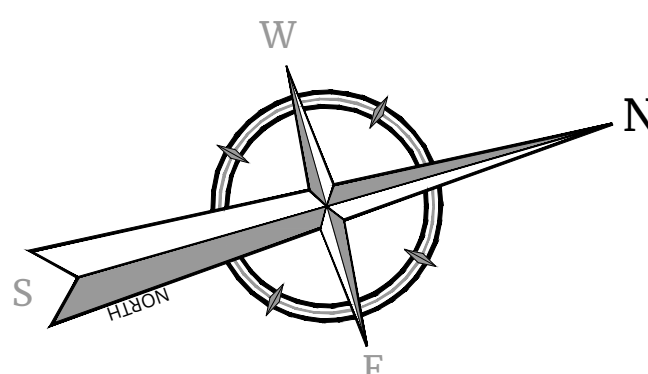
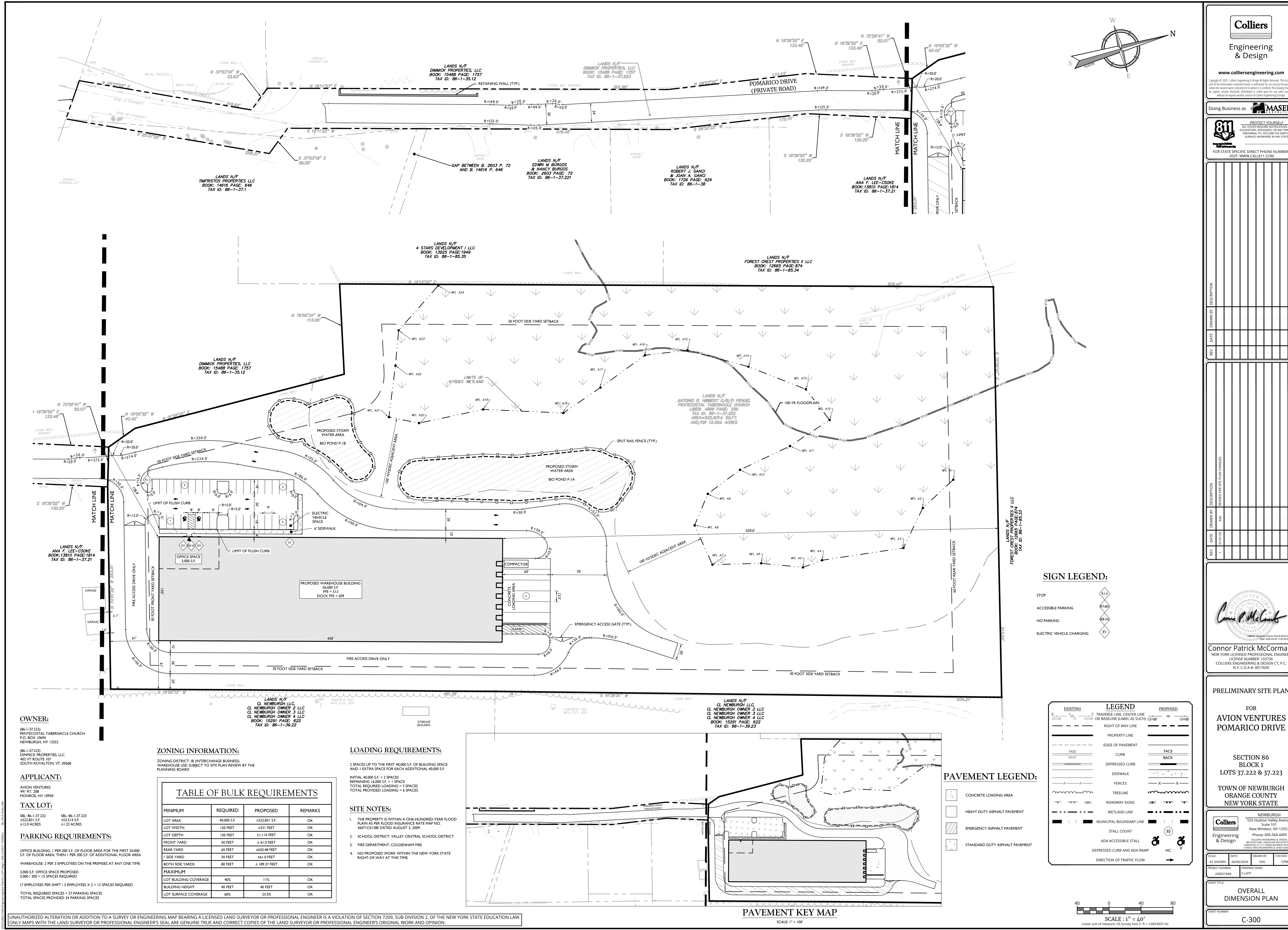
SHEET TITLE:

COVER SHEET

SHEET NUMBER:

C-100

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.



SIGN LEGEND:

- STOP (R-1)
- ACCESSIBLE PARKING (R-4X)
- NO PARKING (R-3A)
- ELECTRIC VEHICLE CHARGING (E1)

PAVEMENT LEGEND:

- CONCRETE LOADING AREA
- HEAVY DUTY ASPHALT PAVEMENT
- EMERGENCY ASPHALT PAVEMENT
- STANDARD DUTY ASPHALT PAVEMENT

EXISTING	LEGEND	PROPOSED
12+00	TRAVERSE LINE, CENTER LINE	12+00
13+00	RIGHT OF WAY LINE	13+00
14+00	PROPERTY LINE	14+00
15+00	EDGE OF PAVEMENT	15+00
16+00	CURB	16+00
17+00	DEPRESSED CURB	17+00
18+00	SIDEWALK	18+00
19+00	FENCES	19+00
20+00	TREELINE	20+00
21+00	ROADWAY SIGNS	21+00
22+00	WETLAND LINE	22+00
23+00	MUNICIPAL BOUNDARY LINE	23+00
24+00	STALL COUNT	24+00
25+00	ADA ACCESSIBLE STALL	25+00
26+00	DEPRESSED CURB AND ADA RAMP	26+00
27+00	DIRECTION OF TRAFFIC FLOW	27+00

PAVEMENT KEY MAP

SCALE: 1" = 100'

SCALE: 1" = 40'
Linear unit of measure: US Survey Foot (1 ft = 1200/3937 m)

OWNER:

(86-1-37.222)
PENTECOSTAL TABERNACLE CHURCH
P.O. BOX 10694
NEWBURGH, NY 12552

APPLICANT:

AVION VENTURES
491 RT. 308
MONROE, NY 10950

TAX LOT:

SBL: 86-1-37.222
±523,831 S.F.
±12.3 ACRES

PARKING REQUIREMENTS:

OFFICE BUILDING: 1 PER 200 S.F. OF FLOOR AREA FOR THE FIRST 20,000 S.F. OF FLOOR AREA, THEN 1 PER 300 S.F. OF ADDITIONAL FLOOR AREA
WAREHOUSE: 2 PER 3 EMPLOYEES ON THE PREMISES AT ANY ONE TIME
3,000 S.F. OFFICE SPACE PROPOSED
3,000 / 200 = 15 SPACES REQUIRED
17 EMPLOYEES PER SHIFT / 3 EMPLOYEES X 2 = 12 SPACES REQUIRED
TOTAL REQUIRED SPACES = 27 PARKING SPACES
TOTAL SPACES PROVIDED 34 PARKING SPACES

ZONING INFORMATION:

ZONING DISTRICT: IB (INTERCHANGE BUSINESS)
WAREHOUSE USE SUBJECT TO SITE PLAN REVIEW BY THE PLANNING BOARD

TABLE OF BULK REQUIREMENTS

MINIMUM	REQUIRED	PROPOSED	REMARKS
LOT AREA	40,000 S.F.	±523,831 S.F.	OK
LOT WIDTH	150 FEET	±331 FEET	OK
LOT DEPTH	150 FEET	±1,114 FEET	OK
FRONT YARD	50 FEET	±61.0 FEET	OK
REAR YARD	40 FEET	±620.48 FEET	OK
1 SIDE YARD	30 FEET	±61.0 FEET	OK
BOTH SIDE YARDS	80 FEET	±189.37 FEET	OK
MAXIMUM			
LOT BUILDING COVERAGE	40%	11%	OK
BUILDING HEIGHT	40 FEET	40 FEET	OK
LOT SURFACE COVERAGE	60%	23.5%	OK

LOADING REQUIREMENTS:

2 SPACES UP TO THE FIRST 40,000 S.F. OF BUILDING SPACE
AND 1 EXTRA SPACE FOR EACH ADDITIONAL 40,000 S.F.
INITIAL 40,000 S.F. = 3 SPACES
REMAINING 16,000 S.F. = 1 SPACE
TOTAL REQUIRED LOADING = 3 SPACES
TOTAL PROVIDED LOADING = 6 SPACES

SITE NOTES:

- THE PROPERTY IS WITHIN A ONE-HUNDRED-YEAR FLOOD PLAIN AS PER FLOOD INSURANCE RATE MAP NO. 34071C0138E DATED AUGUST 3, 2009.
- SCHOOL DISTRICT: VALLEY CENTRAL SCHOOL DISTRICT
- FIRE DEPARTMENT: COLDENHAM FIRE
- NO PROPOSED WORK WITHIN THE NEW YORK STATE RIGHT-OF-WAY AT THIS TIME.

UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY OR ENGINEERING MAP BEARING A LICENSED LAND SURVEYOR OR PROFESSIONAL ENGINEER IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2, OF THE NEW YORK STATE EDUCATION LAW. ONLY MAPS WITH THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S SEAL ARE GENUINE TRUE AND CORRECT COPIES OF THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S ORIGINAL WORK AND OPINION.

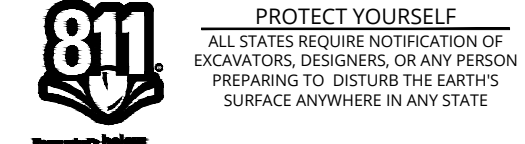


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REV	DATE	DESCRIPTION
1	10/01/25	REVISED PER SITE PLAN CHANGES

REV	DATE	DESCRIPTION
1	10/01/25	REVISED PER SITE PLAN CHANGES



Connor Patrick McCormack
NEW YORK LICENSED PROFESSIONAL ENGINEER
LICENSE NUMBER: 109756
COLLIERS ENGINEERING & DESIGN CT, P.C.
N.Y. C.O.A.# 0017609

PRELIMINARY SITE PLAN

FOR
AVION VENTURES
POMARICO DRIVE

SECTION 86
BLOCK 1
LOTS 37.222 & 37.223

TOWN OF NEWBURGH
ORANGE COUNTY
NEW YORK STATE

NEWBURGH
555 Hudson Valley Avenue
Suite 101
New Windsor, NY 12553
Phone: 845.564.4495

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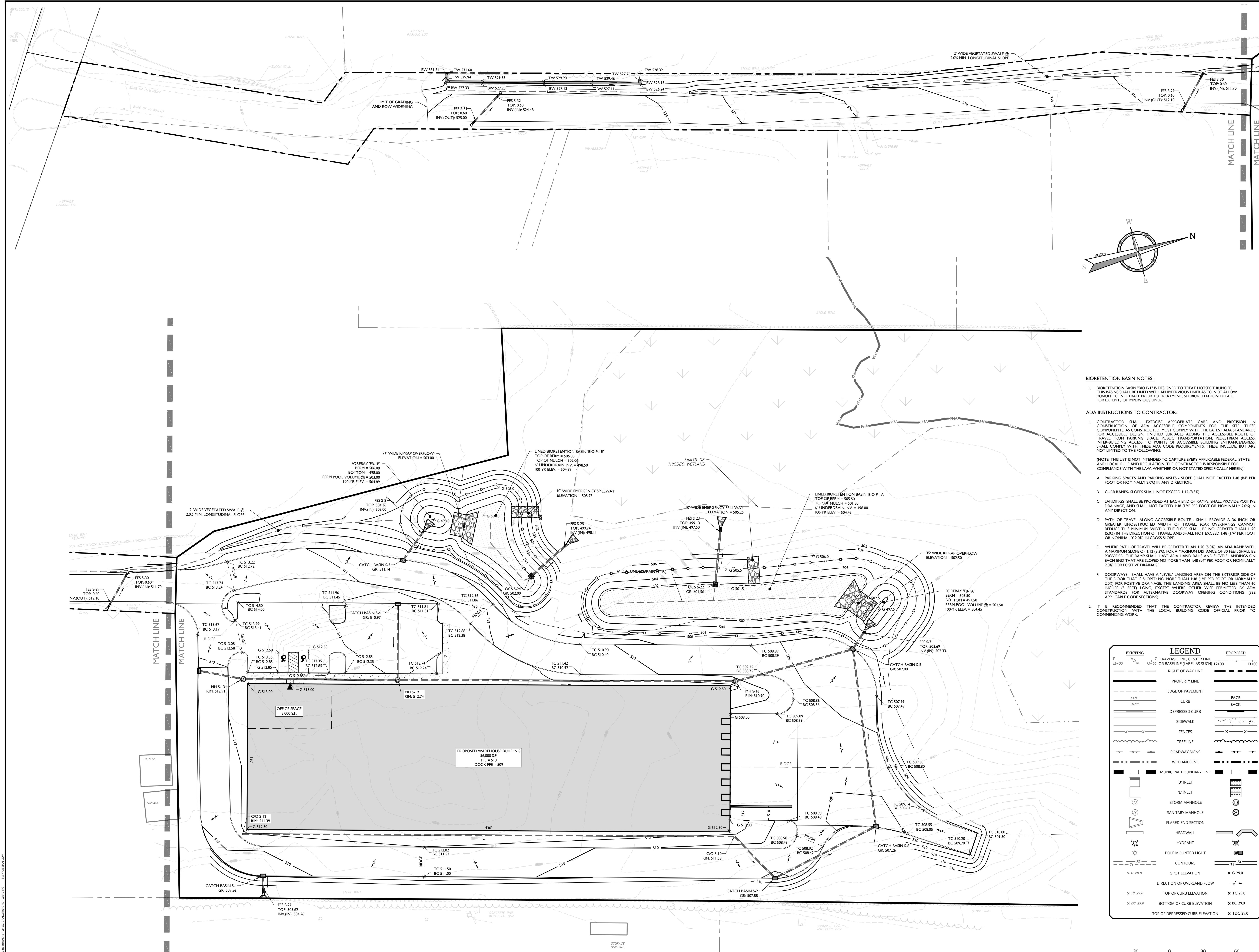
SCALE: AS SHOWN DATE: 06/06/2024 DRAWN BY: KAS CHECKED BY: CPM

PROJECT NUMBER: 24002169A DRAWING NAME: C-LAY1

SHEET TITLE: OVERALL DIMENSION PLAN

SHEET NUMBER: C-300

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REV	DATE	DRAWN BY	DESCRIPTION
1	05/06/2024	KAS	REVISIONS PER SITE PLAN CHANGES

LEGEND

EXISTING

PROPOSED

PROPERTY LINE

EDGE OF PAVEMENT

CURB

DEPRESSED CURB

SIDEWALK

FENCES

TREELINE

ROADWAY SIGNS

WETLAND LINE

MUNICIPAL BOUNDARY LINE

'B' INLET

'E' INLET

STORM MANHOLE

SANITARY MANHOLE

FLARED END SECTION

HEADWALL

HYDRANT

POLE MOUNTED LIGHT

CONTOURS

SPOT ELEVATION

DIRECTION OF OVERLAND FLOW

TOP OF CURB ELEVATION

BOTTOM OF CURB ELEVATION

TOP OF DEPRESSED CURB ELEVATION

30 0 30 60

SCALE: 1" = 30'

Linear unit of measure: US Survey Foot (1 ft = 1200/3937 mm)

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

PRELIMINARY SITE PLAN

FOR

AVION VENTURES

POMARICO DRIVE

SECTION 86

BLOCK 1

LOTS 37.222 & 37.223

TOWN OF NEWBURGH

ORANGE COUNTY

NEW YORK STATE

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555 Hudson Valley Avenue Suite 101 New Windsor, NY 12553 Phone: 945.564.4495

