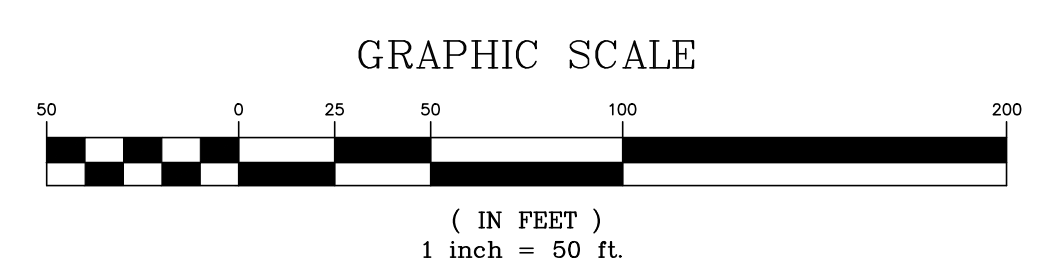


- NOTES AND REFERENCES:**
- ANDOVER TOWNSHIP TAX MAPS.
 - DEEDS AS REFERENCED ON THIS MAP.
 - PLANS TITLED "PRELIMINARY AND FINAL SITE PLANS FOR WAWA, TAX MAP LOT 6, BLOCK 158, ANDOVER TOWNSHIP, SUSSEX COUNTY, NEW JERSEY" PREPARED BY KENDERIAN ZILINSKI ASSOCIATES, DATED 8/22/05, AND LAST REVISED 7/22/09.
 - NJDOT PLANS TITLED "GENERAL PROPERTY KEY MAP, ROUTE 31, SECTION 9, ANDOVER TO NEWTON, SHOWING EXISTING RIGHT OF WAY & PARCELS TO BE ACQUIRED IN THE TOWNSHIP OF ANDOVER, SUSSEX COUNTY" DATED JUNE 1931, AND RECORDED IN THE SUSSEX COUNTY CLERK'S OFFICE ON 1/19/1932 AS MAP NO. 160.
 - COUNTY ROUTE 603 PLAN TITLED "SECTION NO. 1, SPRINGDALE-ALLAMUCHY ROAD, SUSSEX COUNTY, NEW JERSEY" DATED 10/1917.
 - UNDERGROUND UTILITIES SERVING THE SUBJECT PROPERTY ARE SHOWN BASED UPON SURFACE EVIDENCE AND AVAILABLE RECORD DOCUMENTS FURNISHED. THE LACK OF UNDERGROUND UTILITY INFORMATION DOES NOT DENY THE EXISTENCE OR ABSENCE OF SAME. THE APPROPRIATE UTILITY COMPANY SHOULD BE CONTACTED TO CONFIRM THE EXISTENCE OR ABSENCE OF SAME AND FOR A FIELD MARKOUT OF ALL UTILITIES PRIOR TO CONSTRUCTION. A FIELD MARKOUT MAY BE REQUESTED BY CALLING (800) 272-1000.
 - TITLE REPORT PREPARED BY FOUNDATION TITLE, LLC, AS AGENT FOR AMTRUST TITLE INSURANCE COMPANY, FILE NO. 524-175580, DATED 8/11/21. SAID REPORT CONTAINED SEVERAL REFERENCES TO A BUILDING EASEMENT NEAR THE STREET INTERSECTION. THE EASEMENT IS SHOWN HEREON. HOWEVER, THE REFERENCED DEEDS NOTE THAT UPON REMOVAL OF THE BUILDING ANY NEW STRUCTURES SHOULD BE CONSTRUCTED BASED ON CURRENT MUNICIPAL REQUIREMENTS.
 - OFFSETS SHOWN HEREON SHOULD NOT BE USED AS THE BASIS FOR CONSTRUCTION OF FENCES OR OTHER PERMANENT STRUCTURES.
 - HORIZONTAL DATUM IS NAD 83 AND VERTICAL DATUM IS NAVD 88 PER GPS/RTK OBSERVATIONS TAKEN BY DYKSTRA WALKER DESIGN GROUP IN APRIL 2020 (SPECTRA PRECISION SP60/GEOD 12B/COMBINED SCALE FACTOR 0.999882502/CENTROID AT MIDDLE OF 206 FRONTAGE).
 - THE NORTHERLY PORTION OF THE SUBJECT PROPERTY IS VEGETATED WITH DENSE BRUSH. SEVERAL MONITORING WELLS WERE FOUND WITHIN THIS AREA, BUT OTHERS MAY HAVE BEEN OBTAINED DUE TO THE EXISTING VEGETATION.
 - DYKSTRA WALKER DESIGN GROUP PERFORMED A FIELD TOPOGRAPHY OF U.S. HIGHWAY ROUTE 206, BRIGHTON ROAD, AND THE NORTHERLY PORTION OF THE SUBJECT PROPERTY. TOPOGRAPHIC INFORMATION FOR THE REMAINDER OF THE SUBJECT PROPERTY AND SURROUNDING AREAS IS BASED ON USGS LIDAR DATA.

**BLOCK 158
LOT 6**
AREA=452,392 SF
OR 10.385 ACRES
DB 3535/607

**BRIGHTON ROAD
COUNTY ROUTE 603
(66' RIGHT-OF-WAY)**

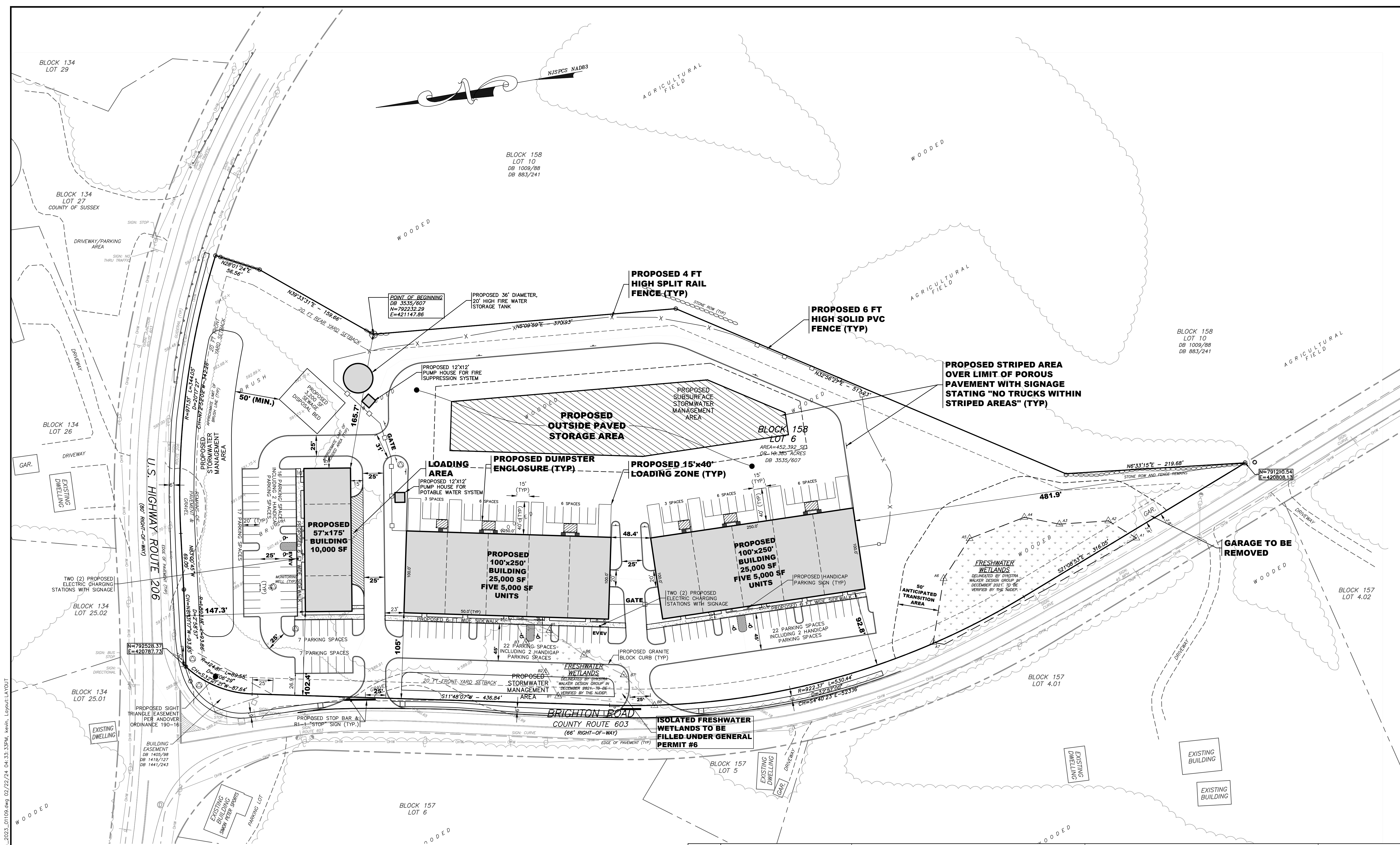
**U.S. HIGHWAY ROUTE 206
(80' RIGHT-OF-WAY)**



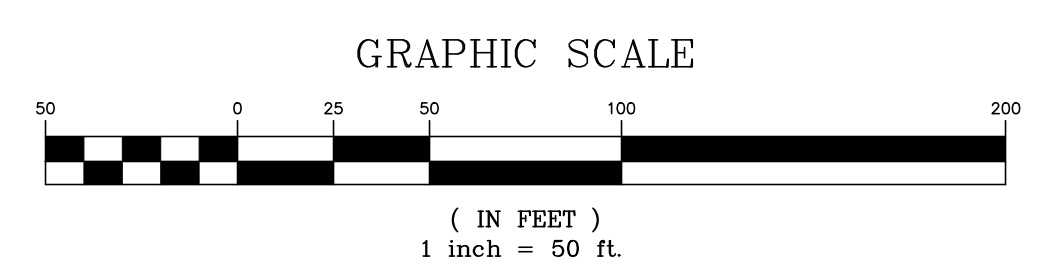
DYKSTRA WALKER DESIGN GROUP	
PROFESSIONAL ENGINEERS, PLANNERS & SURVEYORS 21 BOWLING GREEN PARKWAY, SUITE 204 - LAKE HOPATCONG, NJ 07849 PHONE (973) 663-4540 - FAX (973) 663-0042 WWW.DYKSTRAWALKER.COM	
KENNETH D. DYKSTRA	
PROFESSIONAL ENGINEER AND LAND SURVEYOR N.J. LIC. NO. 24GB03297200	
DATE	REVISION
7/25/23	INCORPORATED INTO SITE PLAN SET
1/20/22	REVISED PER TITLE REPORT

BOUNDARY AND TOPOGRAPHIC SURVEY PLAN		DW
PRELIMINARY SITE PLAN BLOCK 158, LOT 6 U.S. HIGHWAY ROUTE 206 & BRIGHTON ROAD (C.R. 603) TOWNSHIP OF ANDOVER SUSSEX COUNTY NEW JERSEY		
SCALE:	1" = 50'	
JOB NO.:	01109	
DRAWN BY:	KJO	
CHECKED BY:	KDD	
DATE:	1/4/22	
SHEET NO.:	2 OF 21	

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DATE	REVISION
2/22/24	REVISED BASED ON BOARD ENGINEER'S COMMENTS

DYKSTRA WALKER
 DESIGN GROUP PA
 PROFESSIONAL ENGINEERS, PLANNERS & SURVEYORS
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 PHONE (973) 663-4540 - FAX (973) 663-0042
 WWW.DYKSTRAWALKER.COM

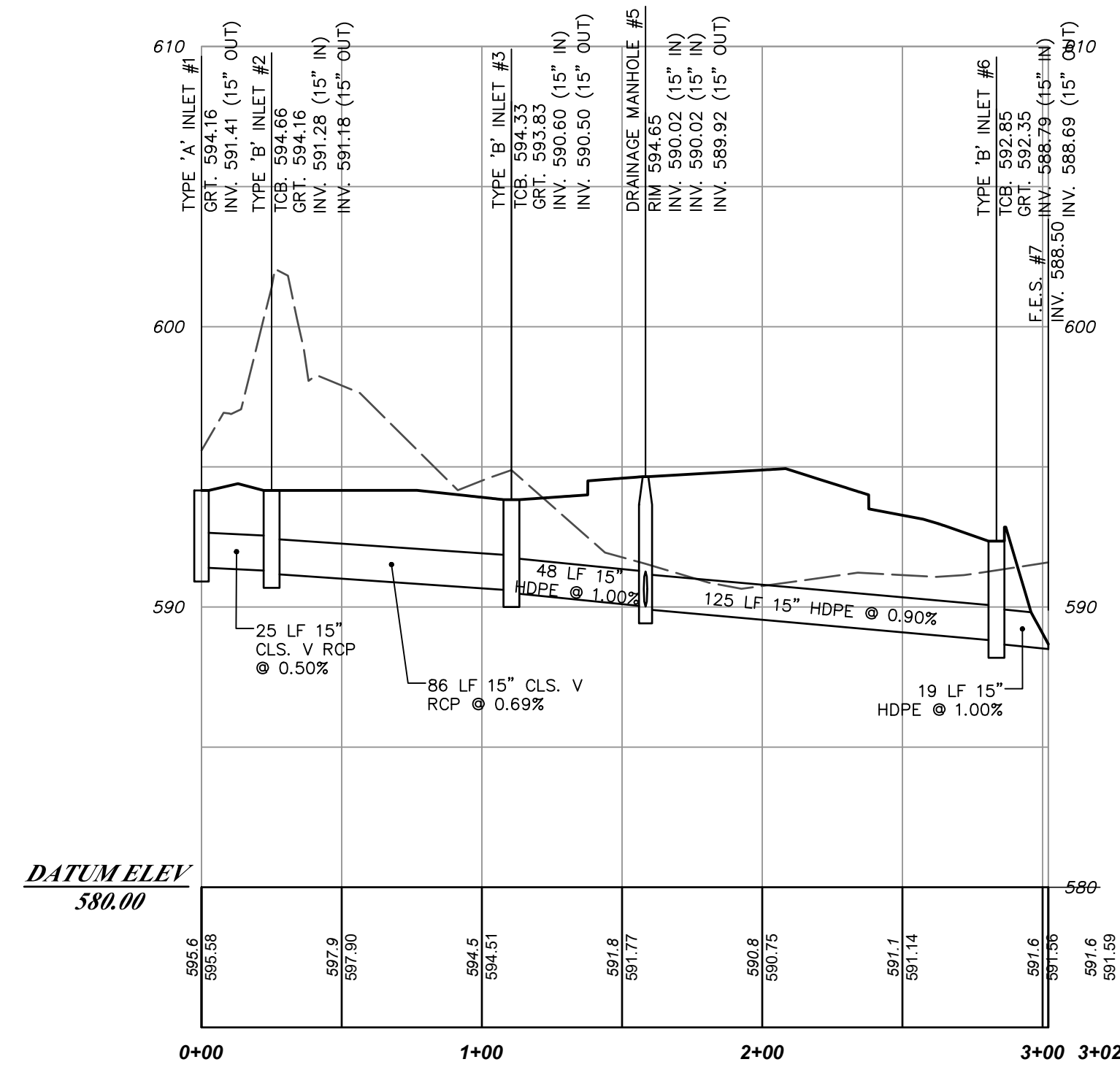
Kevin J. Robine
KEVIN J. ROBINE, P.E.
 PROFESSIONAL ENGINEER, N.J. LIC. NO. 24GE04965200

SITE LAYOUT PLAN

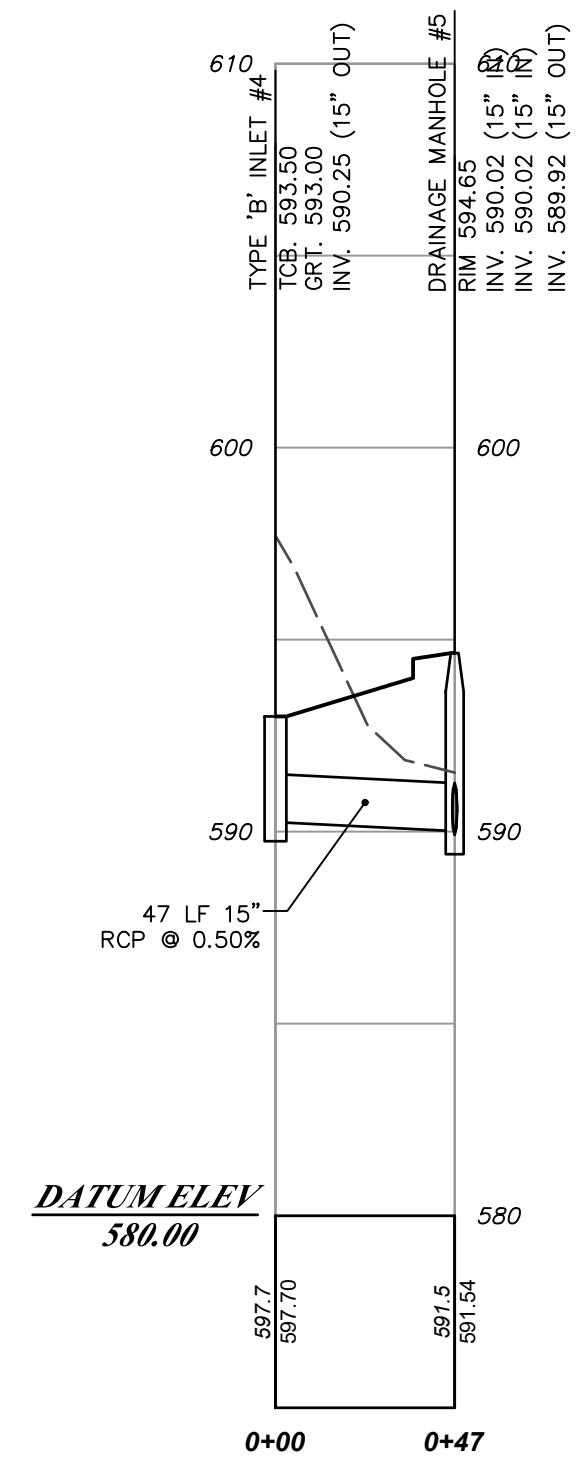
PRELIMINARY SITE PLAN
 BLOCK 158, LOT 6
 U.S. HIGHWAY ROUTE 206 &
 BRIGHTON ROAD (C.R. 603)
 TOWNSHIP OF ANDOVER
 SUSSEX COUNTY NEW JERSEY

SCALE: 1" = 50'
JOB NO.: 01109
DRAWN BY: TJB
CHECKED BY: KJR
DATE: 7/25/23
SHEET NO. 3 OF 21

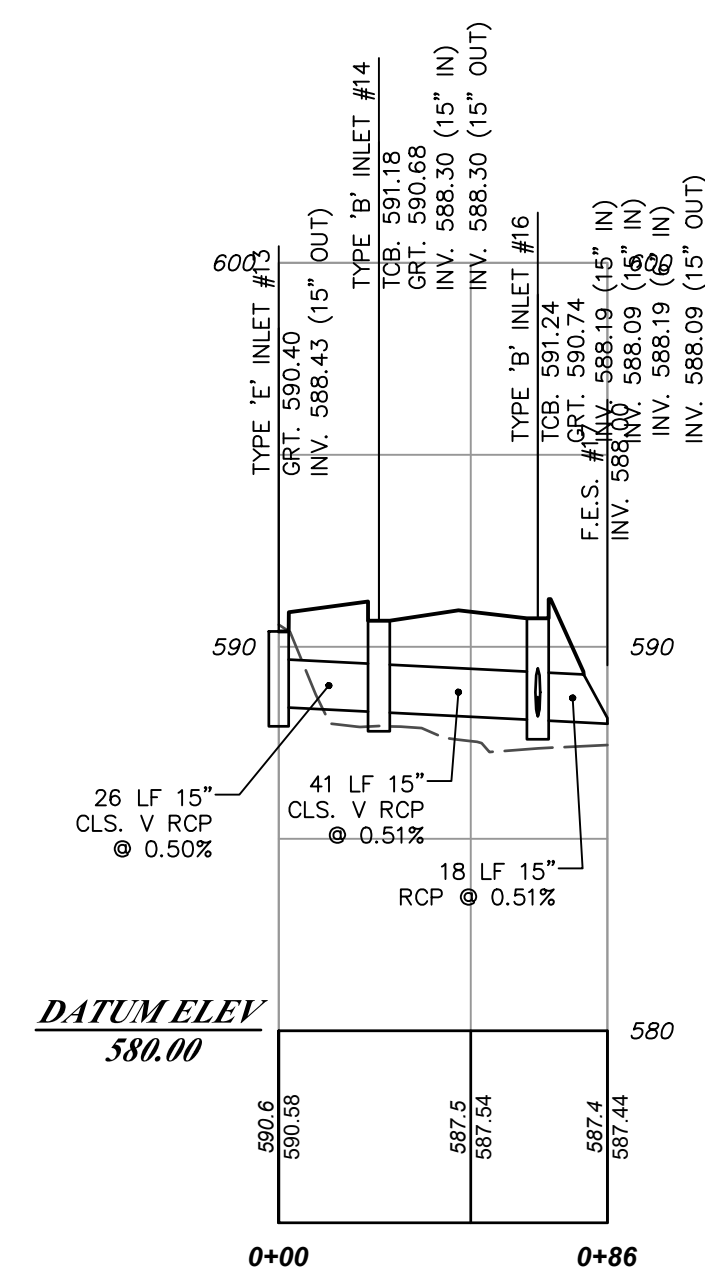
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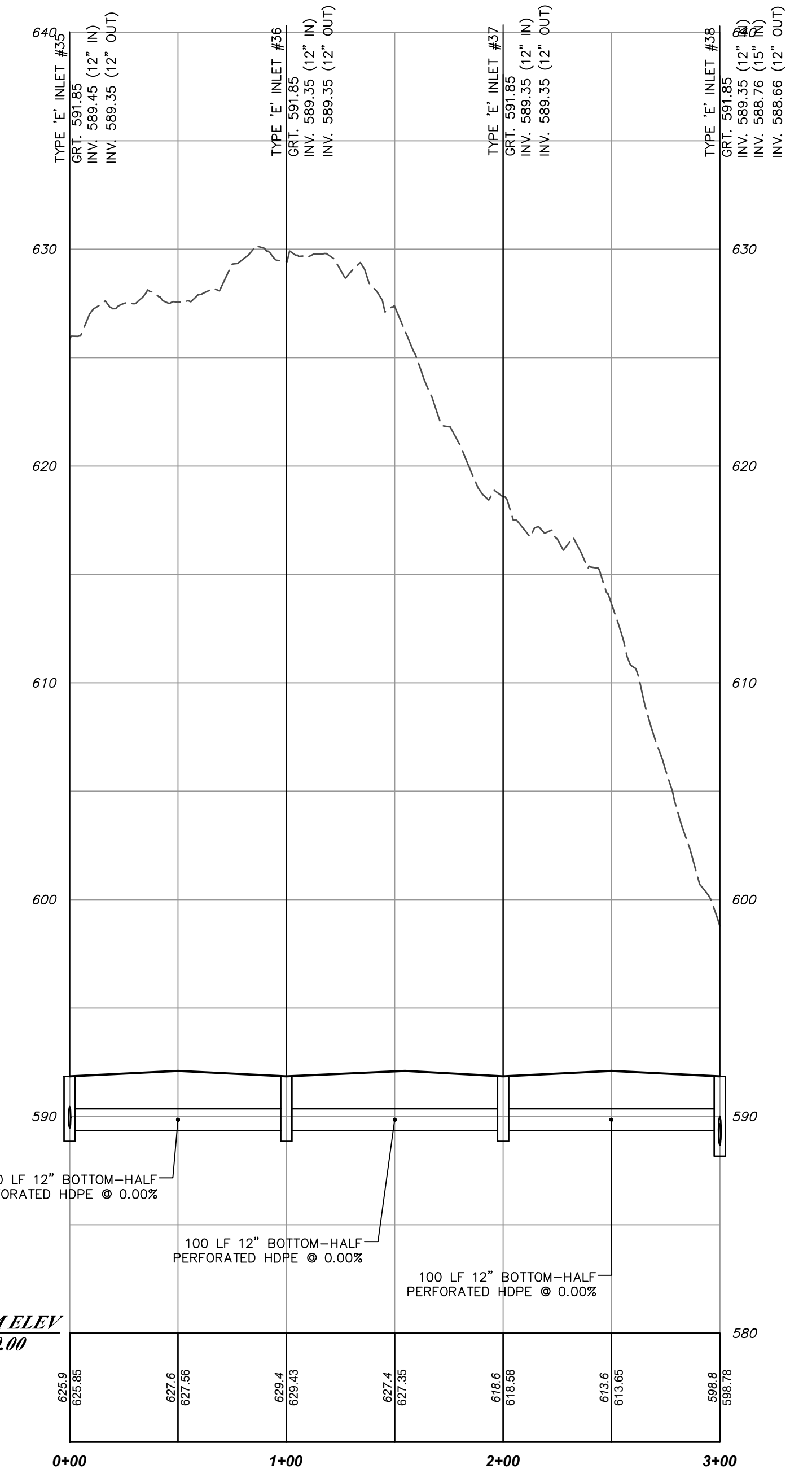
**PROPOSED DRAINAGE SYSTEM PROFILE
(INLET #1 - F.E.S. #7)**
HORIZONTAL SCALE: 1" = 50'
VERTICAL SCALE: 1" = 5'



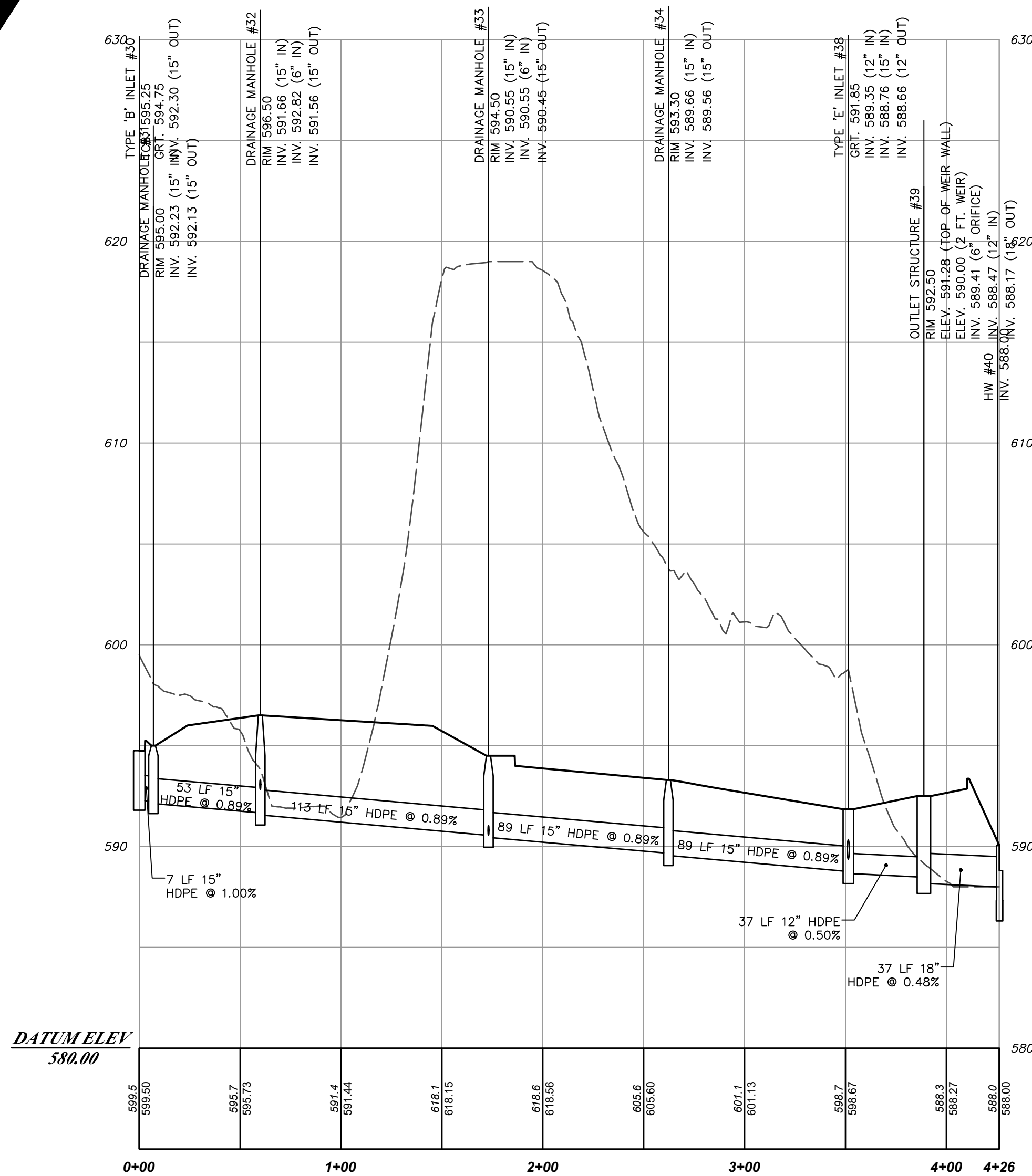
**PROPOSED DRAINAGE SYSTEM PROFILE
(INLET #4 - MANHOLE #5)**
HORIZONTAL SCALE: 1" = 50'
VERTICAL SCALE: 1" = 5'



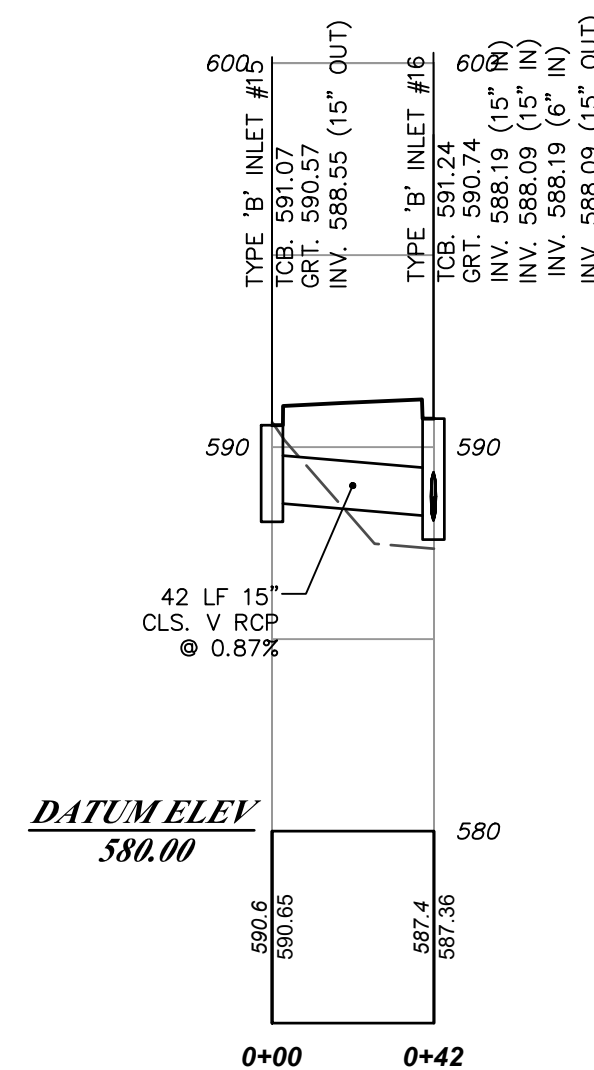
**PROPOSED DRAINAGE SYSTEM PROFILE
(INLET #13 - F.E.S. #17)**
HORIZONTAL SCALE: 1" = 50'
VERTICAL SCALE: 1" = 5'



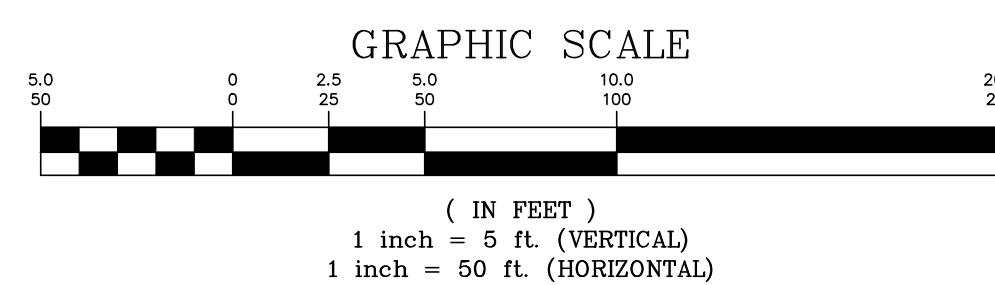
**PROPOSED DRAINAGE SYSTEM PROFILE
(INLET #35 - MANHOLE #38)**
HORIZONTAL SCALE: 1" = 50'
VERTICAL SCALE: 1" = 5'



**PROPOSED DRAINAGE SYSTEM PROFILE
(INLET #30 - HEADWALL #40)**
HORIZONTAL SCALE: 1" = 50'
VERTICAL SCALE: 1" = 5'



**PROPOSED DRAINAGE SYSTEM PROFILE
(INLET #15 - INLET #16)**
HORIZONTAL SCALE: 1" = 50'
VERTICAL SCALE: 1" = 5'



DATE	REVISION
2/22/24	REVISED BASED ON BOARD ENGINEER'S COMMENTS

**DYKSTRA WALKER
DESIGN DW GROUP**
PROFESSIONAL ENGINEERS, PLANNERS & SURVEYORS
21 BOWLING GREEN PARKWAY, SUITE 204 - LAKE HOPATCONG, NJ 07849
PHONE (973) 663-5540 - FAX (973) 663-0042
WWW.DYKSTRAWALKER.COM

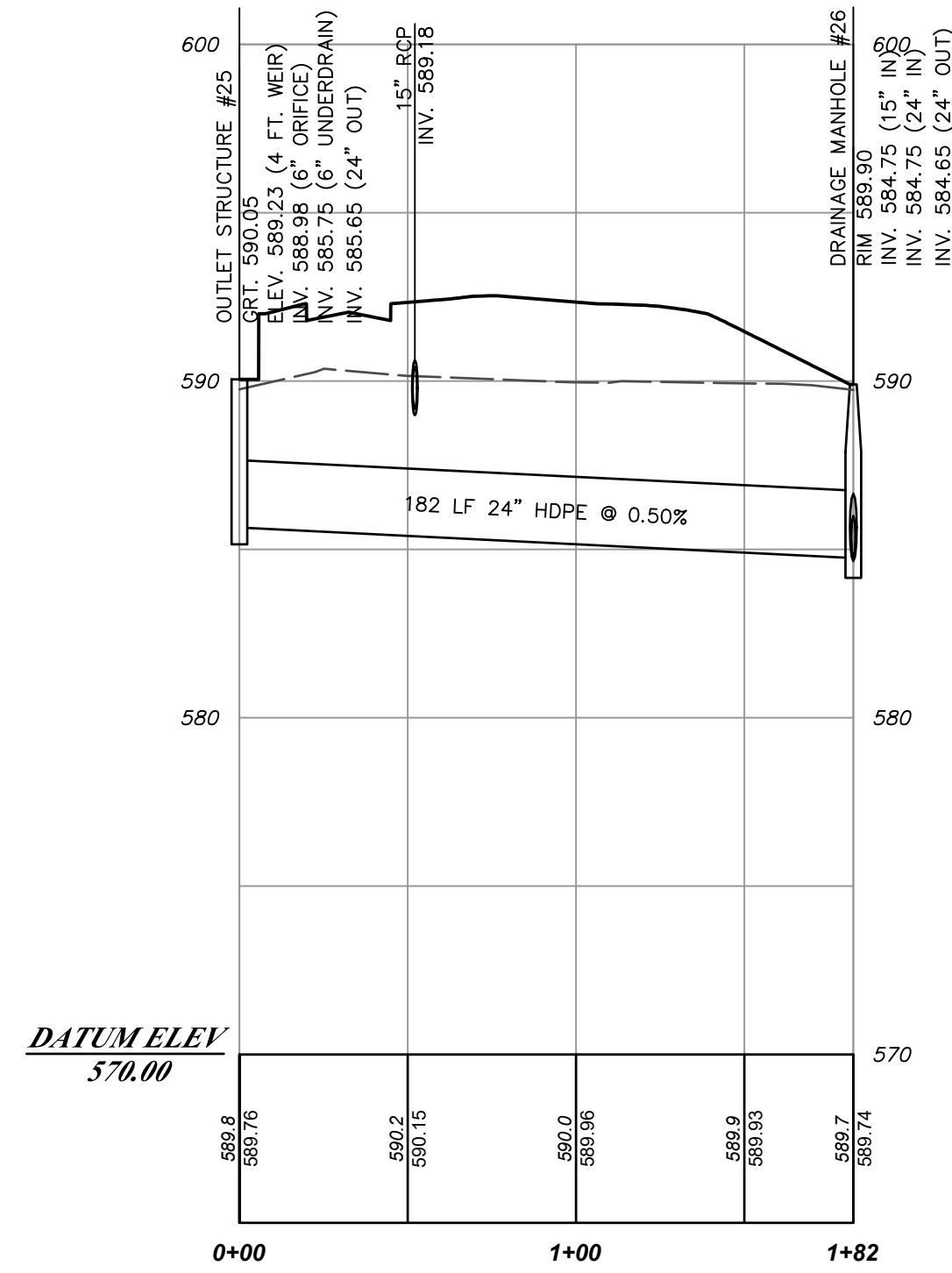
Kevin J. Robine
KEVIN J. ROBINE, P.E.
PROFESSIONAL ENGINEER, N.J. LIC. NO. 24GE04965200

