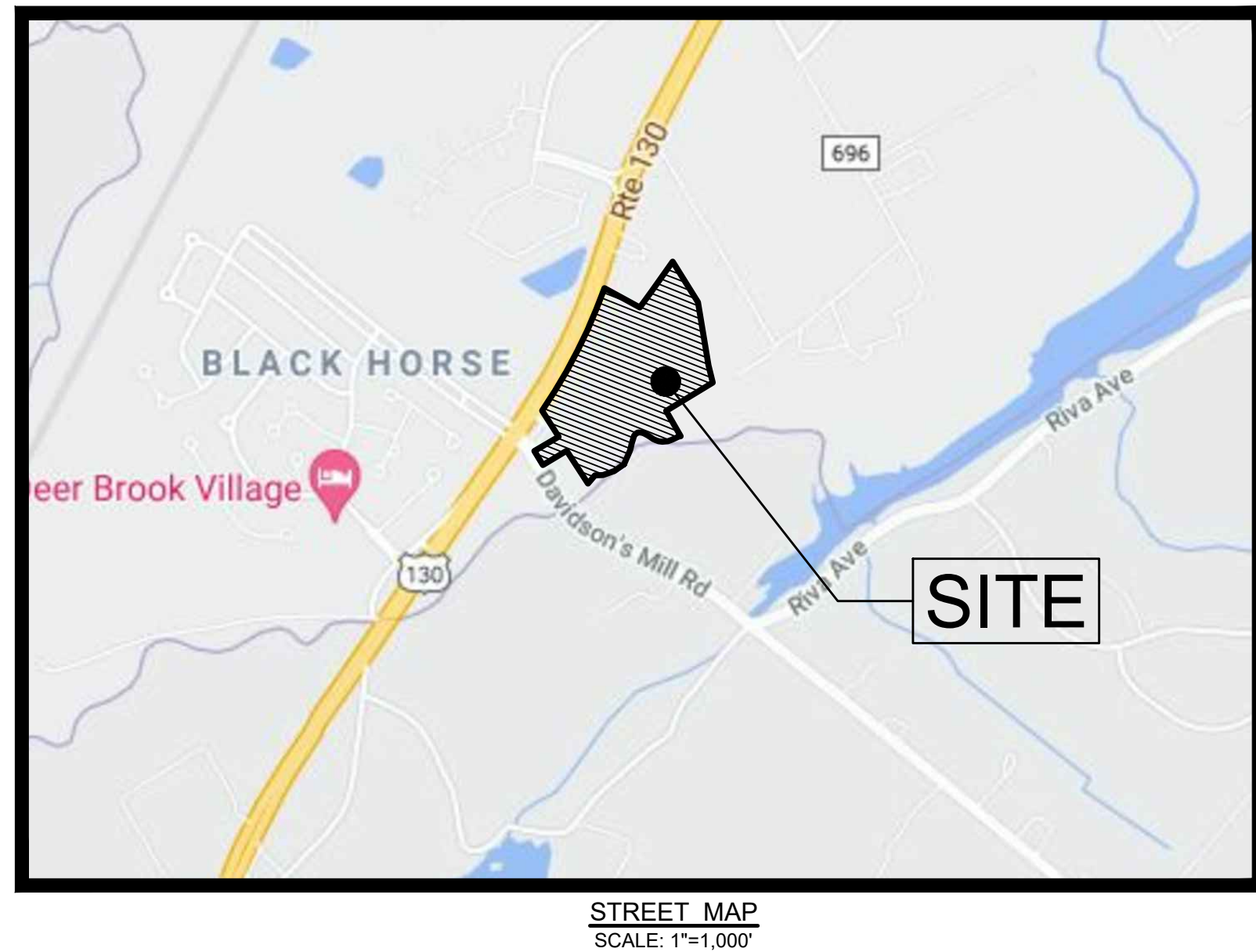
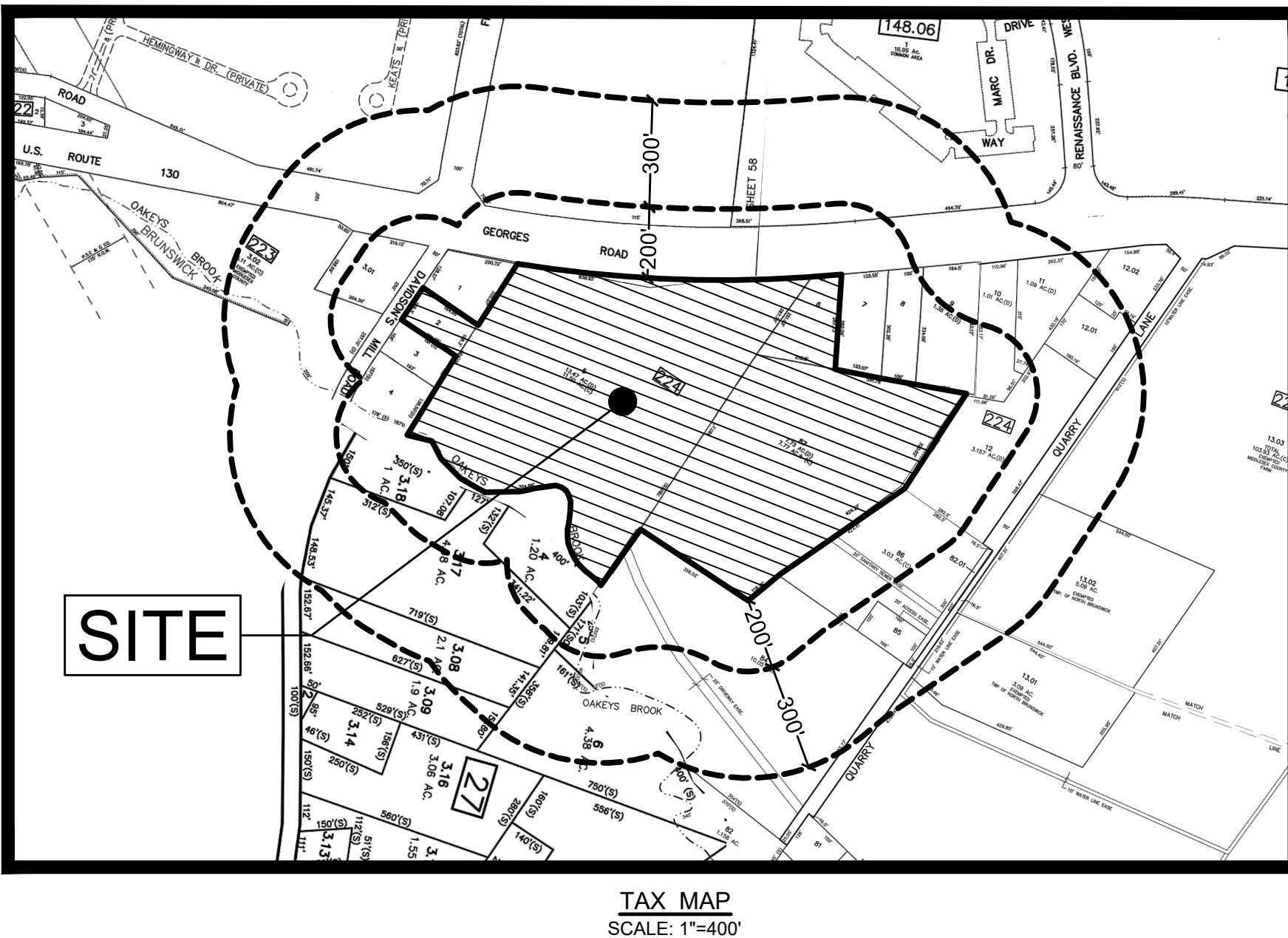
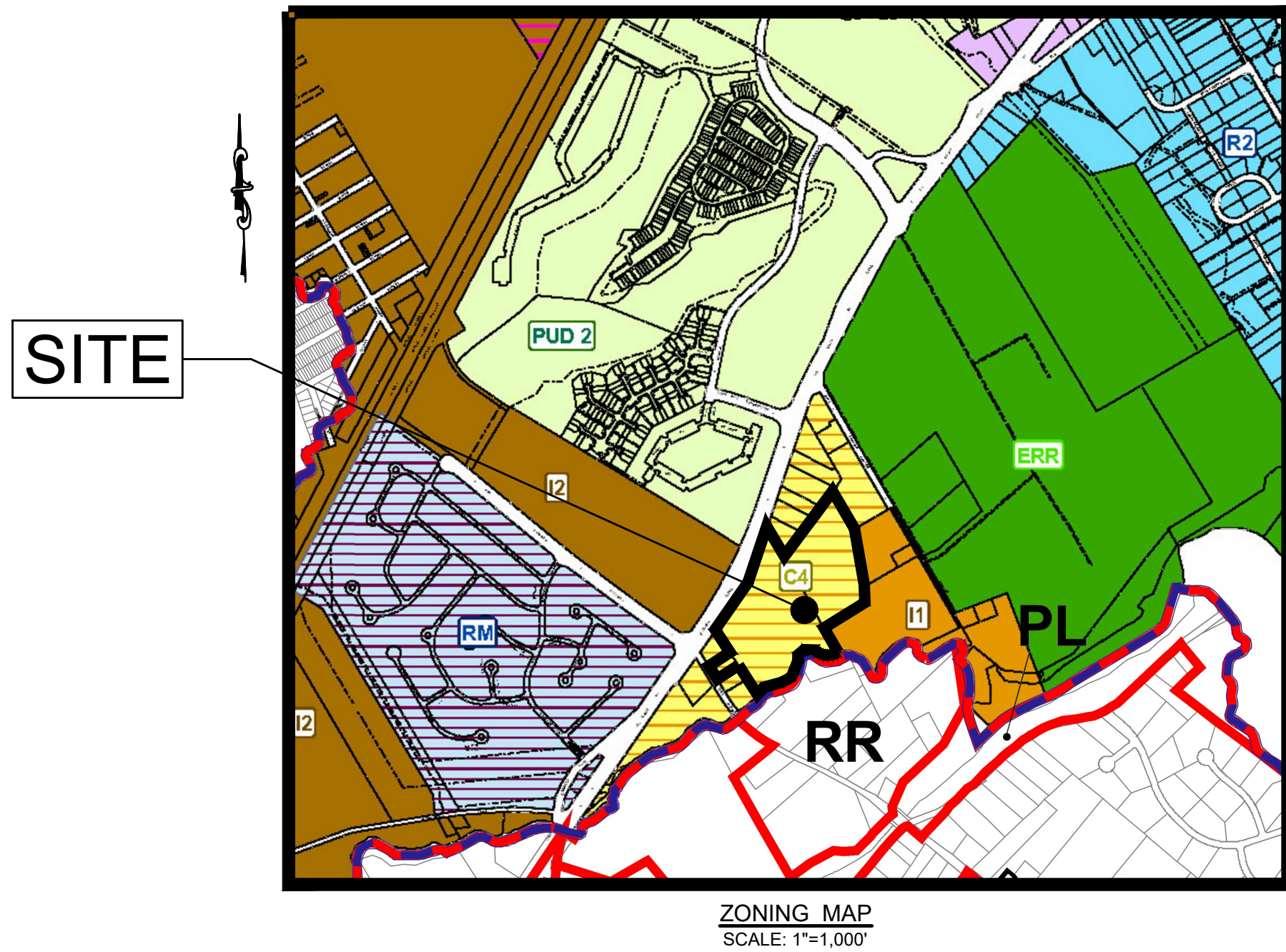


PRELIMINARY & FINAL MAJOR SITE PLAN

DM INVESTMENTS OF NORTH BRUNSWICK, LLC

BLOCK 224 - LOTS 2, 5, 6 & 87

TOWNSHIP OF NORTH BRUNSWICK, MIDDLESEX COUNTY, NEW JERSEY



PROPERTY OWNERS WITHIN 200'

NORTH BRUNSWICK TOWNSHIP
(AS PROVIDED BY THE TOWNSHIP OF NORTH BRUNSWICK,
DATED JUNE 15, 2021)

BLOCK LOT ADDRESS (MAILING ADDRESS)

148 112 FINNEGAN LANE ASSOC.
c/o MARC LENNER
P.O. BOX 1700
LIVINGSTON, NJ 07039

148.06 1 RENAISSANCE GLENN, LLC.
90 WOODBRIDGE CTR DRIVE 600
WOODBRIDGE, NJ 07095

223 3.01 MATRAFAJLO, JERRY - TRUSTEE
438 DAVIDSON'S MILL ROAD
NORTH BRUNSWICK, NJ 08902

223 3.02 COUNTY OF MIDDLESEX
1 JFK SQUARE PO BOX 871
NEW BRUNSWICK, NJ 08903

224 1 OCEANPETROLEUM INC.,
c/o HOUTAN MOSTAGHIM
2369 RESEARCH COURT
WOODBRIDGE, VA 22192

224 2 DM INVESTMENTS OF NO BRUNS, LLC
1315 STELTON ROAD
PISCATAWAY, NJ 08854

224 3 TAORMINA, JACK & MARY
443 DAVIDSON'S MILL ROAD
NORTH BRUNSWICK, NJ 08902

224 4 CHAN, MICKY
147 DAVIDSON'S MILL ROAD
NORTH BRUNSWICK, NJ 08902

224 7 SALZMANN, DONALD G. & HALAS, DENNIS
147 DAVIDSON'S MILL ROAD
NORTH BRUNSWICK, NJ 08902

224 8 DM INVESTMENTS OF ROUTE 130, LLC
1260 STELTON ROAD
PISCATAWAY, NJ 08854

224 9 ROSENBURGH CORP.
c/o KW RASTALL OIL
2460 ROUTE 130
NORTH BRUNSWICK, NJ 08902

224 10 2440 REALTY ASSOCIATES, LLC.
11 KIRKSTONE CIRCLE
WESTFIELD, NJ 07090

224 11 2440 REALTY CORPORATION
2600 US ROUTE 130
NORTH BRUNSWICK, NJ 08902

224 12.84 VAN DEURSEN, RICHARD
492 OLD GEORGES ROAD
NORTH BRUNSWICK, NJ 08902

224 86 BENANTI REALTY, LLC.
4 OAKWOOD PLACE
NORTH BRUNSWICK, NJ 08902

SOUTH BRUNSWICK TOWNSHIP
(AS PROVIDED BY THE TOWNSHIP OF SOUTH BRUNSWICK,
DATED JUNE 14, 2021)

BLOCK LOT ADDRESS (MAILING ADDRESS)

27 3.17 KOVACH, MARGARET
15 DAVIDSON'S MILL ROAD
NORTH BRUNSWICK, NJ 08902

27 3.18 ROBINSON, HAKIM & ANDREA
13 DAVIDSON'S MILL ROAD
NORTH BRUNSWICK, NJ 08902

27 4 DM INVESTMENTS @ NORTH BRUNSWICK
1315 STELTON ROAD
PISCATAWAY, NJ 08854

27 5 VAN DEURSEN, RICHARD
492 OLD GEORGE ROAD
NORTH BRUNSWICK, NJ 08902

UTILITIES/AGENCIES

NORTH BRUNSWICK TOWNSHIP
(AS PROVIDED BY THE TOWNSHIP OF NORTH
BRUNSWICK, DATED JUNE 15, 2021)

MIDDLESEX COUNTY PLANNING BOARD
COUNTY ADMINISTRATION BUILDING
5TH FLOOR
75 BAYARD STREET
NEW BRUNSWICK, NJ 08901

NORTH BRUNSWICK TOWNSHIP
710 HERMAN ROAD
NORTH BRUNSWICK, NJ 08902
ATTN: TOWNSHIP CLERK

PUBLIC SERVICE ELECTRIC & GAS, CO.
MANAGER - CORP. PROPERTIES
80 PARK PLAZA-108
NEWARK, NJ 07102

VERIZON INC.
N.J. GEN. TAX ADMINISTRATION
540 BROAD ST. ROOM 305
NEWARK, NJ 07101

CABLEVISION OF RARITAN VALLEY
275 CENTENNIAL AVENUE
CN 8805
PISCATAWAY, NJ 08855
ATTN: MARGURITE PRENDERVILLE

DEPARTMENT OF TRANSPORTATION
STATE OF NEW JERSEY
1035 PARKWAY PLAZA
TRENTON, NJ 08625

CONSTRUCTION DEPARTMENT - MR. TIM ALLEN
TEXAS EASTERN TRANSMISSION CORP.
501 COOLIDGE STREET
SOUTH PLAINFIELD, NJ 07080

SUNOCO PIPELINE L.P.
4 OAKWOOD PLACE
MONTELEO COMPLEX
525 FRITZTOWN ROAD
SINKING SPRING, PA 19608

SOUTH BRUNSWICK TOWNSHIP
(AS PROVIDED BY THE TOWNSHIP OF SOUTH
BRUNSWICK, DATED JUNE 14, 2021)

SUN PIPE LINE COMPANY
RIGHT OF WAY DEPT.
525 FRITZTOWN ROAD
SINKING SPRING, PA 19608

MS. JOAN PURCARO
RIGHT OF WAY REPRESENTATIVE
NEW JERSEY NATURAL GAS COMPANY
PO BOX 1464
WALL, NJ 07719

DONNA SHORT - GIS SUPERVISOR
NEW JERSEY - AMERICAN WATER COMPANY, INC.
1025 LAUREL OAK ROAD
VOORHEES, NJ 08043

NEW JERSEY BOARD OF PUBLIC UTILITIES
PO BOX 350
44 S. CLINTON AVE
TRENTON, NJ 08625

PSE&G
80 PARK PLAZA
PO BOX 570
NEWARK, NJ 07102-4194

VERIZON NEW JERSEY INC.
540 BROAD STREET, 20TH FLOOR
NEWARK, NJ 07102

COMCAST BUSINESS COMMUNICATION LLC
ONE COMCAST CENTER
PHILADELPHIA, PA 19103

TOWNSHIP OF NORTH BRUNSWICK

BLOCK 224 - LOTS 2, 5, 6 & 87

C-4 ZONE - NON-RESTRICTED COMMERCIAL DISTRICT

ITEM	CODE	REQUIRED/PERMITTED	EXISTING	PROPOSED
MIN. LOT AREA	(SECT. 205-68.5.E.1.a)	50,000 SF	TRACT 949,009 SF±	TRACT 949,009 SF±
MIN. LOT WIDTH	(SECT. 205-68.5.E.1.b)	1.148 AC 200 FT	21.786 AC± 912.97 FT	21.786 AC± 912.97 FT
SETBACKS				
MINIMUM TRACT BOUNDARY SETBACKS	(SECT. 205-68.5.E.1.c)	75 FT	42.43 FT *	60.4 FT
MINIMUM LOT FRONT SETBACK	(SECT. 205-68.5.A)	75 FT	85.3 FT	85.3 FT
FROM FRONT SETBACK, US ROUTE 130	(SECT. 205-68.5.A)	60 FT	7.45 FT *	323.93 FT
FROM ALL OTHER STREETS	(SECT. 205-68.5.E.1.d)	20 FT	N/A	12 FT
FROM SITE ACCESS ROADS	(SECT. 205-68.5.E.1.d)	0 FT	N/A	12 FT
FROM DRIVE OR PARKING AISLE	(SECT. 205-68.5.E.1.e)	0 FT	302.8 FT	60.4 FT
MINIMUM LOT SIDE YARD	(SECT. 205-68.5.E.1.f)	0 FT	415.23 FT	287.5 FT
MINIMUM LOT REAR YARD	(SECT. 205-68.5.E.1.g)	10 FT	N/A	11.7 FT
PARKING TO FRONTAGE	(SECT. 205-68.5.E.1.g)	50 FT	<50 FT	<50 FT
MAX. PRINCIPAL BUILDING HEIGHT	(SECT. 205-68.5.E.1.g)	N/A	0.86%	24.85%
MAX. PRINCIPAL BUILDING COVERAGE	(SECT. 205-68.5.E.1.g)	N/A	235,883 SF	235,883 SF
MAX. LOT COVERAGE	(SECT. 205-68.5.E.1.h)	100%	8.40%	60.83%
			84,419 SF	577,282 SF
PARKING AREA DRIVEWAY SETBACK FROM	(SECT. 205-98.B.3)	200 FT	N/A	202.4 FT
NEAREST R.O.W. LINE TO INTERSECTING ST.	(SECT. 205-98.B.3)	200 FT	N/A	202.4 FT
DRIVEWAY ROADWAY WIDTH	(SECT. 205-68.5.E.2.a)	30 FT	N/A	25 FT
NON-TRUCK DELIVERY ROUTE	(SECT. 205-68.5.E.2.a)	40 FT	N/A	36 FT
TRUCK DELIVERY ROUTE	(SECT. 205-68.5.E.2.b)	100 FT	N/A	42.4 FT
MINIMUM DRIVEWAY THROAT LENGTH	(SECT. 205-68.5.E.2.b)	100 FT	N/A	42.4 FT
*EXISTING NON-CONFORMING CONDITION				

PARKING

STALL SIZE	STANDARD	(SECT. 205-98A)	9 FT x 18 FT	N/A	9 FT x 18 FT
REQUIRED SPACES	3.3 SPACES/1,000 SF OFFICE USE	(SECT. 205-68.8.A.1)	7,074 SF * (0.31,000) = 24 SPACES		
1 SPACE/2,500 SF INDUSTRIAL	(SECT. 205-68.8.A.1)		227,513 SF/2,500 = 92 SPACES		
1 VISITOR SPACE/5 EXEC. EMPL.	(SECT. 205-100.A.3)		48 EXEC. EMPL./5 = 10 SPACES		
TOTAL			126 SPACES		
TRUCK PARKING			TBD****		
ELEC. VEHICLE CHARGING STATIONS (SECT. 205-33B)					
IMMEDIATE USE: 3% OF TOTAL REQUIRED PARKING			126 * 3% = 4 SPACES REQUIRED		6 SPACES WITH CHARGER TO BE PROVIDED
FUTURE USE: 4% OF TOTAL REQUIRED PARKING			126 * 4% = 5 SPACES REQUIRED		6 SPACES TO BE WIRED FOR FUTURE EXPANSION

ADA PARKING	REQUIRED	EXISTING	PROPOSED
STALL SIZE (SECT. 334-56)	12 FT X 18 FT	N/A	11 FT X 18 FT, 8 FT X 18 FT
MINIMUM REQUIRED	6 SPACES	N/A	7 SPACES
VAN ACCESSIBLE	1 PER 6 STD SPACES (1)	N/A	2 SPACES
LOADING (SECT. 205-97.H)	12 FT X 35 FT	N/A	14 FT X 60 FT
SIZE	TBD****	N/A	46
REQUIREMENT			

***ELECTRIC VEHICLE CHARGING STALLS SHALL COUNT AS 2 STALLS FOR ZONING COMPLIANCE (SECT. 205-32C)
****TRUCK PARKING SPACE TOTAL NOT INCLUDED IN OVERALL PARKING TOTALS
*****QUANTITY OF LOADING SPACES REQUIRED TO BE DETERMINED BY PLANNING BOARD DURING SITE PLAN REVIEW

SIGNAGE TABLE

FRONT FACADE	
NUMBER OF SIGNS PERMITTED (SECT. 205-105.G)	1 OR MORE
NUMBER OF SIGNS PROPOSED (SECT. 205-105.G)	3
TOTAL SIGN AREA PERMITTED (SECT. 205-105.G)	10% OF FRONT FACADE AREA
TOTAL SIGN AREA PROPOSED (SECT. 205-105.G)	10% X 24,382 SF = 2,438 SF
FACE PERMITTED (SECT. 205-102.K)	12 IN
SIGN PROJECTION FROM BUILDING	
FACE PROPOSED	<12 IN
FACE PROPOSED	
RIGHT SIDE FACADE	
NUMBER OF SIGNS PERMITTED (SECT. 205-105.H)	0
NUMBER OF SIGNS PROPOSED (SECT. 205-105.H)	0
TOTAL SIGN AREA PERMITTED (SECT. 205-105.H)	0 SF
TOTAL SIGN AREA PROPOSED (SECT. 205-105.H)	0 SF
LEFT SIDE FACADE	
NUMBER OF SIGNS PERMITTED (SECT. 205-105.H)	0
NUMBER OF SIGNS PROPOSED (SECT. 205-105.H)	0
TOTAL SIGN AREA PERMITTED (SECT. 205-105.H)	0 SF
TOTAL SIGN AREA PROPOSED (SECT. 205-105.H)	0 SF
REAR FACADE	
NUMBER OF SIGNS PERMITTED (SECT. 205-105.H)	0
NUMBER OF SIGNS PROPOSED (SECT. 205-105.H)	0
TOTAL SIGN AREA PERMITTED (SECT. 205-105.H)	0 SF
TOTAL SIGN AREA PROPOSED (SECT. 205-105.H)	0 SF
FREESTANDING SIGNS	
NUMBER OF SIGNS PERMITTED (SECT. 205-105.H.3)	2 (INDUSTRIAL BUILDING OVER 100,000 SF GROSS FLOOR AREA)
NUMBER OF SIGNS PROPOSED (SECT. 205-105.H.3)	2 (MONUMENT SIGNS)
AREA OF SIGN PERMITTED (SECT. 205-105.H.3)	(1 ALONG ROUTE 130 FRONTAGE & 1 ALONG DAVIDSON'S MILL ROAD FRONTAGE)
AREA OF SIGN PROPOSED (SECT. 205-105.H.3)	150 SF (TOTAL BOTH SIGNS)
AREA OF SIGN PROPOSED (SECT. 205-105.H.3)	ILLUMINATED MONUMENT SIGN M-1 - 49.87 SF
SETBACK OF SIGN PROPOSED (SECT. 205-102.C)	ILLUMINATED MONUMENT SIGN M-2 - 24.94 SF
SETBACK OF SIGN PROPOSED (SECT. 205-102.D)	20 FT
HEIGHT OF SIGN PERMITTED (SECT. 205-102.D)	20 FT
HEIGHT OF SIGN PROPOSED (SECT. 205-102.D)	ILLUMINATED MONUMENT SIGN M-1 - 7.83 FT
	ILLUMINATED MONUMENT SIGN M-2 - 3.92 FT

VARIANCES

- SECTION 205-68.5(E)(1)(C) - A MINIMUM TRACT BOUNDARY SETBACK OF 75 FT IS REQUIRED, WHEREAS 60.4 FT IS PROPOSED
- SECTION 205-68.5(E)(1)(D) - A MINIMUM OF 20 FT IS REQUIRED FROM SITE ACCESS ROADS, WHEREAS 12.1 FT IS PROPOSED
- SECTION 205-68.5(E)(2)(a) - SITE ACCESS DRIVEWAY ROADWAY WIDTH SHALL BE 30 FT FOR NON-TRUCK DELIVERY ROUTES, WHEREAS 25 FT IS PROPOSED
- SECTION 205-68.5(E)(2)(a) - SITE ACCESS DRIVEWAY ROADWAY WIDTH SHALL BE 40 FT FOR TRUCK DELIVERY ROUTES, WHEREAS 36 FT IS PROPOSED
- SECTION 205-68.5(E)(2)(b) - MINIMUM DRIVEWAY THROAT LENGTH BETWEEN INTERSECTING ROADWAY AND THE FIRST ACCESS TO OFF-STREET PARKING OR AN INTERSECTING DRIVEWAY SHALL BE 100 FT, WHEREAS 42.4 FT IS PROPOSED.

WAIVERS

- A) APPENDIX A - SITE PLAN COMPLETENESS CHECKLIST ITEM No. 17 - EXISTING AND PROPOSED CONTOURS TO BE AT 1 FOOT INTERVALS BASED ON NAVD83 DATUM, WHEREAS ALL ELEVATIONS ARE BASED ON NAVD83 DATUM.
- B) SECTION 205-68.5(G)(4) - TRUCK ACCESS TO LOADING/UNLOADING FACILITIES IN REAR OR SIDE YARDS ADJUTING RESIDENTIAL ZONES SHALL BE RESTRICTED BY A GATE, WHEREAS NO GATES ARE PROPOSED.
- C) SECTION 334-56 - ADA PARKING STALLS SHALL BE 12 FT X 18 FT, WHEREAS ADA PARKING STALLS ARE PROPOSED TO BE 8 FT X 18 FT AND 11 FT X 18 FT.

UTILITY USAGE ESTIMATE

Potable Water Demand (Per N.J.A.C. 5:21-5.3 (Table 5.1) & N.J.A.C. 7:10-12.6 (Table 1))

Existing: Storage Facility 9,354 sf * 0.125 gal/sf = 1,170 gpd

Proposed: Warehouse 100 empl * 25 gal/empl/shift = 2,500 gpd

Office Space 7,074 sf * 0.125 gal/sf = 885 gpd

Net Increase = 3,385 gpd

Sanitary Flow (Per NJAC 7:14A-23.3)

Existing: Storage Facility 9,354 sf * 0.100 gal/sf = 936 gpd

Proposed: Warehouse 100 empl * 25 gal/empl/shift = 2,500 gpd

Office Space 7,074 sf * 0.100 gal/sf = 708 gpd

Net Increase = 3,208 gpd

DRAWING INDEX

DWG.	(SHT)	TITLE
T-1	(1)	TITLE SHEET
N-1	(2)	GENERAL NOTES & LEGEND
EX-1	(3)	EXISTING SITE PLAN
DM-1	(4)	DEMOLITION PLAN
PS-1	(5)	PROPOSED SITE & GEOMETRY PLAN
SS-1	(6)	PROPOSED SIGNAGE & STRIPING PLAN
UT-1	(7)	PROPOSED UTILITY PLAN
GD-1	(8)	PROPOSED GRADING PLAN
GD-2	(9)	PROPOSED ADA GRADING PLAN
DR-1	(10)	PROPOSED DRAINAGE PLAN
EC-1	(11)	EROSION CONTROL PLAN I
EC-2	(12)	EROSION CONTROL PLAN II
EC-3	(13)	EROSION CONTROL PLAN III
EC-4	(14)	EROSION CONTROL NOTES & DETAILS I
EC-5	(15)	EROSION CONTROL NOTES & DETAILS II
EC-6	(16)	EROSION CONTROL NOTES & DETAILS III
EC-7	(17)	EROSION CONTROL NOTES & DETAILS IV
PR-1	(18)	PROP. STORM & SANITARY PROFILES
CD-1	(19)	CONSTRUCTION DETAILS I
CD-2	(20)	CONSTRUCTION DETAILS II
CD-3	(21)	CONSTRUCTION DETAILS III
VC-1	(22)	PROPOSED VEHICLE CIRCULATION PLAN I
VC-2	(23)	PROPOSED VEHICLE CIRCULATION PLAN II
LT-1	(24)	PROPOSED LIGHTING PLAN I
LT-2	(25)	PROPOSED LIGHTING DETAILS
LA-1	(26)	PROPOSED LANDSCAPING PLAN
LA-2	(27)	LANDSCAPING NOTES & DETAILS

OWNER

DM INVESTMENTS OF NORTH BRUNSWICK, LLC
1260 STELTON ROAD
PISCATAWAY, NJ 08854

APPLICANT:

DM INVESTMENTS OF NORTH BRUNSWICK, LLC
1260 STELTON ROAD
PISCATAWAY, NJ 08854

CHAIRPERSON DATE

SECRETARY DATE

ENGINEER DATE

I HEREBY CERTIFY THAT I HAVE PREPARED THIS PLAN AND THAT ALL DIMENSIONS AND INFORMATION ARE CORRECT

BRADFORD J. ALLER
PROFESSIONAL ENGINEER
N.J. LICENSE NO. 43435

TITLE SHEET

DM INVESTMENTS OF NORTH BRUNSWICK, LLC.

FOR

BLOCK 224 - LOTS 2, 5, 6 & 87

TOWNSHIP OF NORTH BRUNSWICK

MIDDLESEX COUNTY NEW JERSEY

1	REVISED PER AGENCY REVIEW LETTERS	12/15/21	JPB
NO.	REVISIONS	DATE	BY

THIS WORK PREPARED UNDER MY IMMEDIATE SUPERVISION
BRADFORD J. ALLER
PROFESSIONAL ENGINEER

DATE: 7/14/21
BY: BJA
CHECKED BY: BJA
DESIGNED BY: BJA
SCALE: 1" = 27'

THIS WORK PREPARED UNDER MY IMMEDIATE SUPERVISION
BRADFORD J. ALLER
PROFESSIONAL ENGINEER

DATE: 7/14/21
BY: BJA
CHECKED BY: BJA
DESIGNED BY: BJA
SCALE: 1" = 27'

EP DESIGN SERVICES, LLC

State of New Jersey Certificate of Authorization #: 24GA28126800

2001 Hamilton Boulevard

South Plainfield, New Jersey 07080

(908) 205-0943 Fax: (908) 755-3212

THIS DRAWING AND THE INFORMATION ON IT ARE CONFIDENTIAL AND ARE THE PROPERTY OF EP DESIGN SERVICES, LLC. AND MAY NOT BE USED FOR ANY PURPOSE OR PROJECT OTHER THAN THE ONE IDENTIFIED HERE ON WITHOUT WRITTEN CONSENT FROM EP DESIGN SERVICES, LLC.

SHEET 1 OF 27

CONTRACTOR SHALL PURSUE ALL WORK IN ACCORDANCE WITH THE REQUIREMENTS OF THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 (29 U.S.C. 651 et seq.) AND THE NEW JERSEY UNDERGROUND FACILITY PROTECTION ACT (NJSA 48-2.7, et seq.) AS AMENDED.

2. THE DEMOLITION PLAN IS INTENDED TO PROVIDE GENERAL INFORMATION REGARDING ITEMS TO BE DEMOLISHED AND/OR REMOVED. THE CONTRACTOR SHALL PROVIDE ALL OTHER SITE PLAN DRAWINGS AND INCLUDE IN DEMOLITION ACTIVITIES ALL INCIDENTAL WORK NECESSARY FOR THE CONSTRUCTION OF THE NEW SITE IMPROVEMENTS.

3. PRIOR TO STARTING ANY DEMOLITION, CONTRACTOR IS RESPONSIBLE FOR TO:

- A. OBTAINING ALL REQUIRED PERMITS AND MAINTAINING THE SAME ON SITE FOR REVIEW BY THE ENGINEER AND OTHER PUBLIC AGENCIES HAVING JURISDICTION.
- B. NOTIFYING AT A MINIMUM, THE MUNICIPAL ENGINEER, DESIGN ENGINEER, AND LOCAL SOIL CONSERVATION DISTRICT, 72 HOURS PRIOR TO THE START OF WORK.
- C. INSTALLING THE REQUIRED SOIL EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO SITE DISTURBANCE.
- D. IN ACCORDANCE WITH STATE LAW, THE CONTRACTOR SHALL BE REQUIRED TO CALL THE BOARD OF PUBLIC UTILITIES ONE WEEK BEFORE ANY EXCAVATION OR UTILITY WORK WITHOUT IN ADVANCE OF ANY EXCAVATION.
- E. LOCATING AND PROTECTING ALL UTILITIES AND SERVICES, INCLUDING BUT NOT LIMITED TO GAS, WATER, ELECTRIC, SANITARY AND STORM SEWER, TELEPHONE, CABLE, FIBER OPTIC CABLE, ETC. WITHIN AND ADJACENT TO THE LIMITS OF PROJECT ACTIVITIES. THE CONTRACTOR SHALL USE AND COMPLY WITH THE REQUIREMENTS OF THE APPLICABLE UTILITY LOCATION SYSTEMS TO LOCATE ALL THE UNDERGROUND UTILITIES.
- F. PROTECTING AND MAINTAINING IN OPERATION, ALL ACTIVE UTILITIES AND SYSTEMS THAT ARE NOT BEING REMOVED DURING ALL DEMOLITION ACTIVITIES.
- G. OBTAINING A WRITTEN NOTICE FROM THE APPLICABLE UTILITY SERVICE PROVIDER(S) FOR THE TEMPORARY OR PERMANENT TERMINATION OF SERVICE REQUIRED BY THE PROJECT PLANS AND SPECIFICATIONS. THE CONTRACTOR SHALL PROVIDE THE UTILITY ENGINEER AND OWNER WRITTEN NOTIFICATION THAT THE EXISTING UTILITIES AND SERVICES WILL BE TEMPORARILY TERMINATED AND ABANDONED IN ACCORDANCE WITH JURISDICTIONAL AND UTILITY COMPANY REQUIREMENTS.
- H. ACCORDANCE WITH UTILITY COMPANIES REGARDING WORKING "OFF-PEAK" HOURS OR ON WEEKENDS AS MAY BE REQUIRED TO MINIMIZE THE IMPACT ON THE AFFECTED PARTIES. WORK REQUIRED TO BE DONE "OFF-PEAK" SHALL BE DONE AT AN ADDITIONAL COST TO THE OWNER.
- I. IN THE EVENT THE CONTRACTOR DISCOVERS ANY HAZARDOUS MATERIAL, THE REMOVAL OF WHICH IS NOT ADDRESSED IN THE PROJECT PLANS AND SPECIFICATIONS, THE CONTRACTOR SHALL IMMEDIATELY CEASE ALL WORK AND NOTIFY THE OWNER AND ENGINEER OF THE DISCOVERY OF SUCH MATERIALS.

4. THE FIRM OR ENGINEER OF RECORD IS NOT RESPONSIBLE FOR JOB SITE SAFETY OR SUPERVISION. CONTRACTOR IS TO BE RESPONSIBLE FOR THE CONSTRUCTION OF A SYSTEMATIC AND SAFE MANNER, FOLLOWING ALL THE OSHA REQUIREMENTS TO ENSURE PUBLIC AND CONTRACTOR SAFETY.

5. THE CONTRACTOR SHALL NOT PERFORM ANY EARTH MOVEMENT ACTIVITIES, DEMOLITION OR REMOVAL OF FOUNDATION WALLS OR FOOTINGS OR OTHER MATERIAL WITHIN THE LIMITS OF DISTURBANCE UNLESS IT IS IN STRICT ACCORDANCE WITH THE PROJECT PLANS AND SPECIFICATIONS, AND/OR UNDER THE WRITTEN DIRECTION OF THE OWNER'S STRUCTURAL OR GEOTECHNICAL ENGINEER.

6. CONTRACTOR SHALL BACKFILL ALL EXCAVATION RESULTING FROM OR INCIDENTAL TO, DEMOLITION ACTIVITIES. BACKFILL SHALL BE ACCOMPISHED WITH APPROVED BACKFILL MATERIALS, AND SHALL BE SUFFICIENTLY COMPACTED TO SUPPORT NEW IMPROVEMENTS AND IN COMPLIANCE WITH THE RECOMMENDATIONS IN THE GEOTECHNICAL REPORT. BACKFILLING SHALL OCCUR IMMEDIATELY AFTER DEMOLITION ACTIVITIES, AND SHALL BE DONE SO AS TO PREVENT WATER ENTERING THE EXCAVATION. FINISHED SURFACES SHALL BE GRADED TO PROMOTE POSITIVE DRAINAGE.

7. EXPLOSIVES SHALL NOT BE USED WITHOUT PRIOR WRITTEN CONSENT OF BOTH THE OWNER AND ALL APPLICABLE GOVERNMENTAL AUTHORITIES. ALL THE REQUIRED PERMITS AND EXPLOSIVE CONTROL MEASURES THAT ARE REQUIRED BY THE FEDERAL, STATE, AND LOCAL GOVERNMENTS SHALL BE IN PLACE PRIOR TO STARTING AN EXPLOSIVE PROGRAM. THE CONTRACTOR IS ALSO RESPONSIBLE FOR ALL INSPECTION AND SEISMIC VIBRATION TESTING THAT IS REQUIRED TO MONITOR THE EFFECTS ON ALL LOCAL STRUCTURES.

8. CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL, AND GENERALLY ACCEPTED SAFE PRACTICES IN CONFORMANCE WITH THE CURRENT FHWA "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD), AS WELL AS FEDERAL, STATE, AND LOCAL REGULATIONS WHEN DEMOLITION RELATED ACTIVITIES IMPACT ROADWAYS OR ROADWAY RIGHT-OF-WAY.

9. CONTRACTOR SHALL CONDUCT DEMOLITION ACTIVITIES IN SUCH A MANNER TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, SIDEWALKS, WALKWAYS, AND OTHER ADJACENT FACILITIES. STREET CLOSURE PERMITS MUST BE RECEIVED FROM THE APPROPRIATE GOVERNMENTAL AUTHORITY PRIOR TO THE COMMENCEMENT OF ANY ROAD OPENING OR DEMOLITION ACTIVITIES IN OR ADJACENT TO THE RIGHT-OF-WAY.

10. DEMOLITION ACTIVITIES AND EQUIPMENT SHALL NOT USE AREAS OUTSIDE THE DEFINED PROJECT LIMIT LINE, WITHOUT WRITTEN PERMISSION OF THE OWNER AND ALL GOVERNMENTAL AGENCIES HAVING JURISDICTION.

11. THE CONTRACTOR SHALL USE DUST CONTROL MEASURES TO LIMIT AIRBORNE DUST AND DIRT RISING AND SCATTERING IN THE AIR IN ACCORDANCE WITH FEDERAL, STATE, AND/OR LOCAL STANDARDS AFTER THE DEMOLITION IS COMPLETE. ADJACENT AREAS IMMEDIATELY ADJACENT SHALL BE CLEANED OF ALL DUST AND DEBRIS CAUSED BY THE DEMOLITION OPERATIONS. THE CONTRACTOR IS RESPONSIBLE FOR RETURNING ALL ADJACENT AREAS TO THEIR "PRE-DEMOLITION" CONDITION.

12. CONTRACTOR IS RESPONSIBLE TO SAFEGUARD SITE CONDITIONS IN ORDER TO PERFORM THE DEMOLITION IN SUCH A MANNER AS TO PREVENT THE ENTRY OF UNAUTHORIZED PERSONS AT ANY TIME.

13. CONTRACTOR IS RESPONSIBLE FOR SITE JOB SAFETY, WHICH SHALL INCLUDE BUT NOT BE LIMITED TO THE INSTALLATION AND MAINTENANCE OF SAFETY FENCES, AND THE MEANS AND METHODS TO BE USED TO ACCOMPLISH THAT WORK. ALL MEANS AND METHODS UTILIZED ARE TO BE IN STRICT ACCORDANCE WITH ALL STATE, FEDERAL, LOCAL, AND JURISDICTIONAL REQUIREMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL OSHA AND OTHER SAFETY PRECAUTIONS NECESSARY TO PROVIDE A SAFE WORK SITE.

14. THIS DEMOLITION PLAN IS INTENDED TO IDENTIFY THOSE EXISTING ITEMS CONDITIONS WHICH ARE TO BE REMOVED. IT IS NOT INTENDED TO PROVIDE THE MEANS, METHODS, AND EQUIPMENT TO BE USED TO ACCOMPLISH THAT WORK. ALL MEANS AND METHODS UTILIZED ARE TO BE IN STRICT ACCORDANCE WITH ALL STATE, FEDERAL, LOCAL, AND JURISDICTIONAL REQUIREMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL OSHA AND OTHER SAFETY PRECAUTIONS NECESSARY TO PROVIDE A SAFE WORK SITE.

15. DEBRIS SHALL NOT BE BURIED ON THE SUBJECT SITE. ALL DEMOLITION WASTES AND DEBRIS (SOLID WASTE) SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL MUNICIPAL, COUNTY, STATE, AND FEDERAL LAWS AND APPLICABLE CODES. THE CONTRACTOR SHALL MAINTAIN RECORDS TO DEMONSTRATE PROPER DISPOSAL ACTIVITIES, TO BE PROVIDED TO THE OWNER UPON REQUEST.

16. CONTRACTOR SHALL MAINTAIN A RECORD SET OF PLANS UPON WHICH IS INDICATED THE LOCATION OF EXISTING UTILITIES THAT ARE CAPPED, ABANDONED IN PLACE, OR RELOCATED DUE TO DEMOLITION ACTIVITIES. THIS RECORD DOCUMENT SHALL

NON-RAMP ACCESSIBLE ROUTE

1. RUNNING SLOPE OF ROUTE SHALL NOT EXCEED 4.9%.
2. LATERAL OR CROSS SLOPE OF THE ROUTE SHALL NOT EXCEED 2.0%.
3. MINIMUM SIDEWALK WIDTH FLUSH WITH CURB AT PARKING STALLS SHALL BE 6'.
4. MINIMUM SIDEWALK WIDTH SHALL BE 5' (PER MUNICIPAL REQUIREMENTS).
5. A 5x5' LANDING SHALL BE PROVIDED AT ALL DOORWAY ENTRANCES AND EXITS.
6. THE SLOPE IN ANY DIRECTION OF THE 5'x5' LANDING SHALL NOT EXCEED 2%.

1. A 5'x5' LANDING AREA SHALL BE PROVIDED AT THE TOP AND BOTTOM OF ALL RAMPS.
2. THE LANDING AREA, IN EITHER DIRECTION OF THE 5'x5' LANDING AREA SHALL NOT EXCEED 2%.
3. THE CURB RAMP RUNNING PARALLEL TO THE TRAVEL LANE SHALL NOT EXCEED 8.3%.
4. THE LATERAL OR CROSS SLOPE OF THE RAMP SHALL NOT EXCEED 2.0%.
5. ALL RAMPS SHALL DIRECT PEDESTRIAN TRAVEL PERPENDICULAR TO ROADWAY TRAFFIC AND/OR PARALLEL WITH THE TRAVEL ROUTE.
6. CURB RAMP WIDTH SHALL BE 5' MIN.
7. SIDE ACCESS SLOPES OR TAPERS ON CURB RAMPS SHALL NOT EXCEED 10% WHERE:
8. SIDE ACCESS TO THE RAMP IS PROVIDED. MINIMUM WIDTH OF SIDE SLOPE SHALL BE 10' MIN. OR BRIDGABLE.
9. WHERE SIDE ACCESS IS NOT PROVIDED INTO RAMP, MAXIMUM WIDTH OF SIDE SLOPE SHALL BE 18" AT CURB.
10. REGARDLESS OF CURB CONSTRUCTION THE DEPRESSED CURB AT THE RAMP AND SIDE AREAS SHALL BE POURED CONCRETE.
11. TRUNCATED DOME DETECTABLE WARNING SURFACES SHALL BE PROVIDED AT ALL CURB RAMPS. WARNING SURFACE SHALL SPAN FULL WIDTH OF THE RAMP AND BE 24" LONG.
12. SURFACE SHALL BE LOCATED ON THE RAMP AT THE LOWEST POINT OF THE RAMP.
13. TRUNCATED DOME DETECTABLE WARNING SURFACES AT ONE CORNER FOR CROSSING THE RAMPS SHALL BE ORIENTED AT 90 DEGREES APART.
14. A SINGLE 5'x5' LANDING AREA CAN SERVE TWO RAMPS ORIENTED AT 90 DEGREES TO EACH OTHER.
15. LANDING AREAS SHALL BE POURED SEPARATELY FROM THE RAMPS, CURBS AND SIDEWALKS TO ENSURE PROPER SLOPES.
16. RAMPS SHALL BE POURED FLUSH WITH BACK SIDE OF CURB AND SIDEWALK.

1. THE SLOPE IN ANY DIRECTION OF STALLS AND STRIPED AREAS SHALL NOT EXCEED 2.0%
2. STALLS SHALL BE THE MOST PROXIMATE TO THE BUILDING ENTRANCE AS FEASIBLE.

1. ANY NON CURB RAMP ACCESSIBLE ROUTE THAT EXCEEDS 4.99% SHALL BE CONSIDERED A RAMP.
2. RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE MOST CURRENT CODE.

1. ALL LAWN AREAS AND OPEN SPACE SHALL BE GRADED TO 2% MINIMUM GRADE AND TO A MAXIMUM GRADE OF 3 HORIZONTAL TO 1 VERTICAL.
2. ALL ACCESSIBLE RAMPS TO CONFORM TO CURRENT A.D.A. AND APPLICABLE STANDARDS
3. ALL DRAINAGE TO BE REINFORCED HIGH DENSITY POLYETHYLENE (HDPE) PIPE UNLESS OTHERWISE NOTED.
4. ALL PROPOSED LAWN AREAS SHALL BE GRADED WITH LIGHT WEIGHT CONSTRUCTION EQUIPMENT.

PROPERTY UNDER APPLICATION IS KNOWN AS BLOCK 224, LOTS 2, 5, 6, 8 & 10 IN THE TOWNSHIP OF NORTH BRUNSWICK, MIDDLESEX COUNTY, NEW JERSEY (TAX MAP SHEET 60), CONSISTING OF APPROXIMATELY \pm 21.73 ACRES LOCATED EAST OF NEW JERSEY STATE ROUTE 130 AND NORTH OF DAVIDSON'S MILL ROAD.

2. THE PROJECT PROPOSES THE CONSTRUCTION OF: ONE (1) INDUSTRIAL WAREHOUSE, BUILDING AT 235,787 SF. THE PROJECT INCLUDES ALL ASSOCIATED PARKING AND UTILITIES.

3. TOPOGRAPHIC & BOUNDARY INFORMATION IS BASED ON A SURVEY PREPARED BY AMERTECH ENGINEERING, INC. TITLED "LEGAL & TOPOGRAPHIC SURVEY FOR EDGEWOOD PROPERTIES, INC., BLOCK 224, LOTS 2, 5, 6, 8 & 10 TOWNSHIP OF NORTH BRUNSWICK, MIDDLESEX COUNTY, NEW JERSEY, BLOCK 27, LOT 4 TOWNSHIP OF SOUTH BRUNSWICK, MIDDLESEX COUNTY, NEW JERSEY," DATED 2/1/2021.

4. WETLANDS INFORMATION IS BASED ON SURVEY PREPARED BY 3 WIRE SURVEYING, INC. ENTITLED "WETLAND DELINEATION PLAN, BLOCK 224 - LOTS 2, 5, 6, 8 & 10 TOWNSHIP OF NORTH BRUNSWICK, BLOCK 27 - LOTS 4 & 6, TOWNSHIP OF SOUTH BRUNSWICK, MIDDLESEX COUNTY, NEW JERSEY" DATED 5/19/09, LOI GRANTED 12/07/2009, EXTENDED 9/12/2017 FILE NO.: 1200-09-0027.1 FFW# 090001.

5. 100 YEAR FLOOD PLAIN ELEVATION IS BASED ON THE FLOOD INSURANCE RATE MAP FOR THE TOWNSHIP OF NORTH BRUNSWICK (PANEL NO. 340270 0003 B). PREPARED BY THE U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT, EFFECTIVE MAY 1, 1980.

6. SITE DATUMS:
HORIZONTAL: NAD83 (NUSPCS)
VERTICAL: NAVD83 (NGVD29 + NAVD83 + 1.02)

7. INITIAL NJDEP APPROVAL FOR THIS SITE WAS GRANTED ON SEPTEMBER 4, 2012. AN EXTENSION TO THIS APPROVAL WAS GRANTED ON SEPTEMBER 13, 2017. THE FOLLOWING PERMITS WERE GRANTED:
1200-09-0023.3 FFW#12001 - FRESHWATER WETLANDS INDIVIDUAL PERMIT
1200-09-0023.3 FFW#110001 - FRESHWATER WETLANDS INDIVIDUAL PERMIT NO. 2
1200-09-0023.3 FFW#110002 - FRESHWATER WETLANDS INDIVIDUAL PERMIT NO. 11
1200-09-0023.3 FFW#110003 - FRESHWATER WETLANDS TAW AVERAGING PLAN

8. THE DRAWINGS INDICATE THE APPROXIMATE LOCATION OF EXISTING SUBSURFACE UTILITIES IN THE VICINITY OF THE PROJECT AND ARE NOT GUARANTEED FOR ACCURACY AND/OR COMPLETENESS. CONTRACTOR TO VERIFY DEPTH AND LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION (1+800-272-1000). ANY CONFLICTS WITH THE PROPOSED CONSTRUCTION ARE TO BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER. ALL EXISTING UTILITIES ARE TO BE RELOCATED OR ALTERED IN ANY MANNER ARE TO BE DONE IN ACCORDANCE WITH THE RESPECTIVE UTILITY COMPANIES STANDARDS.

9. DESIGN AND INSTALLATION OF ELECTRIC, GAS, TELEPHONE AND CABLE TV TO BE PROVIDED BY THE RESPECTIVE UTILITY COMPANIES.

10. CONSTRUCTION MATERIAL AND METHODS NOT OTHERWISE SPECIFIED OR SHOWN HEREIN SHALL CONFORM TO THE NEW JERSEY DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (THE LATEST EDITION AND AMENDMENTS).

11. FOR SPECIFIC BUILDING DETAILS AND ELEVATIONS, SEE ARCHITECTURAL DRAWINGS.

12. FOR SPECIFIC SIGNAGE DETAILS, SEE ARCHITECTURAL DRAWINGS.

13. SITE GRADING & UTILITY WORK ARE TO BE PERFORMED IN A MANNER TO MINIMIZE DAMAGE TO EXISTING VEGETATION AND TREES. ALL AREAS NOT AFFECTED BY CONSTRUCTION ARE TO REMAIN NATURAL AND UNDISTURBED.

14. EXISTING OR PROJECT GENERATED DEBRIS ARE TO BE REMOVED AND PROPERLY DISPOSED OF ACCORDING TO ALL APPLICABLE REGULATIONS.

15. TOPSOIL THAT HAS BEEN REMOVED FOR THE GRADING OF THE SITE SHALL NOT BE USED AS SPOIL. THE TOPSOIL SHALL BE REDISTRIBUTED ON GREEN AREAS SO AS TO PROVIDE A MINIMUM OF AT LEAST 6 INCHES OF DEPTH ON THOSE AREAS.

16. COMPACTION OF FILL AREAS BENEATH ALL PROPOSED UTILITIES AND STRUCTURES SHOULD MEET ALL CODE REQUIREMENTS AND BE EQUAL TO THE MINIMUM 95% MODIFIED PROCTOR DENSITY.

17. NO SOIL MATERIAL MAY BE IMPORTED TO OR EXPORTED FROM THE SITE, EXCEPT IN ACCORDANCE WITH AN APPROVAL AND EXECUTED FINAL PLAN, NOR WITHOUT THE PRIOR APPROVAL OF THE MUNICIPAL COUNCIL.

18. ALL APPLICABLE SITE CLEARING SHALL INCLUDE THE LOCATION AND REMOVAL OF ALL UNDERGROUND TANKS, PIPES, VALVES, ETC.

19. IF DIMENSIONS SHOWN ON THE PLANS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY ENGINEER IF ANY DISCREPANCIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION FOR NECESSARY PLAN CHANGES.

20. REFUSE AND RECYCLING ENCLOSURES TO BE CONSTRUCTED OF MATERIALS SIMILAR TO BUILDINGS.

21. SOLID WASTE TO BE DISPOSED OF BY CONTRACTOR IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS.

22. IT SHALL BE THE OWNER AND/OR CONTRACTORS RESPONSIBILITY TO CONDUCT SOIL TESTING TO CONFIRM APPLICABILITY OF PROPOSED IMPROVEMENTS AND CONSTRUCTION TECHNIQUES WITH RESPECT TO SUBSURFACE SOIL.

23. ALL CURB RADI SHALL BE 5' UNLESS OTHERWISE NOTED.

24. ALL SIGNAGE, STRIPING & TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE CURRENT MUTCD.

25. THE MAINTENANCE AND INSPECTION OF THE PROPOSED STORMWATER SYSTEM SHALL BE THE RESPONSIBILITY OF THE PROPERTY OWNER.

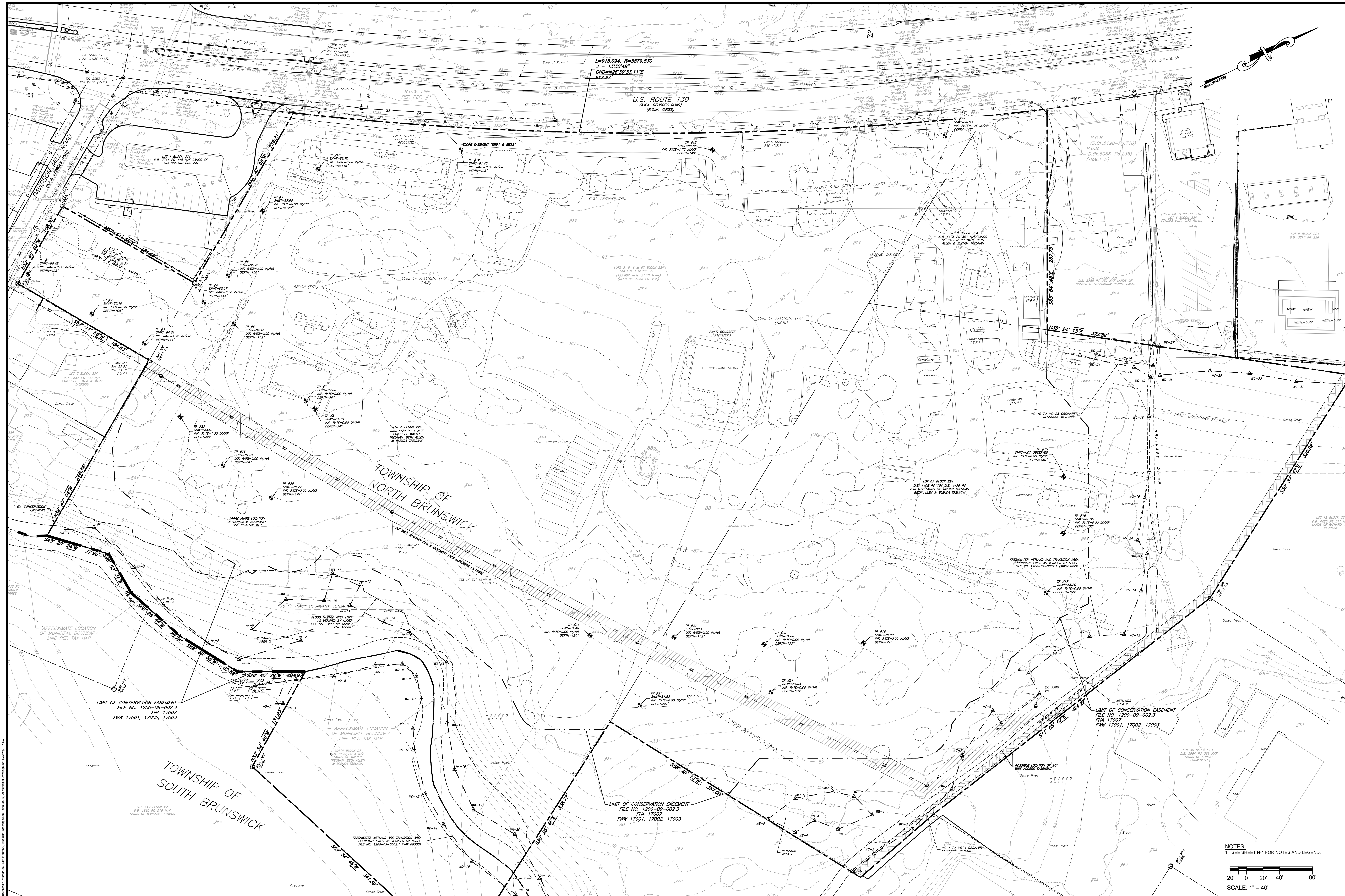
26. ALL PROPOSED INTERIOR ROADWAYS TO BE PRIVATE.

27. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH CURRENT OHSA, LOCAL, & STATE GOVERNING SAFETY CODES, AND TECHNICAL SPECIFICATIONS OF THE TOWNSHIP AND ALL OTHER APPLICABLE CODES.

28. A STORMWATER MAINTENANCE AGREEMENT WILL BE FILED WHICH SETS FORTH DOCUMENTATION THAT ANY PROPOSED DRAINAGE SYSTEM AND ANY STORMWATER DRAINAGE SWALES/DETENTION/RECHARGE FACILITIES WILL BE ADEQUATELY MAINTAINED IN ACCORDANCE WITH THE STANDARDS OF MIDDLESEX COUNTY. REFER TO THE PARAGRAPH IN THE STORMWATER MAINTENANCE AGREEMENT THAT IS FILED HEREWITH REGARDING THE REQUIREMENTS TO MAINTAIN DRAINAGE SYSTEMS UNDER CONDITIONS THAT AFFECT NON-COUNTY FACILITIES SHALL BE REVIEWED AND APPROVED BY THE APPROPRIATE JURISDICTIONAL AGENCY.

1. ADEQUATE WATER SUPPLY, SEWAGE FACILITIES, AND OTHER UTILITIES TO BE PROVIDED IN ACCORDANCE WITH MUNICIPAL AND STATE REGULATIONS.
2. POTABLE WATER SUPPLY TO BE PROVIDED WITH PROTECTION FROM POLLUTION AND DEGRADATION OF WATER QUALITY IN ACCORDANCE WITH THE STANDARDS OF THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.
3. FIRE HYDRANTS, WATER, SEWAGE FACILITIES, AND OTHER NECESSARY IMPROVEMENTS TO BE CONSTRUCTED IN ACCORDANCE WITH THE TOWNSHIP ORDINANCE AND COUNTY AND STATE REGULATIONS.
4. ALL SANITARY SEWER LINES TO CONNECT TO EXISTING SANITARY LINES BY GRAVITY AT THE LOCATIONS SHOWN. REFER TO INDIVIDUAL SITE PLANS FOR SPECIFIC ON-SITE SEWER DESIGN.
5. WATER SERVICE LINES TO BE CONNECTED TO THE EXISTING WATER MAINS AT THE LOCATIONS SHOWN ON THE PROPOSED UTILITY PLANS. REFER TO INDIVIDUAL SITE PLANS FOR SPECIFIC ON-SITE WATER SERVICE DESIGN.
6. WATER LINE AND SANITARY SEWER LINES TO BE A MINIMUM OF 10' SEPARATION HORIZONTALLY OR 18" VERTICALLY UNLESS OTHERWISE NOTED. IN ANY SEPARATION THAT IS LESS THAN 18" BETWEEN SANITARY SEWER AND STORM PIPES, A CONCRETE SADDLE SHALL BE USED.
7. WATERLINES TO HAVE A MINIMUM OF FOUR FEET COVER.
8. ALL EXTERNAL METERS AND EXTERIOR BUILDING MOUNTED UTILITIES TO BE CLEARLY AND PERMANENTLY MARKED.
9. KNOX SECURITY BOXES SHALL BE INSTALLED ON EACH BUILDING ON SITE FOR FIRE DEPARTMENT ACCESS.
10. ALL SANITARY SEWER LATERALS SHALL BE SLOPED AT A MINIMUM OF 1.0% FOR 6" PIPES AND A MINIMUM OF 0.2% FOR 4" PIPES, AND SHALL BE NO DEEPER THAN 8 FEET BELOW FINISHED FLOOR ELEVATIONS.
11. WATER COMPANY OR LOCAL MUA SHALL OWN WATER MAINS IN THE EXISTING AND DEDICATED PUBLIC STREETS. ALL OTHER WATER MAINS SHALL BE MAINTAINED BY THE PROPERTY OWNER.
12. THE TOWNSHIP SHALL OWN SEWER MAINS IN THE EXISTING AND DEDICATED PUBLIC STREETS. ALL OTHER SEWER AND SANITARY SEWER CONNECTIONS SHALL BE MAINTAINED BY THE PROPERTY OWNER, UNLESS OTHERWISE NOTED.
13. SEE ARCHITECTURAL DRAWINGS FOR ALL BUILDING UTILITY CONNECTION LOCATIONS.
14. ALL MECHANICAL JOINT FITTINGS SHALL BE RESTRAINED BY ROMAC RING OR APPROVED EQUAL.
15. SERVICE LINES SHALL BE EQUIPPED WITH A BACKFLOW DEVICE TO BE INSTALLED IN ACCORDANCE WITH N.J.A.C. SUBCHAPTER 7-10.10.4 AND IN ACCORDANCE WITH THE AUTHORITY'S CONTAINMENT SCHEME. THE BACKFLOW DEVICE SHALL BE AFTER THE METER, WITH A VALVE BEFORE AND AFTER THE DEVICE.
16. ALL STORM AND SANITARY SEWER STRUCTURES SHALL BE PRECAST CONCRETE.
17. ALL SANITARY PIPE TO BE SDR-35 PVC PIPE UNLESS OTHERWISE NOTED. ALL WATERLINES TO BE CLASS 52 CEMENT-LINED DUCTILE IRON PIPE UNLESS OTHERWISE NOTED.
18. ALL NEW GAS, ELECTRIC, TELEPHONE AND CABLE TV SERVICE IS TO BE INSTALLED UNDERGROUND THROUGHOUT THE DEVELOPMENT IN ACCORDANCE WITH THE REGULATIONS OF THE LOCAL UTILITY COMPANIES AND TOWNSHIP. DESIGN AN INSTALLATION OF ELECTRIC, GAS, TELEPHONE AND CABLE TV TO BE PROVIDED BY THE RESPECTIVE UTILITY COMPANIES.

PROPOSED		EXISTING	
	PROP. 1ft CONTOUR LINE		EXIST. 1ft CONTOUR LINE
	PROP. 5ft CONTOUR LINE		EXIST. 5ft CONTOUR LINE
	PROP. POTABLE WATER LINE		EXIST. POTABLE WATER LINE
	PROP. SANITARY SEWER LINE		EXIST. SANITARY SEWER LINE
	PROP. GAS LINE		EXIST. GAS LINE
	PROP. ELECTRIC LINE		EXIST. ELECTRIC LINE
	PROP. OVERHEAD ELECTRIC LINE		EXIST. OVERHEAD ELECTRIC LINE
	PROP. FENCE LINE		EXIST. FENCE LINE
	PROP. CURB LINE		EXIST. CURB LINE
	PROP. TREE LINE		EXIST. TREE LINE
	PROP. STORM PIPE		EXIST. CONC. SIDEWALK
	PROP. CONCRETE SIDEWALK		PROPERTY BOUNDARY LINE
	PROP. SILT FENCE		PRIMARY BUILDING SETBACK LINE
	PROP. SPOT ELEVATION		EXIST. BRUSH LINE
	PROP. FIRE HYDRANT		EXIST. STORM PIPE
	PROP. FIRE DEPT. CONNECTION		EXIST. SPOT ELEVATION
	PROP. LIGHT POLE		EXIST. FIRE HYDRANT
	PROP. "B" INLET		EXIST. FIRE DEPT. CONNECTION
	PROP. UTILITY POLE		EXIST. LIGHT POLE
	PROP. MANHOLE		EXIST. "B" INLET
	PROP. "A" INLET		EXIST. UTILITY POLE
	PROP. "E" INLET		EXIST. MANHOLE
			EXIST. "A" OR "E" INLET
			EXISTING CHANNEL
			FRESHWATER WETLAND AND TRANSITION AREA BOUNDARY LINES
			CONSERVATION EASEMENT

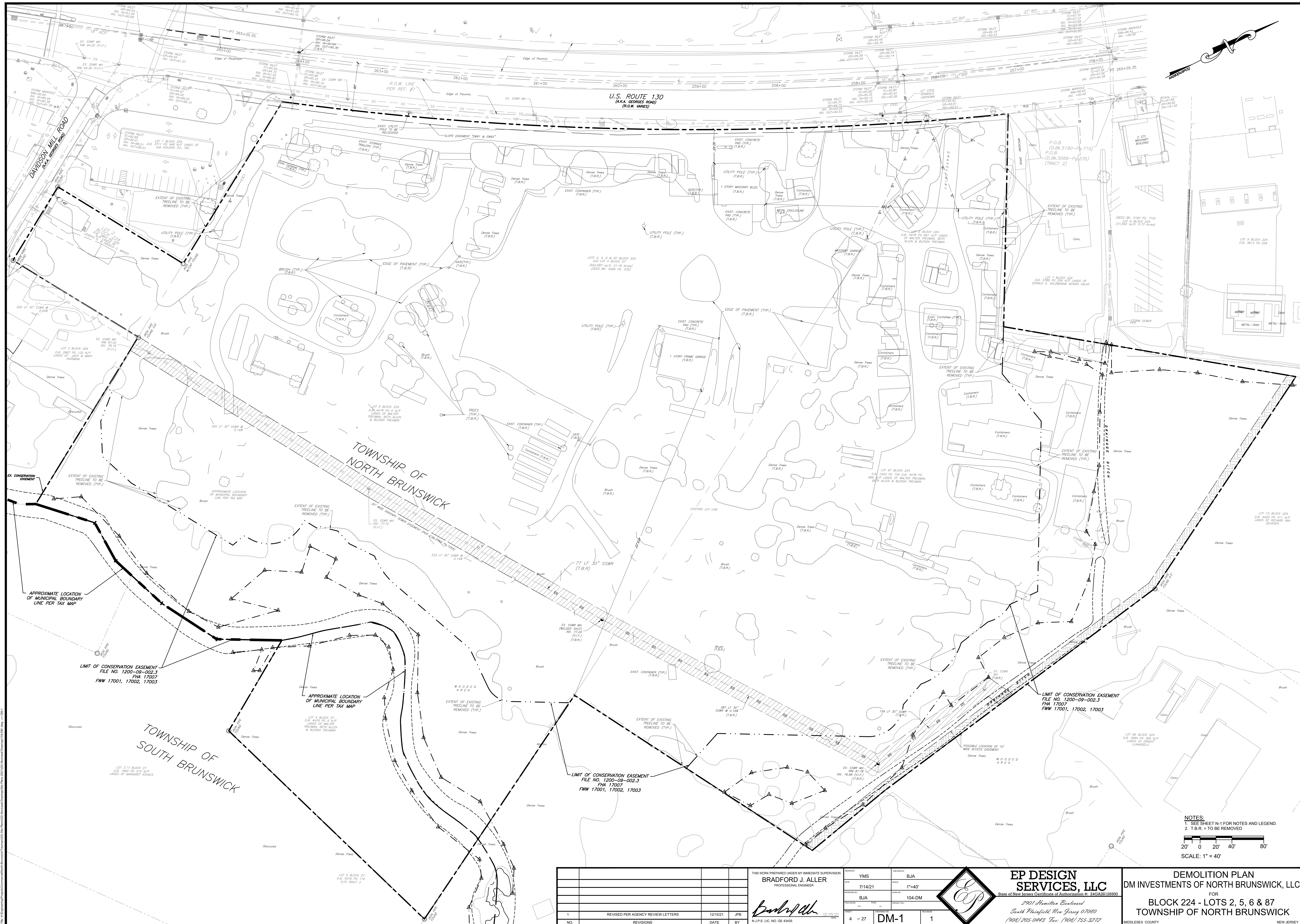


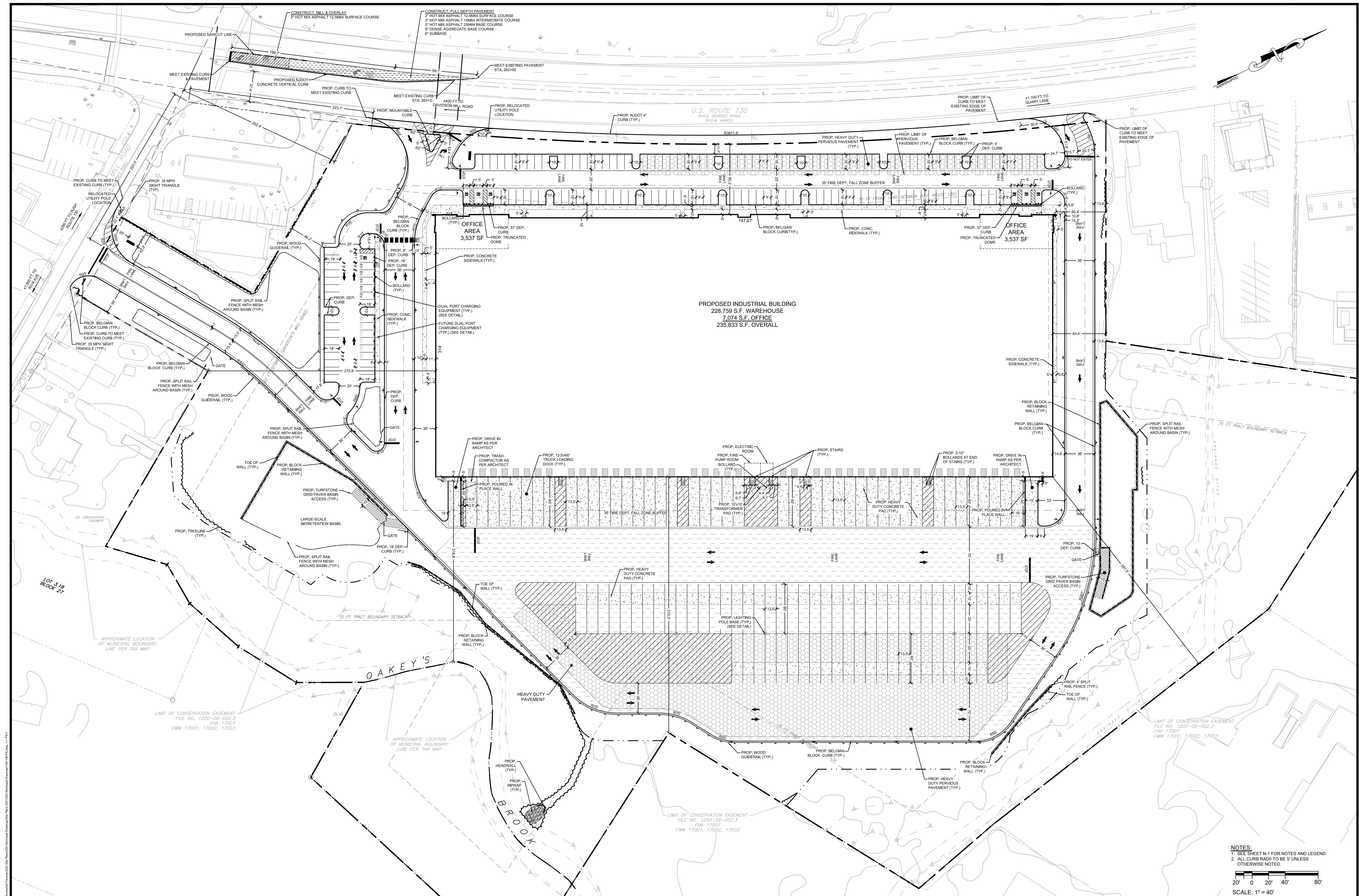
NOTES:
1. SEE SHEET N-1 FOR NOTES AND LEGEND.

0 20' 40' 80'

SCALE: 1" = 40'

<div>THIS DRAWING AND THE INFORMATION ON IT ARE CONFIDENTIAL AND ARE THE PROPERTY OF EP DESIGN SERVICES, LLC. AND MAY NOT BE USED FOR ANY PURPOSE OR PROJECT OTHER THAN THE ONE IDENTIFIED HERE ON WITHOUT WRITTEN CONSENT FROM EP DESIGN SERVICES, LLC.</div>				<div>THIS WORK PREPARED UNDER MY IMMEDIATE SUPERVISION BRADFORD J. ALLER PROFESSIONAL ENGINEER</div>				<div>DATE: 7/14/21 BY: BJA CHECKED: BJA SCALE: 1"=40' SHEET: 3 OF 27 PROJECT: EX-1 SECTION: 1</div>				<div>EP DESIGN SERVICES, LLC State of New Jersey Certificate of Authorization # 2443438126000 2901 Hamilton Boulevard South Plainfield, New Jersey 07080 (908) 205-0443 Fax: (908) 755-3272</div>				<div>EXISTING SITE PLAN DM INVESTMENTS OF NORTH BRUNSWICK, LLC. FOR BLOCK 224 - LOTS 2, 5, 6 & 87 TOWNSHIP OF NORTH BRUNSWICK MIDDLESEX COUNTY NEW JERSEY</div>			
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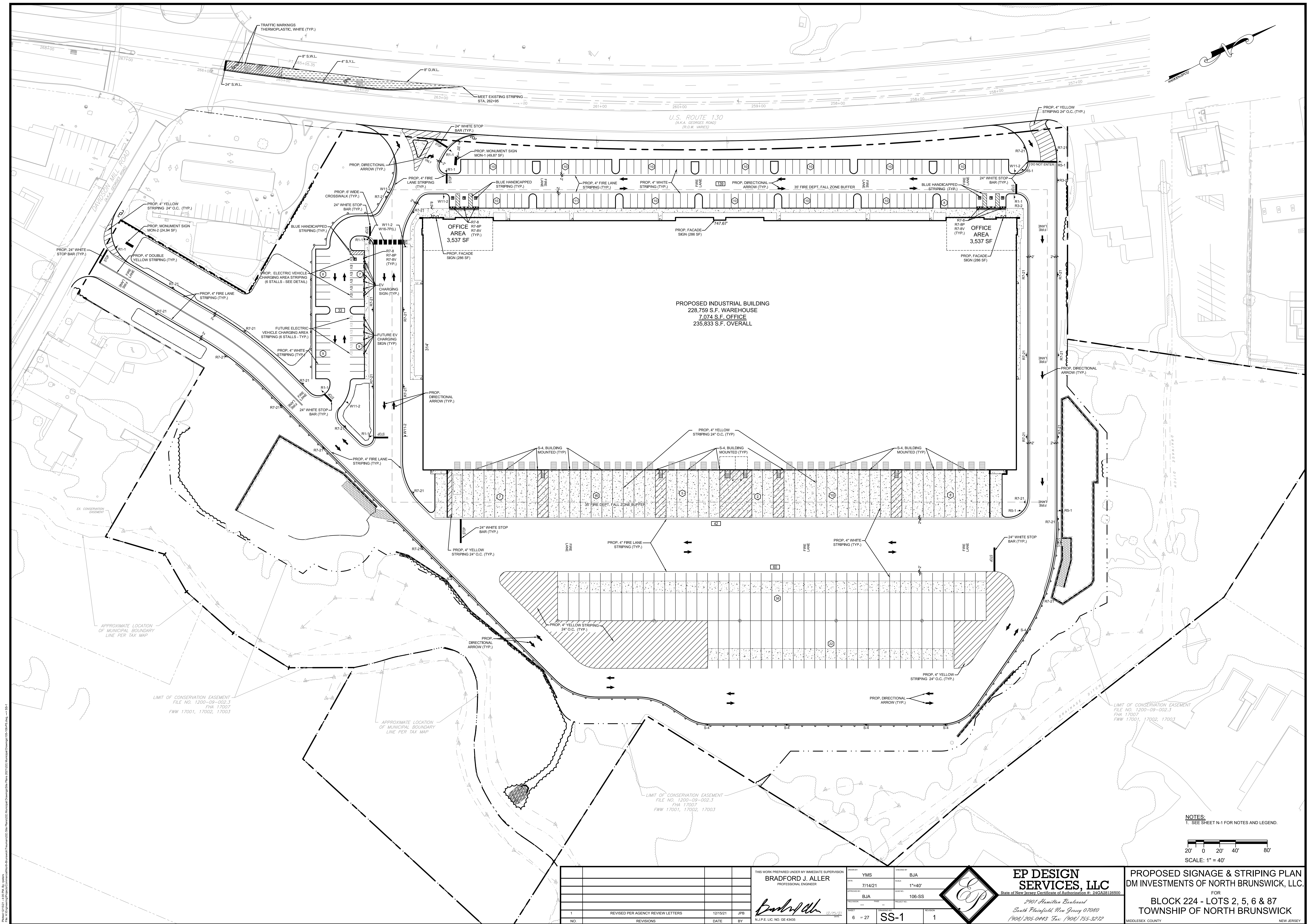
NO.	REVISIONS	DATE	BY
1	REVISED PER AGENCY REVIEW LETTERS	12/15/21	JPB

THIS WORK PREPARED UNDER MY IMMEDIATE SUPERVISION
BRADFORD J. ALLER
PROFESSIONAL ENGINEER
Bradford J. Aller
N.J.P.E. LIC. NO. GE 43435

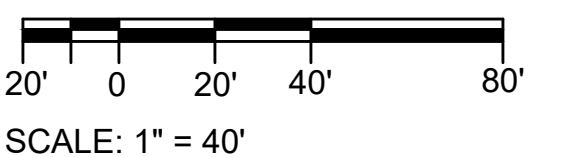
DATE	7/14/21	SCALE	1"=40'
APPROVED BY	BJA	PROJECT NO.	105-PS
SHEET	5 OF 27	PS-1	1

EP DESIGN SERVICES, LLC
State of New Jersey Certificate of Authorization #: 24GA28128800
2401 Hamilton Boulevard
South Plainfield, New Jersey 07080
(908) 205-0443 Fax: (908) 755-3272

PROPOSED SITE & GEOMETRY PLAN
DM INVESTMENTS OF NORTH BRUNSWICK, LLC.
FOR
BLOCK 224 - LOTS 2, 5, 6 & 87
TOWNSHIP OF NORTH BRUNSWICK
MIDDLESEX COUNTY NEW JERSEY



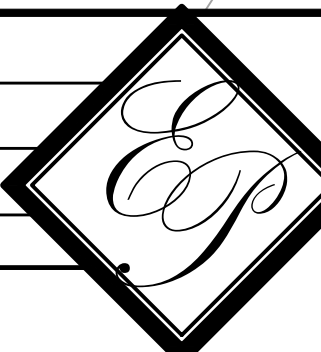
NOTES:
1. SEE SHEET N-1 FOR NOTES AND LEGEND.



1	REVISED PER AGENCY REVIEW LETTERS	12/15/21	JPB		
NO	REVISIONS	DATE	BY		

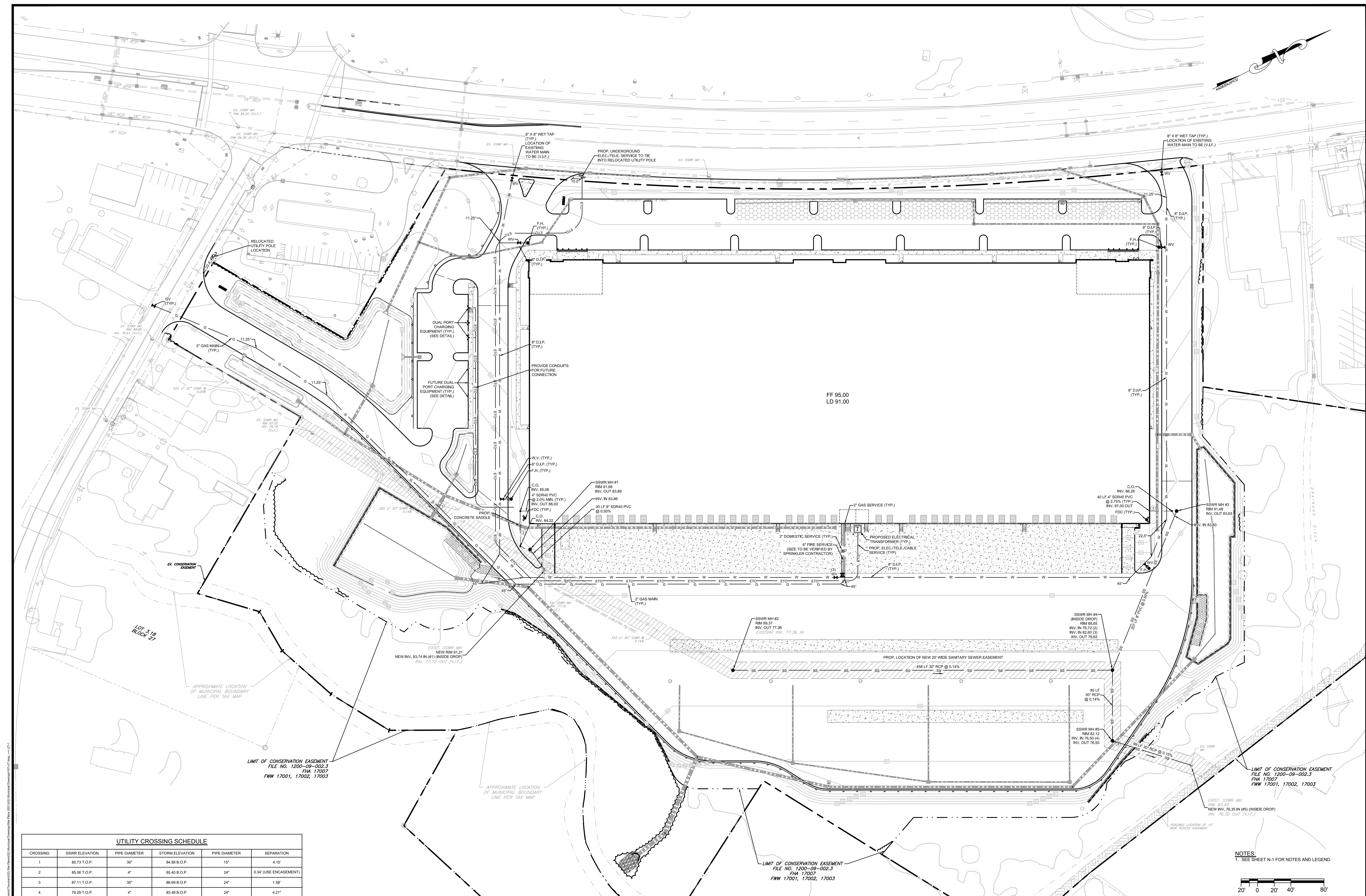
THIS WORK PREPARED UNDER MY IMMEDIATE SUPERVISION
BRADFORD J. ALLER
PROFESSIONAL ENGINEER
Bradford J. Aller
N.J.P.E. LIC. NO. GE 43435
12/15/21

DESIGNED BY	YMS	DRAWN BY	BJA
DATE	7/14/21	SCALE	1"=40'
APPROVED BY	BJA	CHECKED BY	106-SS
PROJECT NO.			
SHEET	6 OF 27	CONSTRUCTION	SS-1
REVISION			1



EP DESIGN SERVICES, LLC
State of New Jersey Certificate of Authorization #: 24GA28126800
2401 Hamilton Boulevard
South Plainfield, New Jersey 07080
(908) 205-0443 Fax: (908) 755-3272

PROPOSED SIGNAGE & STRIPING PLAN
DM INVESTMENTS OF NORTH BRUNSWICK, LLC.
FOR
BLOCK 224 - LOTS 2, 5, 6 & 87
TOWNSHIP OF NORTH BRUNSWICK
MIDDLESEX COUNTY
NEW JERSEY



UTILITY CROSSING SCHEDULE					
CROSSING	SSWR ELEVATION	PIPE DIAMETER	STORM ELEVATION	PIPE DIAMETER	SEPARATION
1	80.73 T.O.P.	30"	84.88 B.O.P.	15"	4.15'
2	85.06 T.O.P.	4"	85.40 B.O.P.	24"	0.34' (USE ENCASEMENT)
3	87.11 T.O.P.	30"	88.69 B.O.P.	24"	1.58'
4	79.29 T.O.P.	4"	83.48 B.O.P.	24"	4.21'

NOTES:
1. SEE SHEET N-1 FOR NOTES AND LEGEND.

20' 0 20' 40' 80'
SCALE: 1" = 40'

1

REVISED PER AGENCY REVIEW LETTERS

12/15/21

JPB

2

REVISIONS

DATE

BY

THIS WORK PREPARED UNDER MY IMMEDIATE SUPERVISION

BRADFORD J. ALLER

PROFESSIONAL ENGINEER

Bradford J. Aller

12/15/21

N.J.P.E. LIC. NO. GE 43435

DATE

7/14/21

DESIGNED BY

BJA

DRAWN BY

BJA

CHECKED BY

BJA

DATE

7/14/21

PROJECT NO.

UT-1

REVISION

1

EP DESIGN SERVICES, LLC

State of New Jersey Certificate of Authorization #: 24GA28126800

2901 Hamilton Boulevard

South Plainfield, New Jersey 07080

(908) 205-0443 Fax: (908) 255-3272

PROPOSED UTILITY PLAN

DM INVESTMENTS OF NORTH BRUNSWICK, LLC.

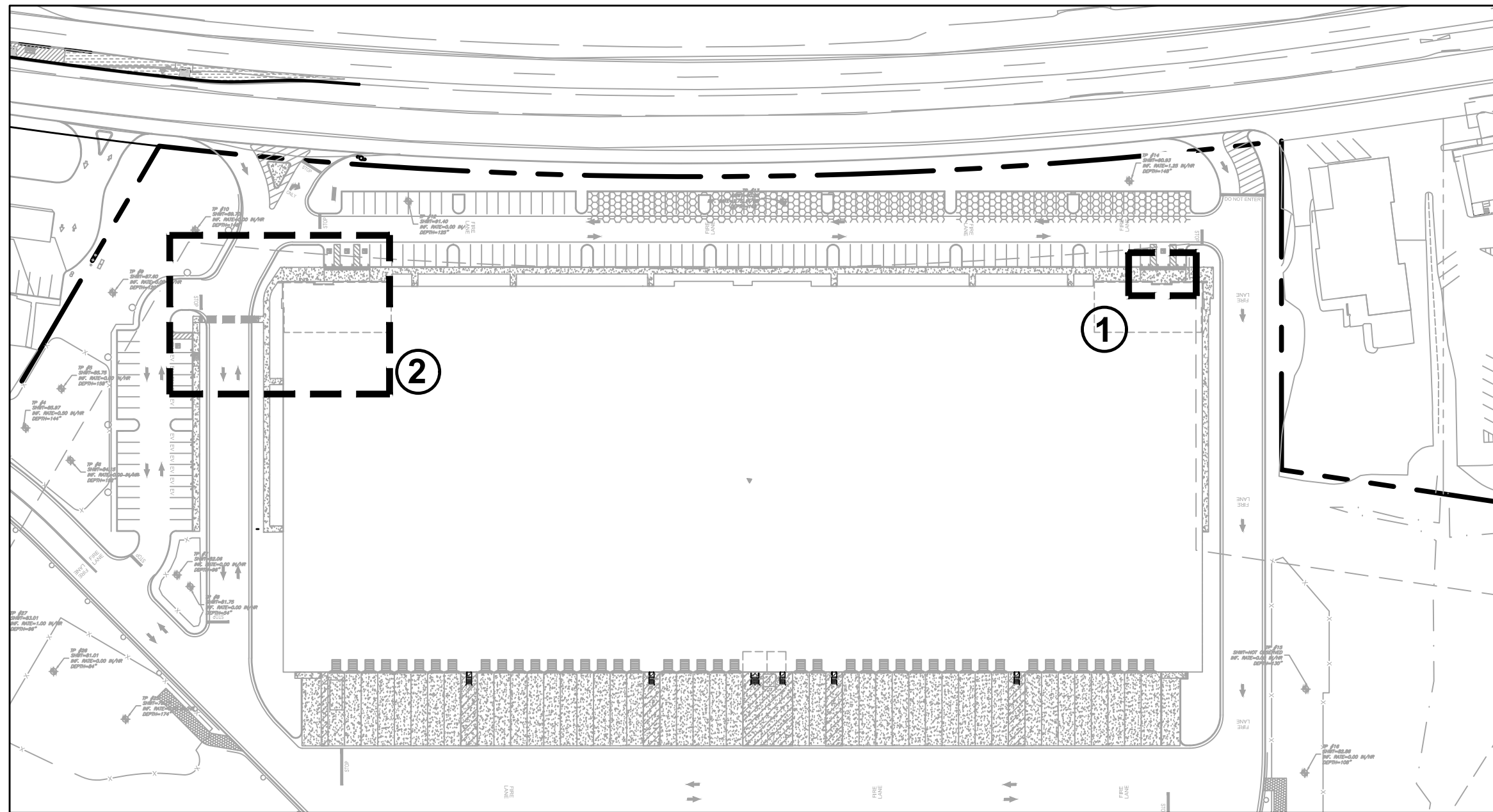
FOR

BLOCK 224 - LOTS 2, 5, 6 & 87

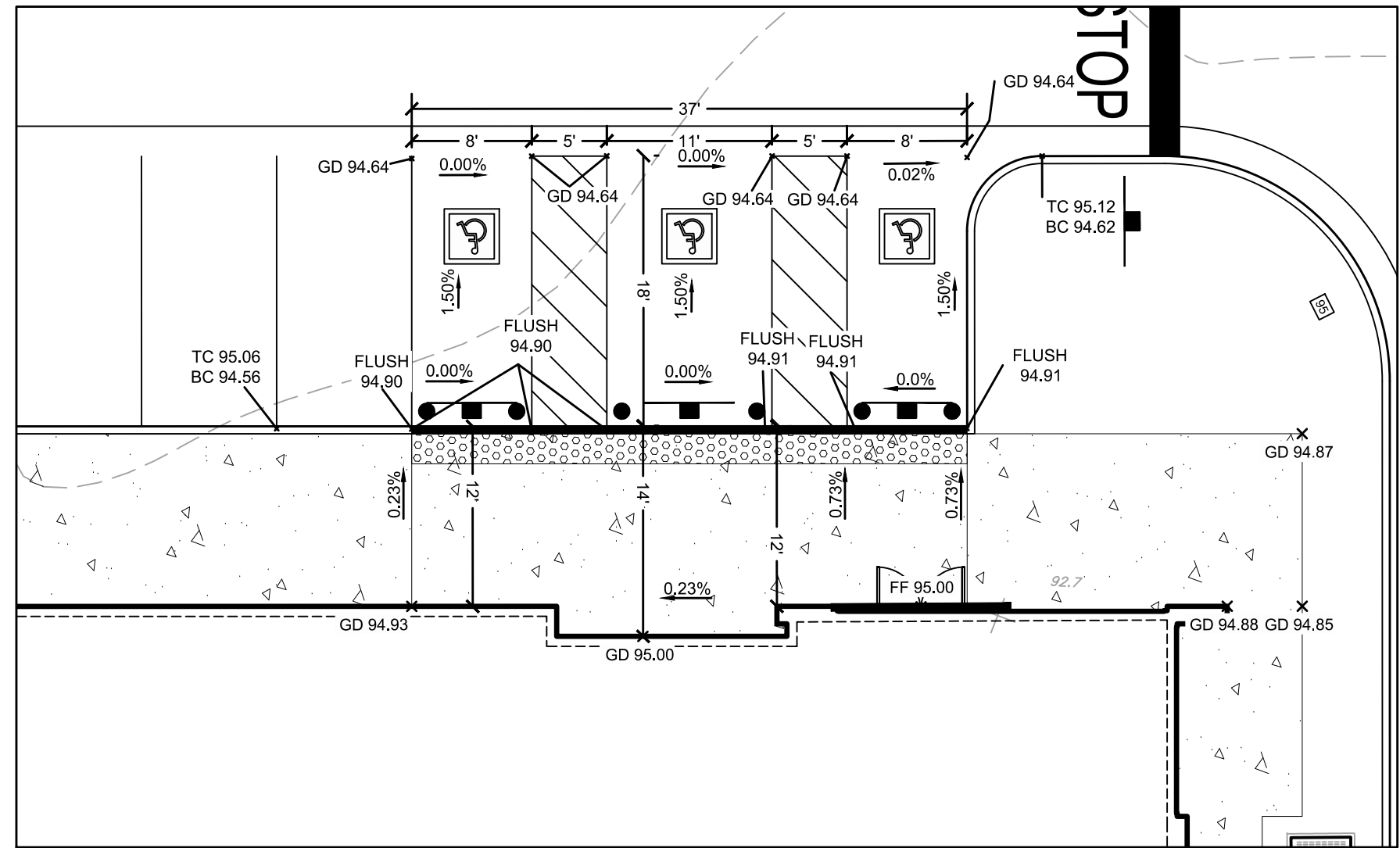
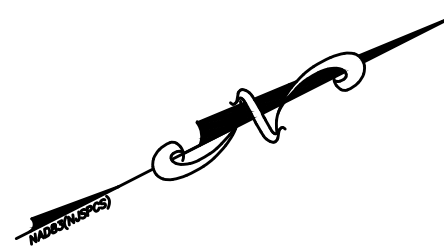
TOWNSHIP OF NORTH BRUNSWICK

MIDDLESEX COUNTY

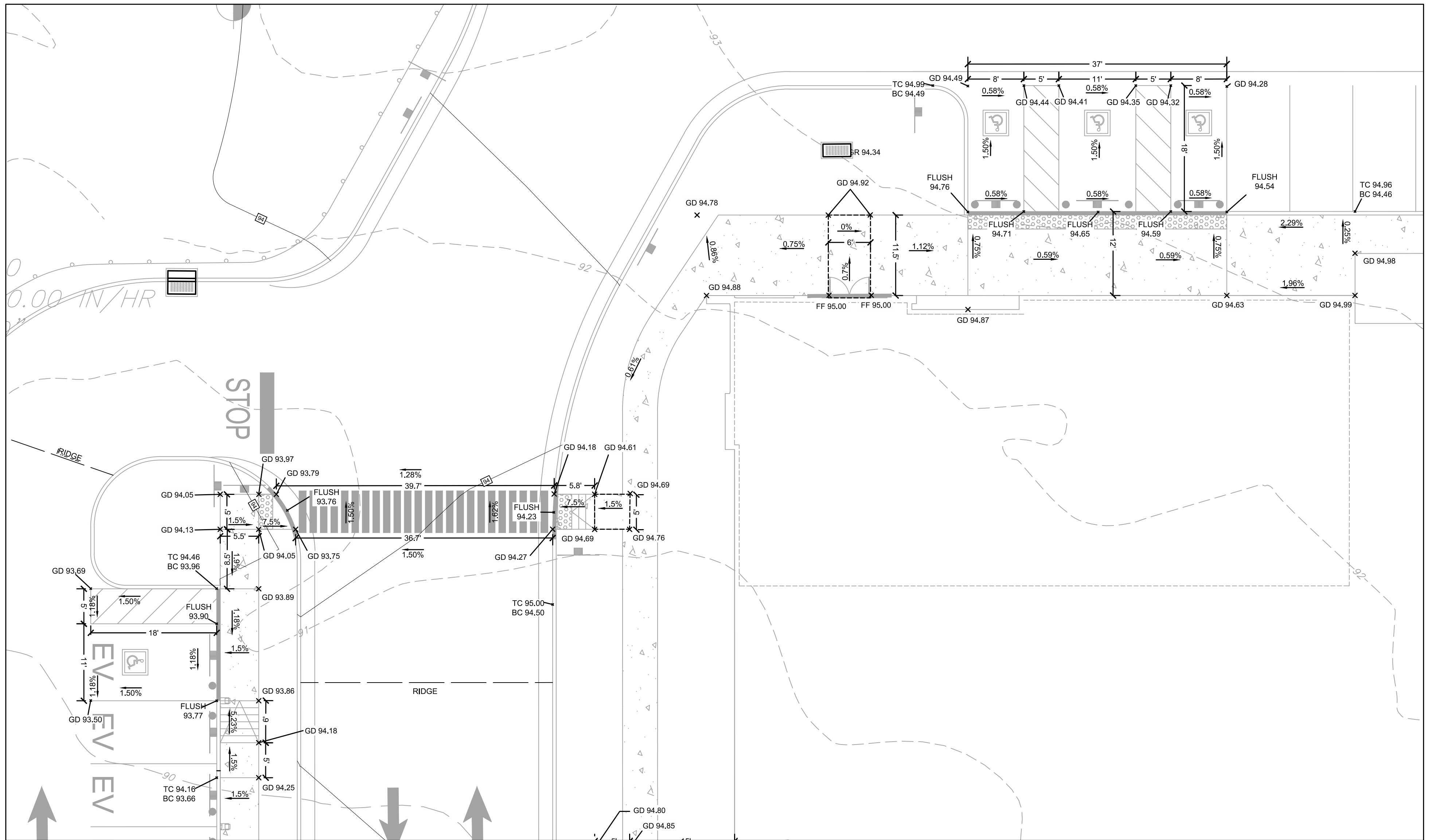
NEW JERSEY



KEY MAP
SCALE: 1" = 100'



ACCESSIBLE GRADING AREA #1
SCALE: 1" = 10'



ACCESSIBLE GRADING AREA #2
SCALE: 1" = 10'

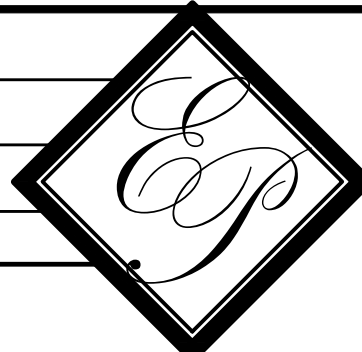
NOTES:
1. SEE SHEET N-1 FOR NOTES AND LEGEND.
2. SEE SHEET GD-1 FOR OVERALL GRADING.

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

1	REVISED PER AGENCY REVIEW LETTERS	12/15/21	JPB		
NO.	REVISIONS	DATE	BY		

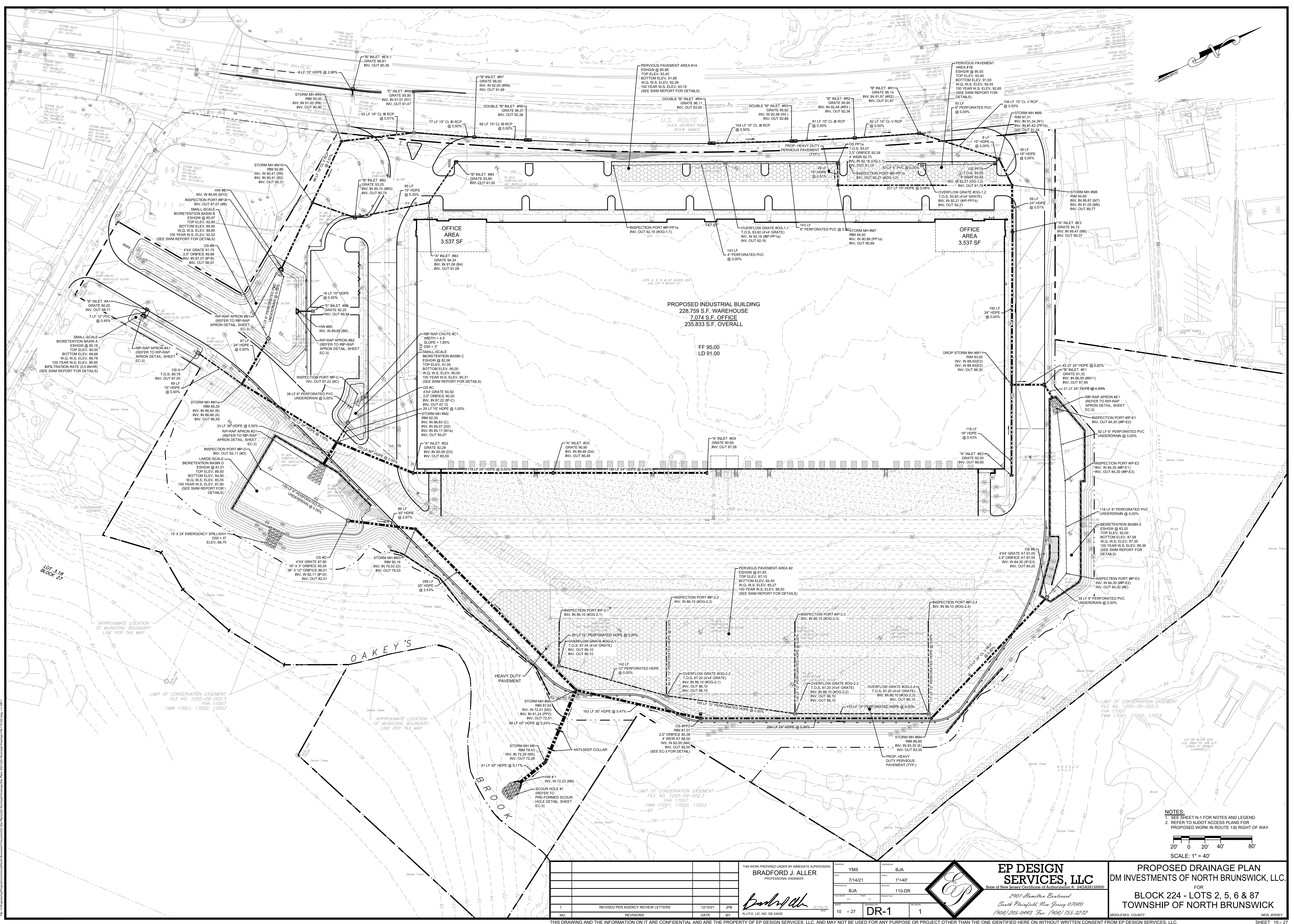
THIS WORK PREPARED UNDER MY IMMEDIATE SUPERVISION
BRADFORD J. ALLER
PROFESSIONAL ENGINEER
Bradford J. Aller
N.J.P.E. LIC. NO. GE 43435

DRAWN BY: YMS
CHECKED BY: BJA
DATE: 7/14/21
AS NOTED
APPROVED BY: BJA
PROJECT NO.: 109-GD
SHEET: 9 OF 27
GD-2
REVISION: 1



EP DESIGN SERVICES, LLC
State of New Jersey Certificate of Authorization #: 24GA28126500
2901 Hamilton Boulevard
South Plainfield, New Jersey 07080
(908) 205-0443 Fax: (908) 755-3272

PROPOSED ADA GRADING PLAN
DM INVESTMENTS OF NORTH BRUNSWICK, LLC.
FOR
BLOCK 224 - LOTS 2, 5, 6 & 87
TOWNSHIP OF NORTH BRUNSWICK
MIDDLESEX COUNTY NEW JERSEY



NOTES:
1. SEE SHEET N-1 FOR NOTES AND LEGEND.
2. REFER TO NJDOT ACCESS PLANS FOR PROPOSED WORK IN ROUTE 130 RIGHT OF WAY.

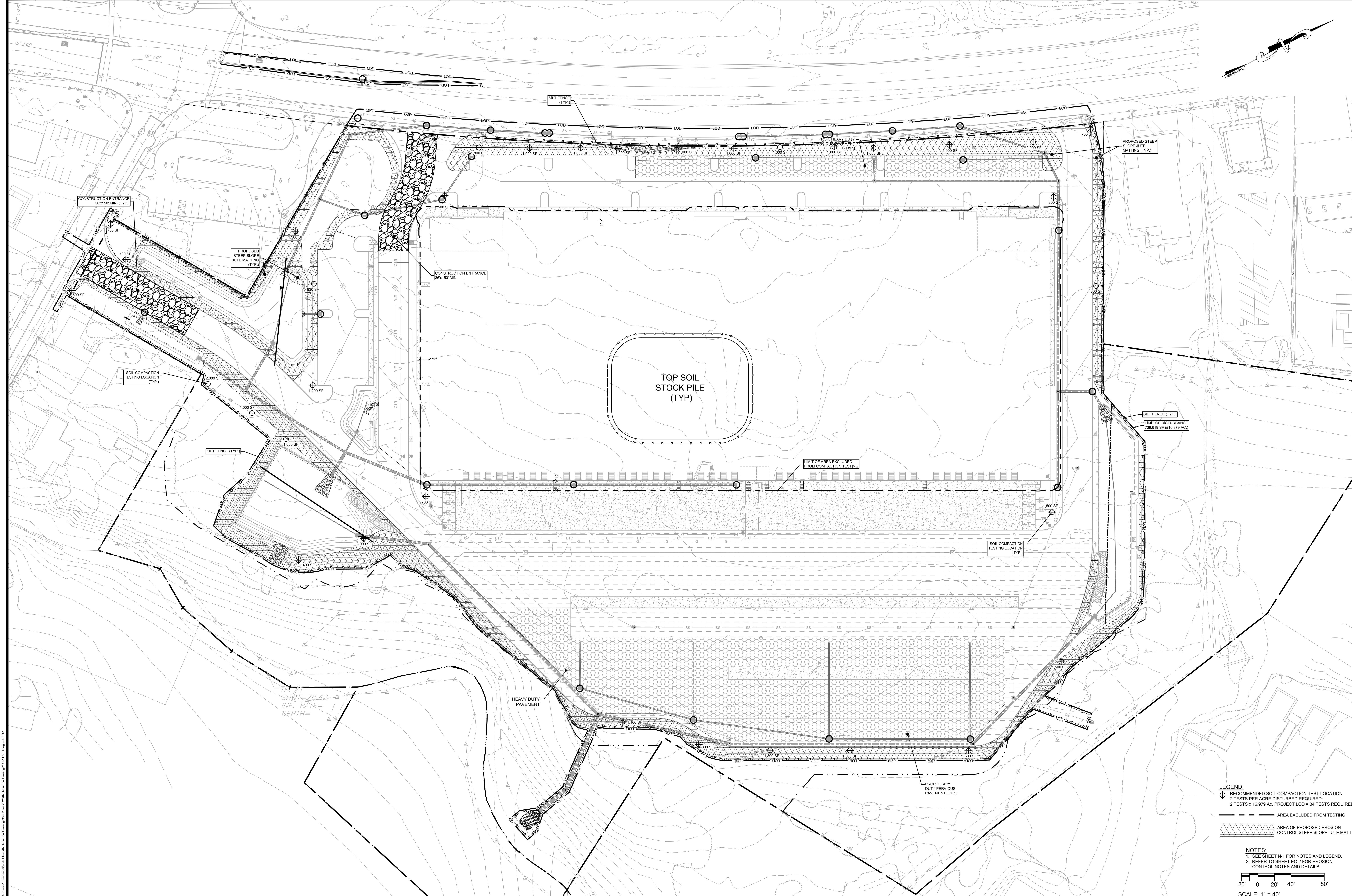
20' 0 20' 40' 80'
SCALE: 1" = 40'

THIS WORK PREPARED UNDER MY IMMEDIATE SUPERVISION BRADFORD J. ALLER PROFESSIONAL ENGINEER		DESIGNED BY: YMS CHECKED BY: BJA DATE: 7/14/21 APPROVED BY: BJA DATE: 7/14/21	DECIDED BY: BJA DATE: 7/14/21 REVISION: 110-DR		EP DESIGN SERVICES, LLC State of New Jersey Certificate of Authorization # 24QA28126500 2901 Hamilton Boulevard South Plainfield, New Jersey 07080 (908) 205-0443 Fax: (908) 755-3272	PROPOSED DRAINAGE PLAN DM INVESTMENTS OF NORTH BRUNSWICK, LLC. FOR BLOCK 224 - LOTS 2, 5, 6 & 87 TOWNSHIP OF NORTH BRUNSWICK MIDDLESEX COUNTY
1 NO. REVISIONS 12/15/21 DATE		1 NO. REVISIONS 12/15/21 DATE				

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LEGEND:

- ⊕ RECOMMENDED SOIL COMPACTION TEST LOCATION
2 TESTS PER ACRE DISTURBED REQUIRED
2 TESTS x 16.979 Ac. PROJECT LOD = 34 TESTS REQUIRED
- AREA EXCLUDED FROM TESTING
- [Hatched Box] AREA OF PROPOSED EROSION CONTROL STEEP SLOPE JUTE MATTING

NOTES:

- SEE SHEET N-1 FOR NOTES AND LEGEND.
- REFER TO SHEET EC-2 FOR EROSION CONTROL NOTES AND DETAILS.

20' 0 20' 40' 80'

SCALE: 1" = 40'

TOTAL AREA OF DISTURBANCE:
747,134 SF. (±17.152 Ac.)

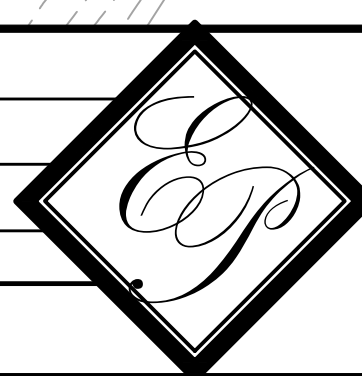
1	REVISED PER AGENCY REVIEW LETTERS	12/15/21	JPB		
NO.	REVISIONS	DATE	BY		

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BRADFORD J. ALLER
PROFESSIONAL ENGINEER

Bradford J. Aller 12/15/21

N.J.P.E. LIC. NO. GE 43435

DESIGNED BY	YMS	CHECKED BY	BJA
DATE	7/14/21	SCALE	1"=40'
APPROVED BY	BJA	PROJECT NO.	111-117-EC
SHEET	11	OF	27
PROJECT	EC-1	EDITION	1



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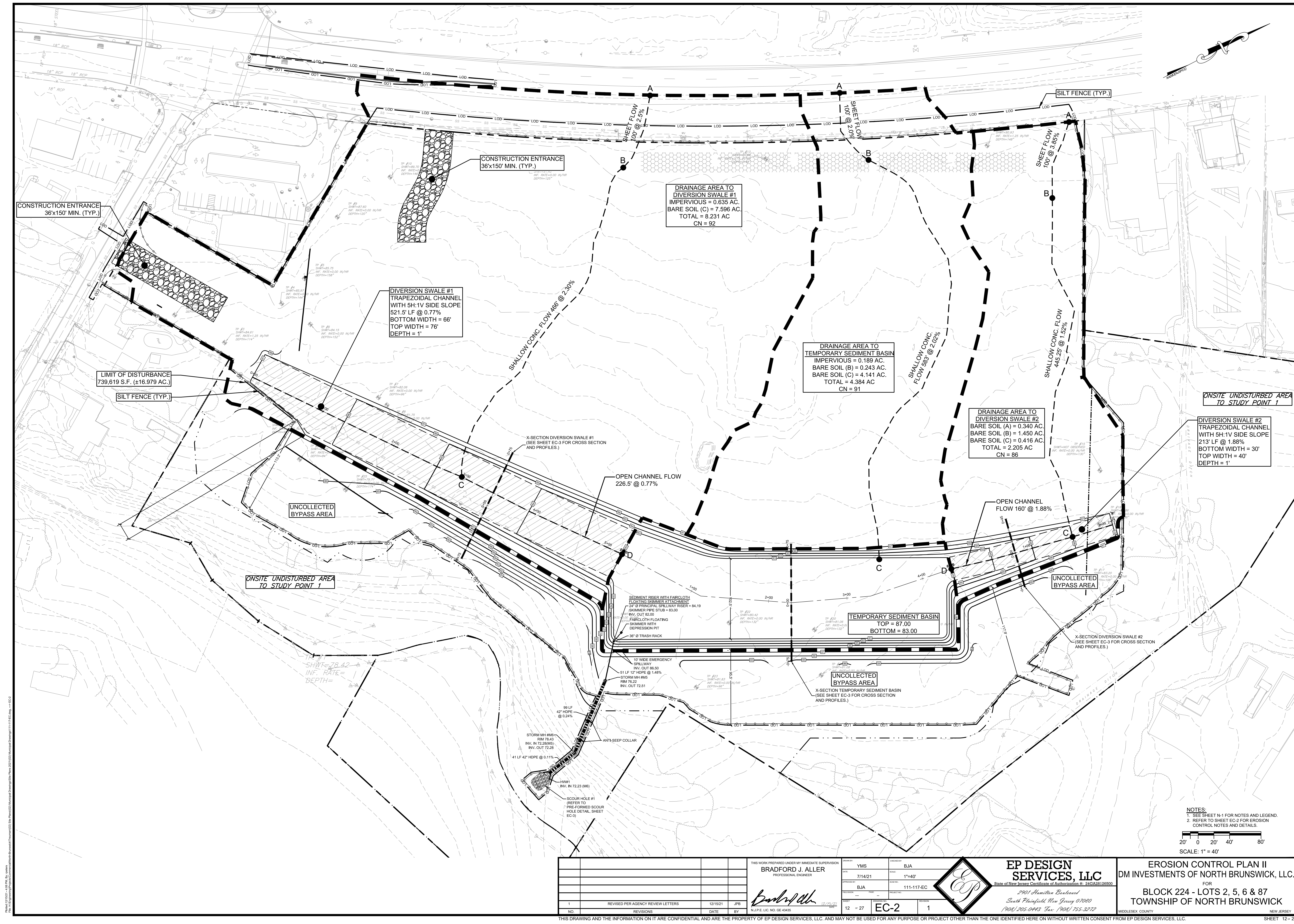
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EROSION CONTROL PLAN I
DM INVESTMENTS OF NORTH BRUNSWICK, LLC.

FOR
BLOCK 224 - LOTS 2, 5, 6 & 87
TOWNSHIP OF NORTH BRUNSWICK

MIDDLESEX COUNTY NEW JERSEY

Plotted: 12/15/21, 4:28 PM, BJA
The Engineer's professional seal and signature are required for this drawing to be used for any purpose or project other than the one identified here on without written consent from EP Design Services, LLC.