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SCALE: AS SHOWN

DATE: 05/06/2024

DRAWN BY: KAS

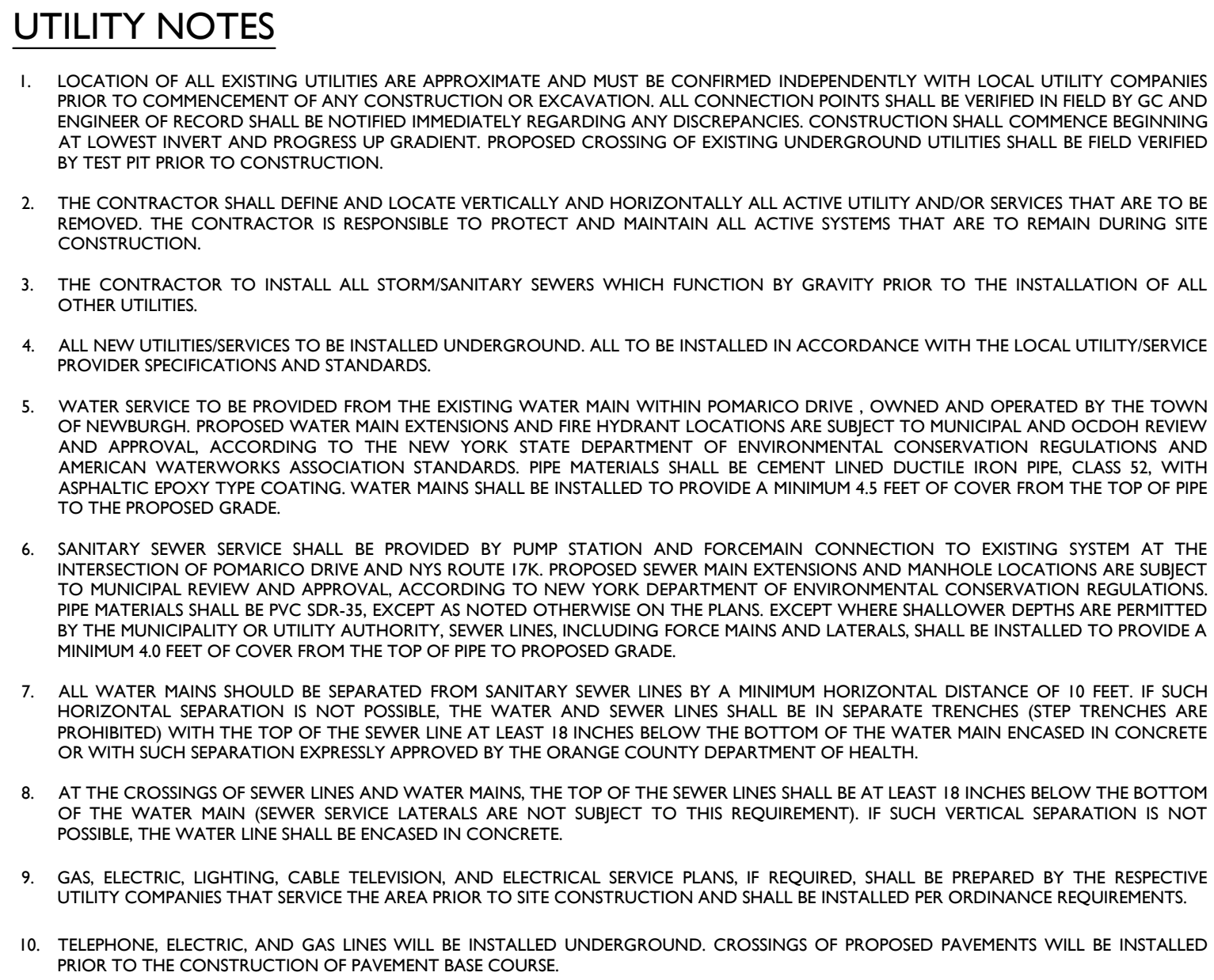
CHECKED BY: CPM

PROJECT NUMBER: 24002169A

DRAWING NAME: C-GRAD

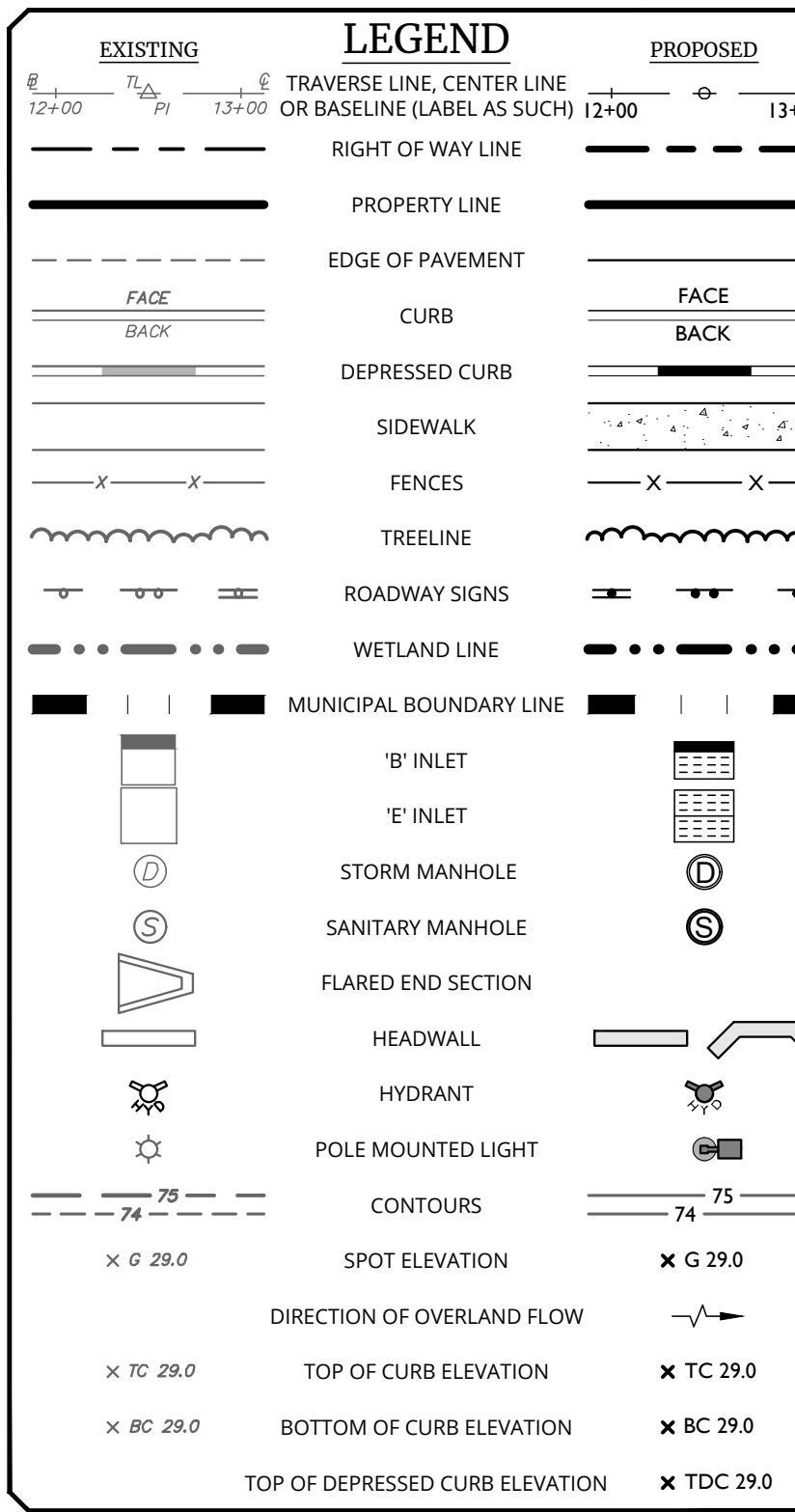
SHEET TITLE: GRADING PLAN

SHEET NUMBER: C-401



1. LOCATION OF ALL EXISTING UTILITIES ARE APPROXIMATE AND MUST BE CONFIRMED INDEPENDENTLY WITH LOCAL UTILITY COMPANIES AND/OR FIELD SURVEY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND RECORDS FROM THE CITY OF ORANGE AND/OR LOCAL UTILITY COMPANIES. LOCATION OF RECORD SHALL BE NOTIFIED IMMEDIATELY REGARDING ANY DISCREPANCIES. CONSTRUCTION SHALL COMMENCE BEGINNING AT LOWEST INVERT AND PROGRESS UP GRADIENT. PROPOSED CROSSING OF EXISTING UNDERGROUND UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR.
2. THE CONTRACTOR SHALL DEFINE AND LOCATE VERTICALLY AND HORIZONTALLY ALL ACTIVE UTILITY AND/OR SERVICES THAT ARE TO BE REMOVED. THE CONTRACTOR IS RESPONSIBLE TO PROTECT AND MAINTAIN ALL ACTIVE SYSTEMS THAT ARE TO REMAIN DURING SITE CONSTRUCTION.
3. THE CONTRACTOR TO INSTALL ALL STORMWATER SEWERS WHICH FUNCTION BY GRAVITY PRIOR TO THE INSTALLATION OF ALL OTHER UTILITIES.
4. ALL NEW UTILITIES/SERVICES TO BE INSTALLED UNDERGROUND. ALL TO BE INSTALLED IN ACCORDANCE WITH THE LOCAL UTILITY/SERVICE PROVIDER SPECIFICATIONS AND STANDARDS.
5. WATER SERVICE TO BE PROVIDED FROM THE EXISTING WATER MAIN WITHIN POMARICO DRIVE, OWNED AND OPERATED BY THE TOWN OF NEWBURGH. PROPOSED WATER MAIN EXTENSIONS AND FIRE HYDRANT LOCATIONS ARE SUBJECT TO MUNICIPAL AND CDDO REVIEW AND/OR ACTION. THE CITY OF THE NEW YORK STATE IS THE DEPENDENT OF ENVIRONMENTAL CONSERVATION REGULATIONS AND AMERICAN WATERWORKS ASSOCIATION STANDARDS. PIPE MATERIALS SHALL BE CEMENT LINER DUCTILE IRON PIPE, CLASS 52, WITH A MINIMUM 4 FEET COVER. THE EXISTING WATER MAIN SHALL BE INSTALLED TO PROVIDE A MINIMUM 4.5 FEET OF COVER FROM THE TOP OF PIPE TO THE PROPOSED GRADE.
6. SANITARY SEWER SERVICE SHALL BE PROVIDED BY PUMP STATION AND FORCEMAIN CONNECTION TO EXISTING SYSTEM AT THE INTERSECTION OF POMARICO DRIVE AND NYS ROUTE 17K. PROPOSED SEWER MAIN EXTENSIONS AND MANHOLE LOCATIONS ARE SUBJECT TO MUNICIPAL AND CDDO REVIEW AND/OR ACTION. THE CITY OF THE NEW YORK STATE IS THE DEPENDENT OF ENVIRONMENTAL CONSERVATION REGULATIONS. PIPE MATERIALS SHALL BE PVC SD-35, EXCEPT AS NOTED OTHERWISE ON THE PLANS. EXCEPT WHERE SHALLOWER DEPTHS ARE PERMITTED BY THE CITY OF THE NEW YORK STATE, THE EXISTING SEWER MAIN SHALL BE INSTALLED TO PROVIDE A MINIMUM 4 FEET OF COVER FROM THE TOP OF PIPE TO THE PROPOSED GRADE.
7. ALL WATER MAINS SHOULD BE SEPARATED FROM SANITARY SEWER LINES BY A MINIMUM HORIZONTAL DISTANCE OF 10 FEET. IF SUCH HORIZONTAL SEPARATION IS NOT POSSIBLE, THE WATER AND SEWER LINES SHOULD BE IN SEPARATE TRENCHES (SEE TRENCH DETAIL). PROPOSED WATER MAINS SHALL BE INSTALLED TO PROVIDE A MINIMUM 4 FEET OF COVER FROM THE WATER MAIN ENCASED IN CONCRETE OR WITH SUCH SEPARATION EXPRESSLY APPROVED BY THE ORANGE COUNTY DEPARTMENT OF HEALTH.
8. AT THE CROSSINGS OF SEWER LINES AND WATER MAINS, THE TOP OF THE SEWER LINES SHALL BE AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER MAIN. THE WATER MAIN SHALL BE INSTALLED SUBJECT TO THIS REQUIREMENT. IF SUCH VERTICAL SEPARATION IS NOT POSSIBLE, THE WATER LINE SHALL BE ENCASED IN CONCRETE.
9. GAS, ELECTRIC, LIGHTING, CABLE TELEVISION, AND ELECTRICAL SERVICE PLANS, IF REQUIRED, SHALL BE PREPARED BY THE RESPECTIVE UTILITY COMPANIES THAT SERVICE THE AREA PRIOR TO SITE CONSTRUCTION AND SHALL BE INSTALLED PER ORDINANCE REQUIREMENTS.
10. TELEPHONE, ELECTRIC, AND GAS LINES WILL BE INSTALLED UNDERGROUND. CROSSINGS OF PROPOSED PAYMENTS WILL BE INSTALLED PRIOR TO THE CONSTRUCTION OF PAVEMENT BASE COURSE.
11. UTILITY RELOCATIONS SHOWN HEREON, IF ANY, ARE FOR INFORMATIONAL PURPOSES ONLY AND MAY NOT REPRESENT ALL REQUIRED RELOCATIONS AND/OR DELETIONS. THE CONTRACTOR IS RESPONSIBLE FOR PERFORMING AND/OR COORDINATING ALL REQUIRED UTILITY RELOCATIONS IN COOPERATION WITH THE RESPECTIVE UTILITY COMPANY(AUTHORITIES).

1. CONSTRUCTION OF SANITARY SEWER FACILITIES AND CONNECTION TO THE TOWN OF NEWBURGH SANITARY SEWER SYSTEM REQUIRES A PERMIT FROM THE TOWN OF NEWBURGH SEWER DEPARTMENT. ALL CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF THE NYSDEC AND THE TOWN OF NEWBURGH.
2. ALL SEWER PIPE INSTALLATION SHALL BE SUBJECT TO INSPECTION BY THE TOWN OF NEWBURGH SEWER DEPARTMENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL INSPECTIONS AS REQUIRED WITH THE TOWN OF NEWBURGH SEWER DEPARTMENT.
3. ALL GRAVITY SANITARY SEWER SERVICE LINES SHALL BE 4 INCHES IN DIAMETER OR LARGER AND SHALL BE SDR-35 PVC PIPE CONFORMING TO ASTM D-3034-89. JOINTS SHALL BE PUSH-ON WITH ELASTOMER RING GASKET CONFORMING ASTM D-3122. FITTINGS SHALL BE AS MANUFACTURED BY THE PIPE SUPPLIER OR EQUAL AND SHALL HAVE A BELL AND SPIGOT CONFIGURATION COMPATIBLE WITH THE PIPE.
4. THE SEWER MAIN SHALL BE TESTED IN ACCORDANCE WITH TOWN OF NEWBURGH SEWER DEPARTMENT. ALL TESTING SHALL BE COORDINATED WITH THE TOWN OF NEWBURGH SEWER DEPARTMENT.
5. THE FINAL LAYOUT OF THE PROPOSED WATER AND/OR SEWER CONNECTION, INCLUDING ALL MATERIALS, SIZE AND LOCATION OF SERVICE AND ALL APPURTENANCES, IS SUBJECT TO THE REVIEW AND APPROVAL OF THE TOWN OF NEWBURGH WATER AND/OR SEWER DEPARTMENT. NO PERMITS SHALL BE ISSUED FOR A WATER AND/OR SEWER CONNECTION UNTIL A REVIEW REPORT IS APPROVED BY THE TOWN OF NEWBURGH SEWER DEPARTMENT.




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N.Y. C.O.A.#: 0017609

PRELIMINARY SITE PLAN
FOR
AVION VENTURES
POMARICO DRIVE

SECTION 86
BLOCK 1
CS 37.222 & 37.223

TOWN OF NEWBURGH
ORANGE COUNTY
NEW YORK STATE

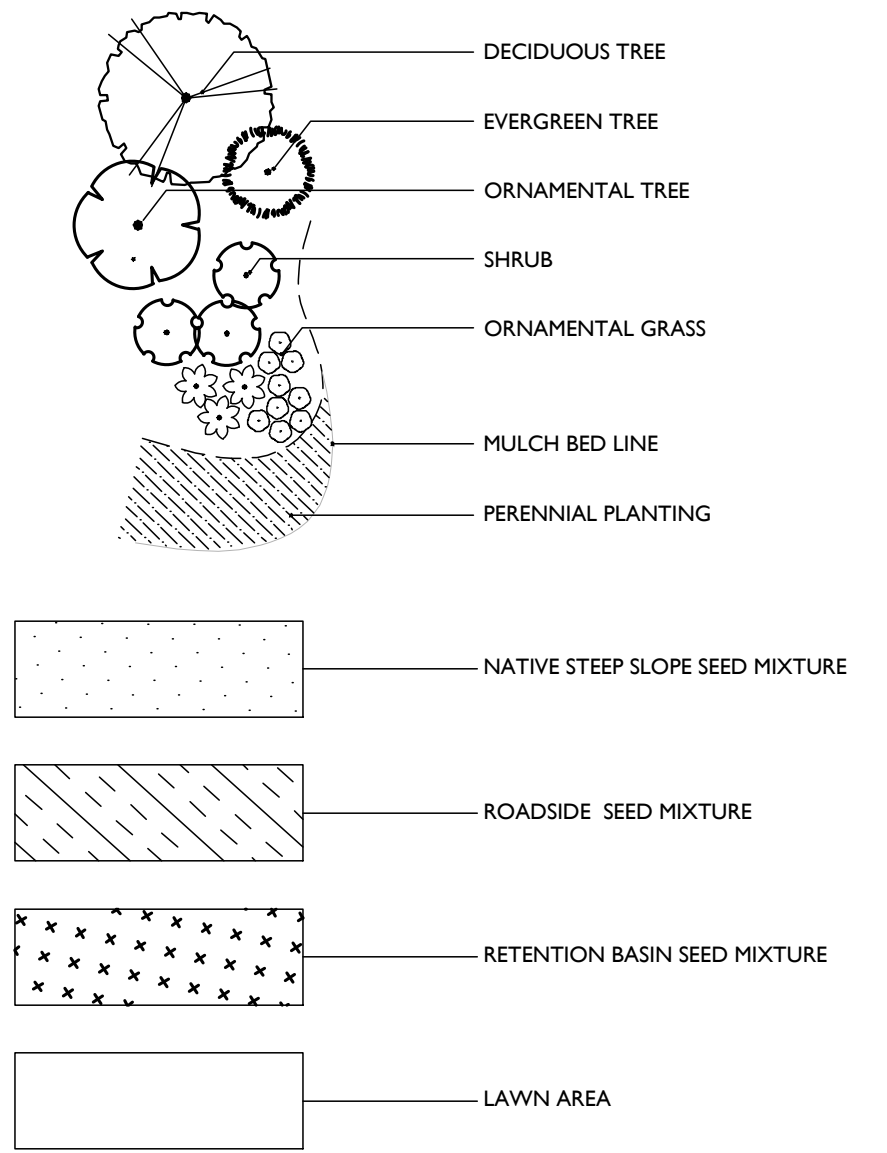
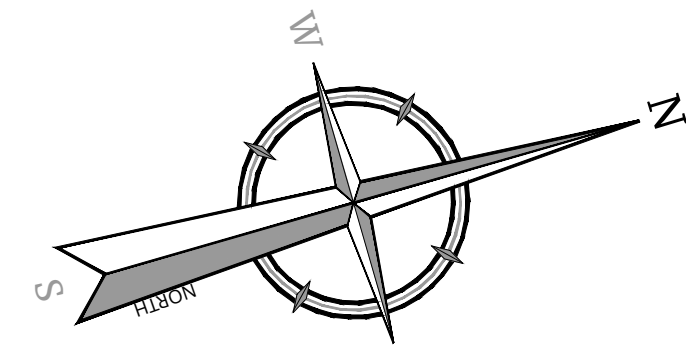
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SCALE: AS SHOWN	DATE: 06/06/2024	DRAWN BY: KAS	CHECKED BY: CPM
PROJECT NUMBER: 24002169A		DRAWING NAME: C-UTIL	

UTILITIES PLAN

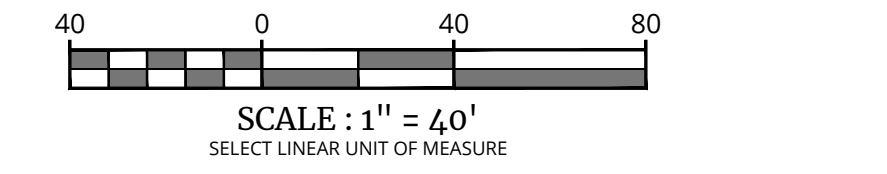
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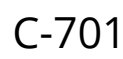
NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION



BIORETENTION AREA PLANTING SCHEDULE						
<u>TREES</u>	<u>QTY</u>	<u>BOTANICAL NAME</u>	<u>COMMON NAME</u>	<u>ROOT</u>	<u>SIZE</u>	<u>REMARKS</u>
AL	4	Amelanchier laevis	Allegheny Serviceberry	CONT.	6" - 8"	MULTISTEM / TYP. SPECIES HABIT
BN	4	Betula nigra	River birch	CONT.	6" - 8"	MULTISTEM / TYP. SPECIES HABIT
<u>SHRUBS</u>					<u>SIZE</u>	<u>REMARKS</u>
AA	40	Aronia arbutifolia	Red Chokeberry	CONT.	24"-30"	TYPICAL SPECIES HABIT
CA	7	Clethra alnifolia	Summersweet	CONT.	18"-24"	TYPICAL SPECIES HABIT
CO	15	Cephalanthus occidentalis	Button Bush	CONT.	18"-24"	TYPICAL SPECIES HABIT
SC	12	Sambucus canadensis	Elderberry	CONT.	18"-24"	TYPICAL SPECIES HABIT
<u>PERENNIALS</u>					<u>REMARKS</u>	
ANA	400	Aster novae angliae	New England Aster	1 GAL. CONT.	CLUMPS, 24" O.C.	
DC	3,400	Deschampsia cespitosa	Tufted Hair Grass	#SP3 CONT.	CLUMPS, 12" O.C.	
EP	300	Echinacea purpurea	Coneflower	1 GAL. CONT.	CLUMPS, 24" O.C.	
JE	575	Juncus effusus	Common Rush	#SP3 CONT.	CLUMPS, 12" O.C.	

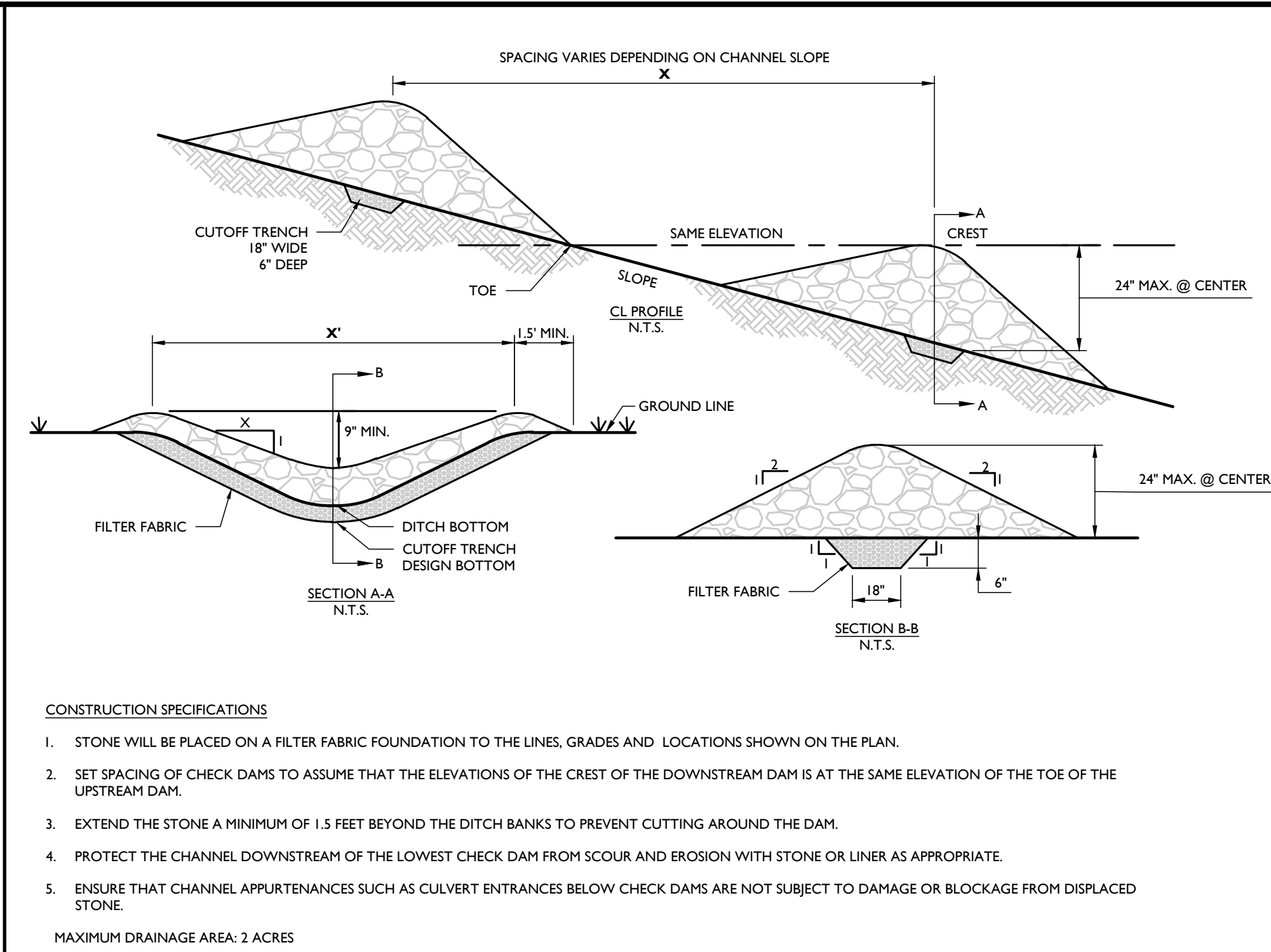
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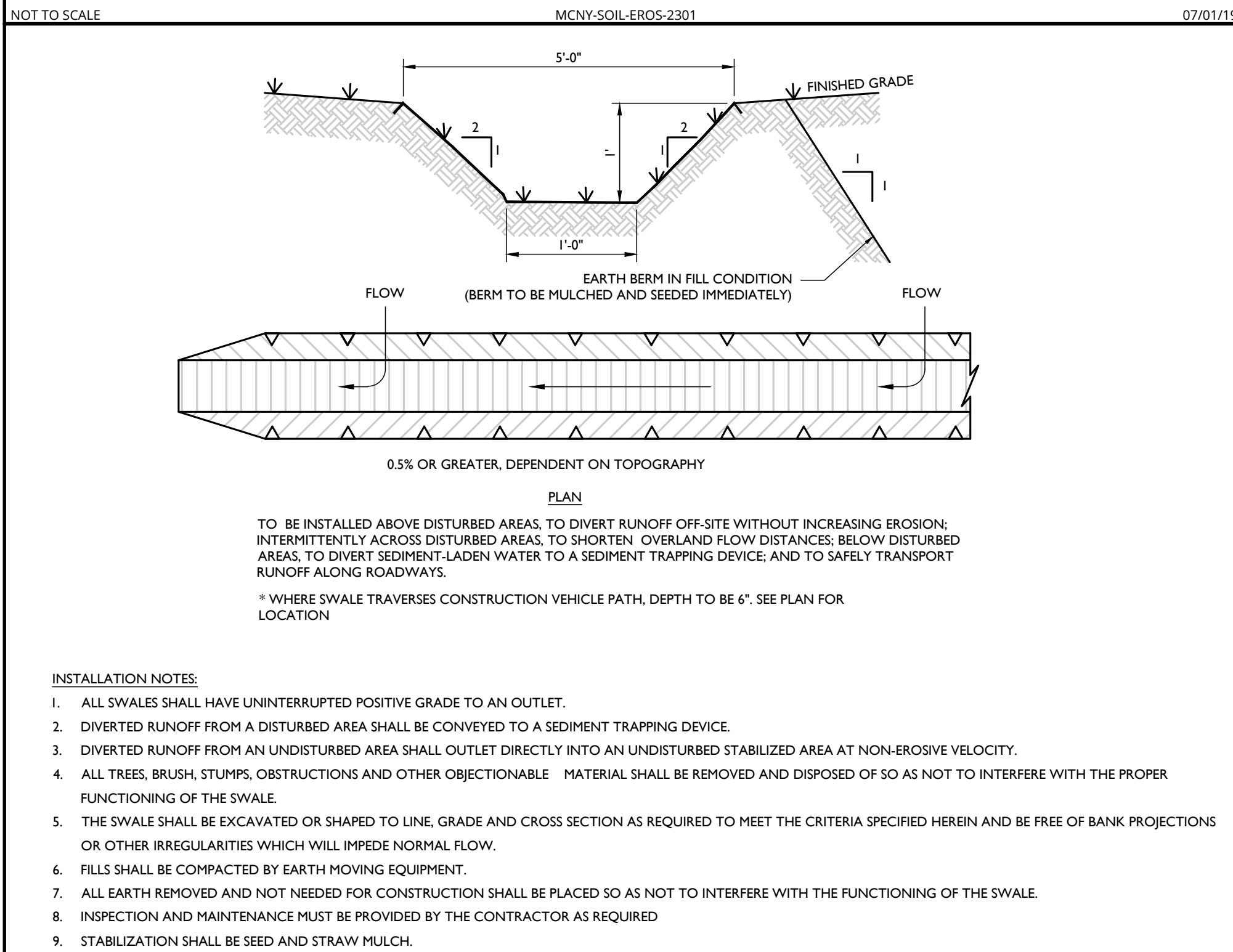


NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION

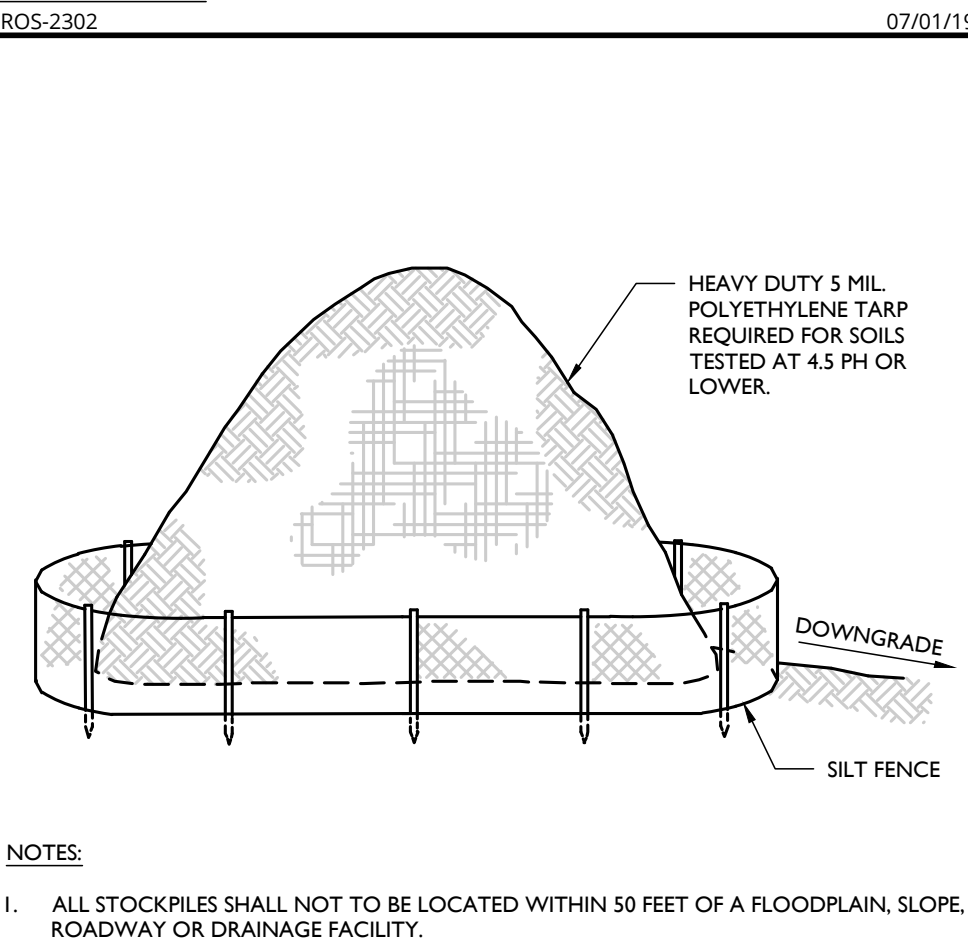




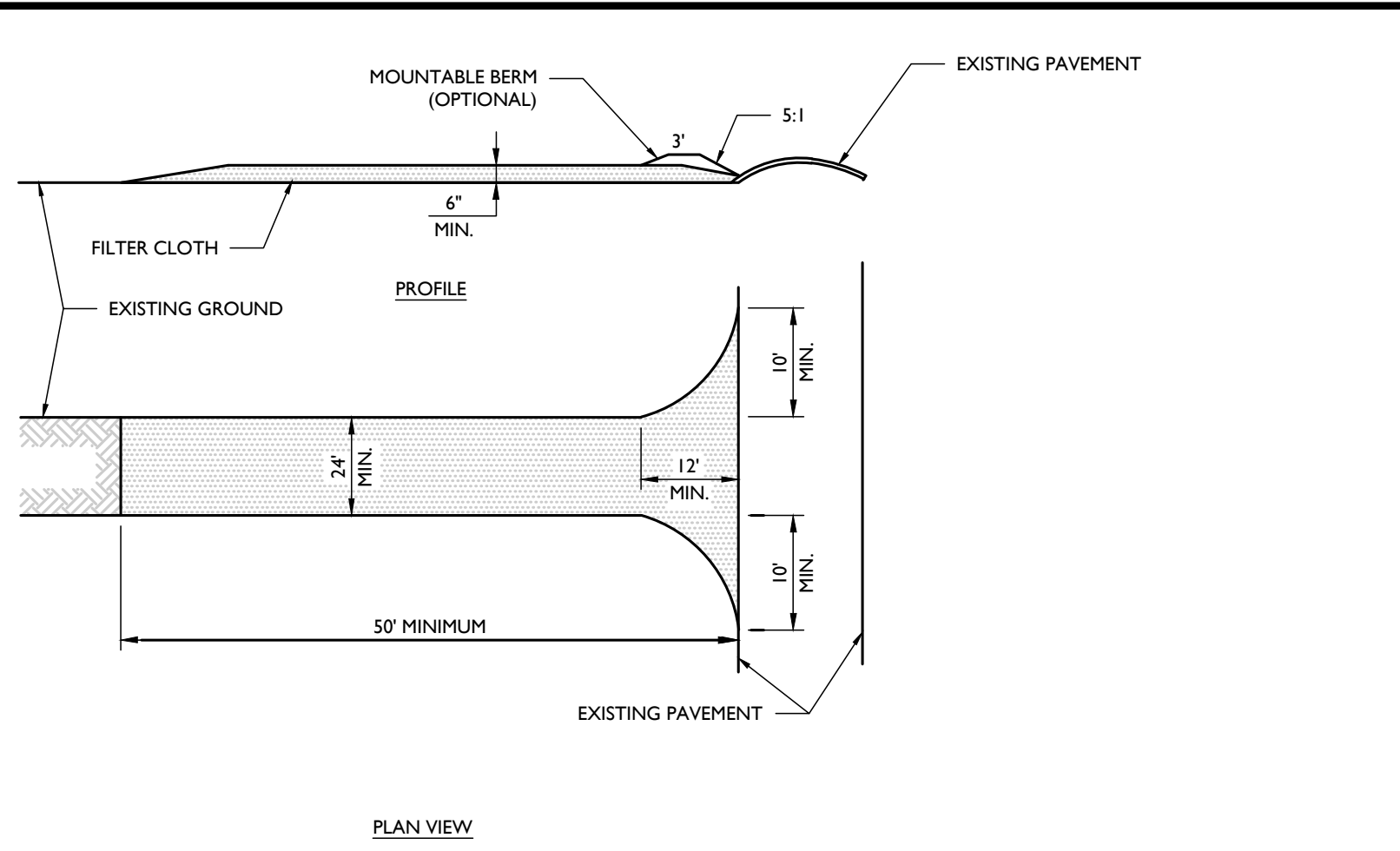
STONE CHECK DAM DETAIL



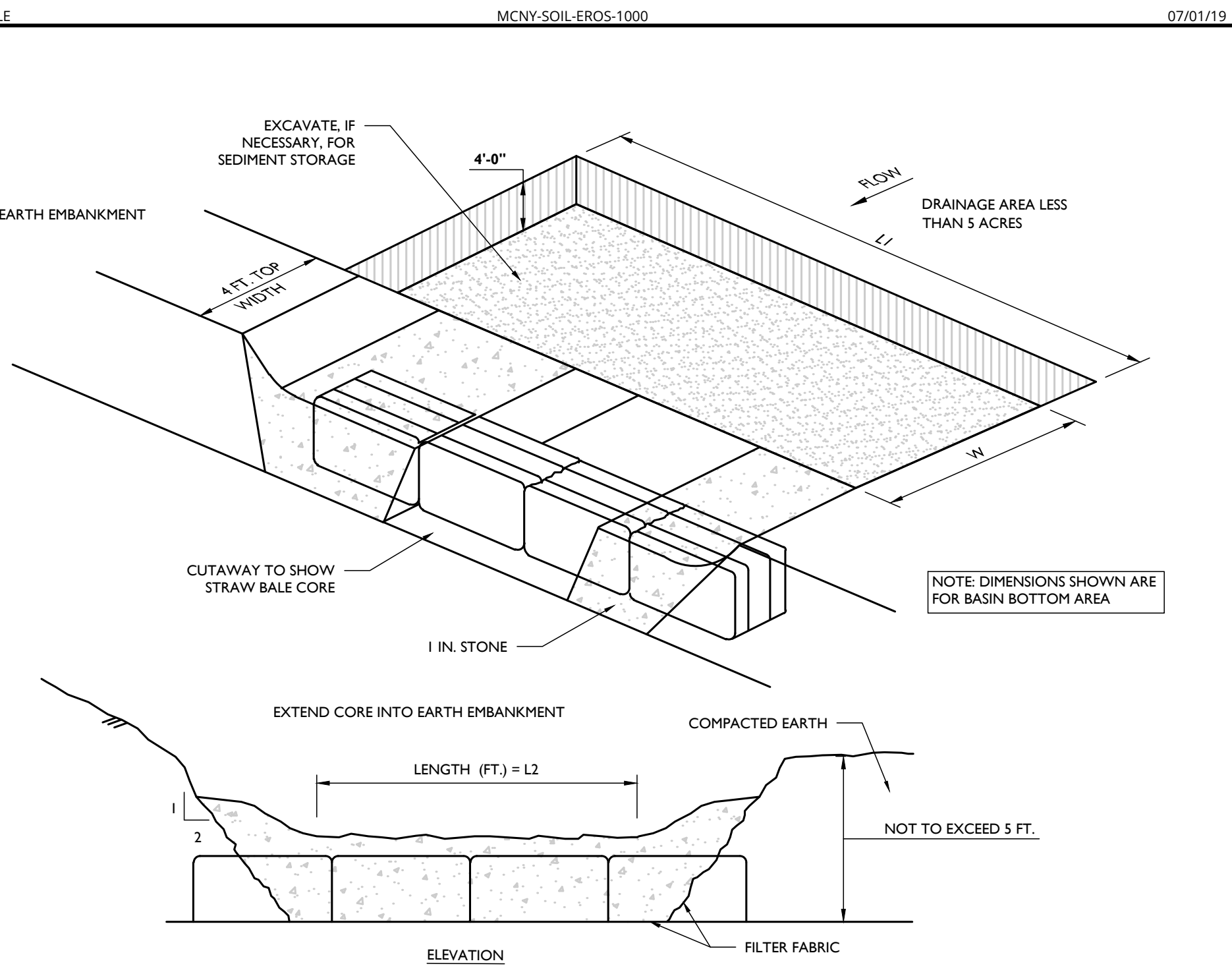
TEMPORARY SWALE & EARTH BERM DETAIL



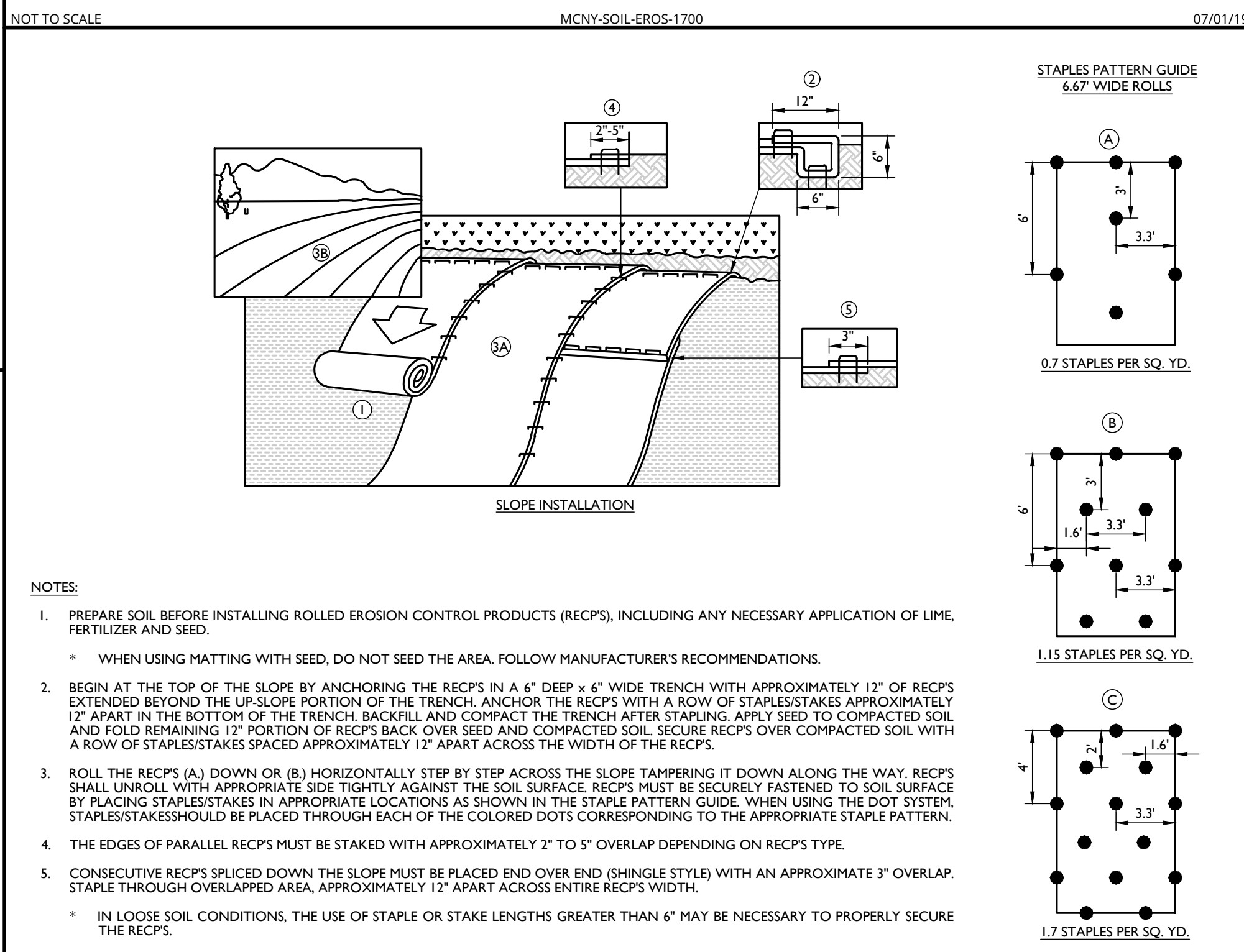
TOPSOIL STOCKPILE DETAIL



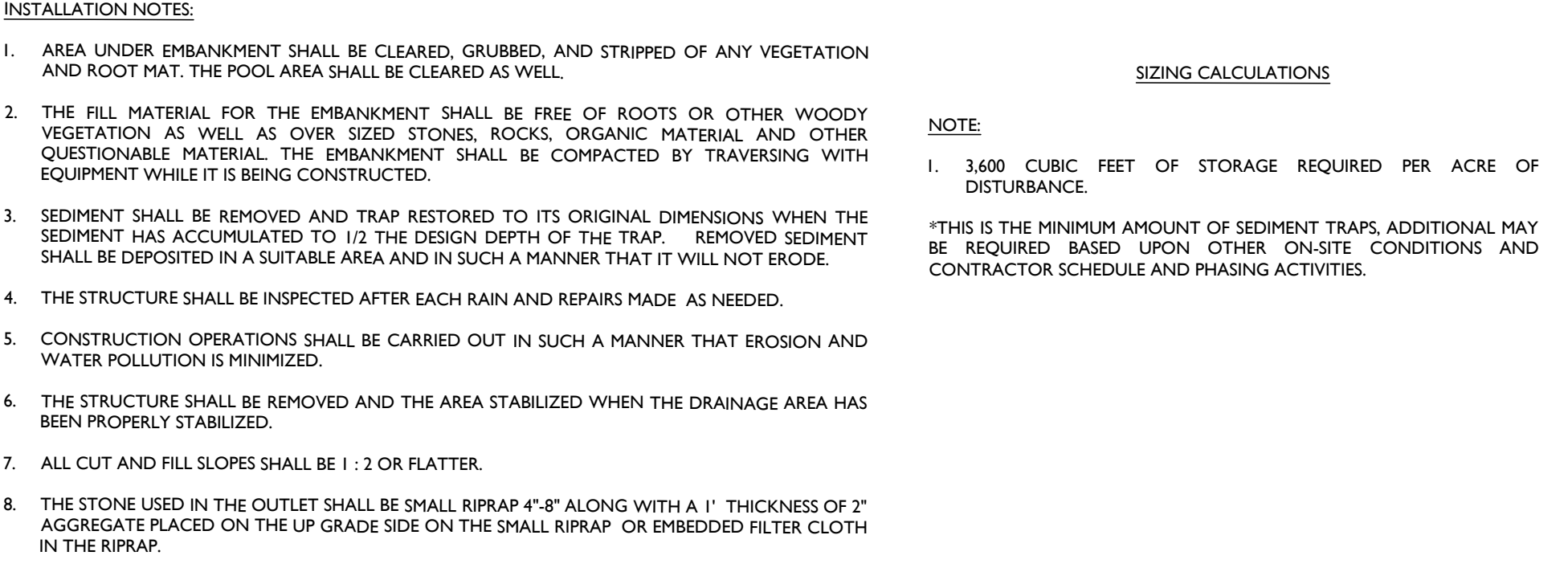
STABILIZED CONSTRUCTION ENTRANCE DETAIL



CONCRETE WASHOUT DETAIL

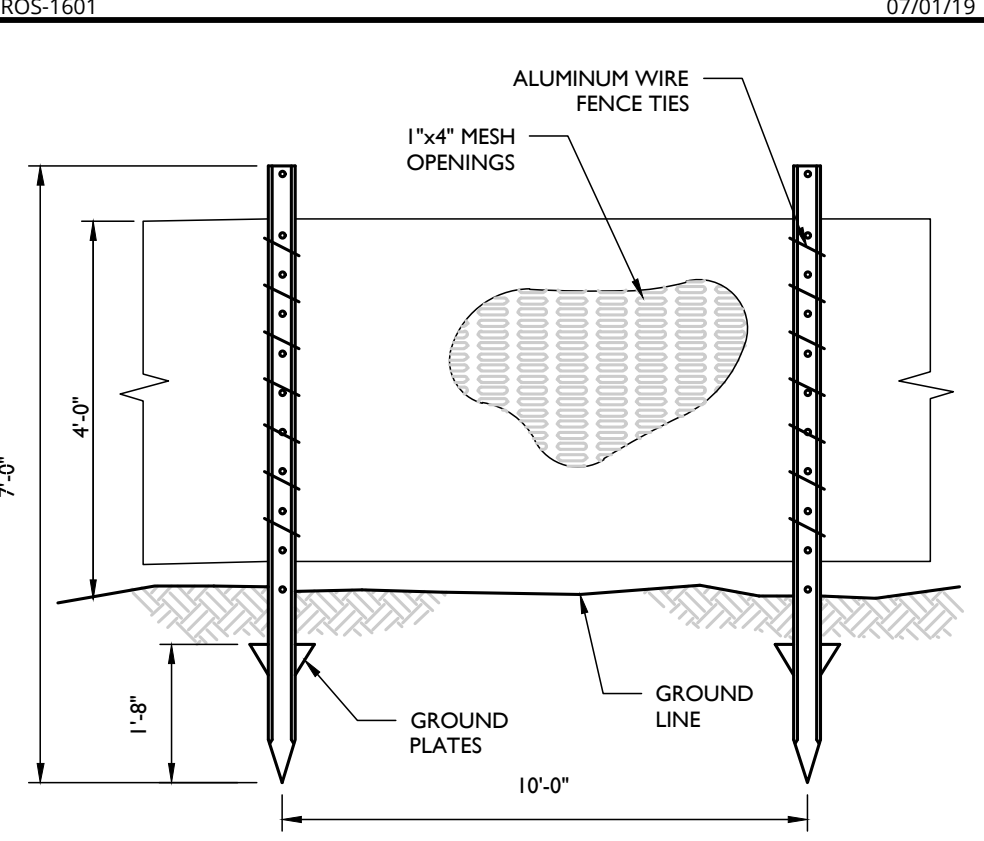


EROSION MATTING (CURLEX ENFORCER I) DETAIL



STONE OUTLET SEDIMENT TRAP DETAIL

STONE OUTLET SEDIMENT TRAP TABLE					
SEDIMENT TRAP	DRAINAGE AREA	AREA	DEPTH (FT.)	VOLUME REQ'D (C.F.)	WEIR LENGTH (L.)
A	7.1 AC.	8,800 S.F.	4.0 FT.	25,540 C.F.	35,200 C.F.
B	2.0 AC.	3,800 S.F.	4.0 FT.	7,200 C.F.	15,200 C.F.



ORANGE CONSTRUCTION FENCE DETAIL

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REV	DATE	DESCRIPTION
1	07/01/19	REVISION PER SITE PLAN CHANGES

Connor Patrick McCormack
NEW YORK LICENSED PROFESSIONAL ENGINEER
LICENSE NUMBER: 103756
COLLIERS ENGINEERING & DESIGN CT, P.C.
N.Y. C.O.A.#: 0017609

PRELIMINARY SITE PLAN

FOR

AVION VENTURES
POMARICO DRIVE

SECTION 86
BLOCK 1
LOTS 37.222 & 37.223

TOWN OF NEWBURGH
ORANGE COUNTY
NEW YORK STATE

NEWBURGH
555 Hudson Valley Avenue
Suite 101
New Windsor, NY 12553
Phone: 945.564.4495

Colliers Engineering & Design
COLLIERS ENGINEERING & DESIGN
ARCHITECTURE, LANDSCAPE ARCHITECTURE
SURVEYING, C.T.P., CONSTRUCTION AS VARIOUS
CONSULTING ENGINEERING, LANDSCAPE ARCHITECTURE

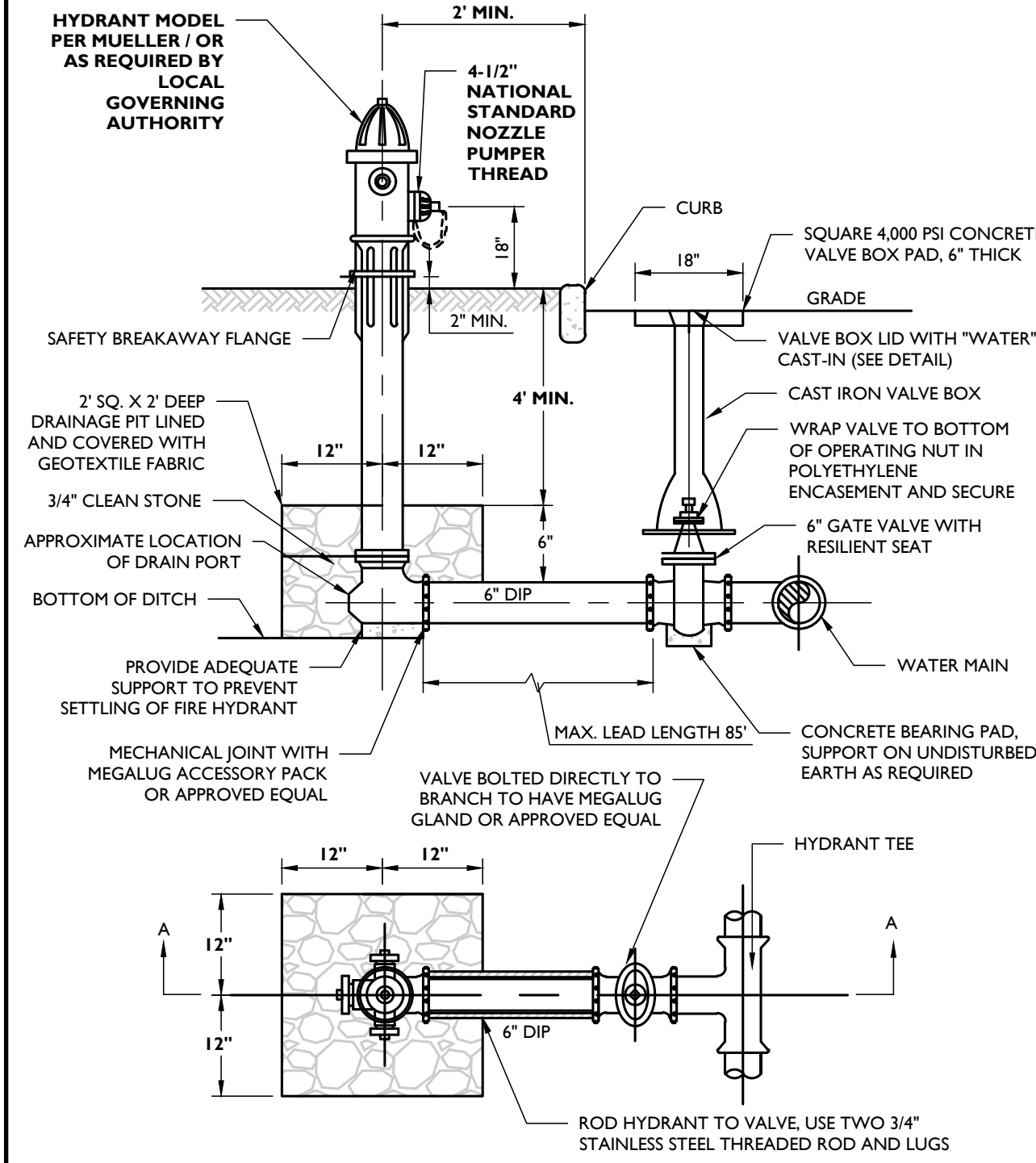
SCALE	DATE	DRAWN BY	CHECKED BY
AS SHOWN	06/06/2024	KAS	CPM

PROJECT NUMBER	DRAWING NAME
24002169A	C-55C

SHEET TITLE: SOIL EROSION & SEDIMENT CONTROL PLAN

SHEET NUMBER: C-802

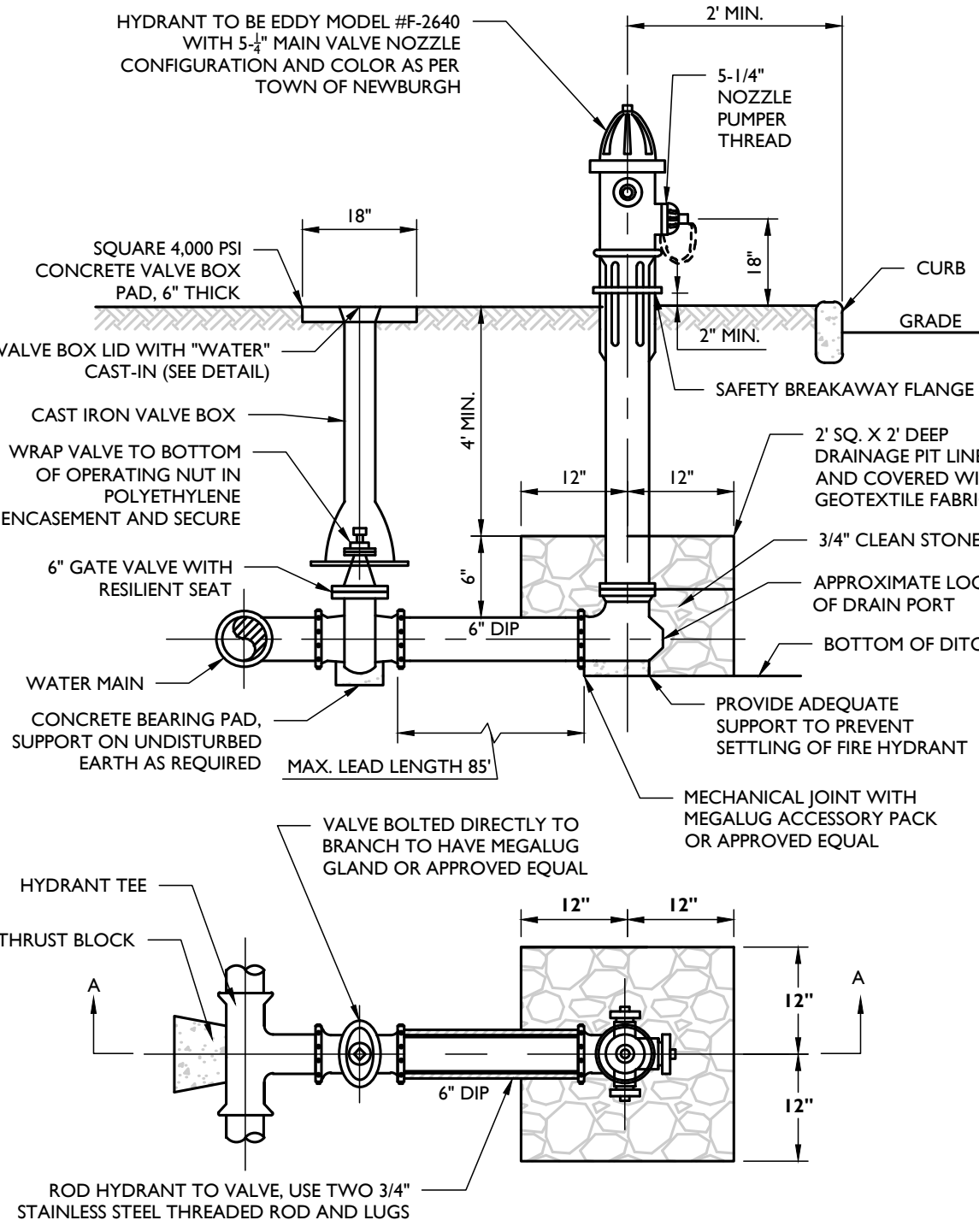
UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY OR ENGINEERING MAP BEARING A LICENSED LAND SURVEYOR OR PROFESSIONAL ENGINEER IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2, OF THE NEW YORK STATE EDUCATION LAW. ONLY MAPS WITH THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S SEAL ARE GENUINE TRUE AND CORRECT COPIES OF THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S ORIGINAL WORK AND OPINION.