UTILITY PROFILES 'A'
PRELIMINARY SITE PLAN
BLOCK 158, LOT 6
U.S. HIGHWAY ROUTE 206 &
BRIGHTON ROAD (C.R. 603)
TOWNSHIP OF ANDOVER
SUSSEX COUNTY NEW JERSEY

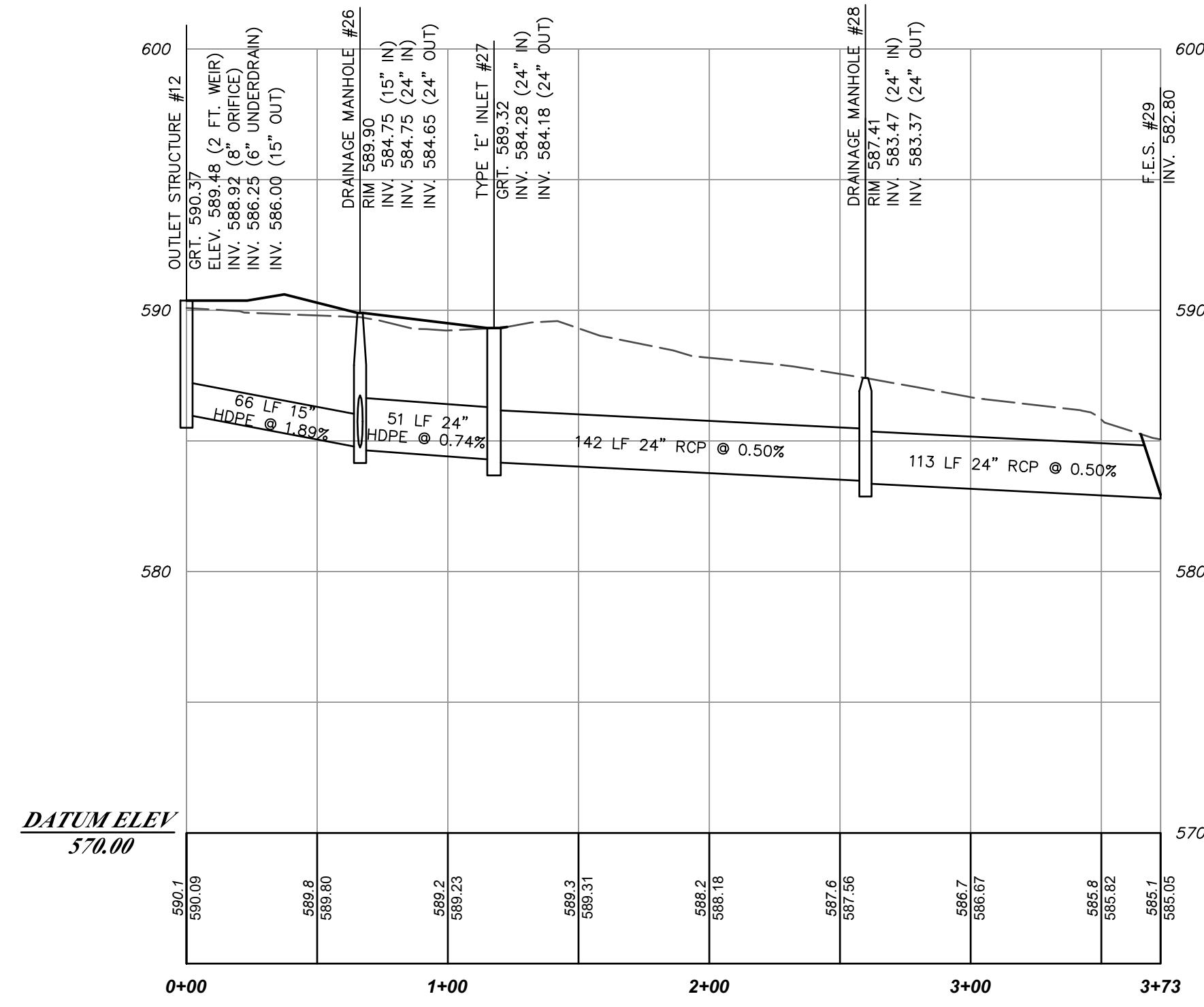
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DRAWN BY: TJB
CHECKED BY: KJR
DATE: 7/25/23
SHEET NO. 5 OF 21

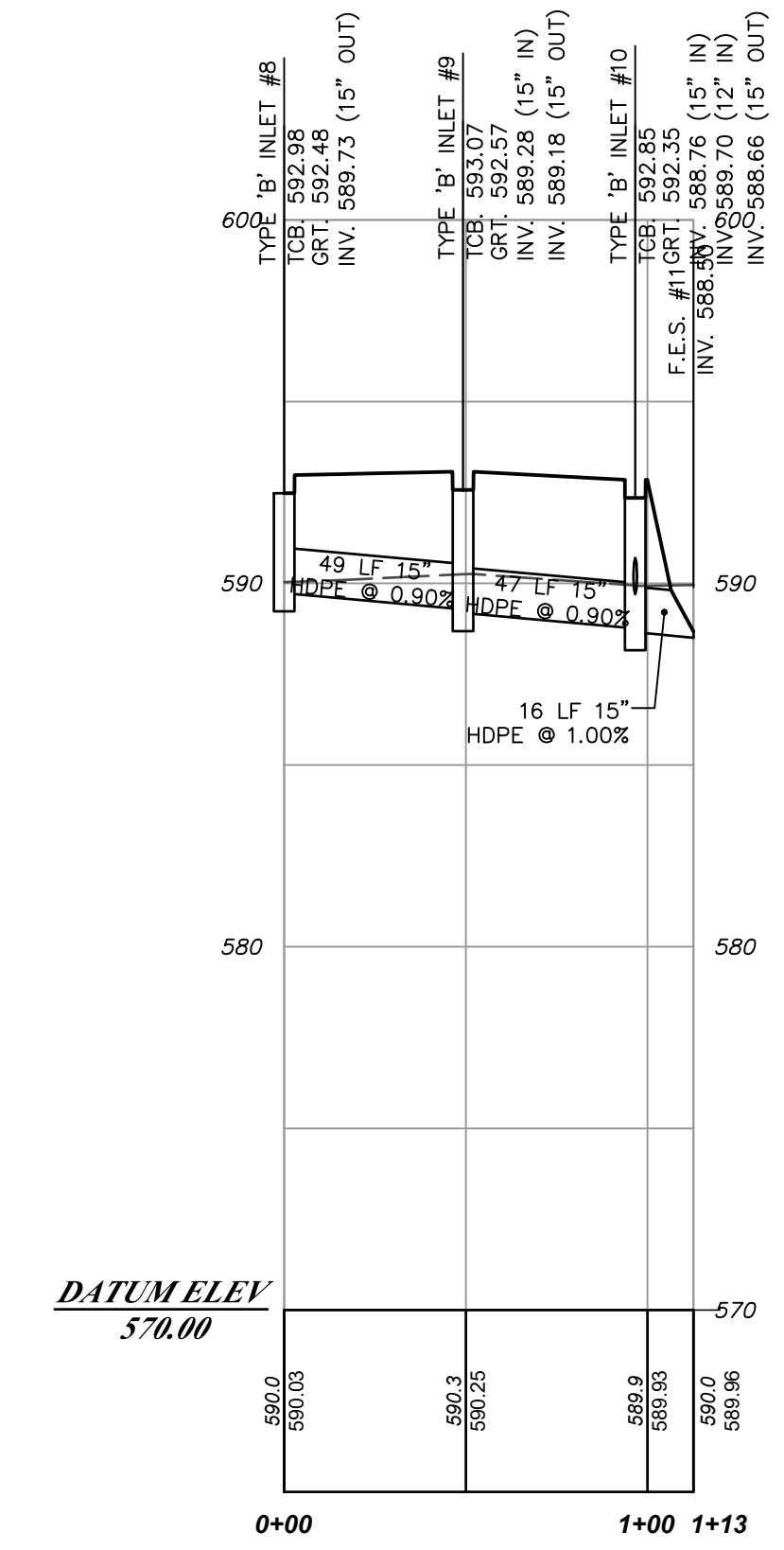
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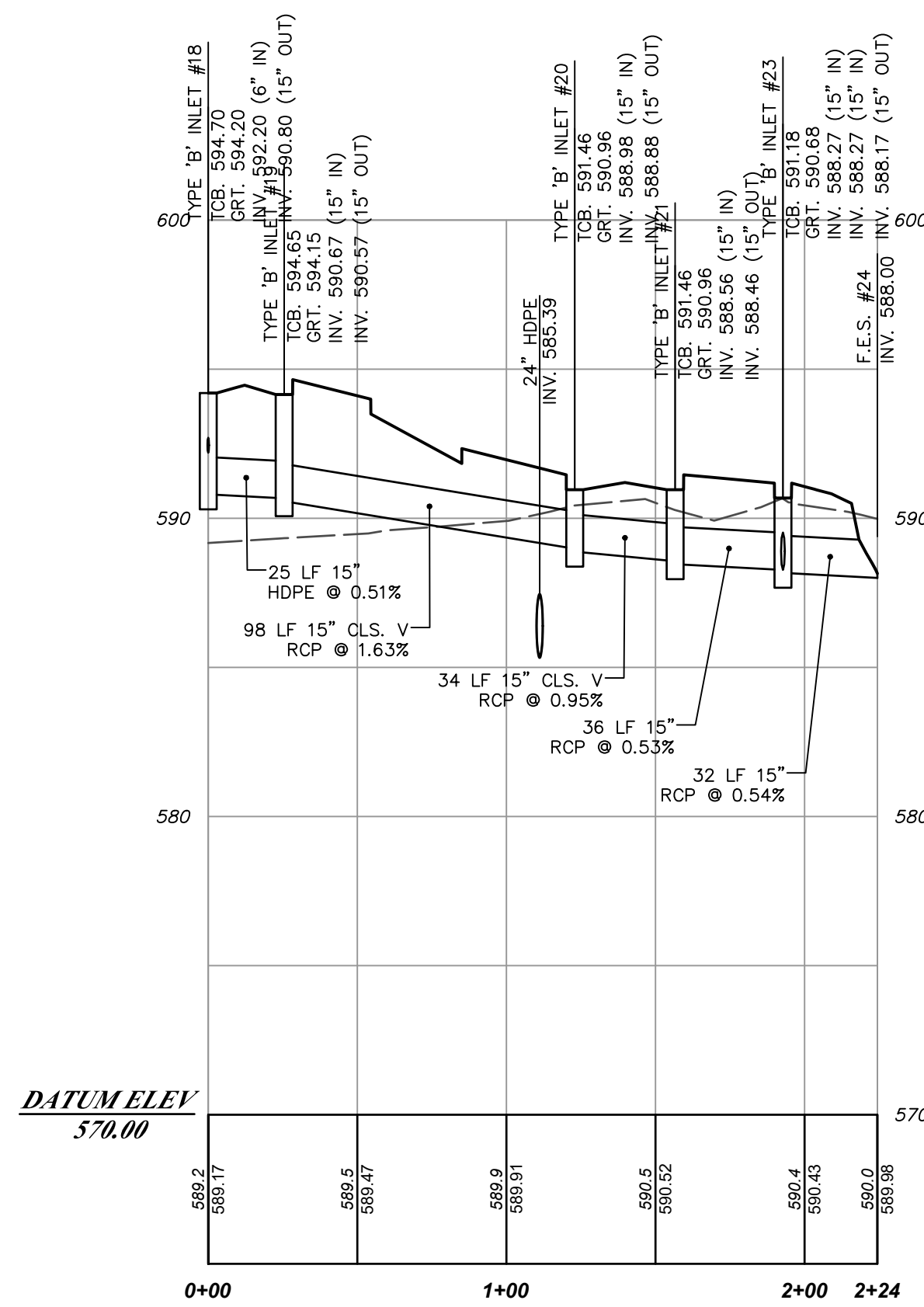
**PROPOSED DRAINAGE SYSTEM PROFILE
(OUTLET STRUCTURE #25 - MANHOLE #26)**
HORIZONTAL SCALE: 1" = 50'
VERTICAL SCALE: 1" = 5'



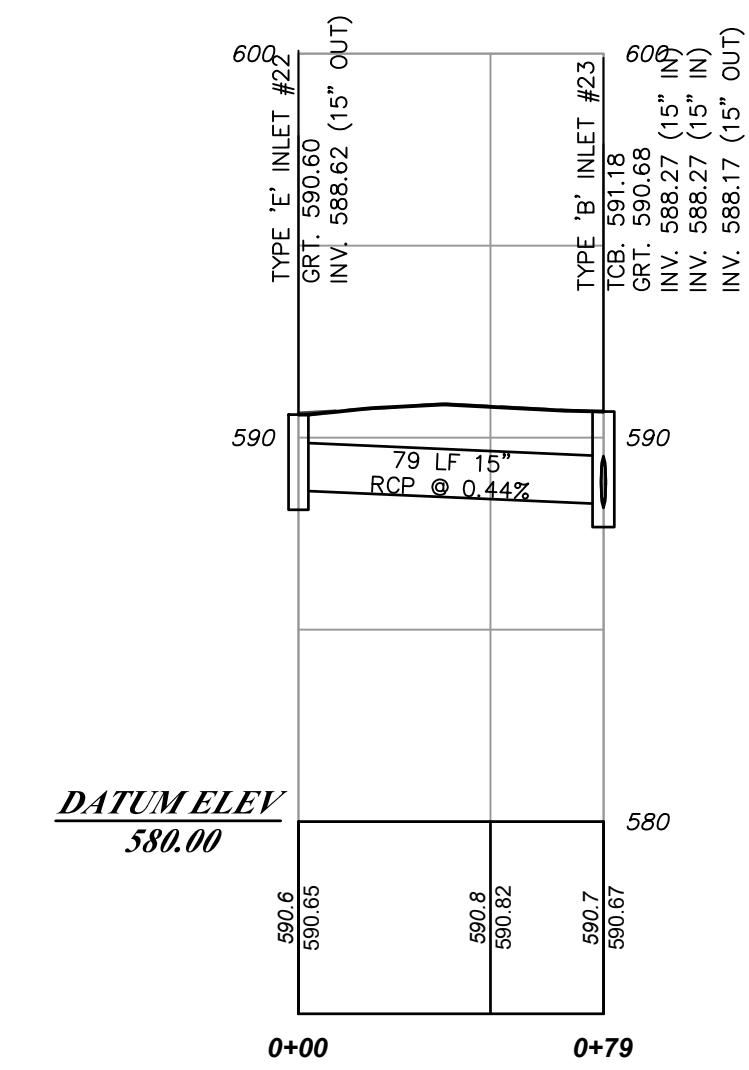
**PROPOSED DRAINAGE SYSTEM PROFILE
(OUTLET STRUCTURE #12 - F.E.S. #29)**
HORIZONTAL SCALE: 1" = 50'
VERTICAL SCALE: 1" = 5'



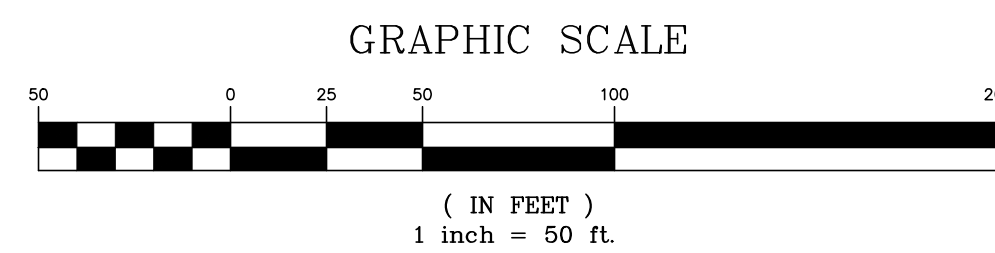
**PROPOSED DRAINAGE SYSTEM PROFILE
(INLET #8 - F.E.S. #11)**
HORIZONTAL SCALE: 1" = 50'
VERTICAL SCALE: 1" = 5'



**PROPOSED DRAINAGE SYSTEM PROFILE
(INLET #18 - F.E.S. #24)**
HORIZONTAL SCALE: 1" = 50'
VERTICAL SCALE: 1" = 5'



**PROPOSED DRAINAGE SYSTEM PROFILE
(INLET #22 - INLET #23)**
HORIZONTAL SCALE: 1" = 50'
VERTICAL SCALE: 1" = 5'



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DATE	REVISION

DYKSTRA WALKER
DESIGN **DW** GROUP PA
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21 BOWLING GREEN PARKWAY, SUITE 204 - LAKE HOPATCONG, NJ 07849
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Kevin J. Robine
KEVIN J. ROBINE, P.E.
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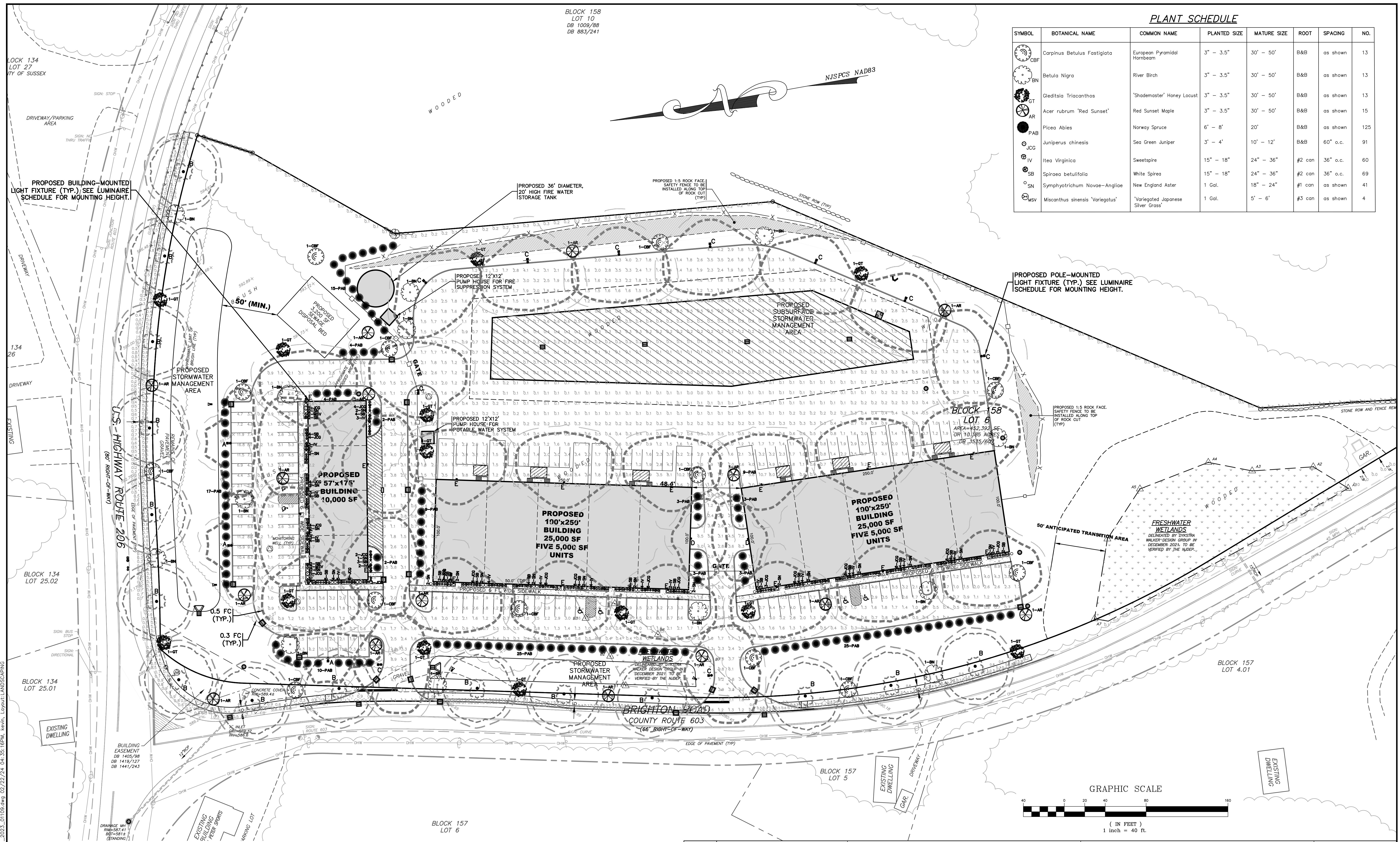
UTILITY PROFILES 'B'
PRELIMINARY SITE PLAN
BLOCK 158, LOT 6
U.S.HIGHWAY ROUTE 206 &
BRIGHTON ROAD (C.R. 603)
TOWNSHIP OF ANDOVER
SUSSEX COUNTY NEW JERSEY

DW
SCALE: 1" = 50'
JOB NO.: 01109
DRAWN BY: TJB
CHECKED BY: KJR
DATE: 7/25/23
SHEET NO. 6 OF 21

BLOCK 158
LOT 10
DB 1009/88
DB 883/241

PLANT SCHEDULE

SYMBOL	BOTANICAL NAME	COMMON NAME	PLANTED SIZE	MATURE SIZE	ROOT	SPACING	NO.
CBF	Corpinus Betulus Fastigiata	European Pyramidal Hornbeam	3" - 3.5"	30' - 50'	B&B	as shown	13
BN	Betula Nigra	River Birch	3" - 3.5"	30' - 50'	B&B	as shown	13
GT	Gleditsia Triacanthos	'Shademaster' Honey Locust	3" - 3.5"	30' - 50'	B&B	as shown	13
AR	Acer rubrum 'Red Sunset'	Red Sunset Maple	3" - 3.5"	30' - 50'	B&B	as shown	15
PAB	Picea Abies	Norway Spruce	6' - 8'	20'	B&B	as shown	125
JCG	Juniperus chinensis	Sea Green Juniper	3' - 4'	10' - 12'	B&B	60" o.c.	91
IV	Itea Virginica	Sweetspire	15" - 18"	24" - 36"	#2 can	36" o.c.	60
SB	Spirea betulifolia	White Spirea	15" - 18"	24" - 36"	#2 can	36" o.c.	69
SN	Symphotrichum Novae-Angliae	New England Aster	1 Gal.	18" - 24"	#1 can	as shown	41
MSV	Miscanthus sinensis 'Variegatus'	'Variegated Japanese Silver Grass'	1 Gal.	5' - 6'	#3 can	as shown	4



Symbol	Qty	Arrangement	Lumens	LLF	Catalog Number	Color	Comments
●A	3	SINGLE	15,833	0.85	LUMECON-LDS-SAL-110-DB-T2-1-NW-MAS-X-X	BLACK	16' HIGH POLE MOUNTED PARKING AREA LIGHTING
●B	15	SINGLE	13,445	0.85	HADCO LIBERTY II S7043-5-150S-A, SP5153-V-A	BLACK	15' HIGH POLE MOUNTED DECORATIVE STREETScape LIGHTING
●C	10	SINGLE	15,952	0.85	LUMECON-LDS-SAL-110-DB-T4-1-NW-MAS-X-X	BLACK	16' HIGH POLE MOUNTED PARKING AREA LIGHTING
●D	2	SINGLE	8,399	0.85	LUMECON-LDS-LFC-60-DB-T3-40	BLACK	16' HIGH BUILDING MOUNTED PARKING AREA LIGHTING
●E	18	SINGLE	15,952	0.85	LUMECON-LDS-SAL-110-DB-T4-1-NW-MAS-X-X	BLACK	16' HIGH BUILDING MOUNTED PARKING AREA LIGHTING

DATE	REVISION
2/22/24	REVISED BASED ON BOARD ENGINEER'S COMMENTS

DYKSTRA WALKER DESIGN GROUP
 PROFESSIONAL ENGINEERS, PLANNERS & SURVEYORS
 21 BOWLING GREEN PARKWAY, SUITE 204 - LAKE HOPATCONG, NJ 07849
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KEVIN J. ROBINE, P.E.
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LIGHTING & LANDSCAPING PLAN

PRELIMINARY SITE PLAN
 BLOCK 158, LOT 6
 U.S. HIGHWAY ROUTE 206 &
 BRIGHTON ROAD (C.R. 603)
 TOWNSHIP OF ANDOVER
 SUSSEX COUNTY NEW JERSEY

SCALE: 1" = 40'
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 DRAWN BY: TJB
 CHECKED BY: KJR
 DATE: 7/25/23
 SHEET NO. 7 OF 21

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STEEP SLOPE AREA SUMMARY TABLE

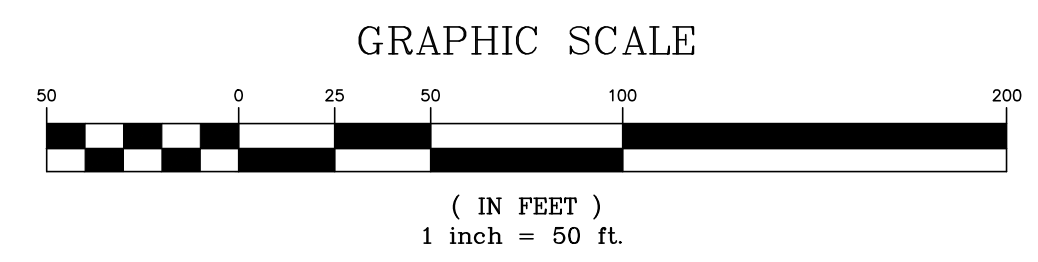
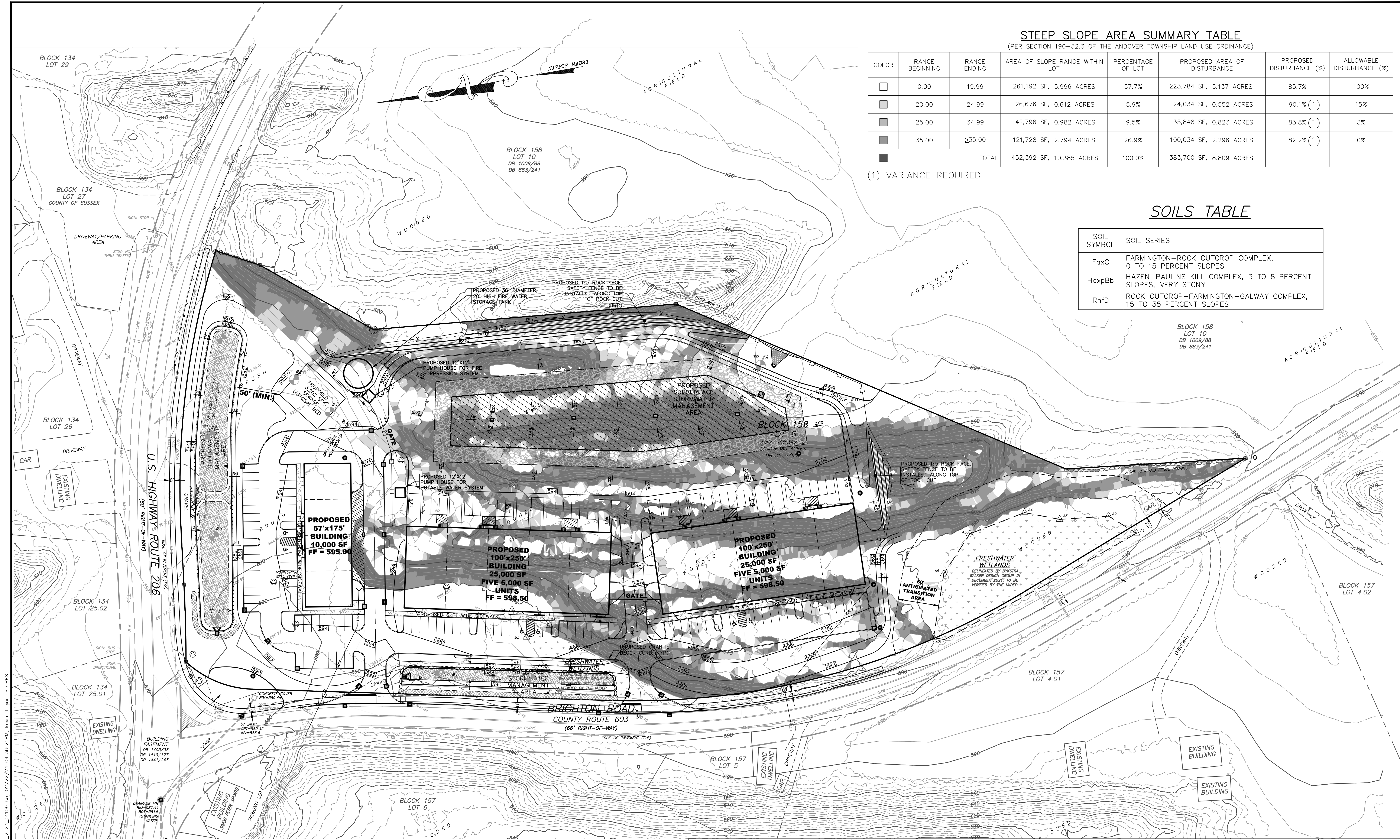
(PER SECTION 190-32.3 OF THE ANDOVER TOWNSHIP LAND USE ORDINANCE)

COLOR	RANGE BEGINNING	RANGE ENDING	AREA OF SLOPE RANGE WITHIN LOT	PERCENTAGE OF LOT	PROPOSED AREA OF DISTURBANCE	PROPOSED DISTURBANCE (%)	ALLOWABLE DISTURBANCE (%)
□	0.00	19.99	261,192 SF, 5.996 ACRES	57.7%	223,784 SF, 5.137 ACRES	85.7%	100%
■	20.00	24.99	26,676 SF, 0.612 ACRES	5.9%	24,034 SF, 0.552 ACRES	90.1% (1)	15%
■	25.00	34.99	42,796 SF, 0.982 ACRES	9.5%	35,848 SF, 0.823 ACRES	83.8% (1)	3%
■	35.00	≥35.00	121,728 SF, 2.794 ACRES	26.9%	100,034 SF, 2.296 ACRES	82.2% (1)	0%
	TOTAL		452,392 SF, 10.385 ACRES	100.0%	383,700 SF, 8.809 ACRES		

(1) VARIANCE REQUIRED

SOILS TABLE

SOIL SYMBOL	SOIL SERIES
FaxC	FARMINGTON-ROCK OUTCROP COMPLEX, 0 TO 15 PERCENT SLOPES
HdpxBb	HAZEN-PAULINS KILL COMPLEX, 3 TO 8 PERCENT SLOPES, VERY STONY
RnfD	ROCK OUTCROP-FARMINGTON-GALWAY COMPLEX, 15 TO 35 PERCENT SLOPES



DATE	REVISION
2/22/24	REVISED BASED ON BOARD ENGINEER'S COMMENTS

DYKSTRA WALKER
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 PROFESSIONAL ENGINEERS, PLANNERS & SURVEYORS
 21 BOWLING GREEN PARKWAY, SUITE 204 - LAKE HOPATCONG, NJ 07849
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 WWW.DYKSTRAWALKER.COM

Kevin J. Robine
KEVIN J. ROBINE, P.E.
 PROFESSIONAL ENGINEER, N.J. LIC. NO. 24GE04965200

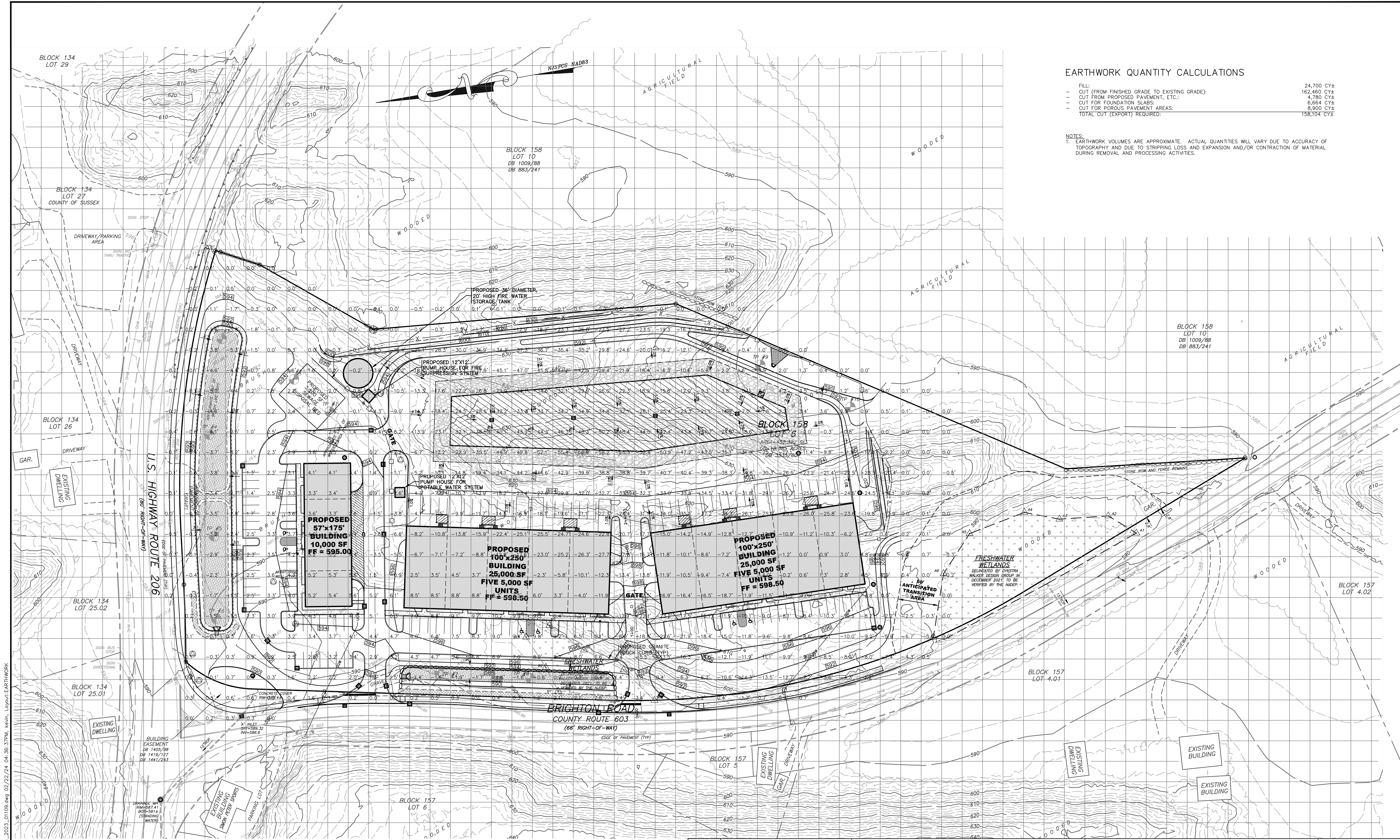
STEEP SLOPES ANALYSIS PLAN

PRELIMINARY SITE PLAN
 BLOCK 158, LOT 6
 U.S. HIGHWAY ROUTE 206 &
 BRIGHTON ROAD (C.R. 603)
 TOWNSHIP OF ANDOVER
 SUSSEX COUNTY NEW JERSEY

DW

SCALE: 1" = 50'
 JOB NO.: 011109
 DRAWN BY: TJB
 CHECKED BY: KJR
 DATE: 7/25/23
 SHEET NO. 11 OF 21

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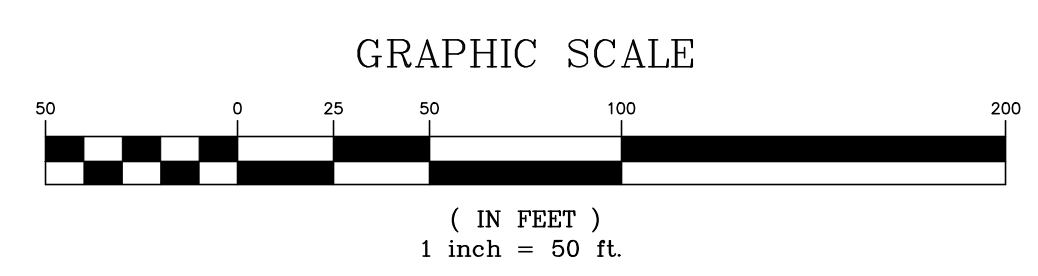


EARTHWORK QUANTITY CALCULATIONS

FILL:	24,700 CY±
- CUT (FROM FINISHED GRADE TO EXISTING GRADE):	162,460 CY±
- CUT FROM PROPOSED PAVEMENT, ETC.:	4,780 CY±
- CUT FOR FOUNDATION SLABS:	6,864 CY±
- CUT FOR POROUS PAVEMENT AREAS:	8,900 CY±
TOTAL CUT (EXPORT) REQUIRED:	158,104 CY±

NOTES:
 1. EARTHWORK VOLUMES ARE APPROXIMATE. ACTUAL QUANTITIES WILL VARY DUE TO ACCURACY OF TOPOGRAPHY AND DUE TO STRIPPING LOSS AND EXPANSION AND/OR CONTRACTION OF MATERIAL DURING REMOVAL AND PROCESSING ACTIVITIES.