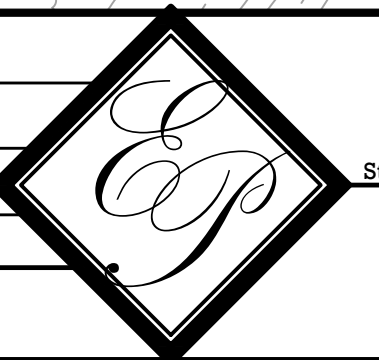
NOTES:
1. SEE SHEET N-1 FOR NOTES AND LEGEND.
2. REFER TO SHEET EC-2 FOR EROSION CONTROL NOTES AND DETAILS.

20' 0 20' 40' 80'
SCALE: 1" = 40'

1	REVISED PER AGENCY REVIEW LETTERS	12/15/21	JPB		
NO.	REVISIONS	DATE	BY		

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BRADFORD J. ALLER
PROFESSIONAL ENGINEER
Bradford J. Aller
N.J.P.E. LIC. NO. GE 43435

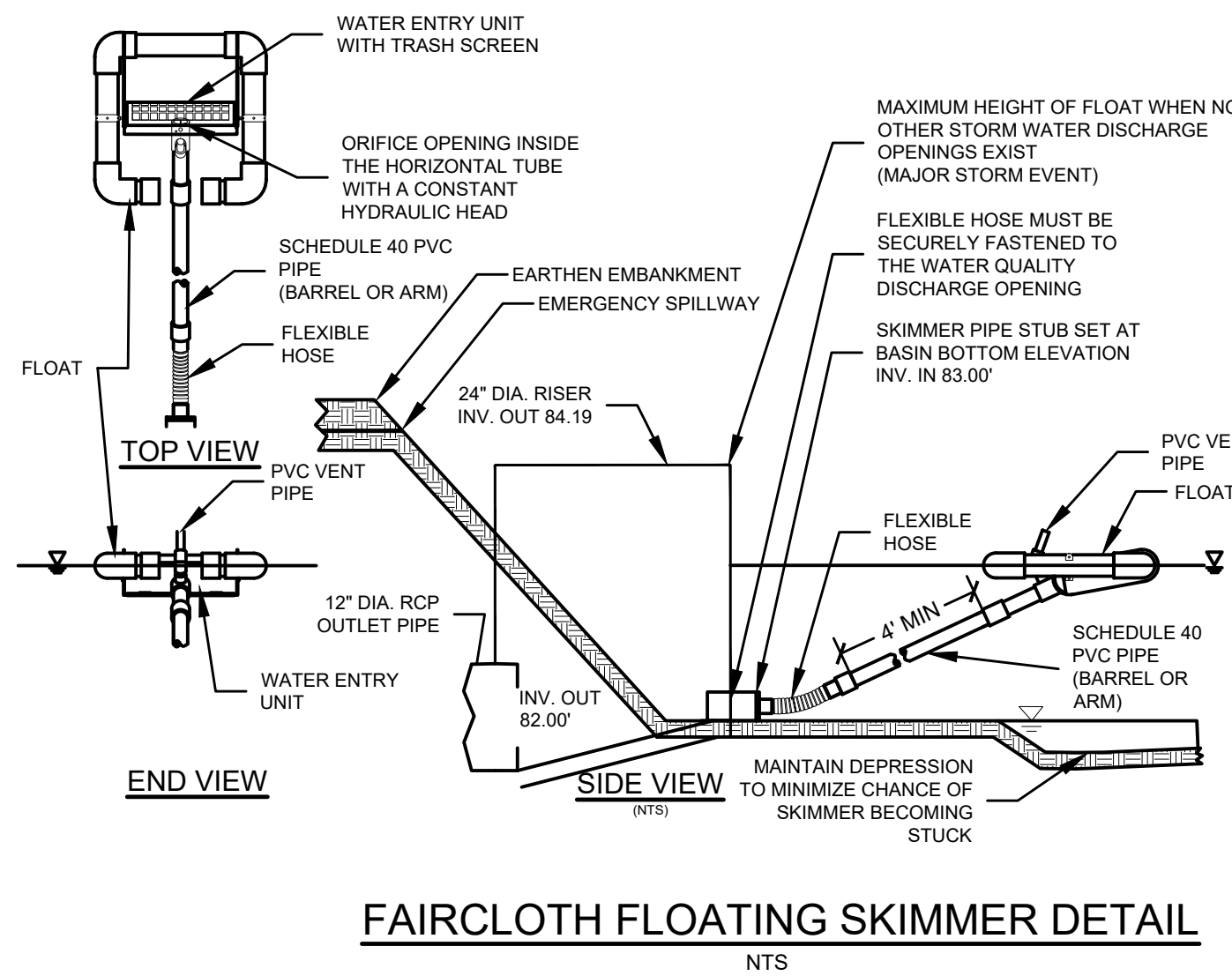
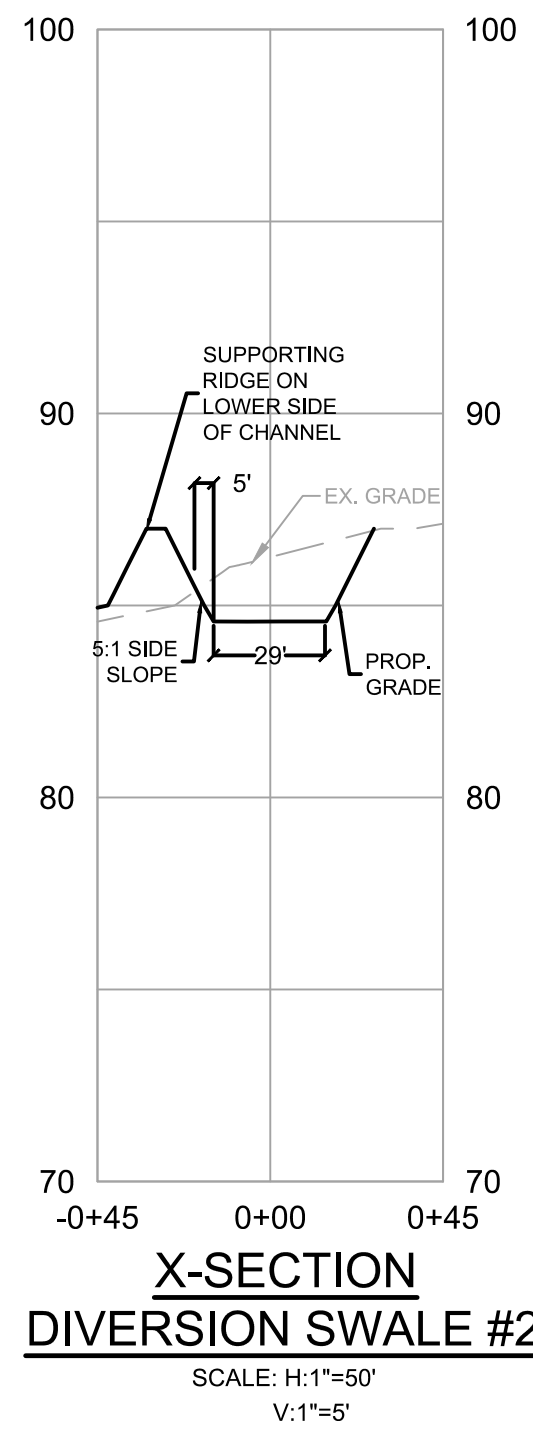
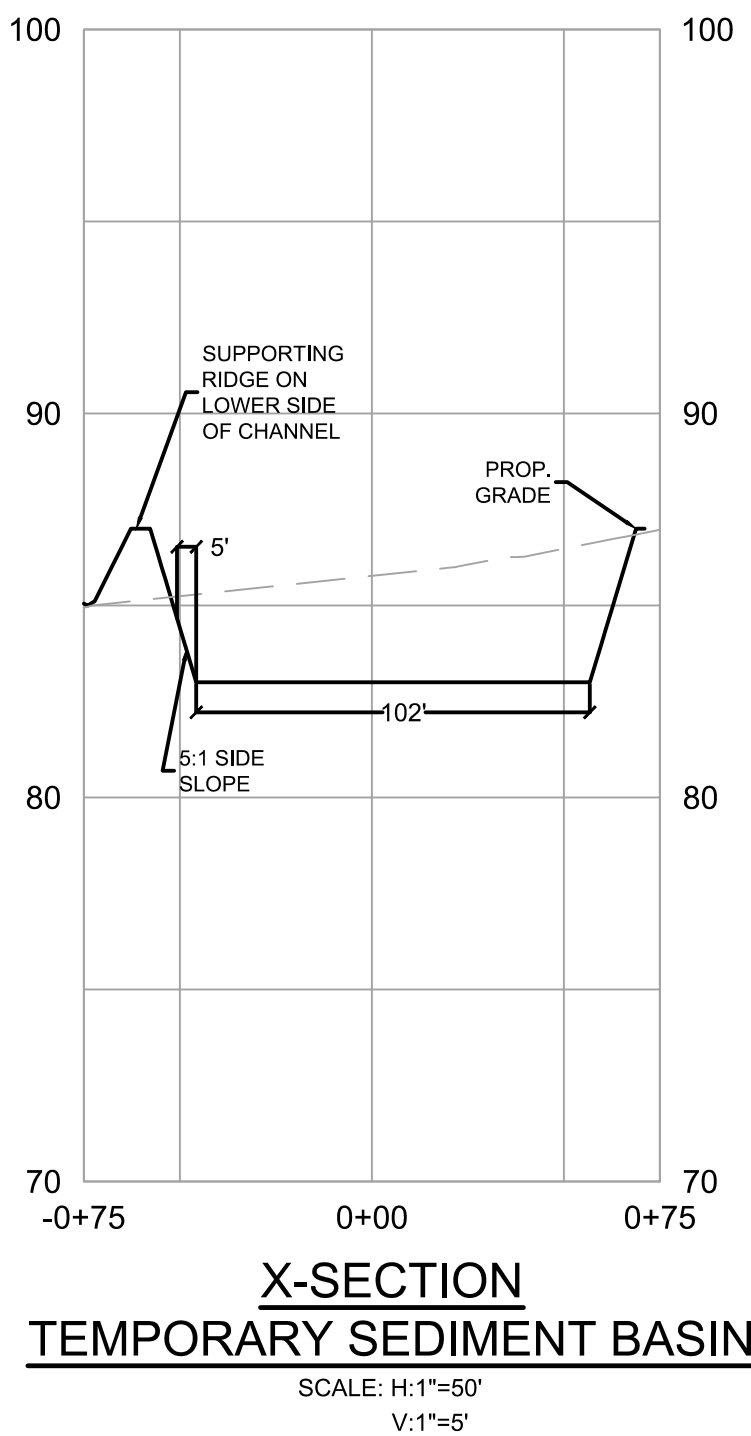
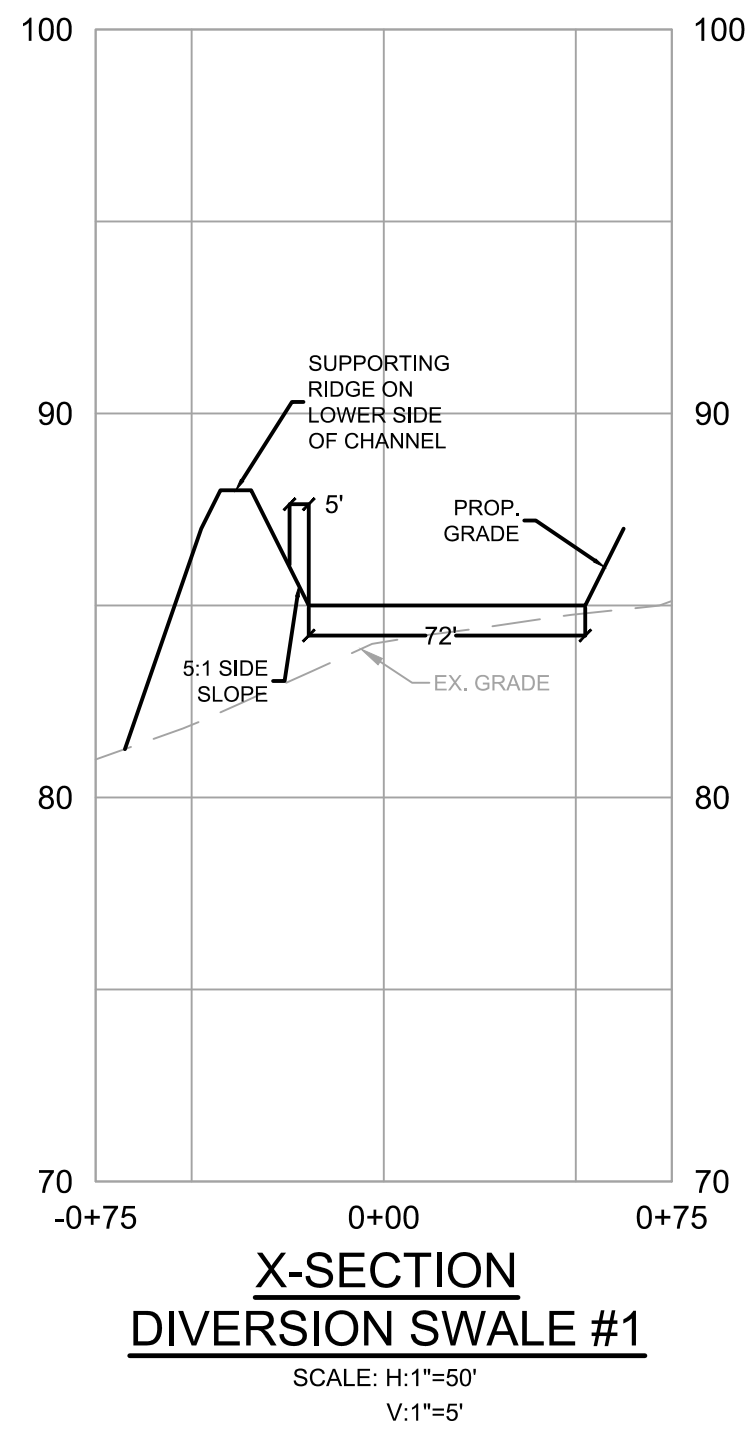
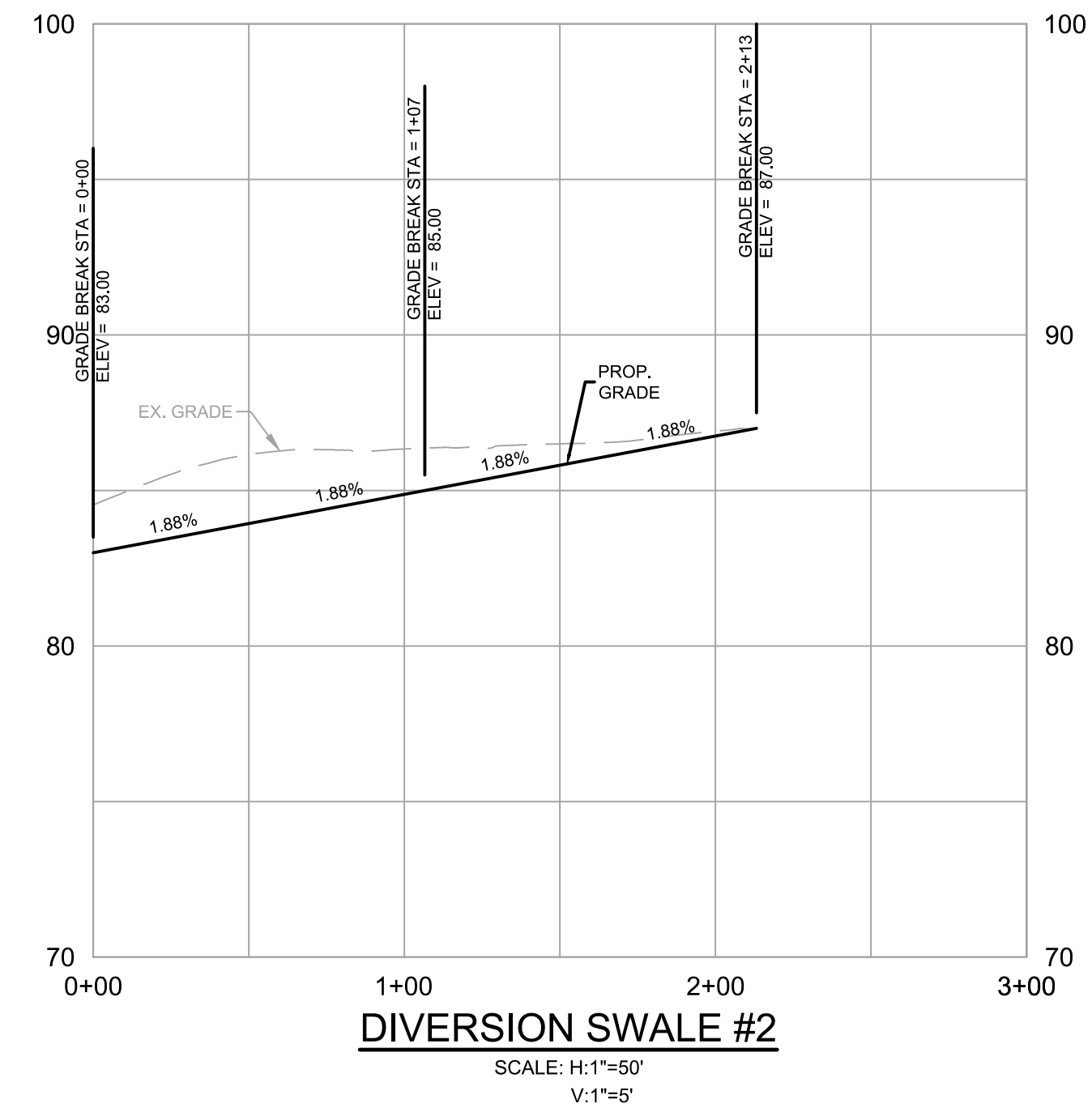
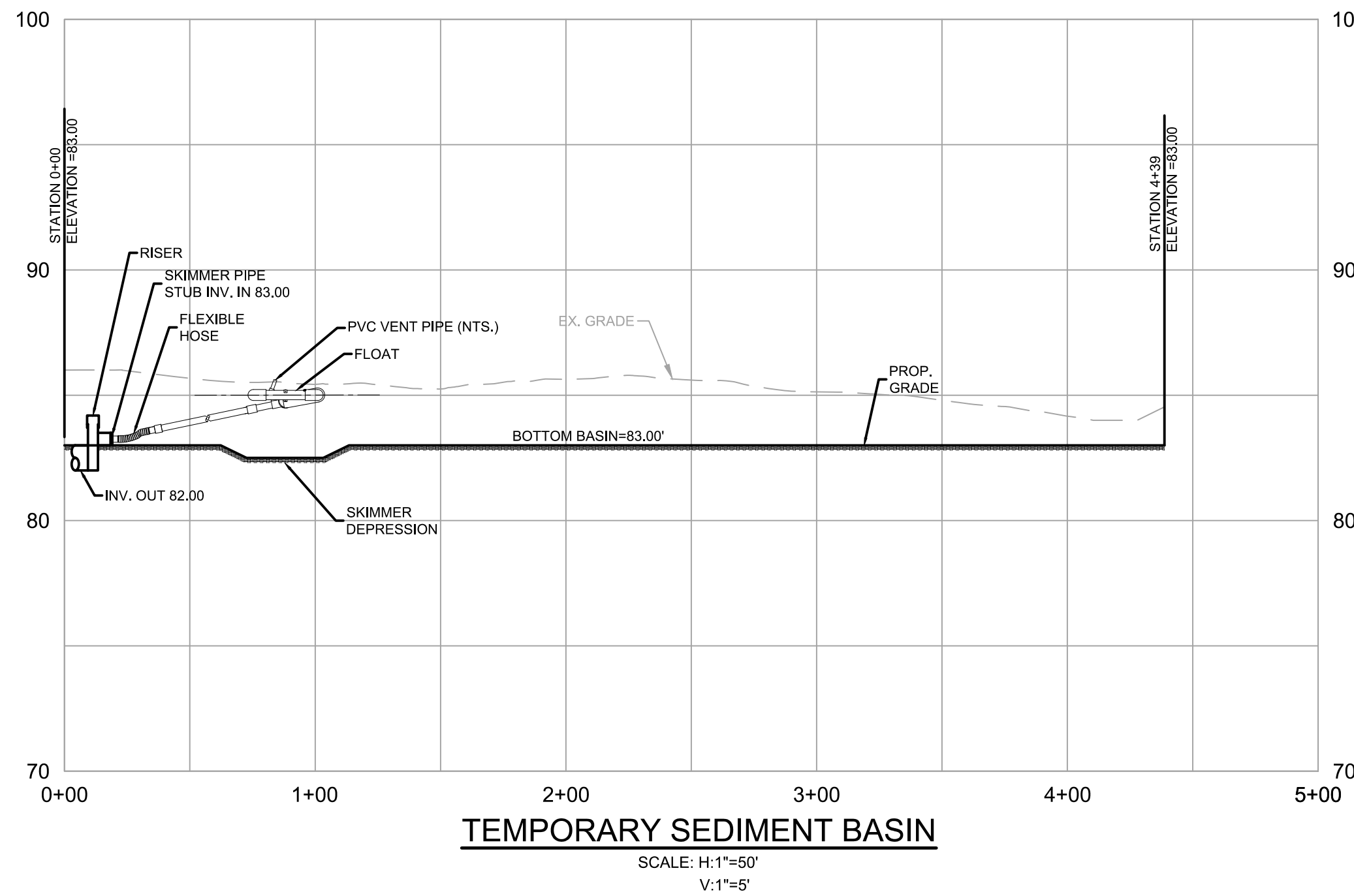
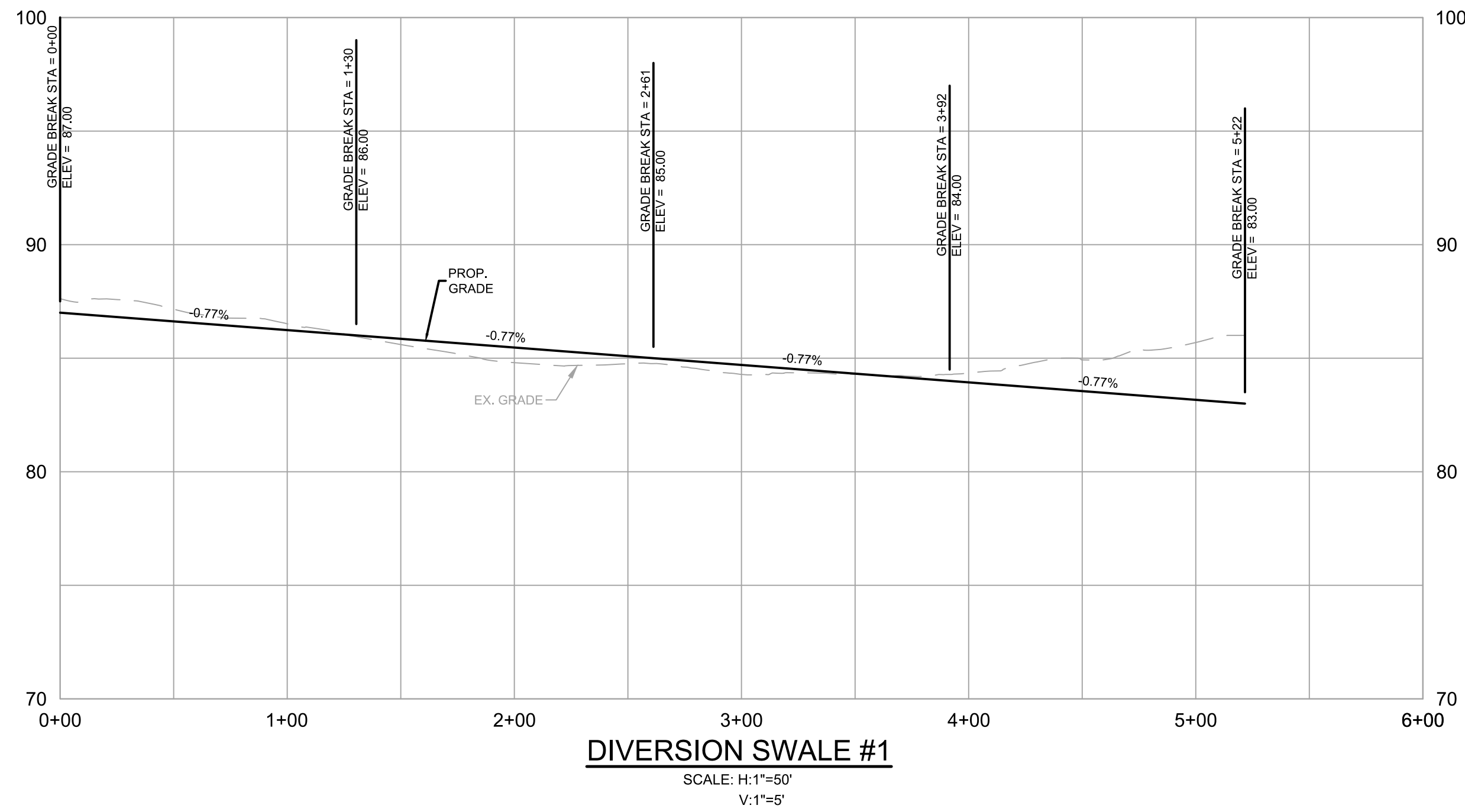
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DATE	7/14/21	SCALE	1"=40'
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SHEET	12	OF	27
PROJECT		EC-2	
EDITION		1	



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EROSION CONTROL PLAN II
DM INVESTMENTS OF NORTH BRUNSWICK, LLC.
FOR
BLOCK 224 - LOTS 2, 5, 6 & 87
TOWNSHIP OF NORTH BRUNSWICK
MIDDLESEX COUNTY, NEW JERSEY

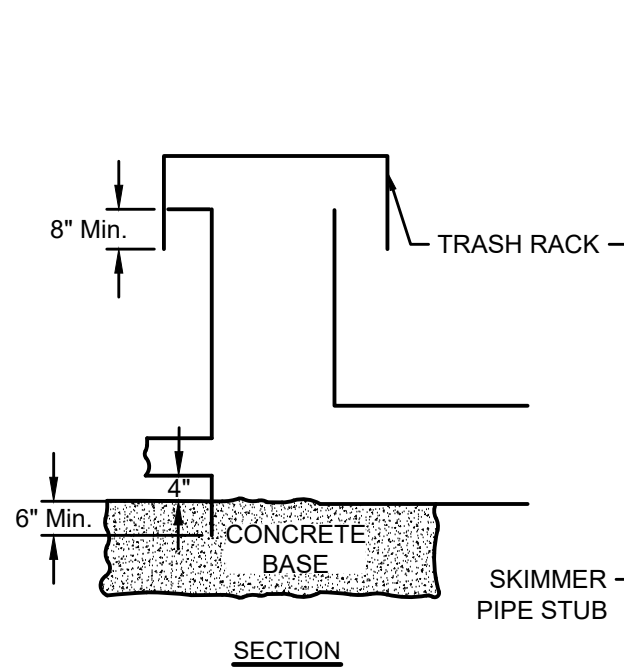
Plotted: 12/15/21, 4:28 PM, by: jpb
The Engineer's professional seal and stamp shall be placed on this drawing in accordance with the provisions of the New Jersey State Board of Professional Engineers and Land Surveyors, Inc. (NJPELS) and the National Council of Engineering and Surveying (NCES).



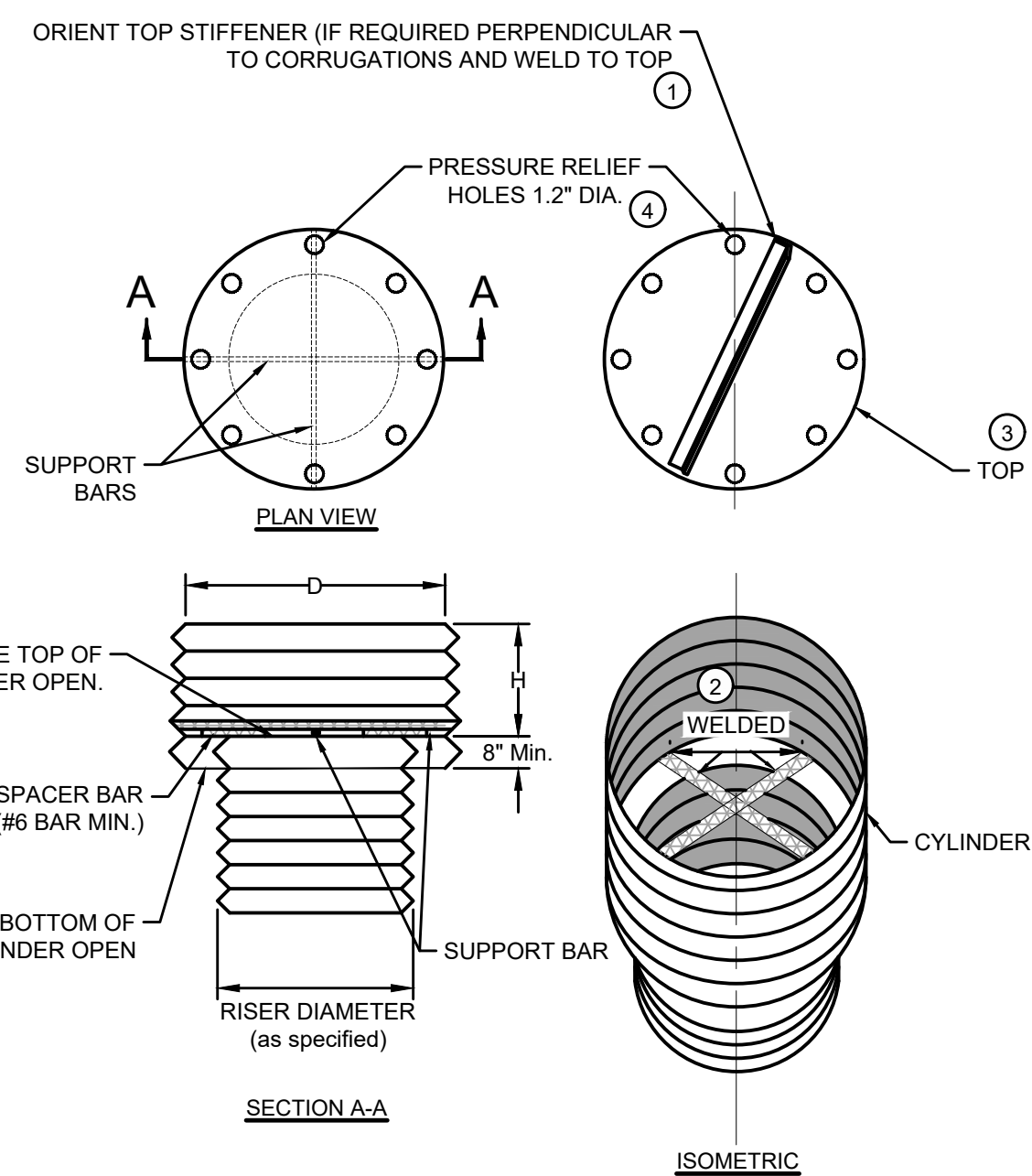
GENERAL MAINTENANCE NOTES FOR FAIRCLOTH SKIMMER

- IF THE SKIMMER IS CLOGGED WITH TRASH AND THERE IS WATER IN THE BASIN, USUALLY A FEW JERKS ON THE ROPE TO MAKE THE SKIMMER BOB UP AND DOWN WILL DISLODGE THE DEBRIS AND RESTORE FLOW. IF THIS DOES NOT WORK PULL THE SKIMMER OVER TO THE SIDE IT'S EASIEST TO DO WHEN THE BASIN IS PARTIALLY FULL) AND REMOVE THE DEBRIS. ALSO CHECK THE ORFICE INSIDE THE SKIMMER TO SEE IF IT IS CLOGGED; IF SO REMOVE THE DEBRIS.
- IF SEDIMENT ACCUMULATES TO THE POINT THE SKIMMER CANNOT SETTLE LOW ENOUGH TO DRAIN THE ENTIRE BASIN PULL THE SKIMMER OVER TO ONE SIDE AND EXCAVATE THE SEDIMENT WITH A BACKHOE.
- IF THE SKIMMER IS CLOGGED DESPITE REMOVING DEBRIS AND IT APPEARS THAT EITHER THE BARREL BETWEEN THE ORFICE AND THE FLEXIBLE JOINT OR THE PIPE THROUGH THE DAM IS CLOGGED TAKE THE FOLLOWING STEPS TO CLEAR THE BLOCKAGE (SEDIMENT WILL SOMETIMES ACCUMULATE IN THE PIPE).
 - PULL THE SKIMMER OVER TO THE SIDE.
 - REMOVE THE PIN AND OPEN THE DOOR TO ACCESS THE ORFICE.
 - REMOVE THE ORFICE PLUG OR CAP.
 - RAISE THE INLET AS HIGH AS PRACTICAL.
 - FILL THE BARREL WITH WATER (USE A BUCKET AND FUNNEL OR A PUMP) TO REMOVE THE CLOG USING THE WATER AND PRESSURE.
 - AFTER THE OBSTRUCTION IS REMOVED CONTINUE POURING WATER INTO THE BARREL TO FLUSH OUT ACCUMULATED DEBRIS AND SEDIMENT TO PREVENT FUTURE CLOGGING.
 - A PLUMBERS SNAKE CAN BE USED BUT FLUSHING OUT THE SEDIMENT AND DEBRIS ACCUMULATION IS RECOMMENDED FIRST.
- PROVISIONS MUST BE MADE TO PREVENT THE FLOATING SKIMMER FROM RESTING ON THE BASIN FLOOR WHEN THE POOL HAS BEEN COMPLETELY DRAINED. A SHALLOW PIT WILL BE EXCAVATED UNDER THE SKIMMER TO ACCOMMODATE SEDIMENT THAT REACHES THE OUTLET END AND SETTLES AROUND THE SKIMMER. THE PIT ALLOWS THE SKIMMER TO DRAIN THE ENTIRE VOLUME OF THE BASIN WHILE PREVENTING THE SKIMMER FROM RESTING ON THE BASIN FLOOR WHEN THE BASIN FLOOR HAS BEEN COMPLETELY DRAINED. THE BOTTOM OF THE PIT WILL BE BELOW THE INVERT OF THE OUTLET PIPE THAT THE SKIMMER IS ATTACHED TO AND MAINTAINED REGULARLY THROUGHOUT THE VARIOUS CONSTRUCTION PHASES OF THE PROJECT.

RISER		CYLINDER				MINIMUM TOP	
DIAMETER (IN.)	DIAMETER (IN.)	THICKNESS (GAGE)	Height (H) (IN.)	MINIMUM SIZE SUPPORT BAR	THICKNESS	DIAMETER (IN.)	THICKNESS
24	36	16	13	#6 REBAR OR 1/2" x 8" ANGLE	16 GA (CORRUGATED) 14 GA (FLAT)		



- NOTES:**
- SEE TABLE BELOW FOR DIMENSIONS OF CYLINDER SUPPORT BARS, TOP PLATE, AND TOP STIFFENER.
 - FIRMLY ATTACH THE ANTI-VORTEX CYLINDER TO THE TOP OF THE RISER BY WELDING OR OTHER APPROVED MEANS.
 - CORRUGATED METAL OR 1/4" INCH STEEL PLATE CYLINDER AND TOP.
 - PRESSURE RELIEF HOLES MAY BE OMITTED IF ENDS OF CORRUGATIONS ARE LEFT FULLY OPEN WHEN THE TOP IS ATTACHED.
 - ALTERNATE ANTI-VORTEX DEVICE CONFIGURATIONS MAY BE UTILIZED UPON APPROVAL OF THE ENGINEER.

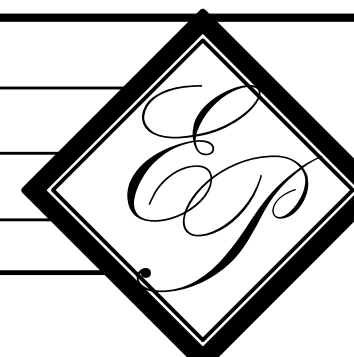


TYPICAL CYLINDER TRASH RACK DETAIL
NTS

1	REVISED PER AGENCY REVIEW LETTERS	12/15/21	JPB
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BRADFORD J. ALLER
PROFESSIONAL ENGINEER
Bradford J. Aller
N.J.P.E. LIC. NO. GE 43435

DESIGNED BY	YMS	CHECKED BY	BJA
DATE	7/14/21	SCALE	1"=50'
APPROVED BY	BJA	DATE	11/11/21-EC
SHEET	13	OF	27
PROJECT NO.	EC-3	REVISION NO.	1



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State of New Jersey Certificate of Authorization #: 24GA29126800
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EROSION CONTROL PLAN III
DM INVESTMENTS OF NORTH BRUNSWICK, LLC.
FOR
BLOCK 224 - LOTS 2, 5, 6 & 87
TOWNSHIP OF NORTH BRUNSWICK
MIDDLESEX COUNTY
NEW JERSEY

EROSION AND SEDIMENT CONTROL NOTES

1. THE FREEHOLD SOIL DISTRICT SHALL BE NOTIFIED FORTY- EIGHT (48) HOURS IN ADVANCE OF ANY LAND DISTURBING ACTIVITY.
2. ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES ARE TO BE INSTALLED PRIOR TO ANY MAJOR SOIL DISTURBANCE, OR IN THEIR PROPER SEQUENCE, AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED.
3. ANY CHANGES TO THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLANS WILL REQUIRE THE SUBMISSION OF REVISED SOIL EROSION AND SEDIMENT CONTROL PLANS TO THE DISTRICT FOR RE-CERTIFICATION. THE REVISED PLANS MUST MEET ALL CURRENT STATE SOIL EROSION AND SEDIMENT CONTROL STANDARDS.
4. N.J.S.A. 4:24-39 et. SEQ. REQUIRES THAT NO CERTIFICATES OF OCCUPANCY BE ISSUED BEFORE THE DISTRICT DETERMINES THAT A PROJECT OR PORTION THEREOF IS IN FULL COMPLIANCE WITH THE CERTIFIED PLAN AND STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL. IN NEW JERSEY AND A REPORT OF COMPLIANCE HAS BEEN ISSUED. UPON WRITTEN REQUEST FROM THE APPLICANT, THE DISTRICT MAY ISSUE A REPORT OF COMPLIANCE WITH CONDITIONS ON A LOT-BY- LOT OR SECTION-BY-SECTION BASIS, PROVIDED THAT THE PROJECT OR PORTION THEREOF IS IN SATISFACTORY COMPLIANCE WITH THE SEQUENCE OF DEVELOPMENT AND TEMPORARY MEASURES FOR SOIL EROSION AND SEDIMENT CONTROL HAVE BEEN IMPLEMENTED, INCLUDING PROVISIONS FOR STABILIZATION AND SITE WORK.
5. ANY DISTURBED AREAS THAT WILL BE LEFT EXPOSED MORE THAN SIXTY (60) DAYS, AND NOT SUBJECT TO CONSTRUCTION TRAFFIC, WILL IMMEDIATELY RECEIVE A TEMPORARY SEEDING. IF THE SEASON PREVENTS THE ESTABLISHMENT OF TEMPORARY COVER, THE DISTURBED AREAS WILL BE MULCHED WITH STRAW, OR EQUIVALENT MATERIAL, AT A RATE OF 2 TO 2-1/2 TONS PER ACRE, ACCORDING TO THE STANDARD FOR STABILIZATION WITH MULCH ONLY.
6. IMMEDIATELY FOLLOWING INITIAL DISTURBANCE OR ROUGH GRADING, ALL CRITICAL AREAS SUBJECT TO EROSION (i.e. SOIL STOCKPILE, STEEP SLOPES AND ROADWAY EMBANKMENTS) WILL RECEIVE TEMPORARY SEEDING IN COMBINATION WITH STRAW MULCH OR A SUITABLE EQUIVALENT, AND A MULCH ANCHOR IN ACCORDANCE WITH STATE STANDARDS.
7. A SUB-BASE COURSE WILL BE APPLIED IMMEDIATELY FOLLOWING ROUGH GRADING AND INSTALLATION OF IMPROVEMENTS TO STABILIZE STREETS, ROADS, DRIVEWAYS, AND PARKING AREAS. IN AREAS WHERE NO UTILITIES ARE PRESENT, THE SUB-BASE SHALL BE INSTALLED WITHIN FIFTEEN (15) DAYS OF PRELIMINARY GRADING.
8. THE STANDARD FOR STABILIZED CONSTRUCTION ACCESS REQUIRES THE INSTALLATION OF A PAD OF CLEAN CRUSHED STONE AT POINTS WHERE TRAFFIC WILL BE ACCESSING THE CONSTRUCTION SITE. AFTER INTERIOR ROADWAYS ARE PAVED, INDIVIDUAL LOTS REQUIRE A STABILIZED CONSTRUCTION ENTRANCE CONSISTING OF ONE INCH TO TWO INCH (1"-2") STONE FOR A MINIMUM LENGTH OF TEN (10) FEET EQUAL TO THE LOT ENTRANCE WIDTH. ALL OTHER ACCESS POINTS SHALL BE BLOCKED OFF.
9. ALL SOIL WASHED, DROPPED, SPILLED, OR TRACKED OUTSIDE THE LIMIT OF DISTURBANCE OR ONTO PUBLIC RIGHT-OF-WAYS WILL BE REMOVED IMMEDIATELY.
10. PERMANENT VEGETATION IS TO BE SEEDDED OR SODDED ON ALL EXPOSED AREAS WITHIN TEN (10) DAYS AFTER FINAL GRADING.
11. AT THE TIME THAT SITE PREPARATION FOR PERMANENT VEGETATIVE STABILIZATION IS GOING TO BE ACCOMPLISHED, ANY SOIL THAT WILL NOT PROVIDE SUFFICIENT SUPPORT AND STABILIZATION TO THE PERMANENT VEGETATION SHALL BE REMOVED OR TREATED IN SUCH A WAY THAT IT WILL PERMANENTLY ADJUST THE SOIL CONDITIONS AND RENDER IT SUITABLE FOR VEGETATIVE GROUND COVER. IF THE REMOVAL OR TREATMENT OF SOIL WILL NOT PROVIDE SUITABLE CONDITIONS, NON-VEGETATIVE MEANS OF PERMANENT GROUND STABILIZATION WILL HAVE TO BE EMPLOYED.
12. IN ACCORDANCE WITH THE STANDARD FOR MANAGEMENT OF HIGH ACID PRODUCTION SOILS, ANY SOIL HAVING A pH OF 4 OR LESS OR CONTAINING IRON SULPHIDES SHALL BE ULTIMATELY PLACED OR BURIED WITH LIMESTONE APPLIED AT THE RATE OF 10 TONS/ACRE, (OR 480 LBS/1,000 SQ. FT. OF SURFACE AREA) AND COVERED WITH A MINIMUM OF 12" OF SETTLED SOIL WITH A pH OF 5 OR MORE, OR 24" WHERE TREES OR SHRUBS ARE TO BE PLANTED.
13. CONDUIT OUTLET PROTECTION MUST BE INSTALLED AT ALL REQUIRED OUTFALLS PRIOR TO THE DRAINAGE SYSTEM BECOMING OPERATIONAL.
14. UNFILTERED DEWATERING IS NOT PERMITTED. NECESSARY PRECAUTIONS MUST BE TAKEN DURING ALL DEWATERING OPERATIONS TO MINIMIZE SEDIMENT TRANSFER. ANY DEWATERING METHODS USED MUST BE IN ACCORDANCE WITH THE STANDARD FOR DEWATERING.
15. SHOULD THE CONTROL OF DUST AT THE SITE BE NECESSARY, THE SITE WILL BE SPRINKLED UNTIL THE SURFACE IS WET. TEMPORARY VEGETATIVE COVER SHALL BE ESTABLISHED OR MULCH SHALL BE APPLIED AS REQUIRED BY THE STANDARD FOR DUST CONTROL.
16. STOCKPILE AND STAGING LOCATIONS ESTABLISHED IN THE FIELD SHALL BE PLACED WITHIN THE LIMIT OF DISTURBANCE ACCORDING TO THE CERTIFIED PLAN. STAGING AND STOCKPILES NOT LOCATED WITHIN THE LIMIT OF DISTURBANCE WILL REQUIRE CERTIFICATION OF A REVISED SOIL EROSION AND SEDIMENT CONTROL PLAN. CERTIFICATION OF A NEW SOIL EROSION SEDIMENT CONTROL PLAN MAY BE REQUIRED FOR THESE ACTIVITIES IF AN AREA GREATER THAN 5,000 SQUARE FEET IS DISTURBED.
17. ALL SOIL STOCKPILES ARE TO BE TEMPORARILY STABILIZED IN ACCORDANCE WITH THE SOIL EROSION AND SEDIMENT CONTROL NOTE #6.
18. THE PROPERTY OWNER SHALL BE RESPONSIBLE FOR ANY EROSION OR SEDIMENTATION THAT MAY OCCUR BELOW STORMWATER OUTFALLS OR OFFSITE AS A RESULT OF CONSTRUCTION OF THE PROJECT.

GENERAL NOTES

1. PROPERTY OWNER TO BE RESPONSIBLE FOR BASIN MAINTENANCE.
2. DISTURB AS LITTLE AREA AS POSSIBLE WHEN EXCAVATING FOR ANY FOUNDATIONS AND STORING TOPSOIL.
3. PLACE TOPSOIL AND EXCAVATION MATERIAL FROM FOUNDATIONS ON DOWNHILL SIDE OF LOT WHENEVER POSSIBLE TO TRAP RUNOFF FROM SCALPED AREAS.
4. ALL DISTURBED AREAS THAT ARE NOT BEING GRADED, UNDER ACTIVE CONSTRUCTION, OR TO BE PERMANENTLY SEEDDED WITHIN 30 DAYS MUST BE STABILIZED BY TEMPORARY SEEDING OR MULCHING AS PER SPECIFICATIONS BELOW.
5. ALL EXPOSED AREAS WHICH ARE TO BE PERMANENTLY VEGETATED WILL BE SEEDDED WITHIN 10 DAYS OF FINAL GRADING. COMPLETE PERMANENT SEEDING AS PER SPECIFICATIONS BELOW.
6. MULCH SHALL BE PROVIDED FOR TEMPORARY AND PERMANENT SEEDING. UNROTTED SMALL GRAIN STRAW OR SALT HAT WILL BE APPLIED AT THE RATE OF (1-1/2 TO 2) TONS PER ACRE (90-115) POUNDS PER 1000 SQFT. THE EXISTENCE OF VEGETATION SUFFICIENT TO CONTROL SOIL EROSION SHALL BE DEEMED AS COMPLIANCE WITH THIS MULCHING REQUIREMENT.
7. MULCH ANCHORING WILL BE ACCOMPLISHED IMMEDIATELY AFTER MULCHING TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY ONE OF THE METHODS (CRIMPING, LIQUID MULCH BINDERS, NETTING TIE DOWN, ETC.) IN THE "STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY".
8. NO EXCESS FILL MATERIAL SHALL BE REMOVED FROM THE SITE.
9. NO STUMPS OR DEBRIS SHALL BE BURIED ON SITE. THIS MATERIAL SHALL BE DISPOSED OF IN A MANNER CONSISTENT WITH THE APPLICABLE REGULATIONS.
10. THE CONTRACTOR SHALL MINIMIZE THE TRACKING OF MUD ONTO PAVED AREAS. SOIL TRACKED ONTO PAVED AREAS SHALL BE REMOVED BY THE CONTRACTOR PROMPTLY SO AS TO PREVENT TRACKING OF MUD ONTO SOMERSET STREET.
11. ALL STANDARDS IN ACCORDANCE WITH THE "STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY" TO APPLY.

SOIL DE-COMPACTION AND TESTING REQUIREMENTS.

A. SOIL COMPACTION REQUIREMENTS.

1. SUBGRADE SOILS PRIOR TO THE APPLICATION OF TOPSOIL (SEE PERMANENT SEEDING AND STABILIZATION NOTES FOR TOPSOIL REQUIREMENTS) SHALL BE FREE OF EXCESSIVE COMPACTION TO A DEPTH OF 6 INCHES TO ENHANCE THE ESTABLISHMENT OF PERMANENT VEGETATIVE COVER.
2. AREAS OF THE SITE WHICH ARE SUBJECT TO COMPACTION TESTING AND/OR MITIGATION ARE GRAPHICALLY DENOTED ON THE CERTIFIED SOIL EROSION CONTROL PLAN.
3. COMPACTION TESTING LOCATIONS ARE DENOTED ON THE PLAN, A COPY OF THE PLAN OR PORTION OF THE PLAN SHALL BE USED TO MARK LOCATIONS OF TESTS AND ATTACHED TO THE COMPACTION REMEDIATION FORM, AVAILABLE FROM THE LOCAL SOIL CONSERVATION DISTRICT. THIS FORM MUST BE FILLED OUT AND SUBMITTED PRIOR TO RECEIVING A CERTIFICATE OF COMPLIANCE FROM THE DISTRICT.
4. IN THE EVENT THAT TESTING INDICATES COMPACTION IN EXCESS OF THE MAXIMUM THRESHOLDS INDICATED FOR THE SIMPLIFIED TESTING METHODS (SEE DETAILS BELOW), THE CONTRACTOR/OWNER SHALL HAVE THE OPTION TO PERFORM EITHER (1) COMPACTION MITIGATION OVER THE ENTIRE MITIGATION AREA DENOTED ON THE PLAN (EXCLUDING EXEMPT AREAS), OR (2) PERFORM ADDITIONAL, MORE DETAILED TESTING TO ESTABLISH THE LIMITS OF EXCESSIVE COMPACTION WHEREUPON ONLY THE EXCESSIVELY COMPACTED AREAS WOULD REQUIRE COMPACTION MITIGATION. ADDITIONAL DETAILED TESTING SHALL BE PERFORMED BY A TRAINED, LICENSED PROFESSIONAL.

B. COMPACTION TESTING METHODS.

1. PROBING WIRE TEST (SEE DETAIL).
2. HAND HELD PENETROMETER TEST (SEE DETAIL).
3. TUBE BULK DENSITY TEST (LICENSED PROFESSIONAL ENGINEER REQUIRED).
4. NUCLEAR DENSITY TEST (LICENSED PROFESSIONAL ENGINEER REQUIRED).
5. NOTE: ADDITIONAL TESTING METHODS WHICH CONFORM TO ASTM STANDARDS AND SPECIFICATIONS, AND WHICH PRODUCE A DRY WEIGHT, SOIL BULK DENSITY MEASUREMENT MAY BE ALLOWED SUBJECT TO DISTRICT APPROVAL.
6. DETAILED REQUIREMENTS FOR EACH COMPACTION TESTING METHOD CAN BE FOUND IN SECTION 19-1, STANDARD FOR LAND GRADING, OF THE NJ STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL, LATEST EDITION.
7. SOIL COMPACTION TESTING IS NOT REQUIRED IF WHEN SUBSOIL COMPACTION REMEDIATION (SCARIFICATION/TILLAGE (6" MINIMUM DEPTH) OR SIMILAR) IS PROPOSED AS PART OF THE SEQUENCE OF CONSTRUCTION.

C. PROCEDURES FOR SOIL COMPACTION MITIGATION

1. PROCEDURES SHALL BE USED TO MITIGATE EXCESSIVE SOIL COMPACTION PRIOR TO PLACEMENT OF TOPSOIL AND ESTABLISHMENT OF PERMANENT VEGETATIVE COVER.
2. RESTORATION OF COMPACTED SOILS SHALL BE THROUGH DEEP SCARIFICATION/TILLAGE (6" MINIMUM DEPTH) WHERE THERE IS NO DANGER TO UNDERGROUND UTILITIES (CABLES, IRRIGATION SYSTEMS, ETC.). IN THE ALTERNATIVE, ANOTHER METHOD AS SPECIFIED BY A NEW JERSEY LICENSED PROFESSIONAL ENGINEER MAY BE SUBSTITUTED SUBJECT TO DISTRICT APPROVAL.

BIORETENTION BASIN SOIL BED REQUIREMENTS.

1. THE SOIL BED MUST BE A MINIMUM OF 18 - 24 INCHES IN DEPTH. IN ACCORDANCE WITH THE TABLE ON PAGE 4, CHAPTER 9.1 OF THE NEW JERSEY STORMWATER BEST MANAGEMENT PRACTICES MANUAL.
2. THE SOIL BED MATERIAL MUST CONSIST OF THE FOLLOWING MIX, BY WEIGHT: 85 TO 95% SAND, WITH NO MORE THAN 25% OF THE SAND AS FINE OR VERY FINE SANDS; NO MORE THAN 15% SILT AND CLAY WITH 2% TO 5% CLAY CONTENT. THE ENTIRE MIX MUST THEN BE AMENDED WITH 3 TO 7% ORGANICS, BY WEIGHT.
3. PRE-MIXED SOIL MUST BE CERTIFIED TO BE CONSISTENT WITH THE REQUIREMENT ABOVE BY EITHER THE VENDOR OR BY A PROFESSIONAL ENGINEER LICENSED BY THE STATE OF NEW JERSEY. THE CONTENT OF ANY SOIL MIXED ON-SITE MUST BE CERTIFIED BY A PROFESSIONAL ENGINEER LICENSED BY THE STATE OF NEW JERSEY; IN ADDITION, THE ENGINEER MUST BE PRESENT WHILE THE SOIL IS MIXED.
4. THE PH OF THE SOIL BED MATERIAL MUST RANGE FROM 5.5 TO 6.5.
5. THE SOIL BED MATERIAL MUST BE PLACED IN LIFTS NOT TO EXCEED 8 INCHES. ADDITIONAL MATERIALS MAY BE NECESSARY TO ACCOUNT FOR SETTLING OVER TIME.

GENERAL MAINTENANCE NOTES FOR TEMPORARY SEDIMENT BASIN

1. SEDIMENT BASIN TO BE INSPECTED WEEKLY AT MINIMUM AND AFTER EACH 0.5-INCH OR GREATER RAINFALL EVENT AND REPAIRED IMMEDIATELY. IT IS RECOMMENDED THAT BASINS BE INSPECTED PRIOR TO FORECASTED RAIN EVENTS, DAILY DURING RAIN EVENTS, AND AFTER TO CONCLUSION OF EACH RAIN EVENT.
2. IN ADDITION TO EVALUATING SEDIMENT LEVELS, INSPECTIONS WILL EVALUATE EMBANKMENT FOR SIGNS OF SEEPAGE, SETTLEMENT, SLUMPING, AND OVERALL STRUCTURAL SOUNDNESS. INLET AND OUTLET STRUCTURES AND SPILLWAYS ARE TO BE INSPECTED FOR ANY DAMAGE OR OBSTRUCTIONS AND SHOULD BE REPAIRED AS NEEDED.
3. SEDIMENT REMOVAL SHOULD TAKE PLACE WHEN SEDIMENT ACCUMULATES TO THE CLEAN OUT LEVEL (50% OF WET STORAGE DEPTH DESIGN VOLUME), DURING SEDIMENT CLEANOUT, TRASH AND OTHER DEBRIS SHOULD BE REMOVED FROM THE BASIN, DEWATERING DEVICE, AND RISER STRUCTURE. SEDIMENT REMOVAL SHALL BE COMPLETED WITH 72 HOURS OR WHEN ALL RUNOFF HAS DRAINED FROM THE PLANTING BED AND THE BASIN IS DRY. SEDIMENT BASIN TO BE RESTORED TO THE ORIGINAL DESIGNED OR EXCAVATED GRADE AS NECESSARY TO RESTORE THE DESIGN FUNCTION.
4. DISPOSAL OF DEBRIS, TRASH, SEDIMENT AND OTHER WASTE MATERIAL MUST BE DONE AT SUITABLE DISPOSAL/RECYCLING SITES AND IN COMPLIANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL WASTE REGULATIONS.
5. STORMWATER BMP'S MAY NOT BE USED FOR STOCKPILING OF PLOWED SNOW AND ICE, COMPOST, OR ANY OTHER MATERIAL.
6. SEDIMENT SHALL BE REMOVED FROM THE UPSTREAM FACE OF THE BARRIER WHEN IT HAS REACHED A DEPTH OF 1/2 THE BARRIER HEIGHT.
7. REPAIR OR REPLACE BARRIER (FABRIC, POSTS, BALES ETC.) WHEN DAMAGED.
8. BARRIERS SHALL BE INSPECTED DAILY FOR SIGNS OF DETERIORATION AND SEDIMENT REMOVAL.
9. A FLOCCULENT SUCH AS "PAM" (POLYACRYLAMIDE) MAY BE ADDED TO THE BASIN IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS TO REMOVE FINE SUSPENDED COLLOIDAL MATERIAL PRIOR TO DEWATERING. ALL DEWATERING DISCHARGES MUST BE TO A STABILIZED LOCATION. A SOURCE OF FREE CATIONIC IONS (SUCH AS CA 2+) MAY BE REQUIRED AT A RATE OF 50-80 GM CA2+ /KG PAM TO ENCOURAGE BONDING BETWEEN COLLOIDS AND PAM. MATERIALS SUCH AS LIME, CACL, GYPSUM OR FLYASH MAY BE USED TO PROVIDE THE CATION COMPONENT. THE FLOCCULENT SHALL NOT CAUSE ADVERSE ENVIRONMENTAL CONDITIONS TO DEVELOP IN THE AREA RECEIVING THE BASIN DISCHARGE.
10. FLOCCULENT MAY BE ADDED THROUGH THE USE OF "LOGS" OR SIMILAR DEVICES IMPREGNATED WITH PAM TO DOSE INFLOW WATER PRIOR TO ENTRANCE TO THE SEDIMENT BASIN. SUCH DEVICES SHALL BE PLACED TO ALLOW COMPLETE PASSAGE OF THE DESIGN STORM AND SHALL NOT OBSTRUCT FLOW THROUGH STORM SEWER SYSTEMS.