FIRE HYDRANT (VALVE IN PAVEMENT) DETAIL

NOTES:

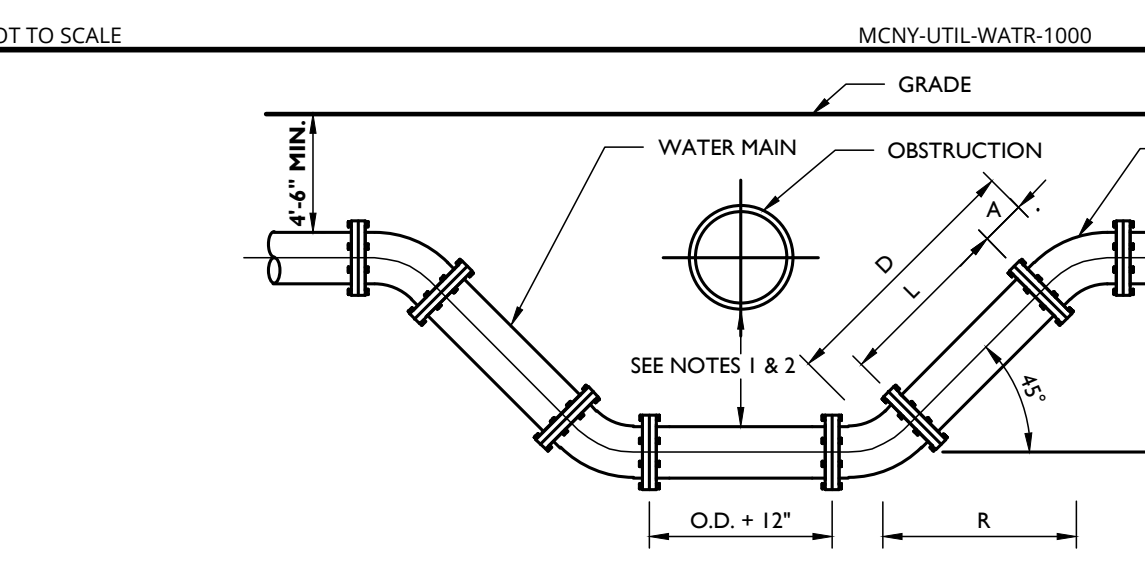
- HYDRANT SHALL BE MUELLER SUPER CENTURION 150 #A-421 TRAFFIC MODEL DESIGN WITH THE FOLLOWING SPECIFICATION:
 - SAFETY COUPLED STANDPIPE.
 - 6" MECHANICAL JOINT INLET CONNECTION.
 - TWO 2-1/2" NATIONAL STANDARD THREAD HOSE NOZZLES.
 - ONE 4-1/2" NATIONAL STANDARD THREAD STEAMER NOZZLE FACING THE ROAD.
 - HYDRANT OPERATORS AND HYDRANT NOZZLE CAP NUTS SHALL BE IN ACCORDANCE WITH AWWA/ANSI STANDARD C500.
 - HYDRANT HOSE CAPS SHALL BE ATTACHED BY MEANS OF CHAINS.
 - HYDRANT BARRELS SHALL BE PAINTED - RED, BONNETS - YELLOW, AND NOZZLE CAPS - BLACK TO INDICATE THE AVAILABLE FIRE FLOW OR AS IN ACCORDANCE WITH THE LOCAL REQUIREMENTS.
 - HYDRANTS SHALL OPEN COUNTER-CLOCKWISE.
- STANDPIPE (BREAK-AWAY) COUPLING SHALL NOT EXCEED A MAXIMUM OF 5 INCHES FROM THE TOP OF THE CURB TO THE BOTTOM OF COUPLING.
- THE DRAIN VALVE SHALL BE CLEAR OF ANY OBSTRUCTIONS, AND 3/4" CLEAN GRADE BE PLACED FROM THE BOTTOM OF THE HYDRANT TO A POINT 6" ABOVE THE HYDRANT LATERAL PIPE. HYDRANT DRAINS SHALL NOT BE CONNECTED TO OR LOCATED WITHIN 10' OF ANY SANITARY SEWER OR STORM DRAIN. IF HYDRANT DRAIN IS LOCATED WITHIN 2 FEET OF HIGH GROUNDWATER, DRAIN SHALL BE PLUGGED. IF PLUGGED, PROPER SIGNAGE MUST BE INSTALLED TO INDICATE THAT THE BARRELS MUST BE PUMPED DRY AFTER EACH USE.
- BACKFILL MATERIAL SHALL BE IN ACCORDANCE WITH THE LOCAL JURISDICTION.
- GATE VALVE SHALL BE 4" U.S. PIPE METROSEAL 150 R/S (RESILIENT SEALED) MECHANICAL JOINT END (RIGHT HAND) OR APPROVED EQUAL.
- WATER LATERAL SHALL BE 6" DUCTILE IRON CEMENT LINED CLASS 52 PIPE.
- TIE ROD SHALL BE 3/4" DIAMETER TIE ROD WITH EYE BOLTS - TWO REQUIRED (SIDE VIEW SHOWN). RESTRAIN ALL JOINTS ON HYDRANT TEE, VALVE, AND HYDRANT LEAD.
- HYDRANT TEE SHALL BE U.S. PIPE CATALOG #U-592 TRIM-TITE DUCTILE IRON MECHANICAL JOINT OR AN APPROVED EQUAL SUBSTITUTE.



FIRE HYDRANT (VALVE IN GRASS) DETAIL

NOTES:

- HYDRANT SHALL BE EDDY MODEL #F-3640 DESIGN WITH THE FOLLOWING SPECIFICATION:
 - SAFETY COUPLED STANDPIPE.
 - 6" MECHANICAL JOINT INLET CONNECTION.
 - TWO 2-1/2" NATIONAL STANDARD THREAD HOSE NOZZLES.
 - ONE 5-1/4" NATIONAL STANDARD THREAD STEAMER NOZZLE FACING THE ROAD.
 - HYDRANT OPERATORS AND HYDRANT NOZZLE CAP NUTS SHALL BE IN ACCORDANCE WITH AWWA/ANSI STANDARD C500.
 - HYDRANT HOSE CAPS SHALL BE ATTACHED BY MEANS OF CHAINS.
 - HYDRANT BARRELS SHALL BE PAINTED - RED, BONNETS - YELLOW, AND NOZZLE CAPS - BLACK TO INDICATE THE AVAILABLE FIRE FLOW OR AS IN ACCORDANCE WITH THE LOCAL REQUIREMENTS.
 - HYDRANTS SHALL OPEN COUNTER-CLOCKWISE.
- STANDPIPE (BREAK-AWAY) COUPLING SHALL NOT EXCEED A MAXIMUM OF 5 INCHES FROM THE TOP OF THE CURB TO THE BOTTOM OF COUPLING.
- THE DRAIN VALVE SHALL BE CLEAR OF ANY OBSTRUCTIONS, AND 3/4" CLEAN GRADE BE PLACED FROM THE BOTTOM OF THE HYDRANT TO A POINT 6" ABOVE THE HYDRANT LATERAL PIPE.
- THRUST BLOCKS SHALL BE MADE OF 4000 PSI CONCRETE, PROVIDED BEHIND THE HYDRANT SHOULDER.
- BACKFILL MATERIAL SHALL BE IN ACCORDANCE WITH THE LOCAL JURISDICTION.
- GATE VALVE SHALL BE RESILIENT WEDGE GATE VALVE (RESILIENT SEALED) MECHANICAL JOINT END (RIGHT HAND).
- WATER LATERAL SHALL BE 6" DUCTILE IRON CEMENT LINED CLASS 52 PIPE.
- TIE ROD SHALL BE 3/4" DIAMETER TIE ROD WITH EYE BOLTS - TWO REQUIRED (SIDE VIEW SHOWN). RESTRAIN ALL JOINTS ON HYDRANT TEE, VALVE, AND HYDRANT LEAD.
- HYDRANT TEE SHALL BE U.S. PIPE CATALOG #U-592 TRIM-TITE DUCTILE IRON MECHANICAL JOINT OR AN T.W.V. APPROVED SUBSTITUTE.
- HYDRANT SPACING MAY RANGE FROM 350' TO A MAX OF 600'.
- HYDRANTS SHALL BE DRY-BARREL HYDRANTS. IN ACCORDANCE WITH AWWA C500, HYDRANTS SHALL HAVE A TANK VALVE SIZE OPENING OF 2" NOMINAL, ONE FOUR-AND-ONE-HALF INCH NPT PUMPER NOZZLE, TWO TWO-AND-ONE-HALF INCH NPT HOSE NOZZLES, A ONE-AND-ONE-HALF INCH PENTAGON OPERATING NUT, AND A 3/8 INCH MECHANICAL JOINT INLET 3/4 INCH CONNECTION WITH ACCESSORIES.
- ALL TEES, VALVES AND FITTINGS TO INCLUDE RESTRAINT IN THE FORM OF MEGALUG RESTRAINT GLANDS AND RODS.
- WHEN HIGH GROUND WATER IS ENCOUNTERED WITHIN 2 FEET OF THE HYDRANT BOWL, THE WEEP HOLE IS TO REMAIN PLUGGED AND APPROPRIATELY WORKED SIGNAGE SHALL BE PERMANENTLY SECURED TO THE HYDRANT SPECIFYING THAT THE HYDRANT IS TO BE PUMPED DRY AFTER USE TO PREVENT DAMAGE DUE TO FREEZING TEMPERATURES.
- HYDRANT DRAINS ARE TO BE PLUGGED IF GROUNDWATER IS EXPECTED 2' OR LESS BELOW BASE OF HYDRANT.

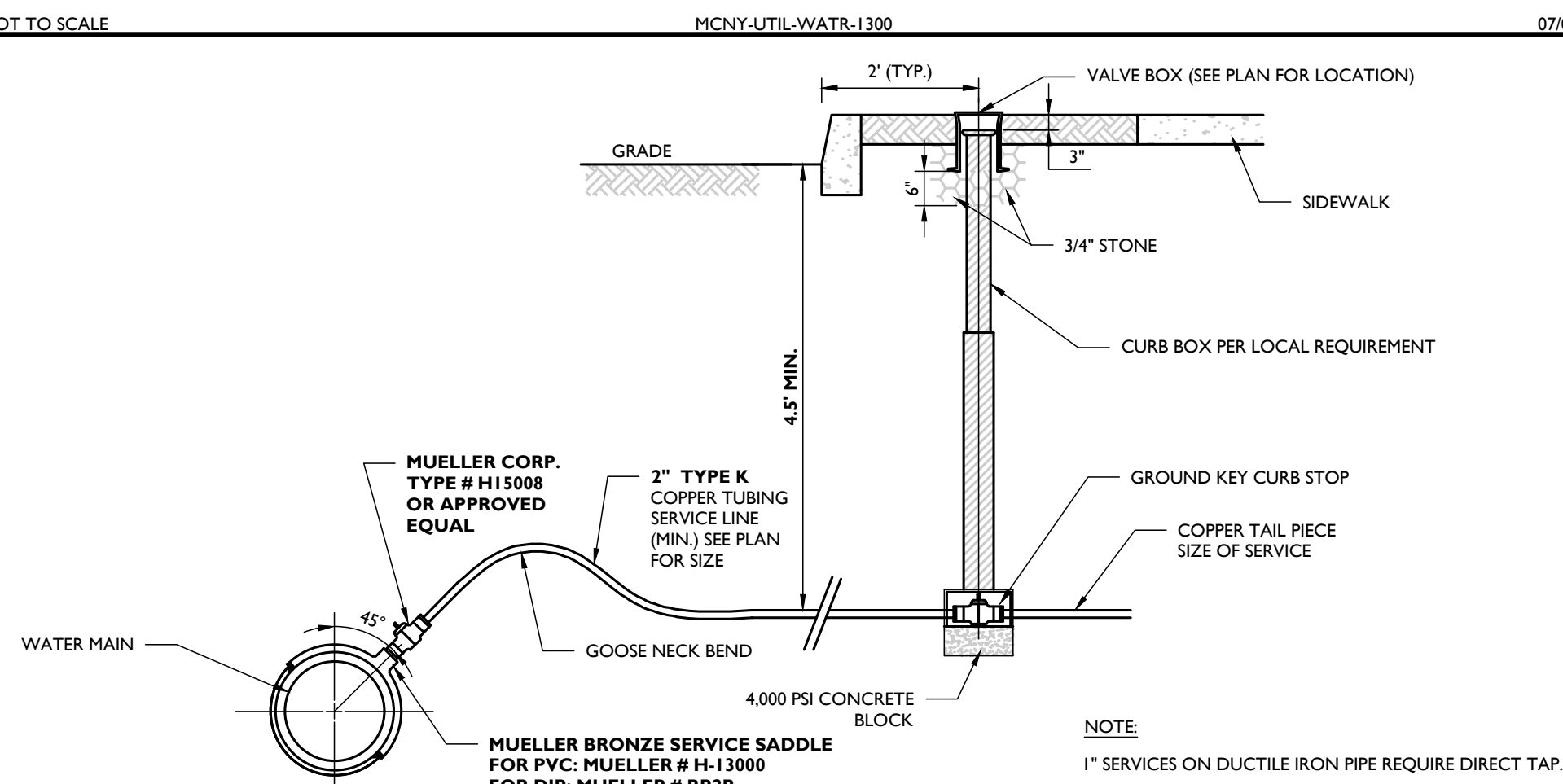


MECHANICAL JOINTS					
ANGLE	D =	R =	L =		
45°	T x 1.414	T x 1.000	D-2A		
22.5°	T x 2.613	T x 2.414	D-2A		
11.25°	T x 5.126	T x 5.027	D-2A		

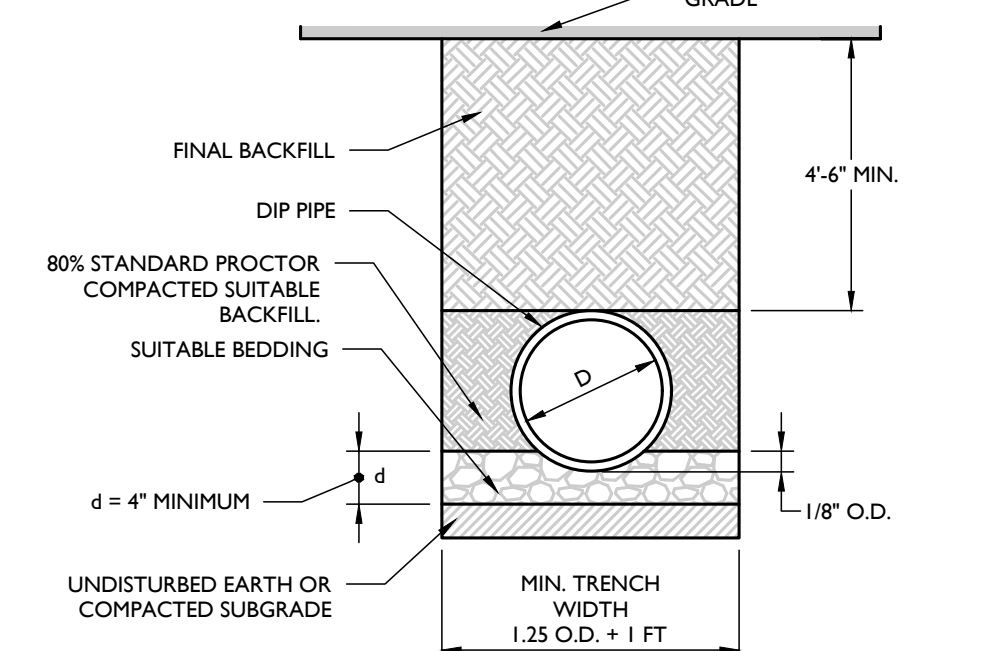
NOTES:

- WATER MAIN MAY CROSS ABOVE OBSTRUCTION IF 4'-4" MINIMUM COVER IS MAINTAINED ABOVE THE WATER MAIN AND FINISH GRADE.
- MINIMUM VERTICAL SEPARATION BETWEEN SANITARY OR STORM SEWER TO WATER MAIN SHALL BE 18" IF THE HORIZONTAL SEPARATION IS LESS THAN 10'. BETWEEN WATER MAIN AND OTHER UTILITIES, THE MINIMUM VERTICAL SEPARATION SHALL BE 12".
- WATER MAIN SHALL BE SIZE AND MATERIAL SPECIFIED ON THE PLAN, WITH MECHANICAL JOINT OR PUSH-ON AND ALL FITTINGS BE CAST IRON MECHANICALLY JOINT.
- OFFSETS MAY BE SUBSTITUTED FOR A "T" OF UP TO 24" IF APPROVED BY THE ENGINEER.
- CONCRETE THRUST BLOCKS SHALL BE PROVIDED AT ALL BENDS OR OTHER POINTS OF PIPE DIRECTION CHANGE.
- TIE RODS SHALL BE UTILIZED TO RESTRAIN PIPE JOINTS IF THRUST BLOCK IS NOT USED. DETAILS OF THE TIE ROD ASSEMBLY SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL. TIE RODS SHALL BE SUFFICIENT TO RESTRAIN THE THRUST DEVELOPED AT 100 PSI WORKING PRESSURE. MEGALUG RESTRAINT ALSO ACCEPTABLE IN PLACE OF THE RODS.

WATER CROSSING UNDER UTILITY DETAIL

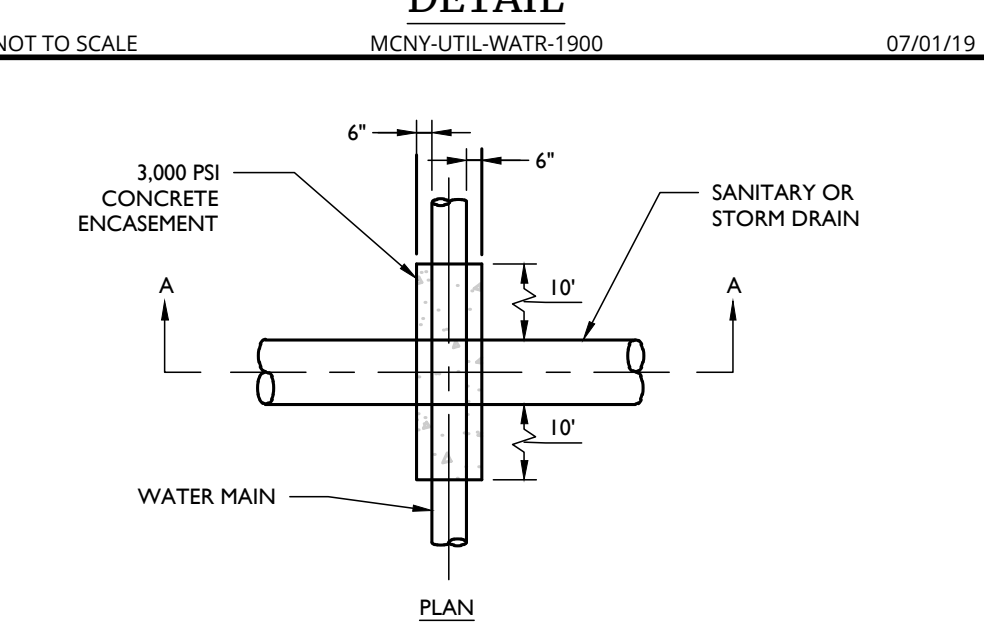


BUILDING WATER SERVICE CONNECTION DETAIL



- NOTES:
- ALL PIPE SYSTEMS AND BACKFILL SHALL BE INSTALLED IN ACCORDANCE WITH ANSI/AWWA C600.
 - WATER MAIN PIPE SHALL BE CEMENT LINED, DUCTILE IRON PIPE (DIP) PRESSURE CLASS 150, THICKNESS CLASS 52 WITH ASPHALTIC EPOXY TYPE COATING.
 - SUITABLE BACKFILL MATERIAL SHALL BE SAND, GRAVEL, OR 3/4" CRUSHED STONE.

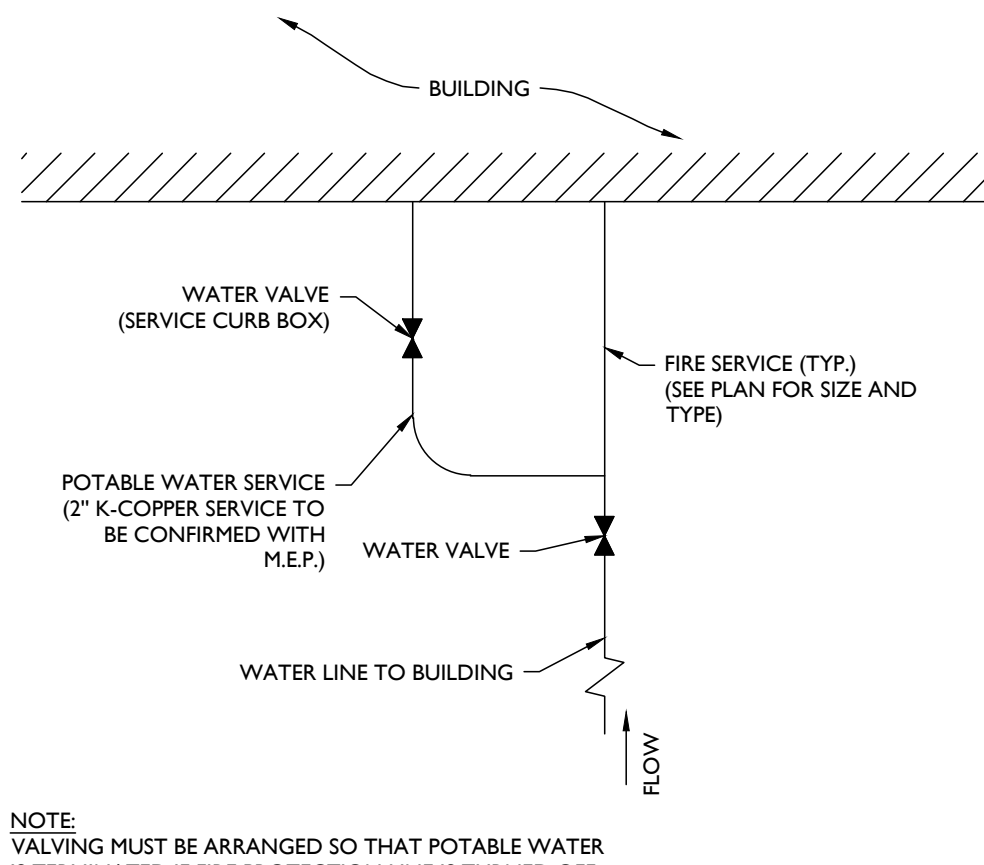
DIP WATER PIPE BEDDING DETAIL



WATER MAIN ENCASEMENT DETAIL

TOWN OF NEWBURGH WATER & SEWER NOTES:

- CONSTRUCTION OF SANITARY SEWER FACILITIES AND CONNECTION TO THE TOWN OF NEWBURGH SANITARY SEWER SYSTEM REQUIRES A PERMIT FROM THE TOWN OF NEWBURGH SEWER DEPARTMENT. ALL CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF THE NYSDEC AND THE TOWN OF NEWBURGH.
- ALL SEWER PIPE INSTALLATION SHALL BE SUBJECT TO INSPECTION BY THE TOWN OF NEWBURGH SEWER DEPARTMENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL INSPECTIONS AS REQUIRED WITH THE TOWN OF NEWBURGH SEWER DEPARTMENT.
- ALL GRAVITY SANITARY SEWER SERVICE LINES SHALL BE 4 INCHES IN DIAMETER OR LARGER AND SHALL BE SDR-35 PVC PIPE CONFORMING TO ASTM D-3034-89. JOINTS SHALL BE PUSH-ON WITH ELASTOMERIC RING GASKET CONFORMING WITH D-312. FITTINGS SHALL BE AS MANUFACTURED BY THE PIPE SUPPLIER OR EQUAL AND SHALL HAVE A BELL AND SPIGOT CONFIGURATION COMPATIBLE WITH THE PIPE.
- THE SEWER MAIN SHALL BE TESTED IN ACCORDANCE WITH TOWN OF NEWBURGH REQUIREMENTS. ALL TESTING SHALL BE COORDINATED WITH THE TOWN OF NEWBURGH SEWER DEPARTMENT.
- THE FINAL LAYOUT OF THE PROPOSED WATER AND/OR SEWER CONNECTION, INCLUDING ALL MATERIALS, SIZE AND LOCATION OF SERVICE AND ALL APPURTENANCES, IS SUBJECT TO THE REVIEW AND APPROVAL OF THE TOWN OF NEWBURGH WATER AND/OR SEWER DEPARTMENT. NO PERMITS SHALL BE ISSUED FOR A WATER AND/OR SEWER CONNECTION UNTIL A FINAL LAYOUT IS APPROVED BY THE RESPECTIVE DEPARTMENT.