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2/22/24	REVISED BASED ON BOARD ENGINEER'S COMMENTS
DATE	REVISION

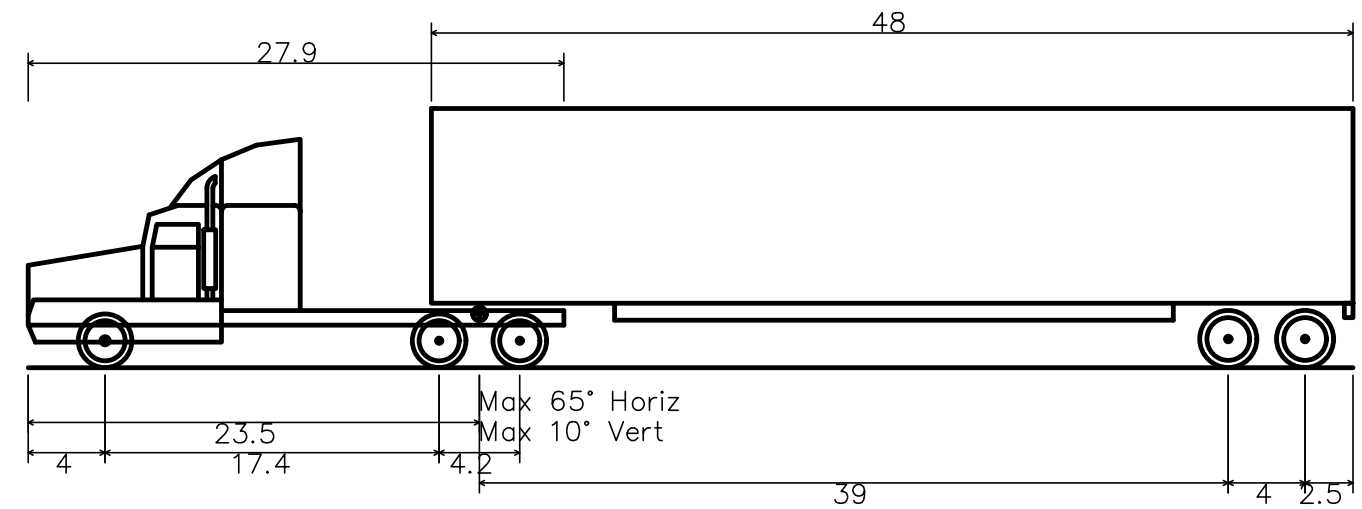
DYKSTRA WALKER DESIGN GROUP PA
 PROFESSIONAL ENGINEERS, PLANNERS & SURVEYORS
 21 BOWLING GREEN PARKWAY, SUITE 304 - LAKE HOPATCONG, NJ 07849
 PHONE (973) 663-5540 - FAX (973) 663-0042
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 PROFESSIONAL ENGINEER, N.J. LIC. NO. 24GE04965200

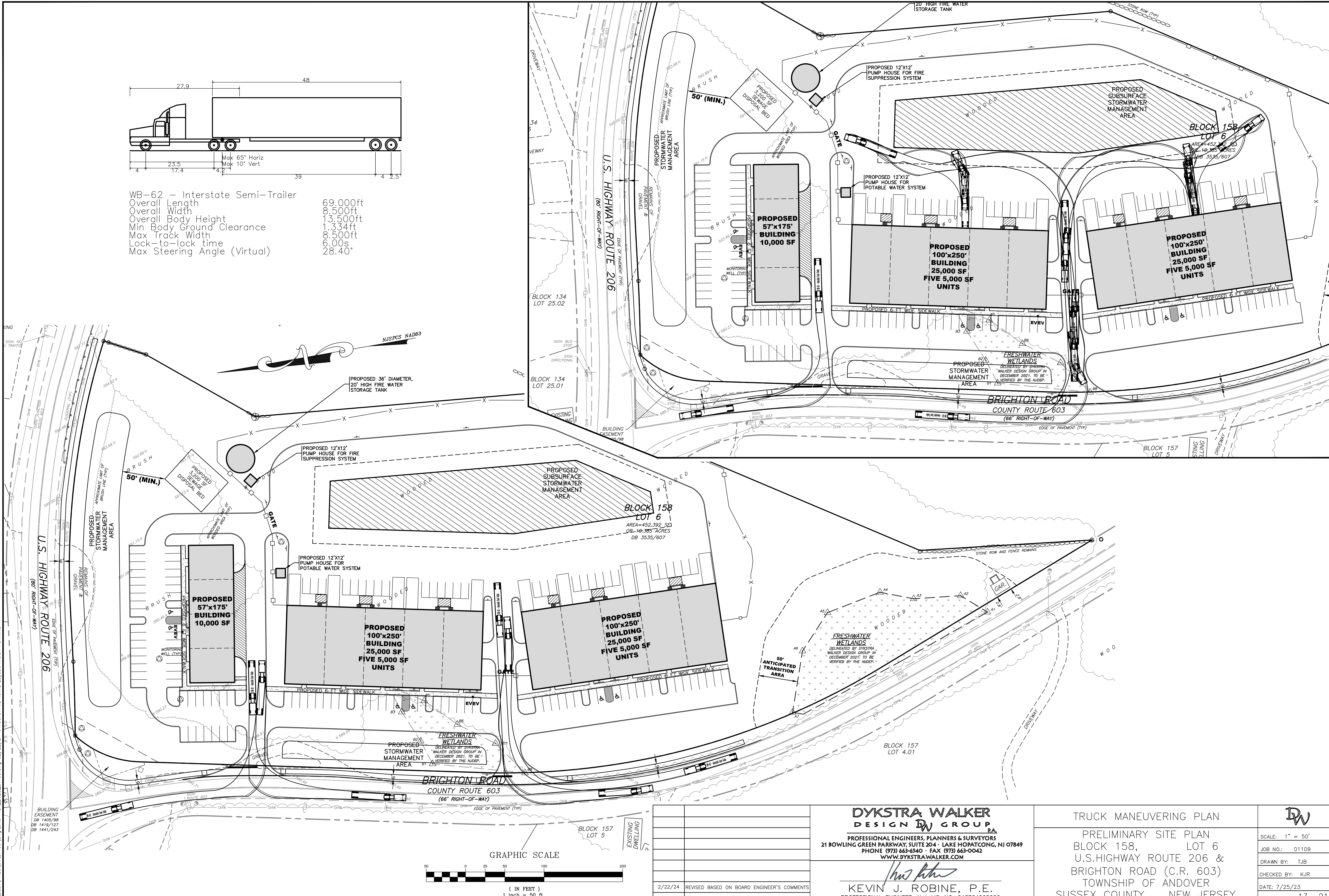
EARTHWORK CALCULATIONS PLAN

PRELIMINARY SITE PLAN
 BLOCK 158, LOT 6
 U.S. HIGHWAY ROUTE 206 &
 BRIGHTON ROAD (C.R. 603)
 TOWNSHIP OF ANDOVER
 SUSSEX COUNTY NEW JERSEY

SCALE: 1" = 50'
 JOB NO.: 01109
 DRAWN BY: TJB
 CHECKED BY: KJR
 DATE: 7/25/23
 SHEET NO. 12 OF 21

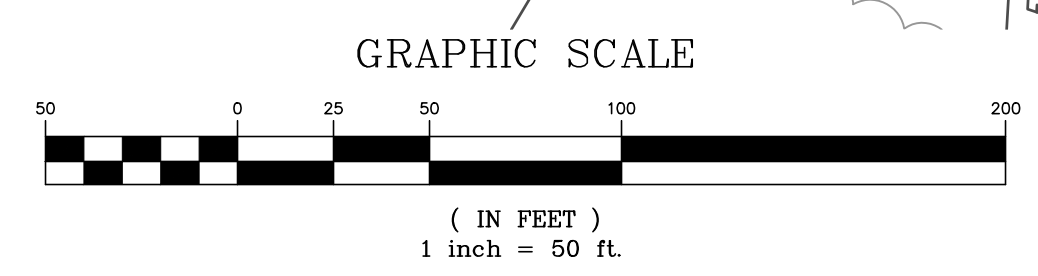


WB-62 - Interstate Semi-Trailer
 Overall Length 69.00ft
 Overall Width 8.500ft
 Overall Body Height 13.500ft
 Min Body Ground Clearance 1.334ft
 Max Track Width 8.500ft
 Lock-to-lock time 6.00s
 Max Steering Angle (Virtual) 28.40°



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BUILDING EASEMENT
 DB 1403/248
 DB 1419/127
 DB 1441/243



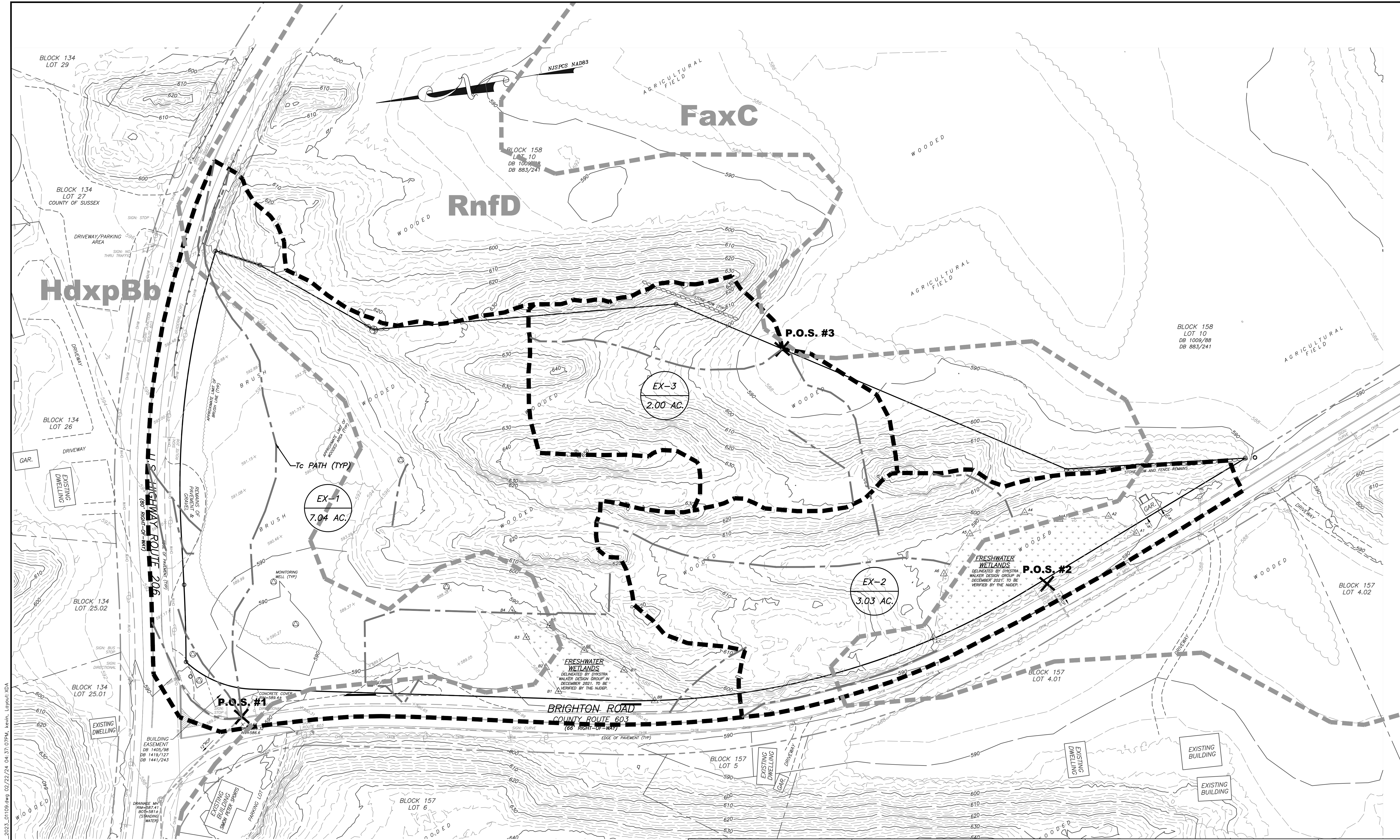
DATE	REVISION
2/22/24	REVISED BASED ON BOARD ENGINEER'S COMMENTS

DYKSTRA WALKER
DESIGN DW GROUP
 PROFESSIONAL ENGINEERS, PLANNERS & SURVEYORS
 21 BOWLING GREEN PARKWAY, SUITE 204 - LAKE HOPATCONG, NJ 07849
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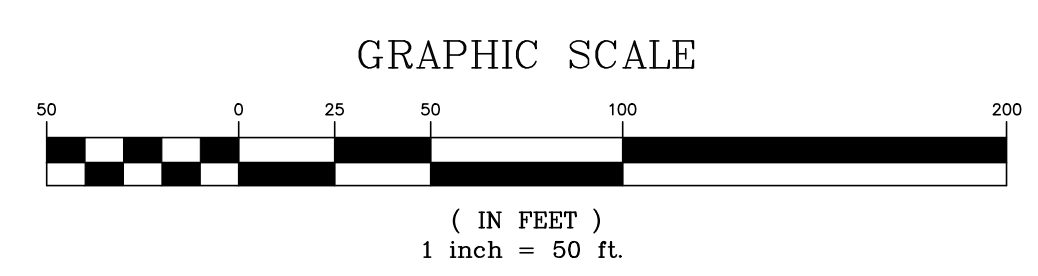
Kevin J. Robine
KEVIN J. ROBINE, P.E.
 PROFESSIONAL ENGINEER, N.J. LIC. NO. 24GE04965200

TRUCK MANEUVERING PLAN
 PRELIMINARY SITE PLAN
 BLOCK 158, LOT 6
 U.S. HIGHWAY ROUTE 206 &
 BRIGHTON ROAD (C.R. 603)
 TOWNSHIP OF ANDOVER
 SUSSEX COUNTY NEW JERSEY

SCALE:	1" = 50'
JOB NO.:	01109
DRAWN BY:	TJB
CHECKED BY:	KJR
DATE:	7/25/23
SHEET NO.	13 OF 21



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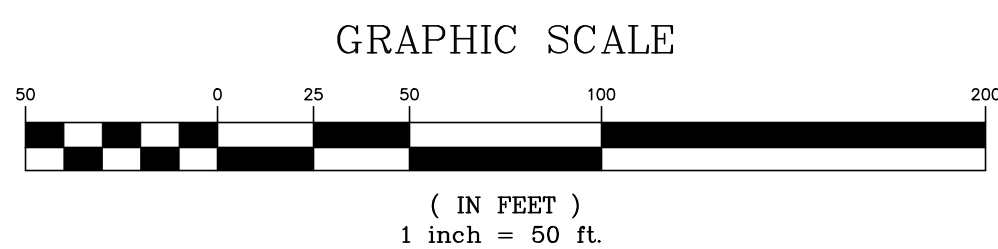
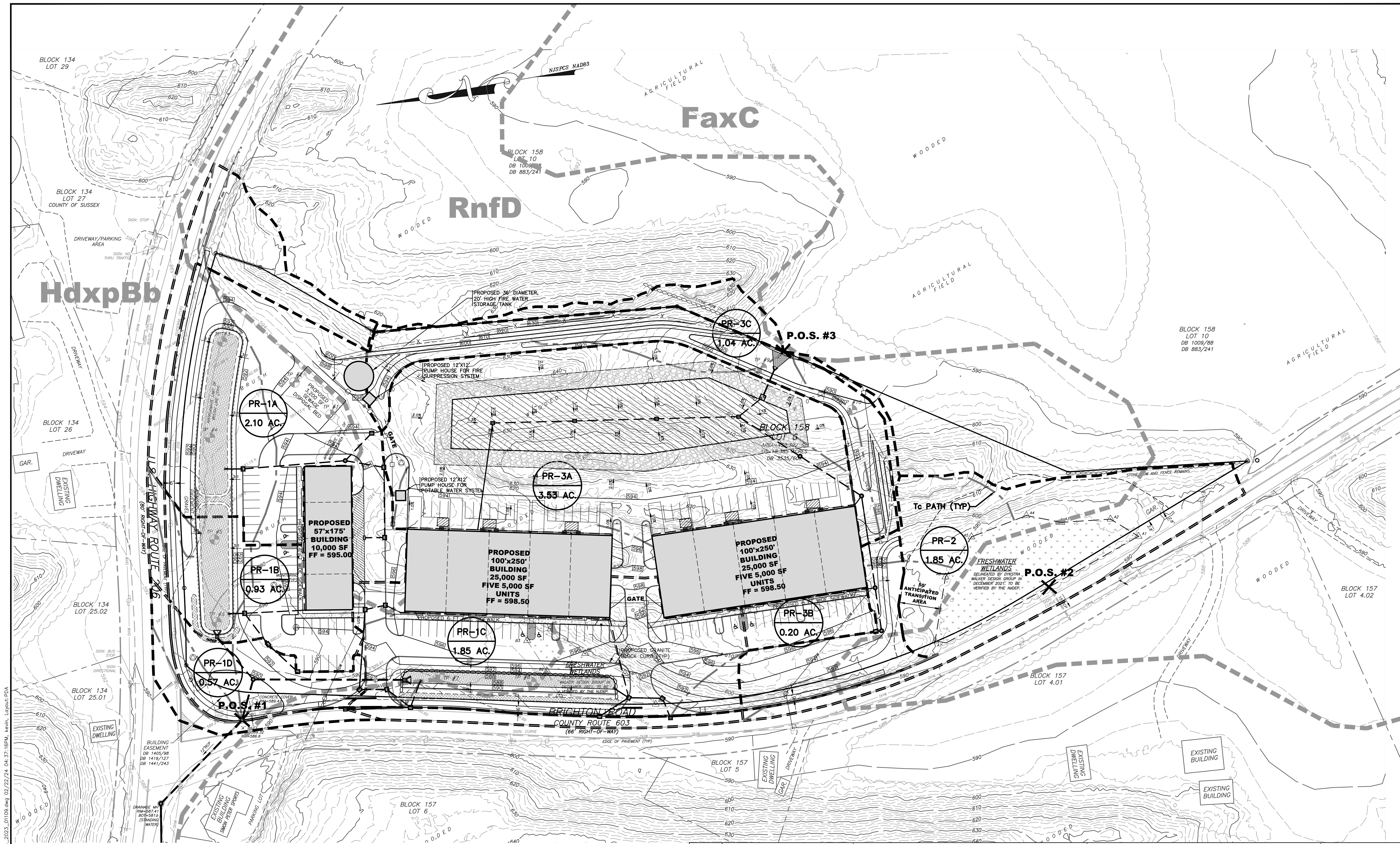
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DATE	REVISION

DYKSTRA WALKER
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Kevin J. Robine
 KEVIN J. ROBINE, P.E.
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EXISTING DRAINAGE AREA MAP
 PRELIMINARY SITE PLAN
 BLOCK 158, LOT 6
 U.S. HIGHWAY ROUTE 206 &
 BRIGHTON ROAD (C.R. 603)
 TOWNSHIP OF ANDOVER
 SUSSEX COUNTY NEW JERSEY

SCALE: 1" = 50'
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SHEET NO. 14 OF 21



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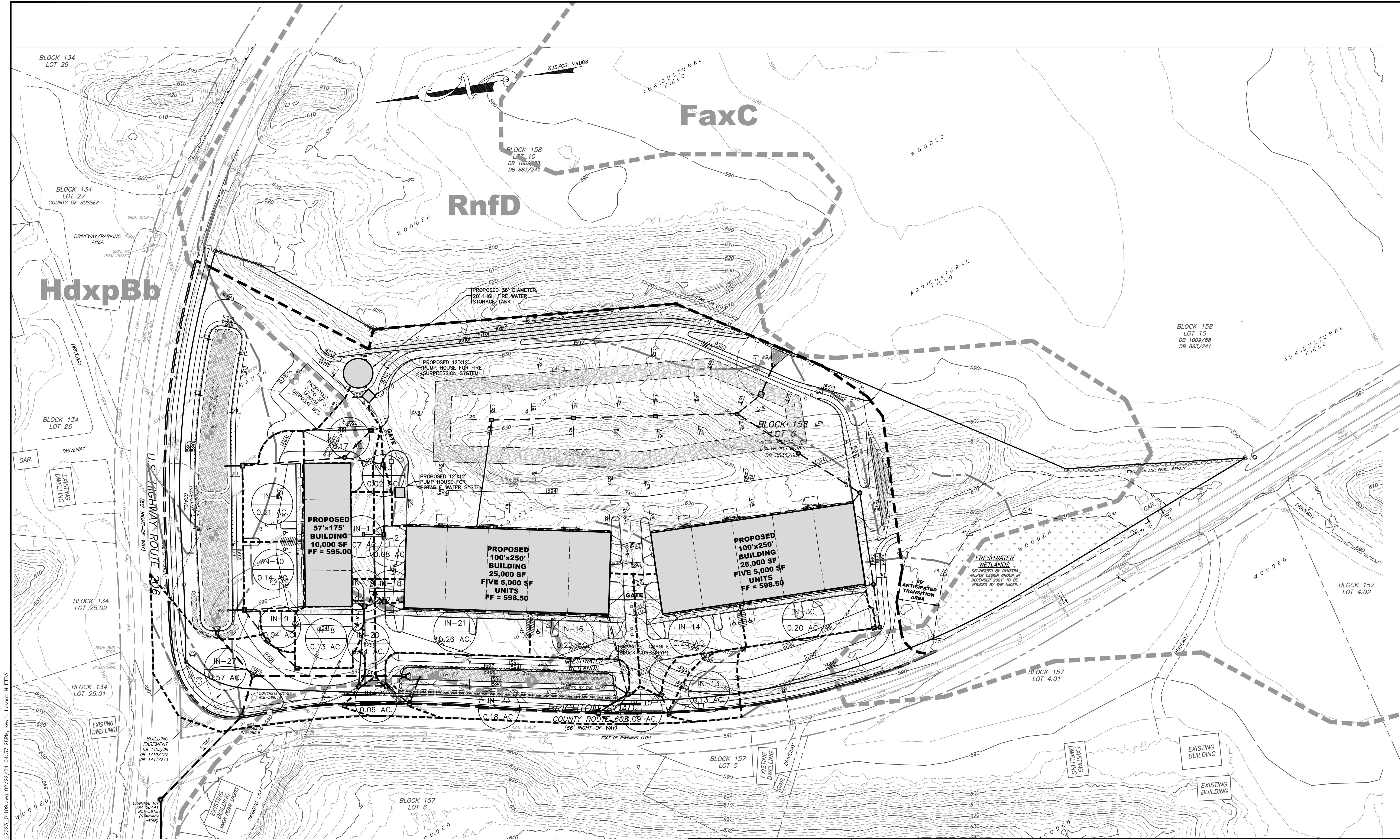
**DYKSTRA WALKER
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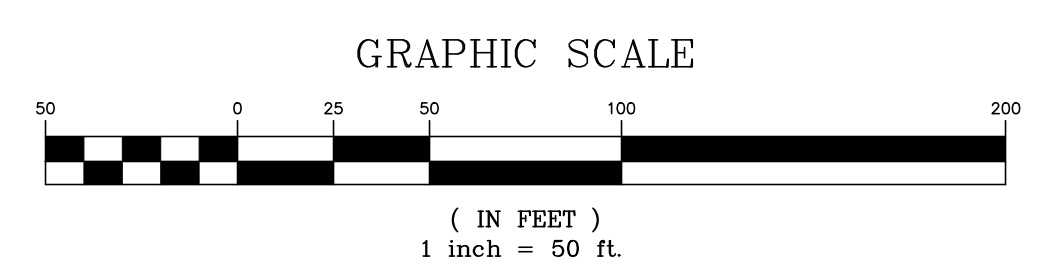
PROPOSED DRAINAGE AREA MAP
 PRELIMINARY SITE PLAN
 BLOCK 158, LOT 6
 U.S. HIGHWAY ROUTE 206 &
 BRIGHTON ROAD (C.R. 603)
 TOWNSHIP OF ANDOVER
 SUSSEX COUNTY NEW JERSEY

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PROPOSED INLET DRAINAGE AREA MAP

PRELIMINARY SITE PLAN
 BLOCK 158, LOT 6
 U.S. HIGHWAY ROUTE 206 &
 BRIGHTON ROAD (C.R. 603)
 TOWNSHIP OF ANDOVER
 SUSSEX COUNTY NEW JERSEY

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SCALE: 1" = 50'
 JOB NO.: 01109
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 SHEET NO. 16 OF 21

SOIL EROSION AND SEDIMENT CONTROL NOTES:

- THE DISTRICT SHALL BE REPRESENTED AT THE PRECONSTRUCTION MEETING WITH THE TOWNSHIP ENGINEER, CONTRACTORS, AND UTILITY REPRESENTATIVES. IF THE TOWNSHIP ENGINEER DOES NOT SCHEDULE A PRECONSTRUCTION MEETING, IT IS THE RESPONSIBILITY OF THE OWNER/APPLICANT TO SCHEDULE ONE PRIOR TO ANY LAND DISTURBANCE.
- ALL SEDIMENT AND EROSION CONTROL PRACTICES ARE TO BE INSTALLED PRIOR TO ANY MAJOR SOIL DISTURBANCE IN THEIR PROPER SEQUENCE, AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED.
- EXCAVATED SOIL MATERIAL SHALL NOT BE PLACED ADJACENT TO RIVERS, STREAMS OR BODIES OF WATER IN A MANNER THAT WILL CAUSE IT TO BE WASHED AWAY BY HIGH WATER OR RUNOFF. EXCESS BORROW MATERIAL REMOVED FROM THE CONSTRUCTION SITE SHALL BE STABILIZED AT THE SITE OF PLACEMENT.
- ALL DISTURBED AREAS NOT SCHEDULED FOR CONSTRUCTION ACTIVITIES WITHIN 60 DAYS OF DISTURBANCE SHALL BE TEMPORARILY STABILIZED.
- IF THE SEASON PROHIBITS TEMPORARY SEEDING, THE DISTURBED AREA WILL BE MULCHED WITH SALT HAY OR EQUIVALENT AND BOUND IN ACCORDANCE WITH THE NEW JERSEY STANDARDS. (I.E. PEG AND TWINE, MULCH NETTING, OR LIQUID MULCH BINDER).
- PERMANENT SEEDING AND STABILIZATION TO BE IN ACCORDANCE WITH THE STANDARDS FOR PERMANENT VEGETATIVE COVER. SPECIFIED RATES AND LOCATIONS SHALL BE AS ON THE APPROVED SOIL EROSION AND SEDIMENT CONTROL PLAN.
- ALL WORK TO BE DONE IN ACCORDANCE WITH THE "STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY".
- A CRUSHED-STONE VEHICLE WHEEL-CLEANING BLANKET WILL BE INSTALLED WHEREVER A CONSTRUCTION ACCESS DRIVE INTERSECTS A PAVED ROADWAY. THE BLANKET WILL BE OF SUFFICIENT SIZE TO REDUCE TRACKING OF SEDIMENT BY CONSTRUCTION TRAFFIC AND WILL BE MAINTAINED IN GOOD ORDER UNTIL ALL DRIVEWAY AREAS ARE STABILIZED. THE BLANKET SHALL BE COMPOSED OF ASTM C-33, SIZE NO. 2 OR 3, NOT LESS THAN 6" DEEP AND NOT LESS THAN THE FULL WIDTH OF THE POINTS OF INGRESS OR EGRESS.
- MULCHING SHALL BE DONE AT THE RATE OF 80 LBS/ 1000 SQUARE FEET WITH UNROTTED SALT HAY OR SMALL GRASS STRAW IMMEDIATELY AFTER PLACEMENT.
- ALL REVISIONS, AFTER DISTRICT CERTIFICATION HAS BEEN GRANTED, SHALL BE FORWARDED TO THE SUSSEX COUNTY SOIL CONSERVATION DISTRICT FOR REVIEW. A LETTER OF EXPLANATION SHALL ACCOMPANY ALL REVISIONS.
- THE SUSSEX COUNTY SCD MUST BE NOTIFIED AT LEAST 48 HOURS IN ADVANCE OF ANY LAND DISTURBANCE ACTIVITY.
- THE OWNER/APPLICANT WILL OBTAIN THE DISTRICT ISSUED REPORT OF COMPLIANCE PRIOR TO ANY OCCUPANCY. THE DISTRICT REQUIRES AT LEAST ONE WEEK'S NOTICE BEFORE ISSUANCE.
- ALL TOPSOIL STRIPPED AND STOCKPILED FOR USE IN FINAL GRADING SHALL RECEIVE TEMPORARY SEEDING.
- TOTAL DISTURBED AREA = 8.81 ACRES.
- DURING LAND DISTURBANCE ACTIVITIES OR CONSTRUCTION, ANY ADDITIONAL CONTROL MEASURES AS DEEMED NECESSARY TO PREVENT EROSION OR TO CONTROL SEDIMENTATION BEYOND THOSE SHOWN ON THE APPROVED PLANS SHALL BE INSTALLED AS DIRECTED BY THE MUNICIPAL ENGINEER OR SUSSEX COUNTY SOIL CONSERVATION DISTRICT.
- THE APPLICANT IS REQUIRED TO HAVE A COPY OF THE CERTIFIED PLAN AT THE CONSTRUCTION SITE.
- DUST IS TO BE CONTROLLED WITH WATER, CALCIUM CHLORIDE OR OTHER METHOD APPROVED BY THE SOIL CONSERVATION DISTRICT.
- RESIDENTIAL DEVELOPMENT CONTROL MEASURES SHALL WILL APPLY TO DWELLING CONSTRUCTION ON INDIVIDUAL LOTS AND NOTATION THAT SUCH CONTROL MEASURES SHALL APPLY TO SUBSEQUENT OWNERS IF TITLE IS CONVEYED.
- FOR SUBDIVISION PROJECT (ROADWAYS AND DRAINAGE PLANS) - SOIL EROSION AND SEDIMENT CONTROL PLANS WILL BE DEVELOPED FOR EACH LOT AS DEVELOPED.
- TO THE MAXIMUM EXTENT PRACTICAL, ALL VEGETATED AREA NOT NEED FOR CONSTRUCTION SHALL BE LEFT UNDISTURBED FOR AS LONG AS POSSIBLE.
- ANY DISTURBED AREA THAT WILL BE LEFT EXPOSED FOR MORE THAN THIRTY (30) DAYS AND NOT SUBJECT TO CONSTRUCTION TRAFFIC SHALL IMMEDIATELY RECEIVE A TEMPORARY SEEDING. IF THE SEASON PROHIBITS TEMPORARY SEEDING, THE DISTURBED AREA WILL BE MULCHED WITH SALT HAY OR EQUIVALENT AND BOUND IN ACCORDANCE WITH THE NEW JERSEY STANDARDS. (I.E. PEG AND TWINE, MULCH NETTING, OR LIQUID MULCH BINDER).
- PERMANENT VEGETATION IS TO BE ESTABLISHED ON EXPOSED AREAS WITHIN TEN (10) DAYS AFTER FINAL GRADING. MULCH IS TO BE USED FOR PROTECTION UNTIL VEGETATION IS ESTABLISHED.
- IMMEDIATELY FOLLOWING INITIAL DISTURBANCE OR ROUGH GRADING ALL CRITICAL AREAS SUBJECT TO EROSION WILL RECEIVE A TEMPORARY SEEDING IN COMBINATION WITH STRAW MULCH OR SUITABLE EQUAL AT A 2 TON/ACRE RATE, ACCORDING TO STATE STANDARDS.
- THE SITE SHALL AT ALL TIMES BE GRADED AND MAINTAINED SUCH THAT ALL STORM WATER RUNOFF IS DIVERTED TO SOIL EROSION AND SEDIMENT CONTROL FACILITIES.
- ALL SEDIMENTATION STRUCTURES WILL BE INSPECTED AND MAINTAINED REGULARLY.
- DURING AND AFTER CONSTRUCTION, THE OWNER WILL BE RESPONSIBLE FOR THE MAINTENANCE AND UPKEEP OF THE DRAINAGE STRUCTURES, VEGETATIVE COVER, AND ANY OTHER MEASURES DEEMED APPROPRIATE BY THE DISTRICT.
- ALL TREES TO REMAIN AFTER CONSTRUCTION ARE TO BE PROTECTED WITH TREE PROTECTION DEVICES OR SEDIMENT BARRIERS. SEE STANDARDS.
- ALL MATERIAL SHALL BE FREE FROM DEBRIS, PERISHABLE OR COMBUSTIBLE MATERIAL, AND FROZEN OR WET EARTH OR STONE LARGER THAN SPECIFIED BY THE ENGINEER.
- ALL TOPSOIL STRIPPED AND STOCKPILED FOR USE IN FINAL GRADING SHALL RECEIVE TEMPORARY SEEDING.
- TO THE MAXIMUM EXTENT PRACTICAL, ALL VEGETATED AREA NOT NEED FOR CONSTRUCTION SHALL BE LEFT UNDISTURBED FOR AS LONG AS POSSIBLE.
- FINAL STABILIZATION OF ALL LAND DISTURBANCES ASSOCIATED WITH UNDERGROUND UTILITIES, RESPECTIVE OF PHASING, IS THE ULTIMATE RESPONSIBILITY OF THE OWNER.
- THERE IS NO EXCESS MATERIAL TO BE REMOVED FROM THE SITE, IF EXCESS MATERIALS ARE TO BE TRANSPORTED TO ANOTHER LOCATION IN SUSSEX COUNTY, THE DISTRICT MUST BE PROVIDED WITH THE NAME, ADDRESS AND BLOCK AND LOT OF THAT LOCATION.

TOPSOIL STOCKPILE PROTECTION

- CONSTRUCT TEMPORARY DIVERSION BERM AND/OR HAY BALE BARRIER AROUND STOCKPILE AREA AS REQUIRED.
- APPLY LIMESTONE AT A RATE OF 90 LBS/1000 S.F.
- APPLY FERTILIZER (10-20-10) AT A RATE OF 11 LBS/1000 S.F.
- APPLY PERENNIAL RYEGRASS AT A RATE OF 1 LB/1000 S.F.
- MULCH WITH UNROTTED SALT HAY OR SMALL GRASS STRAW IMMEDIATELY AFTER SEEDING. APPLY AT A RATE OF 90 LBS/1000 S.F.