DIVERSION SWALE NOTES:

1. THE SUPPORTING RIDGE ON THE LOWER SIDE OF THE PROPOSED CHANNEL IS TO HAVE A MINIMUM WIDTH OF 4- FEET AT THE DESIGN WATER ELEVATION.
2. THE SLOPE SIDES OF THE DIVERSION SWALES AND THE SUPPORTING RIDGES SHALL NOT EXCEED 4:1 HORIZONTAL TO VERTICAL.

SUGGESTED SEEDING MIXTURES

TEMPORARY SEEDING

LIME: 2 TONS/ACRE GROUND LIMESTONE
FERTILIZER: 500 LBS. PER ACRE 10-20-10
SEED: DATE & RATE OF APPLICATION ACCORDING TO STANDARDS FOR SOIL EROSION AND SEDIMENTATION CONTROL IN NEW JERSEY.
TEMPORARY SEEDING TO BE NOT LESS THAN ONE POUND OF PERENNIAL RYEGRASS PER 1000 SQ. FT.

PERMANENT SEEDING (STEEP BANKS)

LIME: 3 TONS/ACRE GROUND LIMESTONE
FERTILIZER: 600 LBS. PER ACRE 10-20-10
SEED: DATES 3/15-5/31 AND 8/1-10/10 - 265 LBS. OF TALL FESCUE
20 LBS. OF PERENNIAL RYEGRASS PER ACRE. THIS IS A GENERAL RECOMMENDATION. OTHER SEEDINGS CAN BE USED.

PERMANENT SEEDING (ROAD R.O.W. AND NON-LAWN AREAS)

LIME: 3 TONS/ACRE GROUND LIMESTONE
FERTILIZER: 600 LBS. PER ACRE 10-20-10
PER ACRE. OTHER SEEDINGS ARE ACCEPTABLE PROVIDED THEY ARE ADAPTABLE TO THE AREA AND ARE PERENNIAL. DATE & RATE OF APPLICATION ACCORDING TO STANDARDS FOR SOIL EROSION AND SEDIMENTATION CONTROL IN NEW JERSEY.

PERMANENT SEEDING (LAWN AREAS)

LIME: 3 TONS/ACRE GROUND LIMESTONE INCORPORATED 6 INCHES IN TO THE SOIL.
FERTILIZER: 600 LBS. PER ACRE 10-20-10 INCORPORATED 6 INCHES IN TO THE SOIL, 400 LBS./ACRE 10-10-10 INCORPORATED 2 INCHES IN TO THE SOIL AT LAST RAKING.
SEED: DATES 3/15 - 5/31 & 8/1 - 10/1 - 265 LBS OF TALL FESCUE, 20 LBS. OF KY. BLUEGRASS (BLEND) & 20 LBS OF PERENNIAL RYEGRASS / ACRE
FOR OTHER ACCEPTABLE MIXTURES SEE STANDARDS FOR SOIL EROSION & SEDIMENTATION CONTROL IN NEW JERSEY.

DETENTION/SEDIMENT BASIN SEEDING

KENTUCKY BLUEGRASS, 45 LBS. PER ACRE
TALL FESCUE, 22 LBS PER ACRE
SEED: DATES 2/1 - 4/30 & 8/15 - 10/30

TEMPORARY STABILIZATION WITH MULCH ONLY

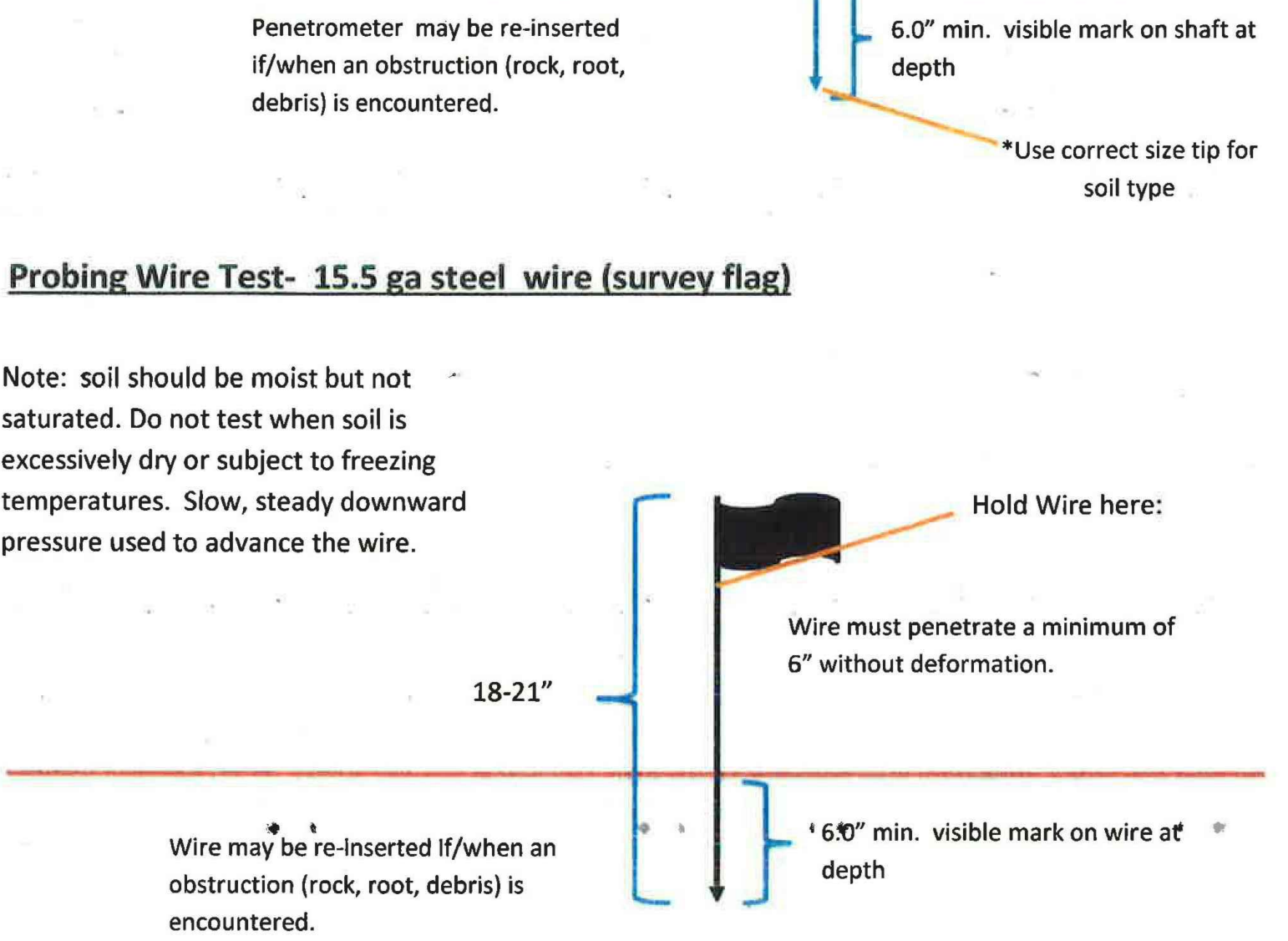
STRAW MULCH OR EQUIVALENT SPREAD UNIFORMLY AT THE RATE OF 1-1/2 TO 2 TONS/ACRE (TOTAL GROUND SURFACE COVERAGE). THIS PRACTICE IS APPLICABLE IN AREAS WHERE THE SEASON OR OTHER CONDITIONS MAY NOT BE SUITABLE FOR ESTABLISHING VEGETATIVE COVER. MULCH ONLY IS TO BE USED ONLY FOR SHORT PERIODS AND WILL REQUIRE MAINTENANCE AND RENEWAL.

SEQUENCE OF CONSTRUCTION

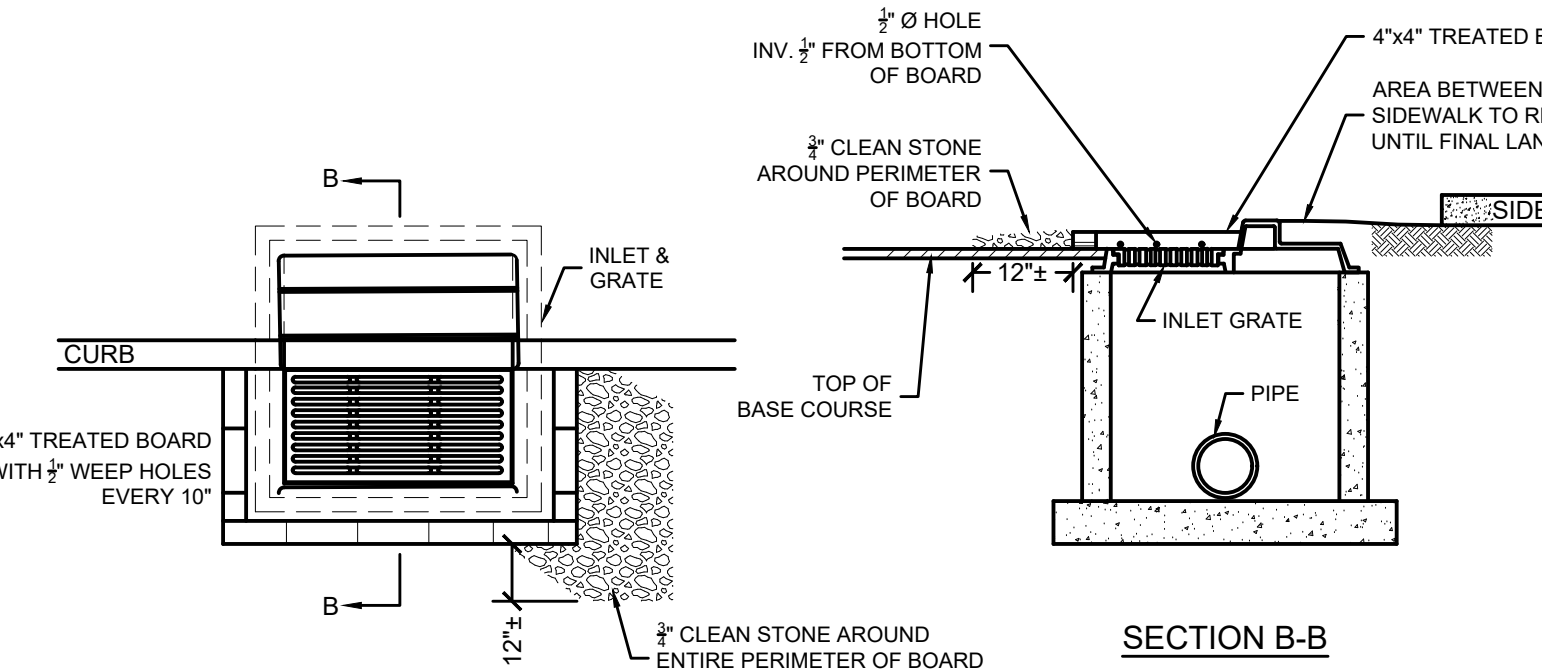
- PRE-CONSTRUCTION
1. A PRE-CONSTRUCTION MEETING SHALL BE SCHEDULED WITH THE TOWN ENGINEER PRIOR TO COMMENCEMENT OF CONSTRUCTION OF ANY IMPROVEMENTS.
 2. THE CONTRACTOR SHALL NOTIFY THE FREEHOLD COUNTY SOIL CONSERVATION DISTRICT IN WRITING AT LEAST 48 HOURS PRIOR TO ANY LAND DISTURBANCE.
- CONSTRUCTION
1. INSTALLATION OF ALL SOIL EROSION AND SEDIMENT CONTROL DEVICES PRIOR TO ANY MAJOR SILT DISTURBANCE AND MAINTAIN UNTIL PERMANENT PROTECTION ARE ESTABLISHED.
 2. INSTALL 2-3" STONE STABILIZED CONSTRUCTION ENTRANCE. CLEAR AND GRUB AREAS WHERE IMPROVEMENTS ARE PROPOSED. ALL REMAINING AREAS TO BE PROPERLY INSPECTED AND ARE TO REMAIN IN THEIR NATURAL STATE.
 3. STRIP AND STOCKPILE TOPSOIL WHERE INDICATED ON THE PLAN. ENIRCLE THE STOCKPILE WITH SILT FILTER FENCE.
 4. CONSTRUCT SEDIMENT BASIN, SEDIMENT BASIN RISER AFFIXED TO OUTLET CONTROL STRUCTURE AND TEMPORARY DIVERSIONS. SEDIMENT REMOVAL SHOULD TAKE PLACE WHEN SEDIMENT ACCUMULATES TO CLEANOUT LEVEL.
 5. ROUGH GRADE SITE. STABILIZE DISTURBED AREA WITH PERMANENT SEEDING MIXTURE.
 6. BEGIN BUILDING CONSTRUCTION.
 7. REMOVE SEDIMENT BASIN.
 8. CONSTRUCTION AND PERMANENT STABILIZATION OF ALL BIORETENTION AND SUBSURFACE BASINS INCLUDING THE CONSTRUCTION OF ALL RETAINING WALLS, FINAL OUTFALLS, RIPRAP CHUTES, THE STORMWATER BASIN(S) MUST BE CONSTRUCTED DURING THE INITIAL PHASE OF CONSTRUCTION AND MUST BE PERMANENTLY STABILIZED PRIOR TO THE ESTABLISHMENT OF IMPERVIOUS SURFACES AND PERVIOUS PAVEMENT.
 9. CONSTRUCTION OF UTILITIES AND STORMWATER COLLECTION SYSTEM. INLET PROTECTION MUST BE INSTALLED AFTER STORM SEWER INSTALLATION.
 10. GRADE AND COMPACT DRIVEWAYS AND PARKING AREAS TO SUBGRADE.
 11. PERFORM SOIL COMPACTION TESTING AND/OR SUBSOIL COMPACTION REMEDIATION. TESTING AND/OR RESTORATION OF COMPACTED SOILS (THROUGH DEEP SCARIFICATION/TILLAGE - 6" MIN. DEPTH) SHALL BE DONE PRIOR TO PLACEMENT OF TOP SOIL.
 12. INSTALL CURBS.
 13. INSTALL SUB-BASE AND BASE COURSE FOR DRIVEWAYS AND PARKING AREAS.
 14. INSTALL SIDEWALKS.
 15. TOPSOIL AND SEED LAWN AREAS. INSTALL LANDSCAPING.
 16. PERMANENT SEEDING STABILIZATION OF REMAINING DEVELOPMENT PERIMETER SLOPES.
 17. REMOVE EROSION CONTROL MEASURES AFTER STABILIZATION HAS MATURED.

Handheld Soil Penetrometer Test

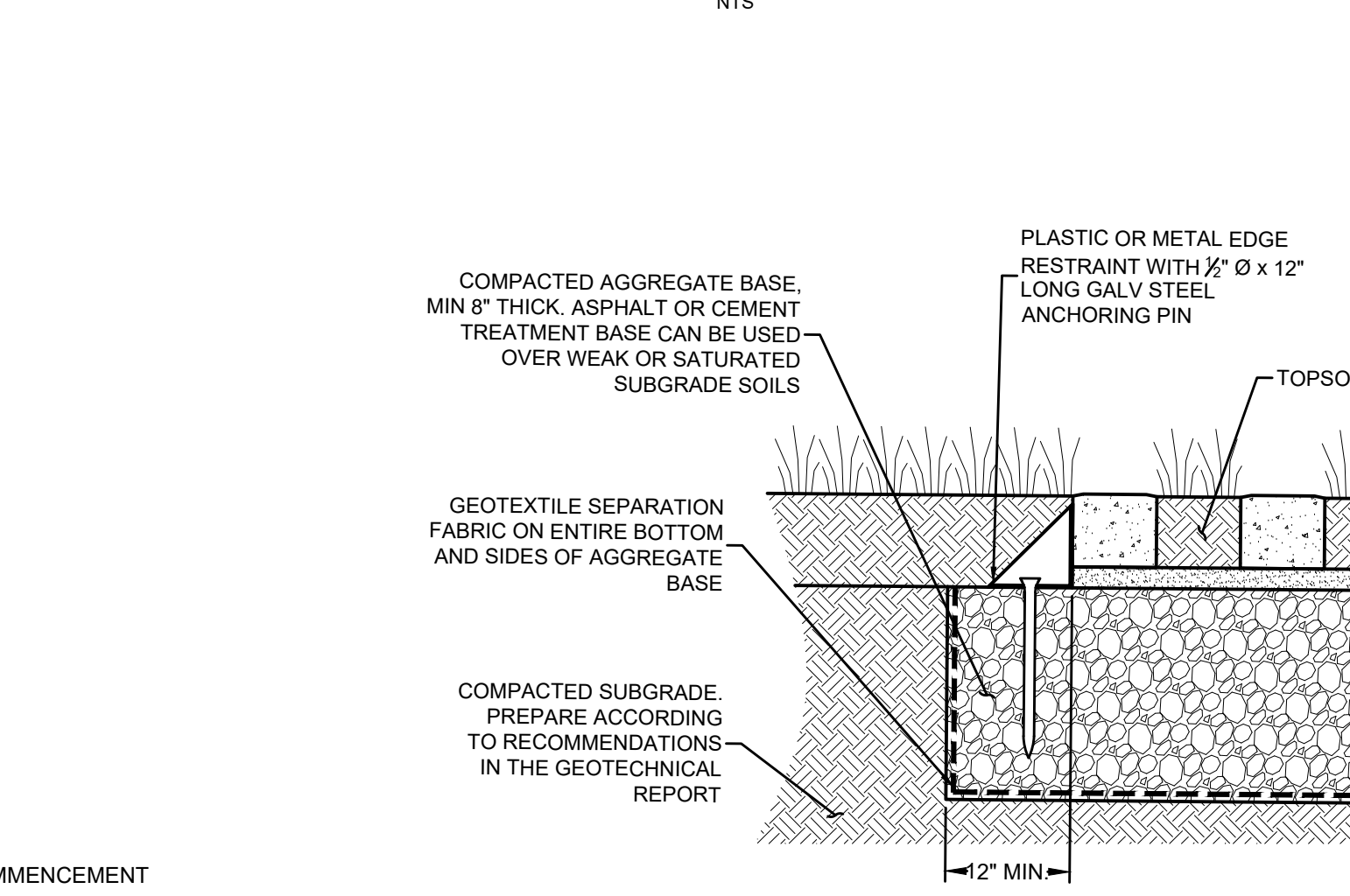
Note: soil should be moist but not saturated. Do not test when soil is excessively dry or subject to freezing temperatures. Slow, steady downward pressure used to advance the probe. Probe must penetrate at least 6" with less than 300 psi reading on the gage.



PROBING WIRE & HANDHELD SOIL PENETROMETER TEST DETAIL



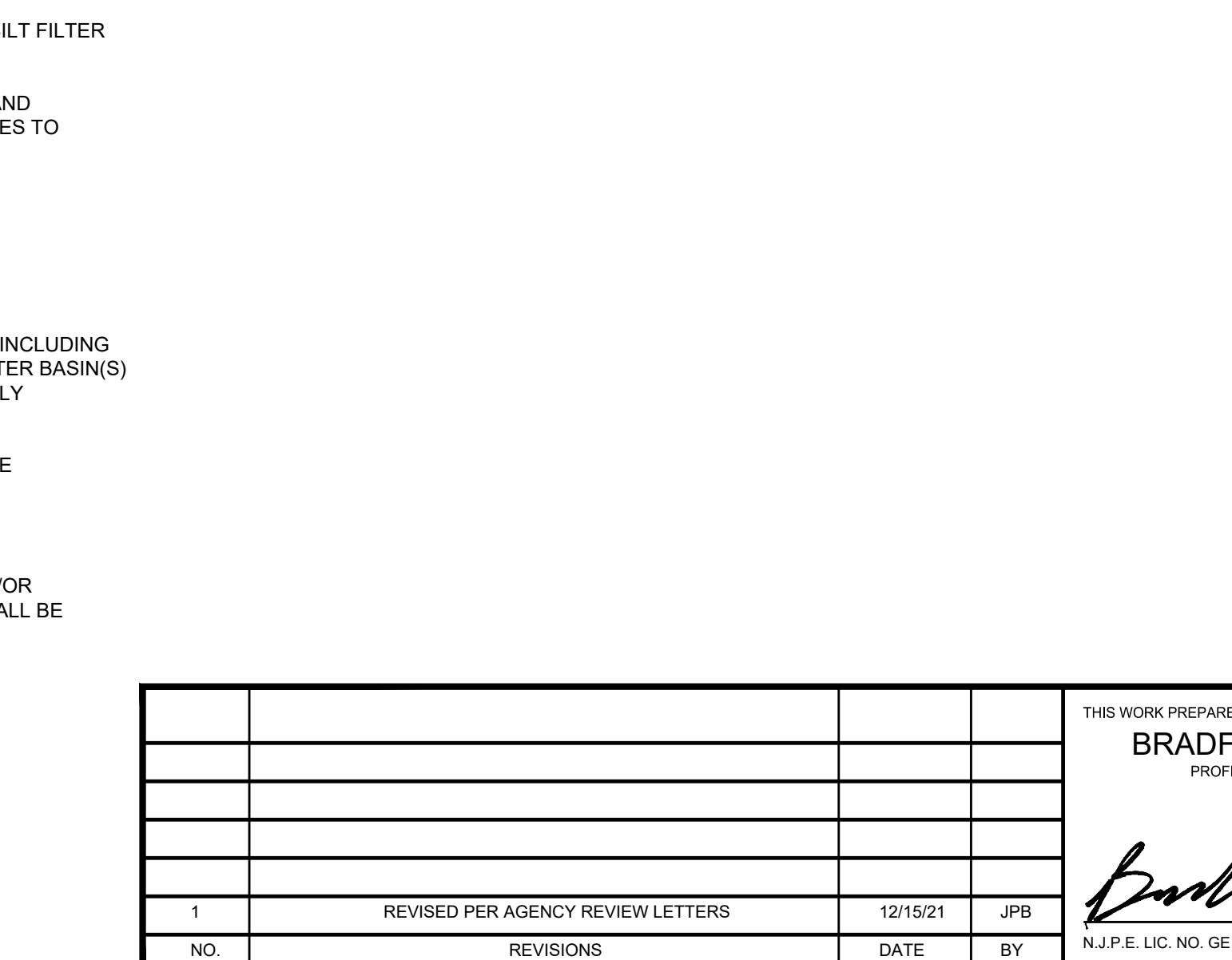
SILT PROTECTION FOR FINISHED OR EXISTING INLET



NOTES:

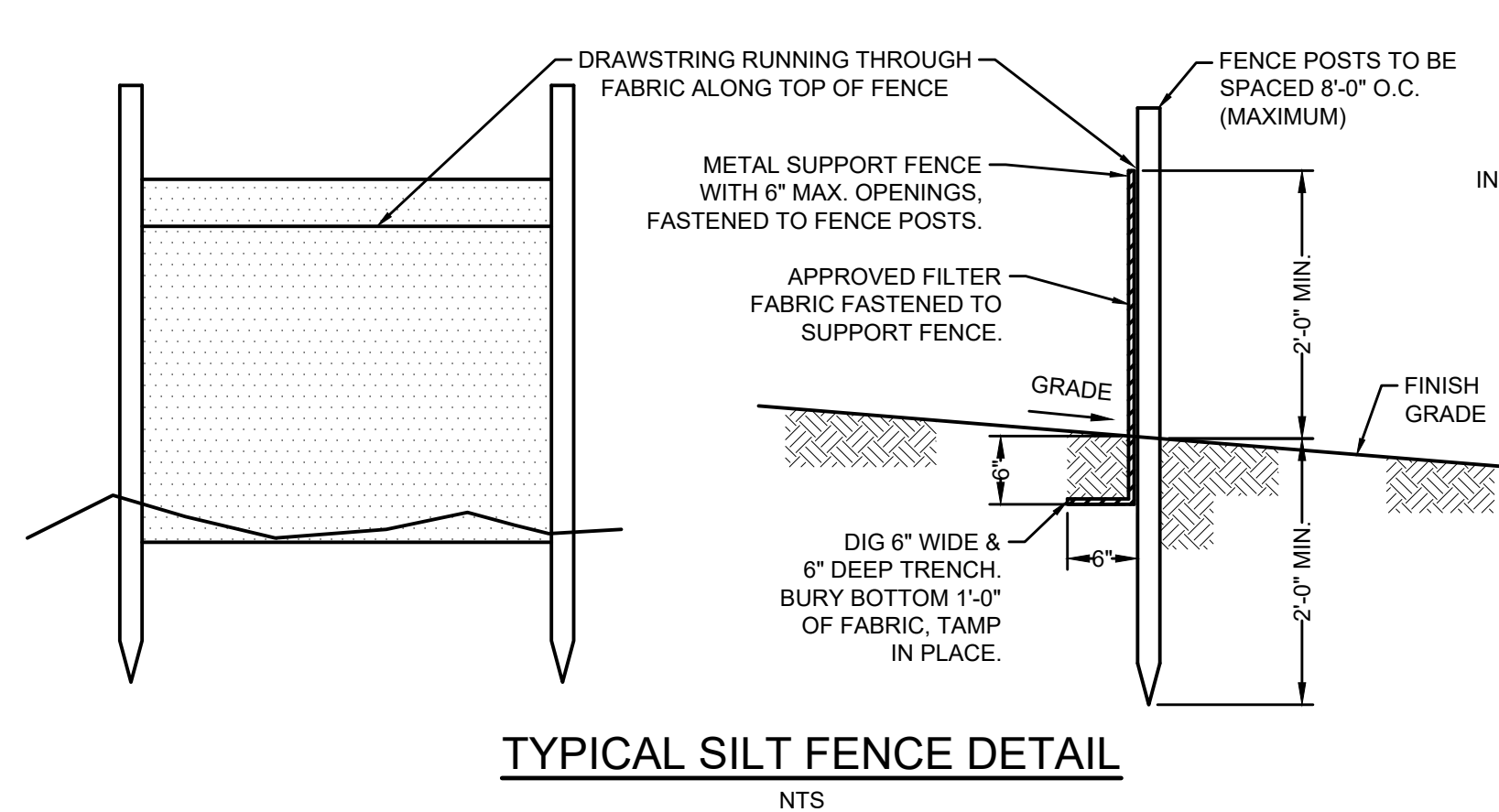
1. TURFSTONE AS SHOWN IS SUITABLE FOR LIGHT VEHICULAR APPLICATIONS, INCLUDING PARKING LOTS, EMERGENCY ACCESS OR RESIDENTIAL DRIVEWAYS.
2. DEPTH OF AGGREGATE BASE SUBJECT TO SITE SPECIFIC CONDITIONS (TRAFFIC LOADING, SOIL CONDITIONS, GROUNDWATER LEVELS, CLIMATIC CONDITIONS).
3. AN EDGE RESTRAINT FOR ALL TURFSTONE APPLICATION IS REQUIRED. COMMERCIAL VEHICULAR APPLICATIONS SHOULD UTILIZE A 6" WIDE CONCRETE CURB FOR CONFINEMENT.

TURFSTONE GRID PAVER DETAIL

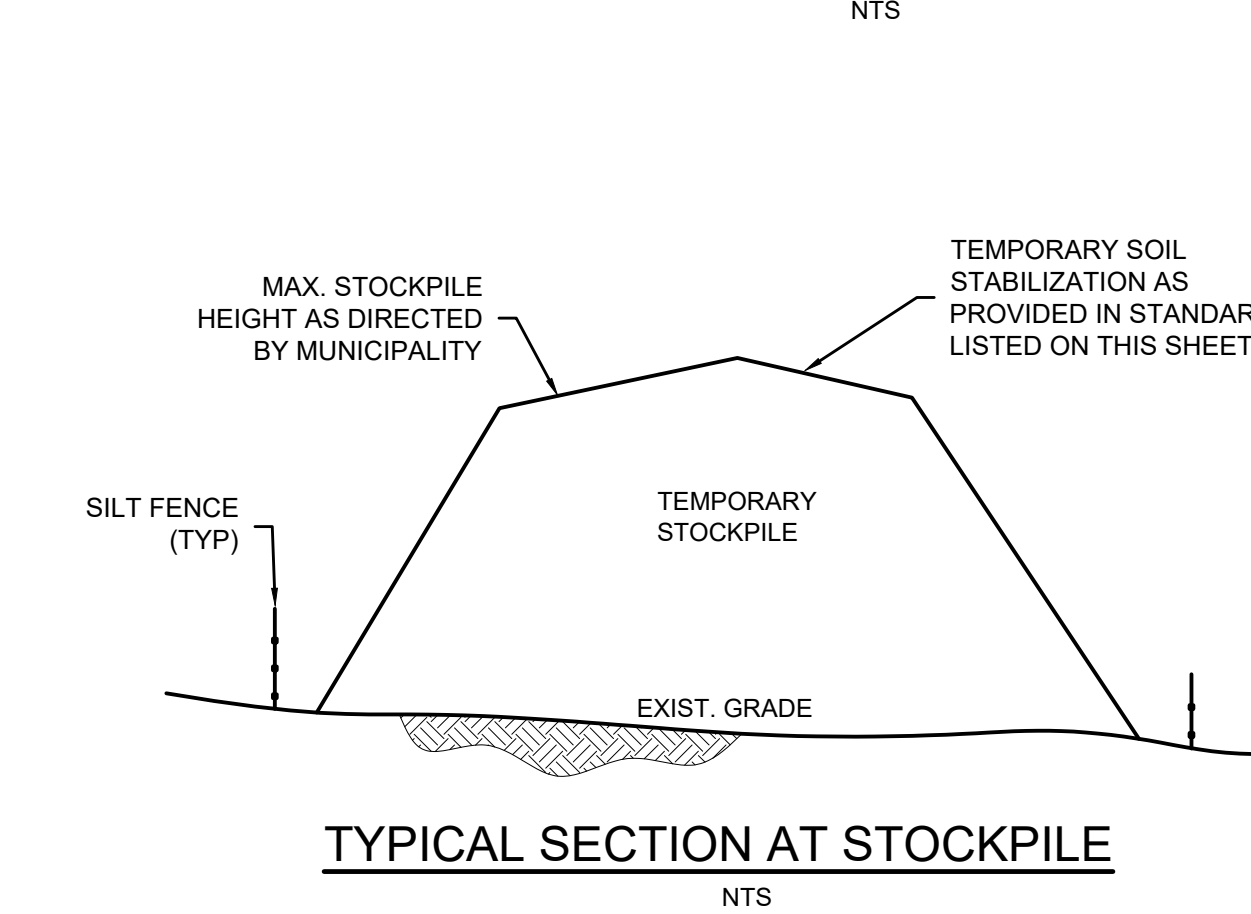


THIS WORK PREPARED UNDER MY IMMEDIATE SUPERVISION
BRADFORD J. ALLER
PROFESSIONAL ENGINEER

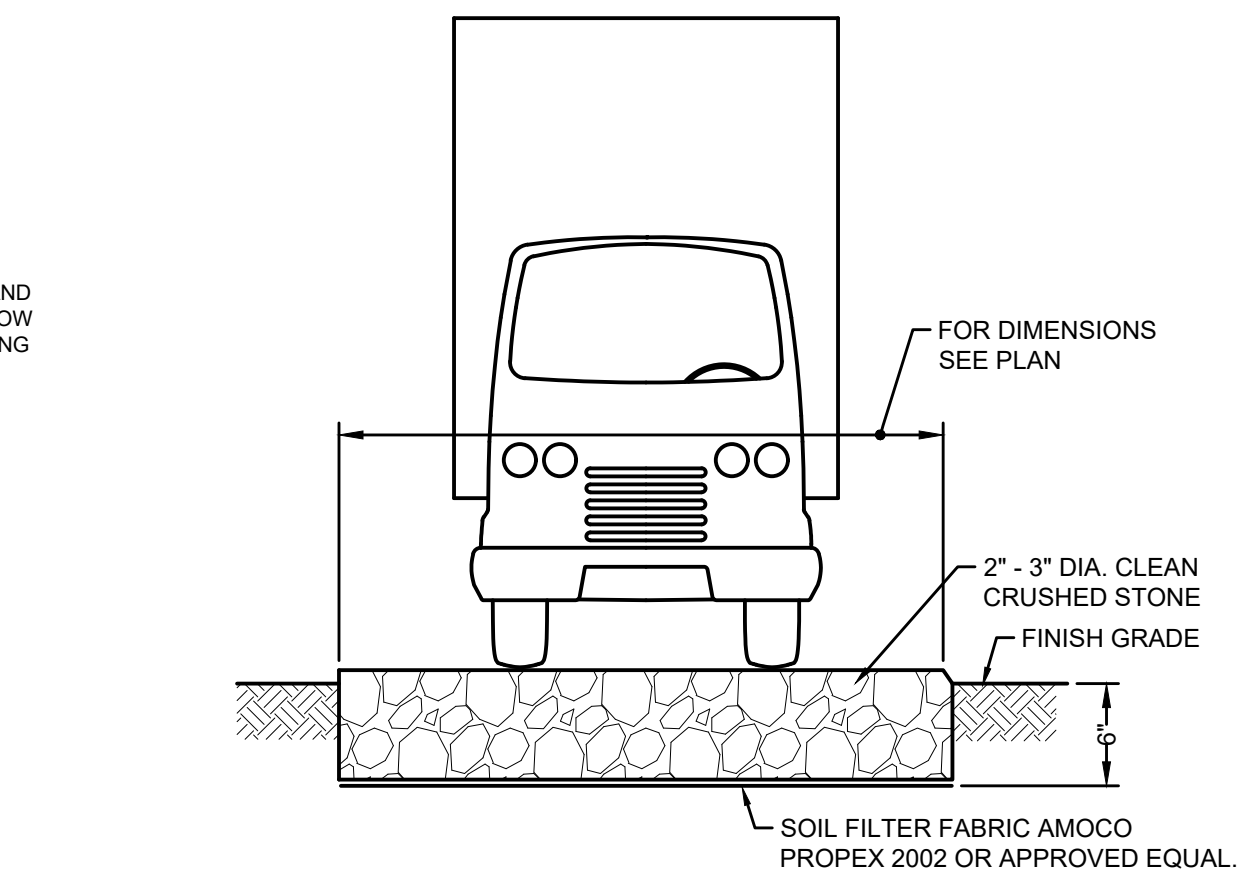
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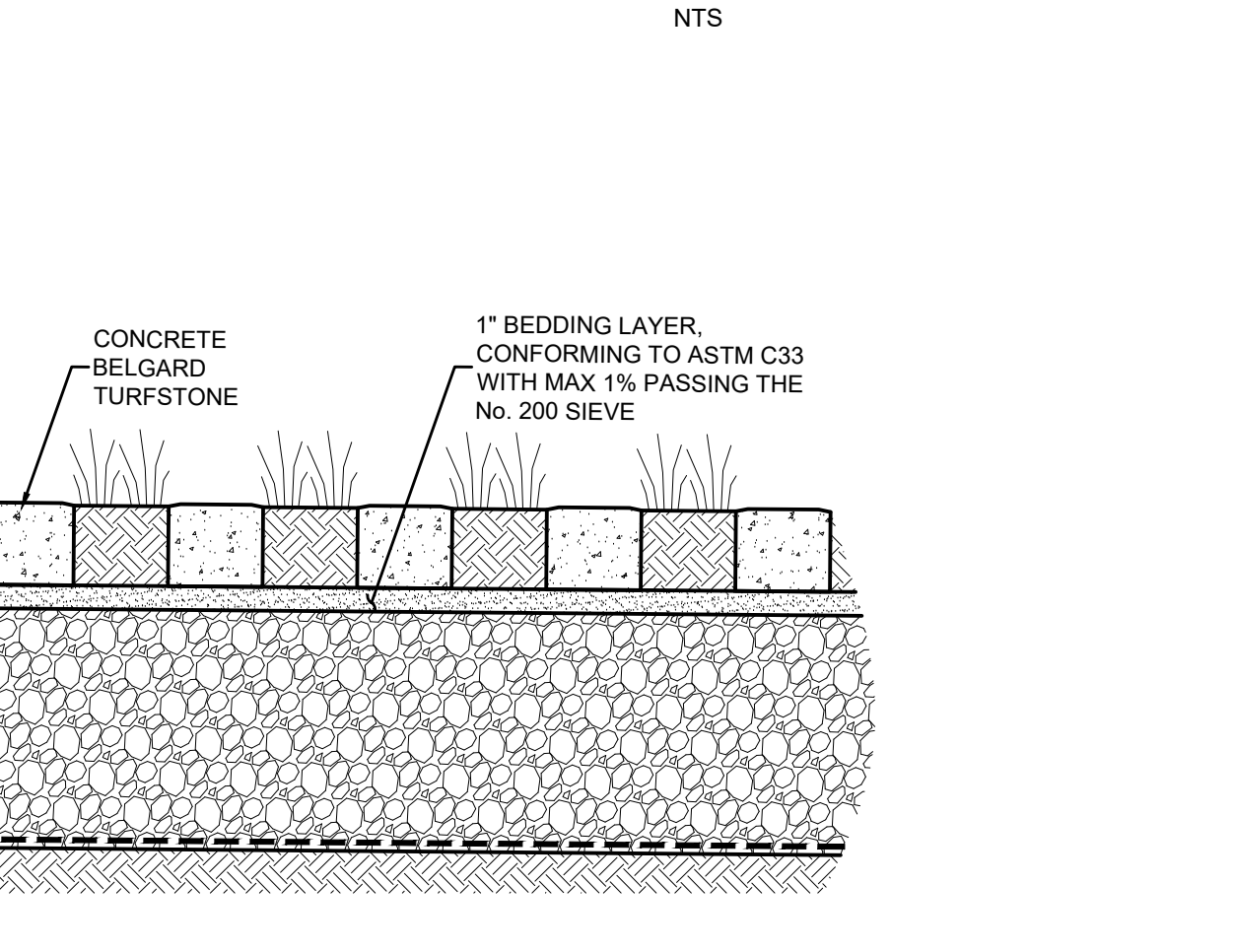
TYPICAL SILT FENCE DETAIL



TYPICAL SECTION AT STOCKPILE



STONE ACCESS PAD DETAIL

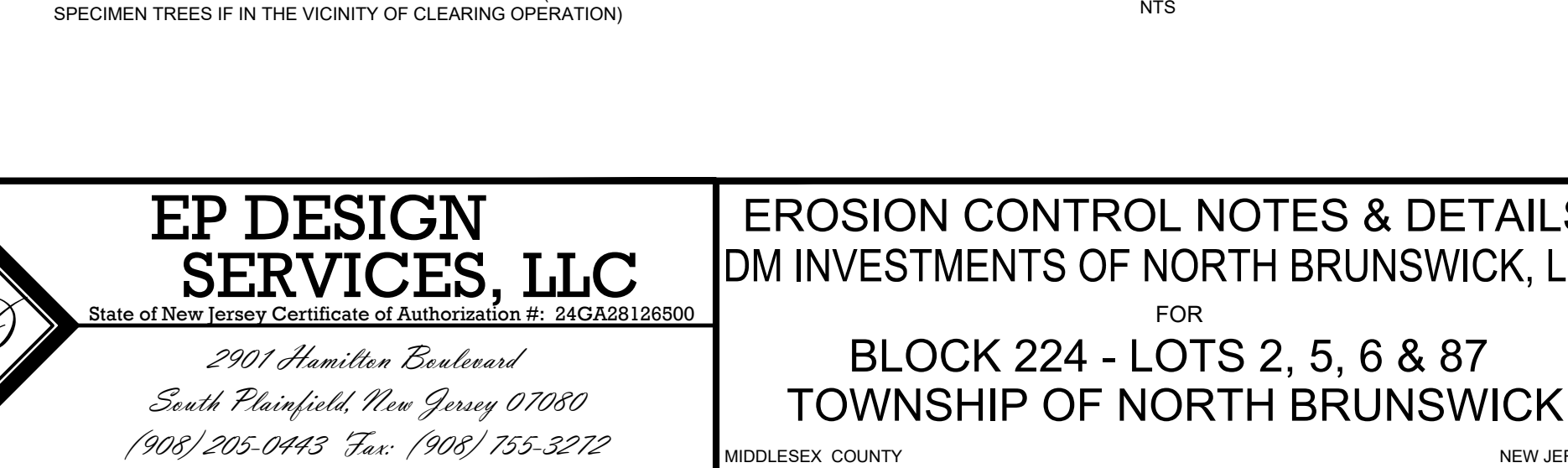


TREE PROTECTION DETAIL

NOTES:

1. SNOW FENCE SHALL BE IDEALLY LOCATED AT THE OUTER PERIMETER OF THE SPREAD OF THE BRANCHES. IN NO CASE SHALL IT BE CLOSER THAN 10' TO THE TRUNK.
2. NO CONSTRUCTION MATERIALS, FILL, TOPSOIL, SOIL, ETC. SHALL BE STORED INSIDE THIS FENCE.
3. EXISTING ELEVATIONS WITHIN THE FENCING AREA SHALL REMAIN UNCHANGED AND SOIL SHALL BE LEFT UNDISTURBED. (TO BE USED FOR SPECIFIC TREES IF IN THE VICINITY OF CLEARING OPERATION)

INNER FILTER DETAIL



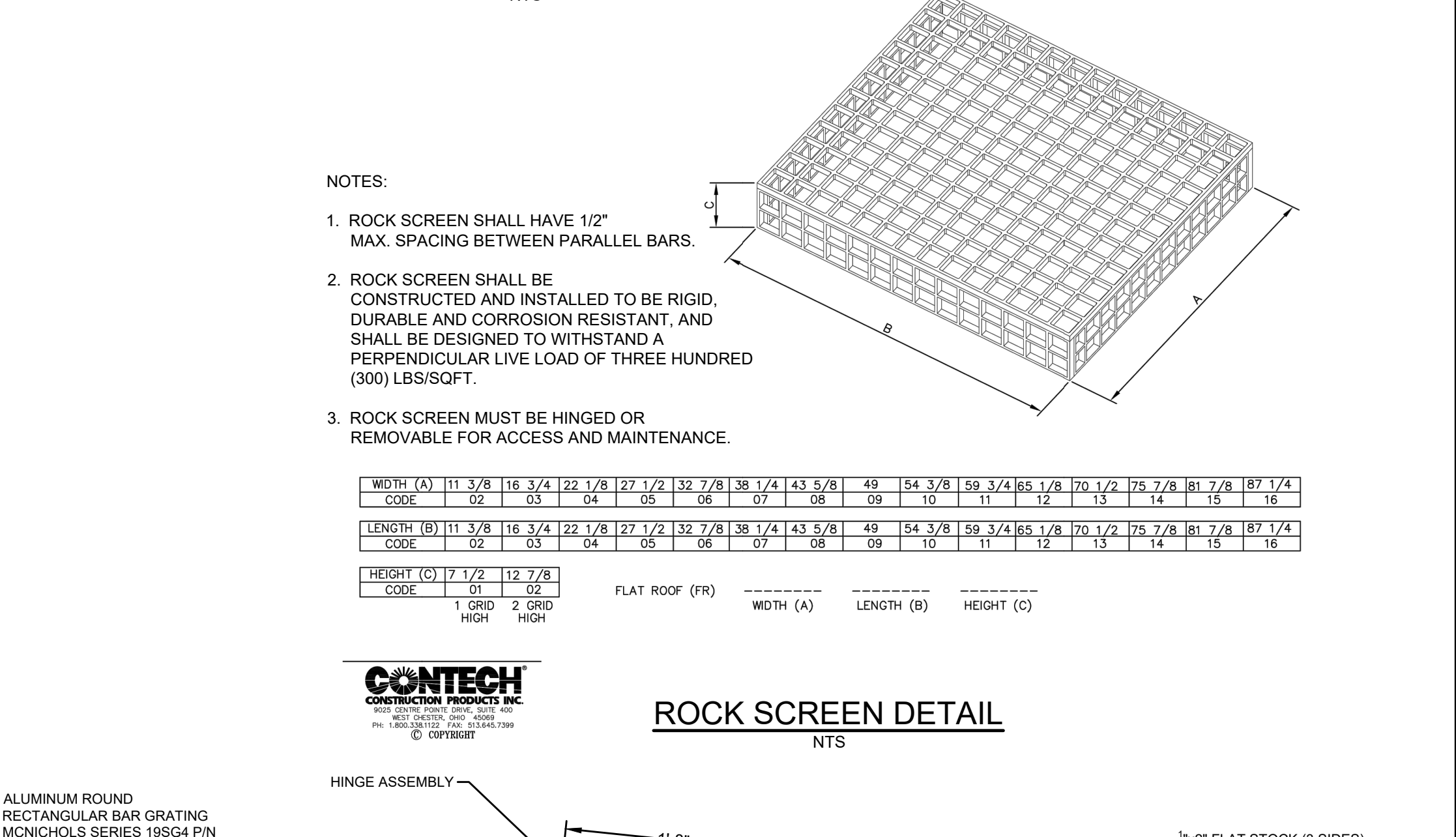
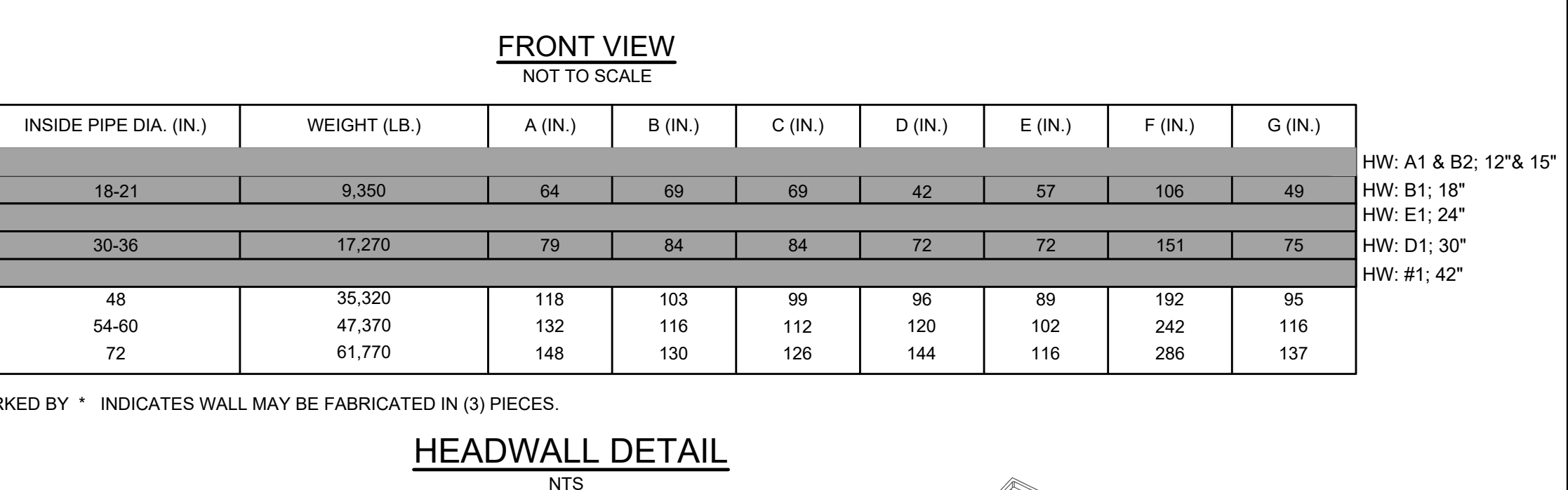
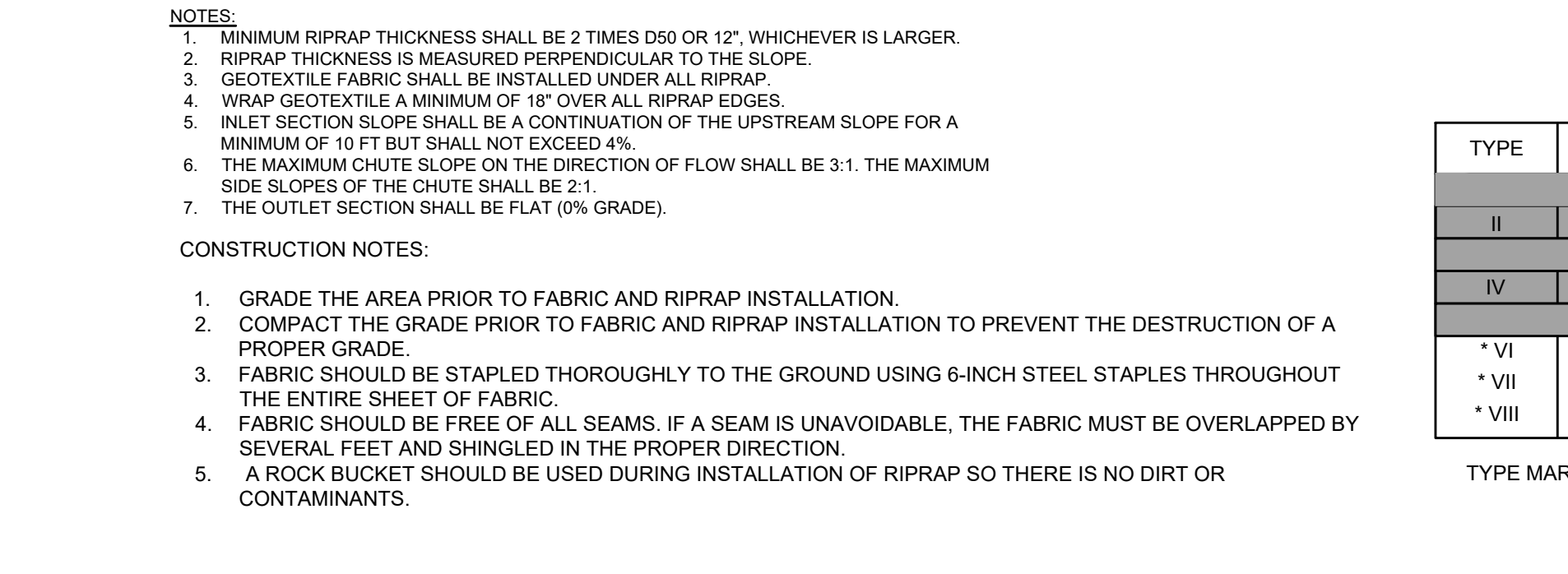
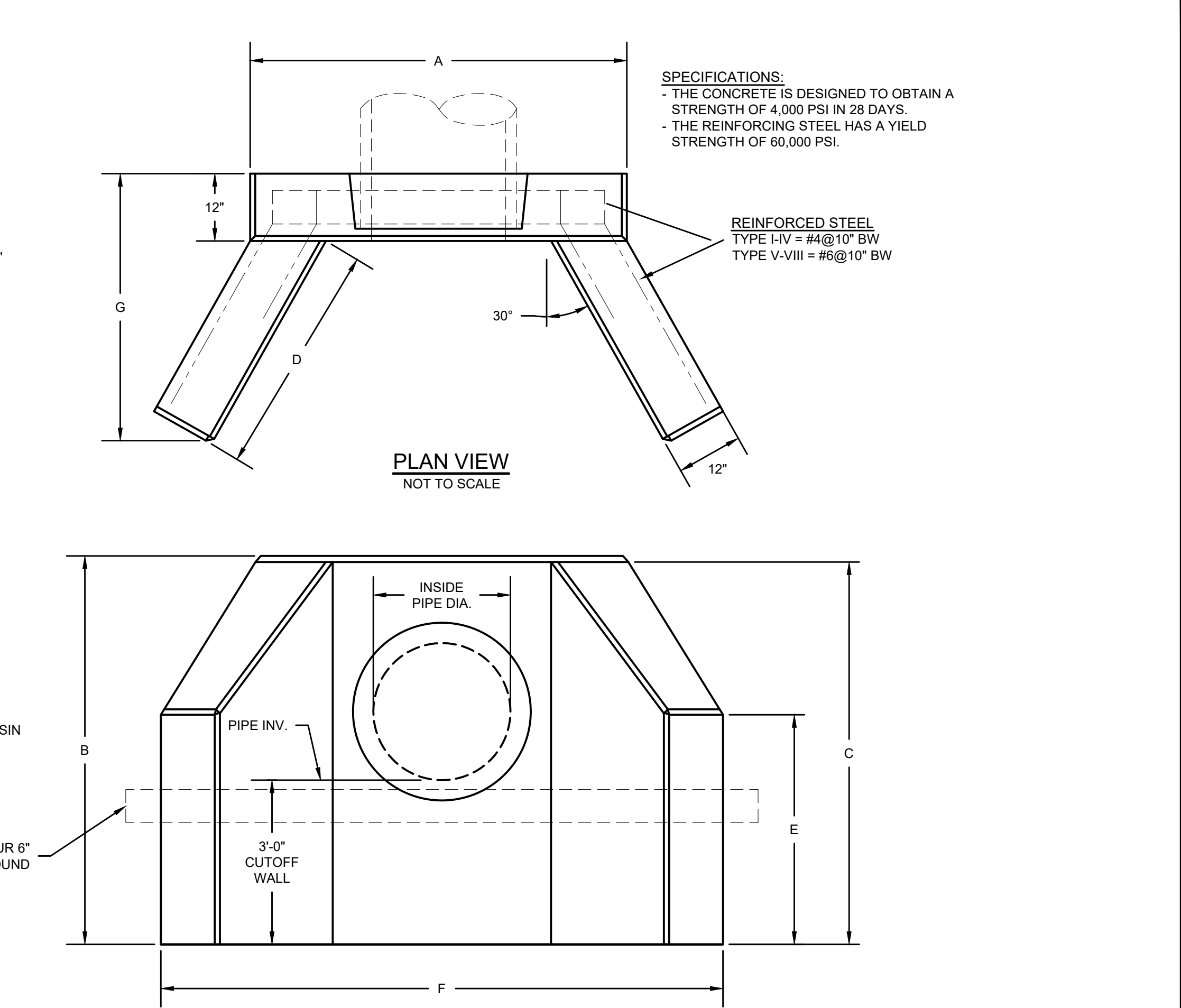
INNER FILTER DETAIL

EROSION CONTROL NOTES & DETAILS I DM INVESTMENTS OF NORTH BRUNSWICK, LLC.