TOWN OF NEWBURGH FIRE PROTECTION FLOW TO BLDG. CONNECTION DETAIL

WATER NOTES:

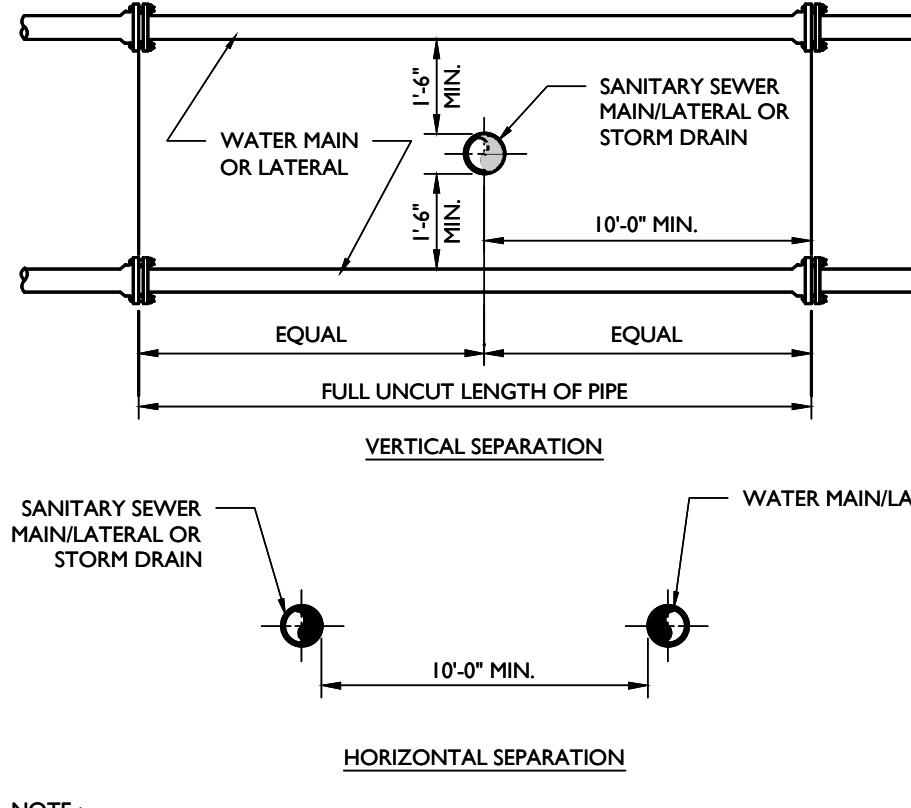
- ALL METHODS, MATERIALS, FITTINGS, DEVICES, DIMENSIONAL REQUIREMENTS AND PROCEDURES NECESSARY TO COMPLETE THE WORK SHOWN HEREON SHALL MEET THE APPROPRIATE CURRENT AWWA SPECIFICATIONS IN EFFECT AS WELL AS ALL REQUIREMENTS DEEMED APPLICABLE BY THE MUNICIPALITY OR ANY OTHER GOVERNING BODY HAVING JURISDICTION OVER SAID WORK.
- ALL WATER MAIN PIPE SHALL BE AWWA C151/A21.51-02 THICKNESS CLASS FIFTY-TWO (52) CEMENT LINED DUCTILE IRON PUSH-ON (RUBBER GASKET) TYPE AND INSTALLED WITH THREE (3) BRONZE WEDGES PER JOINT. JOINT INSTALLATION SHALL BE "TYPE 2" AS PRESCRIBED IN THE LATEST REVISION OF AWWA C600. MECHANICAL JOINTS SHALL HAVE RETAINER GLANDS.
- ALL PIPE FITTINGS SHALL BE IN ACCORDANCE WITH THE LATEST REVISION OF THE AWWA SPECIFICATION C151/A21.53-00.
- ALL GATE VALVES SHALL BE "MUELLER" OR APPROVED EQUAL, RESILIENT SEATED GATE VALVES WITH MECHANICAL JOINT CONNECTIONS. OPENING SHALL BE LEFT (C/W) AND OPERATION SHALL BE BY 2" SQUARE WRENCH NUT. MINIMUM WORKING PRESSURE SHALL BE 250 PSI. GATE VALVES ARE TO BE IN ACCORDANCE WITH LATEST REVISION OF AWWA SPECIFICATION C500.
- ALL VALVE BOXES SHALL BE EXTENSION TYPE BY MUELLER SET ON BRICKS AND POSITIONED PERPENDICULAR TO THE PIPE AND ON COMPACTED BACKFILL.
- ALL CHANGES IN PIPE LINE DIRECTION, BOTH HORIZONTAL AND VERTICAL SHALL BE TIE-RODDED AND THRUST BLOCKED WITH CONCRETE AGAINST UNDISTURBED EARTH AS DIRECTED BY THE ENGINEER.
- A PRELIMINARY HYDROSTATIC TEST PRESSURE OF 150 PSI SHALL BE MAINTAINED IN THE WATER MAIN FOR A PERIOD OF THIRTY (30) MINUTES AND A FINAL HYDROSTATIC TEST PRESSURE OF 150 PSI SHALL BE MAINTAINED IN THE WATER MAIN ONCE WATER SERVICES ARE INSTALLED FOR A MINIMUM PERIOD OF TWO (2) HOURS. RESULTS OF TESTS SHALL BE SUBMITTED AND ACCEPTED BY THE MUNICIPALITY AND THE ORANGE COUNTY DEPARTMENT OF HEALTH. THE MUNICIPAL ENGINEER MUST BE NOTIFIED FORTY-EIGHT (48) HOURS PRIOR TO PRESSURE TESTING.
- ALL WATER LINES AND APPURTENANCES SHALL BE DISINFECTED TO THE SATISFACTION OF THE MUNICIPALITY, AND IN ACCORDANCE WITH THE STANDARDS OF THE OCOOH. THIS SHALL ALSO BE DONE IN ACCORDANCE WITH THE LATEST REVISION OF AWWA C651. A MINIMUM OF TWO (2) BACTERIAL TESTS TAKEN TWENTY-FOUR (24) HOURS APART ARE REQUIRED. RESULTS OF TESTS ARE TO BE SUBMITTED AND ACCEPTED BY THE MUNICIPALITY AS PER AWWA C651. LATEST REVISION, WATER MAIN DISINFECTION PROCEDURE SHALL, GENERALLY, BE AS FOLLOWS, EXCLUDING THE TABLE METHOD:
 - INSPECTING MATERIALS TO BE USED TO ENSURE THEIR INTEGRITY.
 - PREVENTING CONTAMINATING MATERIALS FROM ENTERING THE WATER MAIN DURING STORAGE, CONSTRUCTION, OR REPAIR AND NOTING POTENTIAL CONTAMINATION AT THE CONSTRUCTION SITE.
 - REMOVING, BY FLUSHING OR OTHER MEANS, THOSE MATERIALS THAT MAY HAVE ENTERED THE WATER MAIN.
 - CHLORINATING ANY RESIDUAL CONTAMINATION THAT MAY REMAIN, AND FLUSHING THE CHLORINATED WATER FROM THE MAIN.
 - PROTECTING THE EXISTING DISTRIBUTION SYSTEM FROM BACKFLOW CAUSED BY HYDROSTATIC PRESSURE TEST AND DISINFECTION PROCEDURES.
 - DOCUMENTING THAT AN ADEQUATE LEVEL OF CHLORINE CONTACT EACH PIPE TO PROVIDE DISINFECTION.
 - DETERMINING THE BACTERIOLOGICAL QUALITY BY LABORATORY TEST AFTER DISINFECTION.
 - FINAL CONNECTION OF THE APPROVED NEW WATER SERVICE TO THE ACTIVE DISTRIBUTION SYSTEM.
 - THE CONTINUOUS-FEED METHOD SHALL BE IMPLEMENTED FOR CHLORINATION. AS DESCRIBED IN AWWA C651, LATEST REVISION. AFTER CHLORINATION, THE CONTRACTOR SHALL FLUSH THE MAINS AS PER FINAL FLUSHING REQUIREMENTS OF AWWA C651. LATEST REVISION. WHEN CUTTING INTO OR REPAIRING AN EXISTING MAIN, DISINFECTION PROCEDURES SHALL BE OBSERVED AS DETAILED IN DISINFECTION PROCEDURES WHEN CUTTING INTO OR REPAIRING EXISTING MAINS OF AWWA C651, LATEST REVISION.
 - VERIFICATION SHALL BE ACCOMPLISHED VIA BACTERIOLOGICAL TESTS. AFTER FINAL FLUSHING AND BEFORE THE NEW WATER MAIN IS CONNECTED TO THE DISTRIBUTION SYSTEM, TWO CONSECUTIVE SETS OF ACCEPTABLE SAMPLES, TAKEN AT LEAST 24 HR APART, SHALL BE COLLECTED FROM THE NEW MAIN. AT LEAST ONE SET OF SAMPLES SHALL BE COLLECTED FROM EVERY 1,200 FT OF THE NEW WATER MAIN, PLUS ONE SET FROM THE END OF THE LINE AND AT LEAST ONE SET FROM EACH BRANCH. SAMPLES SHALL BE TESTED FOR BACTERIOLOGICAL (CHEMICAL AND PHYSICAL) QUALITY IN ACCORDANCE WITH STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, AND SHALL SHOW THE ABSENCE OF COLIFORM ORGANISMS AND THE PRESENCE OF A CHLORINE RESIDUAL. SAMPLES FOR BACTERIOLOGICAL ANALYSIS SHALL BE COLLECTED IN STERILE BOTTLES TREATED WITH SODIUM THIOSULFATE, AS REQUIRED BY STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER. NO HOSE OR FIRE HYDRANT SHALL BE USED IN THE COLLECTION OF SAMPLES. THERE SHOULD BE NO WATER IN THE TRENCH UP TO THE CONNECTION FOR SAMPLING. THE SAMPLING PIPE MUST BE DEDICATED AND CLEAN AND DISINFECTED AND FLUSHED PRIOR TO SAMPLING. A CORPORATION COCK MAY BE INSTALLED IN THE MAIN WITH A COPPER-TUBE GOOSENECK ASSEMBLY. AFTER SAMPLES HAVE BEEN COLLECTED, THE GOOSENECK ASSEMBLY MAY BE REMOVED AND RETAINED FOR FUTURE USE. IF SAMPLES RESULTS FROM THE LAB INDICATE A MEASURED HPC GREATER THAN 500 COLONY-FORMING UNITS (CFU) PER ML, FLUSHING SHOULD BE RESUMED AND ANOTHER COLIFORM AND HPC SET OF SAMPLES SHOULD BE TAKEN UNTIL NO COLIFORMS ARE PRESENT AND THE HPC IS LESS THAN 500 CFU/ML. THE RECORD OF COMPLIANCE SHALL BE THE BACTERIOLOGICAL TEST RESULTS CERTIFYING THAT THE WATER SAMPLED FROM THE NEW WATER MAIN IS FREE OF COLIFORM BACTERIA CONTAMINATION AND IS EQUAL TO OR BETTER THAN THE BACTERIOLOGICAL WATER QUALITY IN THE DISTRIBUTION SYSTEM.
 - ALL OTHER REQUIREMENTS OF AWWA C651, LATEST REVISION, SHALL BE OBSERVED.
- ALL RESULTS OF THE BACTERIAL TESTS ARE TO BE SUBMITTED AND ACCEPTED BY THE MUNICIPALITY AND ORANGE COUNTY DEPARTMENT OF HEALTH.
- ALL WATER MAINS SHOULD BE SEPARATED FROM SANITARY SEWER LINES BY A MINIMUM HORIZONTAL DISTANCE OF 10 FEET. IF SUCH HORIZONTAL SEPARATION IS NOT POSSIBLE, THE WATER AND SEWER LINES SHALL BE IN SEPARATE TRENCHES (STEP TRENCHES ARE PROHIBITED) WITH THE TOP OF THE SEWER LINE AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER MAIN ENCASED IN CONCRETE OR WITH SUCH SEPARATION EXPRESSLY APPROVED BY THE ORANGE COUNTY DEPARTMENT OF HEALTH.
- AT THE CROSSINGS OF SEWER LINES AND WATER MAINS, THE TOP OF THE SEWER LINES SHALL BE AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER MAIN. IF SUCH VERTICAL SEPARATION IS NOT POSSIBLE, THE WATER LINE SHALL BE ENCASED IN CONCRETE.
- WATER TIGHT PLUGS ARE TO BE INSTALLED IN THE ENDS OF PIPES WHEN WORK IS NOT IN PROGRESS.
- LEAKAGE AND HYDROSTATIC PRESSURE TESTING SHALL BE PERFORMED AT 1.5 TIMES THE WORKING PRESSURE OR A MINIMUM TEST PRESSURE OF 150 PSI.
- THE MAXIMUM DEFLECTION ALLOWED ALLOWED AT PIPE JOINTS SHALL BE LIMITED TO 80% OF THAT ALLOWED BY AWWA OR IN ACCORDANCE WITH THE MUNICIPALITY. FOR AWWA ALLOWABLE JOINT DEFLECTIONS SEE LATEST REVISION OF AWWA SPECIFICATION C600.
- CONSTRUCTION MUST CONFORM TO ALL ORDINANCES.
- CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATION OF EXISTING WATER AND OTHER UTILITIES PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
- LOCALITY MUST BE CONTACTED PRIOR TO ANY EXCAVATION OR DEMOLITION DIAL 811 OR WWW.LI811.ORG.
- CONTRACTOR TO CONTACT MUNICIPAL WATER DEPARTMENT AND ORANGE COUNTY HEALTH DEPARTMENT AT LEAST 2 DAYS PRIOR TO CONSTRUCTION.
- ALL IMPROVEMENTS SHALL BE INSPECTED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW YORK AND CERTIFICATION SHALL BE PROVIDED TO THE MUNICIPALITY AND THE ORANGE COUNTY HEALTH DEPARTMENT THAT THE SUBJECT IMPROVEMENTS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE APPROVED PLANS.
- CONTRACTOR TO NOTIFY ENGINEER OF ANY DEVIATION FROM THE HORIZONTAL OR VERTICAL ALIGNMENTS WITH REGARDS TO EXISTING UTILITIES.
- ANY BACKFLOW PREVENTION DEVICES DETERMINED TO BE REQUIRED BY OTHERS IN ACCORDANCE WITH THE WATER SUPPLIER WILL BE DESIGNED BY OTHERS IN ACCORDANCE WITH OCOOH REQUIREMENTS AND THAT APPLICATION FOR ANY SUCH BACKFLOW PREVENTION DEVICE SHALL BE SUBMITTED TO THE OCOOH FOR REVIEW AND APPROVAL UNDER SEPARATE COVER.
- A CERTIFIED AS-BUILT MAP OF THE WATER SYSTEM IMPROVEMENTS SHALL BE PROVIDED TO THE MUNICIPALITY'S WATER DEPARTMENT BY A LICENSED DESIGN PROFESSIONAL.

NUMBER AND SIZE OF RODS REQUIRED AND PIPE LENGTH IN FEET TO BE RESTRAINED									
PIPE SIZE IN INCHES	90° TEE OR DEAD END PLUG			45° BEND			22½° BEND		
	No.	Size	L*	No.	Size	L*	No.	Size	L*
4	2	¾"	30'	2	¾"	10'	2	¾"	5'
6	2	¾"	40'	2	¾"	10'	2	¾"	5'
8	4 or 2	¾" or 1"	50'	2	¾"	15'	2	¾"	5'
10	4 or 2	¾" or 1"	60'	2	¾"	20'	2	¾"	5'
12	4	¾"	70'	2	¾"	20'	2	¾"	5'
14	4	1"	80'	2	¾"	25'	2	¾"	5'
16	4	1"	80'	2	¾"	25'	2	¾"	5'

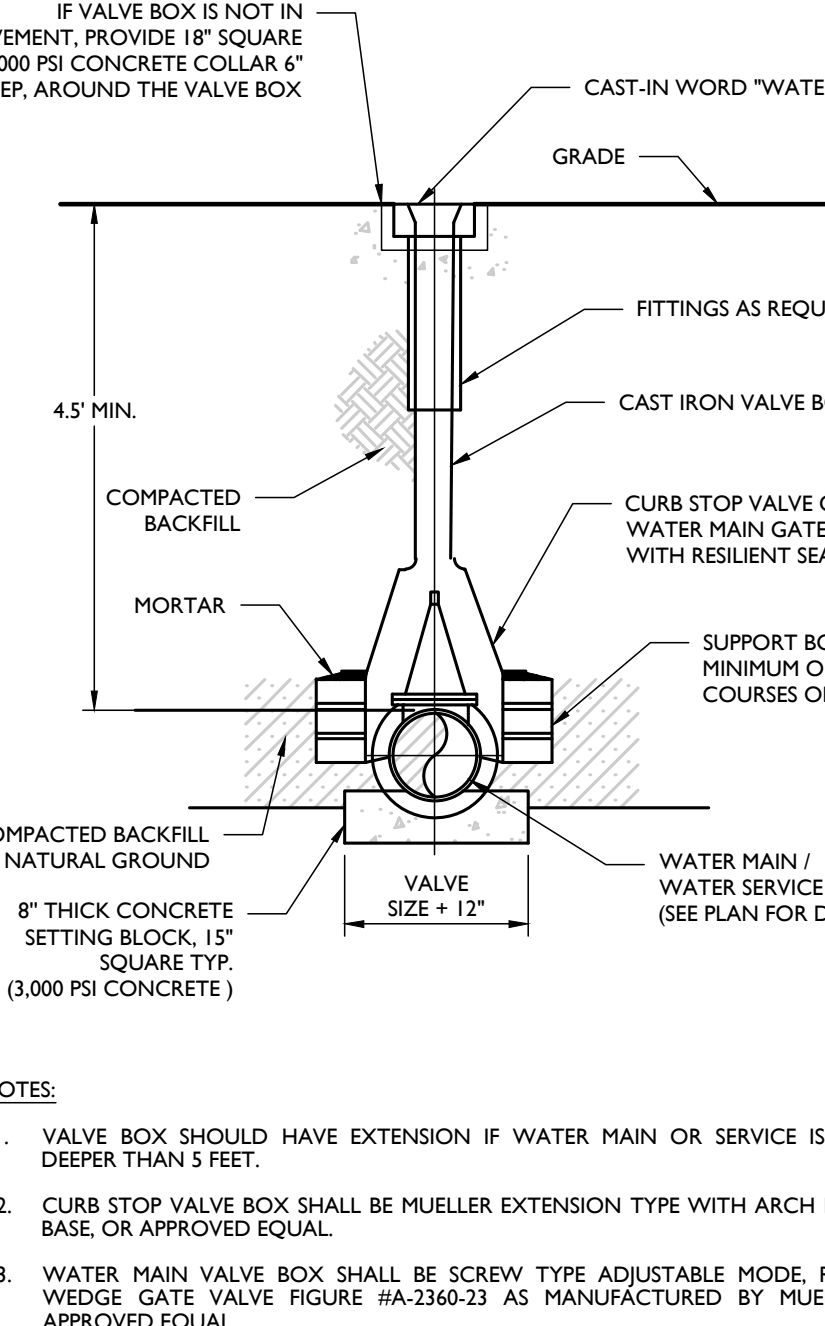
NOTES:

- USE OF MECHANICAL JOINT RETAINER GLANDS SHALL PROVIDE A THRUST RESTRAINT STATION EQUIVALENT TO THAT LISTED IN THE TABLE FOR CLAMPS AND RODS.
- LENGTHS ARE BASED ON THE FOLLOWING CRITERIA: 150 PSI MAXIMUM PRESSURE AND 3'-4" OF COVER. TABLE IS FOR USE WITH CAST IRON PIPE OR DUCTILE IRON PIPE ONLY. IF TEST CONDITIONS ARE MORE SEVERE OR LARGER PIPES ARE USED, THEN SPECIAL COMPUTATIONS MUST BE PROVIDED BY LICENSED PROFESSIONAL ENGINEER.

JOINT RESTRAINT SCHEDULE DETAIL



SANITARY/STORM SEWER-WATER MAIN SEPARATION DETAIL



WATER VALVE BOX DETAIL

NOT TO SCALE MCNY-UTIL-WATR-1600 07/01/19

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1	07/01/19	REVIEW FIRE SITE MAIN CHANGES	KAS	
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Connor Patrick McCormack

NEW YORK LICENSED PROFESSIONAL ENGINEER
LICENSE NUMBER: 103756
COLLIERS ENGINEERING & DESIGN CT, P.C.
N.Y.C.E.A.#: 00170609

PRELIMINARY SITE PLAN

FOR
AVION VENTURES
POMARICO DRIVE

SECTION 86
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555 Hudson Valley Avenue
Suite 101
New Windsor, NY 12553
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DATE: 06/06/2024
PROJECT NUMBER: 24002169A

DRAWN BY: KAS
CHECKED BY: CPM

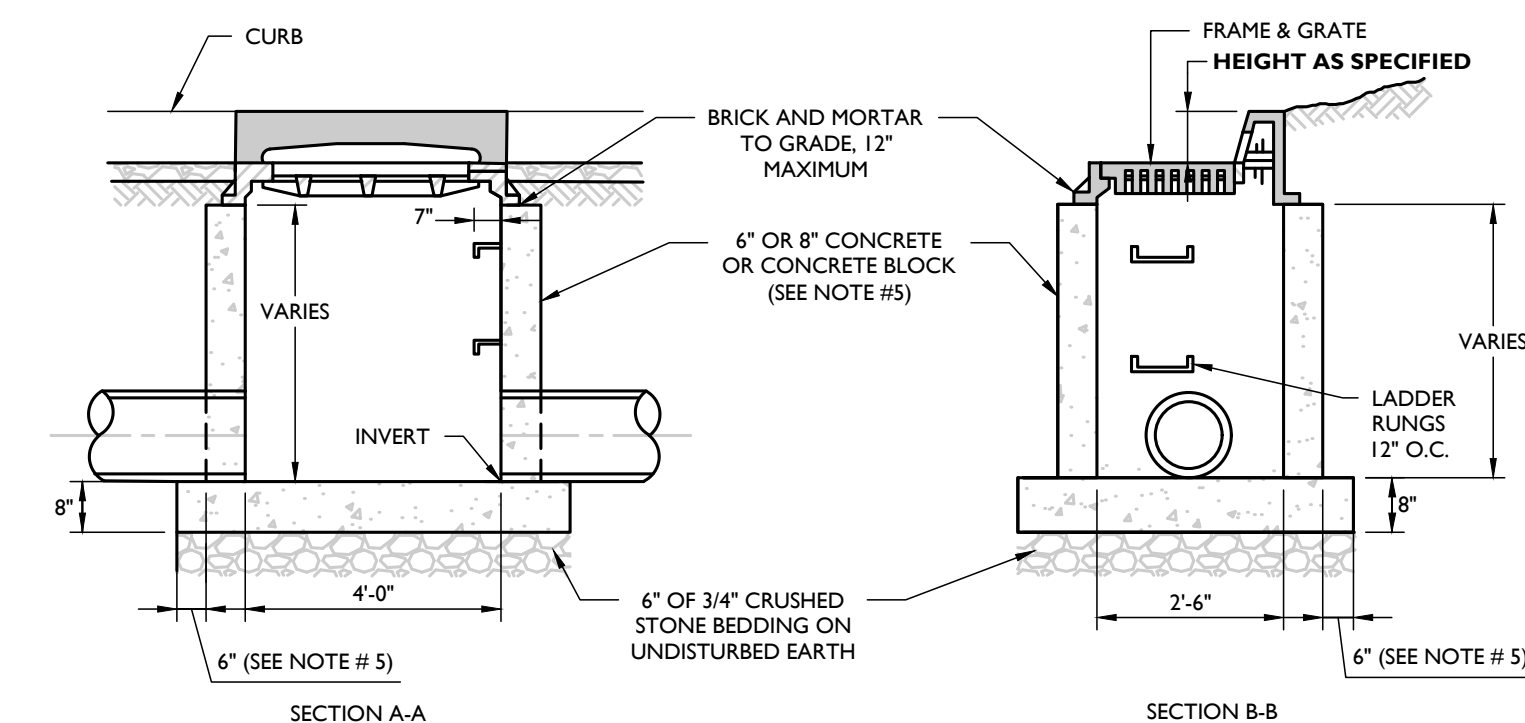
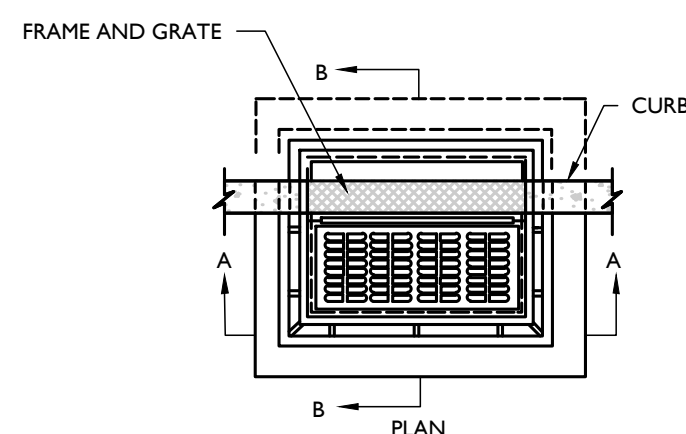
DRAWING NAME: C-0115

SHEET TITLE: CONSTRUCTION DETAILS

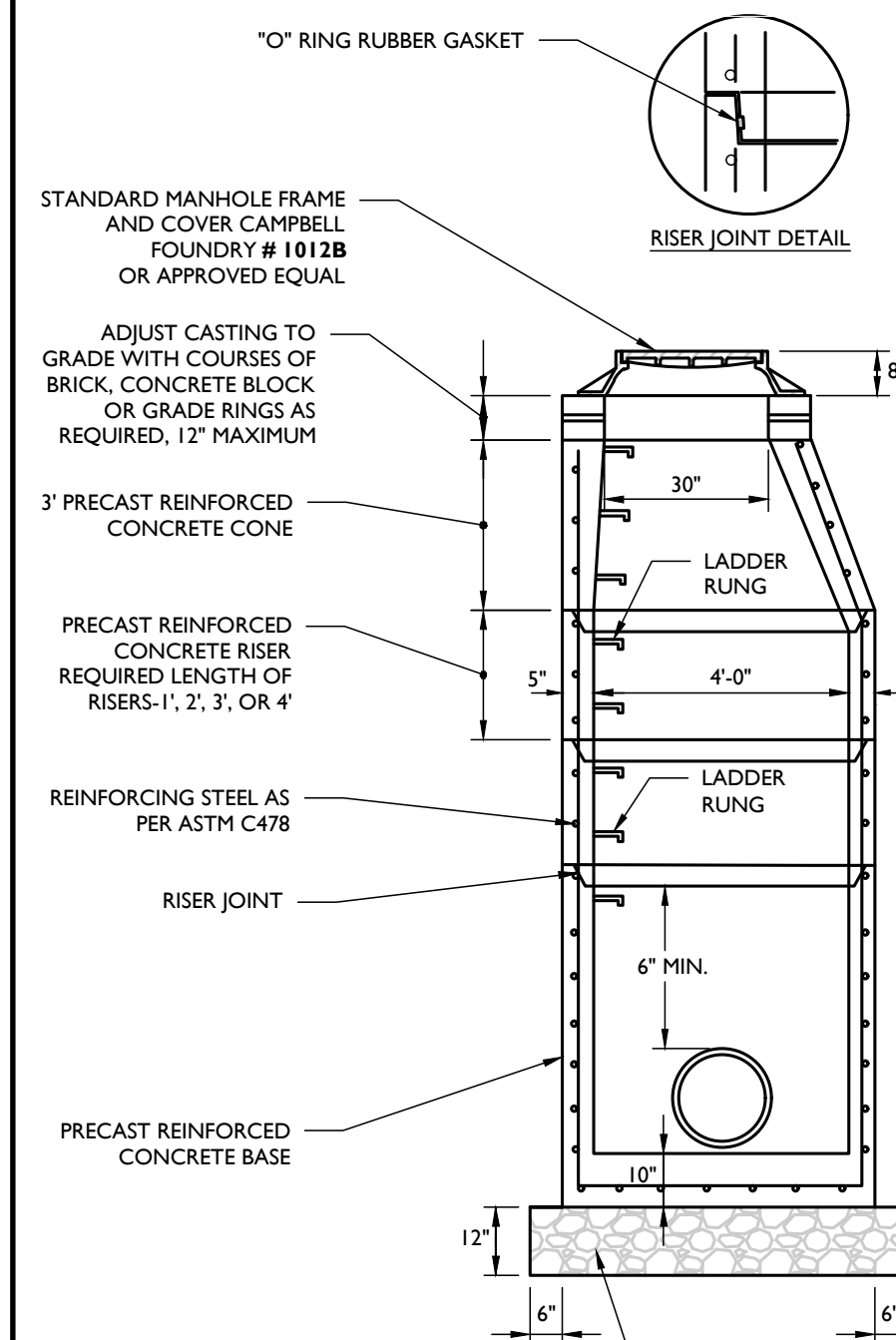
SHEET NUMBER: C-902



	PIPE DIAMETER (INCHES)				
DIMENSION	12	15	18	24	30
A	42	46	54	64	88
B	14.5	24.5	29	37	36
C	33	45.5	55	65	63.5
D	6	6	6	6	6