TEMPORARY STABILIZATION SPECIFICATIONS

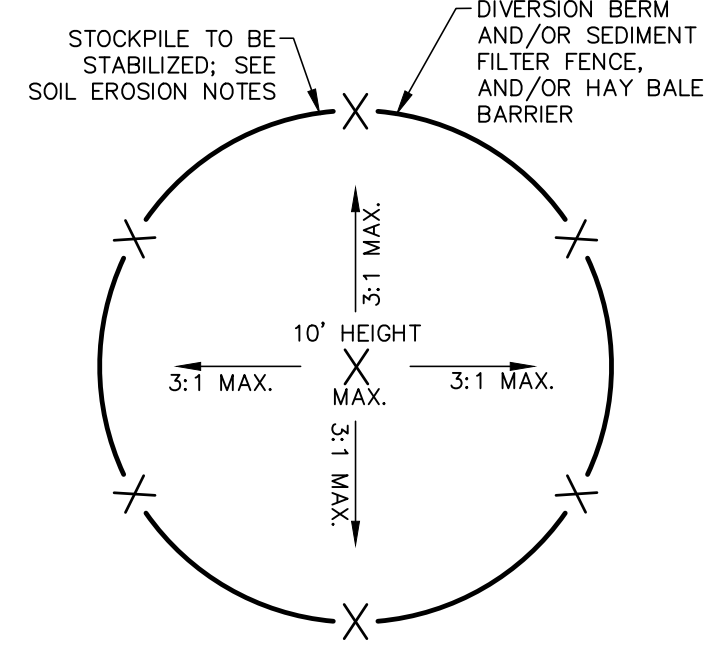
- APPLY GROUND LIMESTONE AT A RATE OF 90 LBS/1000 S.F.
- APPLY FERTILIZER (10-20-10) AT A RATE OF 14 LBS/1000 S.F. AND WORK INTO 4" DEEP.
- APPLY SEED MIXTURE: PERENNIAL RYEGRASS AT 20 LBS/ACRE, PERENNIAL RYEGRASS CREEPING RED FESCUE AT 15 LBS/ACRE OR AT 40 LBS/ACRE OR CHEWING RED FESCUE AT 15 LBS/ACRE OR APPROVED EQUAL.
- MULCH WITH UNROTTED SALT HAY OR SMALL GRASS STRAW IMMEDIATELY AFTER SEEDING APPLY AT A RATE OF 90 LBS/1000 S.F. AND SECURE BY APPROVED METHODS (I.E. PEG AND TWINE, MULCH NETTING, OR LIQUID MULCH BINDER).
- PLANT SEED BETWEEN MARCH 1 AND MAY 15 OR BETWEEN AUGUST 15 AND OCTOBER 1, IF POSSIBLE.

PERMANENT STABILIZATION SPECIFICATIONS

- APPLY TOPSOIL TO A DEPTH OF 4".
- APPLY GROUND LIMESTONE AT A RATE OF 90 LBS/1000 S.F.
- APPLY FERTILIZER (10-20-10) AT A RATE OF 14 LBS/1000 S.F.
- APPLY SEED MIXTURE: PERENNIAL RYEGRASS AT 20 LBS/ACRE, PERENNIAL RYEGRASS CREEPING RED FESCUE AT 15 LBS/ACRE OR 40 LBS/ACRE OR KENTUCKY BLUEGRASS AT 20 LBS/ACRE OR APPROVED EQUAL.
- MULCH WITH UNROTTED SALT HAY OR SMALL GRASS STRAW IMMEDIATELY AFTER SEEDING. APPLY AT A RATE OF 90 LBS/1000 S.F. ACCORDING TO THE NEW JERSEY STANDARDS.
- ANCHOR MULCH WITH EMULSIFIED ASPHALT (SS-1) APPLIED AT A RATE OF 1 GAL./1000 S.F. OTHER APPROVED METHODS (I.E. PEG AND TWINE, OR MULCH NETTING) MAY BE USED. IF POSSIBLE, PLANT BETWEEN MARCH 1 AND MAY 15, OR BETWEEN AUGUST 15 AND OCTOBER 1.

SEQUENCE OF CONSTRUCTION

- INSTALL EROSION CONTROL MEASURES, INCLUDING SILT FENCE, VEHICLE WHEEL CLEANING BLANKET, ETC. AS NOTED ON PLAN. DURATION = 5 DAYS.
 - CLEAR AND GRUB PROPERTY = 20 DAYS.
 - STRIP AND STOCKPILE TOPSOIL, INSTALL SILT FENCE AROUND STOCKPILES, PERFORM TEMPORARY STABILIZATION OF STOCKPILES. DURATION = 20 DAYS.
 - ROUGH GRADE SITE AND INSTALL DRAINAGE FACILITIES WITH STORM SEWER INLET PROTECTION. INFILTRATION BASIN SHALL BE CONSTRUCTED WITHOUT SAND BOTTOM OR UNDERDRAIN AND STABILIZED. DURATION = 180 DAYS.
 - CONSTRUCT SITE IMPROVEMENTS AND INSTALL PERMANENT STABILIZATION OF ALL DISTURBED SURFACES. DURATION = 180 DAYS.
 - CLEAN INFILTRATION BASIN AFTER SITE HAS BEEN STABILIZED. INSTALL UNDERDRAIN AND SAND BOTTOM. DURATION = 5 DAYS.
 - REMOVE TEMPORARY SOIL EROSION MEASURES AFTER APPROVAL BY SOIL CONSERVATION DISTRICT. DURATION = 7 DAYS.
- TOTAL DURATION = 417 DAYS.



TOPSOIL STOCKPILE DETAIL
NOT TO SCALE

SOIL DE-COMPACTION AND TESTING REQUIREMENTS

A. SOIL COMPACTION TESTING REQUIREMENTS

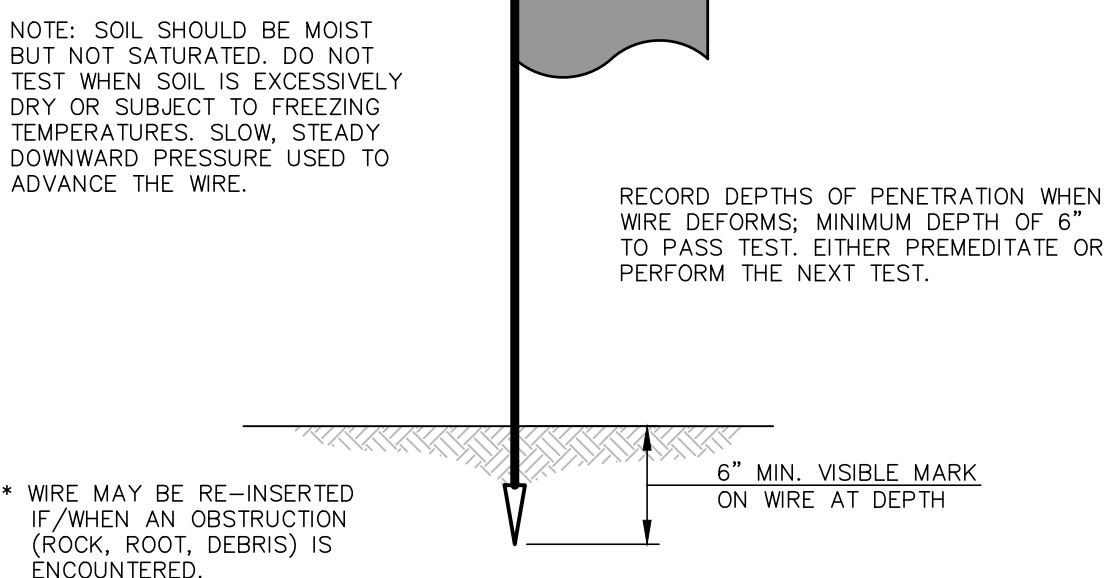
- SUBGRADE SOILS PRIOR TO THE APPLICATION OF TOPSOIL (SEE PERMANENT SEEDING AND STABILIZATION NOTES FOR TOPSOIL REQUIREMENTS) SHALL BE FREE OF EXCESSIVE COMPACTION TO A DEPTH OF 6.0 INCHES TO ENHANCE THE ESTABLISHMENT OF PERMANENT VEGETATIVE COVER.
- AREAS OF THE SITE WHICH ARE SUBJECT TO COMPACTION TESTING AND/OR MITIGATION ARE GRAPHICALLY DENOTED ON THE CERTIFIED SOIL EROSION CONTROL PLAN.
- 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 MITIGATION VERIFICATION 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.
- 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

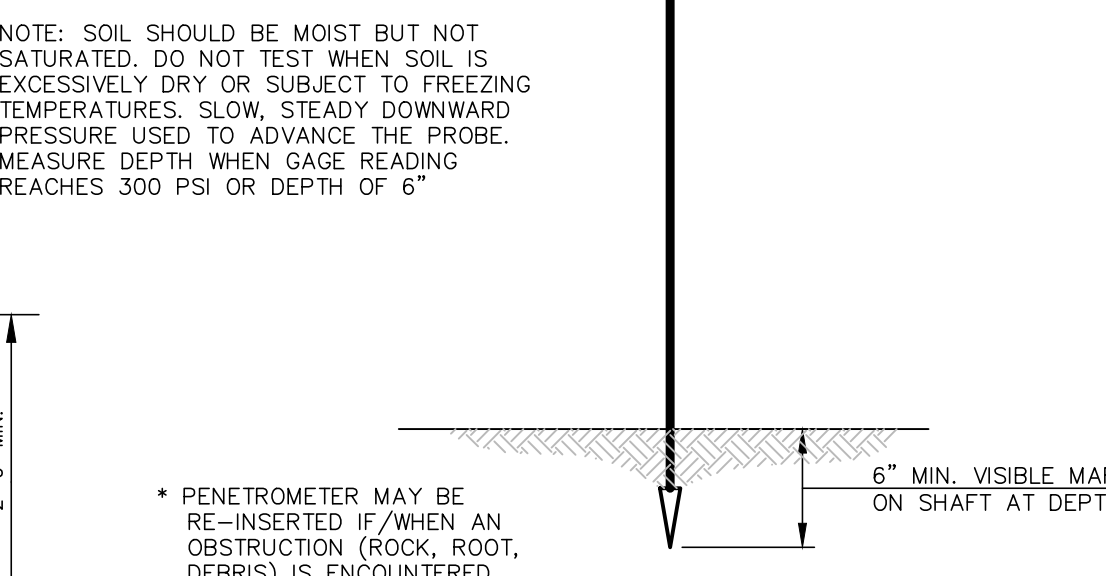
- PROBING WIRE TEST (SEE DETAIL)
- HAND-HELD PENETROMETER TEST (SEE DETAIL)
- TUBE BULK DENSITY TEST (LICENSED PROFESSIONAL ENGINEER REQUIRED)
- NUCLEAR DENSITY TEST (LICENSED PROFESSIONAL ENGINEER REQUIRED)
- NOTE: ADDITIONAL TESTING METHODS WHICH CONFORM TO ASTM STANDARDS AND SPECIFICATIONS, AND WHICH PRODUCE A DRY WEIGHT, SOIL BULK DENSITY MEASUREMENT MAY BE ALLOWED SUBJECT TO DISTRICT APPROVAL.
- DETAILED REQUIREMENTS FOR EACH COMPACTION TESTING METHOD CAN BE FOUND IN SECTION 19 "STANDARD FOR LAND GRADING" OF THE NJ STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL, LATEST EDITION.
- 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

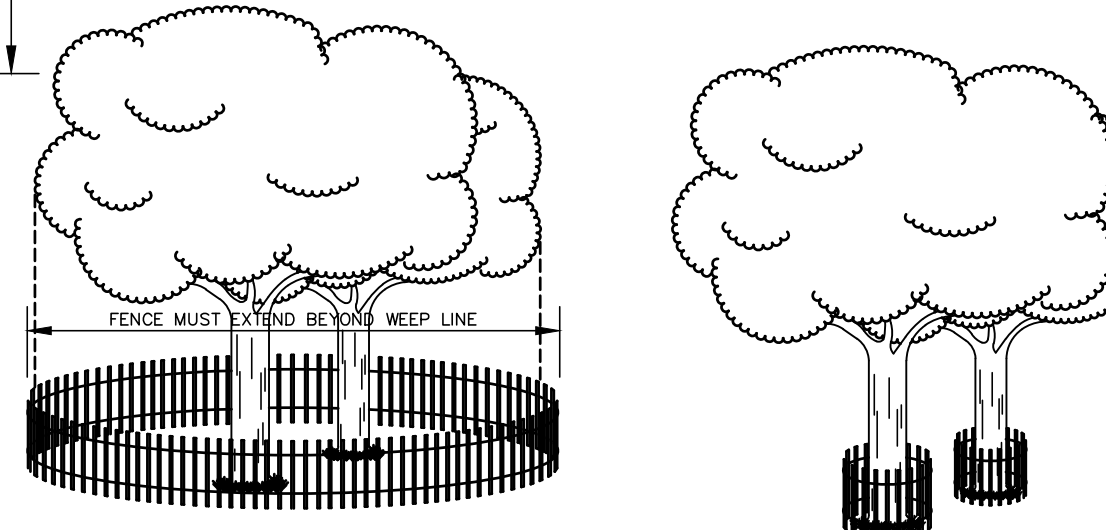
- PROCEDURES SHALL BE USED TO MITIGATE EXCESSIVE SOIL COMPACTION PRIOR TO PLACEMENT OF TOPSOIL AND ESTABLISHMENT OF PERMANENT VEGETATIVE COVER.
- RESTORATION OF COMPACTED SOILS SHALL BE THROUGH DEEP SCARIFICATION/TILLAGE (6" MINIMUM DEPTH) WHERE THERE IS NO DANGER TO UNDERGROUND UTILITIES (CABLES, IRRIGATION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



PROBING WIRE TEST
15.5 GA. STEEL WIRE (SURVEY FLAG)
NOT TO SCALE



HANDHELD SOIL PENETROMETER TEST
NOT TO SCALE



TREE PROTECTION
NOT TO SCALE

STANDARD FOR DUST CONTROL

THE CONTROL OF DUST ON CONSTRUCTION SITES AND ROADS.
PURPOSE: TO PREVENT BLOWING AND MOVEMENT OF DUST FROM EXPOSED SOIL SURFACES, REDUCED ON-SITE AND OFF-SITE DAMAGE, AND HEALTH HAZARDS, AND IMPROVE TRAFFIC SAFETY.
CONDITION WHERE PRACTICE APPLIES: THIS PRACTICE IS APPLICABLE TO AREAS SUBJECT TO DUST BLOWING AND MOVEMENT THERE ON-SITE. DAMAGE IS LIKELY WITHOUT TREATMENT. CONSULT WITH LOCAL MUNICIPAL ORDINANCES ON ANY RESTRICTIONS.

WATER QUALITY ENHANCEMENT: SEDIMENTS DEPOSITED AS "DUST" ARE OFTEN FINE COLLOIDAL MATERIAL WHICH IS EXTREMELY DIFFICULT TO REMOVE FROM WATER ONCE IT BECOMES SUSPENDED. USE OF THIS STANDARD WILL HELP TO CONTROL THE GENERATION OF DUST FROM CONSTRUCTION SITES AND SUBSEQUENT BLOWING AND DEPOSITION INTO LOCAL SURFACE WATER RESOURCES.

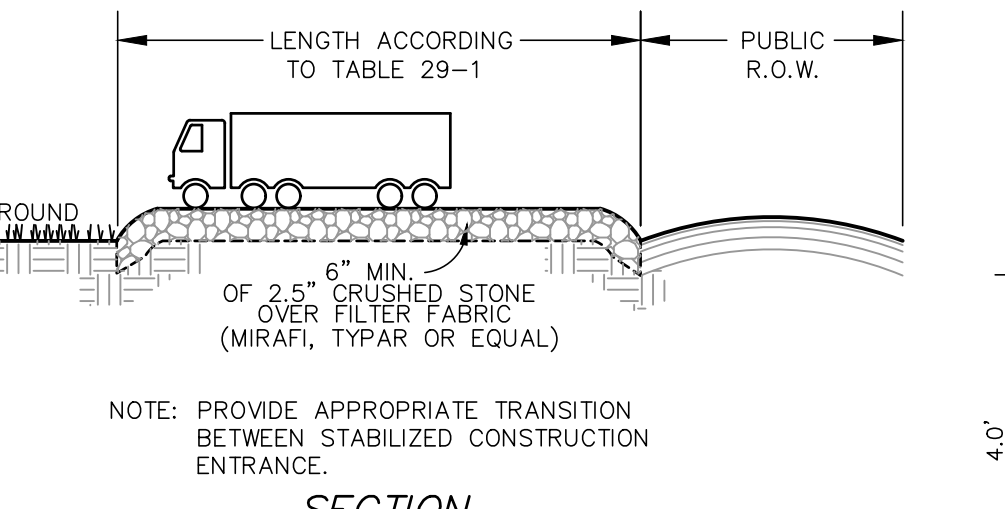
PLANNING CRITERIA: THE FOLLOWING METHODS SHOULD BE CONSIDERED FOR CONTROLLING DUST:
MULCHES - SEE STANDARD OF STABILIZATION WITH MULCHES ONLY, PG. 5-1
VEGETATIVE COVER - SEE STANDARD FOR TEMPORARY VEGETATIVE COVER, PG. 7-1, PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION PG. 4-1, AND PERMANENT STABILIZATION WITH SOO, PG. 6-1
SPRAY-ON ADHESIVES - ON MINERAL SOILS (NOT EFFECTIVE ON MUCK SOILS). KEEP TRAFFIC OFF THESE AREAS.

MATERIAL	WATER DILUTION	TYPE OF NOZZLE	APPLY GALLONS/ ACRE
LIQUID ASPHALT EMULSION	12:1	COARSE SPRAY	1200
LATEX EMULSION	12:1	FINE SPRAY	200
VEGETATIVE SEEDS		FINE SPRAY	1200
PO-ACRYLAMIDE (PAM) - SPRAY ON		APPLY ACCORDING TO MANUFACTURER'S INSTRUCTIONS. MAY ALSO BE USED AS POST-PAVING LAMAE (PAM) - DRY SPREAD	1200
REGULATED SOY BEAN SOAM STICK		COLLOID. SEE SOAMEN BUSH (STANDARD), PG. 1-1	1200

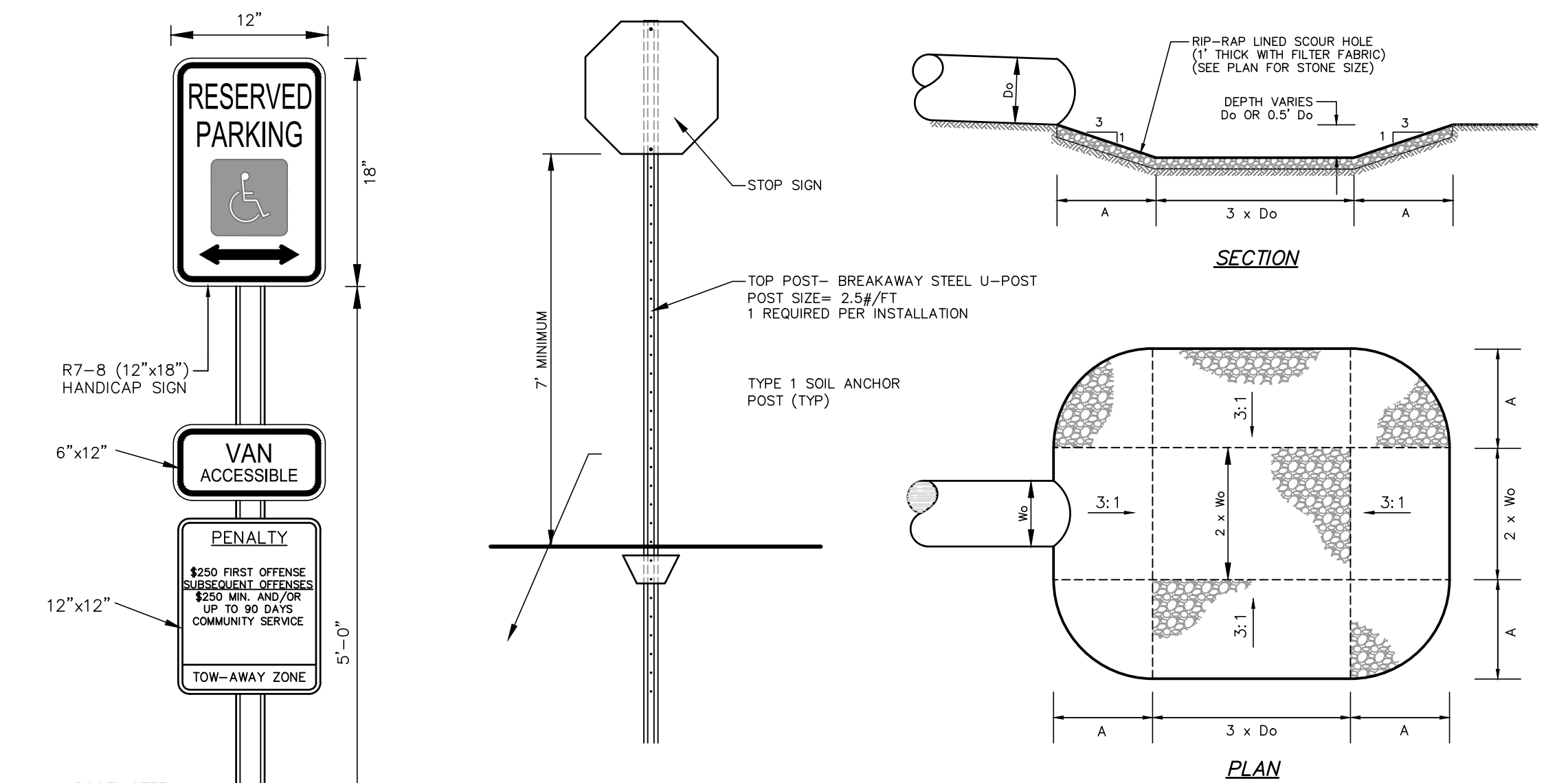
TILLAGE - TO ROUGHEN SURFACE AND BRING CLODS TO THE SURFACE. THIS IS A TEMPORARY EMERGENCY MEASURE WHICH SHOULD BE USED BEFORE SOIL BLOWING STARTS. BEGIN PLOWING ON WINDWARD SIDE OF SITE. CHISEL-TYPE PLOWS SPACED ABOUT 12 INCHES APART, AND SPRING-TOOTHED HARROWS ARE EXAMPLES OF EQUIPMENT WHICH MAY PRODUCE THE DESIRED EFFECT.
SPRINGING - SITE IS SPRINKLED UNTIL THE SURFACE IS WET.
BARRIERS - SOLID BOARD FENCES, SNOW FENCES, BURLAP FENCES, CRATE WATES, BALES OF HAY, AND SIMILAR MATERIAL CAN BE USED TO CONTROL AIR CURRENTS AND SOIL BLOWING.

CALCIUM CHLORIDE - SHALL BE IN THE FORM OF LOOSE, DRY GRANULES OR FLAKES FINE ENOUGH TO FEED THROUGH COMMONLY USED SPREADERS AT A RATE THAT WILL KEEP SURFACE MOST BUT NOT CAUSE POLLUTION OR PLANT DAMAGE. IF USED ON STEEP SLOPES, THEN USE OTHER PRACTICES TO PREVENT WASHING INTO STREAMS, OR ACCUMULATION AROUND PLANTS.
SIDING - COVER SURFACE WITH CRUSHED STONE OR COARSE GRAVEL.

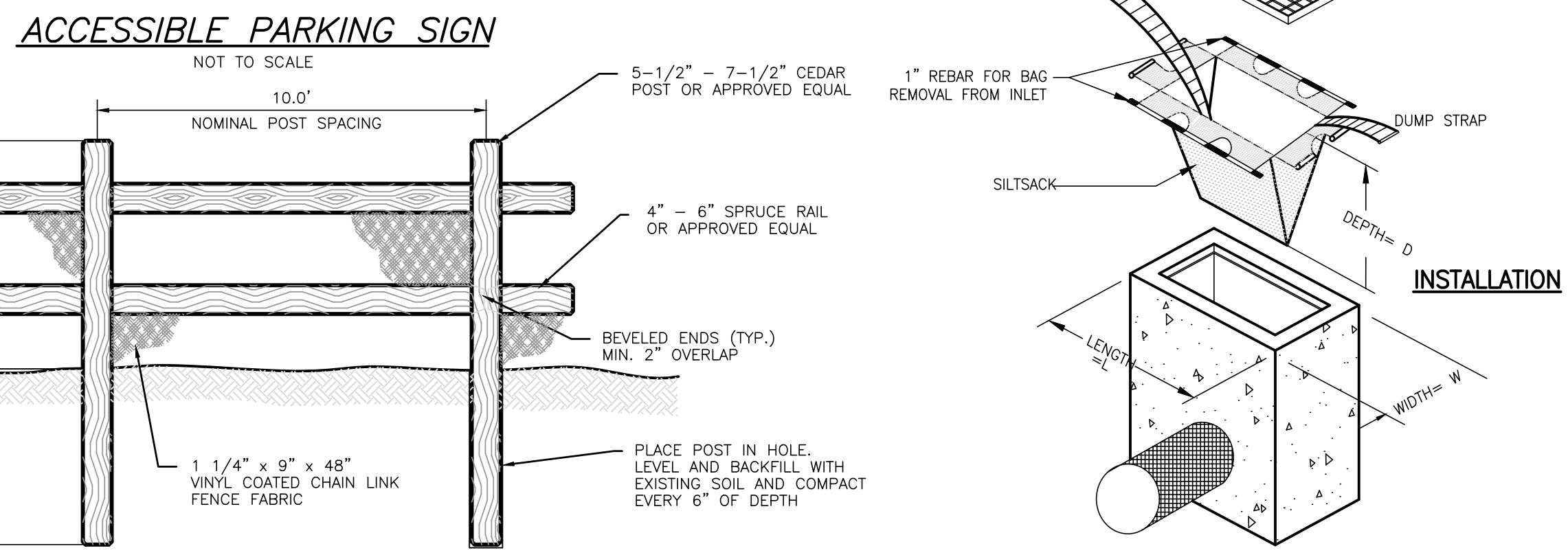
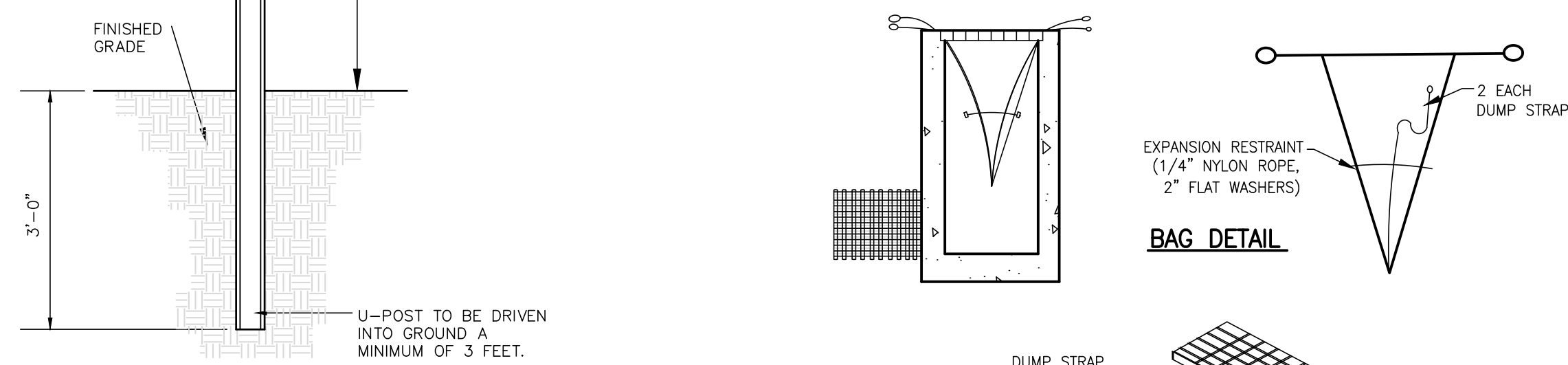
PERCENTAGE SLOPE OF ROADWAY	LENGTH REQUIRED	
	COARSE GRAINED SOILS	FINE GRAINED SOILS
0-2%	50 FT	100 FT
2-5%	100 FT	200 FT
> 5%	ENTIRE SURFACE STABILIZED WITH F.A.B.C. AS PRESCRIBED BY LOCAL ORDINANCE OR OTHER GOVERNING BODY.	



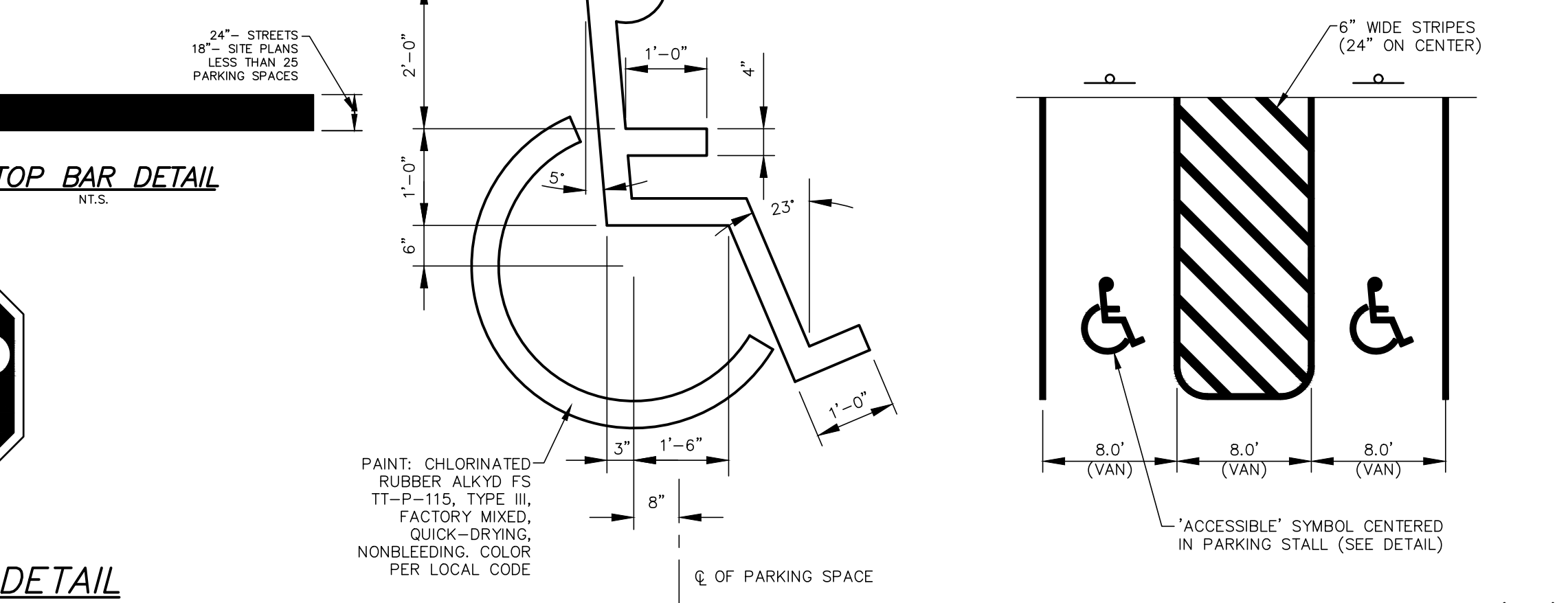
STABILIZED CONSTRUCTION ENTRANCE
NOT TO SCALE



STOP SIGN MOUNTING DETAIL
NOTE TO SCALE



SPLIT RAIL FENCE
N.T.S.



STOP BAR DETAIL
N.T.S.

ACCESSIBLE PARKING SPACE
N.T.S.

ADA PARKING STALL STRIPING (N.J.)
NOT TO SCALE

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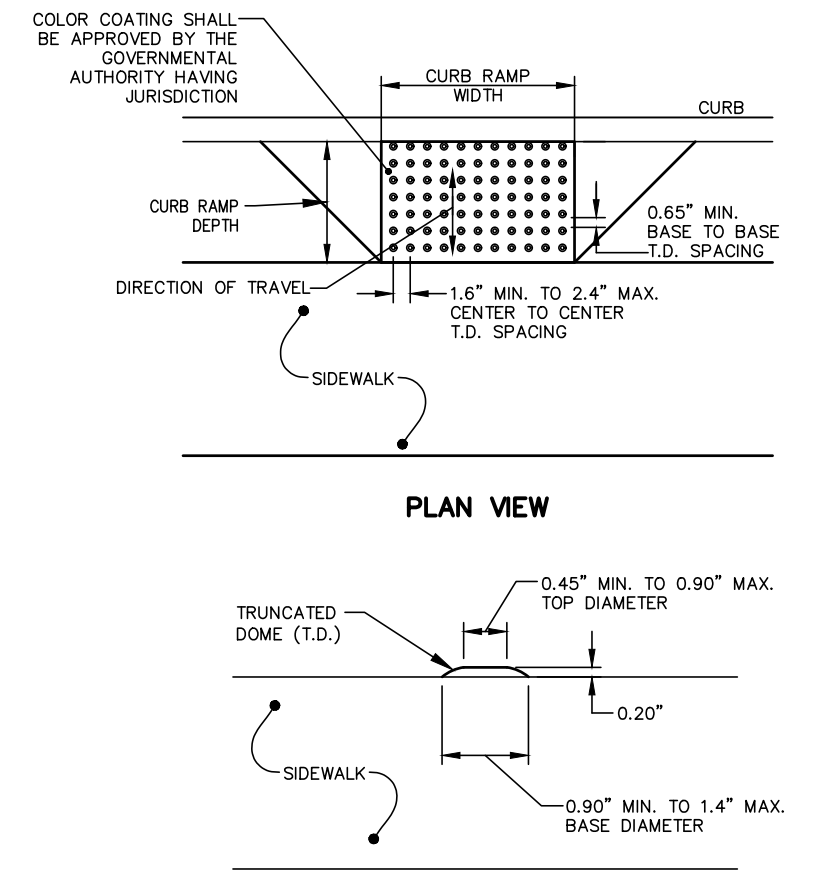
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CONSTRUCTION NOTES & DETAILS

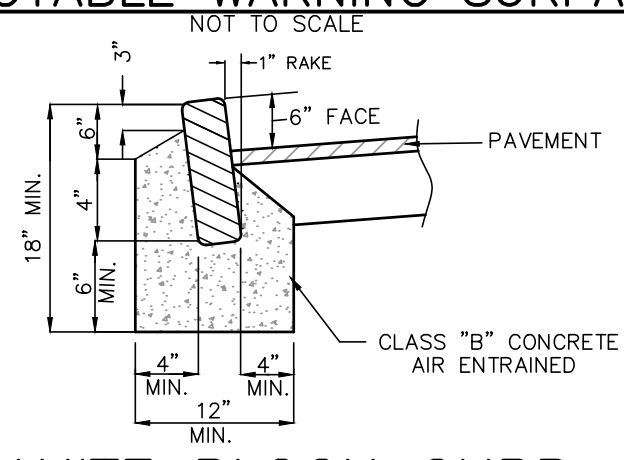
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DATE: 7/25/23
SHEET NO. 17 OF 21

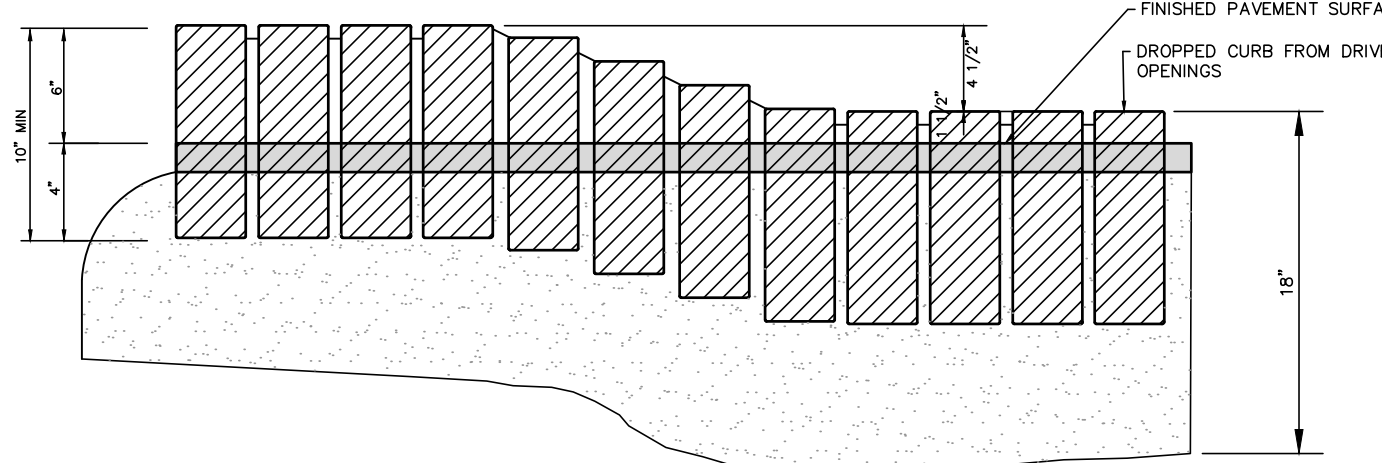


NOTES:
 1. DETECTABLE WARNING SURFACES SHALL BE PROVIDED AT ALL CURB RAMPS.
 2. DETECTABLE WARNING SURFACES SHALL BE COLOR COATED AS REQUIRED BY THE GOVERNMENTAL AUTHORITY HAVING JURISDICTION AND PROVIDE 70% COLOR CONTRAST AGAINST RAMP MATERIAL.
 3. DETECTABLE WARNING SURFACE SHALL BE EITHER SURFACE MOUNT OR CAST-IN-PLACE AS REQUIRED BY GOVERNMENTAL AUTHORITY HAVING JURISDICTION.