FOR
BLOCK 224 - LOTS 2, 5, 6 & 87
TOWNSHIP OF NORTH BRUNSWICK
MIDDLESEX COUNTY
NEW JERSEY

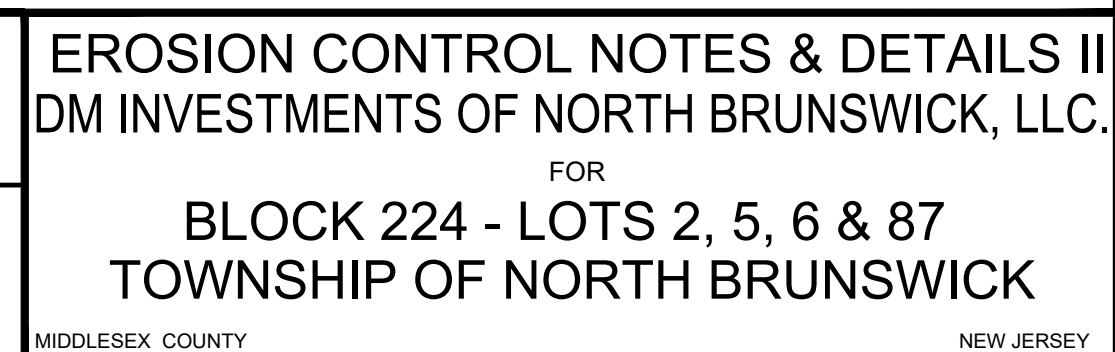
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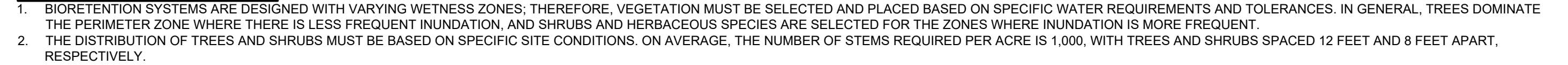
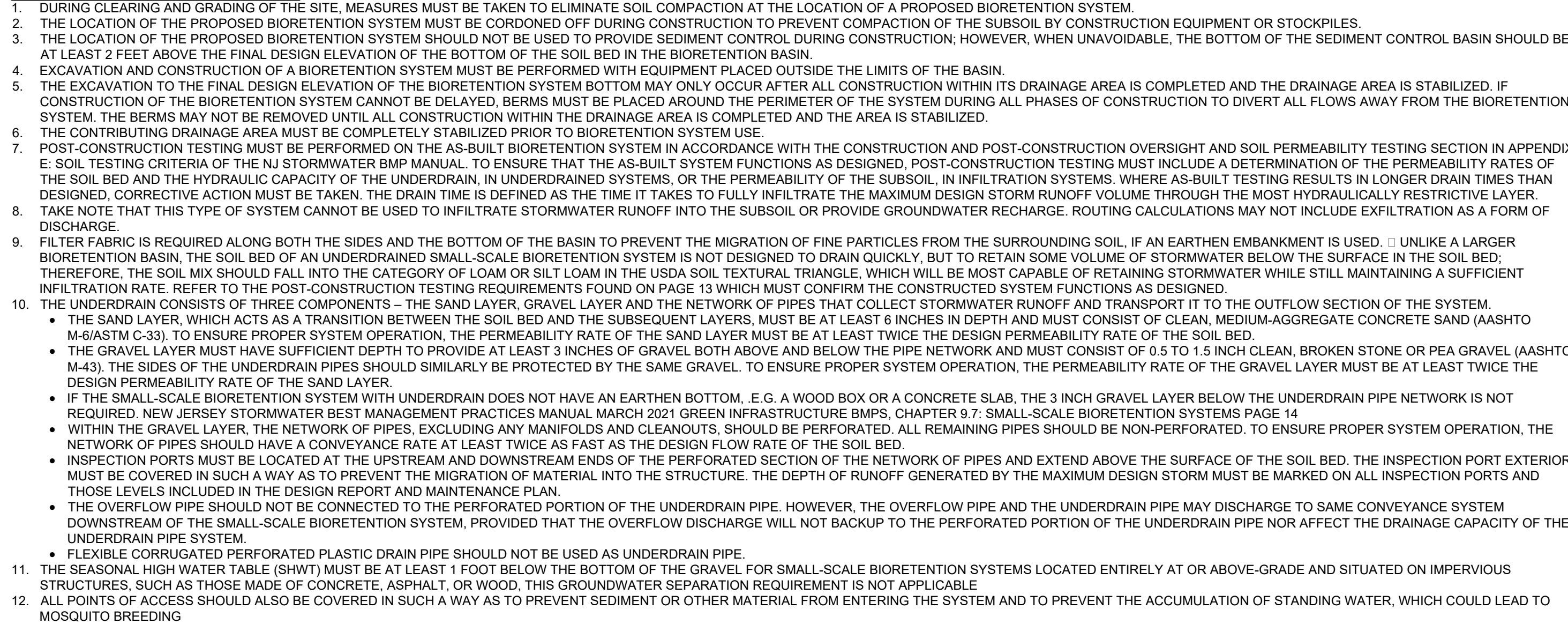
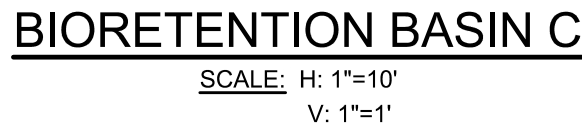
SHEET 14 - 27



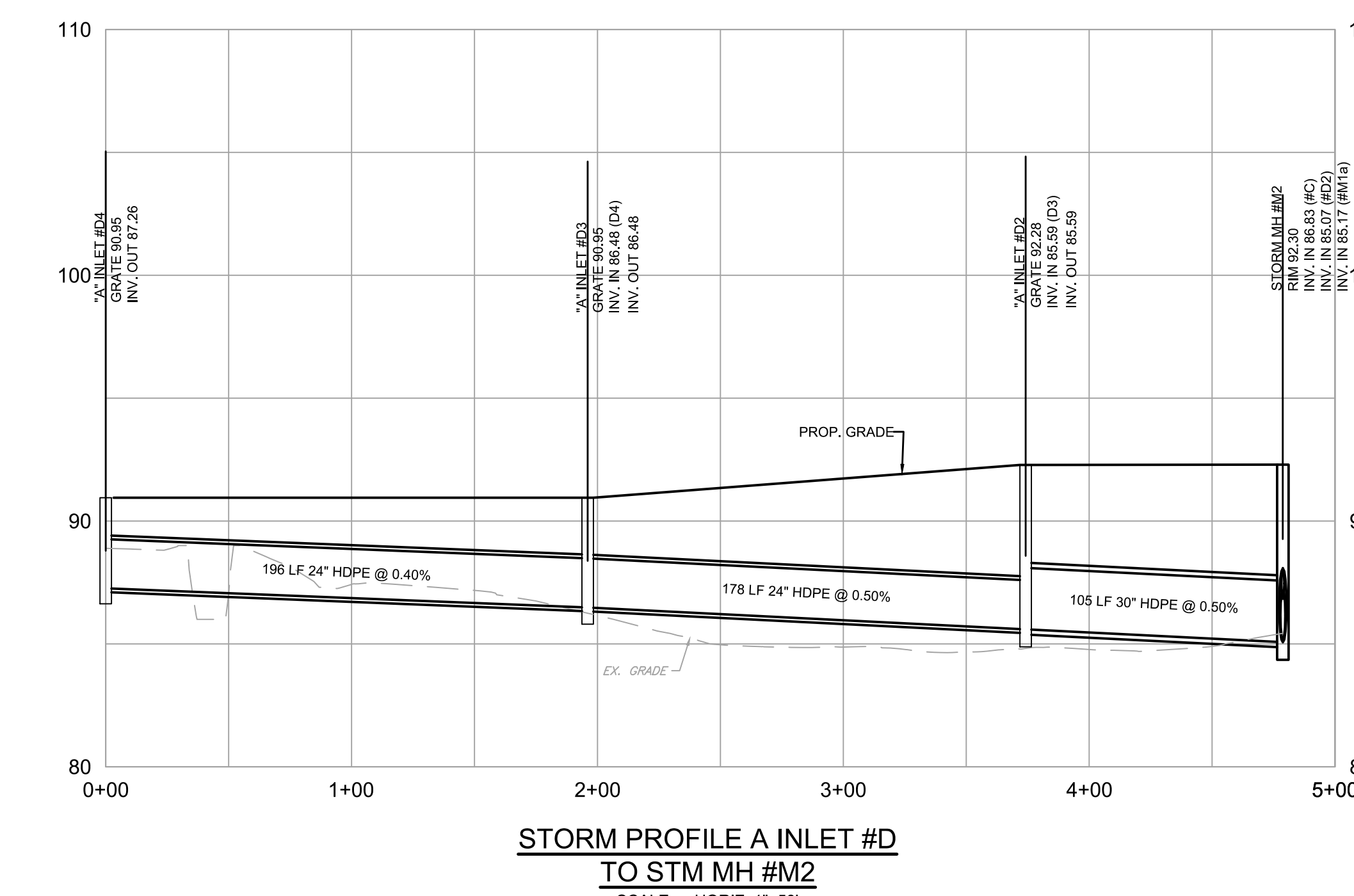
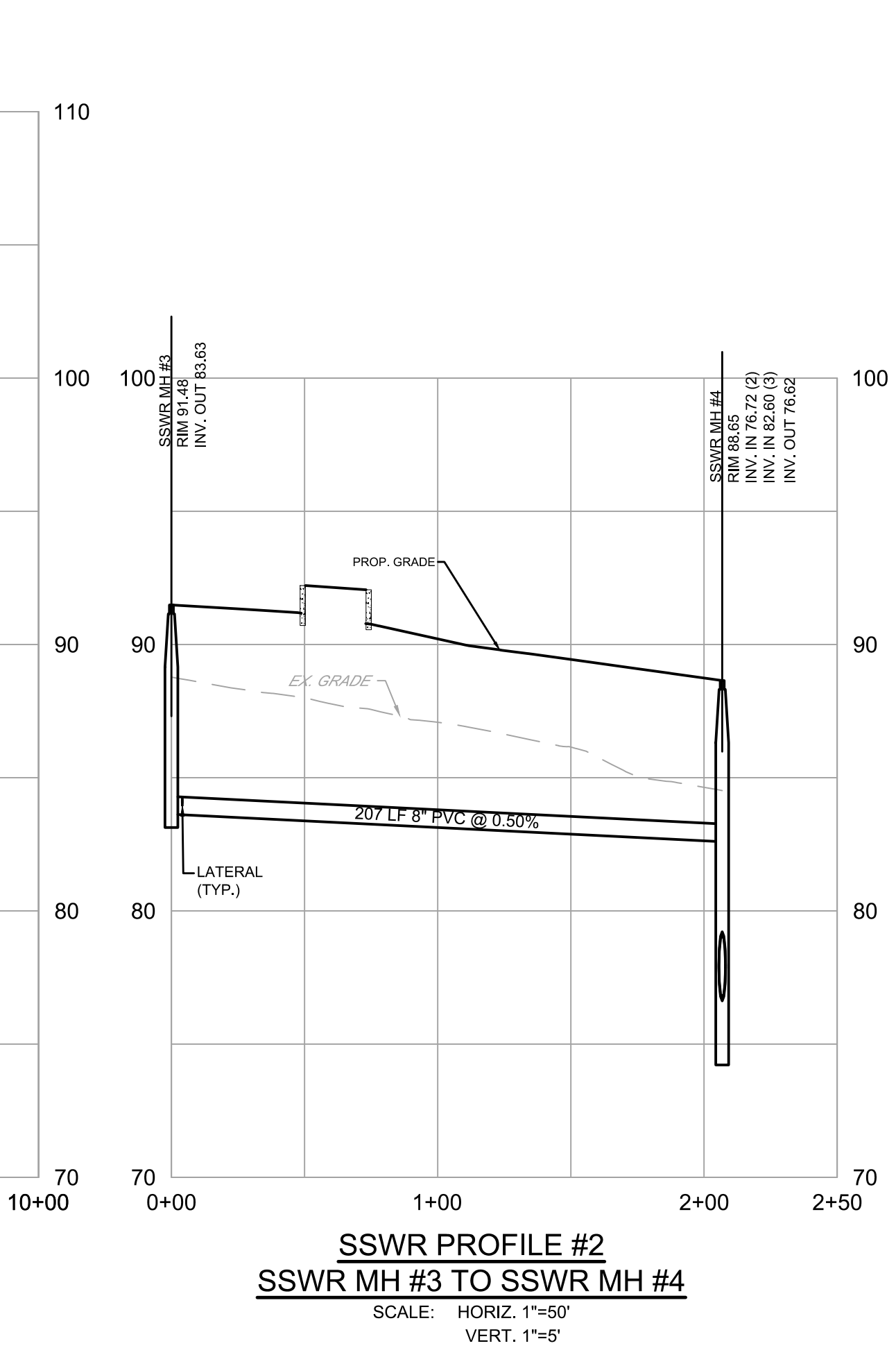
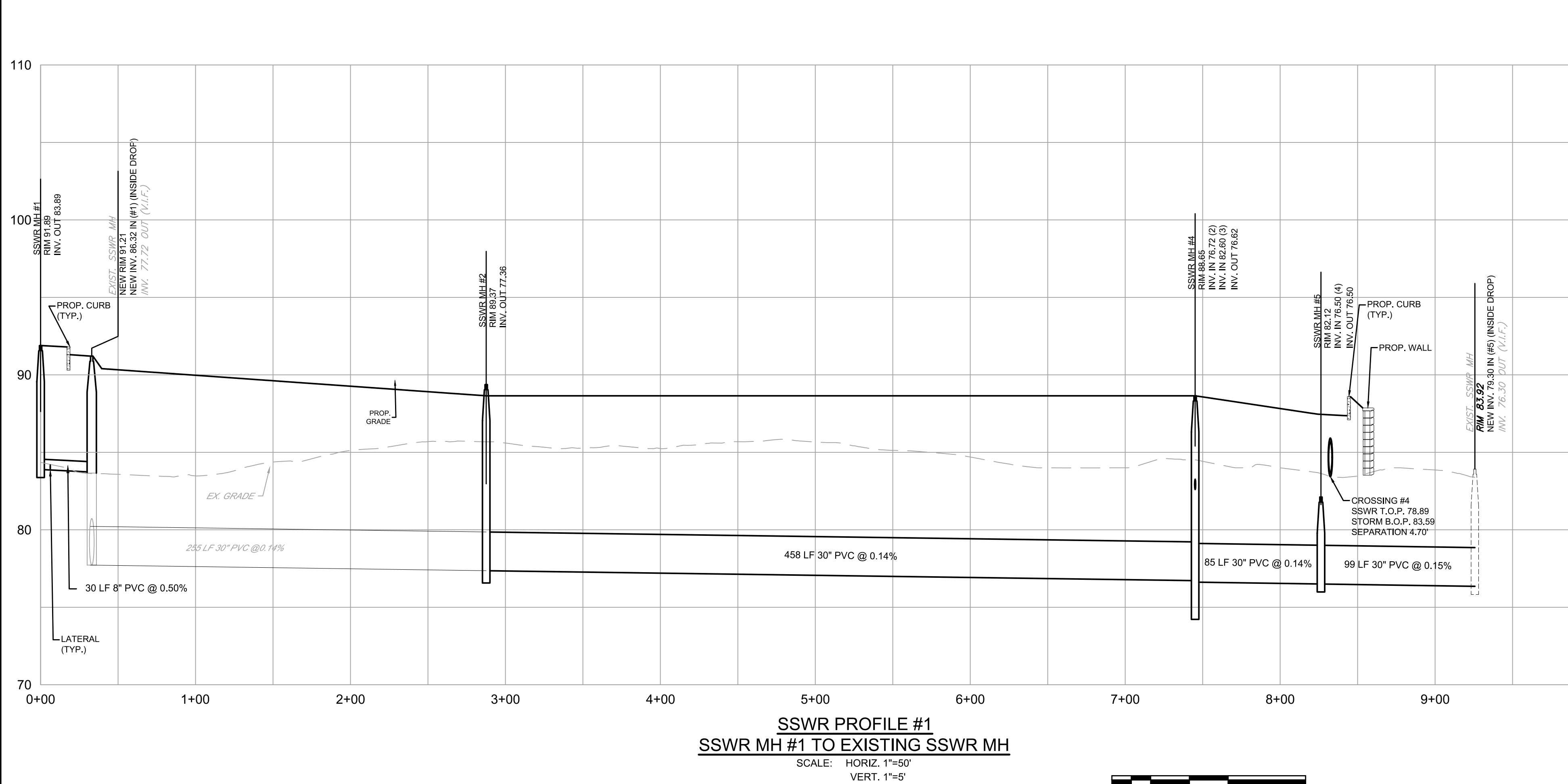
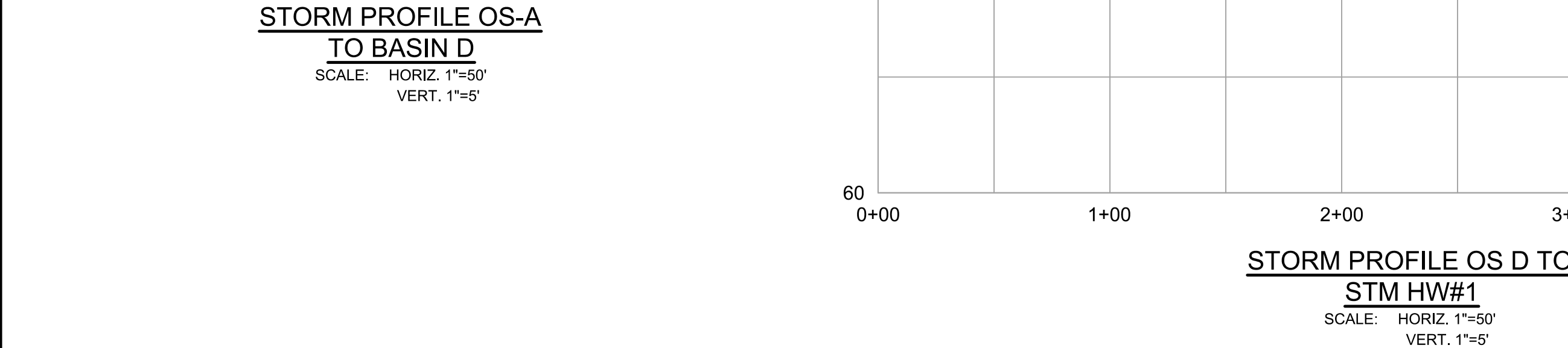
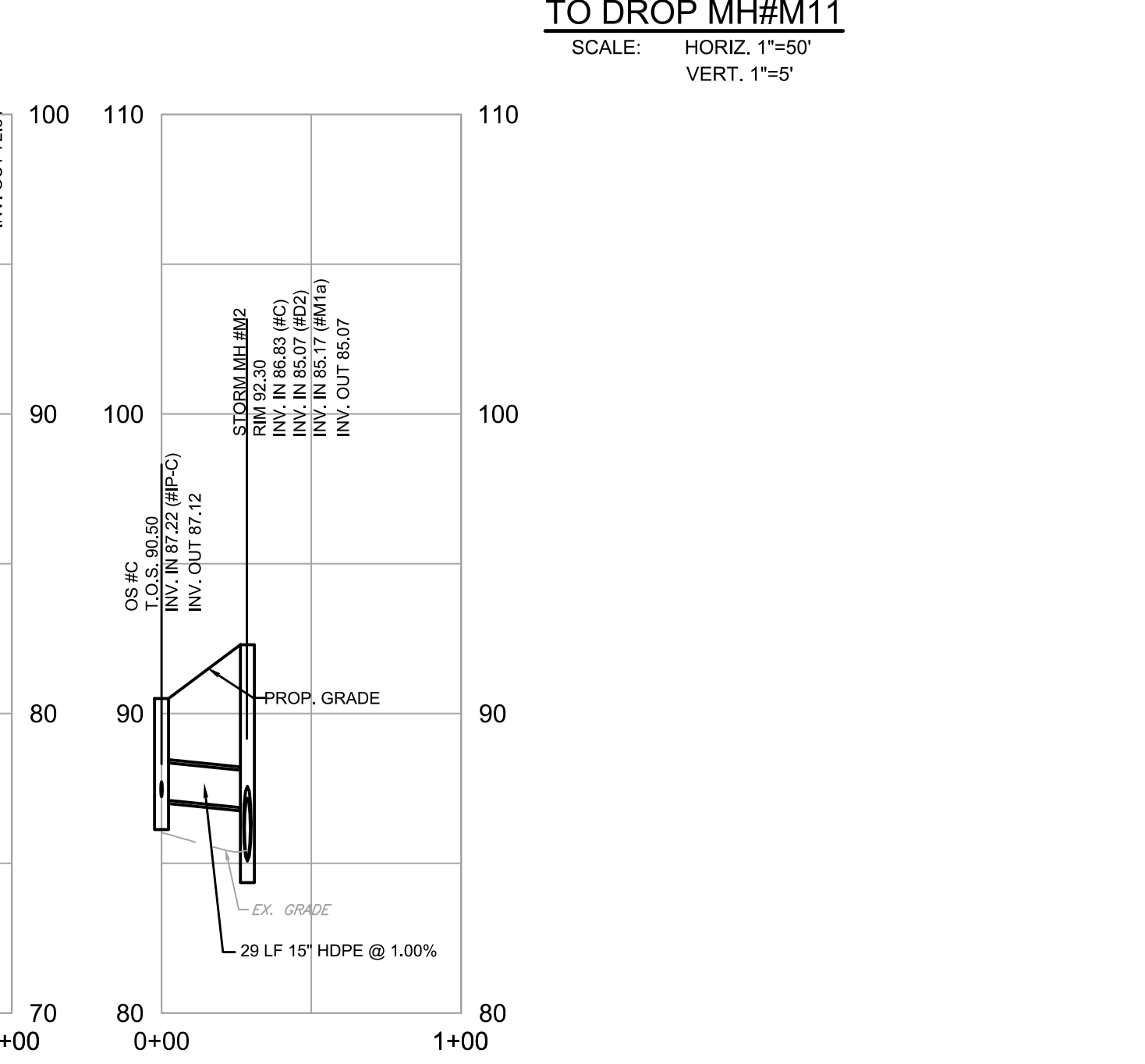
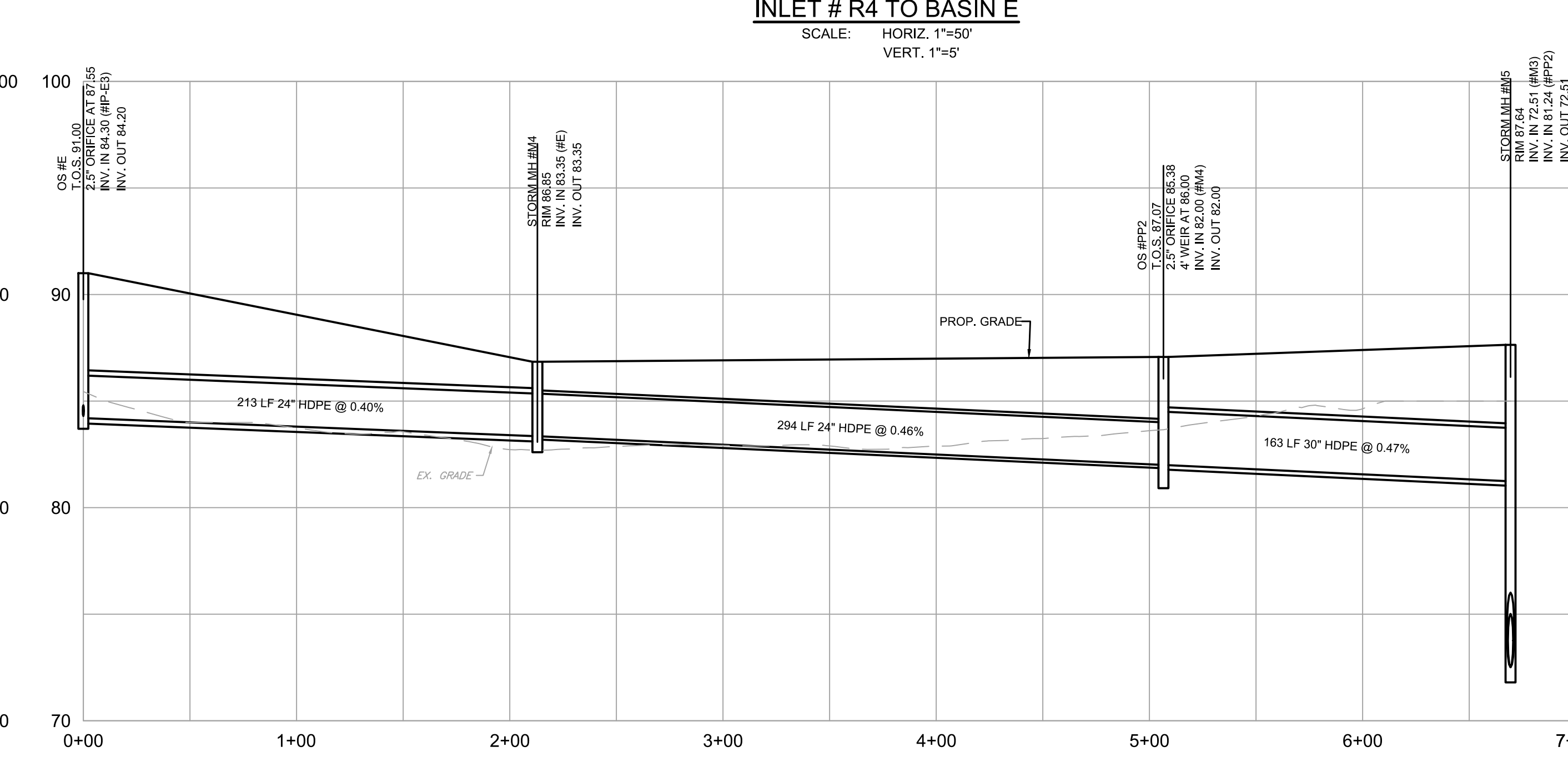
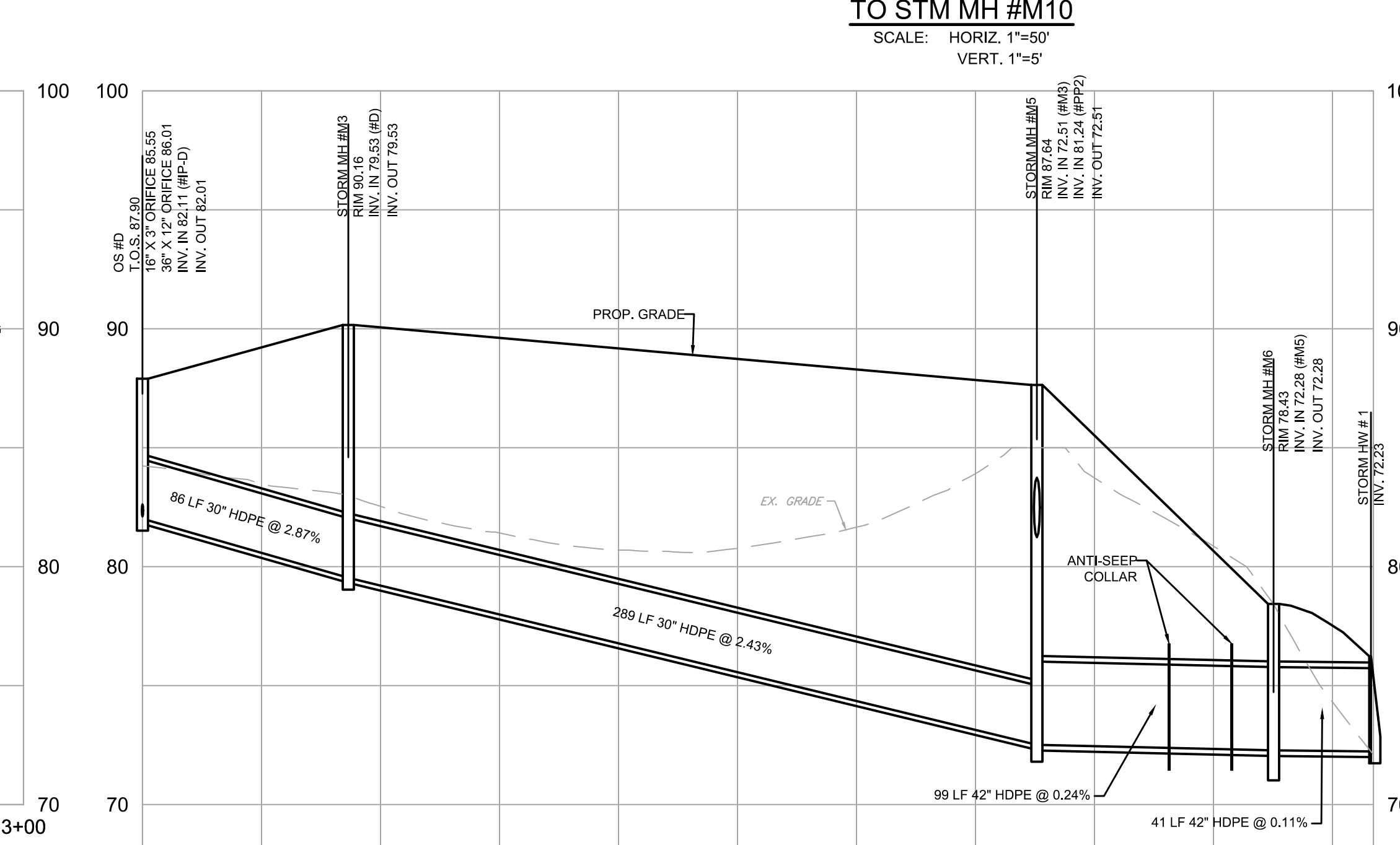
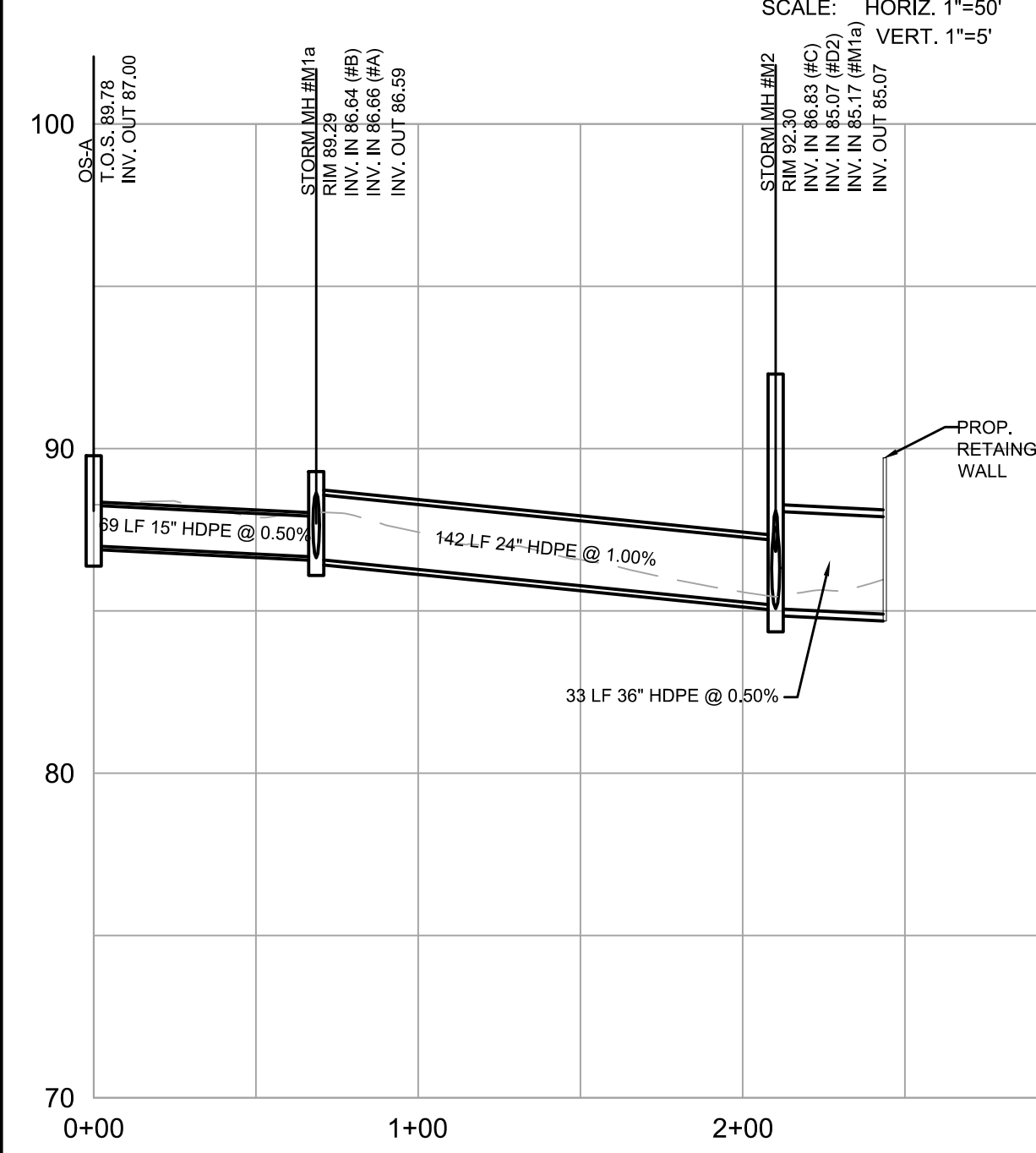
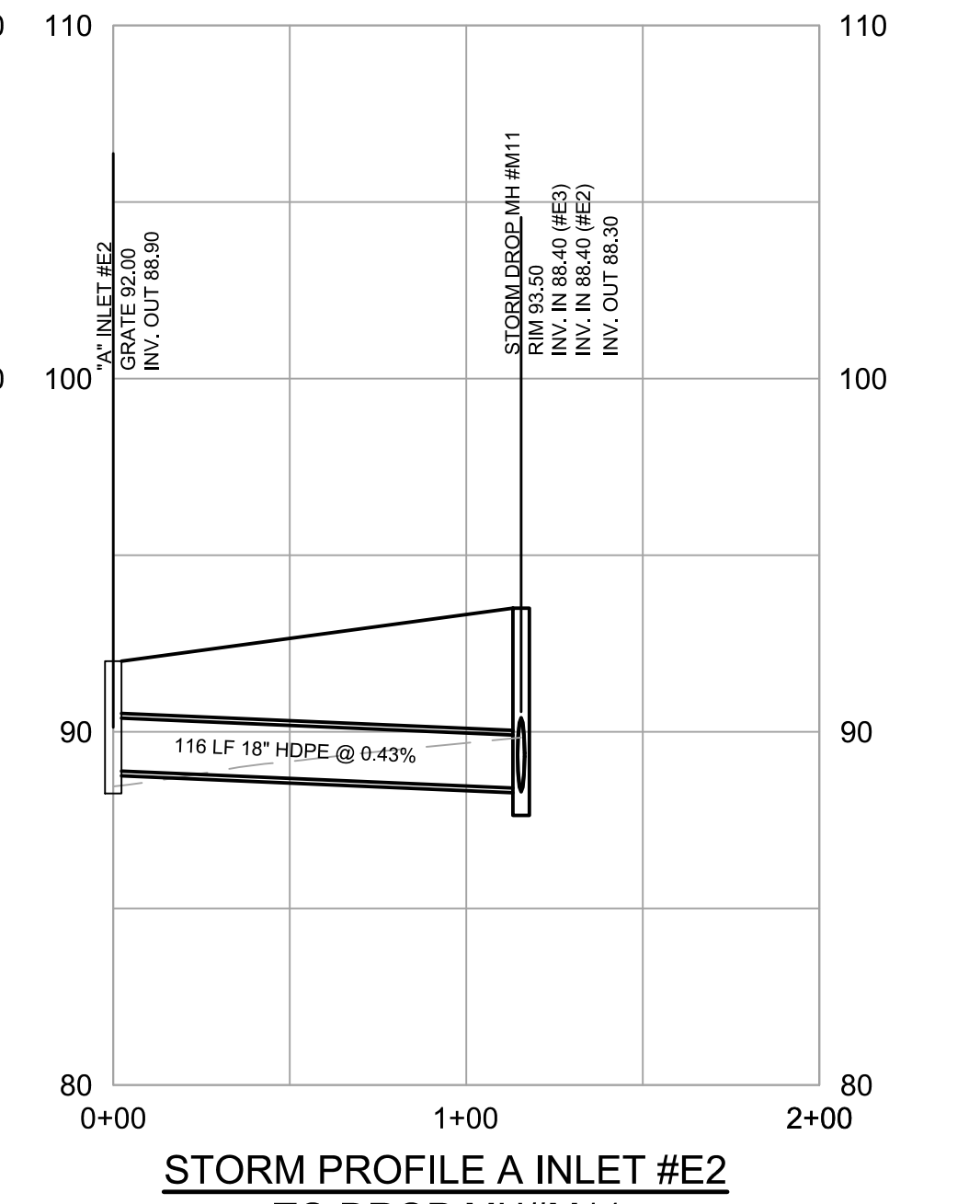
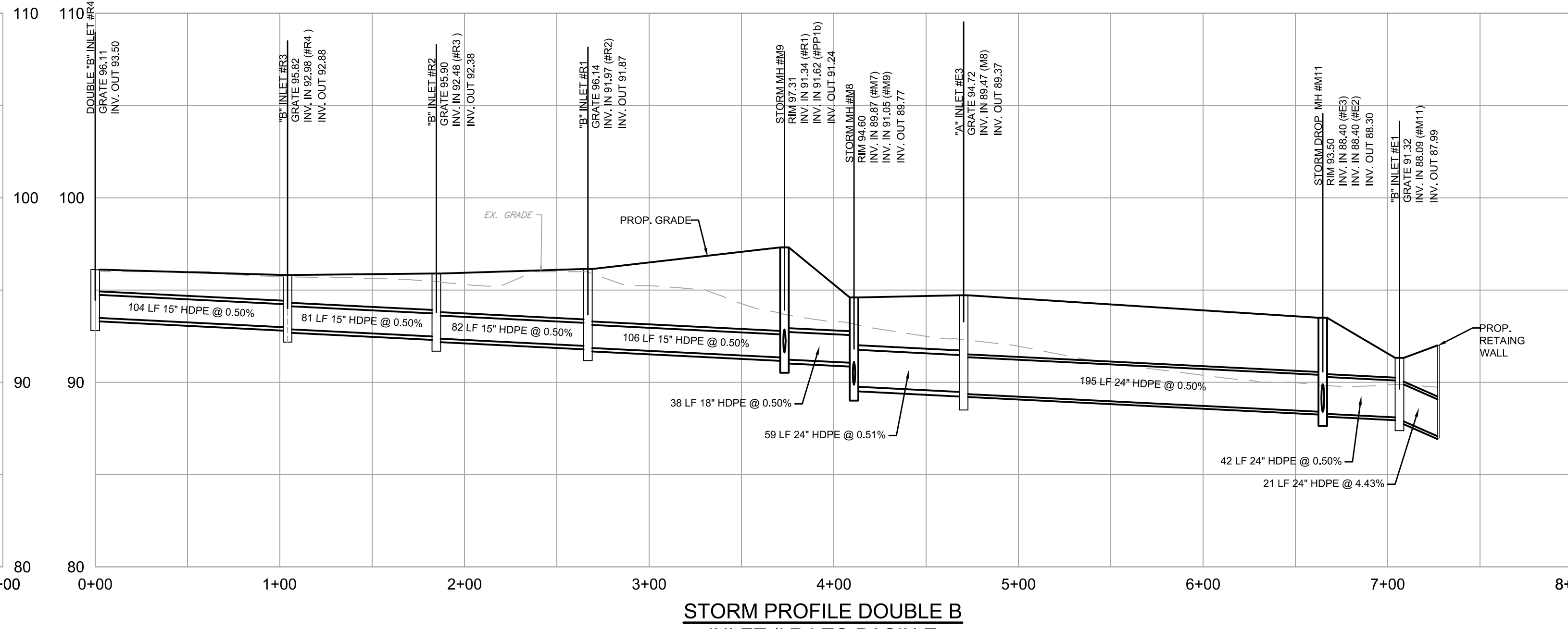
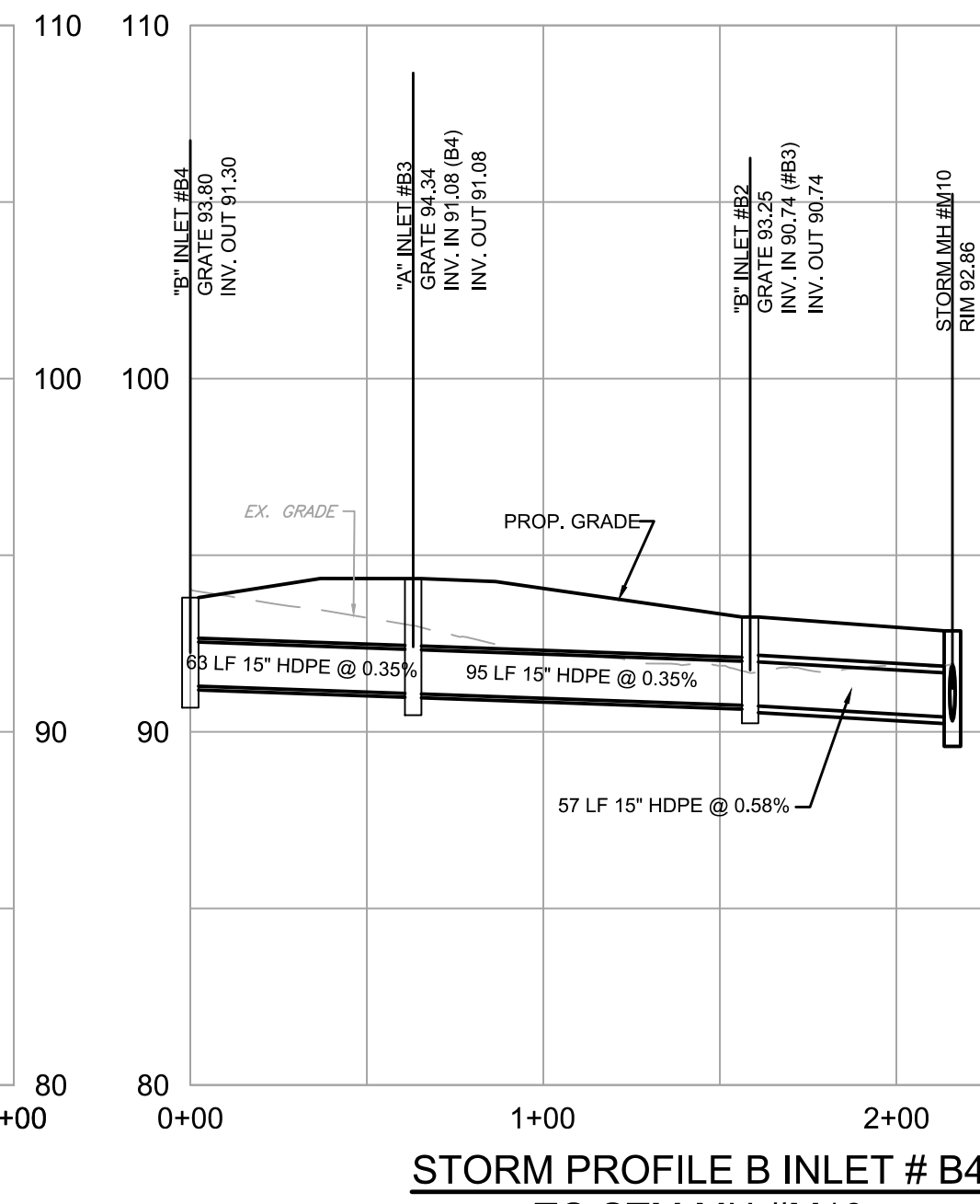
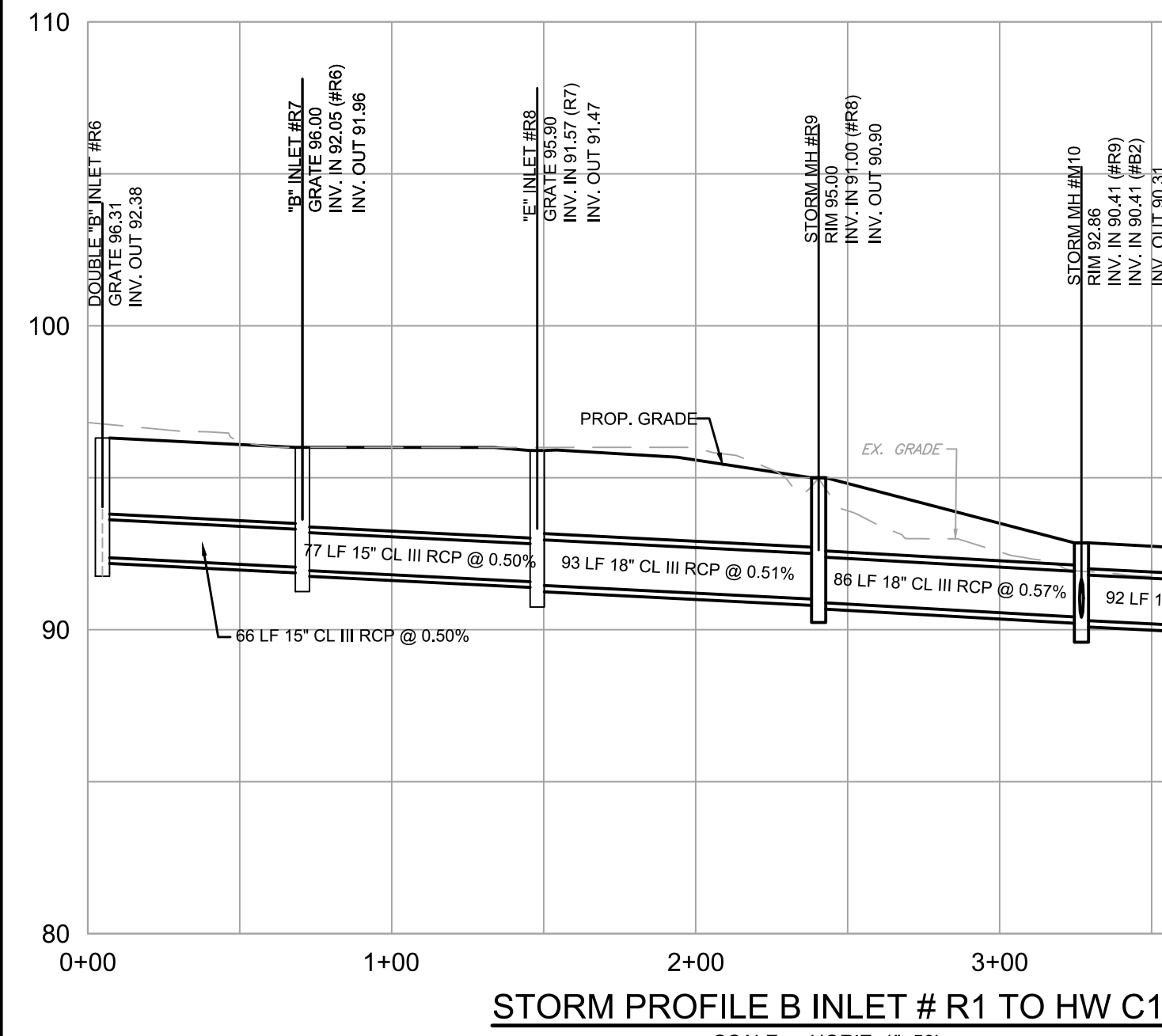
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NO.	REVISIONS	DATE	BY

ISSUED BY: YMS		CHECKED BY: BJA	
DATE: 7/14/21		SCALE: N/A	
APPROVED BY: BJA		ARCH NO: 111-117-EC	
FIELD BOOK	PAGE	PROJECT NO:	
SHEET		REVISION NO.	
15 of 27		1	
EC-5			