SINGLE CATCH BASIN DETAIL

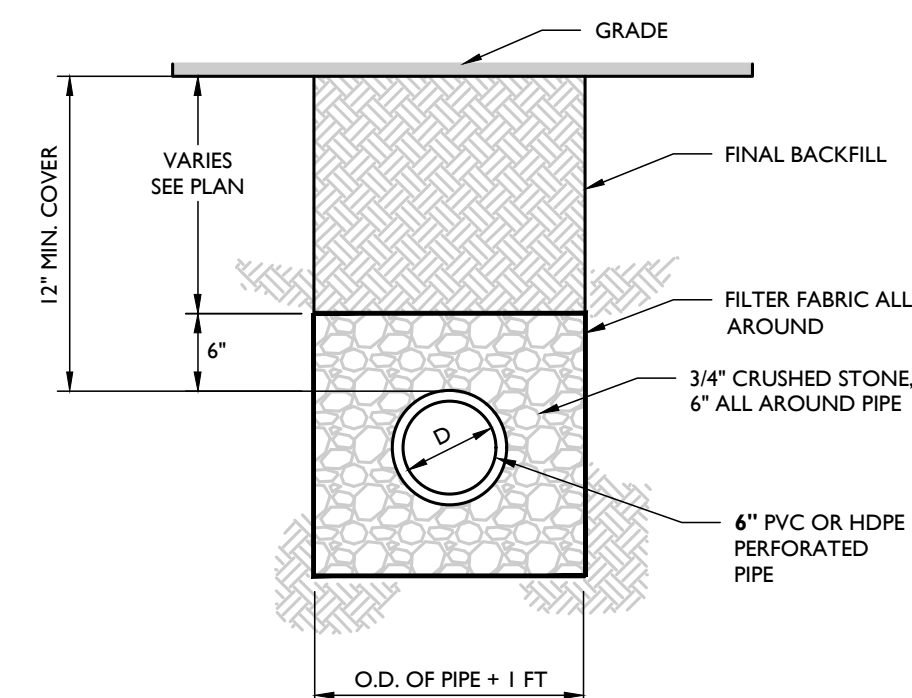


NOTE: 3/4" CRUSHED STONE BEDDING ON UNDISTURBED EARTH

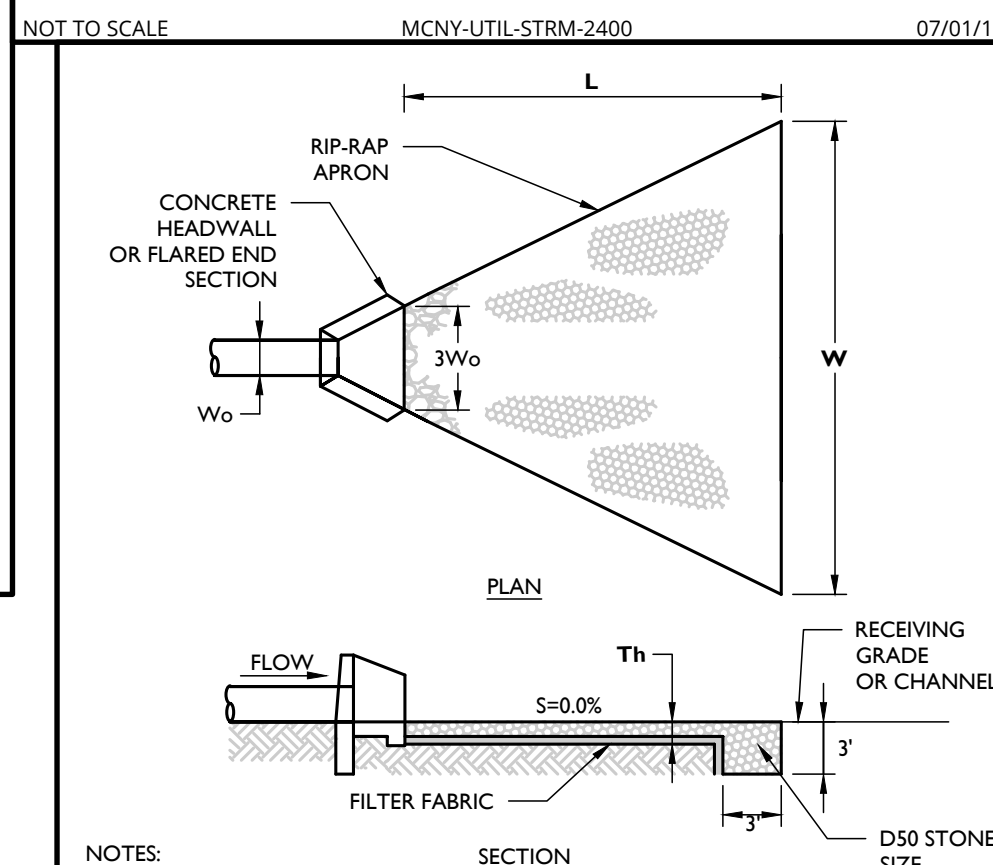
1. IN ACID SOILS, TWO COATS OF BITUMASTIC WATER PROOFING SHALL BE APPLIED PER MANUFACTURER'S SPECIFICATION.
2. ALL CONCRETE TO BE 4,000 PSI.

PRECAST CONCRETE STORM MANHOLE 4' DIA. DETAIL

NOT TO SCALE MCNY-UTIL-STRM-1600



UNDERDRAIN DETAIL

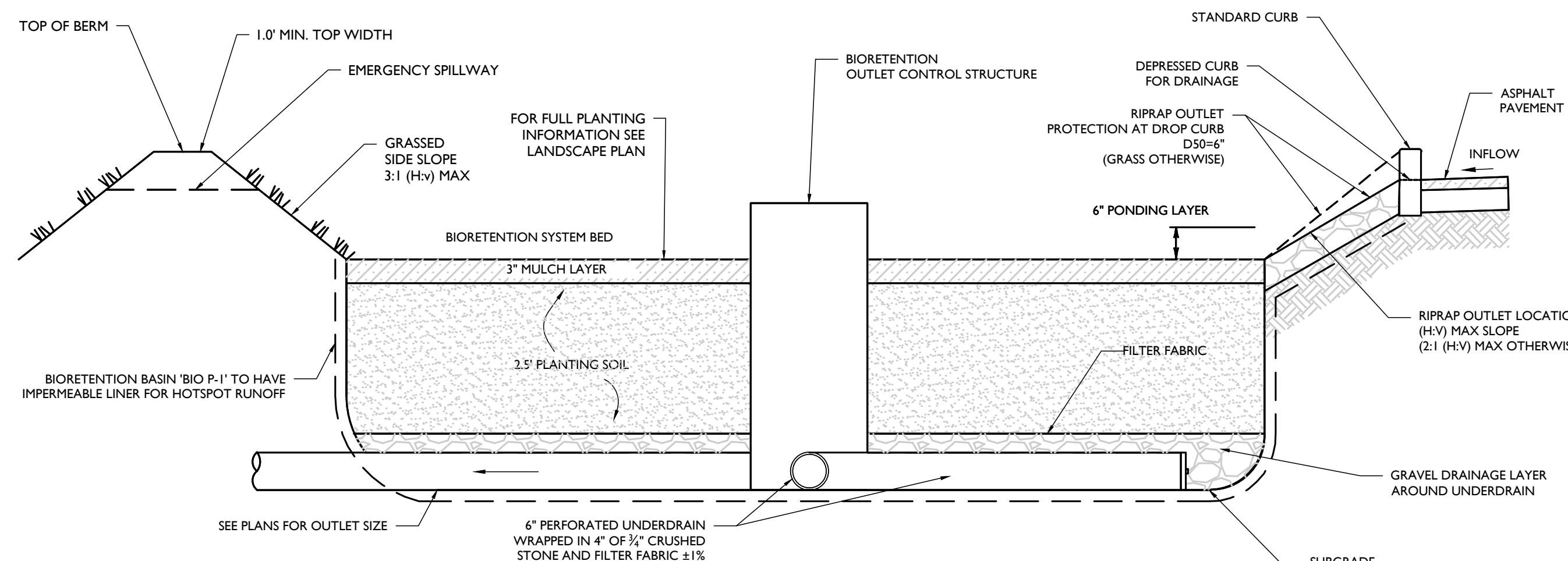


NOTES: SECTION

CONDUIT OUTLET PROTECTION DETAIL

MOD: 01/05/2
05/01/1

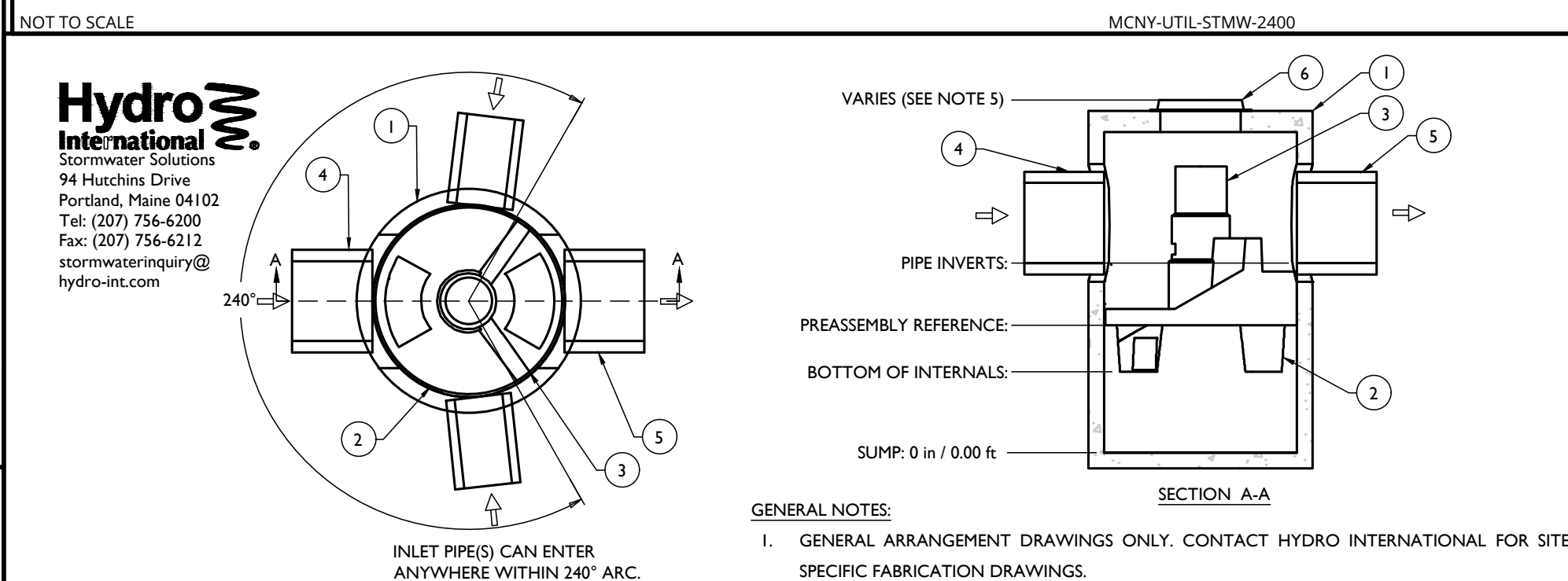
BIORETENTION ELEVATIONS					
SYSTEM	OUTLET NAME	OUTLET SIZE	BED ELEVATION	TOP OF BERM ELEVATION	EMERGENCY SPILLWAY EL.
BIORETENTION BASIN "BIO P-1A"	OCS 2A	4" X 4"	501.50	505.50	505.25
BIORETENTION BASIN "BIO P-1B"	OCS 2B	4" X 4"	502.00	506.00	505.8



NOTES:

1. SEE PLAN FOR DROP CURB LOCATIONS AND BIORETENTION AREA CONFIGURATION.
2. PLANTING SOIL TO BE IN ACCORDANCE WITH 2025 NYSSDM.
3. CONTRACTOR MUST PROVIDE SUBMITTAL OF PROPOSED BIORETENTION SOIL FOR APPROVAL.

BIORETENTION SYSTEM CROSS SECTION DETAIL



GENERAL NOTES

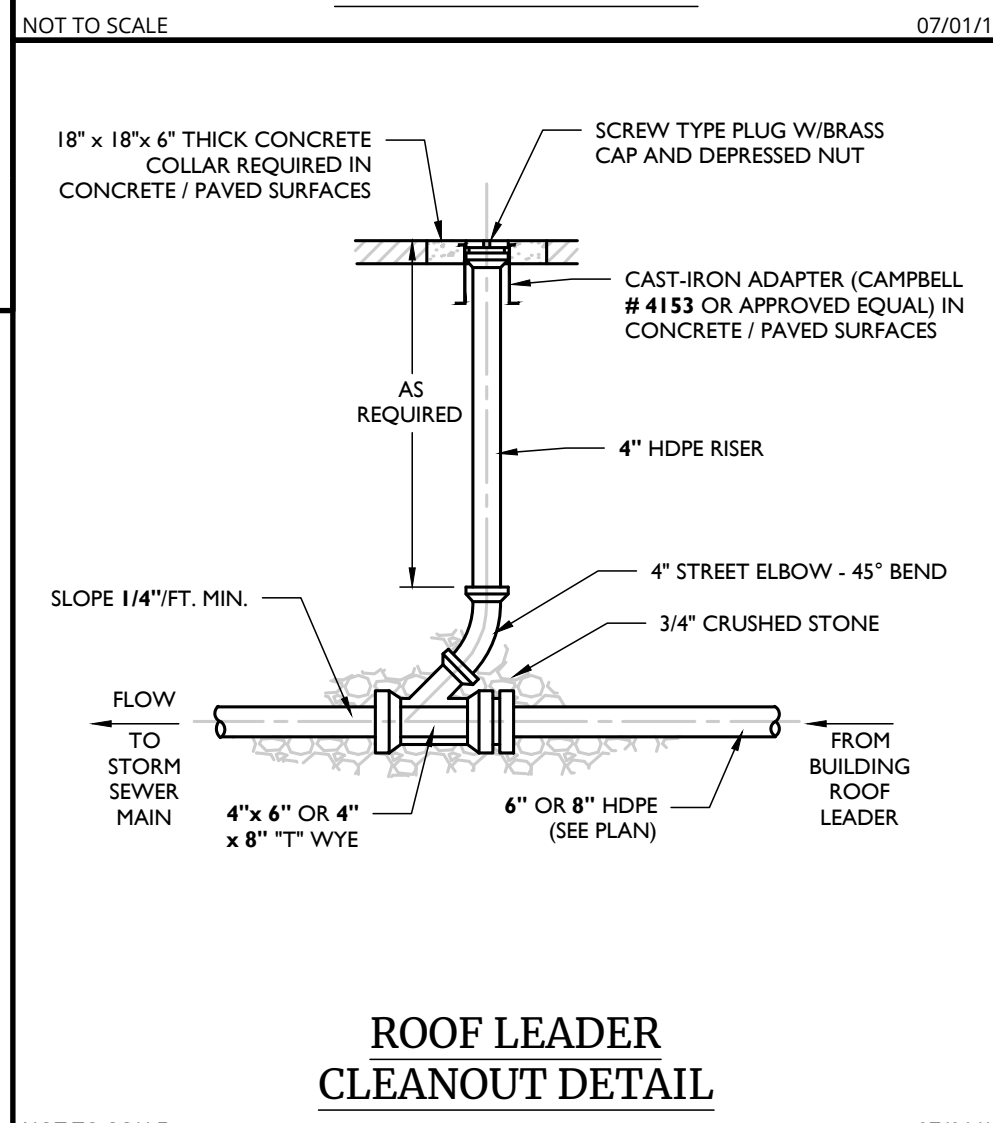
SECTION A-A

1. GENERAL ARRANGEMENT DRAWINGS ONLY. CONTACT HYDRO INTERNATIONAL FOR SITE SPECIFIC FABRICATION DRAWINGS.
2. THE DIAMETER OF THE INLET & OUTLET PIPES MAY BE NO MORE THAN 30".
3. MULTIPLE INLET PIPES POSSIBLE (REFER TO PROJECT PLANS).
4. INLET/OUTLET PIPE LENGTH CAN VARY TO ALIGN WITH DRAINAGE NETWORKS (REFER TO PROJECT PLANS).
5. PEAK FLOW RATE AND MINIMUM HEIGHT LIMITED BY AVAILABLE COVER AND PIPE DIAMETER.
6. LARGER SEDIMENT STORAGE CAPACITY MAY BE PROVIDED WITH A DEEPER SUMP DEPTH.

PRODUCT SPECIFICATIONS

1. THE TREATMENT SYSTEM SHALL USE AN INDUCED VORTEX TO SEPARATE POLLUTANTS FROM STORMWATER RUNOFF.
2. THE TREATMENT SYSTEM SHALL FIT WITHIN THE LIMITS OF EXCAVATION (AREA AND DEPTH) AS SHOWN IN THE PROJECT PLANS AND WILL NOT EXCEED THE DIMENSIONS FOR THE DESIGN FLOW RATES SPECIFIED HEREIN.
3. THE TREATMENT SYSTEM SHALL REMOVE GREATER THAN OR EQUAL TO 90% OF TSS BASED ON THE TARGET PARTICLE SIZE (TPS) OF 106 MICRONS AND/OR 20% TSS BASED ON THE TPS OF 230 MICRONS AT 2.2 CFS AND 3.8 CFS, RESPECTIVELY.
4. THE TREATMENT SYSTEM SHALL CONVEY THE PULSED ON-LINE FLOW RATES OF UP TO 21 CFS WITHOUT EXCEEDING THE MAXIMUM ALLOWABLE DEFORMATION. FULL-SCALE INDEPENDENT LABORATORY SUMP TESTING SHALL DEMONSTRATE EFFLUENT CONCENTRATIONS OF LESS THAN OR EQUAL TO 5 MGL FOR ALL FLOWS UP TO 200% OF INFL-106.
5. THE TREATMENT SYSTEM SHALL BE CAPABLE OF CAPTURING AND RETAINING FINE SILT AND SAND SIZE PARTICLES. A FULL-SCALE ANALYSIS OF CAPTURED SEDIMENT FROM FULL-SCALE FIELD INSTALLATIONS SHALL DEMONSTRATE PARTICLE SIZES PREDOMINANTLY IN THE 30-MICRON RANGE.

HDPE STORM PIPE BEDDING DETAIL



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Date: 2025.02.05 17:00:36-0400

Connor Patrick McCormack
NEW YORK LICENSED PROFESSIONAL ENGINEER
LICENSE NUMBER: 103756
COLLIERS ENGINEERING & DESIGN CT, P.C.
N.Y. C.O.A.#.: 00176769

PRELIMINARY SITE PLAN

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PROJECT NUMBER: 24002169A		DRAWING NAME: C-DTLS	

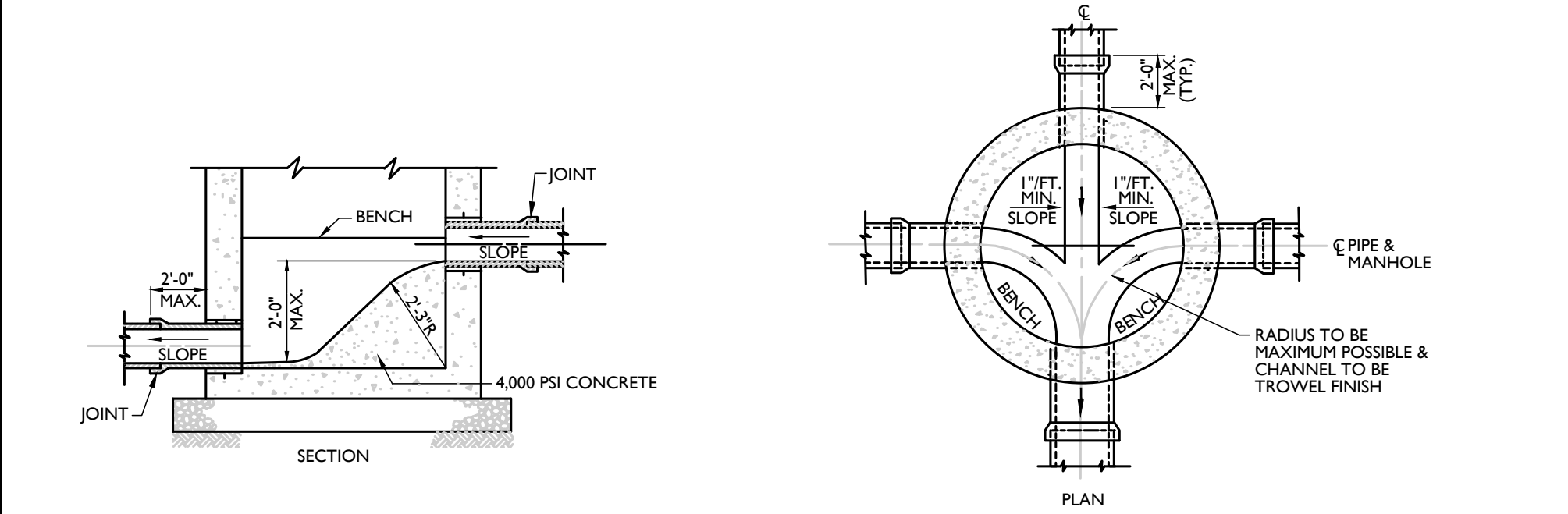
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CONSTRUCTION DETAILS

SHEET NUMBER

C-903

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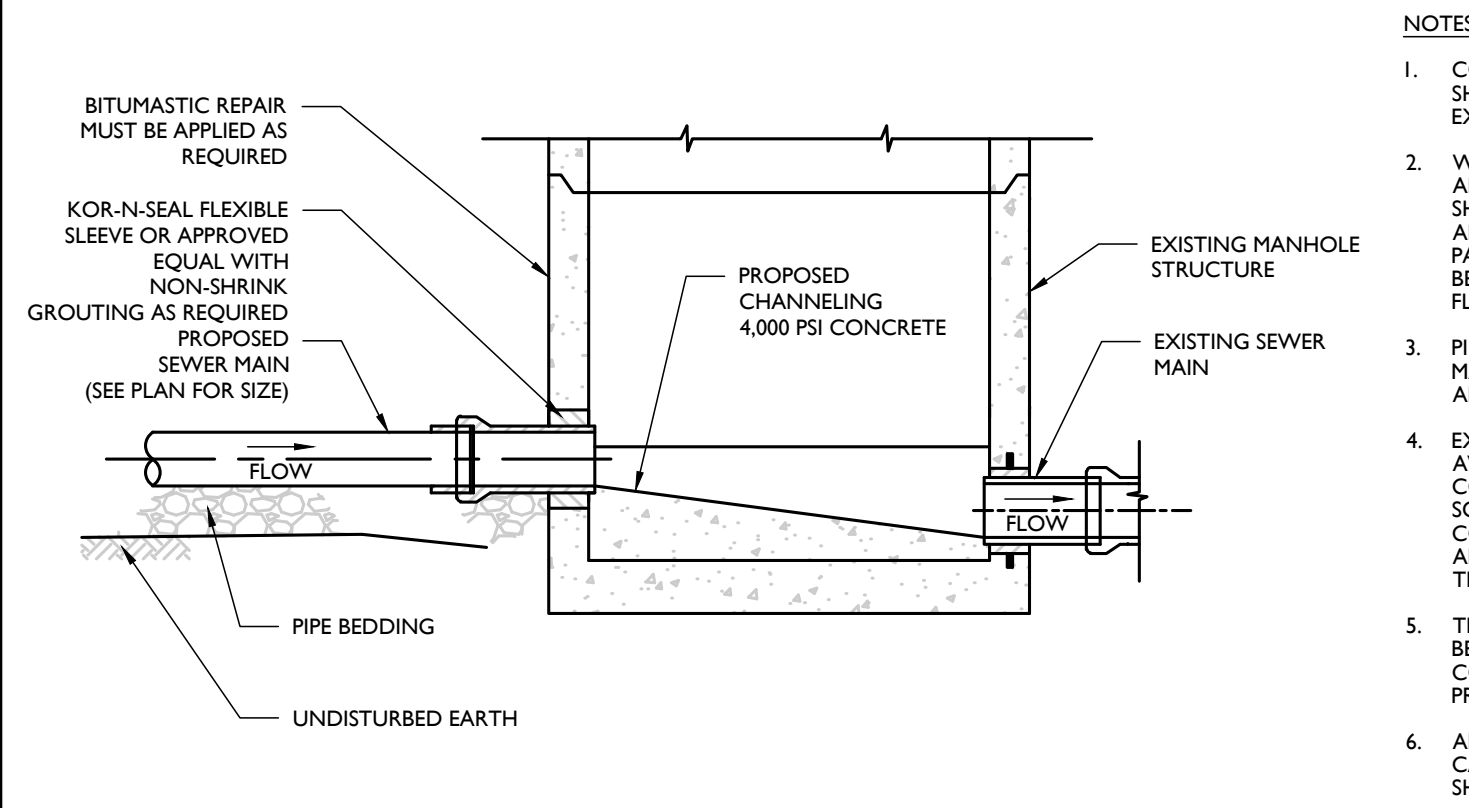


- NOTE:
1. MANHOLE CHUTE IS TO BE USED WHERE DIFFERENCE IN INVERT ELEVATIONS BETWEEN INCOMING PIPE AND OUTGOING PIPE IS LESS THAN 2'-0".
 2. IF THE DIFFERENCE 2'-0" OR GREATER, THEN EXTERNAL DROP CONNECTION SHALL BE MADE. CHANNELING SHALL BE AS SHOWN ABOVE.