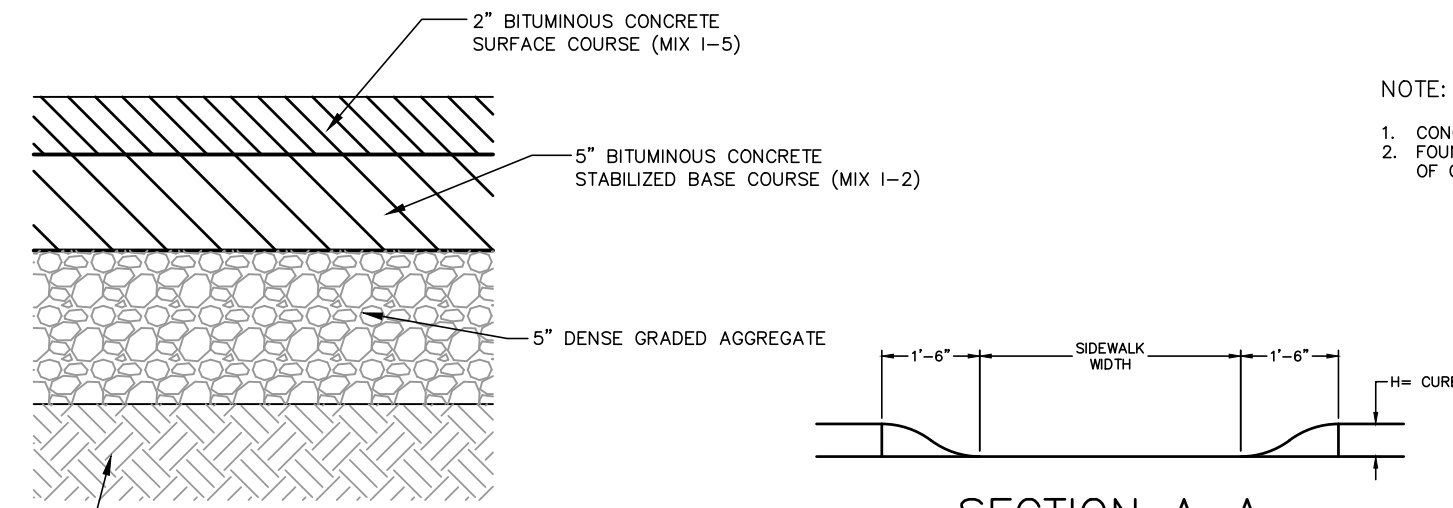
DETECTABLE WARNING SURFACE



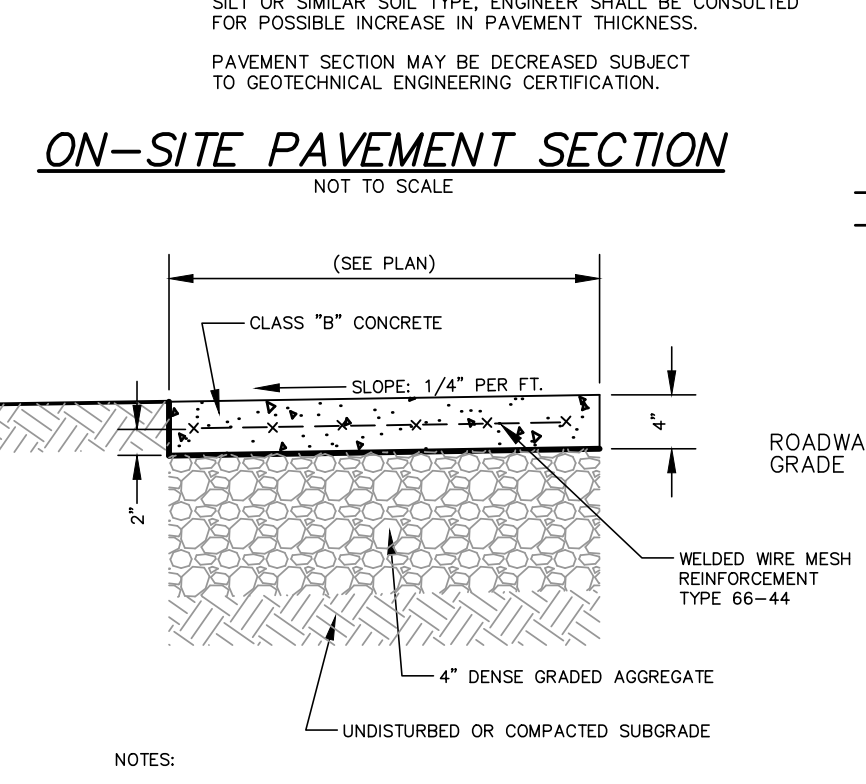
GRANITE BLOCK CURB



GRANITE BLOCK DEPRESSED CURB



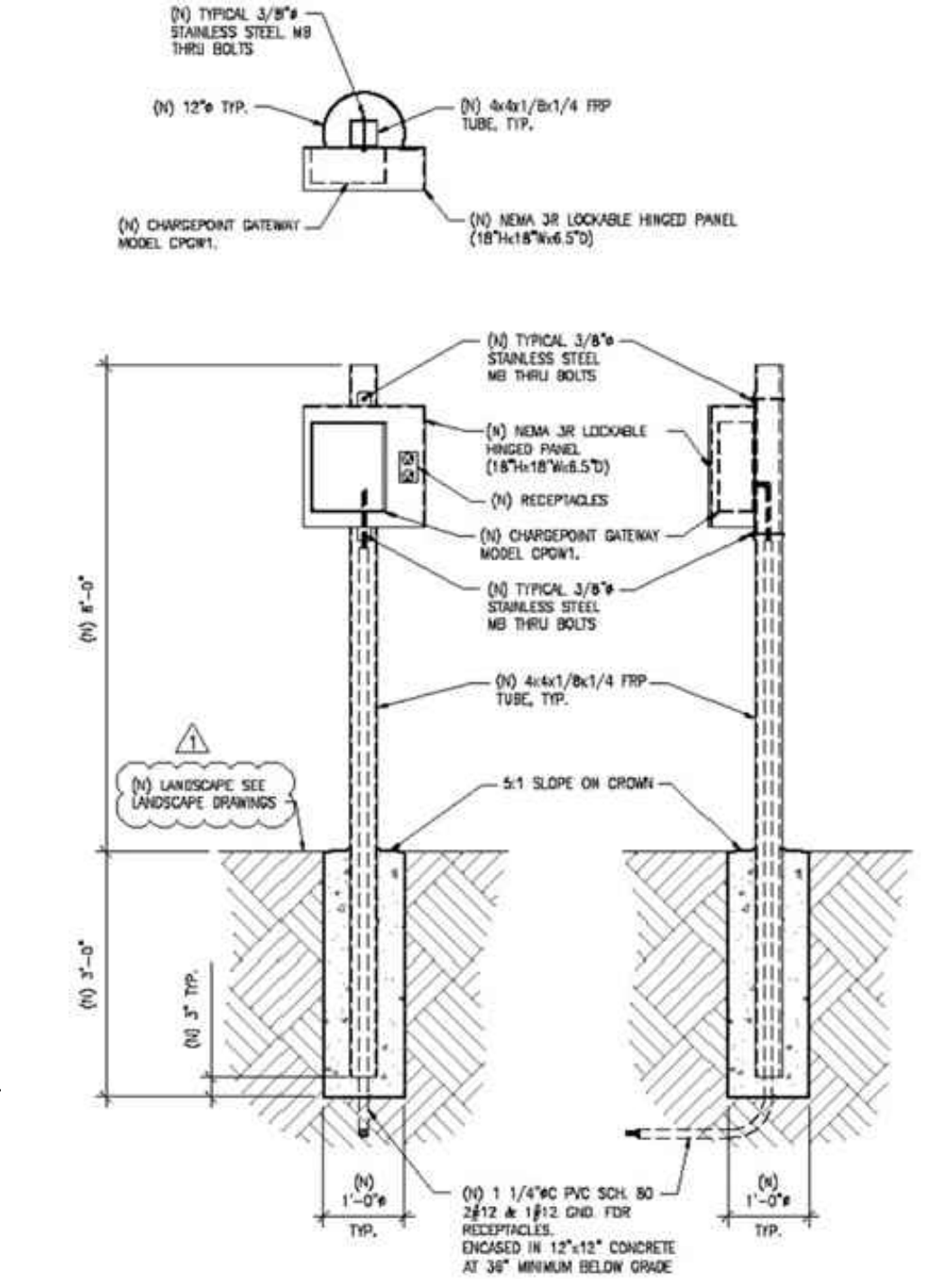
ON-SITE PAVEMENT SECTION



CONCRETE SIDEWALK

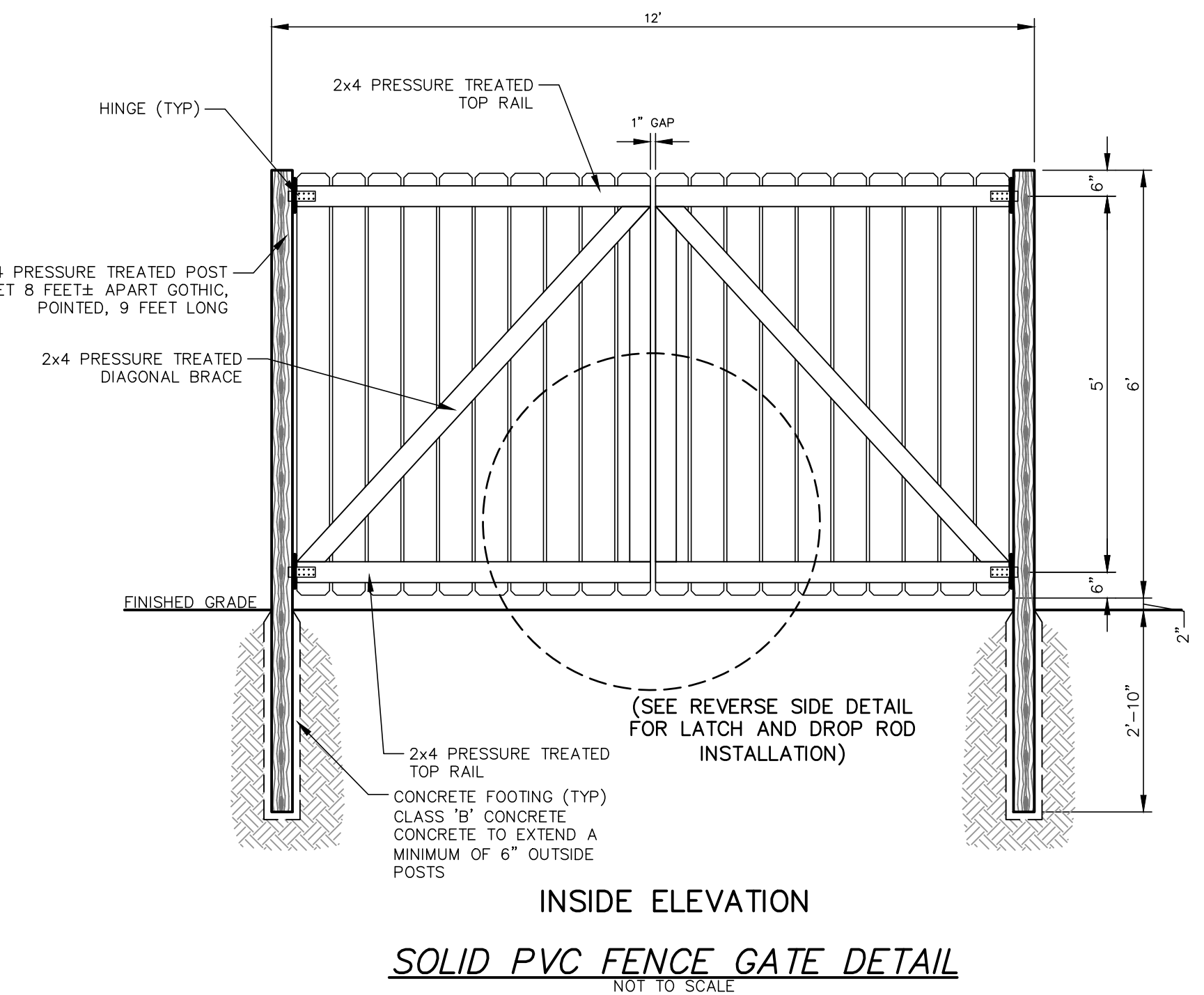
NOTES:
 1. CURB AND SIDEWALK CONCRETE TO BE N.J.D.O.T. CLASS 'B' AIR-ENTRAINED.
 2. PROVIDE PREFORMED BITUMINOUS FIBER EXPANSION JOINTS, 1/2" THICK AT 16'0" MAX. INTERVALS. PROVIDE DUMMY JOINTS (FORMED) MIDWAY BETWEEN EXPANSION JOINTS.

CURB RAMP TYPE 1			
H INCHES	X, FEET	L, FEET	W FEET
3	2.5	9.0	3
4	3.3	10.6	4
5	4.2	12.4	5
6	5.0	14.0	6
7	5.8	15.6	7
8	6.7	17.4	8
9	7.5	19.0	9



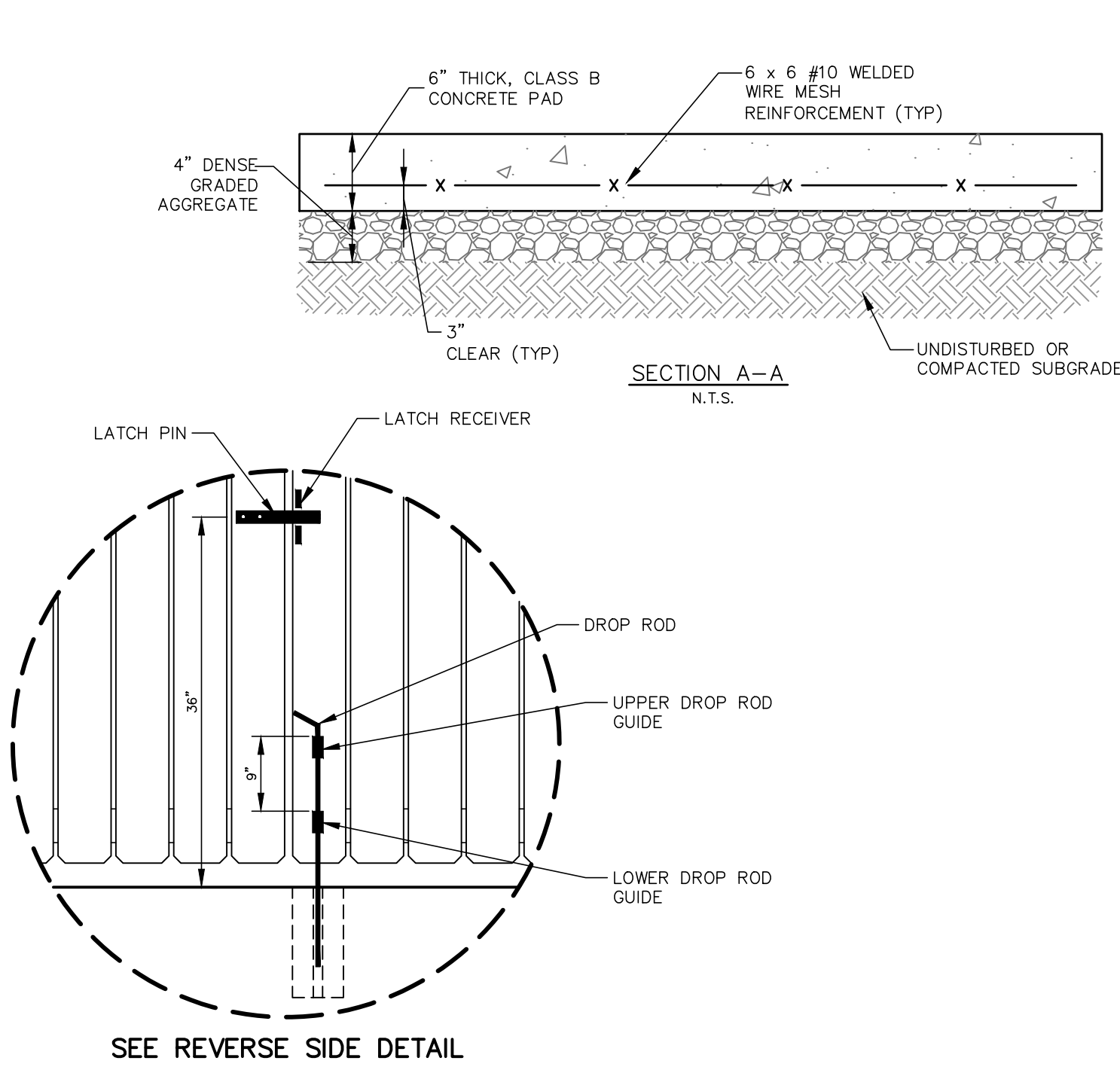
ELECTRIC VEHICLE CHARGING STATION

NOTE: CHARGING STATION DETAIL FOR GRAPHICAL PURPOSES ONLY. PRIOR TO CONSTRUCTION, APPLICANT SHALL SUBMIT ALL NECESSARY CONSTRUCTION DETAILS TO THE TOWN ENGINEER.



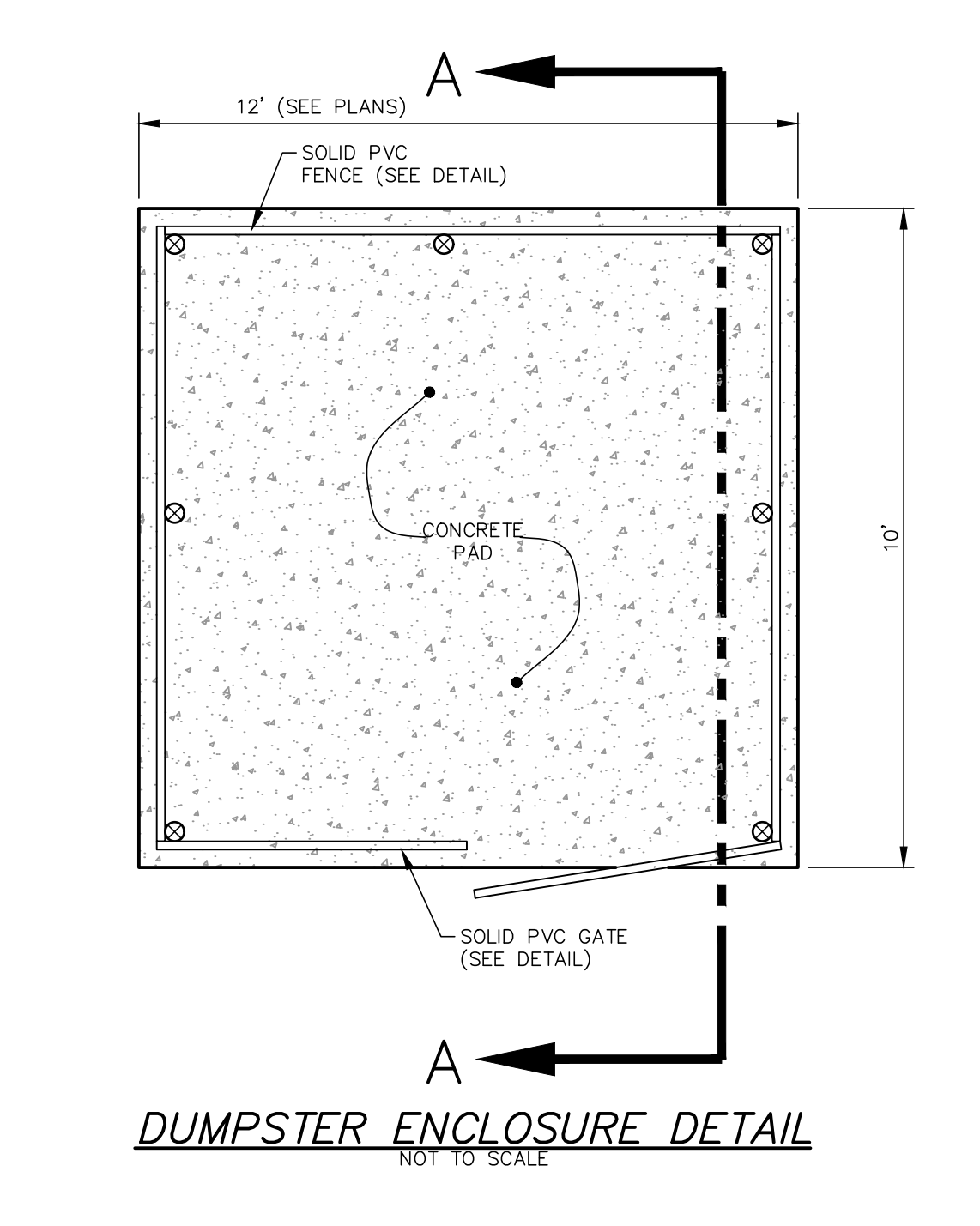
SOLID PVC FENCE GATE DETAIL

NOTE: CHARGING STATION DETAIL FOR GRAPHICAL PURPOSES ONLY. PRIOR TO CONSTRUCTION, APPLICANT SHALL SUBMIT ALL NECESSARY CONSTRUCTION DETAILS TO THE TOWN ENGINEER.



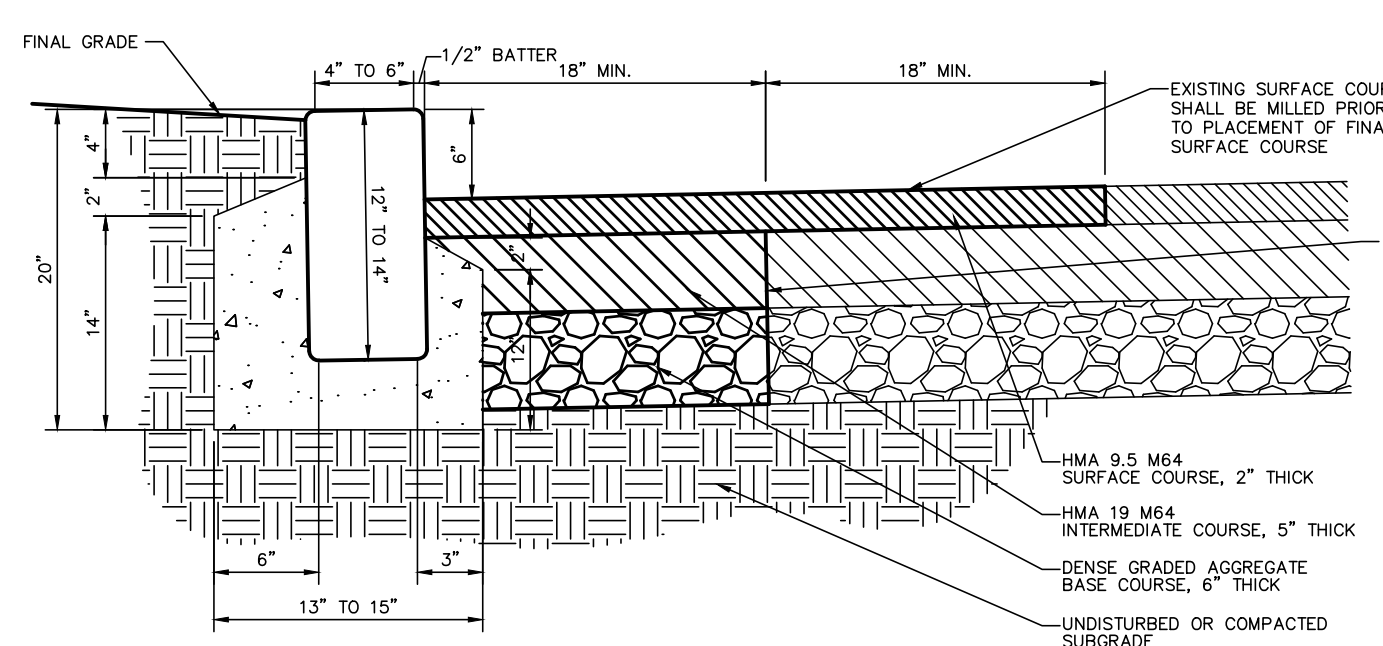
SOLID PVC FENCE

NOTE: CHARGING STATION DETAIL FOR GRAPHICAL PURPOSES ONLY. PRIOR TO CONSTRUCTION, APPLICANT SHALL SUBMIT ALL NECESSARY CONSTRUCTION DETAILS TO THE TOWN ENGINEER.



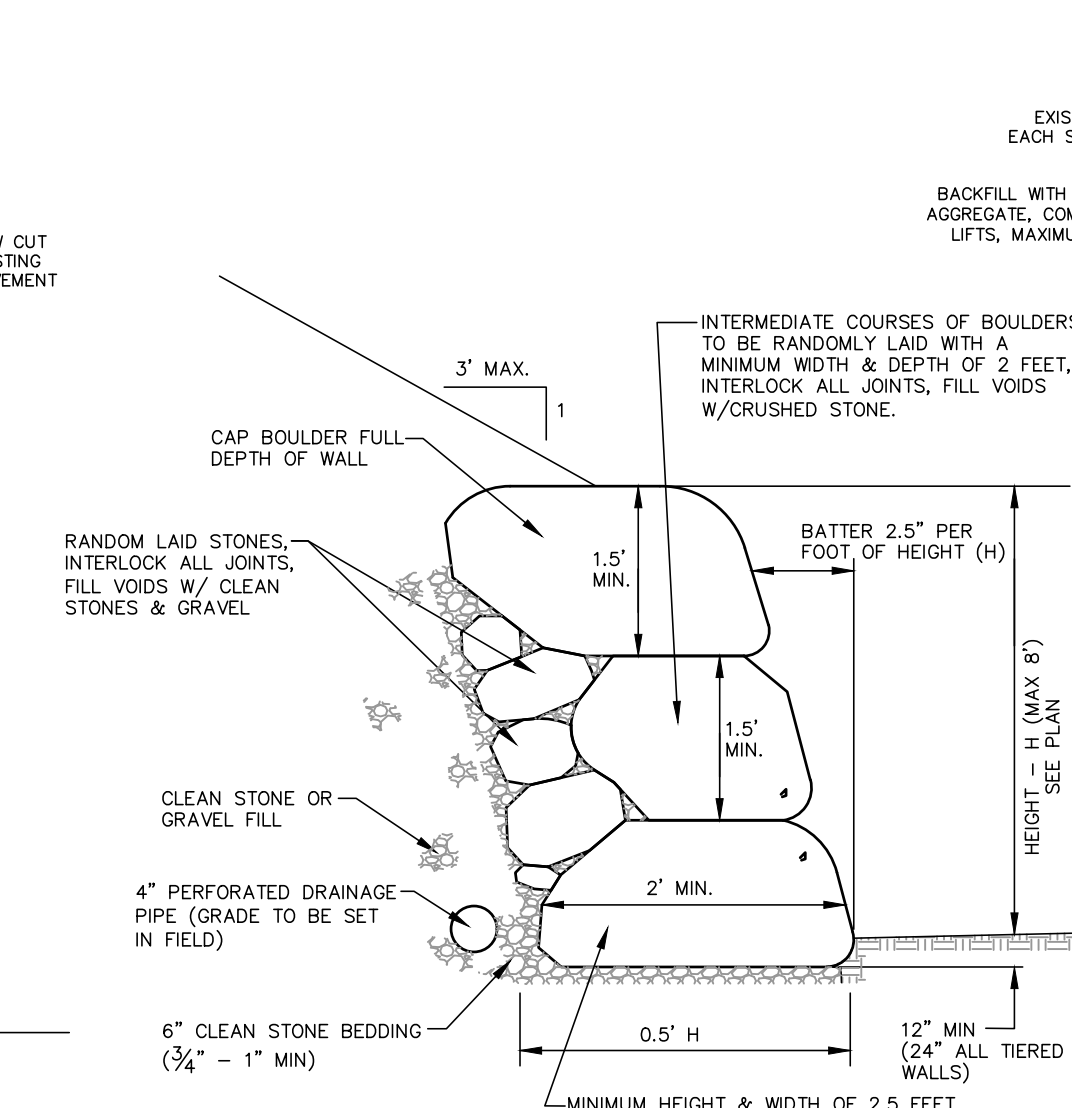
DUMPSTER ENCLOSURE DETAIL

NOTE: CHARGING STATION DETAIL FOR GRAPHICAL PURPOSES ONLY. PRIOR TO CONSTRUCTION, APPLICANT SHALL SUBMIT ALL NECESSARY CONSTRUCTION DETAILS TO THE TOWN ENGINEER.



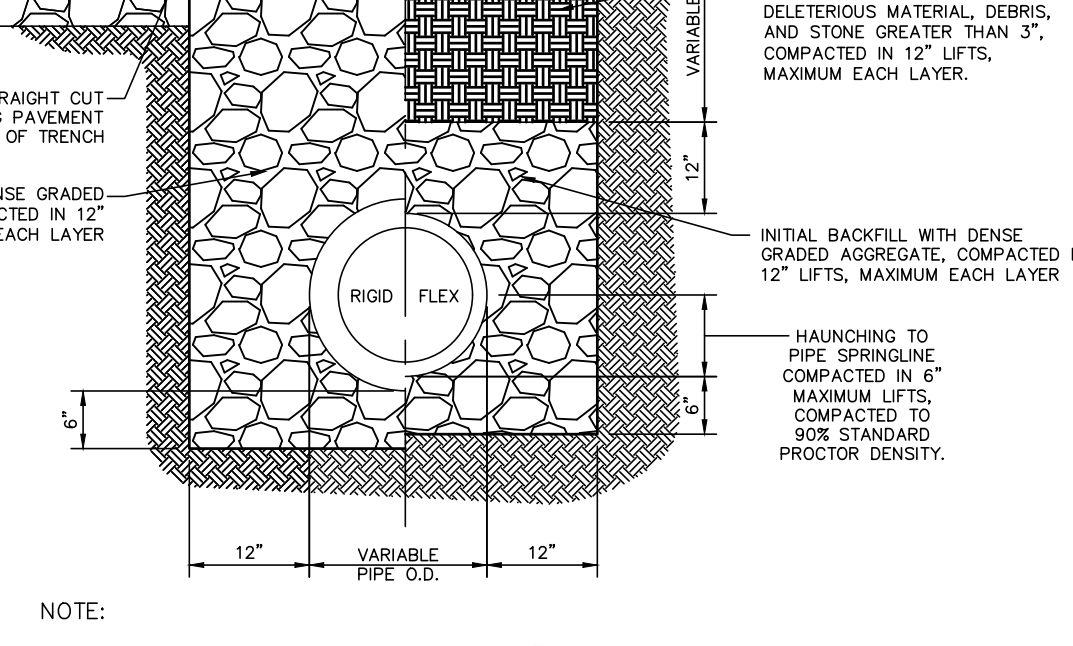
GRANITE BLOCK CURB WITHIN COUNTY R.O.W. DETAIL

NOTE: CONCRETE SHALL BE NOT CLASS 'B' (AIR ENTRAINED). FOUNDATION SHALL BE CONSTRUCTED THE ENTIRE LENGTH OF GRANITE BLOCK CURB.



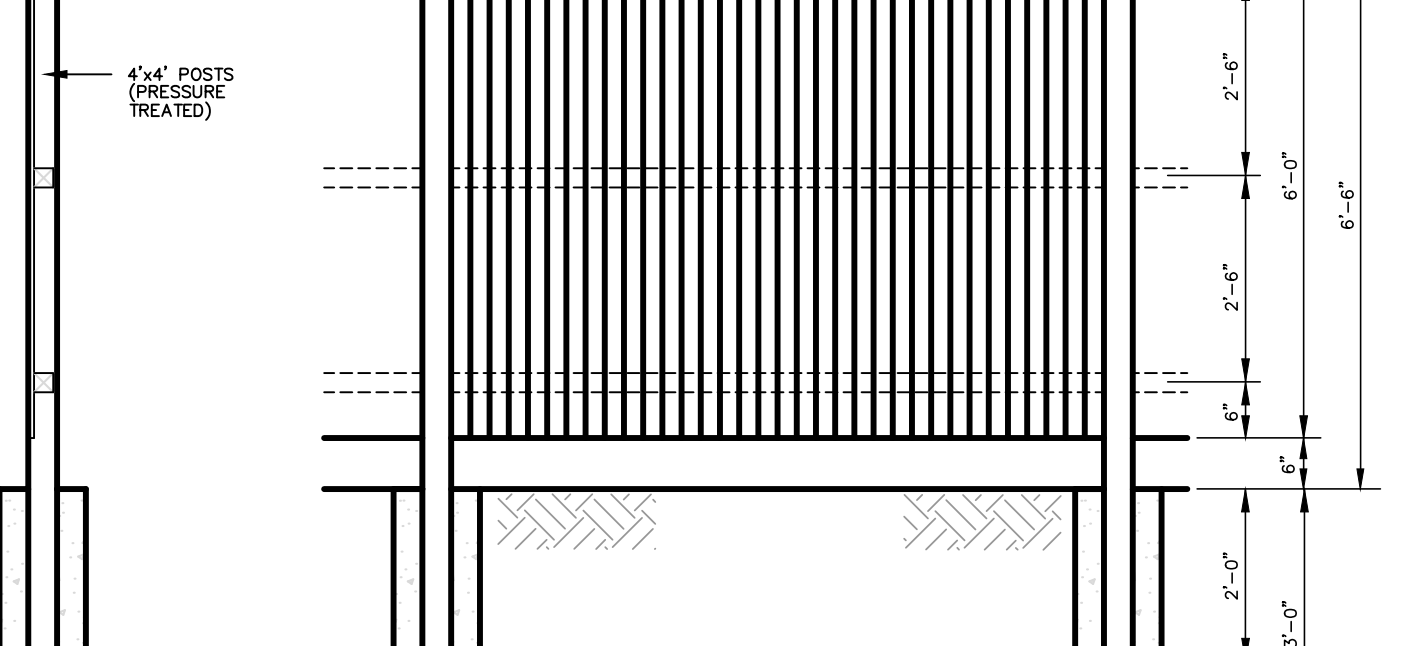
DRY STONE WALL DETAIL (4 FT TO 8 FT HIGH)

NOTE: CHARGING STATION DETAIL FOR GRAPHICAL PURPOSES ONLY. PRIOR TO CONSTRUCTION, APPLICANT SHALL SUBMIT ALL NECESSARY CONSTRUCTION DETAILS TO THE TOWN ENGINEER.