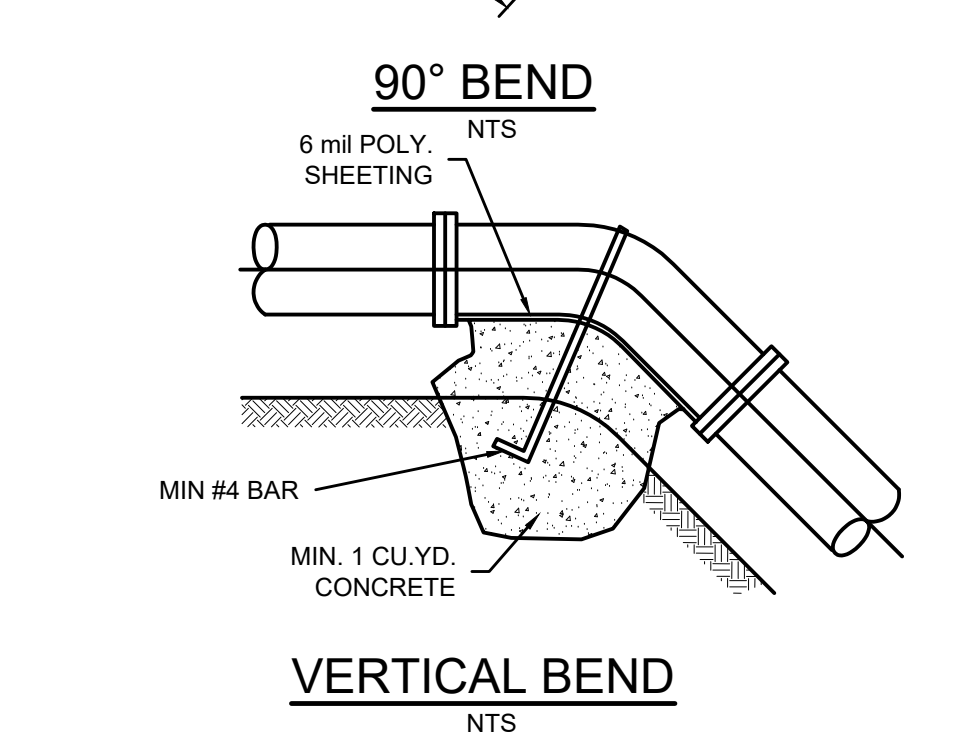
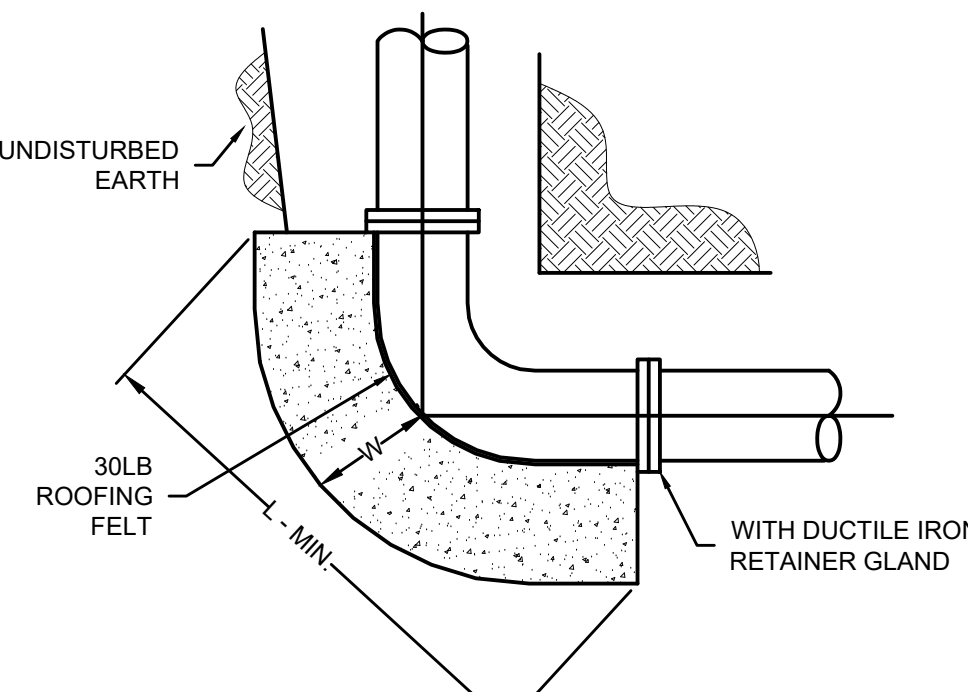
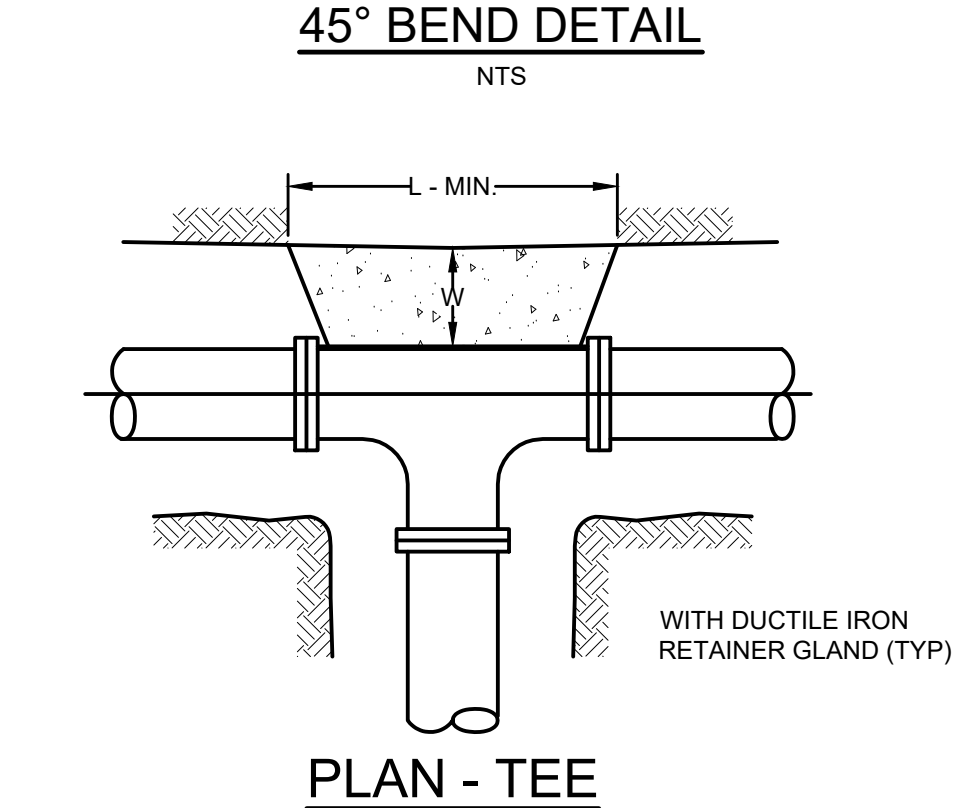
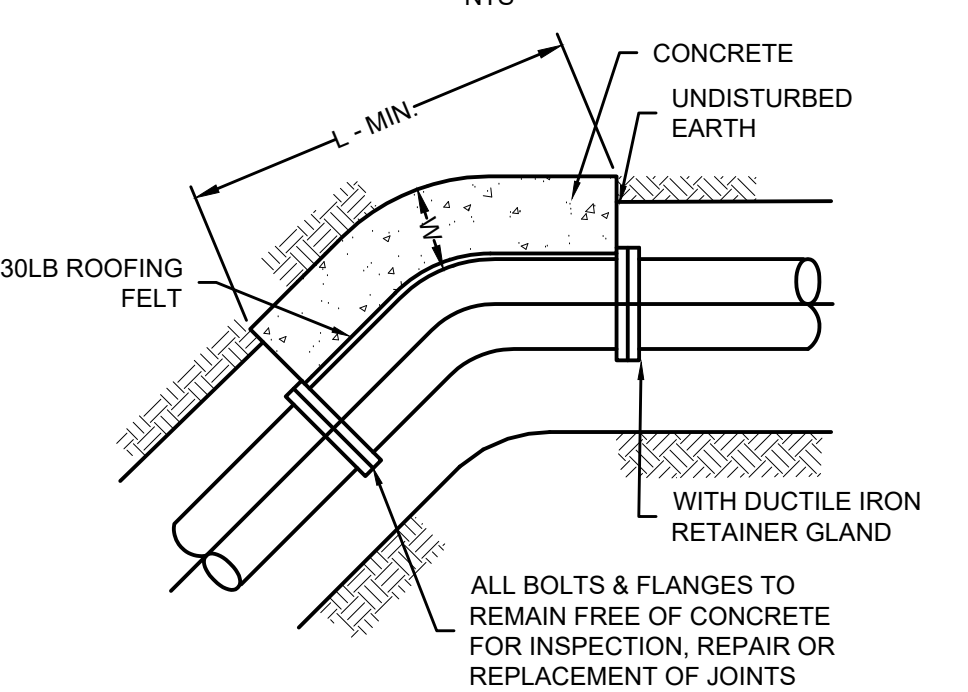
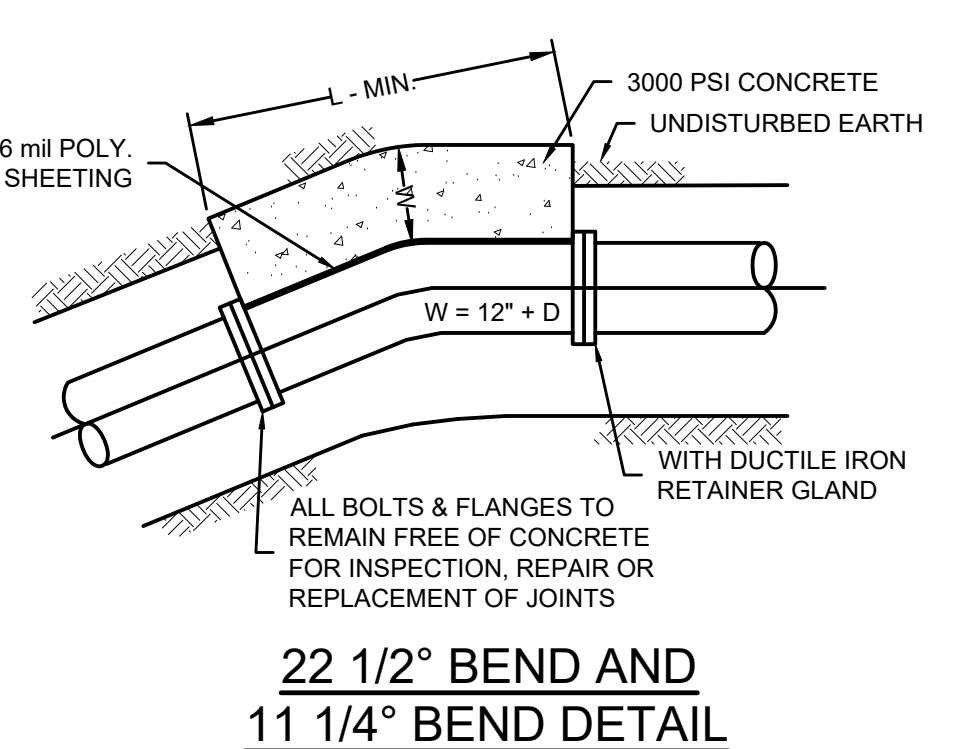
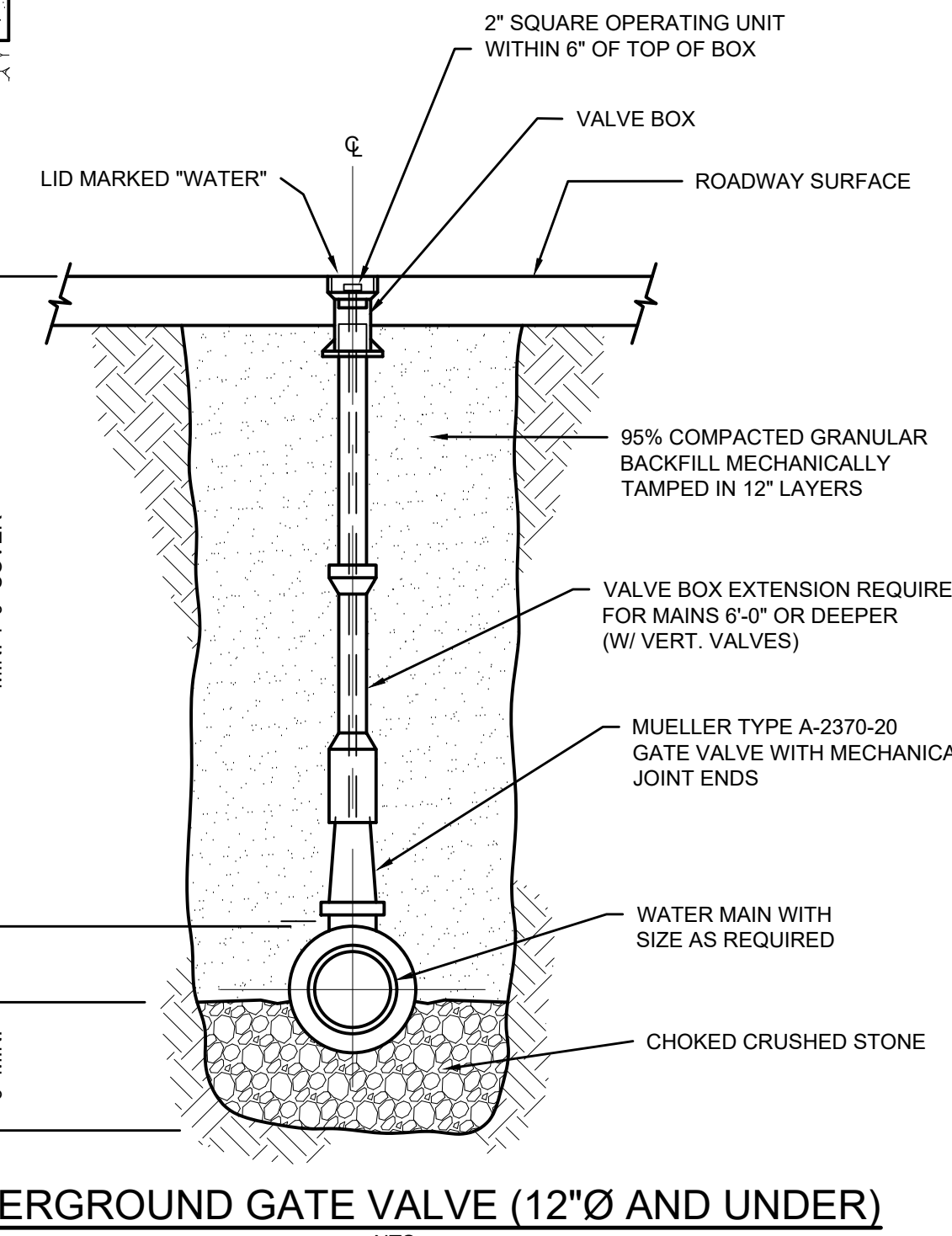
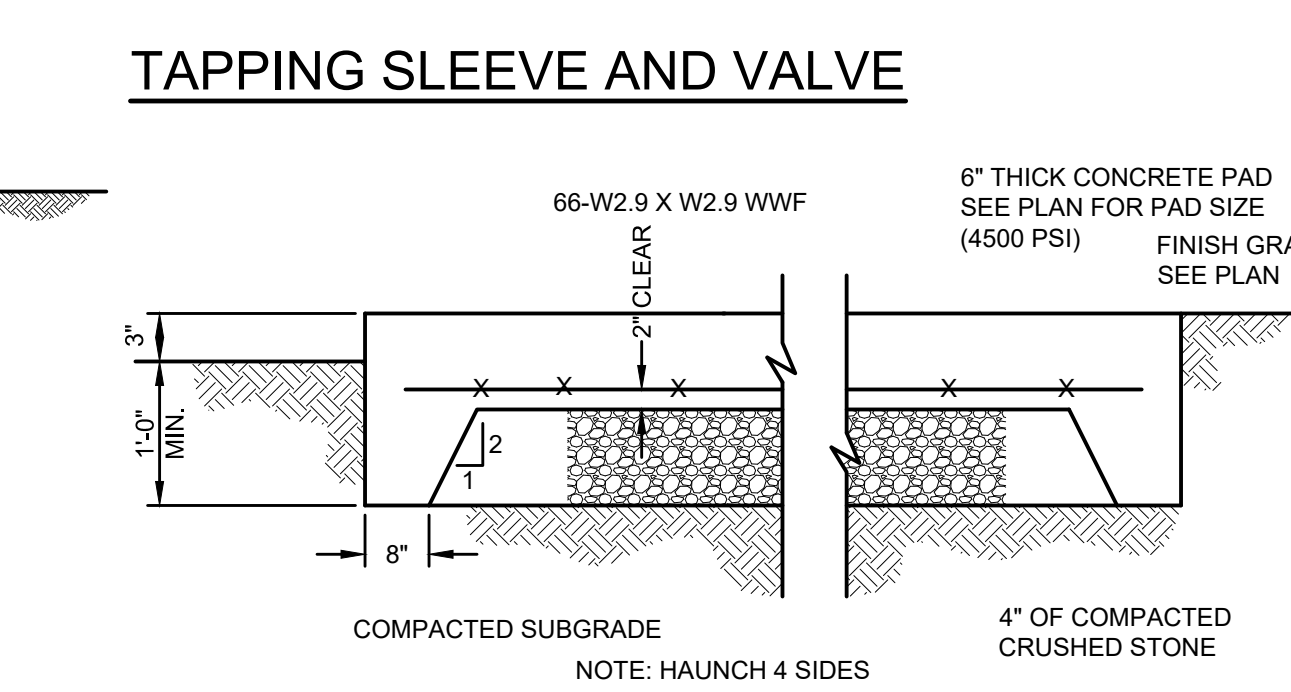
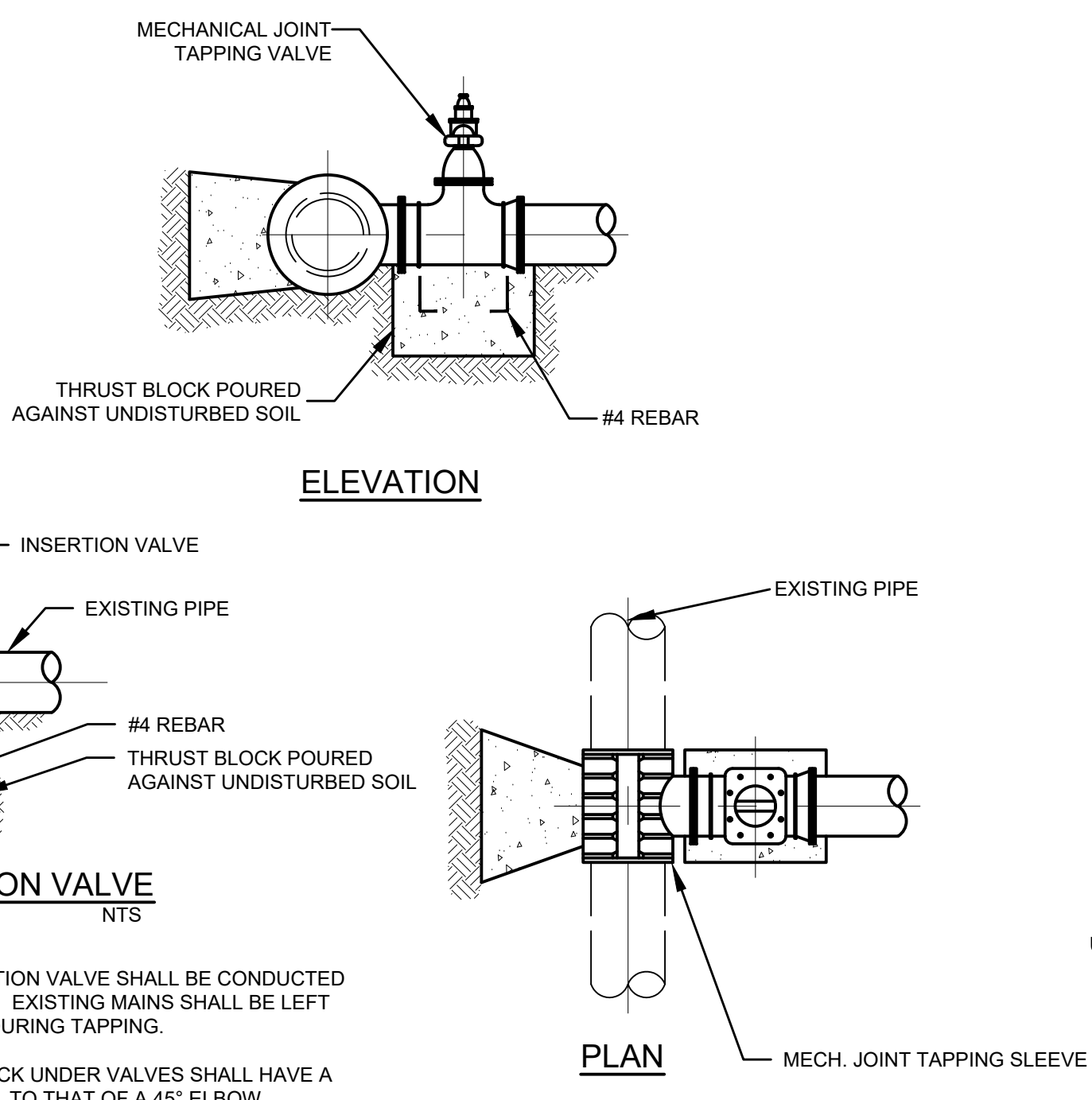
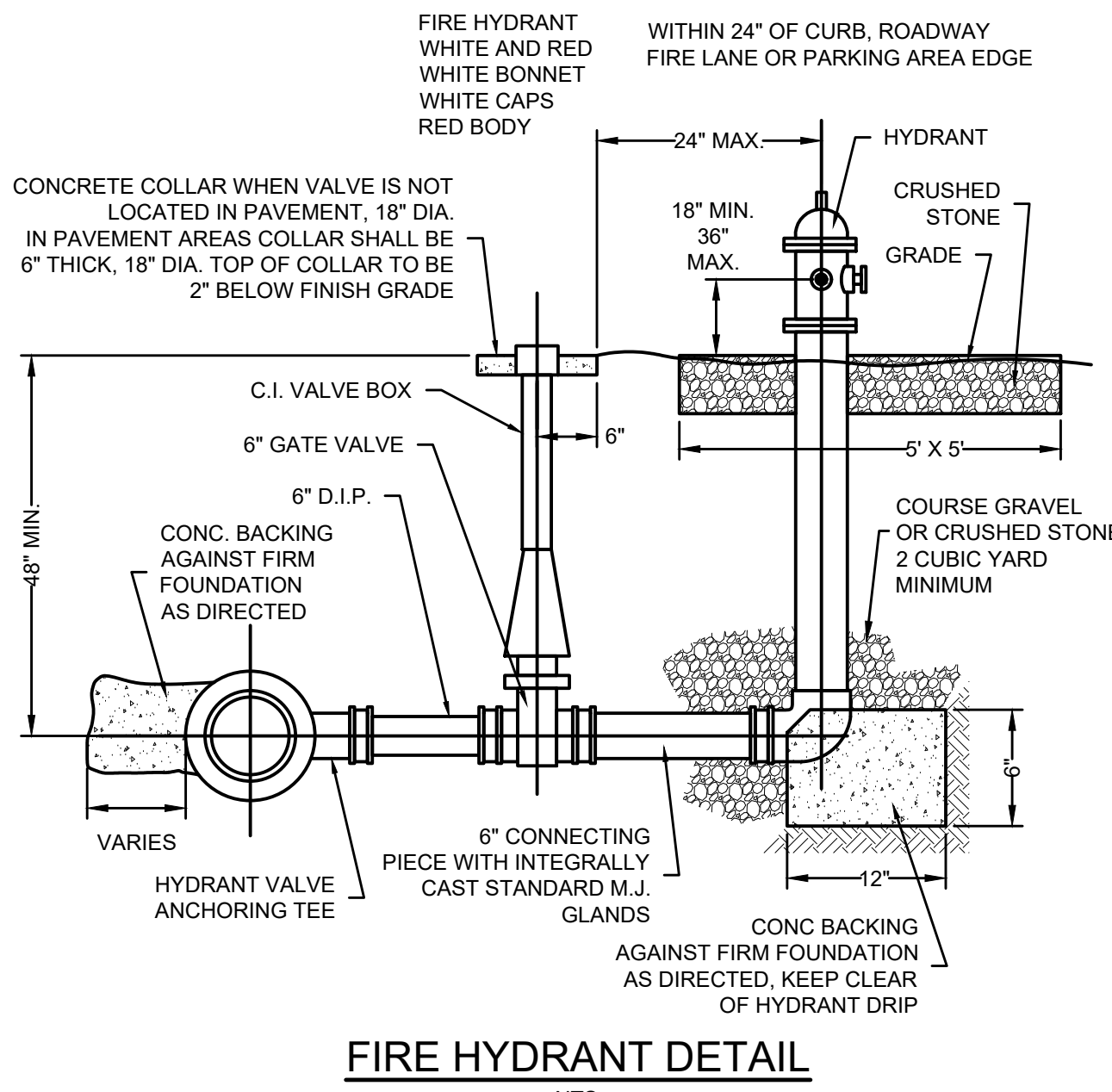
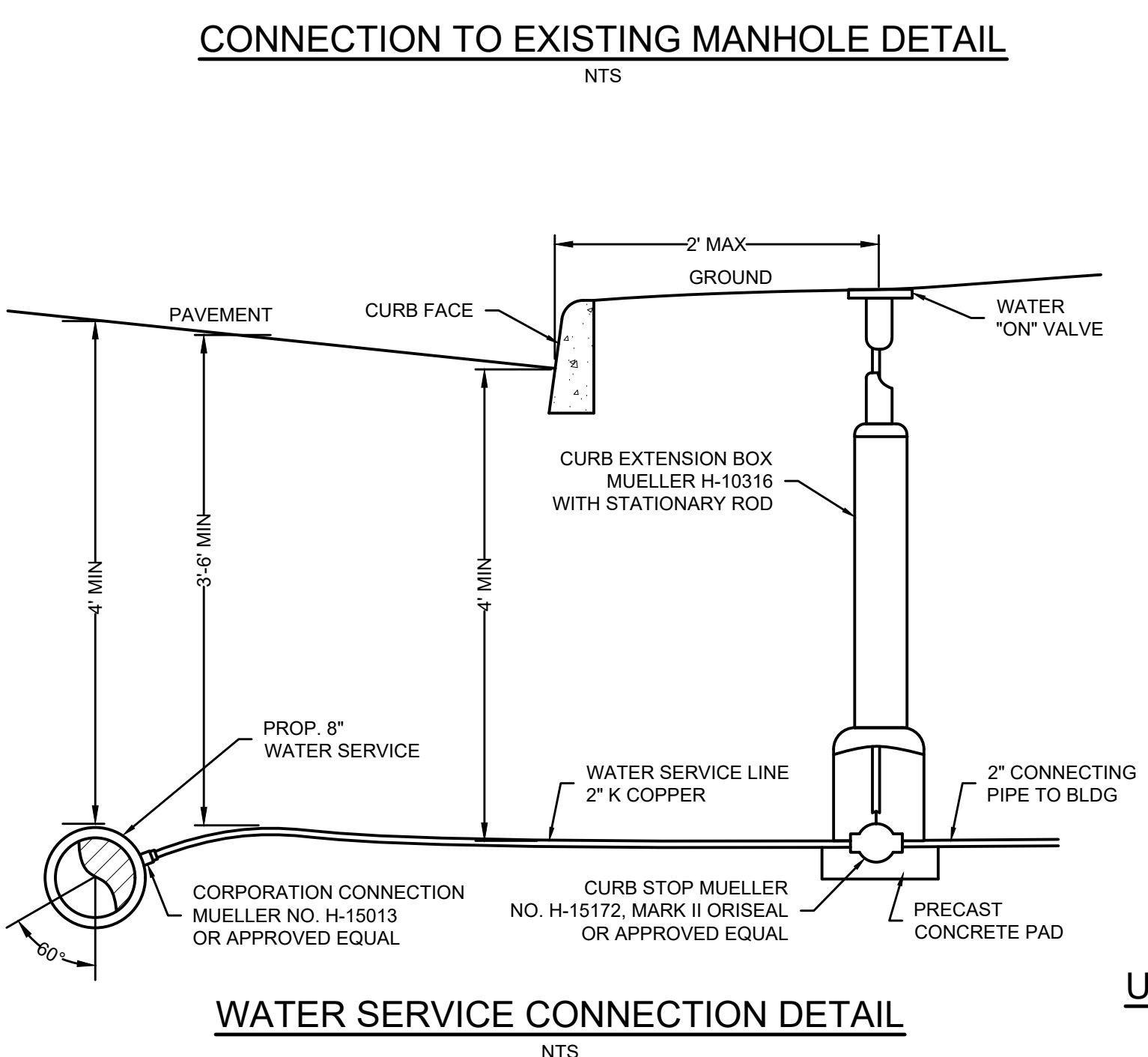
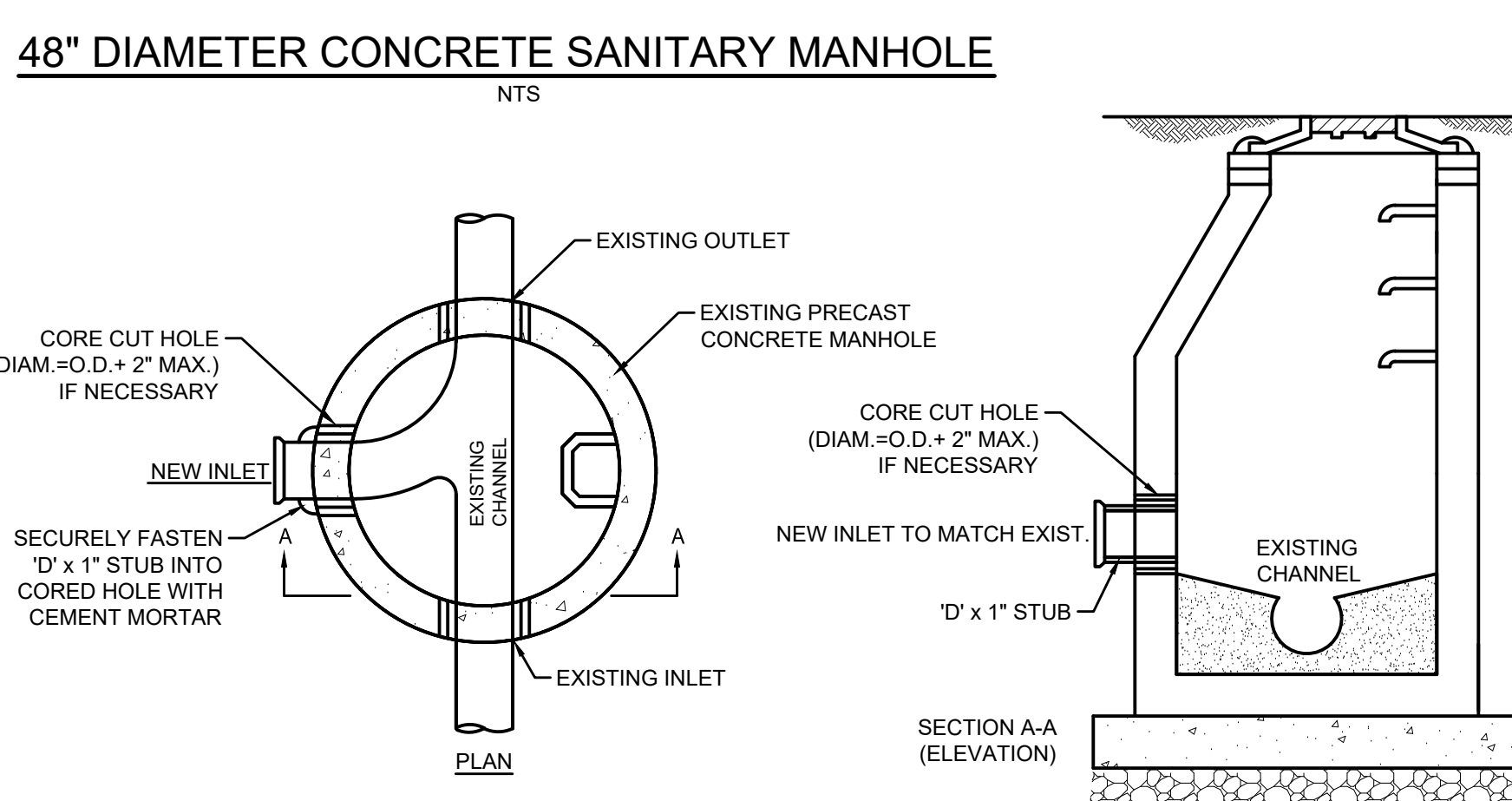
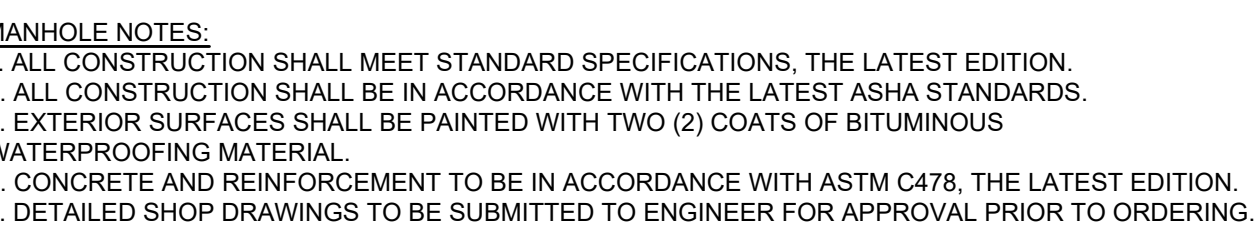
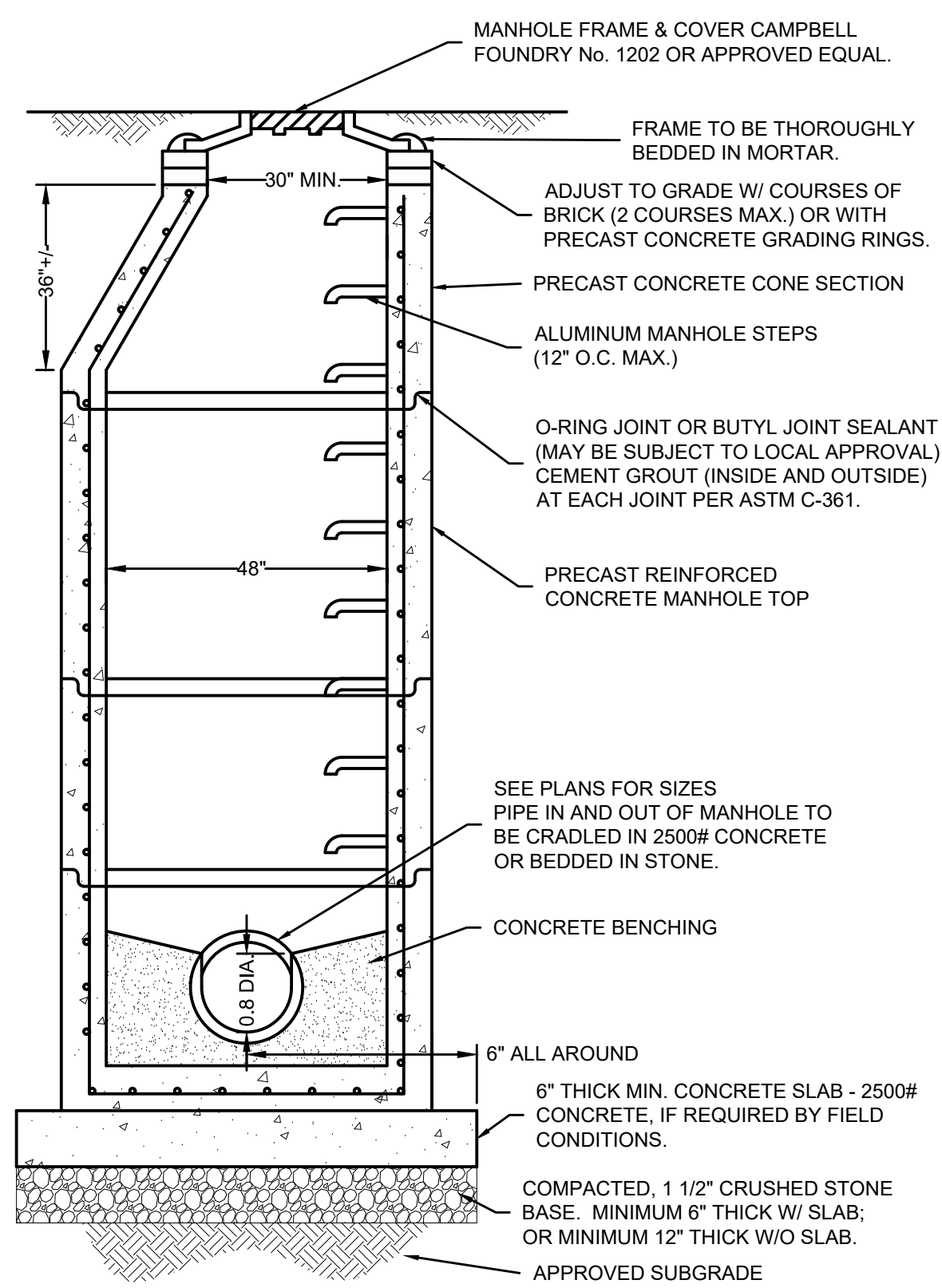
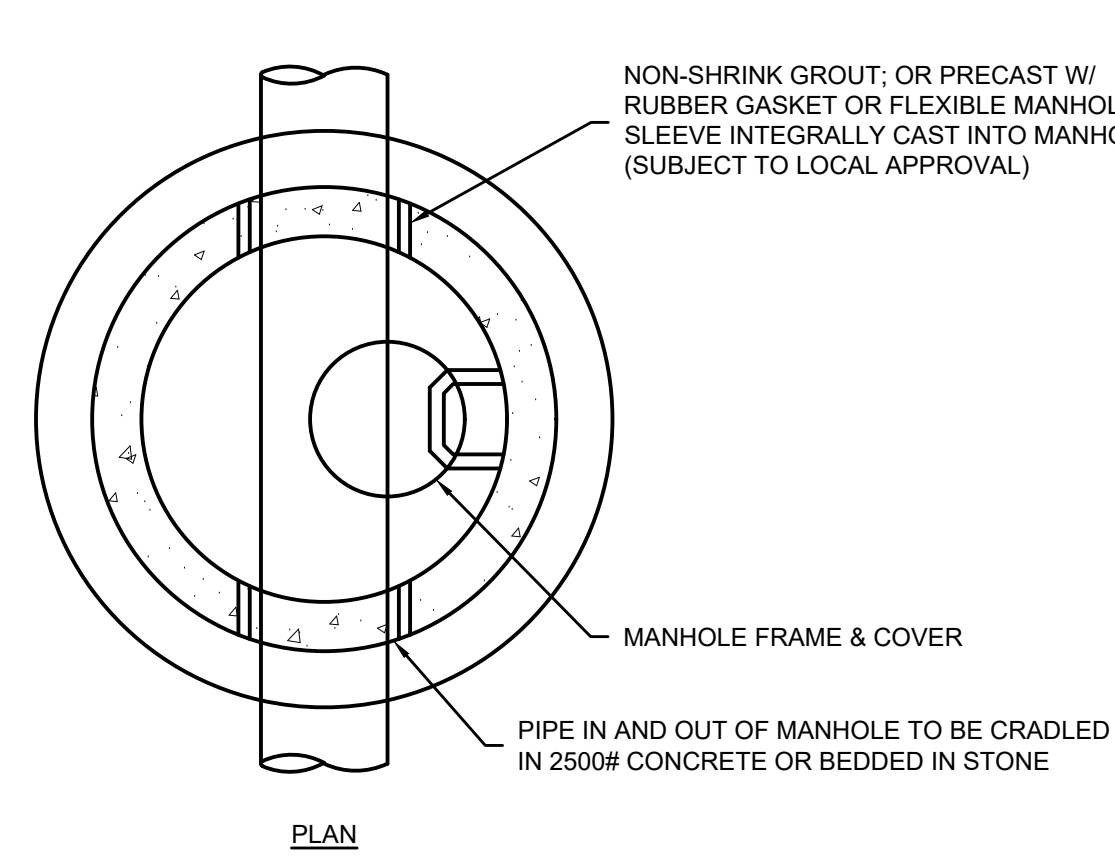
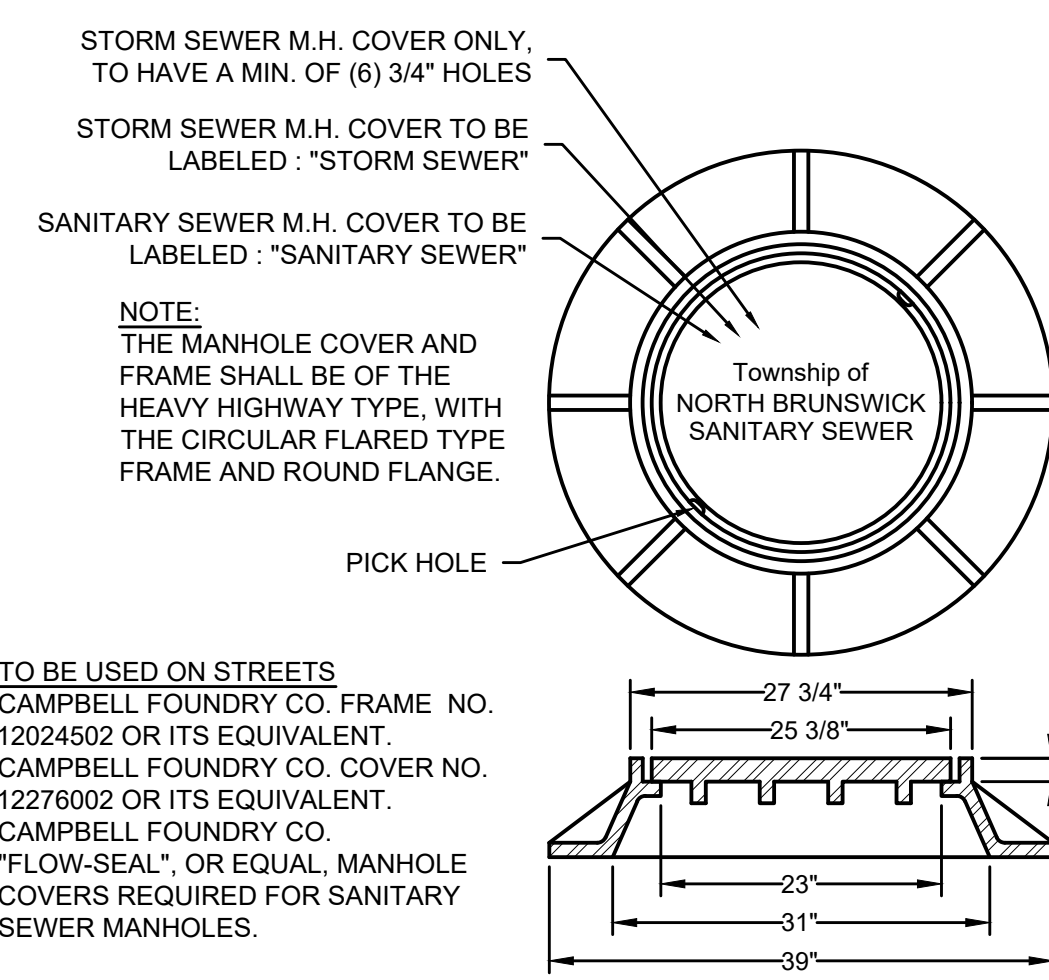
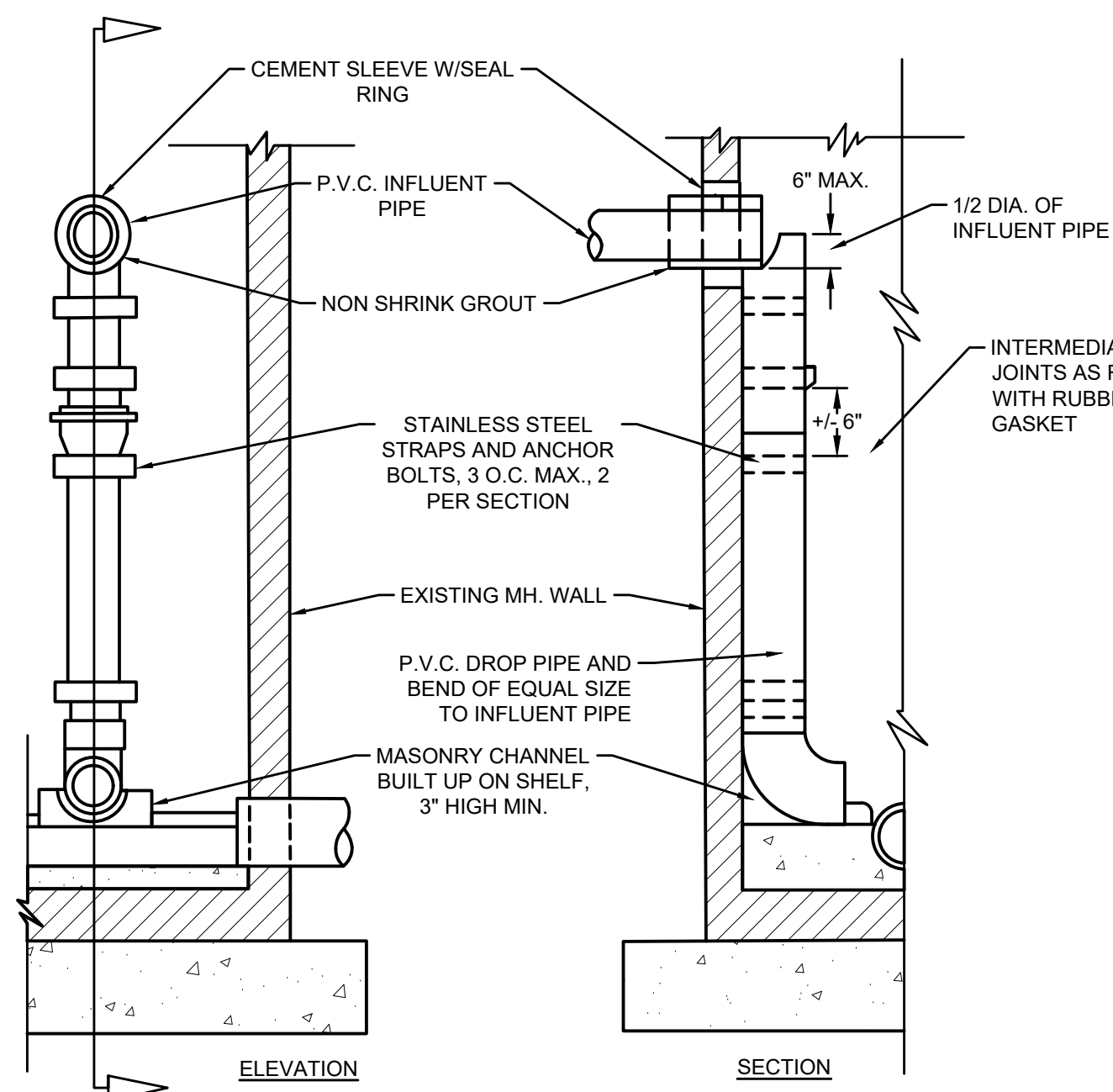
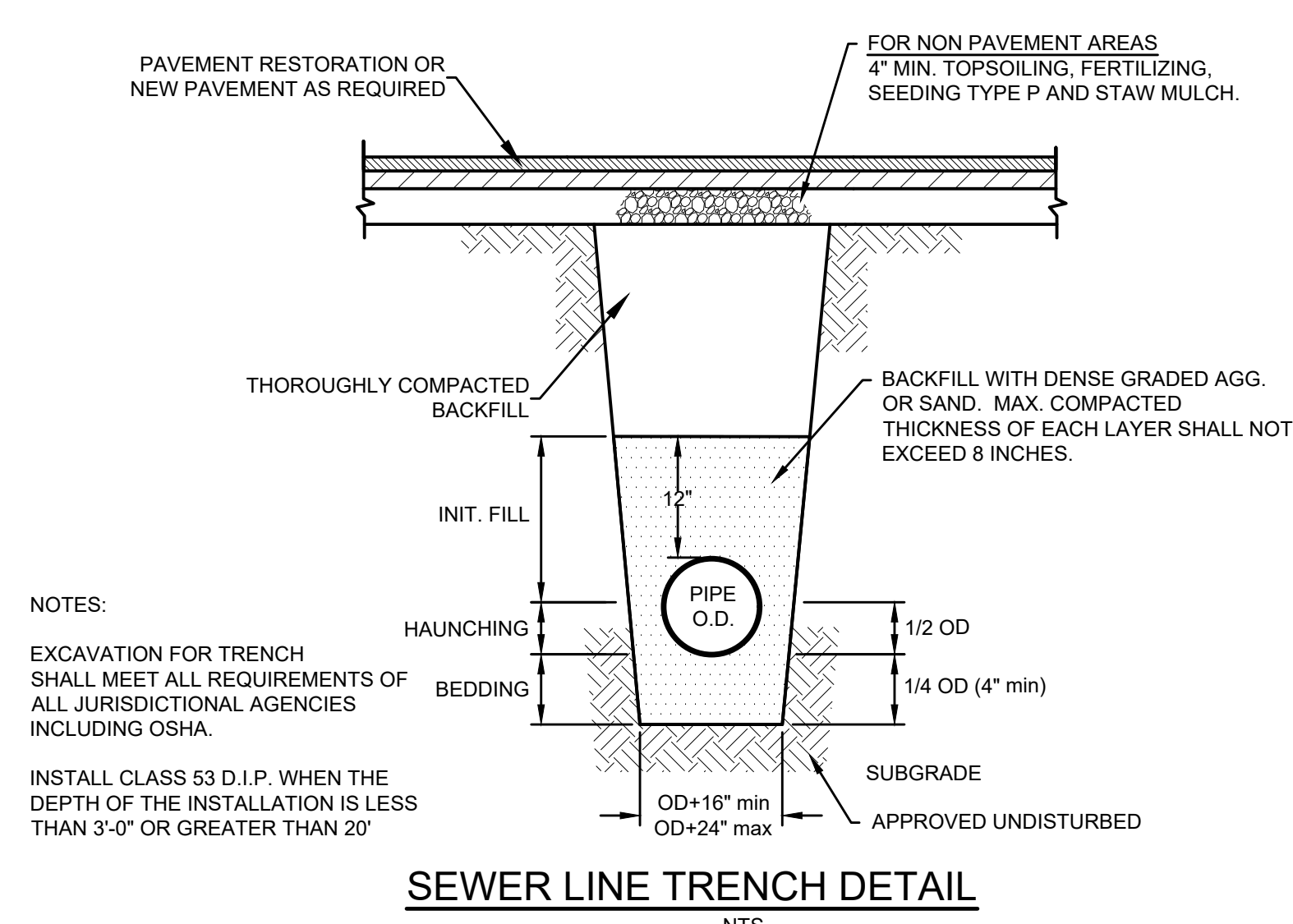
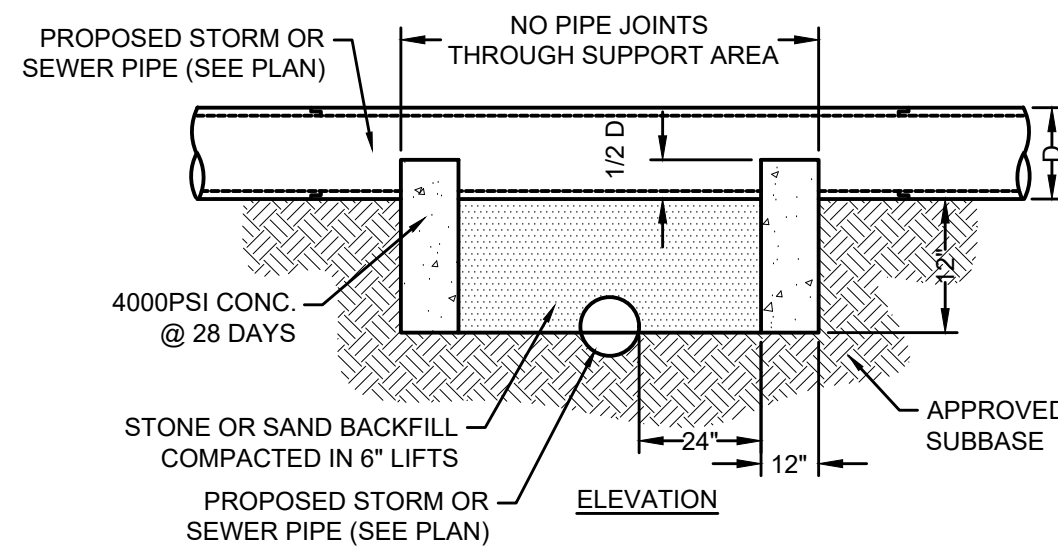
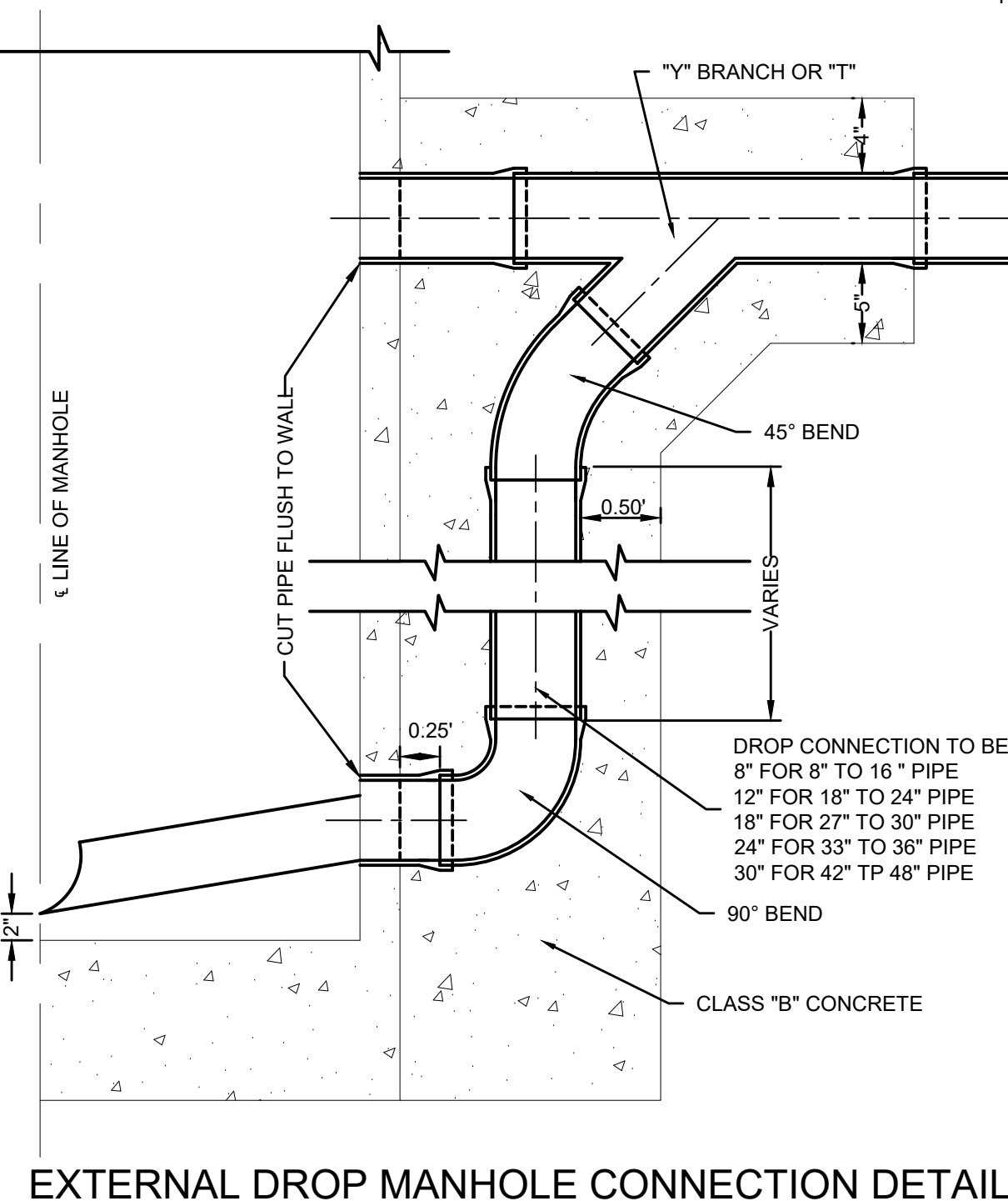
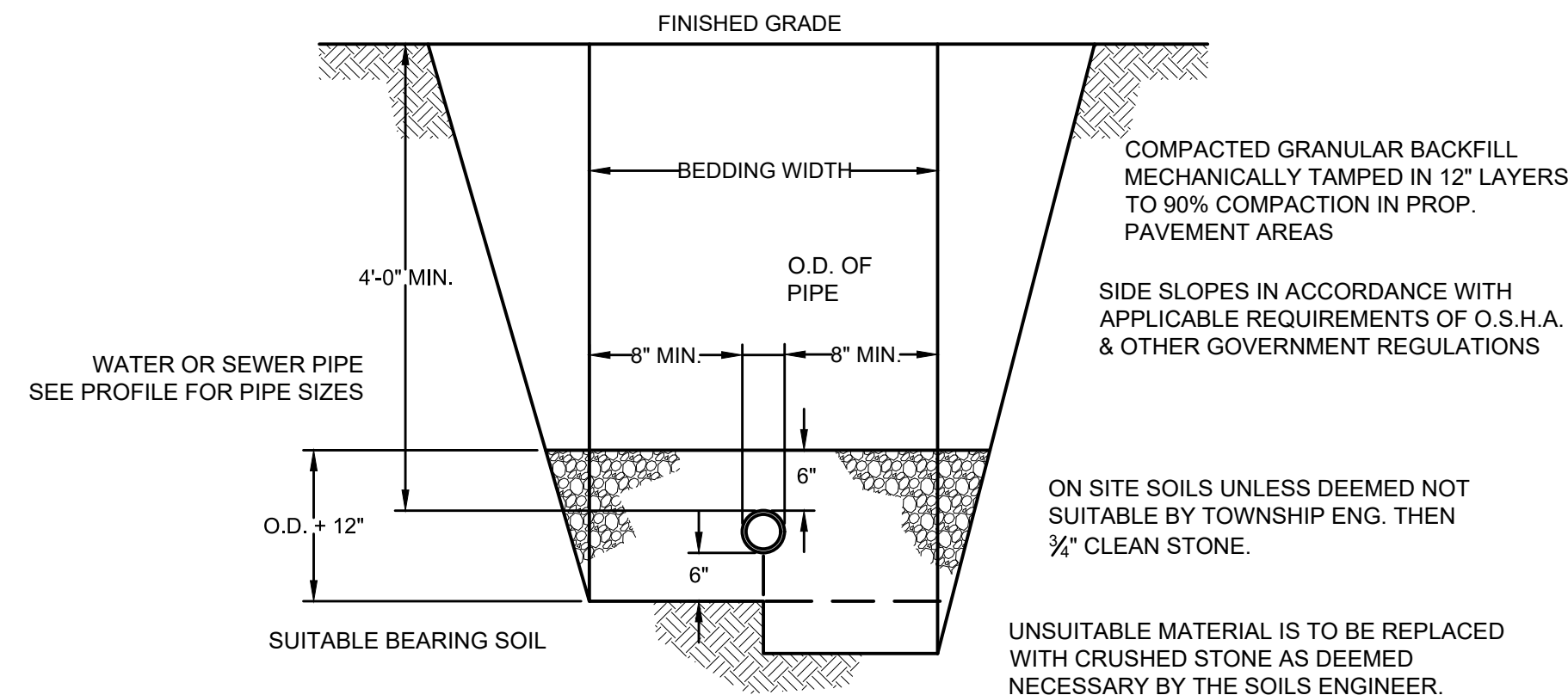
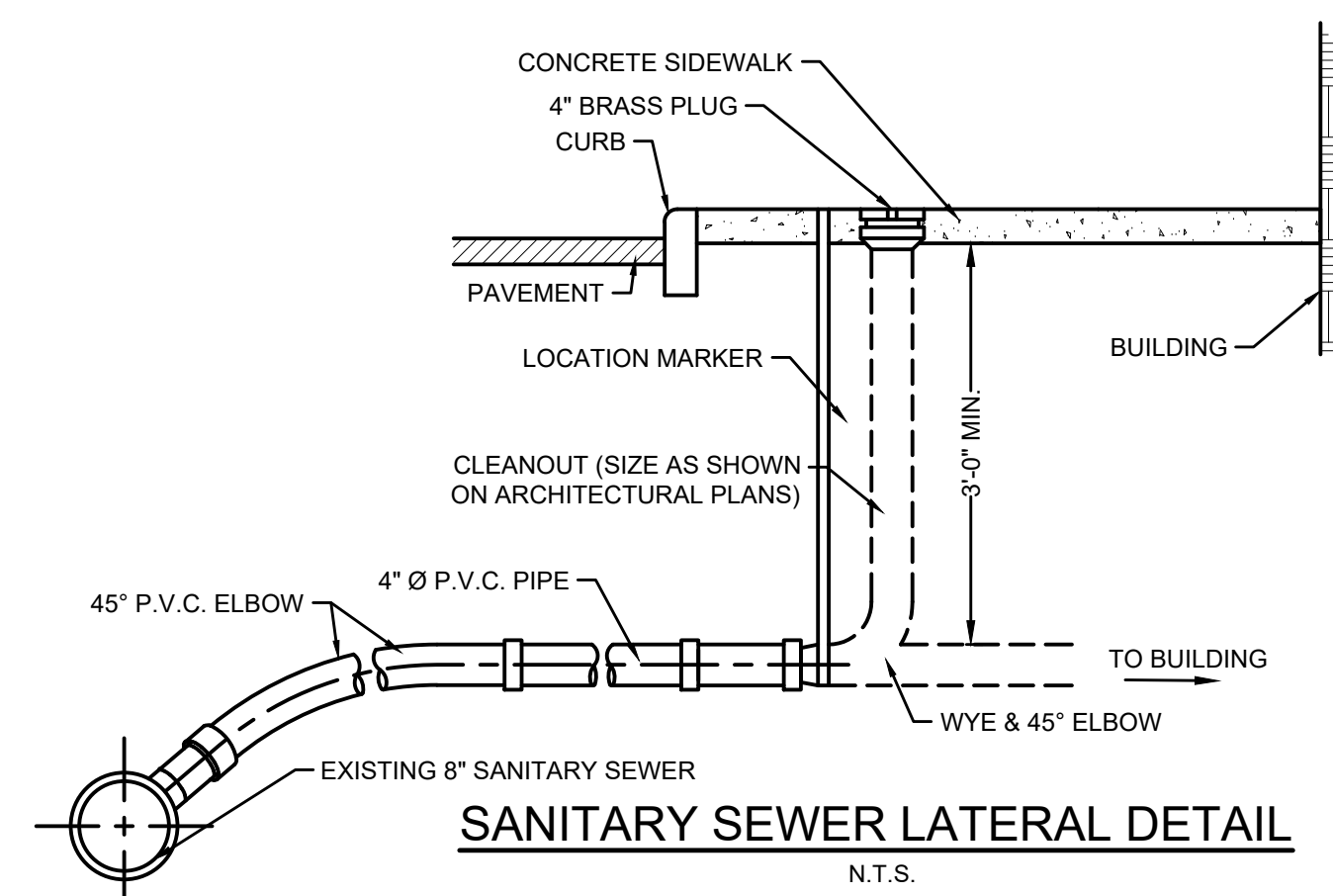
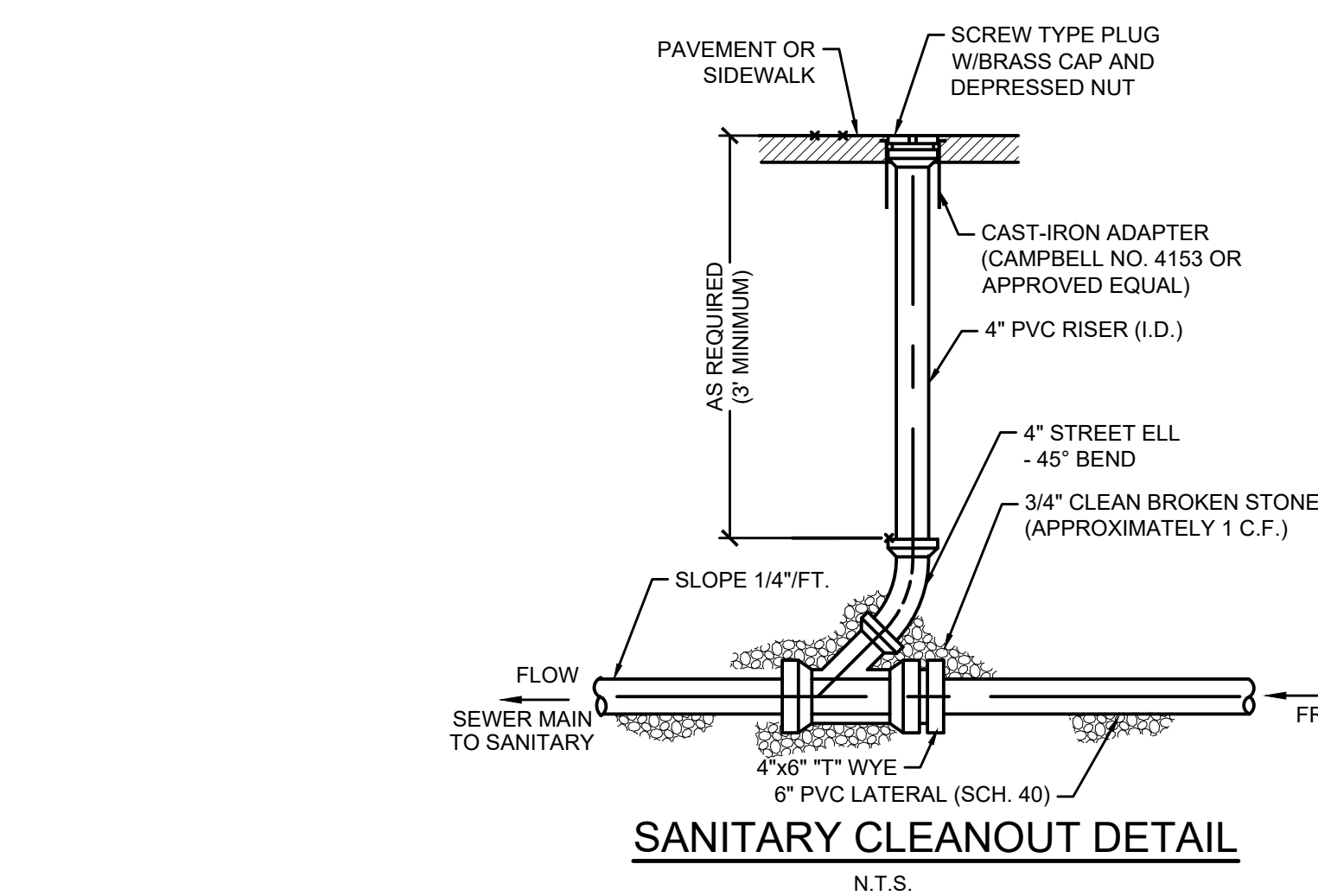




MIDDLESEX COUNTY	NEW JERSEY
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THIS WORK PREPARED UNDER MY IMMEDIATE SUPERVISION BRADFORD J. ALLER PROFESSIONAL ENGINEER				DATE: 7/14/21 PROJECT: 18-27 SHEET: 18-27 PR-1		CHECKED BY: BJA DATE: 7/14/21 PROJECT: 118-PR SHEET: 18-27 SHEET: 18-27		EP DESIGN SERVICES, LLC 2901 Hamilton Boulevard South Plainfield, New Jersey 07080 (908) 205-0443 Fax: (908) 755-3212		PROP. STORM & SANITARY PROFILES DM INVESTMENTS OF NORTH BRUNSWICK, LLC. FOR BLOCK 224 - LOTS 2, 5, 6 & 87 TOWNSHIP OF NORTH BRUNSWICK MIDDLESEX COUNTY NEW JERSEY	
THIS DRAWING AND THE INFORMATION ON IT ARE CONFIDENTIAL AND ARE THE PROPERTY OF EP DESIGN SERVICES, LLC, AND MAY NOT BE USED FOR ANY PURPOSE OR PROJECT OTHER THAN THE ONE IDENTIFIED HERE ON WITHOUT WRITTEN CONSENT FROM EP DESIGN SERVICES, LLC.											