MANHOLE CHUTE DETAIL

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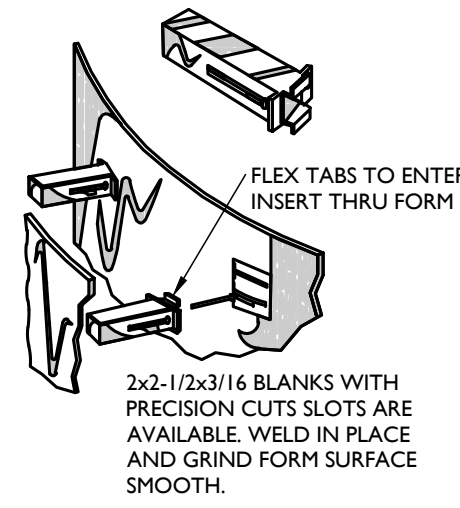
CONNECTION TO EXISTING MANHOLE DETAIL

NOT TO SCALE

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SEWER NOTES:

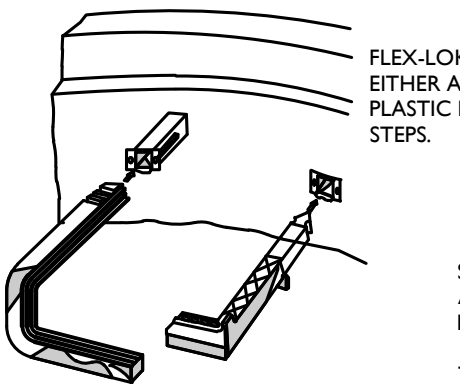
1. PUMP STATION DESIGN IS PENDING.



A POLYPROPYLENE INSERT FOR THE PURPOSE OF SECURING STEPS IN THE WALL OF A PRECAST CONCRETE MANHOLE OR OTHER CONCRETE STRUCTURE.

PLACEMENT OF THE INSERT IS DONE AT THE TIME OF MANUFACTURE, THEREBY ASSURING THE WALL TO REMAIN WATERTIGHT, AND AT THE SAME TIME GUARANTEEING POSITIVE ALIGNMENT AND PROJECTION OF THE STEPS.

INSTALLATION OF EITHER THE ALUMINUM OR PLASTIC POLYPROPYLENE STEP INTO THE INSERT IS RAPID AND SIMPLE, AS THE STEP IS PRESSED OR DRIVEN INTO AN INTERFERENCE FIT IN THE INSERT CAVITY.

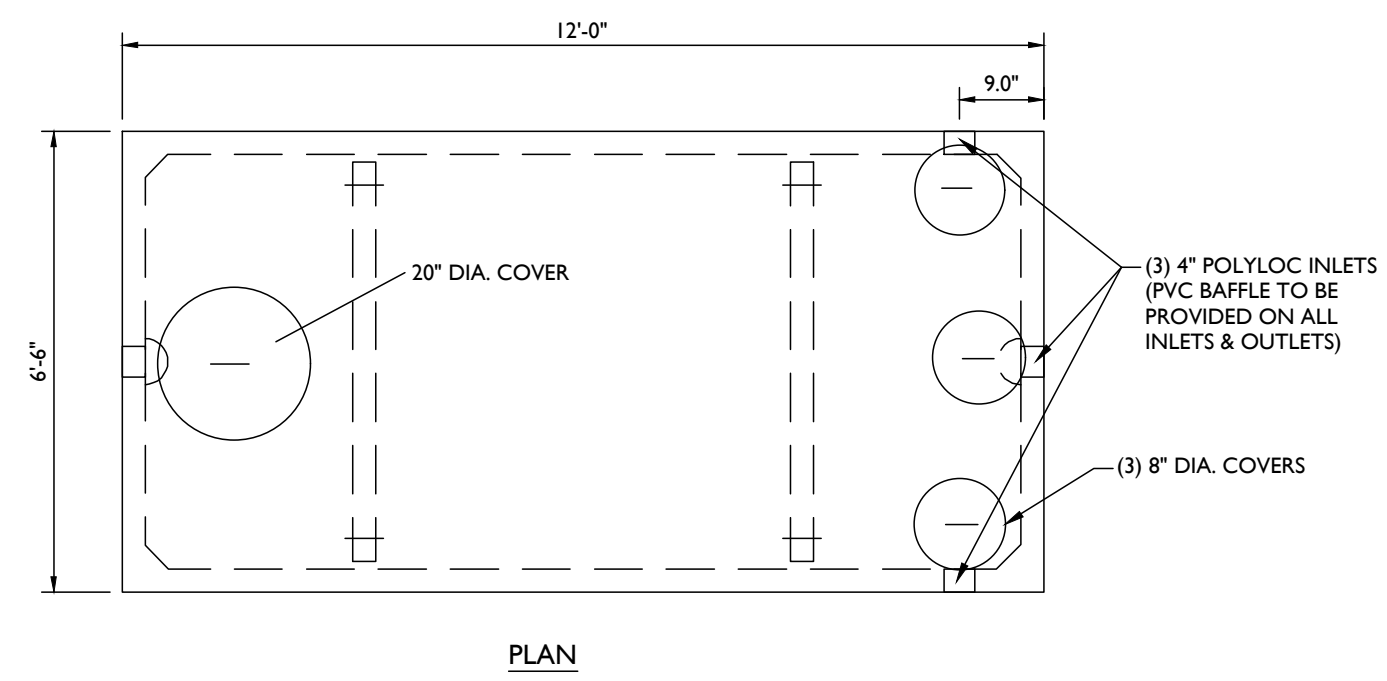


- NOTES:
1. STEP INSERTS TO BE AS MANUFACTURED BY A-LOK PRODUCTS OR APPROVED EQUAL.

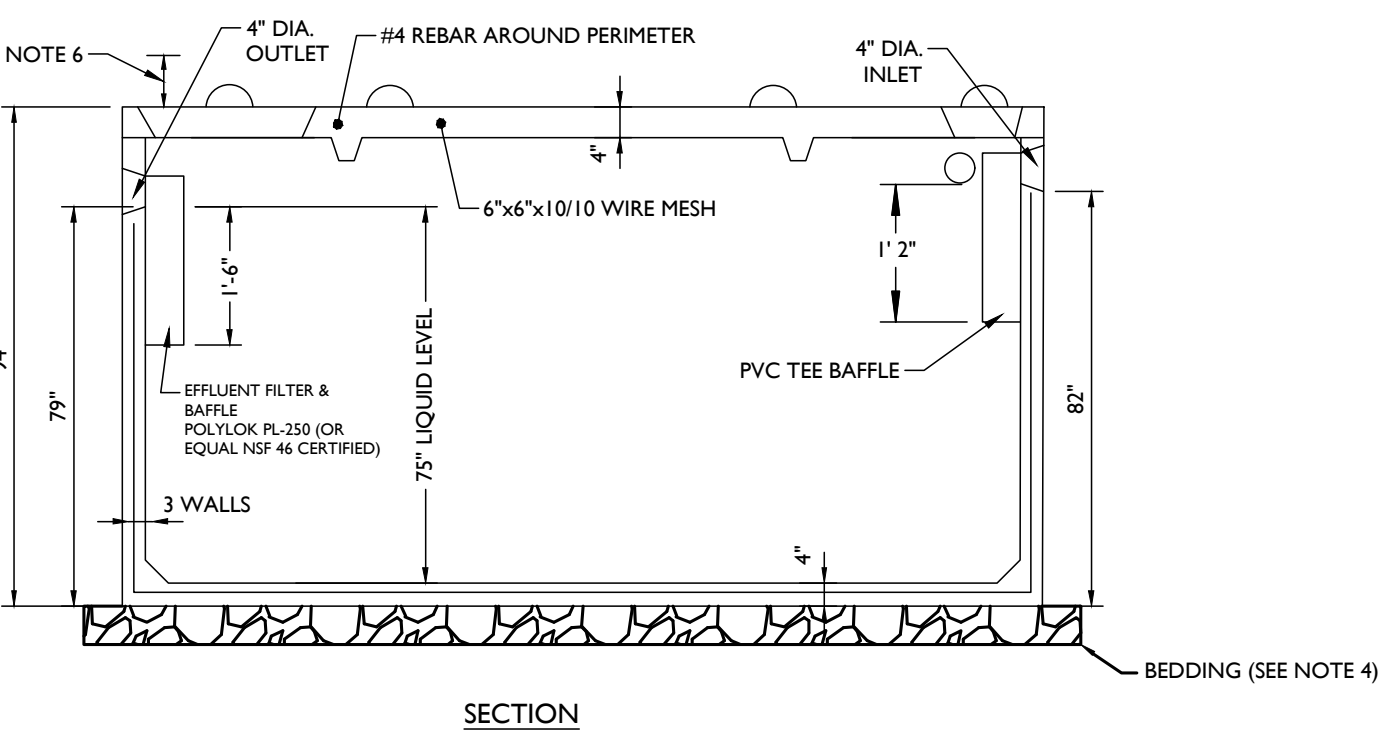
LADDER RUNG (COPOLYMER) DETAIL

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PLAN

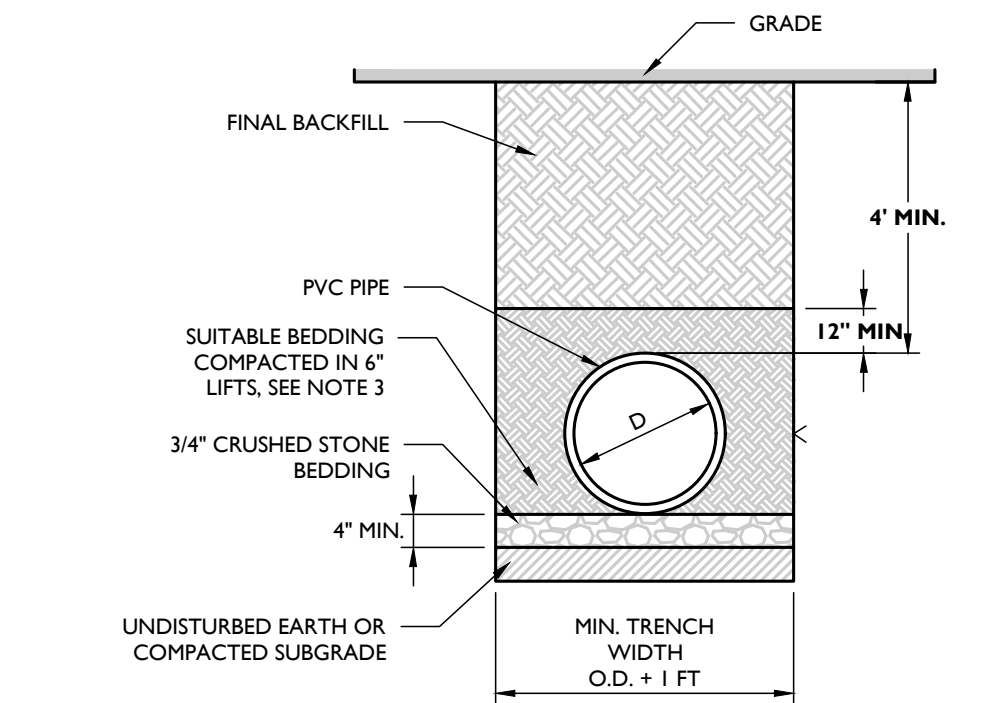


SECTION

- NOTES:
1. TANK IS 4000 PSI CONCRETE W/ STEEL REINFORCEMENT PER AGI RECOMMENDATIONS.
 2. TANK IS TO BE MANUFACTURED BY WOODWARD'S CONCRETE PRODUCTS, INC. OR APPROVED EQUAL.
 3. CONSTRUCTION JOINT - BUTYL RUBBER SEALANT OR APPROVED EQUAL.
 4. BEDDING TO BE A MINIMUM OF 4" OF WASHED AGGREGATE 3/4" TO 1 1/2".
 5. TANK TO BE SET LEVEL.
 6. RISER TO BE INSTALLED TO WITHIN 12" OF FINISHED GRADE FOR MAINTENANCE ACCESS TO TANK AND EFFLUENT FILTER.
 7. ALL CONNECTIONS MUST BE WATERTIGHT.

3,000 GALLON PRECAST CONC. SEPTIC TANK DETAIL

NOT TO SCALE

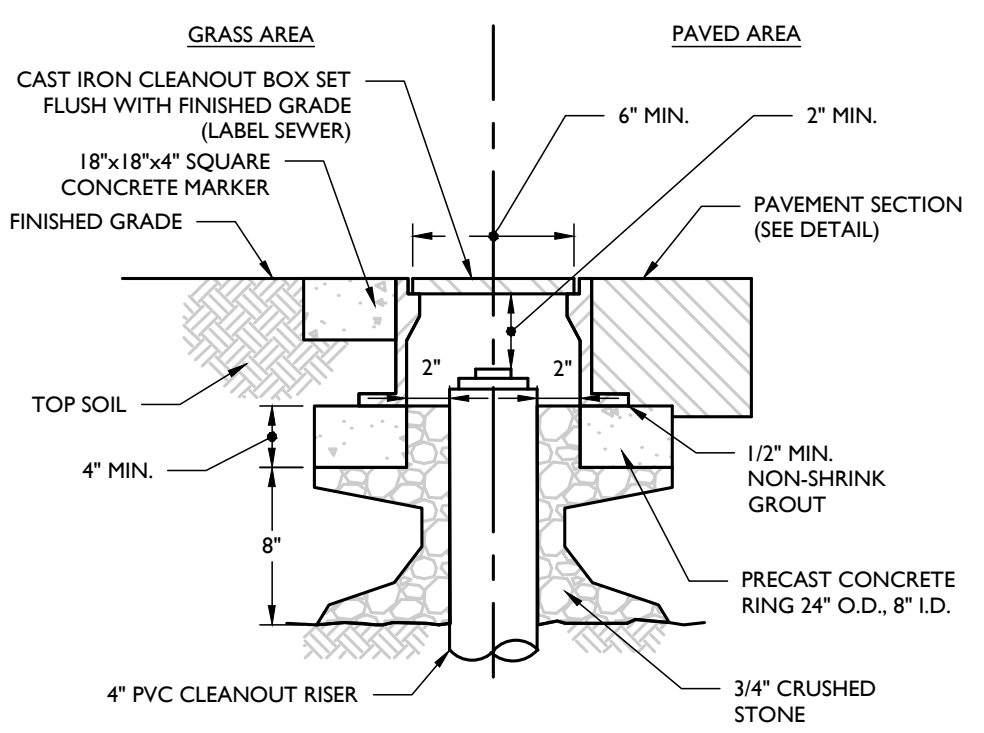


- NOTES:
1. ALL PVC GRAVITY PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D3321.
 2. GRAVITY SANITARY PIPE SHALL BE PVC SDR 35 PER ASTM D3034 OR AS REQUIRED BY THE GOVERNING AUTHORITY.
 3. SUITABLE BEDDING MATERIAL SHALL BE COARSE SAND OR 1/2" CRUSHED STONE.
 4. SUITABLE FINAL BACKFILL MATERIAL SHALL BE SITE SOILS, CLEAN FILL, OR ITEM 4 STONE COMPACTED IN MAX. 9" LIFTS. BACKFILL MATERIAL WITHIN 2' OF THE PIPE MUST BE FREE AND CLEAR OF DEBRIS, FROZEN MATERIAL, LARGE CLODS OR STONES, ORGANIC MATTER, OR OTHER UNSUITABLE MATERIALS.
 5. STONES LARGER THAN 2" FOUND IN THE TRENCH SHALL BE REMOVED FOR A DEPTH OF AT LEAST 4' BELOW THE PIPE.
 6. FOR INSTALLATION IN PAVEMENT, REFER TO THE APPLICABLE PAVEMENT DETAIL TO ESTABLISH FINAL GRADE. BACKFILL REQUIREMENTS BEYOND THE DEPTH OF THE PAVEMENT DETAIL SHALL BE IN ACCORDANCE WITH THIS DETAIL.

PVC SANITARY PIPE BEDDING (GRAVITY) DETAIL

NOT TO SCALE

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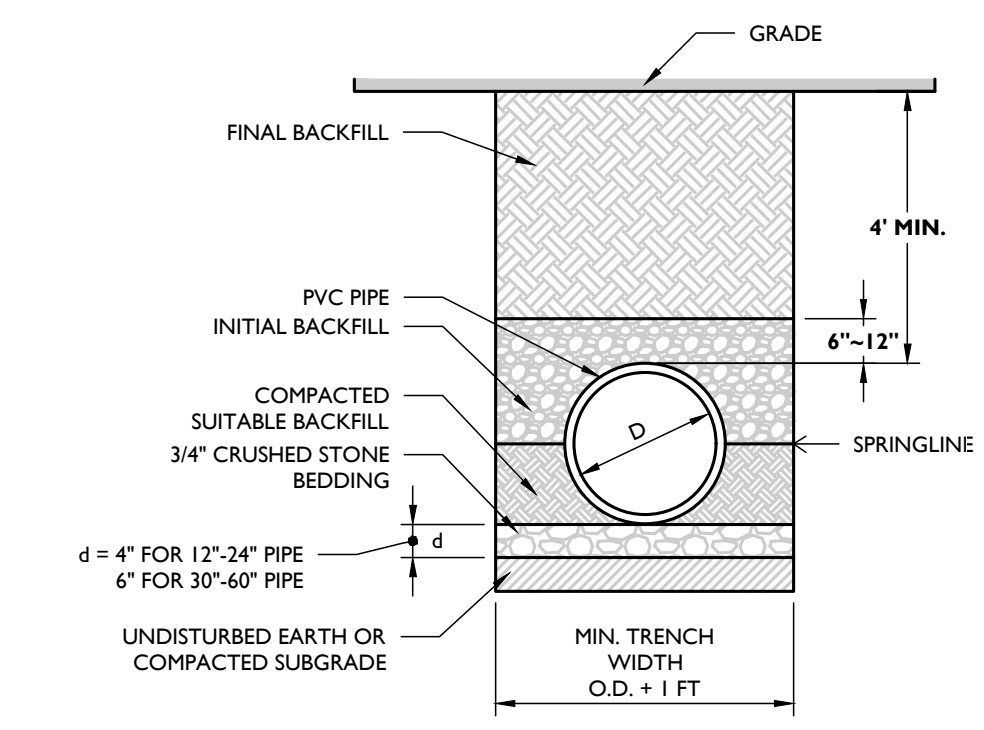


- NOTES:
1. ALL PVC CLEANOUTS TO HAVE CAST IRON FRAME AND COVER PROTECTION BOX. DESIGN FOR H2O LOADING.

CLEANOUT PROTECTION BOX DETAIL

NOT TO SCALE

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- NOTES:
1. ALL PVC FORCE MAIN SHALL BE INSTALLED PER AWWA C605.
 2. FORCE MAIN PVC PIPE SHALL BE CLASS 165 DR25 PER ASTM C609-16 OR AS REQUIRED BY THE GOVERNING AUTHORITY.