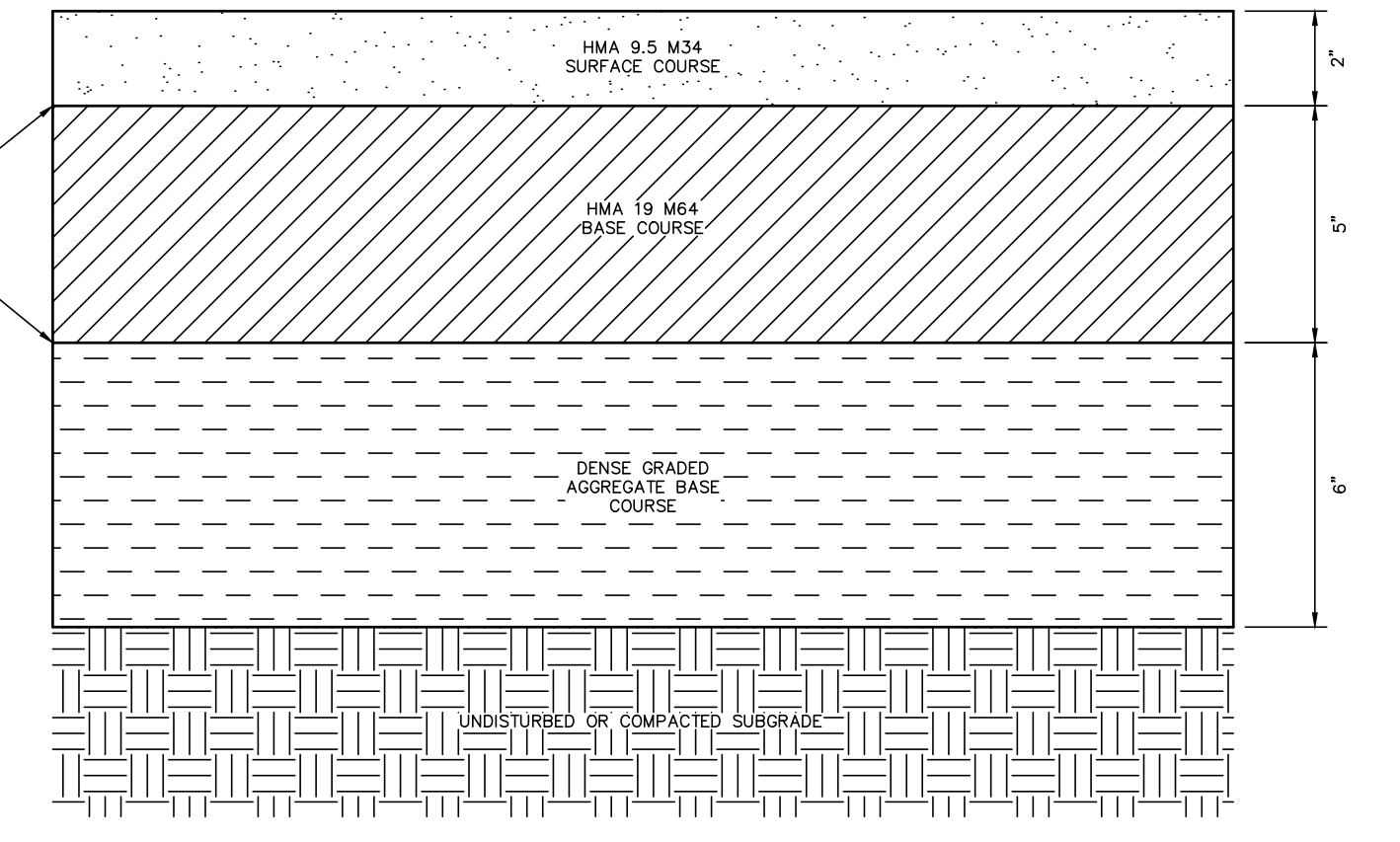
COUNTY R.O.W. TRENCH DETAIL

NOTE: CHARGING STATION DETAIL FOR GRAPHICAL PURPOSES ONLY. PRIOR TO CONSTRUCTION, APPLICANT SHALL SUBMIT ALL NECESSARY CONSTRUCTION DETAILS TO THE TOWN ENGINEER.



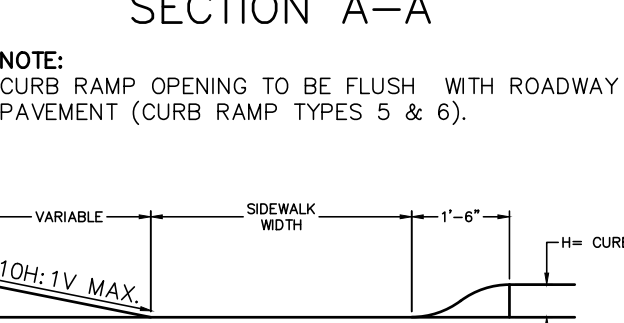
SOLID PVC FENCE

NOTE: CHARGING STATION DETAIL FOR GRAPHICAL PURPOSES ONLY. PRIOR TO CONSTRUCTION, APPLICANT SHALL SUBMIT ALL NECESSARY CONSTRUCTION DETAILS TO THE TOWN ENGINEER.



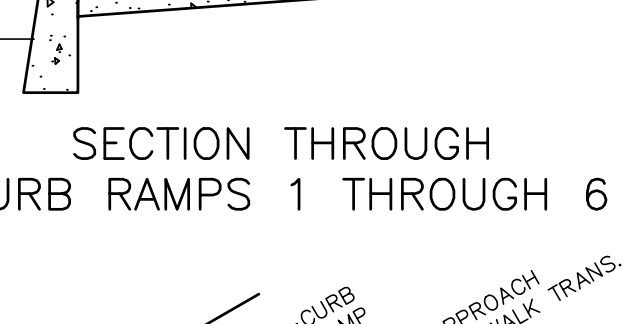
COUNTY R.O.W. PAVEMENT DETAIL

NOTE: CHARGING STATION DETAIL FOR GRAPHICAL PURPOSES ONLY. PRIOR TO CONSTRUCTION, APPLICANT SHALL SUBMIT ALL NECESSARY CONSTRUCTION DETAILS TO THE TOWN ENGINEER.



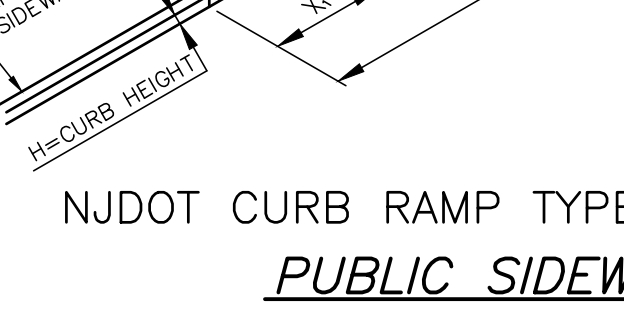
SECTION A-A

NOTE: CURB RAMP OPENING TO BE FLUSH WITH ROADWAY PAVEMENT (CURB RAMP TYPES 5 & 6).

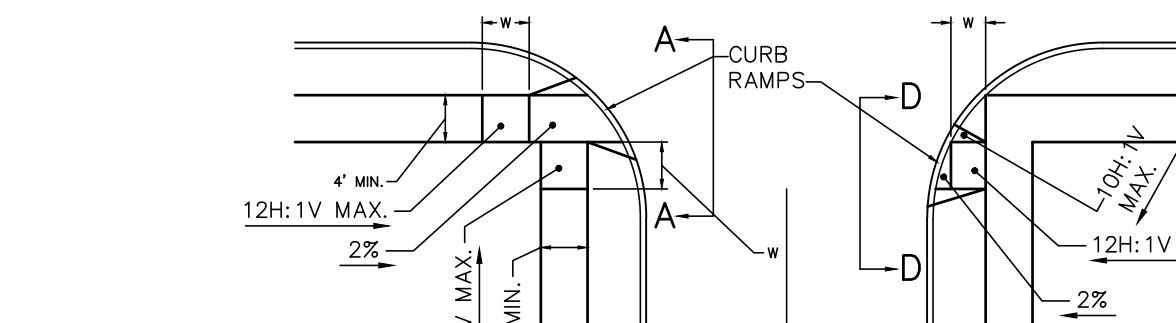


SECTION D-D

NOTE: CURB RAMP OPENING TO BE FLUSH WITH ROADWAY PAVEMENT (CURB RAMP TYPES 5 & 6).

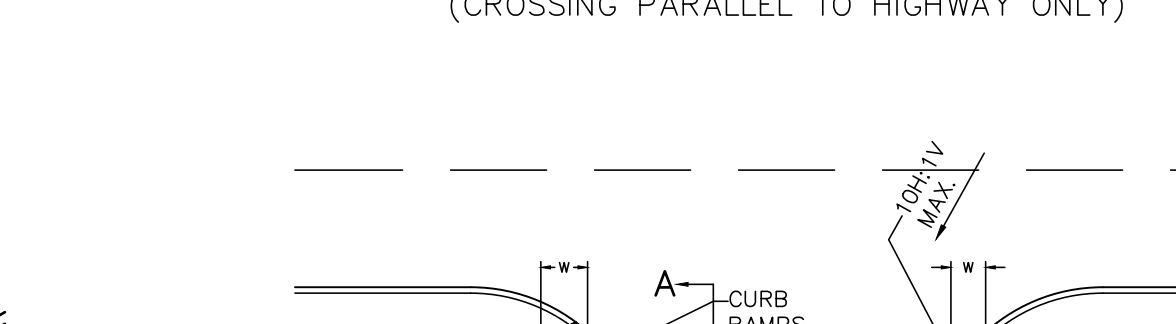


SECTION THROUGH CURB RAMPS 1 THROUGH 6



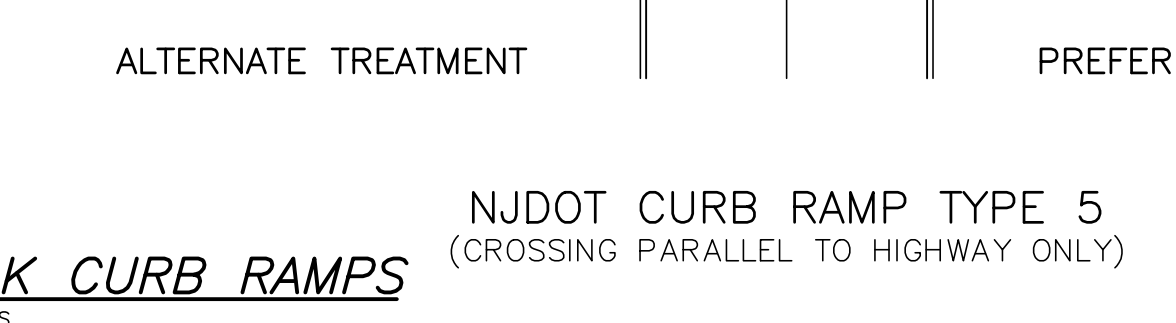
ALTERNATE TREATMENT

NOTE: CURB RAMP OPENING TO BE FLUSH WITH ROADWAY PAVEMENT (CURB RAMP TYPES 5 & 6).

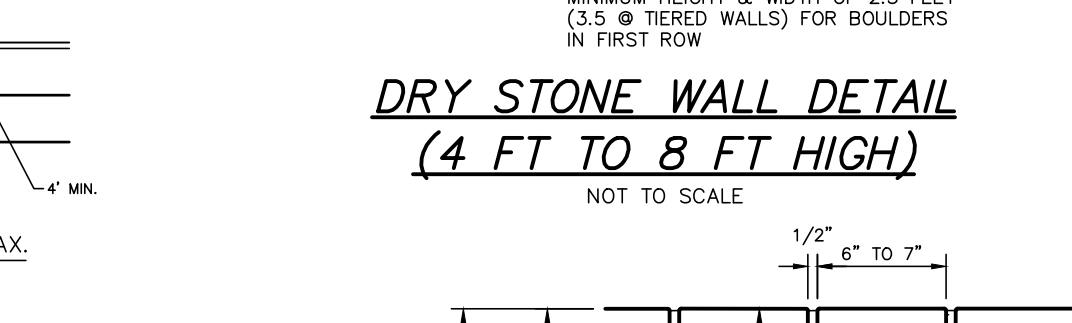


PREFERRED TREATMENT

NOTE: CURB RAMP OPENING TO BE FLUSH WITH ROADWAY PAVEMENT (CURB RAMP TYPES 5 & 6).

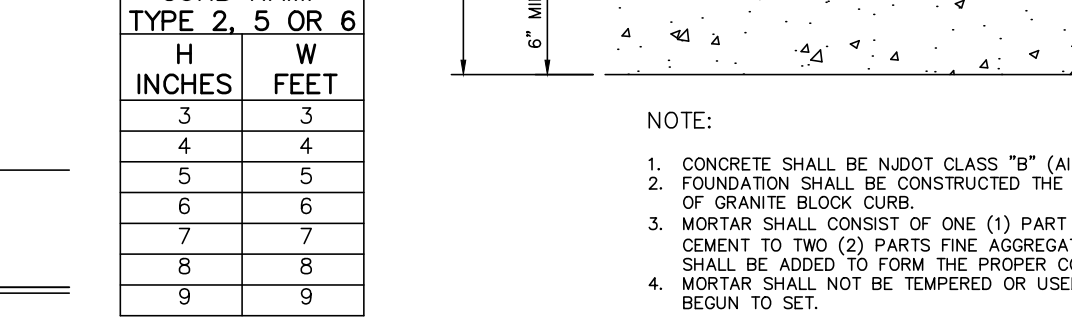


ALTERNATE TREATMENT



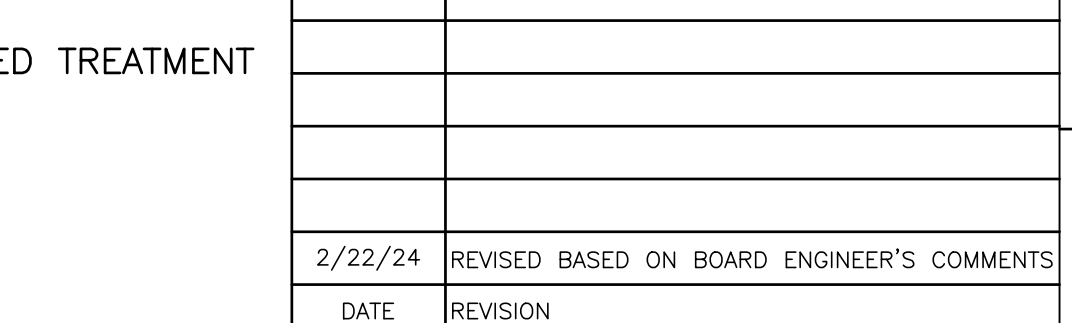
PREFERRED TREATMENT

NOTE: CURB RAMP OPENING TO BE FLUSH WITH ROADWAY PAVEMENT (CURB RAMP TYPES 5 & 6).



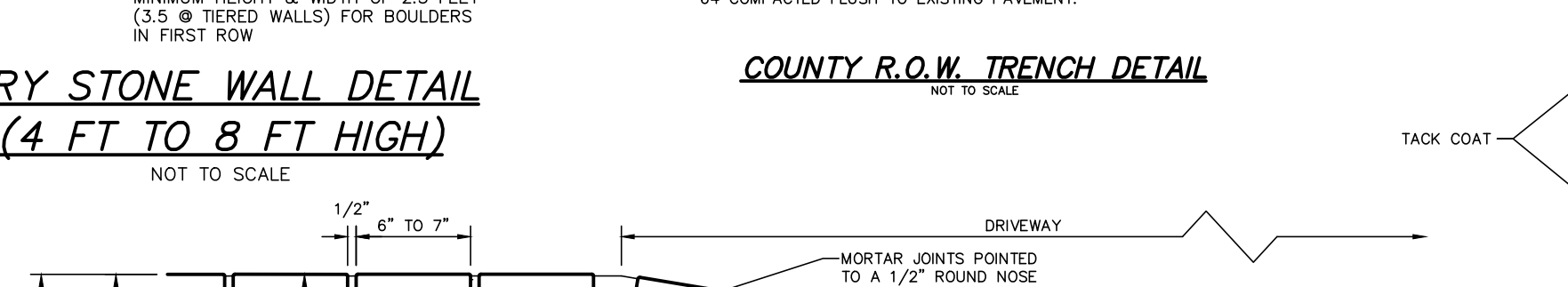
ALTERNATE TREATMENT

NOTE: CURB RAMP OPENING TO BE FLUSH WITH ROADWAY PAVEMENT (CURB RAMP TYPES 5 & 6).



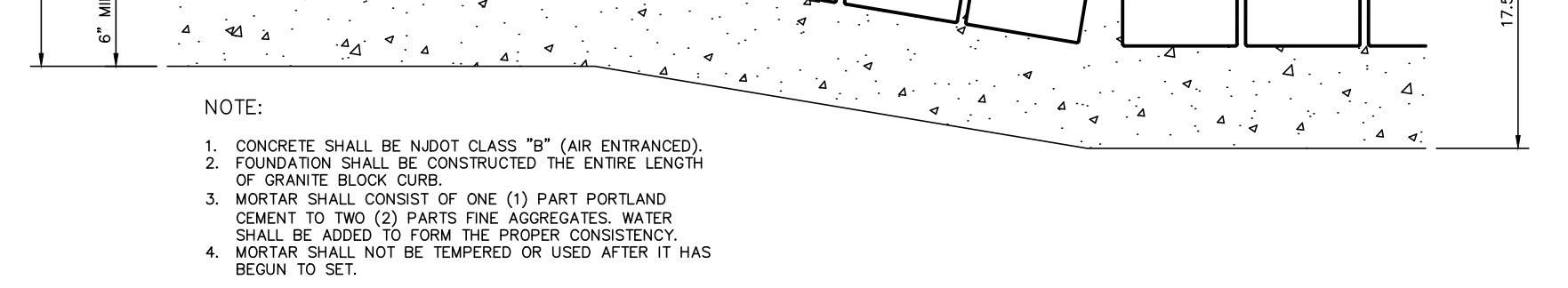
PREFERRED TREATMENT

CURB RAMP TYPE 2, 5 OR 6	
H INCHES	W FEET
3	3
4	4
5	5
6	6
7	7
8	8
9	9



GRANITE BLOCK DEPRESSED CURB WITHIN COUNTY R.O.W. DETAIL

NOTE: CHARGING STATION DETAIL FOR GRAPHICAL PURPOSES ONLY. PRIOR TO CONSTRUCTION, APPLICANT SHALL SUBMIT ALL NECESSARY CONSTRUCTION DETAILS TO THE TOWN ENGINEER.



DRY STONE WALL DETAIL (4 FT TO 8 FT HIGH)

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COUNTY R.O.W. TRENCH DETAIL

NOTE: CHARGING STATION DETAIL FOR GRAPHICAL PURPOSES ONLY. PRIOR TO CONSTRUCTION, APPLICANT SHALL SUBMIT ALL NECESSARY CONSTRUCTION DETAILS TO THE TOWN ENGINEER.

DYKSTRA WALKER DESIGN GROUP
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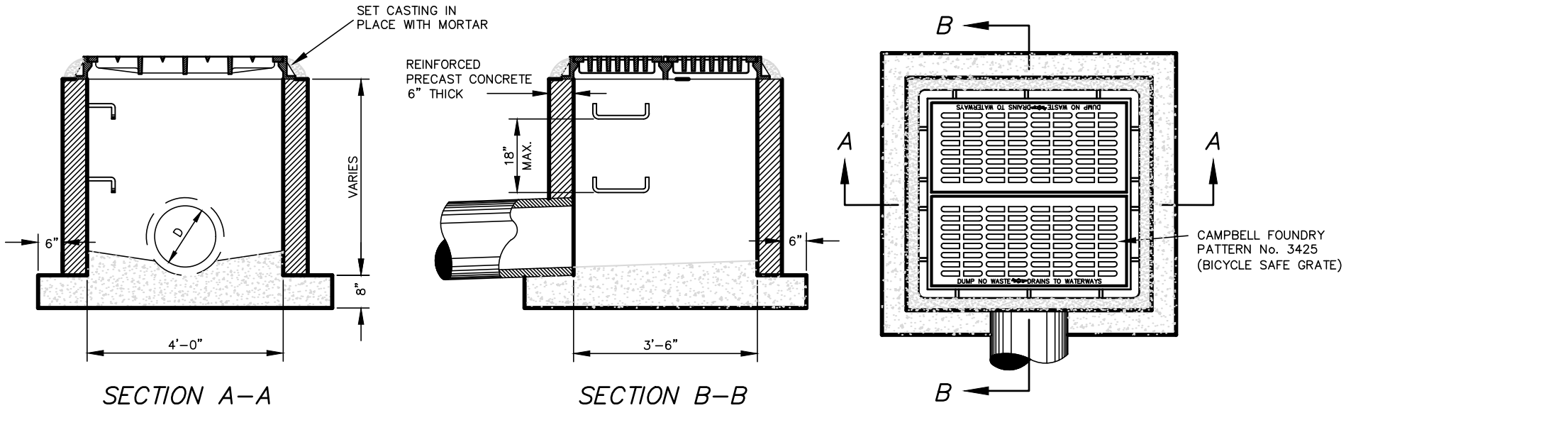
KEVIN J. ROBINE, P.E.
 PROFESSIONAL ENGINEER, N.J. LIC. NO. 24GE04965200

CONSTRUCTION NOTES & DETAILS

PRELIMINARY SITE PLAN
 BLOCK 158, LOT 6
 U.S. HIGHWAY ROUTE 206 &
 BRIGHTON ROAD (C.R. 603)
 TOWNSHIP OF ANDOVER
 SUSSEX COUNTY NEW JERSEY

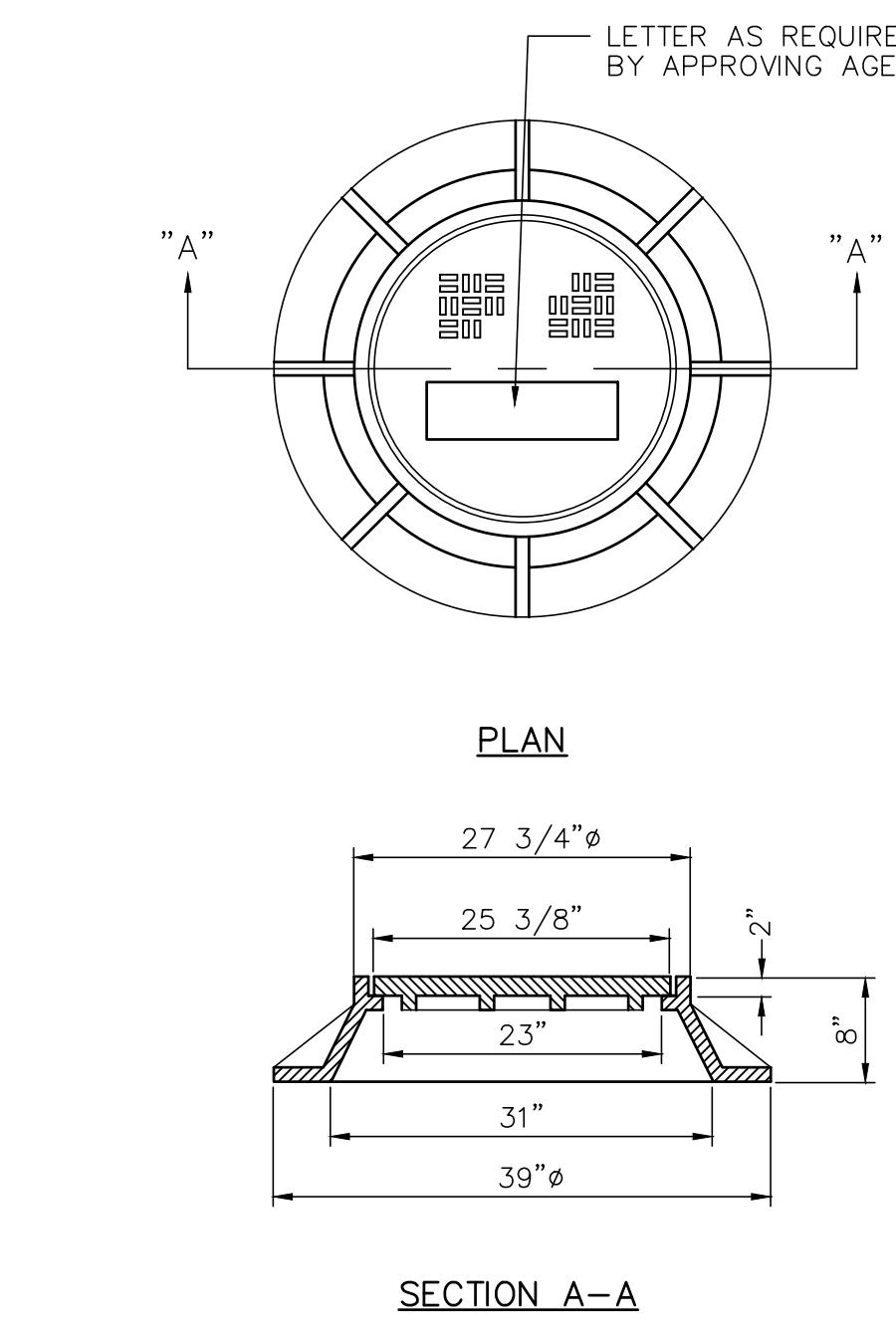
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 DATE: 7/25/23
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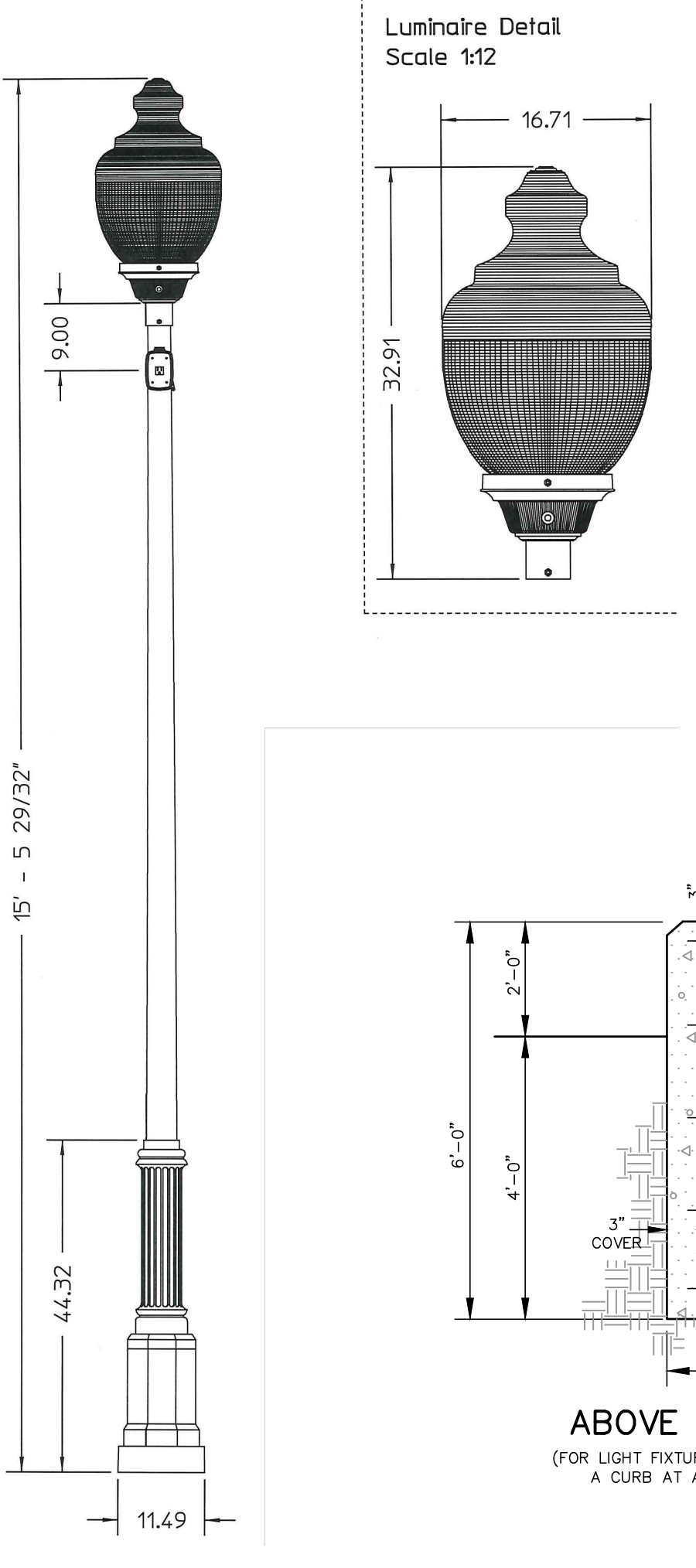
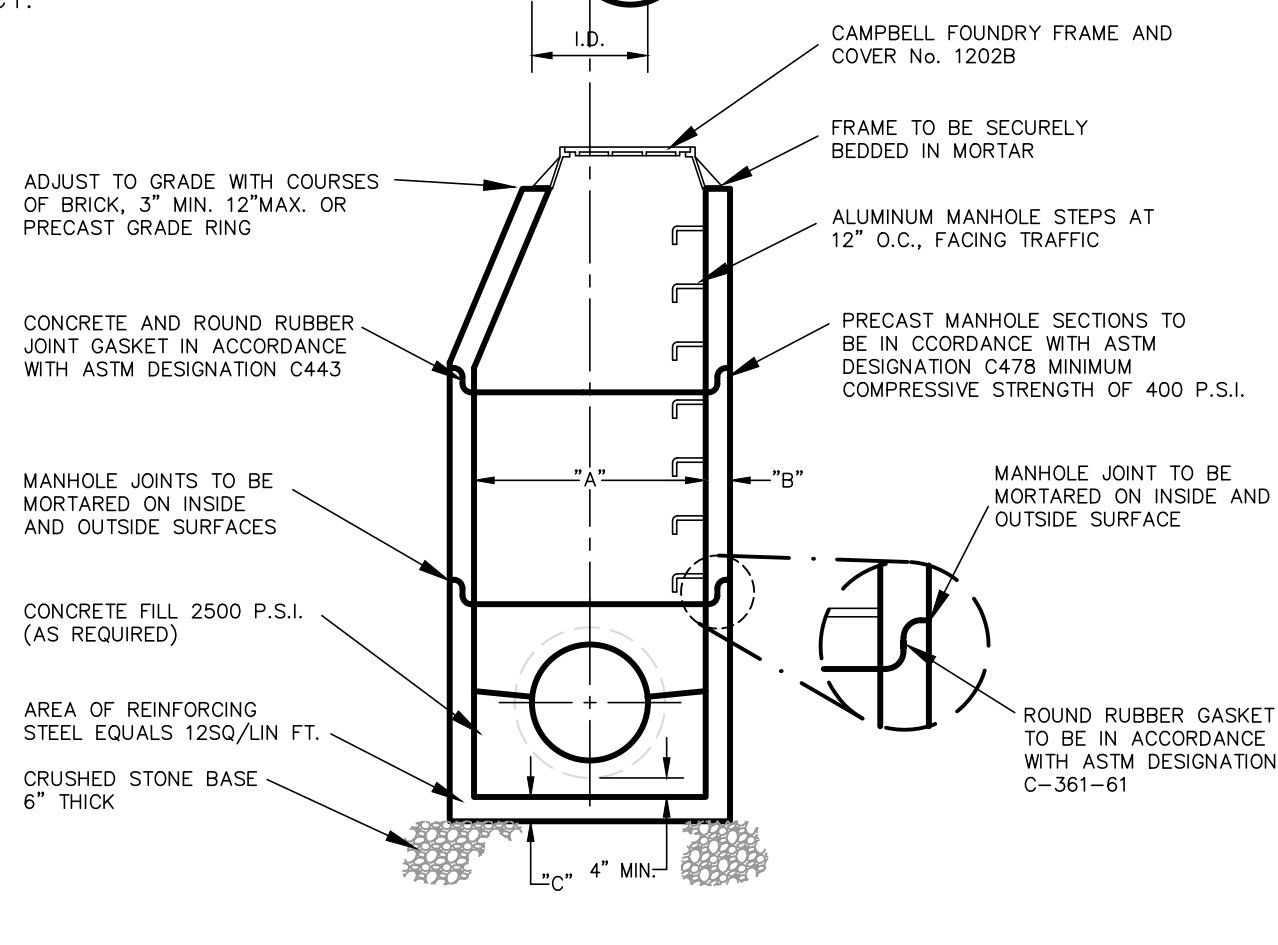


TYPE "E" INLET

- GENERAL NOTES:**
- FOOTING TO BE N.J.D.O.T. CLASS "C" CONCRETE.
 - INVERT TO BE CLASS "C" CONCRETE.
 - IF WALL CONSTRUCTION IS OTHER THAN CONCRETE, THE WALLS SHALL BE PLASTERED BOTH INSIDE AND OUTSIDE WITH 1/2" THICK GYPSUM PLASTER.
 - FRAME AND GRATE TO BE CAMPBELL FOUNDRY No. 3425 OR APPROVED EQUAL.
 - PROVIDE ALUMINUM LADDER RUNGS AT 18" MAX. O.C.
 - ADJUST TO GRADE WITH COURSES OF CONCRETE BRICK (3 MAX) OR PRECAST CONCRETE GRADE RING.