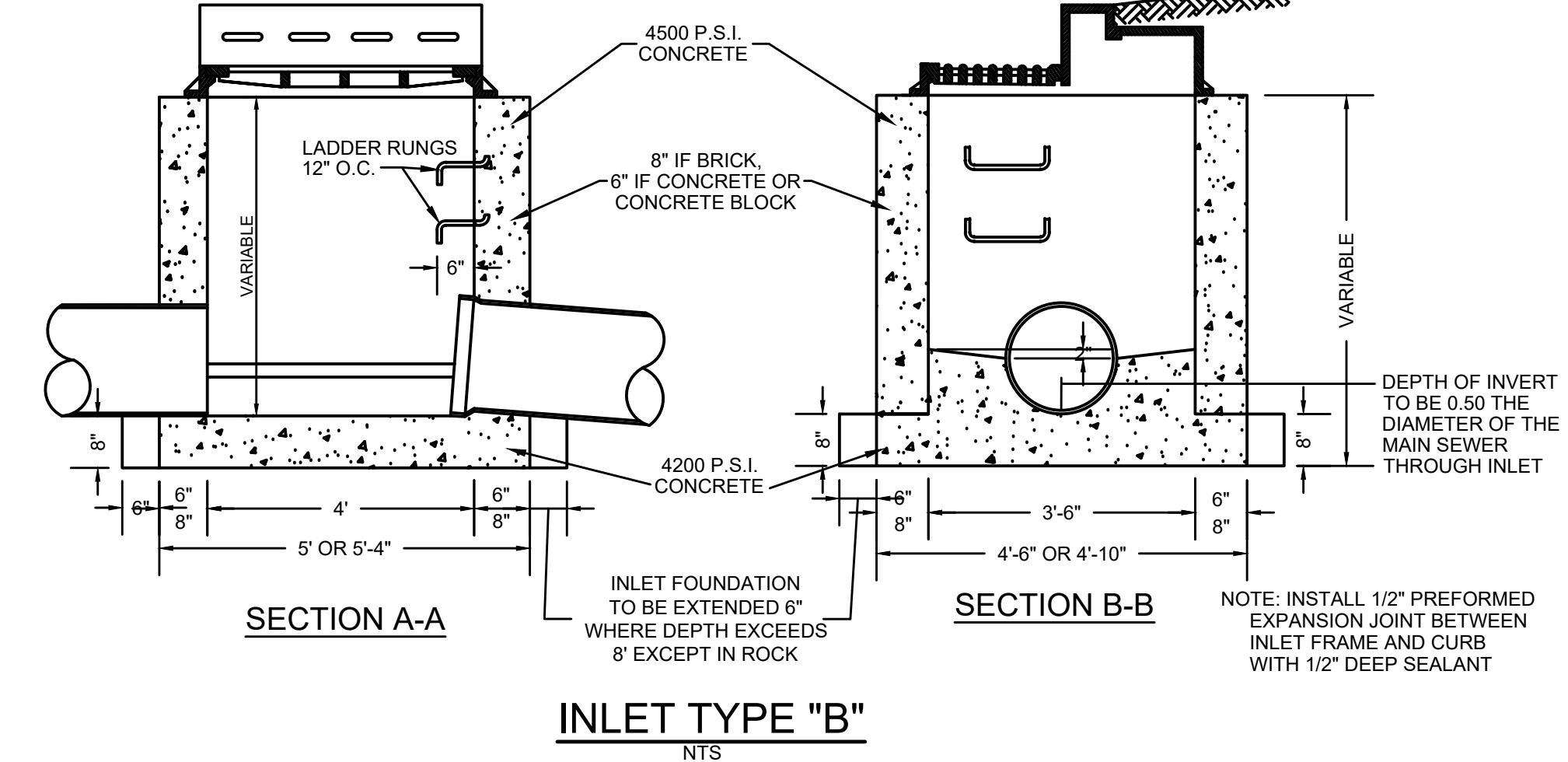
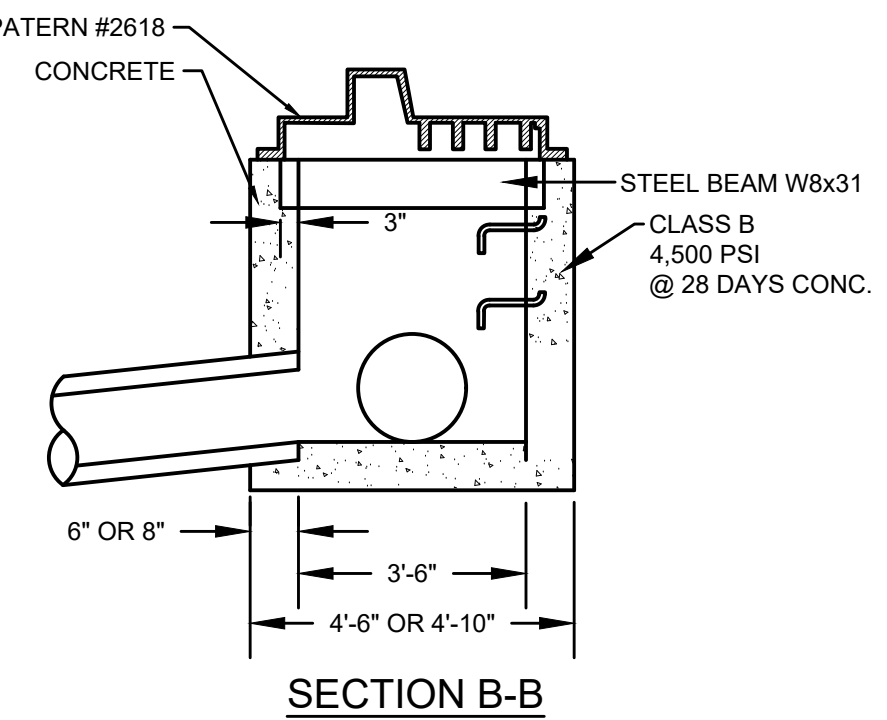
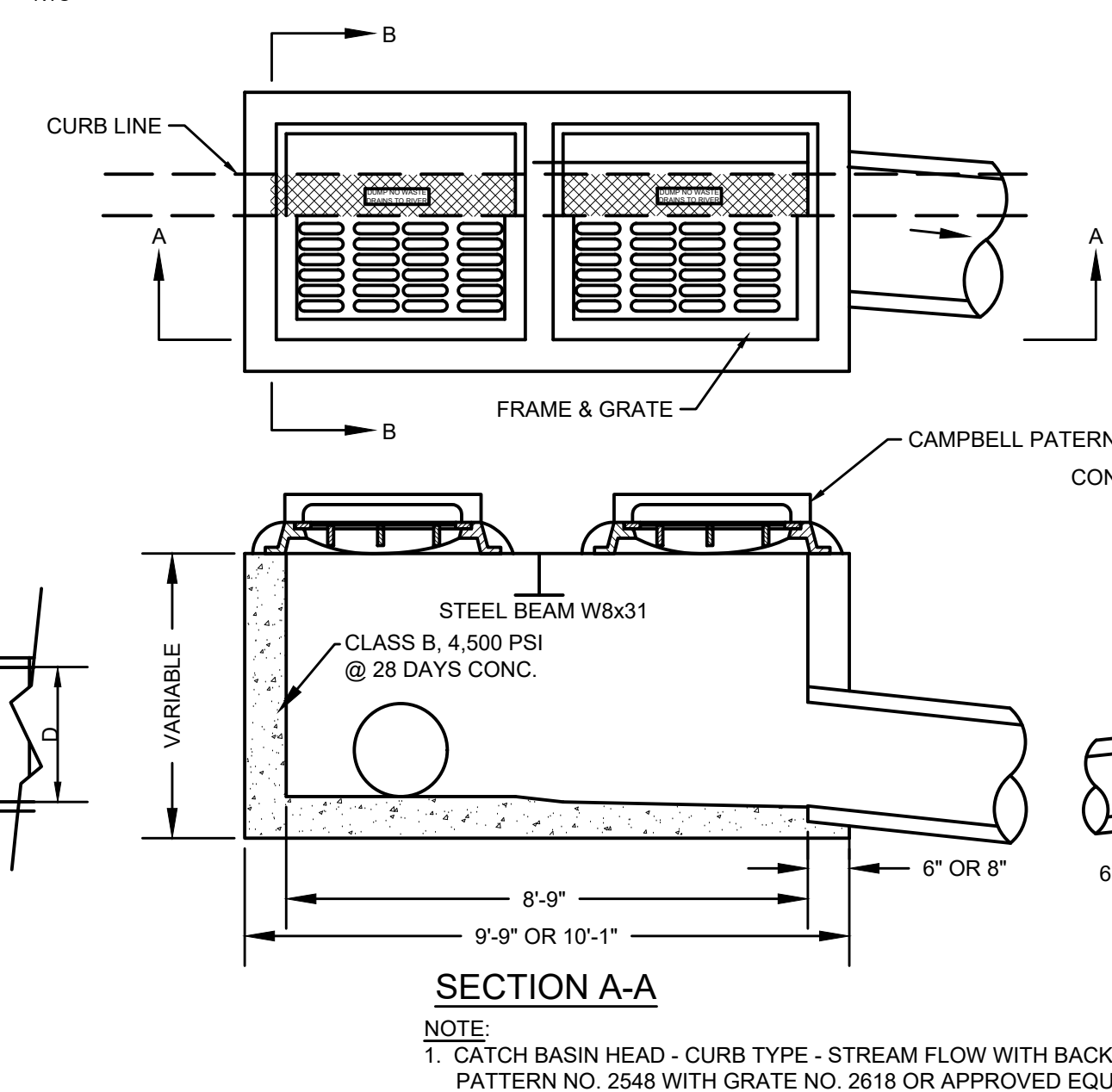
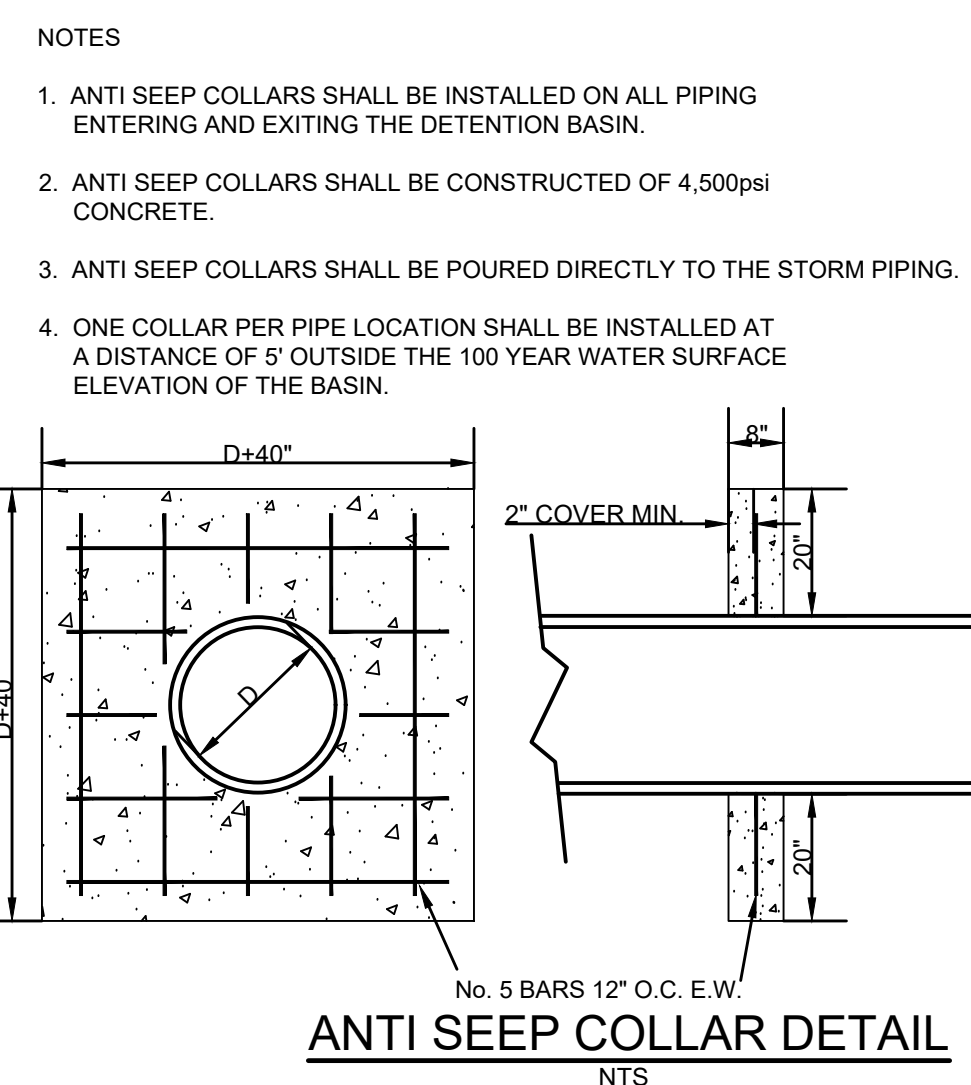
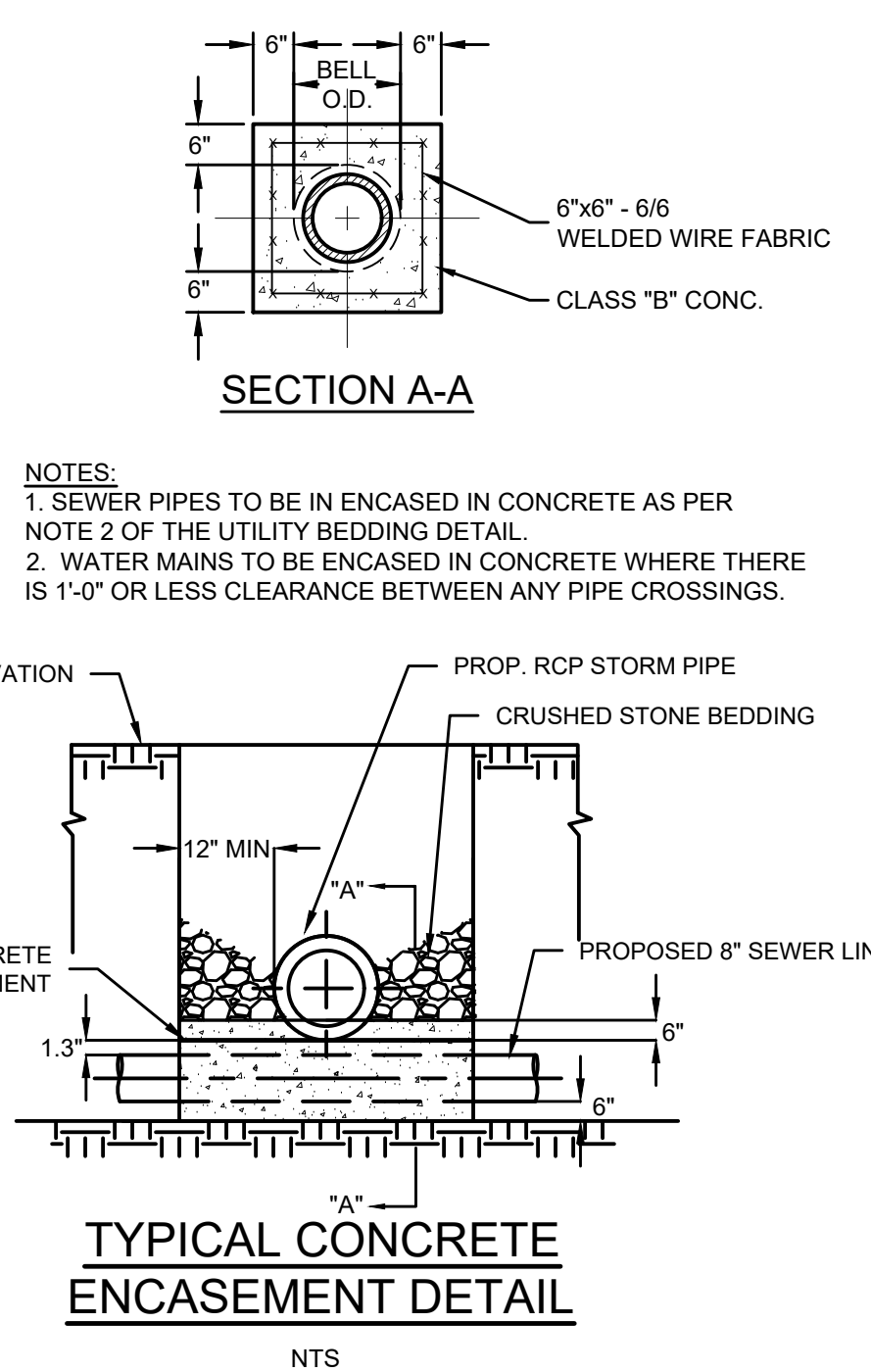
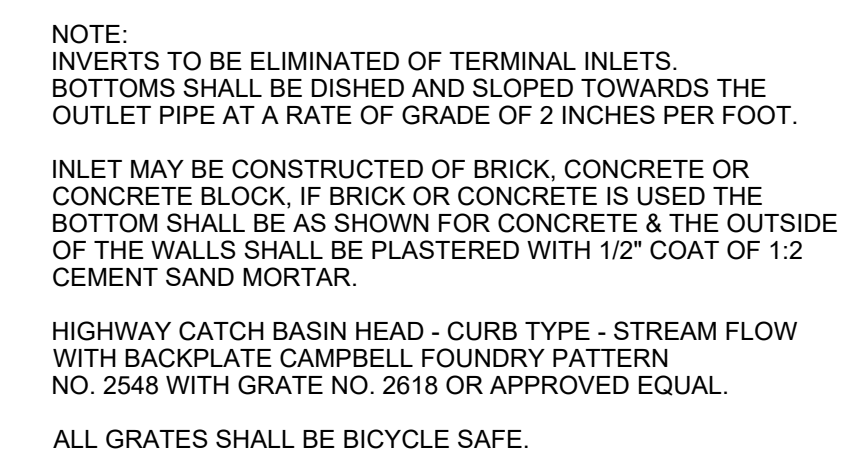
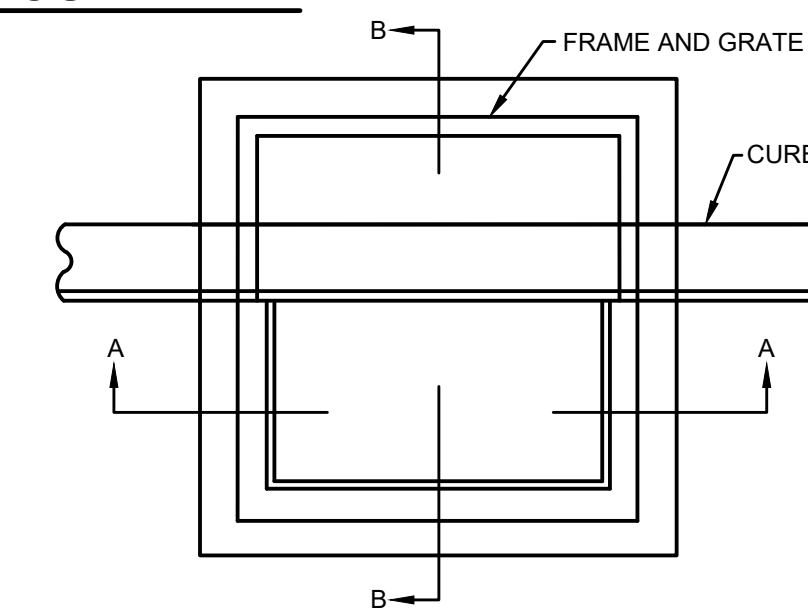
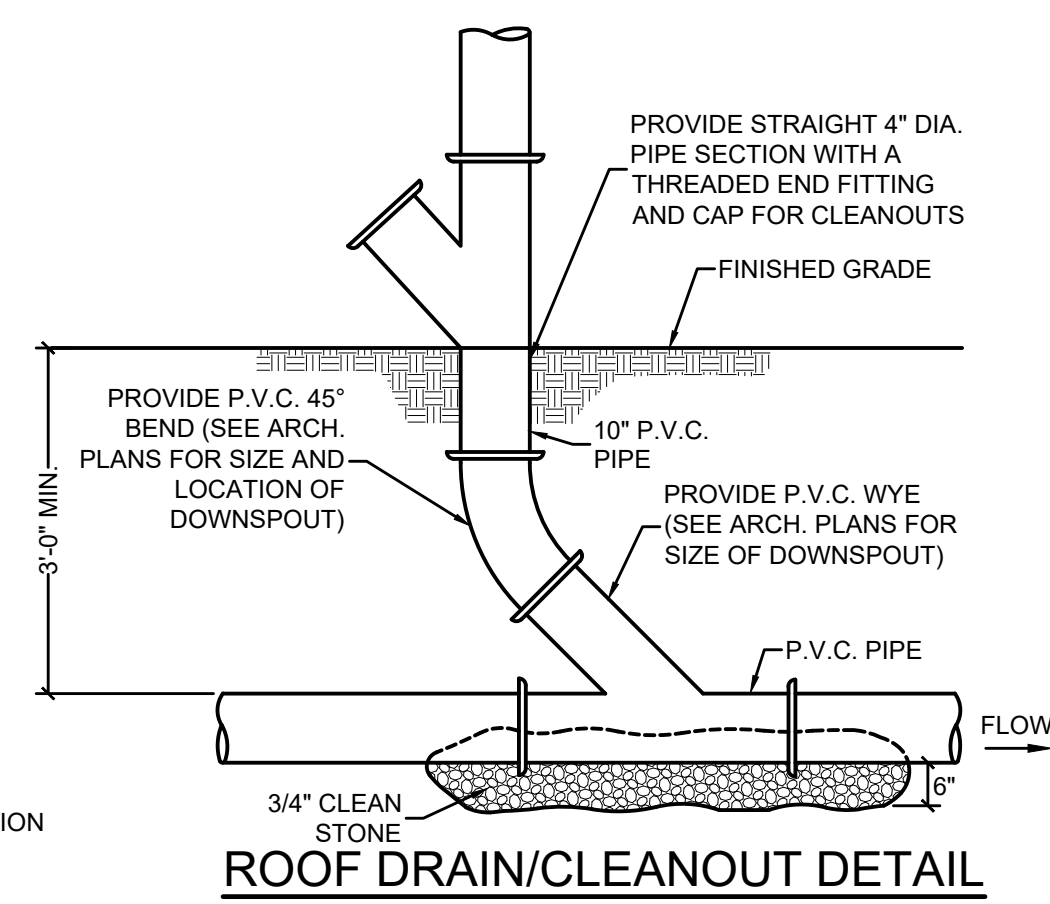
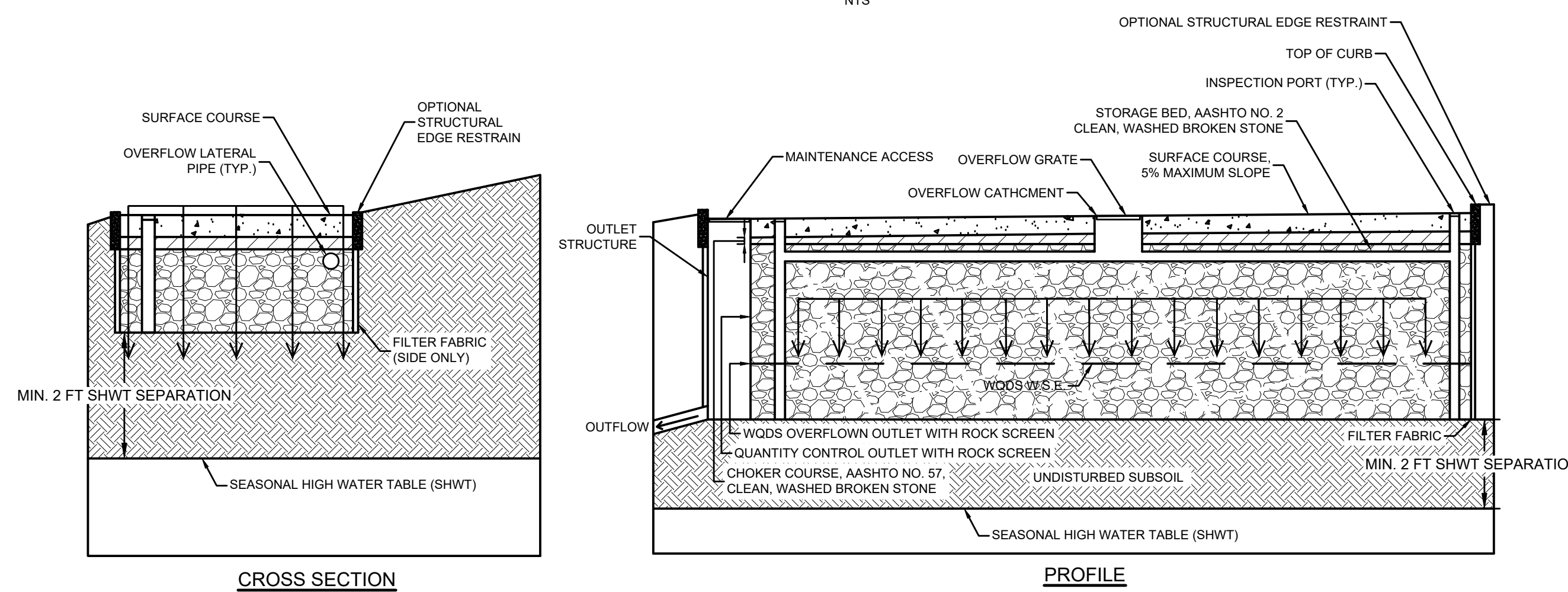
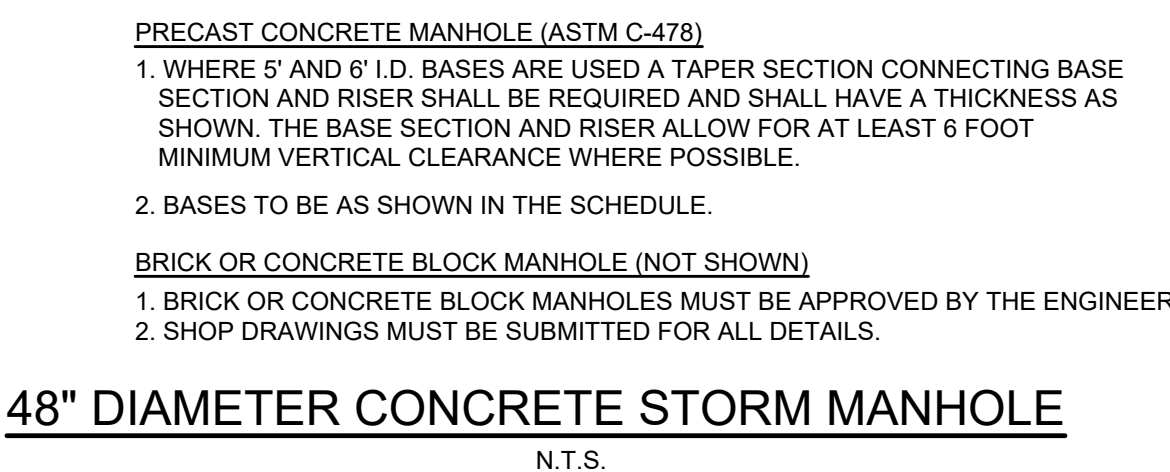
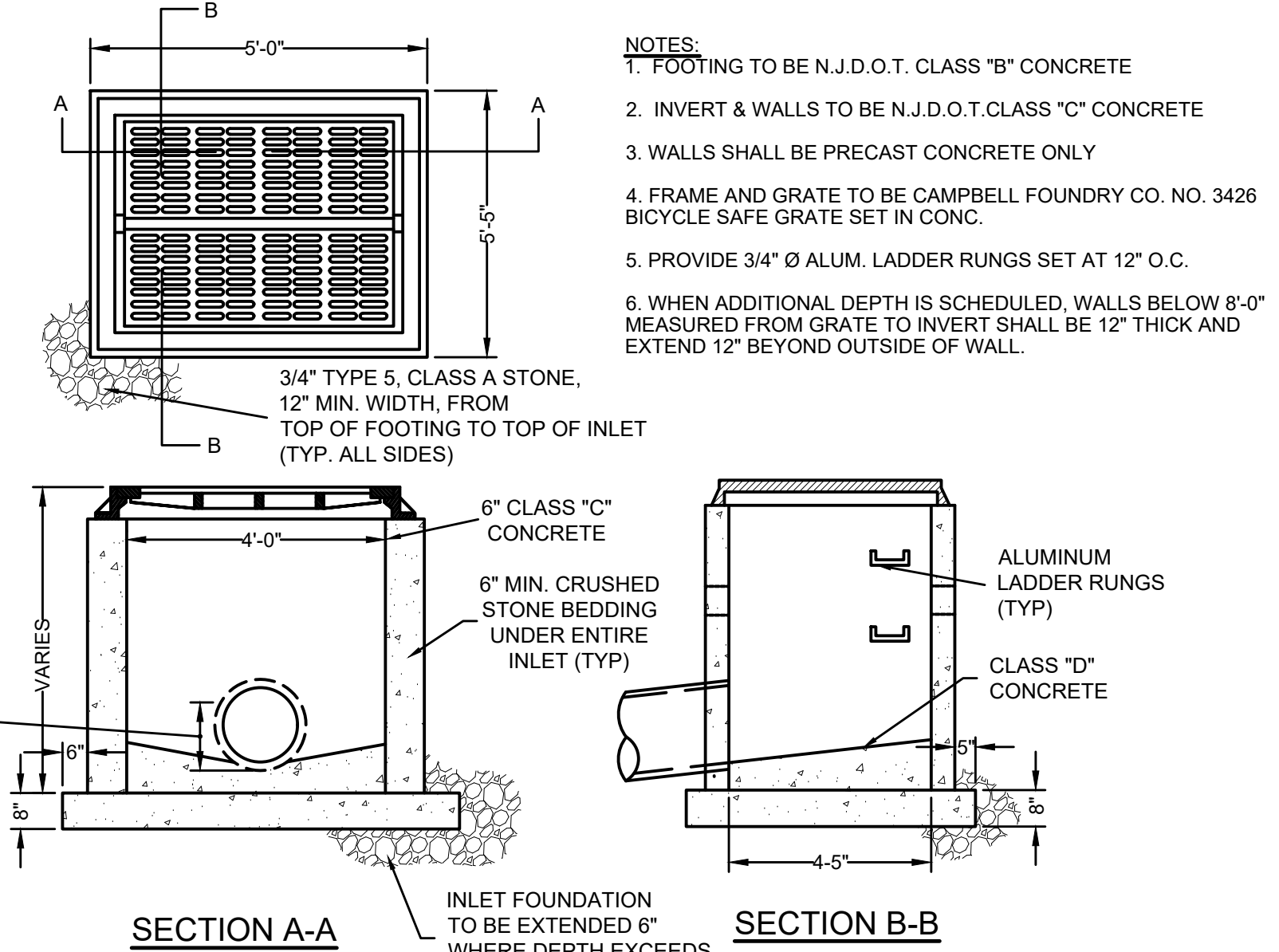
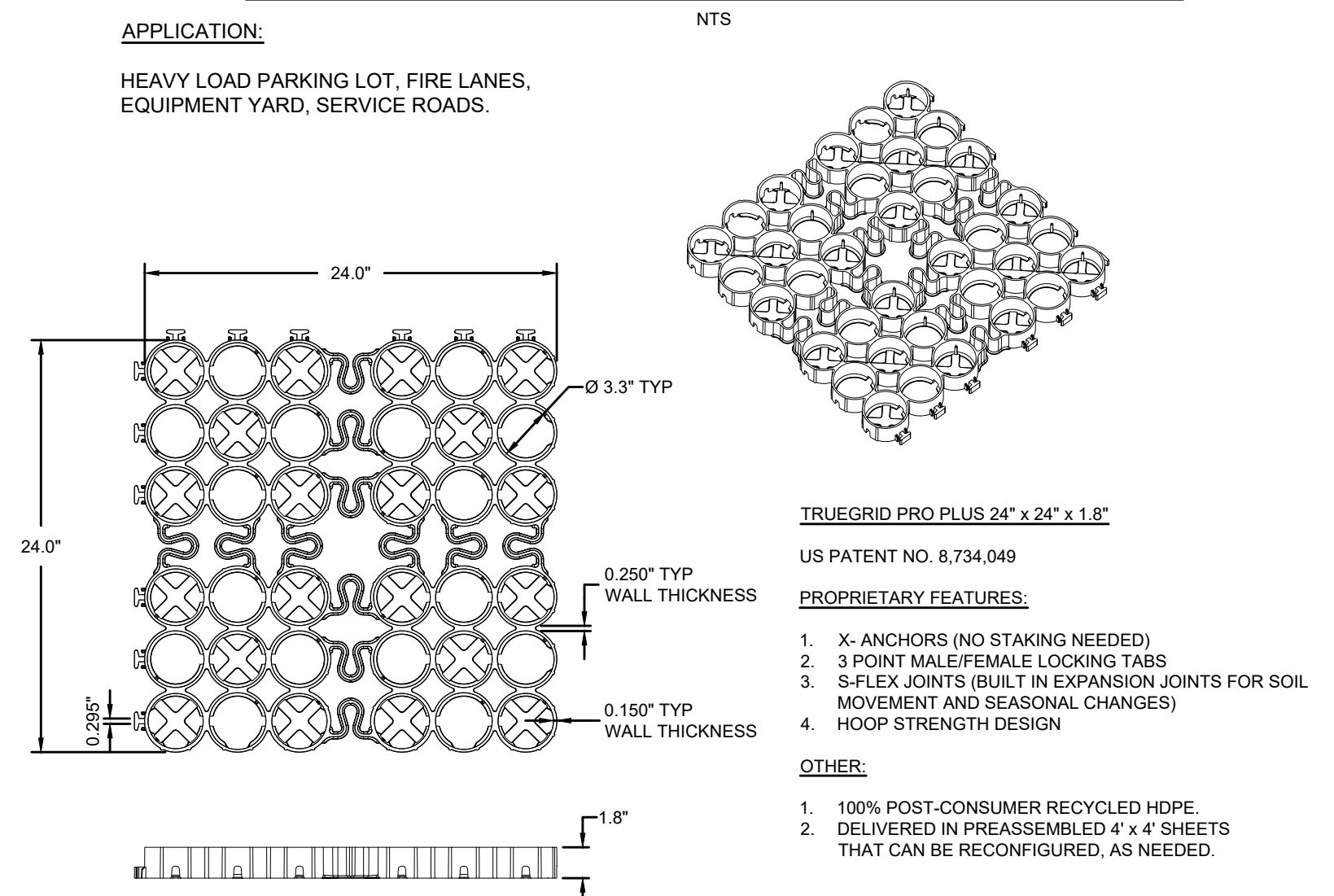
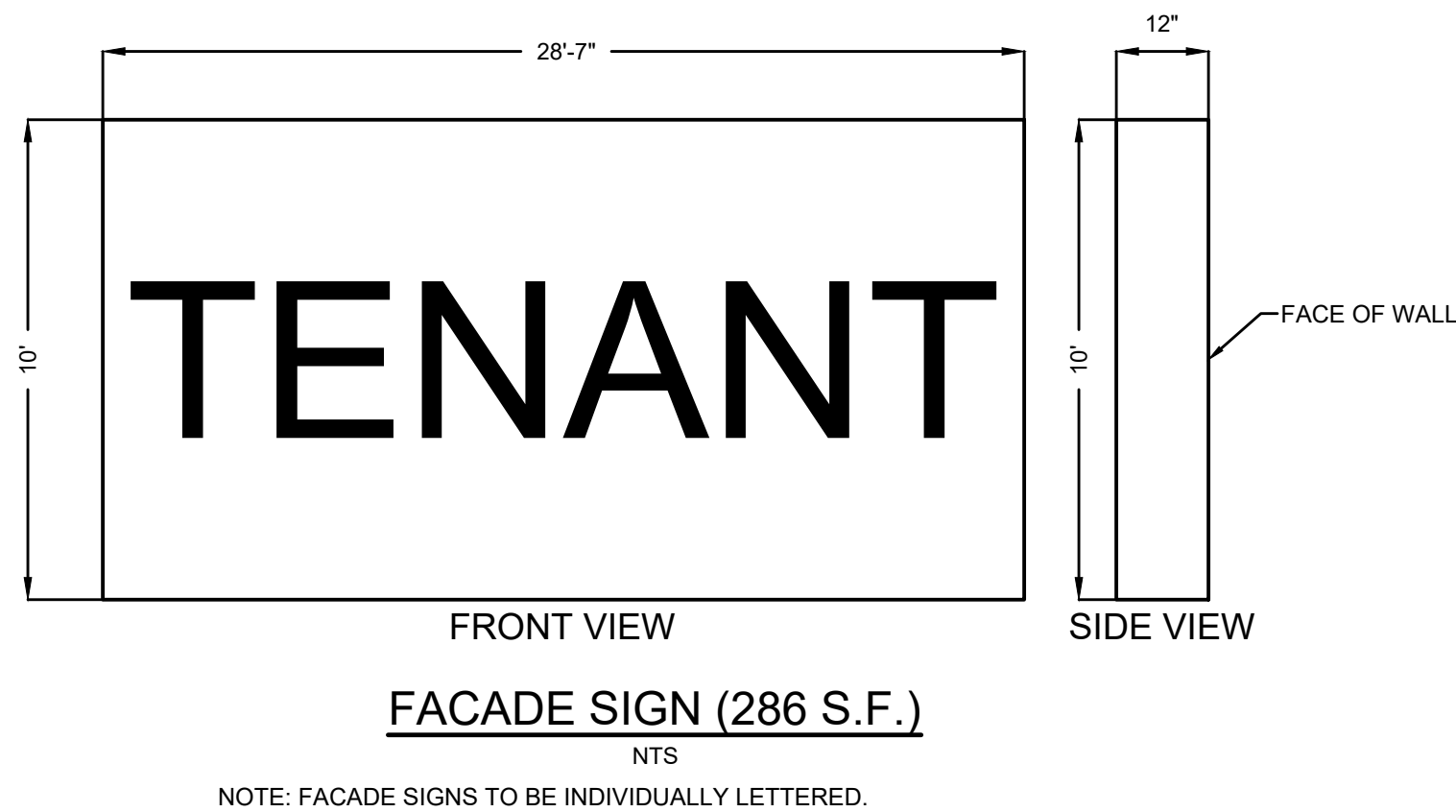



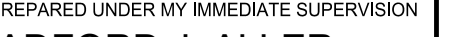
THRUST BLOCK SCHEDULE									
PIPE SIZE	TEE	22 1/2" 11 1/4" BEND				45° BEND		90° BEND	
		L	D	L	D	L	D	L	D
3" & 4"	24"	12"	24"	12"	24"	12"	24"	12"	
6"	36"	12"	24"	12"	28"	12"	48"	12"	
8"	42"	18"	24"	18"	48"	18"	56"	18"	
10"	48"	24"	36"	24"	52"	24"	60"	24"	
12"	52"	30"	36"	30"	58"	30"	74"	30"	
16"	80"	36"	36"	36"	64"	36"	90"	42"	

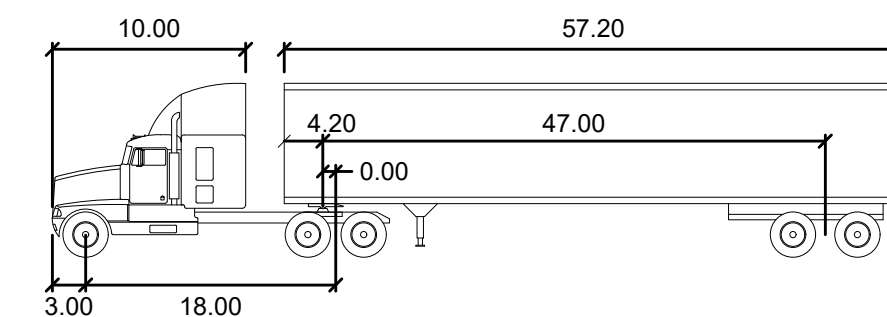
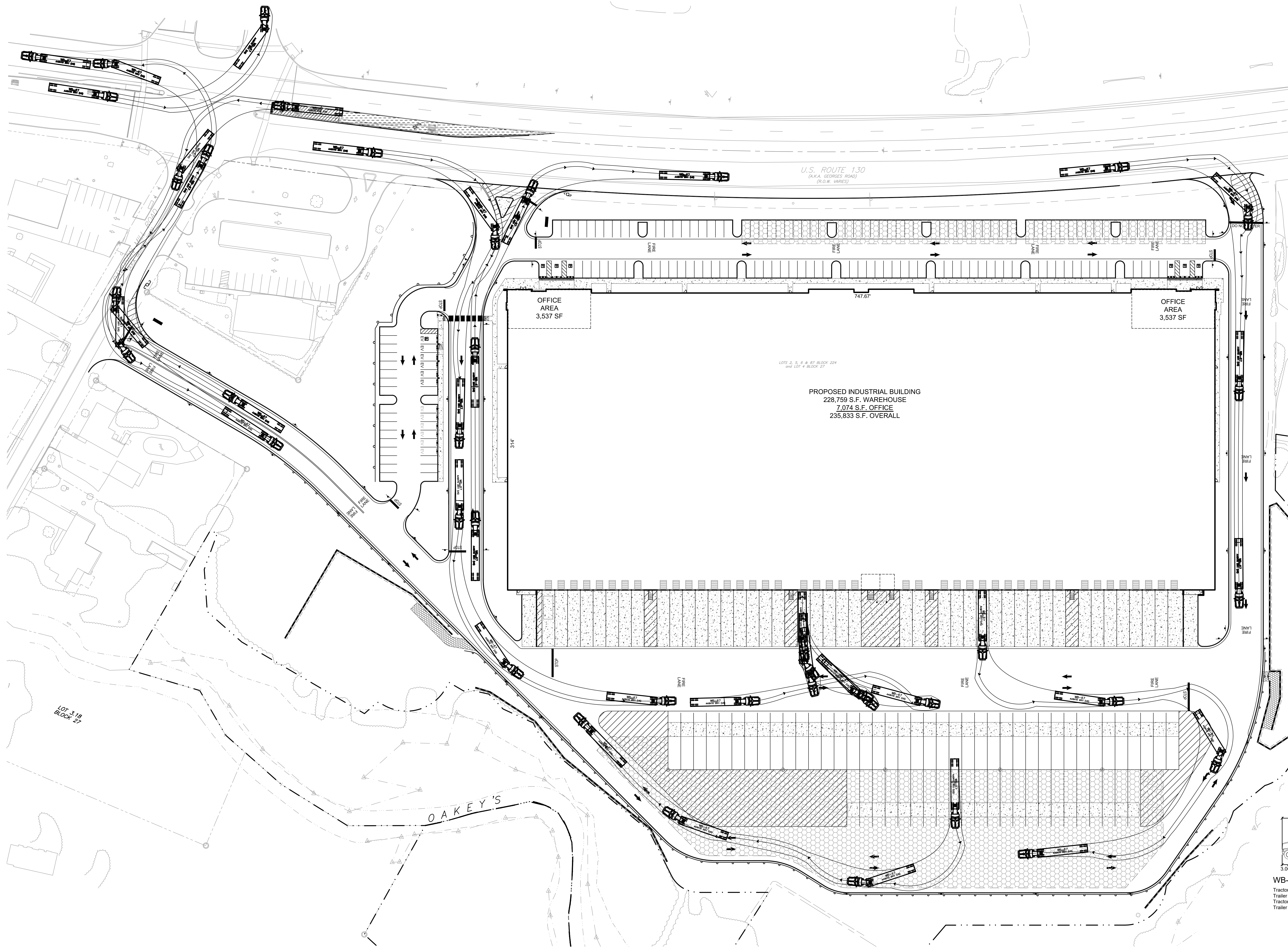
NOTES:

1. ALL TEES, WYES, PULGS, AND BENDS OF MORE THAN 11-1/2" BEND SHALL BE BACKFILL AGAINST UNDISTURBED FIRM EARTH WITH CONCRETE. EARTH PRESSURE SHALL BE 100% OF 200 PSI. THE BACKFILL WILL NOT WITHSTAND EARTH PRESSURE. THE AREA OF THE BLOCK MUST BE INCREASED PROPORTIONATELY. SEE SOILS REPORT.
2. THERE IS TO BE A MINIMUM OF 1500 PSI WORKING PRESSURE PLUS 50% WET HAMMER FOR SIZES UP TO 12" INSIDE.
3. ALL MAINS SHALL BE PRESSURE TESTED AT 150 PSI WORKING PRESSURE.
4. ALL TEES AND BENDS SHALL BE MECHANICAL JOINT WITH RETAINER GLAND.
5. 5MIL POLY. SHEETING MUST BE WIRED TO ALL FITTINGS, VALVES & HYDRANTS BEFORE POURING THRUST BLOCKS OR CONCRETE SUPPORTS NO ACORDANCE WITH TOWNSHIP STANDARDS.
6. BACKFILL INDICATED IS INITIAL BACKFILL. FINAL BACKFILL TO BE IN CONCORDANCE WITH TOWNSHIP STANDARDS.
7. CLAY OR OTHER BACKFILL OR GRANULAR MATERIAL TO MODIFIED 95% PROCTOR DENSITY.
8. APPROVED RESTRAINT ARE REQUIRED AT ALL VERTICAL BENDS.
9. CONCRETE AVERAGE 7 DAY STRENGTH 4,500 PSI.

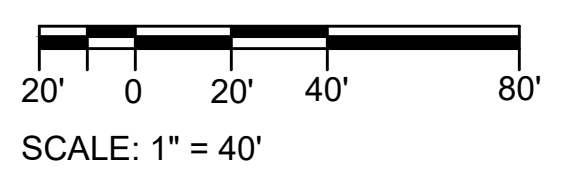
				THIS WORK PREPARED UNDER MY IMMEDIATE SUPERVISION				<div style="display: flex; align-items: center;"> <div style="flex: 1;"> <p>BRADFORD J. ALLER PROFESSIONAL ENGINEER</p>  <p>N.J.P.E. LIC. NO. GE-43435</p> </div> <div style="flex: 1; border: 1px solid black; padding: 5px;"> <p>CD-2</p> </div> </div>				<div style="display: flex; align-items: center;"> <div style="flex: 1;"> <p>YMS</p> <p>DATE: 7/14/21</p> <p>BY: BJA</p> <p>REVISIONS: 20 = 27</p> </div> <div style="flex: 1; border: 1px solid black; padding: 5px;"> <p>BJA</p> <p>N/A</p> <p>119-121-CD</p> <p>CD-2</p> </div> <div style="flex: 1; text-align: center;">  </div> </div>				<p>EP DESIGN SERVICES, LLC</p> <p>State of New Jersey Certificate of Authorization #: 24C309126500</p> <p>1990 Hamilton Boulevard South Plainfield, New Jersey 07080 908/305-0943 Fax: 908/735-3212</p>				<p>NTS</p> <p>CONSTRUCTION DETAILS II</p> <p>DM INVESTMENTS OF NORTH BRUNSWICK, LLC</p> <p>FOR</p> <p>BLOCK 224 - LOTS 2, 5, 6 & 87</p> <p>TOWNSHIP OF NORTH BRUNSWICK</p>			
<p>1</p> <p>REVISED PER AGENCY REVIEW LETTERS</p> <p>NO</p>				<p>12/15/21</p> <p>DATE</p> <p>BY</p>				<p>JPB</p> <p>REVISIONS</p> <p>DATE</p> <p>BY</p>				<p>MIDDLESEX COUNTY</p> <p>NEW JERSEY</p>											



				THIS WORK PREPARED UNDER MY IMMEDIATE SUPERVISION		DRAWN BY YMS		CHECKED BY BJA		<div><div>EP DESIGN SERVICES, LLC State of New Jersey Certificate of Authorization #: 24GAS8125800 2901 Hamilton Boulevard South Plainfield, New Jersey 07080 (908) 205-0943 Fax: (908) 755-3272</div></div>		CONSTRUCTION DETAILS III			
BRADFORD J. ALLER				PROFESSIONAL ENGINEER		DATE 7/14/21		SCALE N/A				DM INVESTMENTS OF NORTH BRUNSWICK, LLC			
 N.J.P.E. LIC. NO. GE 43435				PROJECT NO. BJA		SHEET NO. 119-121-CD						FOR			
				DATE 12/15/21		BY JPB		CD-3				1		BLOCK 224 - LOTS 2, 5, 6 & 87 TOWNSHIP OF NORTH BRUNSWICK	
REVISED PER AGENCY REVIEW LETTERS												MIDDLESEX COUNTY NEW JERSEY			
NO REVISIONS				DATE		BY									



WB-67	feet		
Tractor Width	: 8.50	Lock to Lock Time	: 6.00
Trailer Width	: 8.50	Steering Angle	: 26.10
Tractor Track	: 8.50	Articulating Angle	: 70.00
Trailer Track	: 8.50		



SCALE: 1" = 40'

NOTES:

1. SEE SHEET N-1 FOR NOTES AND LEGEND.

2. WB-67 IS THE LARGEST ANTICIPATED VEHICLE ON SITE.

NO.	REVISIONS	DATE	BY
1	REVISED PER AGENCY REVIEW LETTERS	12/15/21	JPB

THIS WORK PREPARED UNDER MY IMMEDIATE SUPERVISION

BRADFORD J. ALLER

PROFESSIONAL ENGINEER

Bradford J. Aller

N.J.P.E. LIC. NO. GE 43435

PROJECT	YMS	DESIGNED BY	BJA
DATE	7/14/21	SCALE	1"=40'
APPROVED BY	BJA	CHECKED BY	122-123-VC
PROJECT NO.	VC-2	REVISION	1

EP DESIGN SERVICES, LLC

State of New Jersey Certificate of Authorization #: 2447A9126500

2901 Hamilton Boulevard

South Plainfield, New Jersey 07080

(908) 205-0443 Fax: (908) 755-3272

PROPOSED VEHICLE CIRCULATION PLAN II

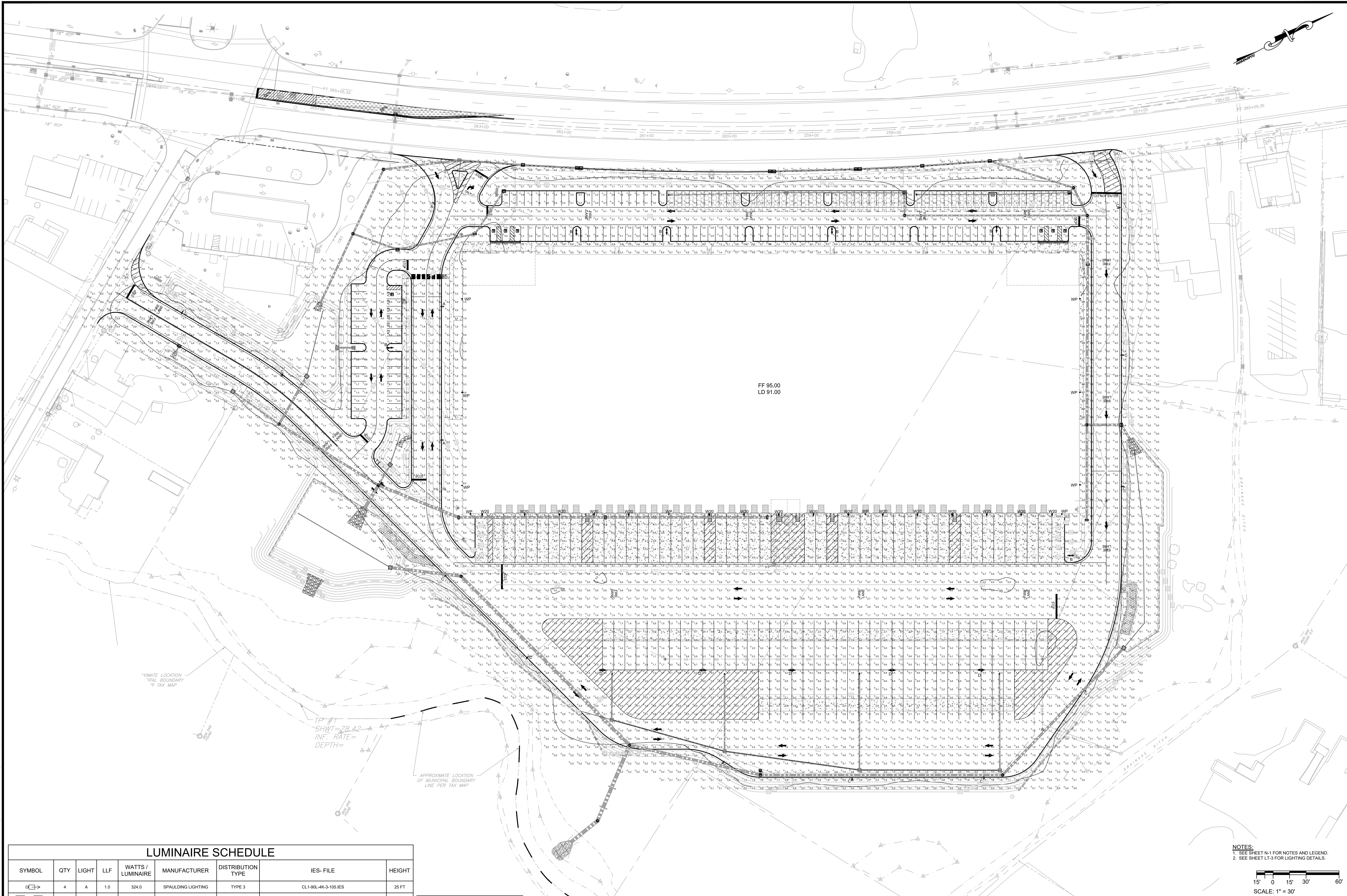
DM INVESTMENTS OF NORTH BRUNSWICK, LLC.

FOR

BLOCK 224 - LOTS 2, 5, 6 & 87

TOWNSHIP OF NORTH BRUNSWICK

MIDDLESEX COUNTY NEW JERSEY



LUMINAIRE SCHEDULE						
SYMBOL	QTY	LIGHT	LLF	WATTS / LUMINAIRE	MANUFACTURER	HEIGHT
	4	A	1.0	324.0	SPAULDING LIGHTING	25 FT
	6	B	1.0	324.0	SPAULDING LIGHTING	25 FT
	11	C	1.0	324.0	SPAULDING LIGHTING	25 FT
	5	D	1.0	324.0	SPAULDING LIGHTING	25 FT
	16	W20	1.0	81.0	SPAULDING LIGHTING	20 FT
	21	WP	1.0	33.0	CREE INC.	12 FT

PARKING LIGHTING CALCULATIONS	
AVERAGE	2.6 FC
MAXIMUM	21.1 FC
MINIMUM	0.0
MAX/MIN	N/A
AVERAGE/MIN	N/A
LIGHTING CALCULATIONS COMPLETED BY AUTOLUX	

1	REVISED PER AGENCY REVIEW LETTERS	12/15/21	JPB
NO.	REVISIONS	DATE	BY

THIS WORK PREPARED UNDER MY IMMEDIATE SUPERVISION
BRADFORD J. ALLER
PROFESSIONAL ENGINEER
Bradford J. Aller
N.J.P.E. LIC. NO. GE 43435

DRAWN BY: YMS		CHECKED BY: BJA	
DATE: 7/14/21		SCALE: 1"=40'	
APPROVED BY: BJA		ACAD NO.: 124-12	
FIELD BOOK: ---		PROJECT NO.: ---	
SHEET 24 OF 27		DRAWING NO. 1 T-1	



EP DESIGN SERVICES, LLC
State of New Jersey Certificate of Authorization #: 24GA28126800
2901 Hamilton Boulevard
South Plainfield, New Jersey 07080
(908) 205-0443 Fax: (908) 255-3272

PROPOSED LIGHTING PLAN I
DM INVESTMENTS OF NORTH BRUNSWICK, LLC.
FOR
BLOCK 224 - LOTS 2, 5, 6 & 87
TOWNSHIP OF NORTH BRUNSWICK
MIDDLESEX COUNTY
NEW JERSEY

NOTES:
1. SEE SHEET N-1 FOR NOTES AND LEGEND.
2. SEE SHEET LT-3 FOR LIGHTING DETAILS.
SCALE: 1" = 30'

Revised 07/07 - 11:24 PM, RJA, JPB
This drawing is the property of EP Design Services, LLC. It is to be used only for the project and location identified on the title block. No part of this drawing may be reproduced or transmitted in any form or by any means electronic or mechanical, including photocopying, recording, or by any information storage or retrieval system, without the prior written permission of EP Design Services, LLC.

ORDERING INFORMATION CONT.

Catalog Number	Height Feet	Height Meters	Nominal Shaft Dimensions	Wall Thickness	Bolt Circle (Inches)	Bolt Circle (mm)	Bolt Square (Inches)	Bolt Square (mm)	Base Plate Square	Anchor Bolt Size	Bolt Projection	Pole Weight
SSS-S-10-40-A-XX-XX	10	3.0	4" square	0.125"	9"	8" - 10"	5.66" - 7.07"	9"	3/4" x 30" x 3"	3.5	77	
SSS-S-12-40-A-XX-XX	12	3.7	4" square	0.125"	9"	8" - 10"	5.66" - 7.07"	9"	3/4" x 30" x 3"	3.5	90	
SSS-S-14-40-A-XX-XX	14	4.3	4" square	0.125"	9"	8" - 10"	5.66" - 7.07"	9"	3/4" x 30" x 3"	3.5	103	
SSS-S-16-40-A-XX-XX	16	4.9	4" square	0.125"	9"	8" - 10"	5.66" - 7.07"	9"	3/4" x 30" x 3"	3.5	116	
SSS-S-18-40-A-XX-XX	18	5.5	4" square	0.125"	9"	8" - 10"	5.66" - 7.07"	9"	3/4" x 30" x 3"	3.5	129	
SSS-S-20-40-A-XX-XX	20	6.1	4" square	0.125"	9"	8" - 10"	5.66" - 7.07"	9"	3/4" x 30" x 3"	3.5	142	
SSS-S-25-40-A-XX-XX	25	7.6	4" square	0.125"	9"	8" - 10"	5.66" - 7.07"	9"	3/4" x 30" x 3"	3.5	175	
SSS-S-10-40-B-XX-XX	14	4.3	4" square	.188"	11"	10" - 12"	7.07" - 8.48"	10.50"	3/4" x 30" x 3"	3.5	152	
SSS-S-12-40-B-XX-XX	16	4.9	4" square	.188"	11"	10" - 12"	7.07" - 8.48"	10.50"	3/4" x 30" x 3"	3.5	171	
SSS-S-14-40-B-XX-XX	18	5.5	4" square	.188"	11"	10" - 12"	7.07" - 8.48"	10.50"	3/4" x 30" x 3"	3.5	190	
SSS-S-16-40-B-XX-XX	20	6.1	4" square	.188"	11"	10" - 12"	7.07" - 8.48"	10.50"	3/4" x 30" x 3"	3.5	209	
SSS-S-18-40-B-XX-XX	22	6.7	4" square	.188"	11"	10" - 12"	7.07" - 8.48"	10.50"	3/4" x 30" x 3"	3.5	228	
SSS-S-20-40-B-XX-XX	25	7.6	4" square	.188"	11"	10" - 12"	7.07" - 8.48"	10.50"	3/4" x 30" x 3"	3.5	283	
SSS-S-25-40-B-XX-XX	30	9.1	4" square	.188"	11"	10" - 12"	7.07" - 8.48"	10.50"	3/4" x 30" x 3"	3.5	338	
SSS-S-10-50-A-XX-XX	16	4.9	5" square	.188"	11"	10.25" - 13.25"	7.25" - 9.37"	11.50"	1" x 36" x 4"	4.5	219	
SSS-S-12-50-A-XX-XX	18	5.5	5" square	.188"	11"	10.25" - 13.25"	7.25" - 9.37"	11.50"	1" x 36" x 4"	4.5	243	
SSS-S-14-50-A-XX-XX	20	6.1	5" square	.188"	11"	10.25" - 13.25"	7.25" - 9.37"	11.50"	1" x 36" x 4"	4.5	267	
SSS-S-16-50-A-XX-XX	22	6.7	5" square	.188"	11"	10.25" - 13.25"	7.25" - 9.37"	11.50"	1" x 36" x 4"	4.5	291	
SSS-S-18-50-A-XX-XX	25	7.6	5" square	.188"	11"	10.25" - 13.25"	7.25" - 9.37"	11.50"	1" x 36" x 4"	4.5	337	
SSS-S-20-50-A-XX-XX	30	9.1	5" square	.188"	11"	10.25" - 13.25"	7.25" - 9.37"	11.50"	1" x 36" x 4"	4.5	387	
SSS-S-25-50-A-XX-XX	35	10.7	5" square	.188"	11"	10.25" - 13.25"	7.25" - 9.37"	11.50"	1" x 36" x 4"	4.5	457	
SSS-S-10-50-B-XX-XX	20	6.1	5" square	.25"	11"	10.25" - 13.25"	7.25" - 9.37"	11.50"	1" x 36" x 4"	4.5	427	
SSS-S-12-50-B-XX-XX	22	6.7	5" square	.25"	11"	10.25" - 13.25"	7.25" - 9.37"	11.50"	1" x 36" x 4"	4.5	451	
SSS-S-14-50-B-XX-XX	25	7.6	5" square	.25"	11"	10.25" - 13.25"	7.25" - 9.37"	11.50"	1" x 36" x 4"	4.5	475	
SSS-S-16-50-B-XX-XX	27	8.2	5" square	.25"	11"	10.25" - 13.25"	7.25" - 9.37"	11.50"	1" x 36" x 4"	4.5	499	
SSS-S-18-50-B-XX-XX	30	9.1	5" square	.25"	11"	10.25" - 13.25"	7.25" - 9.37"	11.50"	1" x 36" x 4"	4.5	547	
SSS-S-20-50-B-XX-XX	35	10.7	5" square	.25"	11"	10.25" - 13.25"	7.25" - 9.37"	11.50"	1" x 36" x 4"	4.5	617	
SSS-S-25-50-B-XX-XX	40	12.2	6" square	.25"	11"	10.25" - 13.25"	7.81" - 9.37"	12.25"	1-1/4" x 42" x 6"	5.0	629	
SSS-S-10-60-A-XX-XX	30	9.1	6" square	.25"	12"	11.00" - 13.25"	7.81" - 9.37"	12.25"	1-1/4" x 42" x 6"	5.0	614	
SSS-S-12-60-A-XX-XX	35	10.7	6" square	.25"	12"	11.00" - 13.25"	7.81" - 9.37"	12.25"	1-1/4" x 42" x 6"	5.0	712	
SSS-S-14-60-A-XX-XX	40	12.2	6" square	.25"	12"	11.00" - 13.25"	7.81" - 9.37"	12.25"	1-1/4" x 42" x 6"	5.0	809	

NOTE: Factory supplied template must be used when setting anchor bolts. Hubbell Lighting will deny any claim for incorrect anchorage placement resulting from failure to use factory supplied template and anchor bolts.