PVC SANITARY PIPE BEDDING (FORCE MAIN) DETAIL

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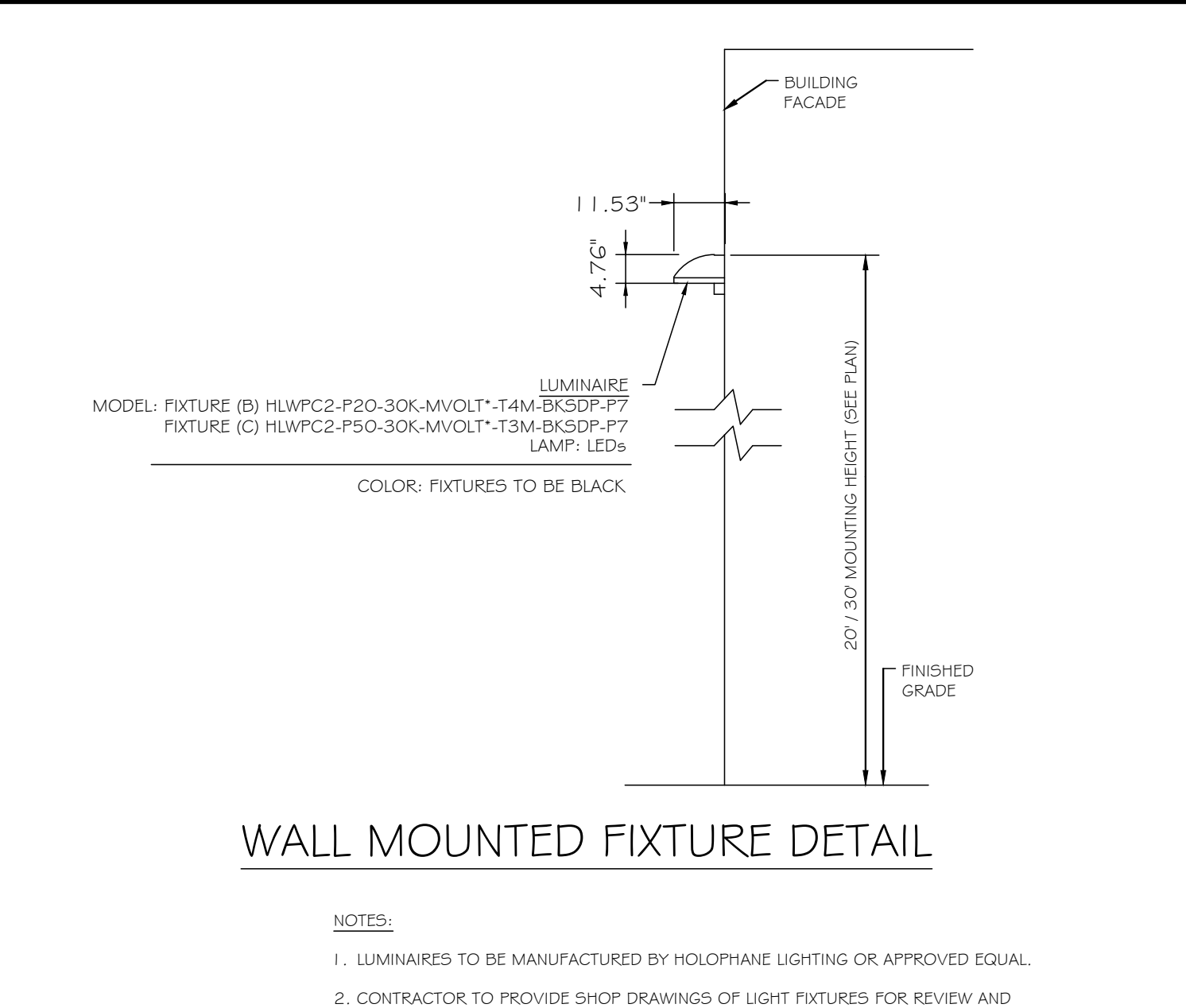
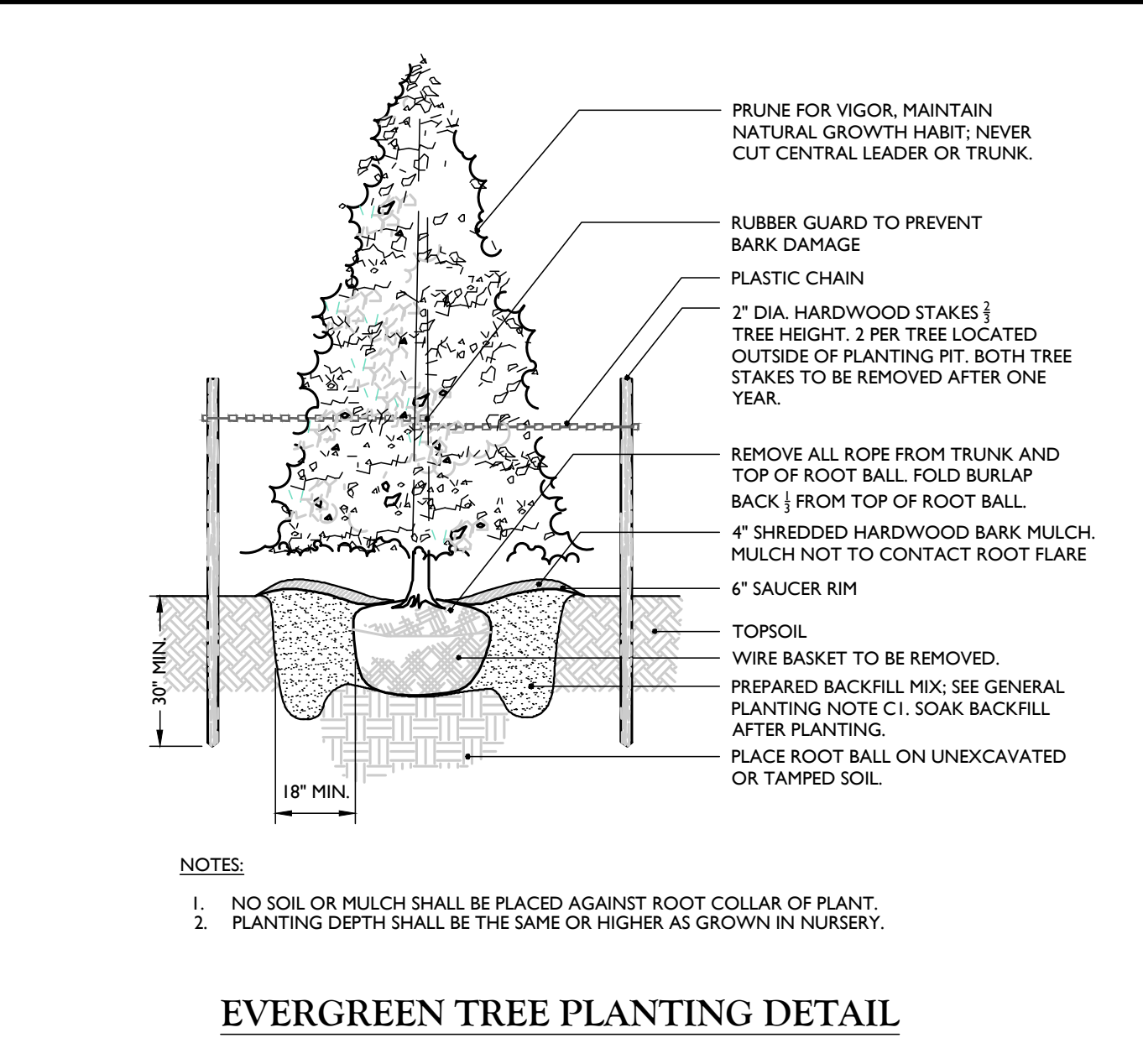
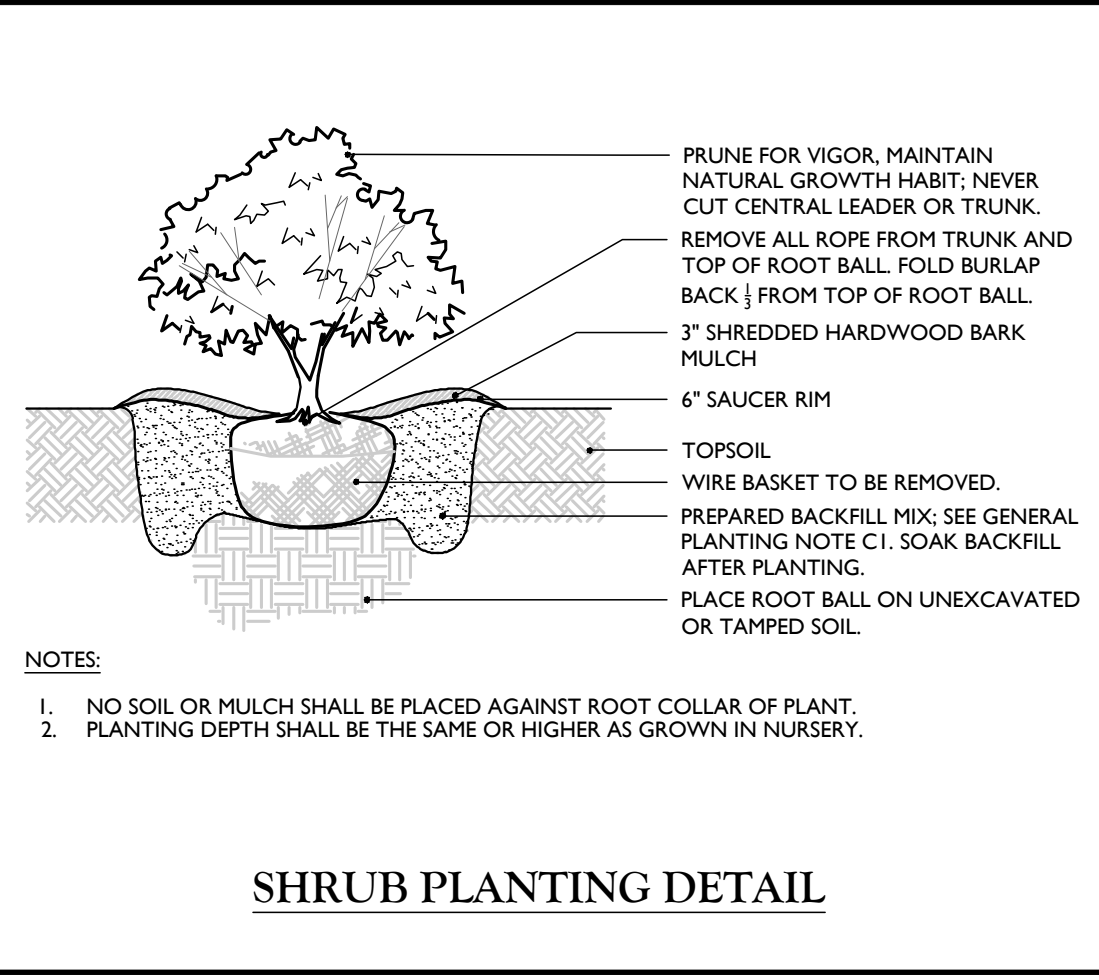
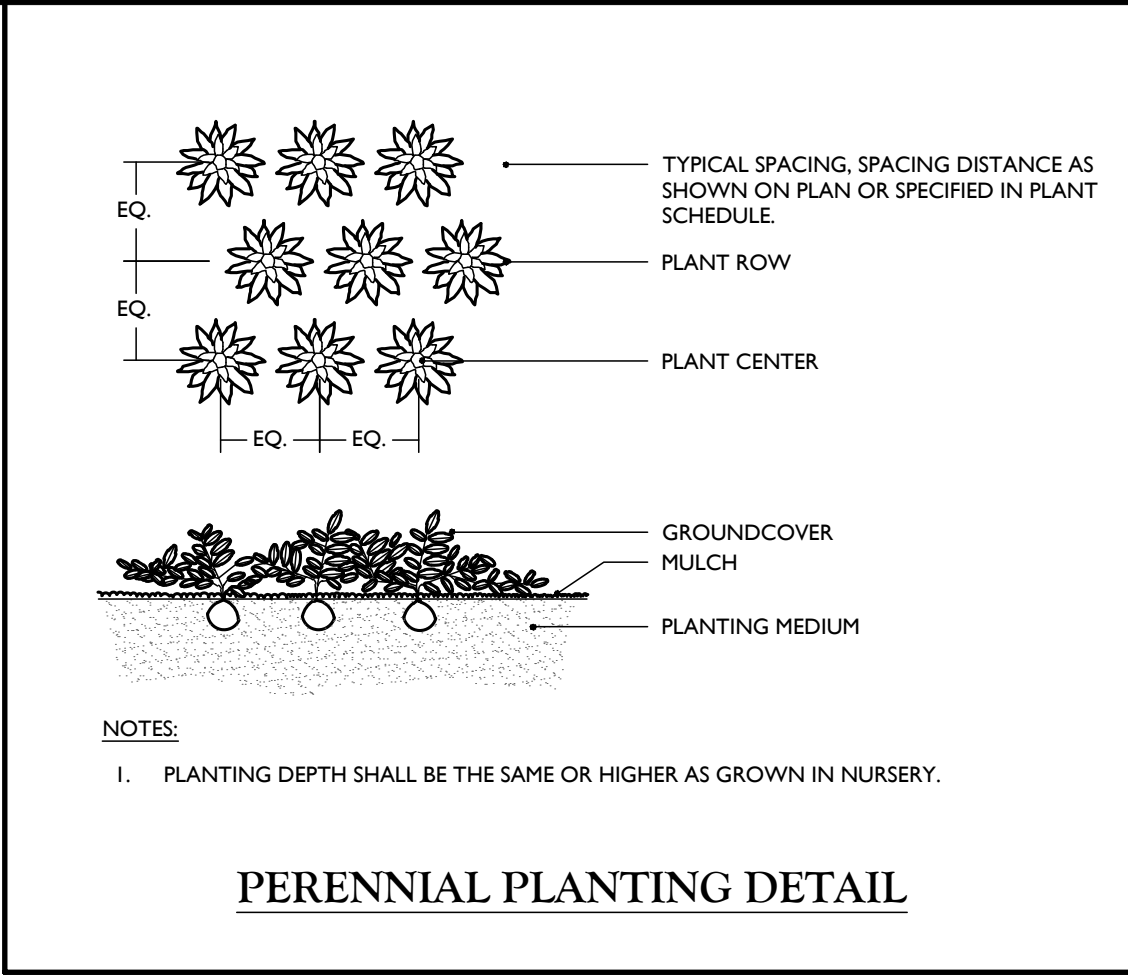
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SHEET TITLE: CONSTRUCTION DETAILS

SHEET NUMBER: C-904

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NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.



GENERAL PLANTING NOTES

1. THIS PLAN SHALL BE USED FOR LANDSCAPE PLANTING PURPOSES ONLY. EXAMINE ALL ENGINEERING DRAWINGS AND FIELD CONDITIONS FOR SPECIFIC LOCATIONS OF UTILITIES AND STRUCTURES AND NOTIFY THE LANDSCAPE ARCHITECT OF ANY DISCREPANCIES OR LOCATION CONFLICTS PRIOR TO PLANTING INSTALLATION.
2. THE CONTRACTOR IS RESPONSIBLE TO LOCATE AND VERIFY LOCATION OF ALL UTILITIES ON SITE PRIOR TO CONSTRUCTION.
3. ALL PLANT MATERIAL SHALL CONFORM TO GUIDELINES AS SET FORTH IN THE LATEST EDITION OF THE AMERICAN ASSOCIATION OF NURSERIES STANDARD FOR NURSERY STOCK OR THE PLANT MATERIAL WILL BE UNACCEPTABLE. ALL PLANT MATERIAL SHALL BE TRUE TO SPECIES, VARIETY, SIZE AND BE CERTIFIED DISEASE AND INSECT FREE. THE OWNER AND/OR THE LANDSCAPE ARCHITECT RESERVES THE RIGHT TO APPROVE ALL PLANT MATERIAL ON SITE PRIOR TO INSTALLATION.
4. NO PLANT SUBSTITUTIONS SHALL BE PERMITTED WITH REGARD TO SIZE, SPECIES, OR VARIETY WITHOUT WRITTEN PERMISSION OF THE LANDSCAPE CONSULTANT. WRITTEN PROOF OF PLANT MATERIAL UNAVAILABILITY MUST BE DOCUMENTED.
5. THE LOCATION OF ALL PLANT MATERIAL INDICATED ON THE LANDSCAPE PLANS ARE APPROXIMATE. THE FINAL LOCATION OF ALL PLANT MATERIAL AND PLANTING BED LINES SHALL BE DETERMINED IN THE FIELD UNDER THE DIRECTION OF THE LANDSCAPE ARCHITECT.
6. ALL STREET TREES AND SHADE TREES PLANTED NEAR PEDESTRIAN OR VEHICULAR ACCESS SHOULD NOT BE BRANCHED LOWER THAN 7'-0" ABOVE GRADE. ALL PLANT MATERIAL LOCATED WITHIN SIGHT TRIANGLE EASEMENTS SHALL NOT EXCEED A MATURE HEIGHT OF 30' ABOVE THE ELEVATION OF THE ADJACENT CURB. ALL STREET TREES PLANTED IN SIGHT TRIANGLE EASEMENTS SHALL BE PRUNED TO NOT HAVE BRANCHES BELOW 10'-0".
7. THE PLANTING PLAN SHALL TAKE PRECEDENCE OVER THE PLANT SCHEDULE SHOULD ANY PLANT QUANTITY DISCREPANCIES OCCUR.
8. ALL PLANT MATERIAL SHALL BE PROPERLY INSTALLED IN CONFORMANCE WITH THE TYPICAL PLANTING DETAILS. INSTALL ALL PLANT MATERIAL ON UNDISTURBED GRADE. CUT AND REMOVE JUTE BURLAP FROM TOP ONE-THIRD OF THE ROOT BALL. WIRE BASKETS AND NOT JUTE BURLAP SHALL BE COMPLETELY REMOVED PRIOR TO BACKFILLING THE PLANT PIT.
9. BRANCHES OF DECIDUOUS TREES SHALL BE PRUNED BACK BY NO MORE THAN ONE QUARTER (1/4) TO BALANCE THE TOP GROWTH WITH ROOTS AND TO PRESERVE THEIR CHARACTER AND SHAPE. THE CENTRAL LEADER OF TREE SHALL NOT BE PRUNED.
10. PROVIDE PLANTING PITS AS INDICATED ON PLANTING DETAILS. BACKFILL PLANTING PITS WITH ONE PART EACH OF TOPSOIL, PLANT MOSS AND PARENT MATERIAL. IF WET SOIL CONDITIONS EXIST THEN PLANTING PITS SHALL BE EXCAVATED AN ADDITIONAL 12" AND FILLED WITH CRUSHED STONE OR UNTIL FREE DRAINING.
11. ALL PLANT MATERIAL SHALL BEAR THE SAME RELATION TO FINISHED GRADE AS IT BORE TO EXISTING GRADE AT NURSERY.
12. OPTIMUM PLANTING TIME: DECIDUOUS - APRIL 1 TO JUNE 1 & OCTOBER 15 TO NOVEMBER 30; CONIFEROUS - APRIL 1 TO JUNE 1 & SEPTEMBER 1 TO NOVEMBER 1. PLANTING OUTSIDE OF THE OPTIMUM DATES SHALL NOT BE CONDUCTED WITH OUT PRIOR APPROVAL FROM THE LANDSCAPE CONSULTANT.
13. NEWLY INSTALLED PLANT MATERIAL SHALL BE WATERED AT THE TIME OF INSTALLATION. REGULAR WATERING SHALL BE PROVIDED TO ENSURE THE ESTABLISHMENT, GROWTH AND SURVIVAL OF ALL PLANTS. WATERING AMOUNTS SHOULD BE ADJUSTED AS RAIN EVENTS OCCUR. WATERING AFTER THE INITIAL 4 WEEKS SHALL BE ADJUSTED BASED ON SEASONAL CONDITIONS. WATERING SHALL NOT TAKE PLACE DURING THE HOTTEST POINT OF THE DAY.
14. ALL PLANT MATERIAL SHALL BE GUARANTEED FOR TWO YEARS AFTER THE DATE OF FINAL ACCEPTANCE. ANY PLANT MATERIAL THAT DIES WITHIN THAT TIME PERIOD SHALL BE REMOVED, INCLUDING THE STUMP, AND REPLACED BY A TREE OF SIMILAR SIZE AND SPECIES AT NO EXPENSE TO THE OWNER.
15. THE LANDSCAPE CONTRACTOR SHALL PROVIDE A MINIMUM 4" LAYER OF TOPSOIL IN ALL LAWN AREAS AND A MINIMUM OF 12" OF TOPSOIL IN ALL PLANTING AREAS. A FULL SOIL ANALYSIS IS RECOMMENDED AFTER CONSTRUCTION AND PRIOR TO PLANTING TO DETERMINE THE EXTENT OF SOIL AMENDMENT REQUIRED. SOIL PH SHOULD BE 5.5-6.5.
16. ALL DISTURBED LAWN AREAS SHALL BE STABILIZED WITH SEED AS INDICATED ON THE LANDSCAPE PLANS. TEMPORARY SEEDING SHALL BE IN ACCORDANCE WITH THE GENERAL SEEDING NOTES ON THIS SHEET. ALL DISTURBED LAWN AREAS SHALL BE TOPSOILED, LIMED, FERTILIZED AND FINE GRADED PRIOR TO LAWN INSTALLATION.
17. ALL PLANTING BEDS SHALL RECEIVE 3" OF SHREDDED HARDWOOD BARK MULCH.
18. ALL SHRUB MASSES SHALL BE PLANTED IN CONTINUOUS MULCHED BEDS.
19. ALL PLANTING DEBRIS (WIRE, TWINE, RUBBER HOSE, BACKFILL ETC.) SHALL BE REMOVED FROM THE SITE AFTER PLANTING IS COMPLETE. PROPERTY IS TO BE LEFT IN A NEAT ORDERLY CONDITION IN ACCORDANCE WITH ACCEPTED PLANTING PRACTICES.

GENERAL SEEDING NOTES

1. TEMPORARY SEEDING: REFER TO SOIL EROSION AND SEDIMENT CONTROL PLANS.
 2. PERMANENT SEEDING SHALL CONSIST OF THE FOLLOWING MIXTURE OR APPROVED EQUAL. OPTIMUM SEEDING DATES: ARE BETWEEN APRIL 1 AND MAY 31; AND AUGUST 16 AND OCTOBER 15. SEEDING OUTSIDE OF THE OPTIMUM DATES SHALL NOT BE CONDUCTED WITH OUT PRIOR APPROVAL.
- LAWN AREA SEED MIXTURE
PT 789 MAR ECO-TURF MIX WITH MICRO-CLCOVER
- SEEDING RATE: 300 LBS/ACRE
- RETENTION BASIN SEED MIXTURE - LOW MAINTENANCE
(ERNNX9 ERNIX-124 BY ERNST SEEDS OR APPROVED EQUAL)
- SEEDING RATE: 20-40 LBS PER ACRE, OR 5.5 LBS/100 SQ. FT. WITH A COVER CROP. FOR A COVER CROP USE ONE OF THE FOLLOWING: GRAIN RYE (1 SEP TO 30 APR; 30 LBS/ACRE), JAPANESE MILLET (1 MAY TO 31 AUG; 10 LBS/ACRE), OR BARNYARD GRASS (1 MAY TO 31 AUG; 10 LBS/ACRE).

SPECIES LIST:

- 20% DEERTONGUE (PANICUM CLANDESTINUM TIQOA)	46.9%
- 20% ALKALIGRASS, FULTS (PUCCINELLIA DISTANS, FULTS)	18.3%
- 18% VIRGINIA WILDRYE, MADISON-ANY ECOTYPE (ELYMUS VIRGINICUS)	9.5%
- 15% CREEPING BENTGRASS, 'PENNCROSS' (AGROSTIS STOLONIFERA)	4.8%
- 15% FOXL BLUEGRASS (POA PALUSTRIS)	3.0%
- 10% FOX SEDGE, PA ECOTYPE (CAREX VULPINOIDEA)	2.0%
- 15 BLUNT BROOK SEDGE, PA ECOTYPE (CAREX SCOPARIA)	1.7%
- 15 SOFT FUR (LUSITIA EPULOSA)	1.2%
- MARSH BLAZING STAR (LITRIS SPICATA)	1.0%
- TALL WHITE BEARDTONGUE (PENSTEMON DIGITALIS)	0.6%
- BLUE FALSE INDIGO (BAPTISIA AUSTRALIS)	0.6%
- THIRLEWEED (ARABIS VIRGINIANA)	0.5%
- BIENNIAL REEBLOSSOM (GAURA BIENNIS)	0.5%
- BROWNWEED SUSAN (RUDIBECKIA HIRT)	0.4%
- BUTTERFLY MILKWEED (ASCLERAS TUBEROSA)	0.4%
- BIGLEAF ASTER (ASTER MACROPHYLLUS)	0.4%
- HEATH ASTER (ASTER FILLOIDS)	0.4%
- HOARY MOUNTAINPINK (PENCANTHEMUM INCANUM)	0.4%
- COMMON MILKWEED (ASCLERAS SYRIACA)	0.3%
- WHITE GOLDENROD (SOLIDAGO BICOLOR)	0.3%
- EASTERN CLOVERBINE (ASTER NOVAE-ANGLIAE)	0.2%
- NEW ENGLAND ASTER (ASTER NOVAE-ANGLIAE)	0.2%
- ZIGZAG ASTER (ASTER PRENANTHOIDES)	0.2%
- APPALACHIAN BEARDTONGUE (PENSTEMON LAEYGIATUS)	0.2%
- GRAY GOLDENROD (SOLIDAGO NEMORALIS)	0.2%
- HARTY BEARDTONGUE (PENSTEMON HISPIDUS)	0.1%
- EARLY GOLDENROD (SOLIDAGO LUNGEA)	0.1%
- LICORICE SCENTED GOLDENROD (SOLIDAGO ODORA)	0.1%

SEEDING RATE: 20 LBS PER ACRE WITH 30 LBS PER ACRE OF A COVER CROP. FOR A COVER CROP USE EITHER GRAIN OATS (1 JAN TO 31 JUL) OR A GRAIN RYE (1 AUG TO 31 DEC).

PERMANENT SEEDING SHALL CONSIST OF THE FOLLOWING MIXTURE OR APPROVED EQUAL: OPTIMUM SEEDING DATES: ARE IN THE SPRING AND SUMMER (UNTIL SEPTEMBER 15).

NATIVE STEEP SLOPE MIX WITH GRAIN OATS
(ERNNX9 ERNIX-181-1 BY ERNST SEEDS OR APPROVED EQUAL)

SEEDING RATE: 75 LBS PER ACRE

SPECIES LIST:

- 40.0% OATS, (AVEENA SATIVA)	40.0%
- 20.8% INDIANGRASS, PA ECOTYPE (SORGHASTRUM NUTANS, PA ECOTYPE)	20.8%
- 11.2% BIG BLUESTEM, NIAGARA (ANDROPOGON GERARDI, NIAGARA)	11.2%
- 8.0% CANADA WILDRYE (ELYMUS CANADENSIS)	8.0%
- 5.6% VIRGINIA WILDRYE, MADISON-ANY ECOTYPE (ELYMUS VIRGINICUS)	5.6%
- 3.2% AUTUMN BENTGRASS (AGROSTIS PERENNANS)	3.2%
- 3.1% SWITCHGRASS (PANICUM VIRGATUM)	3.1%
- 2.4% DEERTONGUE (PANICUM CLANDESTINUM)	2.4%
- 1.2% PURPLE CONEFLOWER (ECHINACEA PURPUREA)	1.2%
- 1.1% PARTIDGE PEAS (CHAMAECRISTA FASCICULATA)	1.1%
- 0.9% OXEYE SUNFLOWER (HELIOPSIS HELIANTHOIDES)	0.9%
- 0.8% LANCELEAF COREOPSIS (COREOPSIS)	0.8%
- 0.8% BLACKWEED SUSAN (RUDIBECKIA HIRT)	0.8%
- 0.3% WILD BERGAMOT (MONARDA FISTULOSA)	0.3%
- 0.3% COMMON MILKWEED (ASCLERAS SYRIACA)	0.3%
- 0.2% WRINKLELEAF GOLDENROD (SOLIDAGO RUGOSA)	0.2%
- 0.1% CALICA ASTER (ASTER LATERIFLORUS)	0.1%
- 0.1% HEATH ASTER (ASTER FILLOIDS)	0.1%

3. PERMANENT SEEDING TO BE APPLIED BY RAKING OR DRILLING INTO THE SOILS AT THE RATE GIVEN ABOVE.
4. FERTILIZER FOR THE ESTABLISHMENT OF TEMPORARY AND PERMANENT VEGETATIVE COVER SHALL BE IN COMPLIANCE WITH THE LATEST NYSDC REGULATIONS. THIS INCLUDES, BUT NOT LIMITED TO:
 1. NO FERTILIZER SHALL BE APPLIED BETWEEN DEC. 1 AND APRIL 1 IN ANY YEAR.
 2. SHALL NOT BE APPLIED WITHIN 20 FEET OF A WATER BODY.
 3. ONLY LAWN FERTILIZER WITH LESS THAN 0.6% BY WEIGHT PHOSPHATE CONTENT MAY BE APPLIED.(A SOIL TEST PRIOR TO FERTILIZER APPLICATION IS RECOMMENDED.)
5. IF SEASON PREVENTS THE ESTABLISHMENT OF TEMPORARY OR PERMANENT SEEDING, EXPOSED AREA TO BE STABILIZED WITH MULCH AS INDICATED IN NOTE 6.
6. MULCH TO CONSIST OF SMALL GRAIN STRAW OR SALT HAY ANCHORED WITH A WOOD AND FIBER MULCH BINDER OR AN APPROVED EQUAL. MULCH WILL BE SPREAD AT RATES PER NYSDC STANDARDS AND ANCHORED WITH A MULCH ANCHORING TOOL, OR LIQUID MULCH BINDER, AND SHALL BE PROVIDED ON ALL SEEDINGS. HYDROMULCH SHALL ONLY BE USED DURING OPTIMUM GROWING SEASONS.
7. AS NEEDED, WORK LINE AND FERTILIZER INTO SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISC, SPRINGTOOTH HARROW, OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISCING OPERATION SHOULD BE ON ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLY UNIFORM FINE SEEDBED IS PREPARED. ALL BUT CLAY OR SILTY SOILS AND COARSE SANDS SHOULD BE ROLLED TO FIRM THE SEEDBED WHEREVER FEASIBLE.
8. REMOVE FROM THE SURFACE ALL STONES TWO INCHES OR LARGER IN ANY DIMENSION. REMOVE ALL OTHER DEBRIS, SUCH AS WIRE, CABLE, TREE ROOTS, PIECES OF CONCRETE, CLOUDS, LUMPS, OR OTHER UNSUITABLE MATERIAL.
9. INSPECT SEEDBED JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED, THE AREA MUST BE RE-TILLED AND FIRMED AS ABOVE.