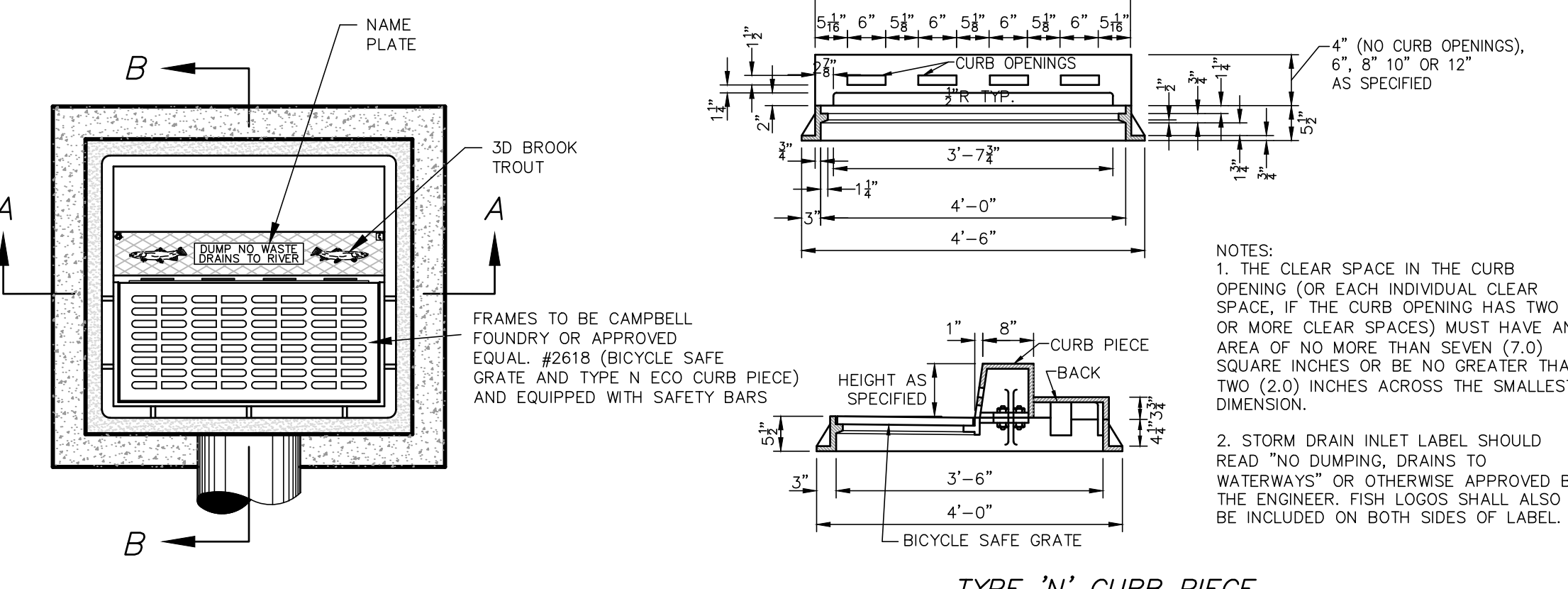


PRECAST STORM DRAINAGE MANHOLE

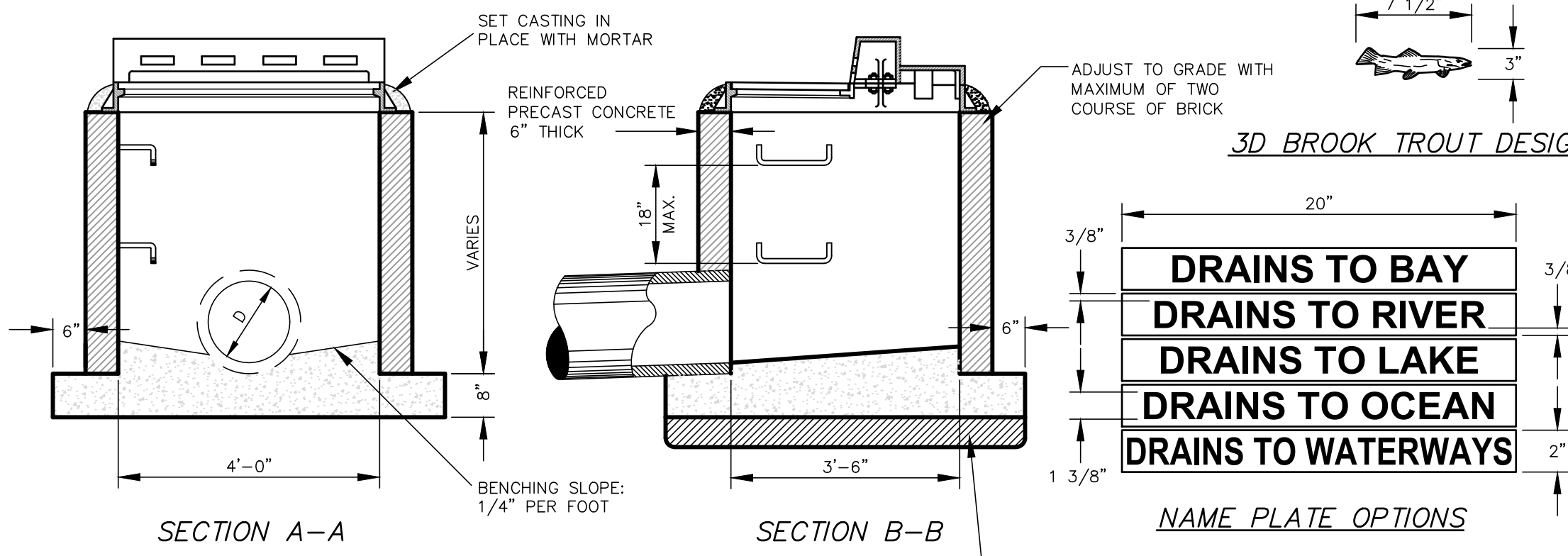


POLE MOUNTED STREETSCAPE LIGHT FIXTURE DETAIL

STANDARD MANHOLE FRAME AND COVER

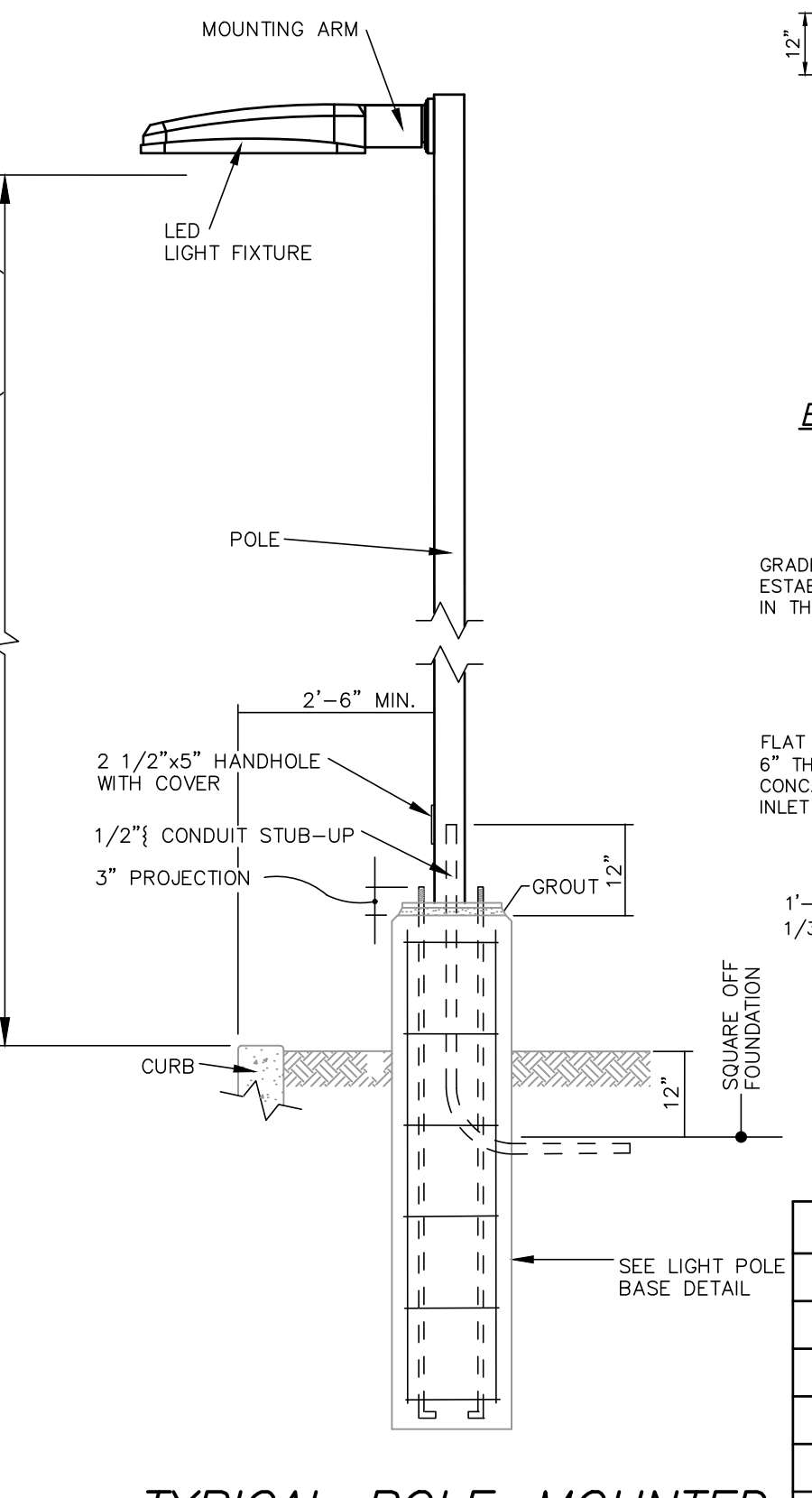


TYPE "N" CURB PIECE

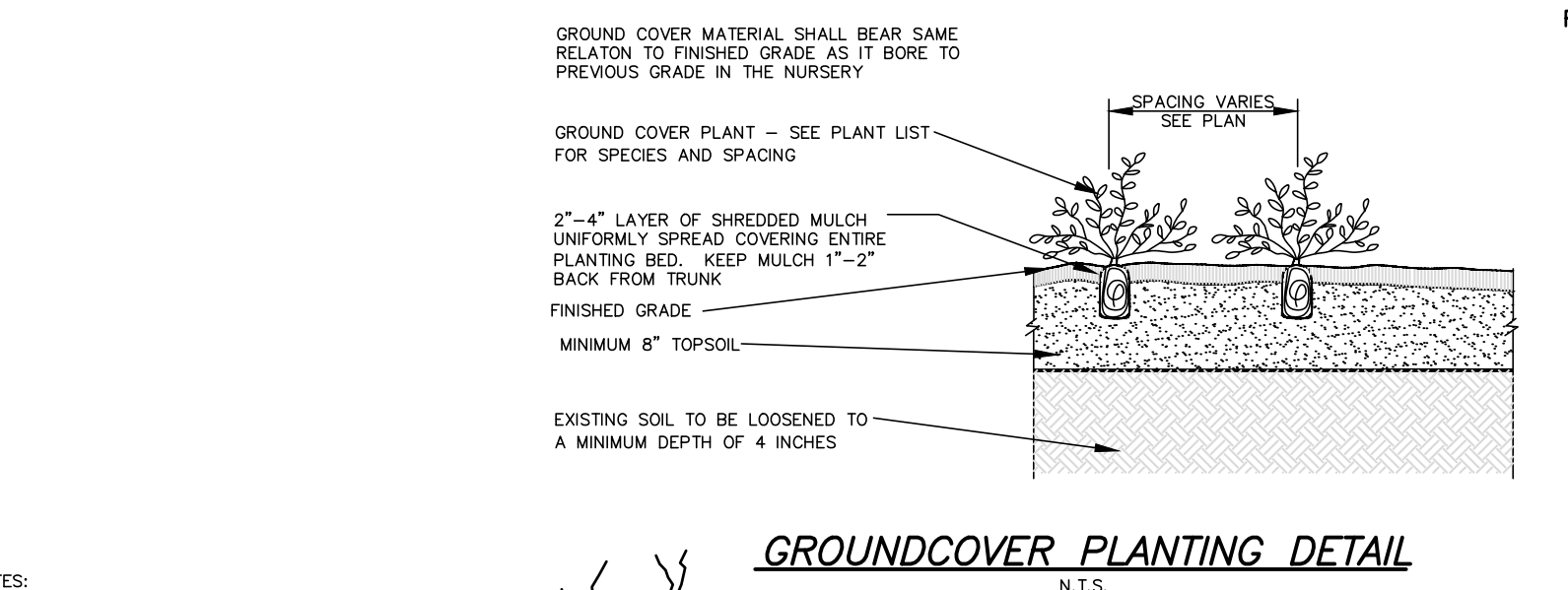


TYPE "B" INLET

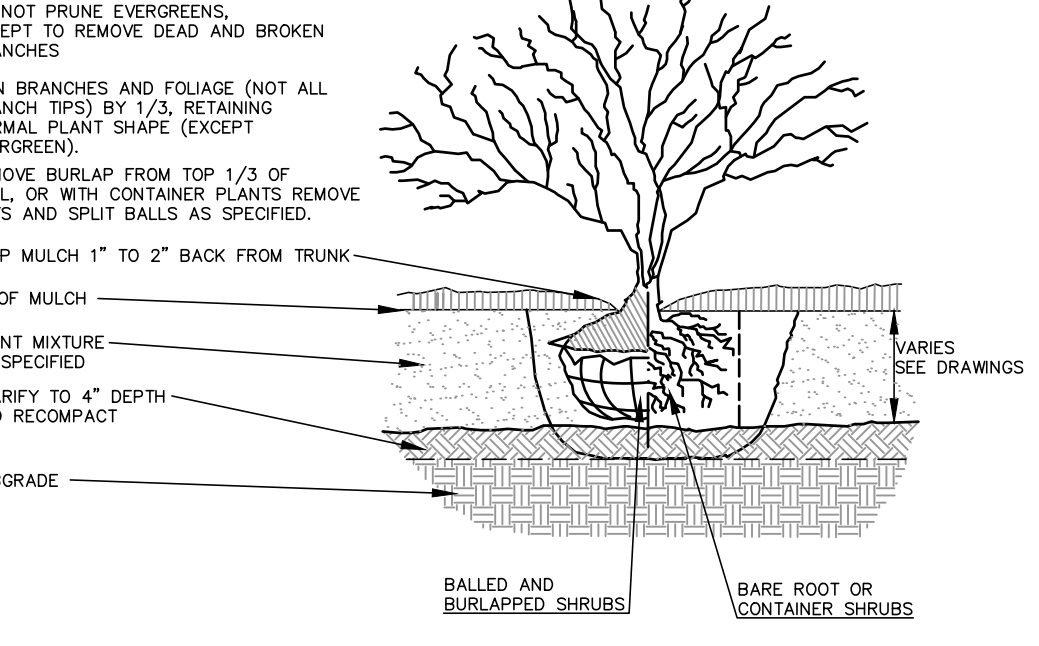
- NAME PLATE OPTIONS**
- DRAINS TO BAY
 - DRAINS TO RIVER
 - DRAINS TO LAKE
 - DRAINS TO OCEAN
 - DRAINS TO WATERWAYS



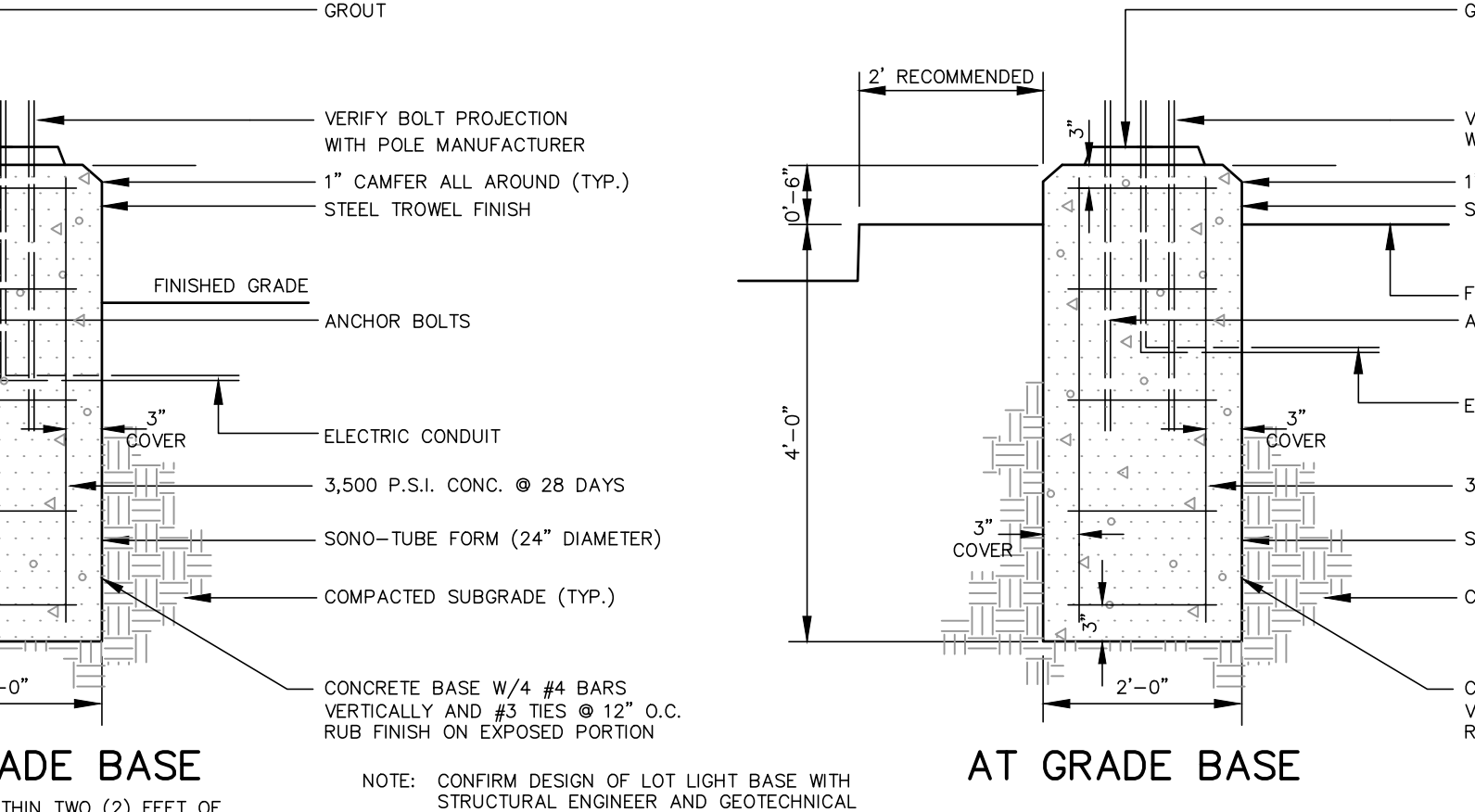
TYPICAL POLE-MOUNTED LIGHT FIXTURE DETAIL



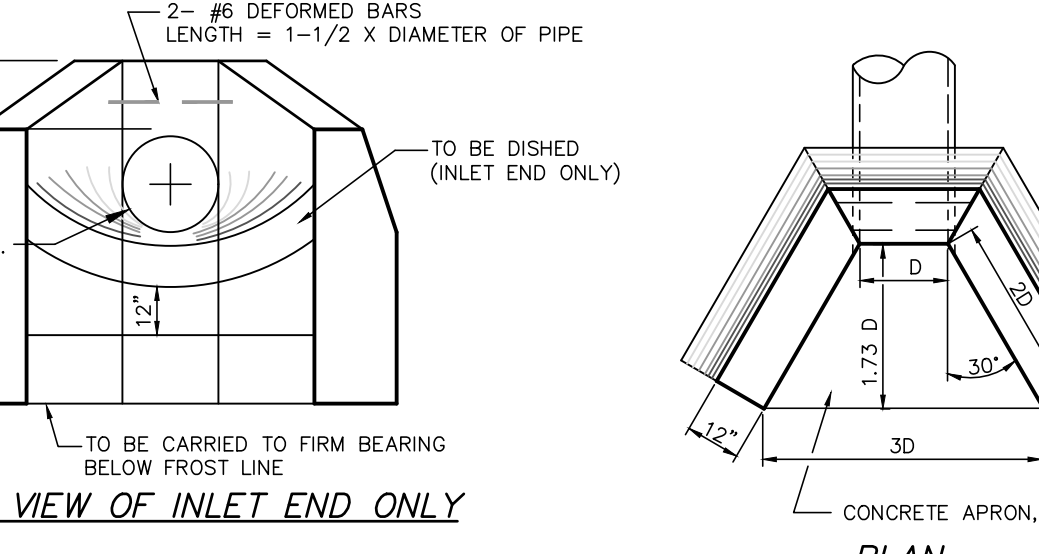
GROUND COVER PLANTING DETAIL



SHRUB PLANTING DETAIL



POLE MOUNTED LIGHT POLE BASE DETAILS



CONCRETE HEADWALL

HEADWALL IN CUBIC YARDS

PIPE SIZE	CORMETAL REIN. CONC.	APRONS IN CUBIC YARDS
12"	1.4 C.Y.	0.2 C.Y.
15"	1.7	0.2
18"	2.1	0.3
21"	2.5	0.4
24"	2.9	0.5
27"	3.3	0.6
30"	3.7	0.7
36"	4.7	0.9
42"	5.8	1.2
48"	7.6	1.5
54"	9.7	1.8
60"	12.2	2.1
66"	15.0	2.5
72"	18.1	3.0

- NOTES:**
- ALL EDGES TO BE CHAMFERED 1".
 - CONCRETE TO BE N.J.D.O.T. CLASS "B".
 - APRONS TO BE 6" THICK CONC. FLAT AT OUTLET END, DISHED AT INLET END.
 - EXPOSED PORTIONS OF WALL TO BE RUBBED AND FLOATED.
 - FOR ARCH PIPE, THE SPAN SHALL BE SUBSTITUTED FOR D.

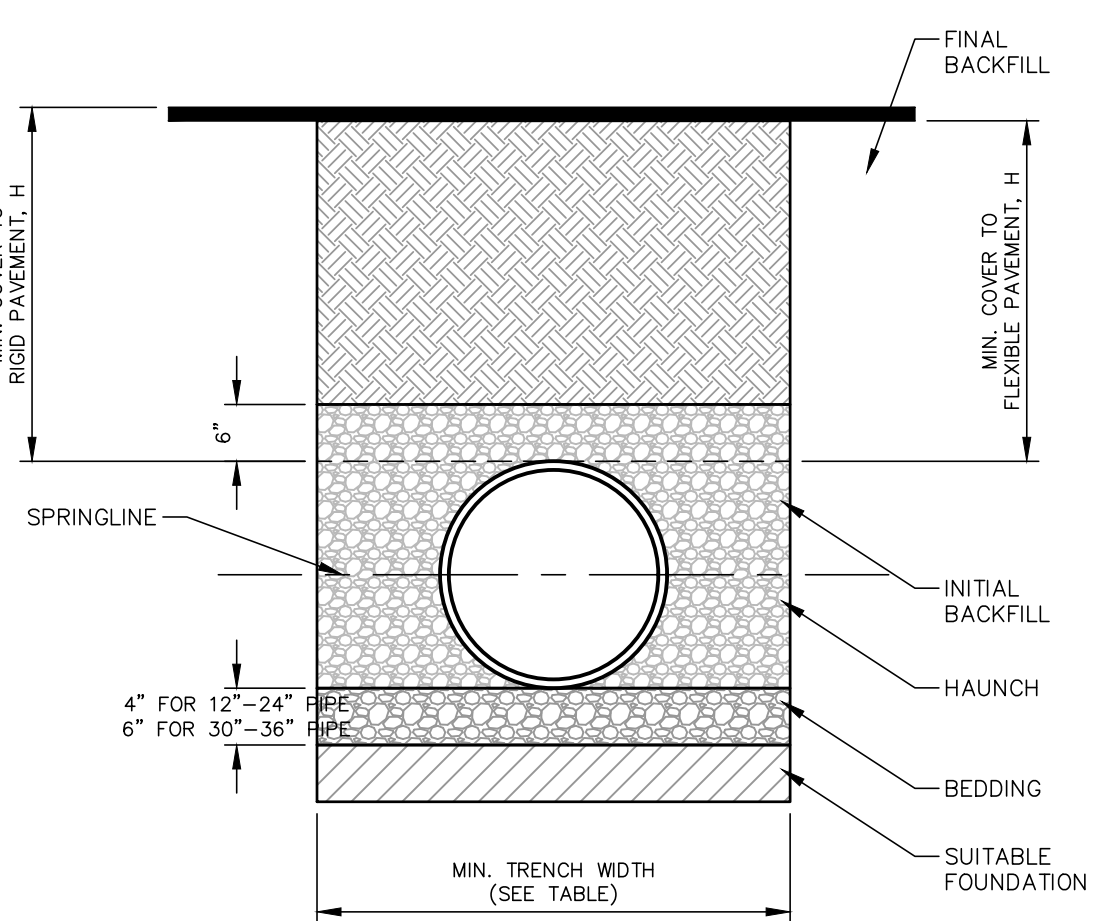
RECOMMENDED MINIMUM TRENCH WIDTHS

PIPE DIAM.	MIN. TRENCH WIDTH
4"	21"
6"	23"
8"	26"
10"	28"
12"	30"
15"	34"
18"	39"
24"	48"
30"	56"
36"	64"
42"	72"
48"	80"
54"	88"
60"	96"

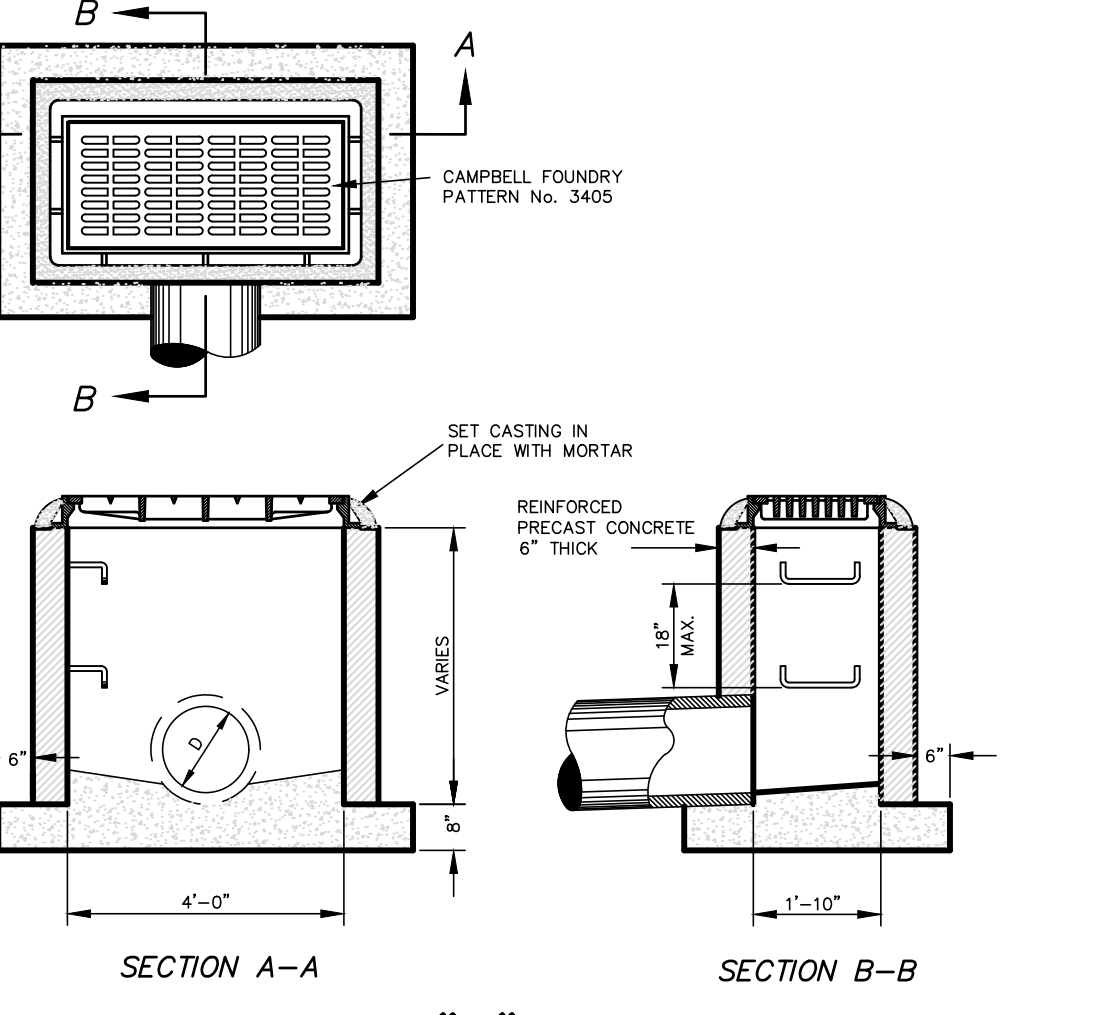
MINIMUM RECOMMENDED COVER BASED ON VEHICLE LOADING CONDITIONS

PIPE DIAM.	H-25 SURFACE LIVE LOAD CONDITION	HEAVY CONSTRUCTION (75T AXLE LOAD)*
12"-48"	12"	48"
54"-60"	24"	60"

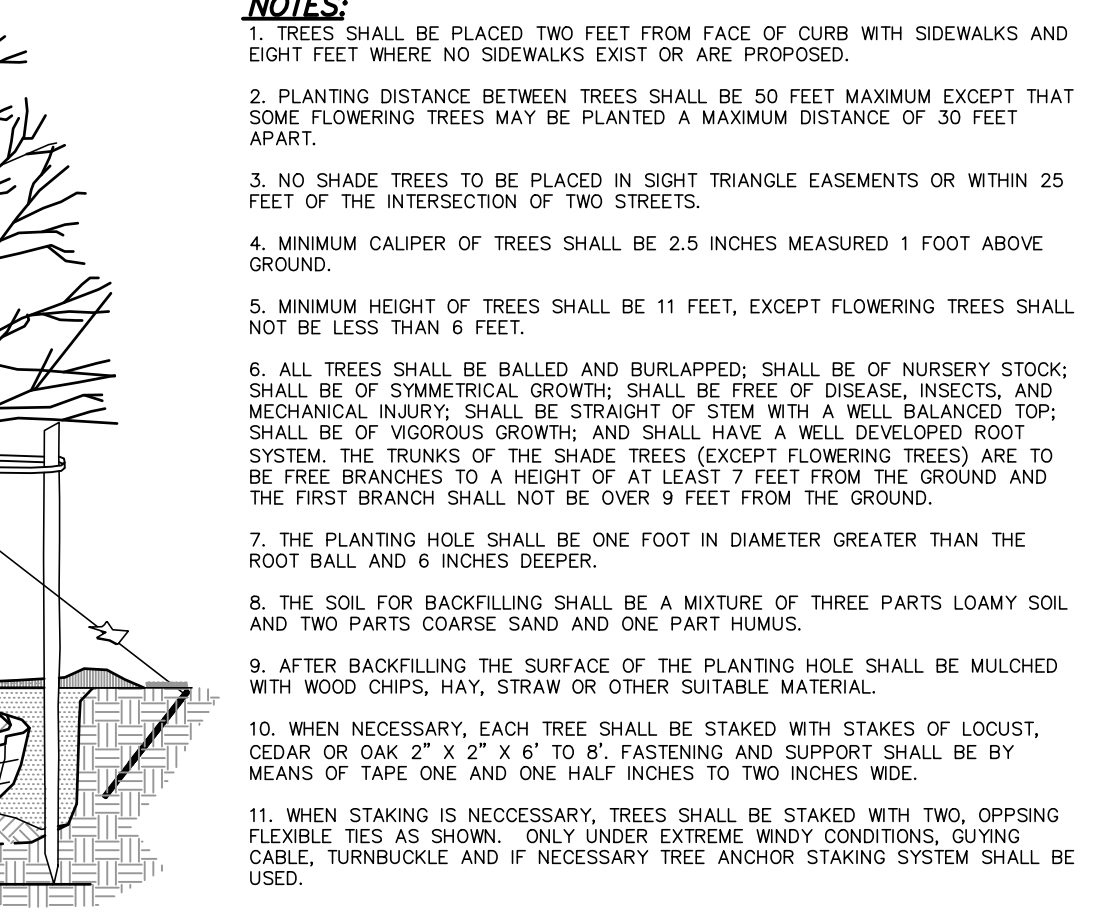
*VEHICLES IN EXCESS OF 75T MAY REQUIRE ADDITIONAL COVER



HDPE PIPE BEDDING DETAIL



TYPE "A" INLET



TREE STAKING DETAIL

- NOTES:**
- TREES UNDER 3" IN CALIPER SHALL BE STAKED. ALL TREES 3" IN CALIPER AND GREATER SHALL BE GUIED.
 - PLANTING DISTANCE BETWEEN TREES SHALL BE 50 FEET MAXIMUM EXCEPT THAT SOME FLOWERING TREES MAY BE PLACED A MAXIMUM DISTANCE OF 30 FEET APART.
 - NO SHADE TREES TO BE PLACED IN SIGHT TRIANGLE EASEMENTS OR WITHIN 25 FEET OF THE INTERSECTION OF TWO STREETS.
 - MINIMUM CALIPER OF TREES SHALL BE 2.5 INCHES MEASURED 1 FOOT ABOVE GROUND.
 - MINIMUM HEIGHT OF TREES SHALL BE 11 FEET, EXCEPT FLOWERING TREES SHALL NOT BE LESS THAN 6 FEET.
 - ALL TREES SHALL BE BALLED AND BURLAPPED. SHALL BE OF NURSERY STOCK. SHALL BE OF SYMMETRICAL GROWTH. SHALL BE FREE OF DISEASE, INSECTS, AND MECHANICAL INJURY. SHALL BE STRAIGHT OF STEM WITH A WELL BALANCED TOP. SHALL BE OF VIGOROUS GROWTH, AND SHALL HAVE A WELL DEVELOPED ROOT SYSTEM. THE TRUNKS OF THE SHADE TREES (EXCEPT FLOWERING TREES) ARE TO BE FREE BRANCHES TO A HEIGHT OF AT LEAST 7 FEET FROM THE GROUND AND THE FIRST BRANCH SHALL NOT BE OVER 9 FEET FROM THE GROUND.
 - THE PLANTING HOLE SHALL BE ONE FOOT IN DIAMETER GREATER THAN THE ROOT BALL AND 6 INCHES DEEPER.
 - THE SOIL FOR BACKFILLING SHALL BE A MIXTURE OF THREE PARTS LOAMY SOIL AND TWO PARTS COARSE SAND AND ONE PART HUMUS.
 - AFTER BACKFILLING THE SURFACE OF THE PLANTING HOLE SHALL BE MULCHED WITH WOOD CHIPS, HAY, STRAW OR OTHER SUITABLE MATERIAL.
 - WHEN STAKING IS NECESSARY, TREES SHALL BE STAKED WITH TWO, OPPOSING FLEXIBLE TIES AS SHOWN. ONLY UNDER EXTREME WINDY CONDITIONS, GIVING CABLE, TURNBUCKLE AND IF NECESSARY TREE ANCHOR STAKING SYSTEM SHALL BE USED.

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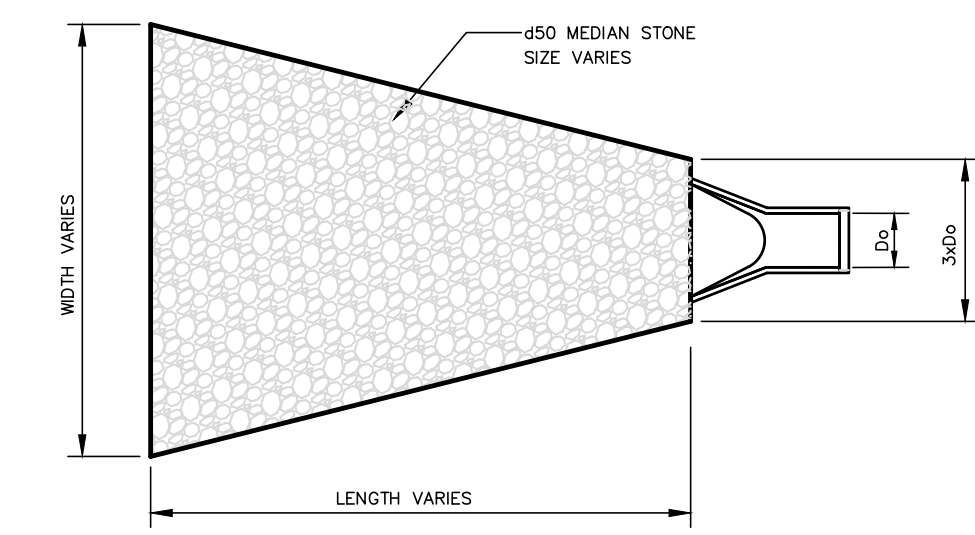
KEVIN J. ROBINE, P.E.
 PROFESSIONAL ENGINEER, N.J. LIC. NO. 24604965200

CONSTRUCTION NOTES & DETAILS

PRELIMINARY SITE PLAN
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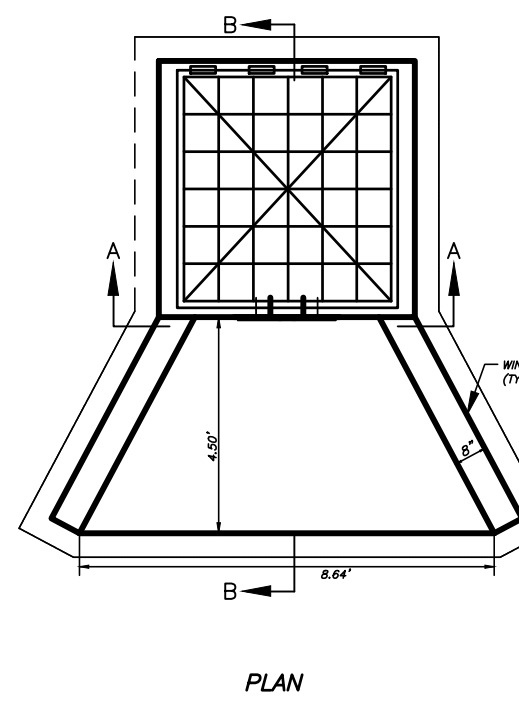
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 SHEET NO. 19 OF 21

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RIP-RAP APRON

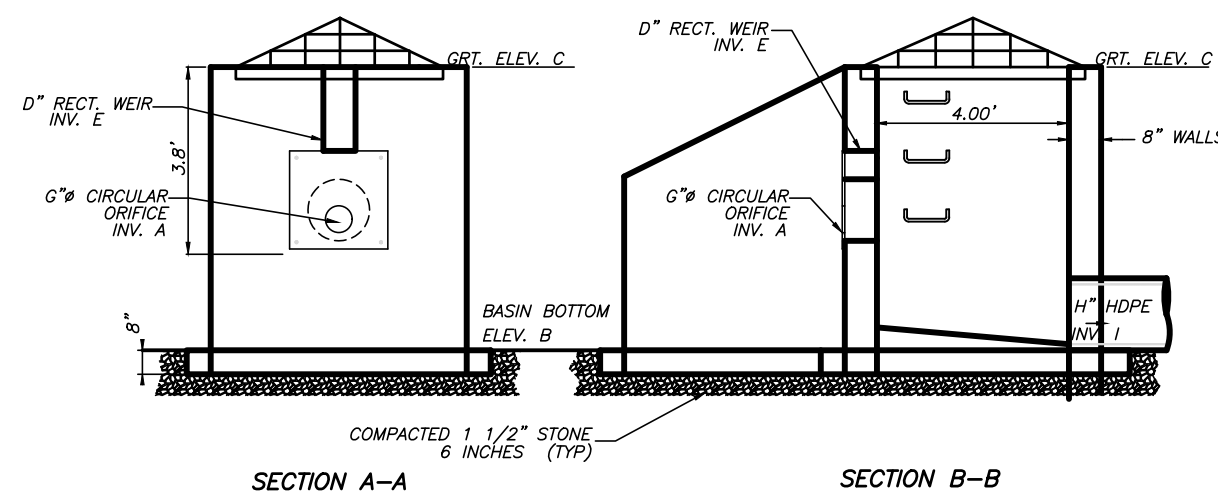
NOT TO SCALE



NOTES:

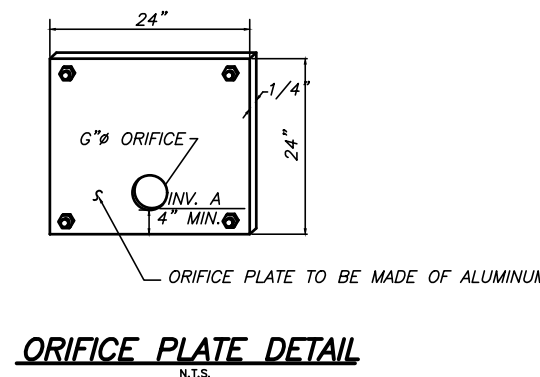
1. FOOTING TO BE N.I.D.O.T., CLASS "B"
2. INVERT TO BE CLASS "B"
3. IF WALL CONSTRUCTION IS OTHER THAN CONCRETE, THE WALLS SHALL BE PLASTERED BOTH INSIDE AND OUTSIDE WITH 1/2" THICK CEMENT PLASTER
4. GRATE TO BE OF ALUMINUM, PYRAMIDAL HINGED TYPE WITH 1/2" BARS SPACED AT 6" O.C.
5. PROVIDE ALUMINUM LADDER RUNGS @ 12" CENTER TO CENTER
6. WHEN ADDITIONAL DEPTH IS SCHEDULE WALLS BELOW THE DEPTH OF 8'-0" MEASURED FROM THE INLET GUTTER TO THE INVERT, SHALL BE 12" THICK. THE FOUNDATION DIMENSIONS SHALL BE INCREASED TO 12" WIDTH AND TO 12" IN DEPTH.