EHH - EXTRA HANDHOLE

Provision for Grounding

COS - COT - C20 - COUPLING

3/4" - 14 NPSM Threads
1/2" - 14 NPSM Threads

VM1 - VIBRATION DAMPER 1ST MODE

Field installed Pole Top damper designed to reduce pole top deflection or sway. VM1 is recommended for pole systems 20' and taller with a total EPA of 1.0 or less.

VM2 - VIBRATION DAMPER 2ND MODE

Factory installed, internal damper designed to alter pole resonance to reduce movement and material fatigue caused by 2nd mode vibration.

VM2SXX - VIBRATION DAMPER 2ND MODE

Field installed, internal damper designed to alter pole resonance to reduce movement and material fatigue caused by 2nd mode vibration.

VM2S8S - 8"
VM2S16 - 12"
VM2S20 - 20"
VM2S24 - 24"

GFI - 20 AMP GFCI RECEPTACLE & COVER

Standard hand hole frame
Adapter plate
20 AMP GFCI
Wet Locations Cover

MPB - MID POLE BRACKET

Square Steel Pole
Attachment stud 9" long welded to pole
Arm, 3" Sq. x 13.5" long after angling

OPTION ORIENTATION

Follow the logic below when ordering location specific options. For each option, include its orientation (in degrees) and its height (in feet). Example: Option C27 should be ordered as: **SSS-S-20-40-A-1A-2B-C27-0-15** (15' coupling on the handhole side of pole, 15 feet up from the pole base) 1" spacing required between option. Consult factory for other configurations.

Denotes handhole location

For more information about pole vibration and vibration dampers, please consult http://www.spauldinglighting.com/content/products/literature/literature_Pole_Vib_Indexed_Pdf_H000022.pdf Due to our continued efforts to improve our products, product specifications are subject to change without notice.

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Hubbell Lighting
© 2015 SPAULDING LIGHTING. All Rights Reserved • For more information visit our website: www.spauldinglighting.com • Printed in USA **SSS-S-POLES-SPEC 017**

AREA LIGHT POLE (A, B, C AND D-22)

Cat.#	Type	Approvals
Job		

SSS-S SERIES POLES

SQUARE STRAIGHT STEEL

Overall Height 10' - 40'
Handhole 18"

APPLICATIONS

- Lighting installations for side and top mounting of luminaires with effective projected area (EPA) not exceeding maximum allowable loading of the specified pole in its installed geographic location

CONSTRUCTION

- SHAFT: One-piece straight steel with square cross section, flat sides and minimum 0.238" radius on all corners; Minimum yield of 46,000 psi (ASTM-A500, Grade B); Longitudinal weld seam to appear flush with shaft side wall; Steel base plate with axial bolt circle slots welded flush to pole shaft having minimum yield of 36,000 psi (ASTM A36)
- BASE COVER: Two-piece square aluminum base cover included standard
- POLE CAP: Pole shaft supplied with removable cover when applicable; Tenon and post-top configurations also available
- HAND HOLE: Rectangular 3x5 steel hand hole frame (2.38" x 4.38" opening); Mounting provisions for grounding lug located behind gasketed cover
- ANCHOR BOLTS: Four galvanized anchor bolts provided per pole with minimum yield of 55,000 psi (ASTM F1554). Galvanized hardware with two washers and two nuts per bolt for leveling

FINISH

- Durable thermoset polyester powder coat paint finish with nominal 3.0 mil thickness
- Powder paint prime applied over "white metal" steel substrate cleaned via mechanical shot blast method
- Decorative finish coat available in seven standard colors; Custom colors available; RAL number preferable; Internal protective coating available

POLE CAP

TENON

BASE COVER

BASE DETAIL

SERIES	HEIGHT	SHAFT	THICKNESS	MOUNTING	DRILL PATTERN	FINISH	OPTIONS
SSS-S	5 - 25	40 - A/B/C	2L - S2	DB - UL			

SERIES	HEIGHT	SHAFT	THICKNESS	MOUNTING	DRILL PATTERN	FINISH	OPTIONS
SSS-S	Square Straight Steel Pole Spaulding	Reference page 2 Ordering matrix	Reference page 2 Ordering matrix	Reference page 2 Ordering matrix			
1	Single arm mount						
2	Two fixtures at 90°						
3T	Three fixtures at 90°						
4	Four fixtures at 90°						
TA	Tenon (2.375" OD)						
TB	Tenon (2.875" OD)						
TC	Tenon (3.5" OD)						
TR	Removable Tenon (2.375 x 4.25)						
OT	Open Top (includes pole cap)						
UL	UL Certified						

Catalog Number	Description
VM1*	1st mode vibration damper
VM2SXX	2nd mode vibration damper

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Due to our continued efforts to improve our products, product specifications are subject to change without notice.

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XSP Series

XSPWM™ LED Wall Mount Luminaire

Product Description

The XSPWM™ LED wall mount luminaire has a slim, low profile design intended for outdoor wall mounted applications. The rugged lightweight aluminum housing and mounting box are designed for installation over standard single gang J-boxes and mud ring single gang J-boxes. The luminaire allows for through-wired or conduit entry from the top, bottom, sides and rear. The housing design is intended specifically for LED technology including a weatherlight LED driver compartment and thermal management. Optic design features industry-leading NanoOptic® Precision Delivery Grid™ system in multiple distributions.

Applications: General area and security lighting

Performance Summary

- NanoOptic® Precision Delivery Grid™ optic
- Assembled in the U.S.A. of U.S. and imported parts
- CRB: Minimum 70 CRI
- CCT: 3000K (4- 300K), 4000K (4- 300K), 5700K (4- 500K)
- Limited Warranty*: 10 years on luminaire/10 years on Colorfast DeltaGuard® finish

*See <http://lighting.cree.com/warranty> for warranty terms

Accessories

Field-Installed

- Base Plate: WM-PL1212" - 12" (D55mm) Square
- WM-PL1414" - 14" (D55mm) Square
- Covers holes left by incoherent ball packs
- ** Must specify color

Weight: 9.5 lbs (4.3kg)

Ordering Information

Example: XSPW-A-2-3-2-0-12-2

Product	Version	Mounting	Optic	Modules	Input Power Designer	Voltage	Color Options	Options	
XSPW	A	0	Wall	2 Type II Medium Type III Medium	30K 3000K 4000K 5700K	C 27W 25W	0 Universal 120-277V 120V 277V 277V 277V	S Silver B Black P Phosphor White Bronze	K Multi-Level Refer to ML spec sheet for details Available with Input Power Designer C only Available with 10 and 4 voltages only Phosphor Not available with K option Available with 120V voltages only

* Available in Canada only; 347V utilizes magnetic step-down transformer. For input power for 347V, refer to the Electrical Data table

WALL MOUNTED (WP)

Rev. Date: Version A V11 08/20/2018

CREE

U.S. Lighting.cree.com T (800) 234-4800 F (262) 504-5415 Canada: www.cree.com/canada T (800) 473-1234 F (800) 890-7507

ECP LPS

ECP Light Pole Foundation

- Economic
- Quick Installation
- No Spoils Created
- All Weather Installation
- No Vibration Installation
- Permanent or Temporary Applications
- No Concrete Cure Time
- Environmentally Friendly
- Immediate Loading Capabilities
- Made in the USA

Resultant Pile Foundation Loads

Light Pole Anchor Configurations

Product Designation	Shaft Size	Plate Diameter	Length	Ultimate-Limit Capacity at SPT ≥ 5 bpf
Stinger End				
LPS-400-40-12	4"	12"	8'-0"	< 5,000 ft-lb
LPS-400-60-14	6"-5/8"	14"	8'-0"	< 5,000 ft-lb
LPS-400-84-14	8"-5/8"	14"	8'-0"	< 5,000 ft-lb
LPS-600-120-14	12"	14"	10'-0"	< 12,000 ft-lb
LPS-800-60-14	6"-5/8"	14"	8'-0"	< 12,000 ft-lb
LPS-800-84-14	8"-5/8"	14"	8'-0"	< 12,000 ft-lb
LPS-800-120-14	12"	14"	10'-0"	< 12,000 ft-lb

Notes: Standard Product Shown Includes: Standard Integral Pile Cap - 1" thick x 15-3/4" Square pile cap welded to shaft. Standard 1-1/8" slots are designed for 1" diameter mounting bolts. Cable Access Slot: available on both sides of shaft - (2" x 10" Standard). Supplied Hot Dip Galvanized Per ASTM A123 Grade 100. Stinger End (LPS) has single chamfer on bottom of shaft with a "stinger" for alignment. Double Chamfer on bottom of LPC product shafts to ease installation. - No "Stinger" on LPC (Not Shown). Special Product Dimensions Are Available: We fabricate custom light pole supports to your design specifications. Please allow extra time for Special Product Designs.

HELICAL PILE LIGHT POLE BASE

Resultant Pile Foundation Loads

Light Pole Anchor Configurations

Product Designation	Shaft Size	Plate Diameter	Length	Ultimate-Limit Capacity at SPT ≥ 5 bpf
Stinger End				
LPS-400-40-12	4"	12"	8'-0"	< 5,000 ft-lb
LPS-400-60-14	6"-5/8"	14"	8'-0"	< 5,000 ft-lb
LPS-400-84-14	8"-5/8"	14"	8'-0"	< 5,000 ft-lb
LPS-600-120-14	12"	14"	10'-0"	< 12,000 ft-lb
LPS-800-60-14	6"-5/8"	14"	8'-0"	< 12,000 ft-lb
LPS-800-84-14	8"-5/8"	14"	8'-0"	< 12,000 ft-lb
LPS-800-120-14	12"	14"	10'-0"	< 12,000 ft-lb

Notes: Standard Product Shown Includes: Standard Integral Pile Cap - 1" thick x 15-3/4" Square pile cap welded to shaft. Standard 1-1/8" slots are designed for 1" diameter mounting bolts. Cable Access Slot: available on both sides of shaft - (2" x 10" Standard). Supplied Hot Dip Galvanized Per ASTM A123 Grade 100. Stinger End (LPS) has single chamfer on bottom of shaft with a "stinger" for alignment. Double Chamfer on bottom of LPC product shafts to ease installation. - No "Stinger" on LPC (Not Shown). Special Product Dimensions Are Available: We fabricate custom light pole supports to your design specifications. Please allow extra time for Special Product Designs.

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ORDERING INFORMATION

ORDERING EXAMPLE: CL1-A-90LU-5K-3-DB-RPA3

SERIES	NO. OF LEDS	VOLTAGE	CCT	DRIVE CURRENT	OPTIONS
CL1 Cimarron LED	SOL 50 High brightness LEDs 60L 60 High brightness LEDs 30L 30 High brightness LEDs	U Universal 120V-277V, 50/60 Hz 1 120V 2 208V 3 240V 4 277V 5 480V 60 Hz F 347V 60 Hz E 220V 50 Hz	3K 3000K 4K 4000K 5K 5000K AM Amber (500 nm available for "Turtle Friendly" applications (consult factory))	LOose blank for 700mA (standard) 035 350mA Amber CCT only 105 1050 mA (Not for use with SOL)	BC Backlight control CD Continuous dimming WB Wall bracket RPA3 3" Round pole adapter RPA4 4" Round pole adapter RPA5 5" Round pole adapter RPA6 6" Round pole adapter FOX Fusing (replace X with voltage: 1-120V, 2-208V, 3-240V, 4-277V, 5-480V, F-347V) VG Vandal guard 7PR Photocell receptacle (7-pin ANSI C136.41-2013 receptacle for use with standard) Twist-Lock® photo controls, shorting caps, and ANSI C136.41 external wireless control devices. Select SOL option to add occupancy sensing capability when using with compatible external wireless devices. DB Dark Bronze BL Black WH White GR Gray PS Platinum Silver RD Red (premium color) FG Forest Green (premium color) CC Custom Color

MOUNTING

A Arm mount construction (6" straight rigid arm included & acceptable for 90° configurations)
AD Decorative arm mount constr. (6" decorative upswep arm incl. & acceptable for 90° configurations)
MAF Mast arm fitter for mounting to standard 2 3/8" mast arm bracket, includes 6" straight rigid arm

DISTRIBUTION

2 Type II
3 Type III
4 Type IV
5M Type V Medium
5S Type V Short
5W Type V Wide
2L Type II Rotated 90° left
3L Type III Rotated 90° left
4L Type IV Rotated 90° left
2R Type II Rotated 90° right
3R Type III Rotated 90° right
4R Type IV Rotated 90° right
1A Auto Front Row Type I
1AR Auto Front Row Type I Rotated 90° right
1AL Auto Front Row Type I Rotated 90° left
2A Auto Front Row Type II
2AR Auto Front Row Type II Rotated 90° right
2AL Auto Front Row Type II Rotated 90° left

CONTROLS GUIDE

As energy codes become more restrictive and we push for sustainable lighting designs, the integration of lighting controls and luminaires have become more and more important. Hubbell Lighting offers numerous outdoor lighting controls solutions for the most demanding applications. Visit the link below to learn more about energy-saving controls.

www.hubbelllighting.com/solutions/controls/

ORDERING INFORMATION

ORDERING EXAMPLE: CL1-A-90LU-5K-3-DB-RPA3

SERIES	NO. OF LEDS	VOLTAGE	CCT	DRIVE CURRENT	OPTIONS
CL1 Cimarron LED	SOL 50 High brightness LEDs 60L 60 High brightness LEDs 30L 30 High brightness LEDs	U Universal 120V-277V, 50/60 Hz 1 120V 2 208V 3 240V 4 277V 5 480V 60 Hz F 347V 60 Hz E 220V 50 Hz	3K 3000K 4K 4000K 5K 5000K AM Amber (500 nm available for "Turtle Friendly" applications (consult factory))	LOose blank for 700mA (standard) 035 350mA Amber CCT only 105 1050 mA (Not for use with SOL)	BC Backlight control CD Continuous dimming WB Wall bracket RPA3 3" Round pole adapter R

[illegible]

GENERAL LANDSCAPE NOTES:

- THE LOCATIONS OF ALL PLANTS SHOWN ON THE LANDSCAPE PLAN ARE APPROXIMATE. THE FINAL LOCATION OF ALL PLANTS AND BED LINES SHALL BE DETERMINED IN THE FIELD UNDER THE DIRECTION OF THE PROJECT LANDSCAPE ARCHITECT.
- ALL SHRUB BEDS SHALL HAVE A MINIMUM DEPTH OF 3" OF SHREDDED HARDWOOD MULCH.
- PLANTS SHALL BE WATERED ON THE SAME DAY OF INSTALLATION. THEREAFTER, REGULAR WATERING SHALL BE PROVIDED TO ENSURE THE ESTABLISHMENT AND GROWTH OF ALL PLANTS.
- ALL TREES, SHRUBS, GROUND COVERS AND LAWNS SHALL BE GUARANTEED FOR A MINIMUM OF TWO (2) YEARS. ALL PLANTS, LAWNS AND GROUND-COVER AREAS, NOT IN A HEALTHY GROWING CONDITION SHALL BE REMOVED AND REPLACED WITH PLANTING OF LIKE KIND AND SIZE BEFORE THE CLOSE OF THE NEXT PLANTING SEASON BY THE LANDSCAPE CONTRACTOR AT NO CHARGE TO THE LANDLORD OR TENANT. CONTRACTOR SHALL REMOVE STAKING, GUYING, AND WRAP AT END OF GUARANTEE PERIOD.
- ALL DISTURBED AREAS, UNLESS INDICATED OTHERWISE ON THE LANDSCAPE PLAN OR EROSION CONTROL PLAN, SHALL BE PLANTED AS LAWN.
- CONTRACTOR SHALL PARTIALLY FILL WITH WATER A REPRESENTATIVE NUMBER OF PITS IN EACH AREA OF THE PROJECT PRIOR TO PLANTING TO DETERMINE IF THERE IS ADEQUATE PERCOLATION. IF PIT DOESN'T PERCOLATE, MEASURES MUST BE TAKEN TO ASSURE PROPER DRAINAGE BEFORE PLANTING.
- ALL PLANT MATERIAL SHALL CONFORM TO THE AMERICAN ASSOCIATION OF NURSERYMEN STANDARDS FOR NURSERY STOCK, AMERICAN ASSOCIATION OF NURSERYMEN, 12501 STREET, N.W., SUITE 500, WASHINGTON, D.C. 20005.
- ALL SUBSTITUTION SHALL BE SUBMITTED TO THE LANDSCAPE ARCHITECT IN WRITING FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.
- ALL PLANTS RELOCATIONS SHALL BE SUBMITTED TO THE LANDSCAPE ARCHITECT FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.
- IRRIGATION SYSTEM TO BE DESIGNED AND INSTALLED BY OTHERS FOR ALL LANDSCAPED AREAS.
- ALL TREE STUMPS AND OTHER TREE PARTS OR OTHER DEBRIS SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN ACCORDANCE WITH THE LAW. NO TREE STUMPS, PORTIONS OF TREE TRUNK OR LIMBS SHALL BE BURIED ANYWHERE IN THE DEVELOPMENT. ALL DEAD OR DYING TREES, STANDING OR FALLEN, SHALL BE REMOVED FROM THE SITE.
- NO TOPSOIL SHALL BE REMOVED THE SITE OR USED AS SOIL. TOPSOIL SHALL BE REDISTRIBUTED ON ALL REGARDED SURFACES WITH A MINIMUM OF FOUR (4) INCH THICKNESS AND STABILIZED BY SEEDING OR PLANTING.
- THE DEVELOPER SHALL SELECTIVELY THIN OR REMOVE ALL DEAD OR DYING VEGETATION, EITHER STANDING OR FALLEN, AND SHALL REMOVE, INCLUDING GRUBBING OUT STUMPS, ALL UNDESIRABLE TREES AND OTHER GROWTH.
- AN IDENTIFICATION TAG ATTACHED AT THE NURSERY INDICATING THE EXACT VARIETY WILL BE REQUIRED ON EACH PLANT INSTALLED.

LAWN SOD SPECIFICATIONS:

- THE SOD COMPOSITION SHALL BE AS FOLLOWS:
 - 90% TALL FESCUE
 - 10% KENTUCKY BLUEGRASS
- THE SOD SHALL BE OF GOOD TEXTURE, FREE FROM OBNOXIOUS ROOTS, STONES, AND FOREIGN MATERIAL. SOD SHALL BE FRESH CULTIVATED SOD, WEED-, DISEASE- AND INSECT-FREE.
- SOD SHALL BE OBTAINED FROM AREAS HAVING GROWING CONDITIONS SIMILAR TO AREAS BEING COVERED. SOD SHALL HAVE A CLEAN GROWTH OF ACCEPTABLE GRASS AND SHALL BE MACHINE CUT WITH NOT LESS THAN 1" LOAMY SAND FIRMLY ADHERING TO THE ROOTS.
- INDIVIDUAL PIECES OF SOD SHALL BE CUT TO THE SUPPLIER'S STANDARD WIDTHS AND LENGTHS. BROKEN PADS OR TORN OR UNEVEN EDGES WILL NOT BE ACCEPTED.
- STANDARD SIZE SECTIONS OF SOD SHALL BE STRONG ENOUGH TO SUPPORT THEIR OWN WEIGHT AND RETAIN THEIR SHAPE WHEN SUSPENDED VERTICALLY FROM A FIRM GRASP ON THE UPPER 10% OF THE SECTION.
- SOD SHALL NOT BE HARVESTED OR TRANSPLANTED UNDER DROUGHT CONDITIONS. IF THE SOIL IS DRY, SOD SHALL BE WATERED SUFFICIENTLY TO MOISTEN THE SOIL TO A DEPTH AT WHICH THE SOD IS TO BE CUT.
- DUMPING FROM TRANSPORT VEHICLE WILL NOT BE PERMITTED. DAMAGED SOD OR SOD THAT HAS TURNED YELLOW IN COLOR WILL BE REJECTED. SOD SHALL BE INSPECTED AT THE TIME OF DELIVERY BY THE LANDSCAPE ARCHITECT AND ANY SOD THAT DOES NOT MEET SPECIFIED STANDARDS WILL BE REJECTED AND REMOVED FROM THE JOB SITE AT THE CONTRACTOR'S EXPENSE.
- SOD SHALL BE HARVESTED, DELIVERED AND INSTALLED WITHIN A PERIOD OF 36 HOURS. HOWEVER, IF HIGH TEMPERATURE AND LOW MOISTURE EXTREMES OCCUR, INSTALLATIONS SHOULD OCCUR WITHIN 24 HOURS OF HARVEST. SOD NOT TRANSPLANTED WITHIN THESE TIME PERIODS SHALL BE REMOVED FROM THE JOB SITE AT THE CONTRACTOR'S EXPENSE.

LANDSCAPE MAINTENANCE CHECKLIST

TREES, SHRUBS AND GROUNDCOVERS

PRUNING: PRUNE TREES TO REMOVE DEAD AND DISEASED WOOD AND TO IMPROVE OVERALL HABIT. PRUNE SHRUBS AS NEEDED, AFTER FLOWERING TO PREVENT THE LOSS OF NEXT SEASONS BLOSSOMS. PRUNE AT LEAST ONCE PER YEAR. PLANT MATERIAL SHOWN PLANTED IN A MASS OR TOUCHING EACH OTHER ARE TO BE ALLOWED TO GROW TOGETHER IN ORDER TO BE ABLE TO PERFORM AS A SCREEN OR HEDGE. ALL DEAD PERENNIAL/GRASS VEGETATION SHALL BE REMOVED AFTER FIRST FROST.

FERTILIZER: RATIO 2:1:1 AT 2-3 LBS. ACTUAL NITROGEN PER 1,000 SQ. FT. FERTILIZE IN SPRING ONLY.

PESTICIDES: APPLY PESTICIDES ONLY AS NEEDED FOR SPECIFIC DISEASES OR INSECT PESTS.

WEED CONTROL: WEED ALL BEDS AS NEEDED TO KEEP WELL WATER ALL NEW PLANT MATERIAL AS NEEDED THROUGH FIRST AND SECOND GROWING SEASON. IF RAIN IS INSUFFICIENT, WATER ALL WOODY PLANTS THOROUGHLY TWO TIMES PER WEEK. RENEW SHREDDED BARK MULCH TO 3" DEPTH. REMOVE LEAVES FROM ALL BEDS, TURF AREAS, PARKING AREAS, AND WALKS.

REPLACEMENTS: REPLACE ALL DEAD SHRUBS AND TREES WITHIN NEXT PLANTING SEASON.

TURF

RENEWAL PROCEDURES: OVER SEED THIN SPOTS IN SPRING AND FALL. THATCH AS NECESSARY.

FERTILIZER: RATIO 3:1:2 AT 1 LB. NITROGEN PER 1,000 SQ. FT. FERTIZE TWO TIMES PER YEAR.

PESTICIDES: INSPECT AND APPLY AS NEEDED FOR DISEASES AND INSECTS.

MOW: MAINTAIN A 2" HEIGHT. MOW AT LEAST ONCE PER WEEK. REMOVE CLIPPINGS FROM DETENTION BASIN.

MANICURE: TRIM LAWN AND GROUND COVERS ALONG SIDEWALKS AND SHRUB BED EDGES. RAKE AS NEEDED. GENERAL MAINTENANCE

DETENTION BASIN: CLEAN OUT OUTLET STRUCTURES AFTER EVERY STORM EVENT.

PAVEMENT: REPLACE ALL BROKEN OR MISSING PAVERS REPAIR OR REPLACE ALL OTHER DAMAGE PAVING AS NECESSARY. REMOVE ALL STAINS.

ERNST SEED MIX #180 - RAIN GARDEN MIX

ITEM NUMBER: ERNMIX-180

MIX COMPOSITION

- 33.4% SCHIZACHYRIUM SCOPARIUM, 'ITASCA', MN ECOTYPE (LITTLE BLUESTEM, 'ITASCA' MN ECOTYPE)
- 20.0% ELYMUS VIRGINICUS, 'MADISON' (VIRGINIA WILDRYE, 'MADISON')
- 7.0% CAREX VULPINOIDEA, PA ECOTYPE (FOX SEDGE, PA ECOTYPE)
- 5.6% CHASMANTHIUM LATIFOLIUM, WV ECOTYPE (BRYER OATS, WV ECOTYPE)
- 5.5% ECHINACEA PURPUREA (PURPLE CONEFLOWER)
- 3.0% CHAMAECRISTA FASCICULATA, PA ECOTYPE (PARTRIDGE PEA, PA ECOTYPE)
- 3.0% COREOPSIS LANCEOLATA (LANCELEAF COREOPSIS)
- 3.0% PANICUM CLANDESTINUM, 'TIOGA' (DEERTONGUE, 'TIOGA')
- 3.0% PANICUM RIGIDULUM, PA ECOTYPE (REDTOP PANICGRASS, PA ECOTYPE)
- 3.0% RUDBECKIA HIRTA (BLACKEYED SUSAN)
- 3.0% VERBENA HASTATA, PA ECOTYPE (BLUE VERVAIN, PA ECOTYPE)
- 2.0% HELOPSIS HELIANTHOIDES, PA ECOTYPE (OXEYE SUNFLOWER, PA ECOTYPE)
- 1.8% ASCLEPIAS INDIANATA, PA ECOTYPE (SWAMP MILKWEED, PA ECOTYPE)
- 1.0% CAREX SCOPARIA, PA ECOTYPE (BLUNT BROOM SEDGE, PA ECOTYPE)
- 1.0% SENNA HEBECARPA, VA & WV ECOTYPE (WILD SENNA, VA & WV ECOTYPE)
- 0.6% HELENIUM AUTUMNALE, PA ECOTYPE (COMMON SNEEZEWEED, PA ECOTYPE)
- 0.5% ASTER NOVAE-ANGLIAE, PA ECOTYPE (NEW ZEALAND ASTER, PA ECOTYPE)
- 0.5% ASTER PRENANTHOIDES, PA ECOTYPE (ZIGZAG ASTER, PA ECOTYPE)
- 0.5% BAPTISA AUSTRALIS, SOUTHERN WV ECOTYPE (BLUE FALSE INDIGO, SOUTHERN WV ECOTYPE)
- 0.5% PYCNANTHEMUM TENUIFOLIUM (NARROWLEAF MOUNTAINMINT)
- 0.5% ZIZIA ALUREA (GOLDEN ALEXANDERS)
- 0.4% MONARDA FISTULOSA, FORT INDIANTOWN GAP-PA ECOTYPE (WILD BERGAMOT, FORT INDIANTOWN GAP-PA ECOTYPE)
- 0.3% EUPATORIUM PERFORIATUM, PA ECOTYPE (BONESET, PA ECOTYPE)
- 0.3% JUNCUS TENUIS, PA ECOTYPE (PATH RUSH, PA ECOTYPE)
- 0.2% JUNCUS EFFUSUS (SOFT RUSH)
- 0.2% SOLIDAGO MEMORALIS, PA ECOTYPE (GRAY GOLDENROD, PS ECOTYPE)
- 0.2% SOLIDAGO RUOGSA, PA ECOTYPE (WRINKLELEAF GOLDENROD, PA ECOTYPE)

SEEDING RATE: 20 LB PER ACRE WITH A COVER CROP OF GRAIN RYE AT 30 LB PER ACRE

ERNST CONSERVATION SEEDS, INC.
8884 MERCER PIKE, MEADVILLE PA 16335
1-800-873-3321

ERNST SEED MIX #181 - NATIVE STEEP SLOPE MIX

ITEM NUMBER: ERNMIX-181

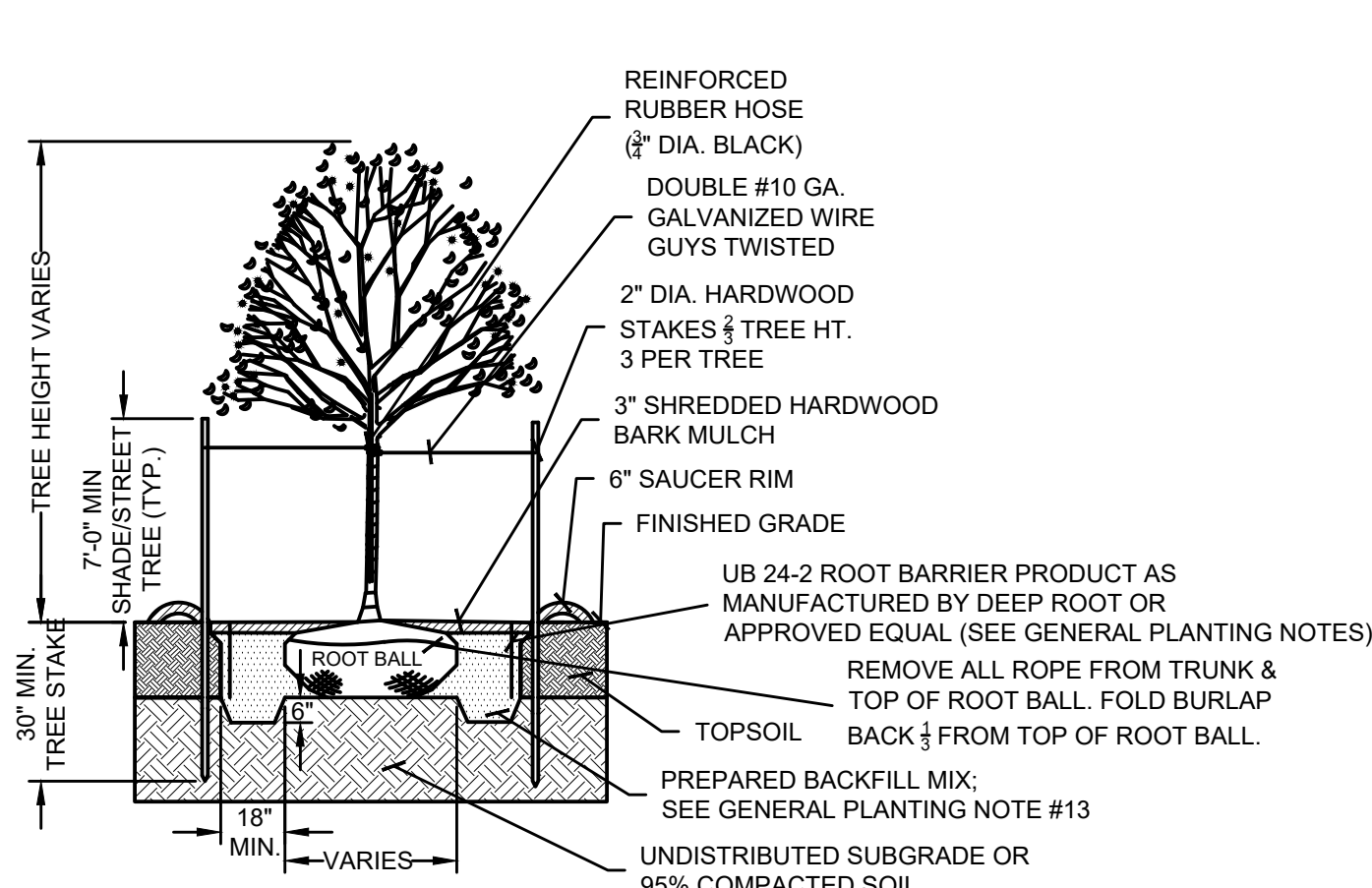
MIX COMPOSITION

- 31.5% SORGHASTRUM NUTANS, NY4 ECOTYPE (INDIANGRASS, NY4 ECOTYPE)
- 20.0% LOLIUM MULTIFLORUM (ANNUAL RYEGRASS)
- 10.0% ELYMUS VIRGINICUS, PA ECOTYPE (VIRGINIA WILDRYE, PA ECOTYPE)
- 9.8% ANDROPOGON GERARDII, 'NIAGARA' (BIG BLUESTEM, 'NIAGARA')
- 0.0% ELYMUS CANADENSIS (CANADA WILDRYE)
- 5.0% AGROSTIS PERENNANS, ALBANY PINE BUSH-NY ECOTYPE (AUTUMN BENTGRASS, ALBANY PINE BUSH-NY ECOTYPE)
- 4.0% PANICUM VIRGATUM, NJ ECOTYPE (SWITCHGRASS, NJ ECOTYPE)
- 3.0% PANICUM CLANDESTINUM, 'TIOGA' (DEERTONGUE, 'TIOGA')
- 2.0% SCHIZACHYRIUM SCOPARIUM, 'CAMPER' (LITTLE BLUESTEM, 'CAMPER')
- 1.3% CHAMAECRISTA FASCICULATA, PA ECOTYPE (PARTRIDGE PEA, PA ECOTYPE)
- 1.2% ECHINACEA PURPUREA (PURPLE CONEFLOWER)
- 1.2% TRIDENS FLAVUS (PURPLETOP)
- 1.0% COREOPSIS LANCEOLATA (LANCELEAF COREOPSIS)
- 1.0% RUDBECKIA HIRTA, COASTAL PLAIN NC ECOTYPE (BLACKEYED SUSAN, COASTAL PLAIN NC ECOTYPE)
- 0.7% HELOPSIS HELIANTHOIDES, PA ECOTYPE (OXEYE SUNFLOWER, PA ECOTYPE)
- 0.2% MONARDA FISTULOSA, FORT INDIANTOWN GAP-PA ECOTYPE (WILD BERAMOT, FORT INDIANTOWN GAP-PA ECOTYPE)
- 0.1% ASTER LAEVIS, NY ECOTYPE (SMOOTH BLUE ASTER, NY ECOTYPE)
- 0.1% ASTER NOVAE-ANGLIAE, PA ECOTYPE (NEW ENGLAND ASTER, PA ECOTYPE)
- 0.1% GEUM CANADENSE, PA ECOTYPE (WHITE AVENS, PA ECOTYPE)
- 0.1% LIATRIS SPICATA, PA ECOTYPE (MARSH BLACKING STAR, PA ECOTYPE)
- 0.1% PENSTEMON DIGITALIS, PA ECOTYPE (TALL WHITE BEARDTONGUE, PA ECOTYPE)
- 0.1% PYCNANTHEMUM TENUIFOLIUM (NARROWLEAF GOLDENROD)
- 0.1% SOLIDAGO JUNCEA, PA ECOTYPE (EARLY GOLDENROD, PA ECOTYPE)

SEEDING RATE: 60 LB PER ACRE, OR 1 LB PER 1,000 SQ. FT

PLANTING NOTES:

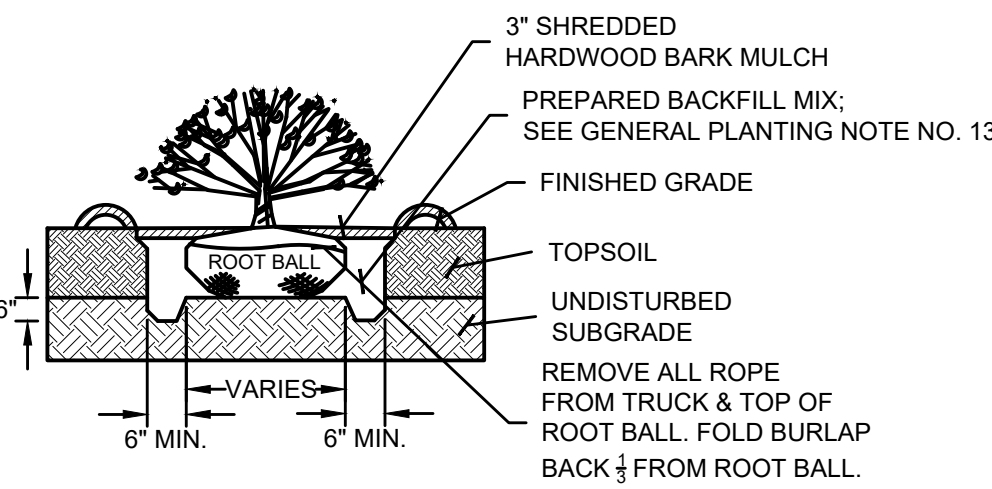
- THE CONTRACTOR SHALL FURNISH AND PLANT ALL PLANT MATERIALS SHOWN ON THE DRAWINGS, AS SPECIFIED, AND IN QUANTITIES INDICATED ON THE PLANT LIST. THE OWNER OR HIS AUTHORIZED REPRESENTATIVE SHALL BE NOTIFIED PRIOR TO BEGINNING PLANTING OPERATIONS.
- STANDARDS: ALL PLANTS SHALL BE IN CONFORMANCE WITH THE AMERICAN STANDARD FOR NURSERY STOCK, LATEST EDITION, PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, INC. WITH REGARD TO SIZING AND DESCRIPTION.
- QUALITY: ALL PLANTS SHALL BE NURSERY GROWN AND HARDY UNDER CLIMATIC CONDITIONS SIMILAR TO THOSE IN THE LOCALITY OF THE PROJECT. ALL PLANTS SHALL BE TYPICAL OF THEIR SPECIES OR VARIETY AND SHALL HAVE A NORMAL HABIT OF GROWTH. THEY SHALL BE SOUND, HEALTHY AND VIGOROUS, WELL BRANCHED AND DENSELY FOLIATED WHEN IN LEAF. THEY SHALL BE FREE OF DISEASE AND INSECT PESTS, EGGS OR LARVAE. THEY SHALL HAVE HEALTHY, WELL DEVELOPED ROOT SYSTEMS.
- SUBSTITUTIONS: WHEN PLANTS OF A SPECIFIED KIND OR SIZE ARE NOT AVAILABLE WITHIN REASONABLE DISTANCE, SUBSTITUTIONS MAY BE MADE UPON REQUEST BY THE CONTRACTOR, AND MUST BE APPROVED BY THE LANDSCAPE ARCHITECT.
- SIZE: ALL PLANTS SHALL CONFORM TO THE MEASUREMENTS SPECIFIED ON THE PLANT LIST UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE LANDSCAPE ARCHITECT.
- PRUNING: EACH TREE AND SHRUB SHALL BE PRUNED IN ACCORDANCE WITH AMERICAN ASSOCIATION OF NURSERYMEN, INC. ALL PRUNING MUST BE DONE AT THE NURSERY PRIOR TO PURCHASE, NO FIELD PRUNING IS ALLOWED. CARE MUST BE TAKEN TO AVOID ANY ADDITIONAL DAMAGE TO THE PLANT. CUTS OVER ONE INCH (1") IN DIAMETER SHALL BE PAINTED WITH AN APPROVED TREE PAINT.
- ROOT SYSTEMS: BALLED AND BURLAPPED PLANTS SHALL BE DUG WITH FIRM NATURAL BALLS OF EARTH OF DIAMETER AND DEPTH TO INCLUDE MOST OF THE FIBROUS ROOTS. CONTAINER GROWN STOCK SHALL HAVE BEEN IN A CONTAINER LONG ENOUGH FOR THE ROOT SYSTEM HAVE DEVELOPED SUFFICIENTLY TO HOLD ITS SOIL TOGETHER FIRM AND WHOLE. NO PLANTS SHALL BE LOOSE IN THE CONTAINER OR BALL.
- PROTECTION: ROOTBALLS, TRUNKS, BRANCHES AND FOLIAGE OF PLANTS SHALL BE ADEQUATELY PROTECTED AT ALL TIMES FROM SUN AND DRYING WINDS OR FROST. PLANTS WITH BROKEN ROOT BALLS OR EXCESSIVE DAMAGE TO THE CROWN SHALL BE REPLACED, IN KIND, PRIOR TO INSTALLATION.
- MULCH: IMMEDIATELY FOLLOWING PLANT INSTALLATION ALL TREE AND SHRUB PLANTING PITS SHALL BE COVERED WITH A THREE INCH (3") LAYER OF HARDWOOD MULCH. THE LIMITS OF THIS MULCH FOR DECIDUOUS TREES AND SINGLE EVERGREEN TREES SHALL BE THE AREA OF THE PIT. FOR EVERGREEN TREES CLUSTER OR SHRUB MASSES, A MULCHED BED SHALL BE CREATED. INCORPORATE SYNTHETIC WEED BARRIER FABRIC UNDER ALL MULCHED BEDS.
- ANTI-DESICCANT SPRAY: SPRAY ALL BROADLEAF EVERGREEN TREES & SHRUBS WITH AN ANTI-DESICCANT SUCH AS "WILT PROOF".
- PLANTING MIX BEFORE BACKFILLING: THE TOPSOIL BACKFILL MIXTURE SHALL BE PREPARED AND MIXED TO THE FOLLOWING PROPORTIONS: DECIDUOUS PLANTS - TWO PARTS BY VOLUME OF TOPSOIL, ONE PART ORGANIC COMPOST AND FIVE POUNDS BONE MEAL PER CUBIC YARD. EVERGREEN PLANTS - THREE PARTS BY VOLUME OF TOPSOIL AND ONE PART ORGANIC COMPOST. FERTILIZER - TO THE ABOVE MIXTURES, ADD THREE POUNDS OF SPECIFIED COMMERCIAL FERTILIZER (SLOW RELEASE 5-10-5) FOR TREES UP TO THREE INCHES (3") IN CALIPER AND ONE POUND PER INCH OF CALIPER FOR LARGER TREES. SHRUBS SHALL BE FERTILIZED WITH SIX (6) OUNCES OF FERTILIZER FOR SHRUBS FOUR FEET (4') AND OVER.
- STAKING AND GUYING: ALL TREES SHALL BE STAKED AND GUYED ACCORDING TO ACCEPTED INDUSTRY PRACTICE. ALL TREES 2" TO 3-1/2" CALIPER, SHALL BE STAKED AND ALL TREES FOUR (4") CAL OR GREATER TO BE GUYED PER DETAIL ON THIS SHEET. THEY SHALL ALSO BE WRAPPED IMMEDIATELY AFTER THEY ARE PLANTED WITH KRAFT PAPER TYPE OR APPROVED EQUAL.
- LAYOUT: THE CONTRACTOR SHALL LAY OUT THE LOCATION OF ALL PLANTS AND THE ARRANGEMENT AND OUTLINES OF PLANTING BEDS AS INDICATED ON THE DRAWINGS. THE LAYOUT OF PLANTING SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO ANY EXCAVATION OF PLANTING PITS OR PREPARATION OF PLANTING BEDS. ALL PLANTING SHALL BE AT THE LOCATIONS INDICATED ON THE DRAWINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PLANTING AT THE CORRECT GRADES, ALIGNMENT AND LAYOUT OF PLANTING BEDS. MINOR ADJUSTMENTS TO TREE LOCATIONS MAY BE NECESSARY DUE TO FIELD CONDITIONS AND FINAL GRADING. THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT IF MAJOR ADJUSTMENTS ARE ANTICIPATED.
- ADVERSE CONDITIONS: THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT IN WRITING OF ANY SOIL OR DRAINAGE CONDITIONS WHICH THE CONTRACTOR CONSIDERS DETRIMENTAL TO PLANT GROWTH. THE DOCUMENTED CONDITIONS SHALL INCLUDE A PROPOSAL FOR CORRECTING THE SITUATION, INCLUDING ANY CHANGE IN COST FOR REVIEW AND ACCEPTANCE BY THE LANDSCAPE ARCHITECT.
- QUANTITY: THE QUANTITY OF PLANTS INDICATED IN THE PLANT SCHEDULE IS FOR GENERAL REFERENCE ONLY. THE CONTRACTOR SHALL OBTAIN QUANTITIES FOR PRICING BY COMPIING NUMBERS FROM THE PLANTS ILLUSTRATED ON THE DRAWINGS. SHOULD THERE BE A DISCREPANCY BETWEEN THE DRAWINGS AND THE PLANT SCHEDULE, THE QUANTITIES ILLUSTRATED ON THE DRAWINGS SHALL TAKE PRECEDENCE.
- GARANTEE: IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MONITOR THE PROJECT DURING THE GUARANTEE PERIOD AND NOTIFY THE OWNER IN WRITING IF PROBLEMS ARE OCCURRING OR SITUATIONS DEVELOP THAT APPEAR DETRIMENTAL TO THE PLANT MATERIAL.
- PLANT MATERIAL RECEIVED IN WIRE BASKETS IS ACCEPTABLE, BUT MUST BE HANDLED IN THE FOLLOWING MANNER. THE PLANT MUST BE PARTIALLY PLANTED FOR SUPPORT, AND THE ENTIRE WIRE BASKET MUST BE CUT AND REMOVED.
- PROVIDE ROOT BARRIER UB-24.2 OR APPROVED EQUAL BETWEEN STREET TREES AND ALL SIDEWALK OR CURBING.
- PLANTING PITS SHALL PROVIDE AT LEAST ONE (1) FOOT OF CLEARANCE AROUND ROOT BALL AT ALL PLANTINGS.
- ALL NON LAWN AREAS SHALL HAVE A TOP GRADE WEED BARRIER. HOLES SHALL BE CUT IN THE BARRIER TO PLANT THE PLANTING MATERIAL. THE TOTAL AREA SHALL BE COVERED IN GOOD MULCH. MULCH SHALL BE KEPT AWAY FROM THE TRUNKS OF TREES.
- ALL LAWN AND LANDSCAPED AREAS SHALL BE IRRIGATED AREAS "AS SHOWN ON PLAN" BY LIMITS OF SOD & IRRIGATION.



SHADE (STREET) TREE PLANTING DETAIL

NTS

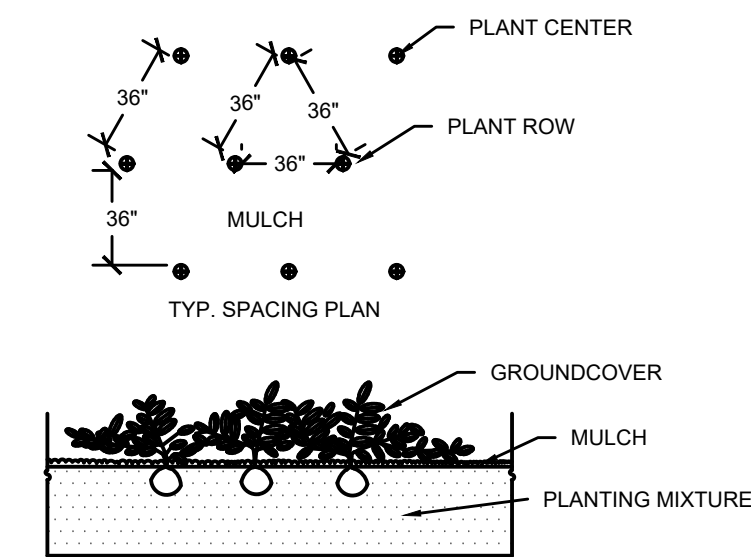
- NOTES:
- NO SOIL OR MULCH SHALL BE PLACED AGAINST ROOT COLLAR OF PLANT.
 - PLANTING DEPTH SHALL BE THE SAME OR HIGHER AS GROWN IN NURSERY.
 - CENTRAL LEADER SHALL NOT BE CUT OR DAMAGED.
 - WIRE BASKETS TO BE REMOVED PRIOR TO BACKFILLING PIT.



SHRUB PLANTING DETAIL

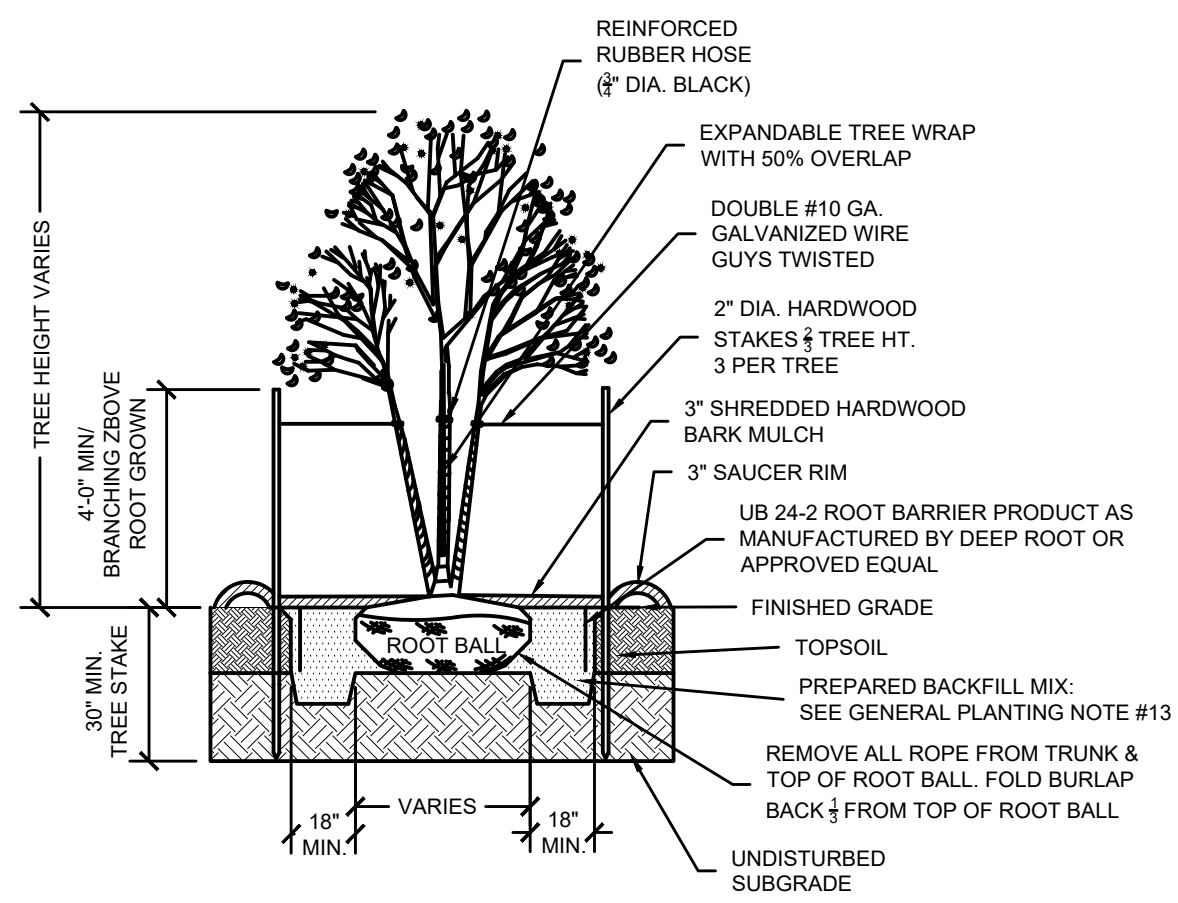
NTS

- NOTES:
- NO SOIL OR MULCH SHALL BE PLACED AGAINST ROOT COLLAR OF PLANT.
 - PLANTING DEPTH SHALL BE THE SAME OR HIGHER AS GROWN IN NURSERY.



GROUNDCOVER PLANTING

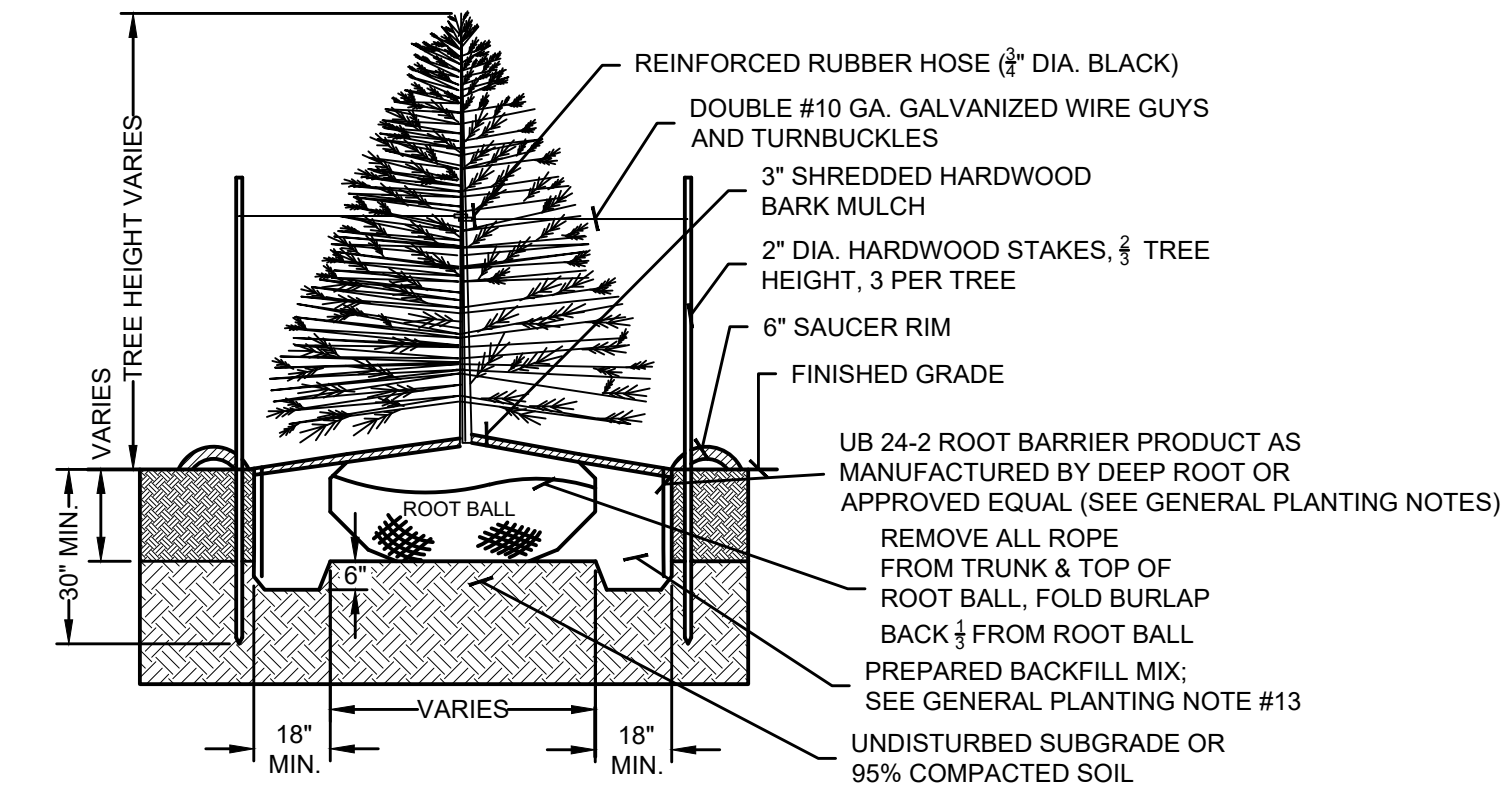
NTS



MULTI-STEM TREE PLANTING DETAIL

NTS

- NOTES:
- NO SOIL OR MULCH SHALL BE PLACED AGAINST ROOT COLLAR OF PLANT.
 - PLANTING DEPTH SHALL BE THE SAME OR HIGHER AS GROWN IN NURSERY.
 - TRUNK TO BE WRAPPED WITH BIODEGRADABLE TREE WRAP.
 - CENTRAL LEADER SHALL NOT BE CUT OR DAMAGED.
 - WIRE BASKETS TO BE REMOVED PRIOR TO BACKFILLING PIT.



EVERGREEN TREE PLANTING DETAIL

NTS

- NOTES:
- NO SOIL OR MULCH SHALL BE PLACED AGAINST ROOT COLLAR OF PLANT.
 - PLANTING DEPTH SHALL BE THE SAME OR HIGHER AS GROWN IN NURSERY.
 - CENTRAL LEADER SHALL NOT BE CUT OR DAMAGED.
 - WIRE BASKETS TO BE REMOVED PRIOR TO BACKFILLING PIT.

				THIS WORK PREPARED UNDER MY IMMEDIATE SUPERVISION BRADFORD J. ALLER PROFESSIONAL ENGINEER <i>Bradford J. Aller</i> 12/10/21 N.J.P.E. LIC NO. GE 43435				EP DESIGN SERVICES, LLC State of New Jersey Certificate of Authorization R: 24GA28126800 2901 Hamilton Boulevard South Plainfield, New Jersey 07080 (908) 205-0443 Fax: (908) 255-3272				LANDSCAPING NOTES & DETAILS DM INVESTMENTS OF NORTH BRUNSWICK, LLC. FOR BLOCK 224 - LOTS 2, 5, 6 & 87 TOWNSHIP OF NORTH BRUNSWICK MIDDLESEX COUNTY, NEW JERSEY			
DATE: 7/14/21		DRAWN: BJA		CHECKED: N/A		PROJECT NO: 126-127-LA		SHEET: 27		TOTAL: 27		REVISION: 1		LA-2	
NO. 1		REVISED PER AGENCY REVIEW LETTERS		DATE: 12/15/21		BY: JPB									
NO.		REVISIONS		DATE		BY									