PLAN



SECTION A-A

SECTION B-B



ORIFICE PLATE DETAIL

NOT TO SCALE

OUTLET STRUCTURE

INVERT A:	12	23
BASIN ELEV. B:	588.92 FT	588.96 FT
GR. ELEV. C:	588.50 FT	588.00 FT
WEIR ELEV. D:	590.37 FT	590.05 FT
WEIR WIDTH:	24 IN	48 IN
CREST ELEVATION E:	589.48 FT	589.23 FT
DIAMETER G:	6 IN	6 IN
DIAMETER H:	15 IN	24 IN
INVERT I:	588.00 FT	585.65 FT

PAVEMENT REPAIR DETAIL

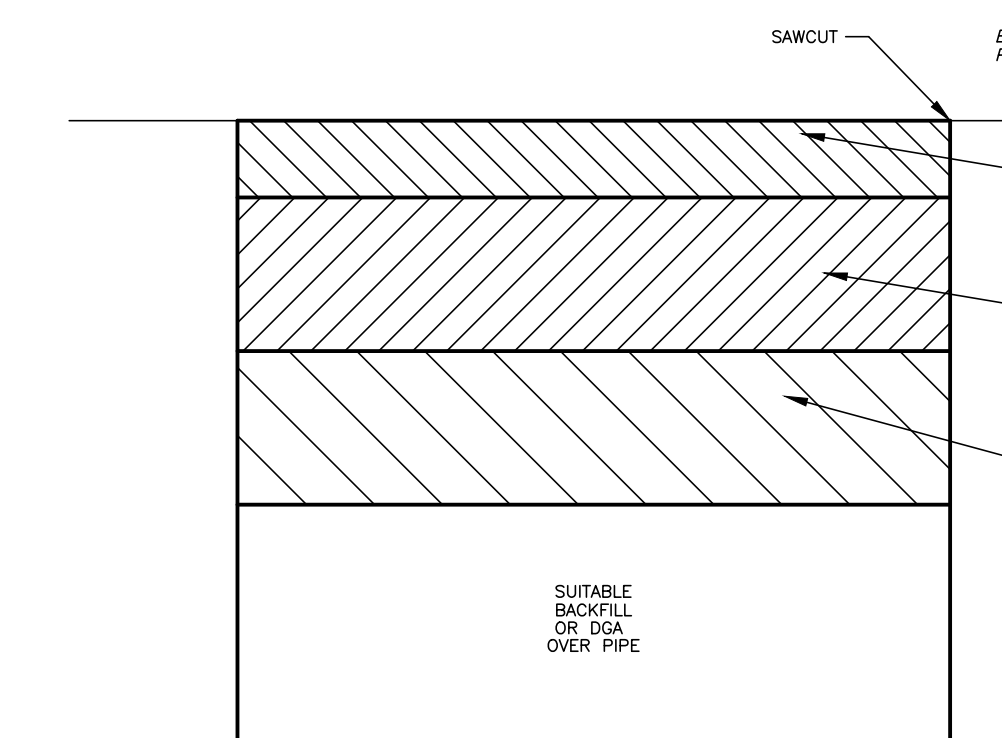
NOT TO SCALE

CONCRETE FLARED END SECTION

I.D.	12"	15"	18"	21"	24"	27"	30"	36"	42"	48"	54"	60"
"A"	2"	2.25"	2.5"	2.75"	3"	3.25"	3.5"	4"	4.5"	5"	5.5"	6"
"B"	6"	7.5"	9"	10"	10"	10"	14"	14"	21"	24"	27"	31"
"C"	24"	24"	24"	24"	24"	24"	26"	26"	36"	36"	36"	36"
"D"	24"	24"	24"	24"	24"	24"	30"	30"	36"	60"	60"	60"
"E"	4"	4"	4"	4"	4"	4"	4-8"	5-2"	8"	8"	8"	8"
"F"	24"	28"	34"	40"	48"	54"	60"	72"	78"	84"	90"	96"
"G"	28"	34.5"	41"	47.5"	54"	60.5"	67"	80"	87"	94"	101"	108"

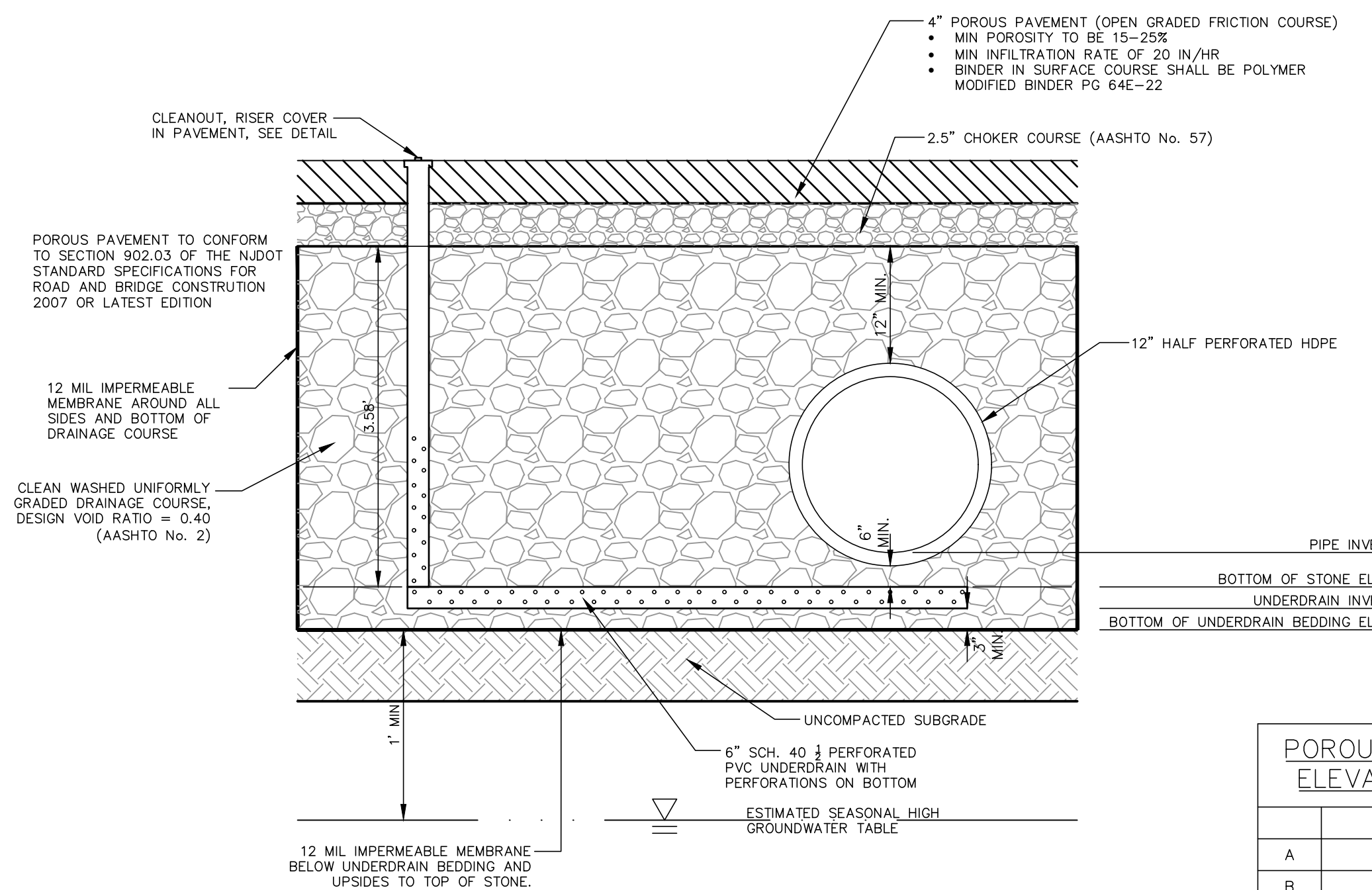
CONCRETE FLARED END SECTION

NOT TO SCALE



PAVEMENT REPAIR DETAIL

NOT TO SCALE



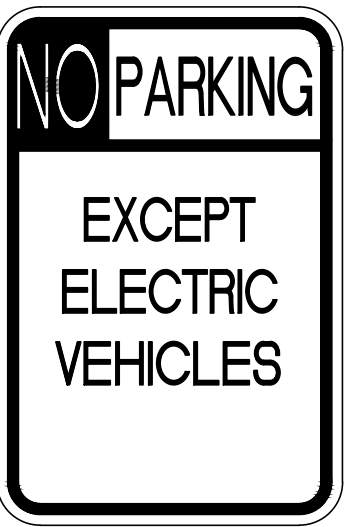
POROUS PAVEMENT SECTION (STORAGE AREA)

(OPEN GRADED FRICTION COURSE)

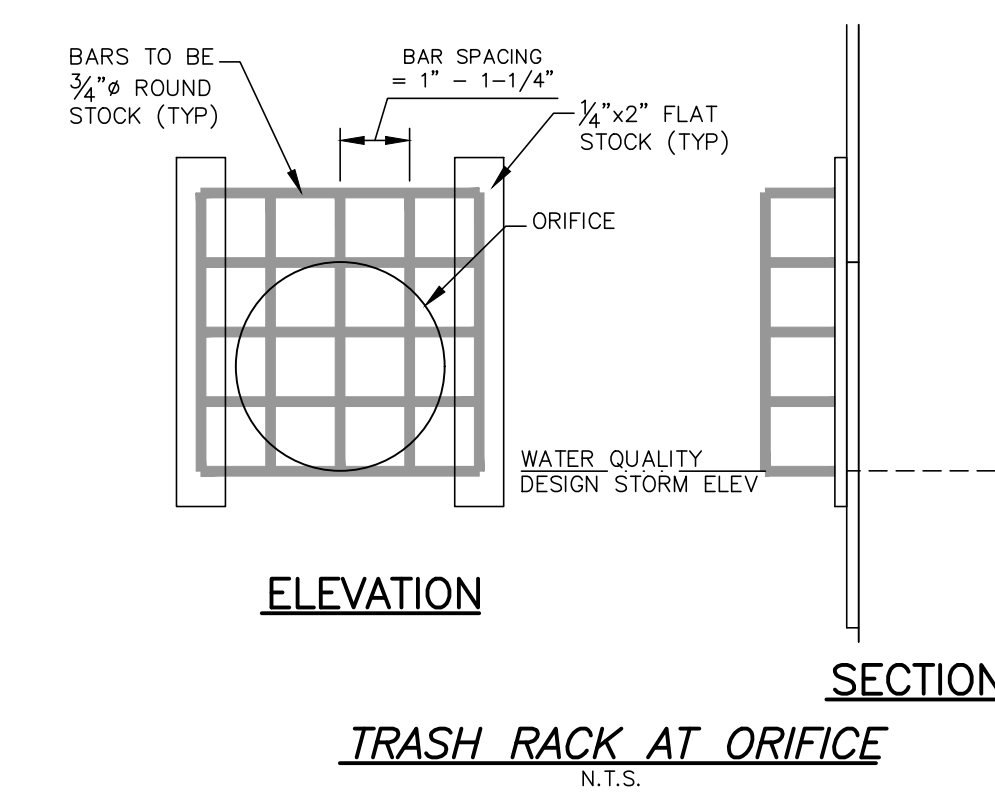
NOT TO SCALE

POROUS PAVEMENT ELEVATION TABLE

	STORAGE AREA #1
A	589.35
B	588.80
C	588.30
D	588.05



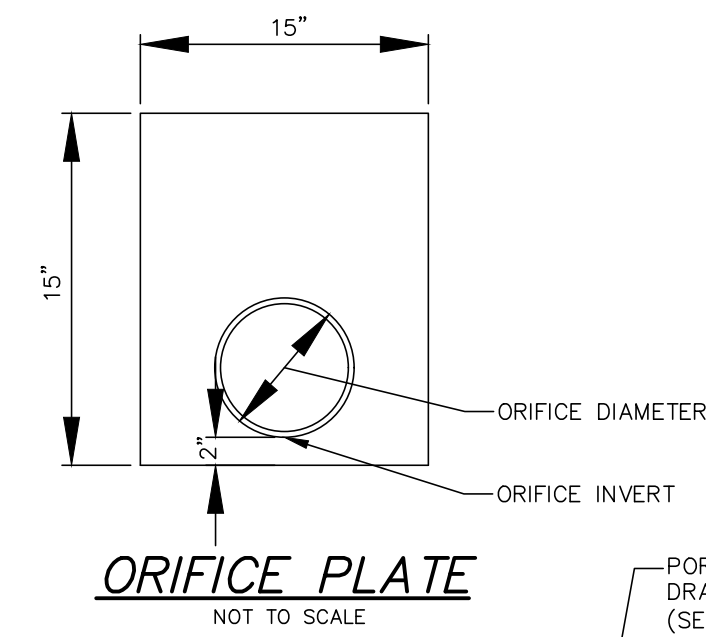
12" x 18"
R7-111 "NO PARKING EXCEPT ELECTRIC VEHICLES SIGN"
NOT TO SCALE



ELEVATION

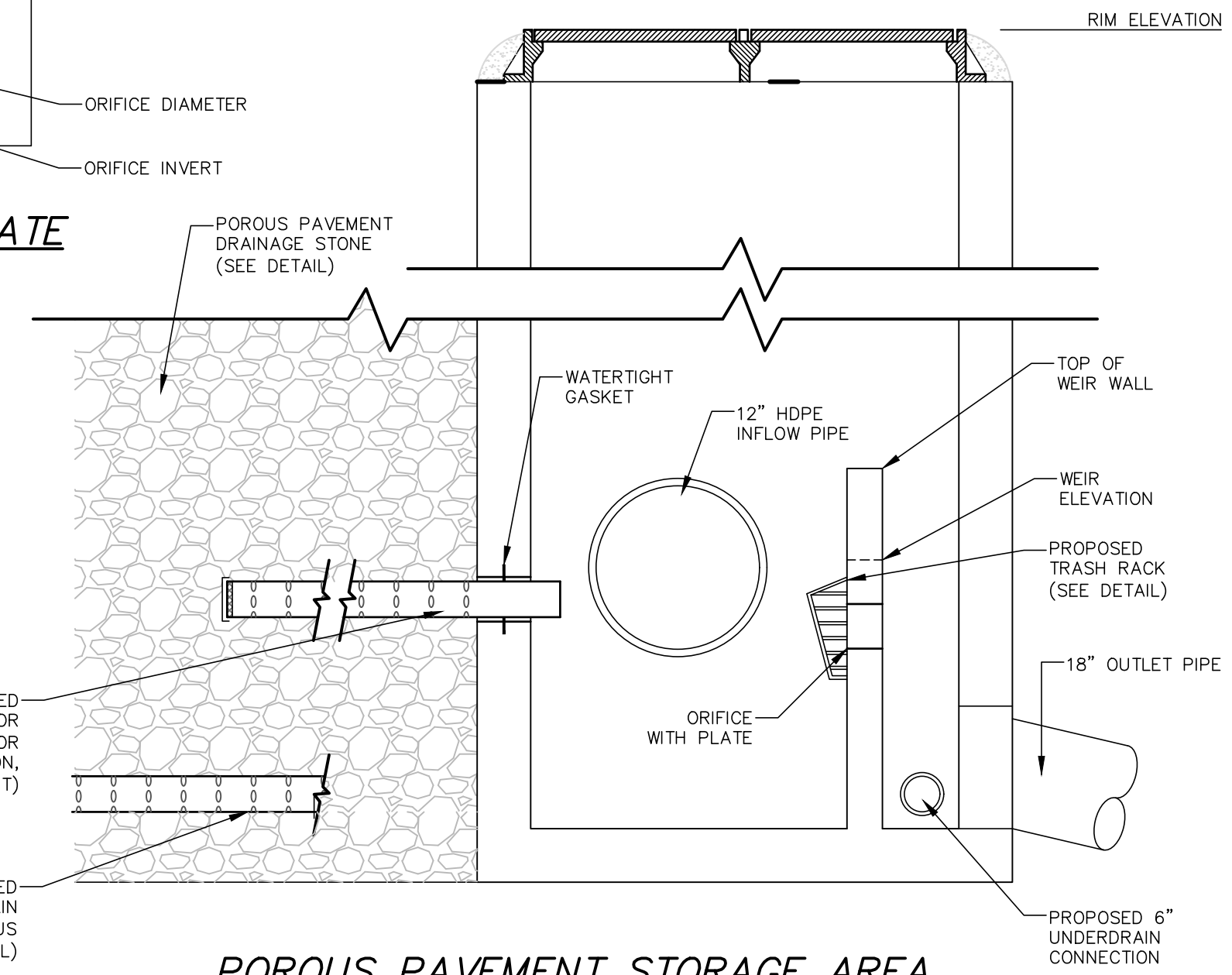
TRASH RACK AT ORIFICE

N.T.S.



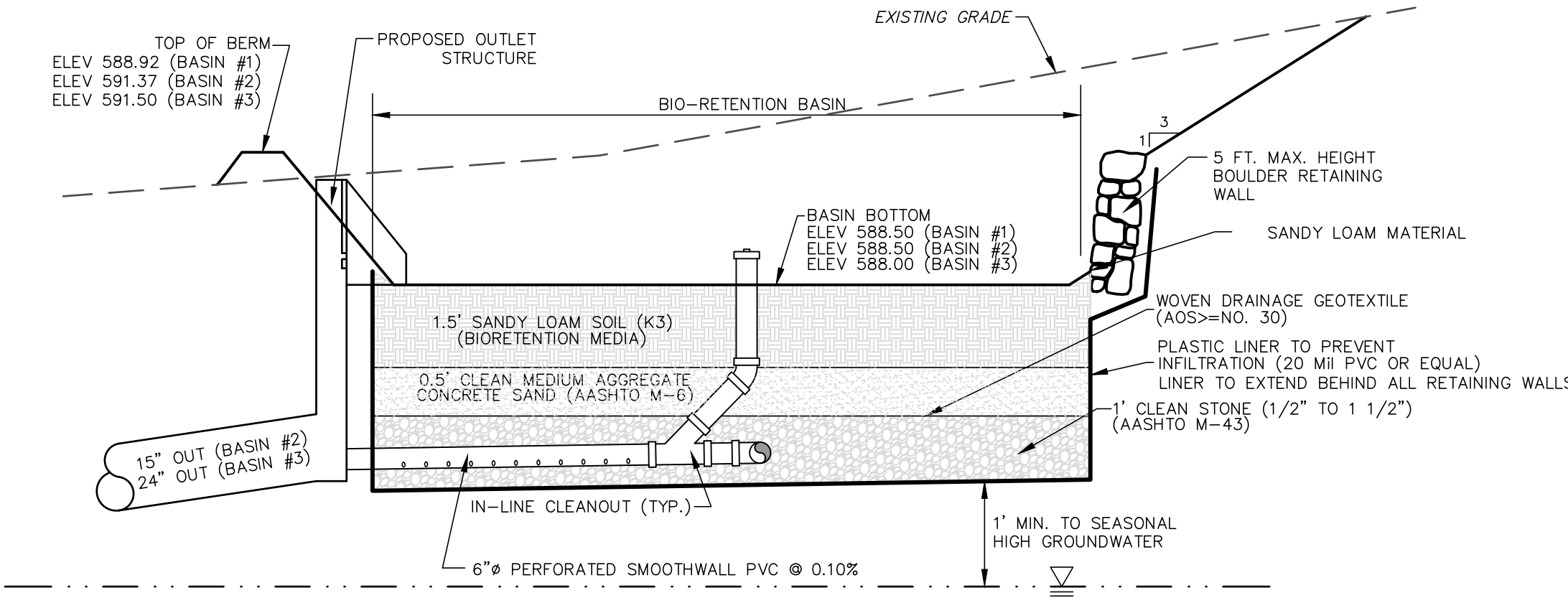
ORIFICE PLATE

NOT TO SCALE



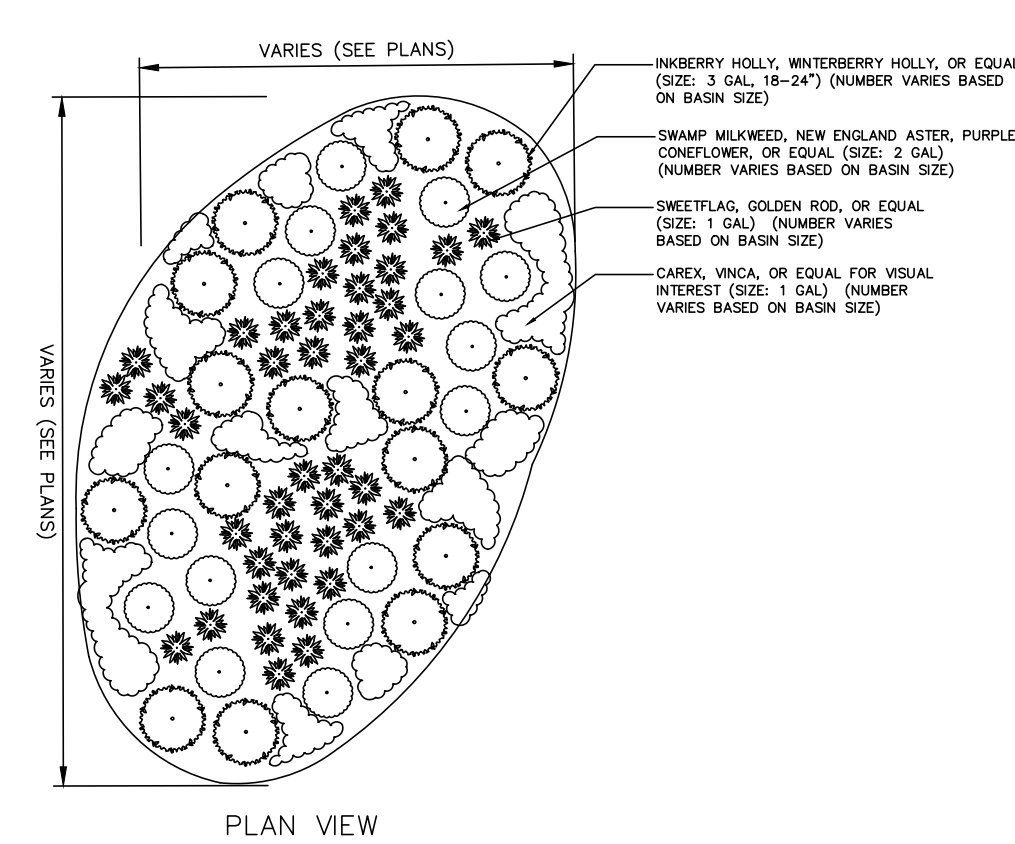
POROUS PAVEMENT STORAGE AREA OUTLET CONTROL STRUCTURE DETAIL

NOT TO SCALE

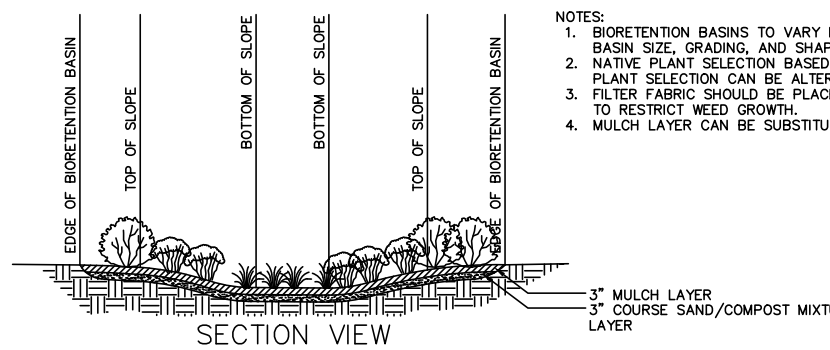


TYPICAL BIO-RETENTION BASIN SECTION

NOT TO SCALE



PLAN VIEW



SECTION VIEW

- NOTES:**
1. BIORETENTION BASINS TO VARY IN SIZE. SEE PLANS FOR BASIN SIZE, SPACING, AND SLOPE.
 2. BIORETENTION MEDIA SHALL CONFORM TO THE FOLLOWING SPECIFICATIONS. NATIVE TOPSOIL CAN BE USED TO MEET THESE SPECIFICATIONS WHEN USED IN THE PROPER MIXTURE WITH CONCRETE AGGREGATE SAND.
 3. MATERIAL SHALL CONSIST OF 85% TO 95% SANDS, WITH NO MORE THAN 25% OF THE SANDS AS FINE OR VERY FINE SANDS; NO MORE THAN 15% SILT AND CLAY WITH 2% TO 5% CLAY CONTENT. THE ENTIRE MIX SHALL THEN BE AMENDED WITH 3% TO 7% ORGANICS.
 4. LIME SHALL BE ADDED AS REQUIRED TO MEET THE pH SPECIFICATIONS.
 5. ALL CLAY AND SAND SHALL BE TESTED FOR GRADATION TO OBTAIN THE PROPER MIXTURE RATIO. THE ENGINEER SHALL APPROVE OF THE MIXTURE RATIO BEFORE PERMITTING THE BIORETENTION MEDIA TO BE PLACED.
 6. ALL BIORETENTION MEDIA SHALL BE PLACED BY TRACKHOE EXCAVATOR FROM THE SIDES OF THE FACILITY IN LIFTS OF 12"-18", AND IN NO EVENT SHALL ANY TRACKED OR WHEELED EQUIPMENT BE PERMITTED TO CROSS THE BIORETENTION MEDIA. THE ENGINEER SHALL BE PRESENT TO WITNESS THE PLACEMENT OF BIORETENTION MEDIA.
 7. THE BIORETENTION MEDIA SHALL BE LOOSELY PLACED AT A DEPTH OF 6 INCHES ABOVE FINAL GRADE TO ALLOW FOR SETTLEMENT; IT SHALL BE LEVELED BY HAND, ALLOWING FOR IRREGULAR DEPRESSIONS AND MOUNDS TO PROVIDE FOR PLANTING DIVERSITY.

BIORETENTION BASIN CONSTRUCTION NOTES:

1. DURING BASIN CONSTRUCTION, PRECAUTIONS MUST BE TAKEN TO PREVENT PLANTING SOIL BED COMPACTION BY CONSTRUCTION EQUIPMENT AND SEDIMENT CONTAMINATION OF RUNOFF. BASIN EXCAVATION AND PLANTING SOIL PLACEMENT SHOULD BE PERFORMED WITH EQUIPMENT PLACED OUTSIDE THE BASIN BOTTOM WHENEVER POSSIBLE. LIGHT EARTH MOVING EQUIPMENT WITH OVERSIZED TIRES OR TRACKS SHOULD BE UTILIZED WHEN THE BASIN MUST BE ENTERED.
2. TO PREVENT COMPACTION OF THE SOIL BELOW THE BASIN THAT WILL REDUCE ITS INFILTRATION CAPACITY, THE BASIN SHOULD BE EXCAVATED WITH LIGHT EARTH MOVING EQUIPMENT, PREFERABLY WITH TRACKS OR OVER-SIZED TIRES LOCATED OUTSIDE THE BASIN BOTTOM. ONCE THE BASIN'S FINAL CONSTRUCTION PHASE IS REACHED, THE FLOOR OF THE BASIN MUST BE DEEPLY TILLED WITH A ROTARY TILLER OR DISC HARROW AND SMOOTHED OVER WITH A LEVELING DRAG OR EQUIVALENT GRADING EQUIPMENT.
3. UPON STABILIZATION OF THE BIORETENTION BASIN AND ITS DRAINAGE AREA, THE INFILTRATION RATE OF THE PLANTING SOIL BED MUST BE RETESTED TO ENSURE THAT THE RATE ASSUMED IN THE COMPUTATIONS IS PROVIDED AT THE BASIN. THE PERMEABILITY RATE OF THE SUBSOIL BELOW THE BASIN MUST ALSO BE RETESTED AFTER CONSTRUCTION.
4. IF BACKFILL IS UTILIZED FOR THE BASIN MEDIA, A NEW JERSEY LICENSED GEOTECHNICAL ENGINEER SHALL BE REQUIRED TO CERTIFY THE MATERIAL.
5. PRIOR TO CONSTRUCTION OF THE BIO-RETENTION BASIN, A DETAILED PLAN OF HOW THE CONSTRUCTION OF THE BASIN WILL PROCEED IS REQUIRED, AND A SITE MEETING WITH THE ENGINEER MUST BE SCHEDULED BY THE CONTRACTOR TO DISCUSS THE SAME.

NOTES:

1. EXISTING FILL DIRT AND TOPSOIL MUST BE COMPLETELY REMOVED BEFORE INSTALLING UNDERDRAIN SYSTEM AND BIORETENTION MEDIA.
2. BIORETENTION MEDIA SHALL CONFORM TO THE FOLLOWING SPECIFICATIONS. NATIVE TOPSOIL CAN BE USED TO MEET THESE SPECIFICATIONS WHEN USED IN THE PROPER MIXTURE WITH CONCRETE AGGREGATE SAND.
3. MATERIAL SHALL CONSIST OF 85% TO 95% SANDS, WITH NO MORE THAN 25% OF THE SANDS AS FINE OR VERY FINE SANDS; NO MORE THAN 15% SILT AND CLAY WITH 2% TO 5% CLAY CONTENT. THE ENTIRE MIX SHALL THEN BE AMENDED WITH 3% TO 7% ORGANICS.
4. LIME SHALL BE ADDED AS REQUIRED TO MEET THE pH SPECIFICATIONS.
5. ALL CLAY AND SAND SHALL BE TESTED FOR GRADATION TO OBTAIN THE PROPER MIXTURE RATIO. THE ENGINEER SHALL APPROVE OF THE MIXTURE RATIO BEFORE PERMITTING THE BIORETENTION MEDIA TO BE PLACED.
6. ALL BIORETENTION MEDIA SHALL BE PLACED BY TRACKHOE EXCAVATOR FROM THE SIDES OF THE FACILITY IN LIFTS OF 12"-18", AND IN NO EVENT SHALL ANY TRACKED OR WHEELED EQUIPMENT BE PERMITTED TO CROSS THE BIORETENTION MEDIA. THE ENGINEER SHALL BE PRESENT TO WITNESS THE PLACEMENT OF BIORETENTION MEDIA.
7. THE BIORETENTION MEDIA SHALL BE LOOSELY PLACED AT A DEPTH OF 6 INCHES ABOVE FINAL GRADE TO ALLOW FOR SETTLEMENT; IT SHALL BE LEVELED BY HAND, ALLOWING FOR IRREGULAR DEPRESSIONS AND MOUNDS TO PROVIDE FOR PLANTING DIVERSITY.

OUTLET CONTROL STRUCTURE SUMMARY TABLE

STRUCTURE #	RIM ELEVATION	TOP OF WEIR WALL	WEIR ELEVATION	WEIR LENGTH	ORIFICE DIAMETER	ORIFICE INVERT	OUTLET PIPE INVERT	UNDERDRAIN INVERT
#39	592.50	591.28	590.00	2 FT	6"	589.41	588.17	588.30

CONSTRUCTION NOTES & DETAILS

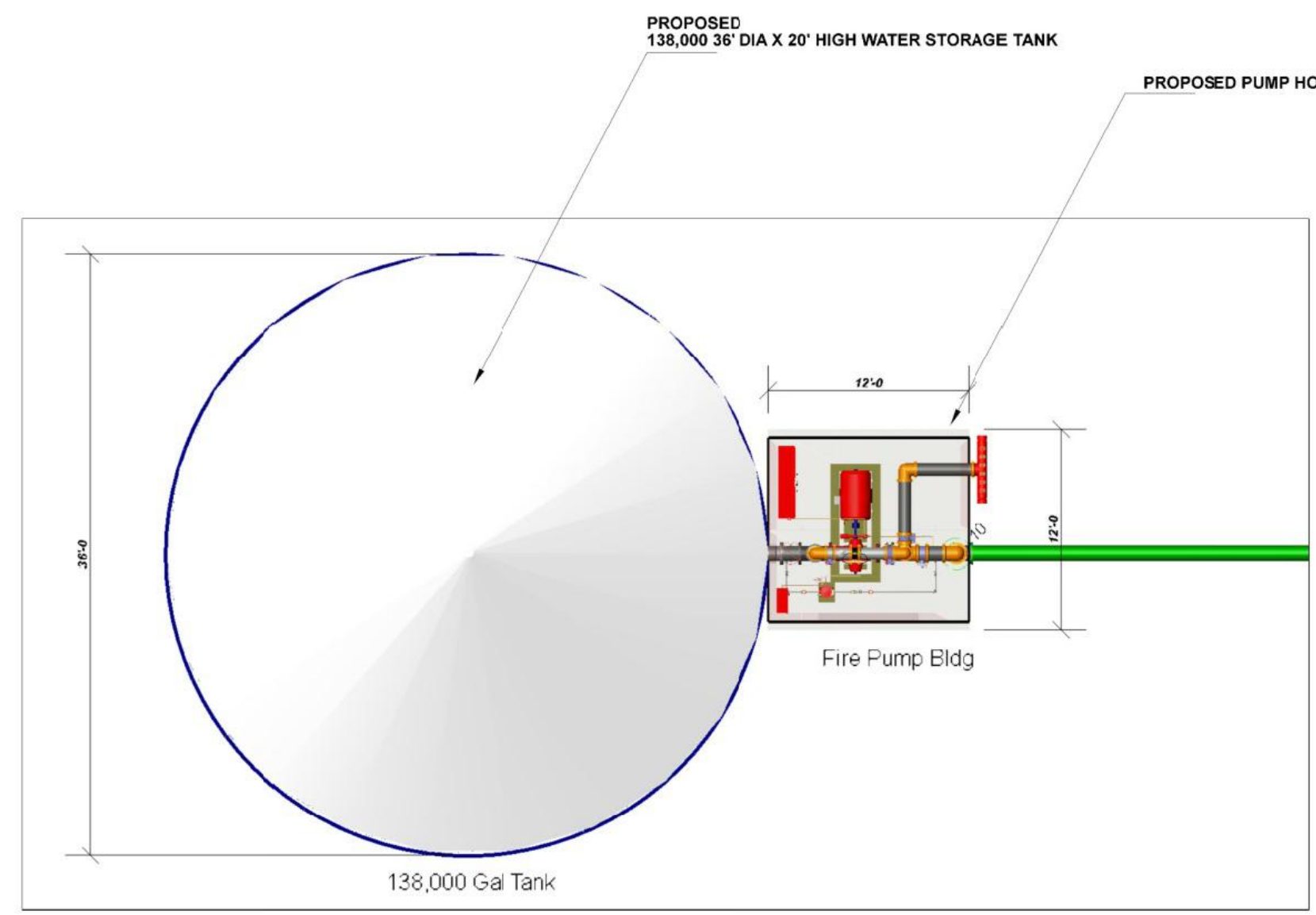
PRELIMINARY SITE PLAN
BLOCK 158, LOT 6
U.S. HIGHWAY ROUTE 206 &
BRIGHTON ROAD (C.R. 603)
TOWNSHIP OF ANDOVER
SUSSEX COUNTY NEW JERSEY

SCALE: AS NOTED
JOB NO.: 01109
DRAWN BY: TJB
CHECKED BY: KJR
DATE: 7/20/23
SHEET NO. 20 OF 21

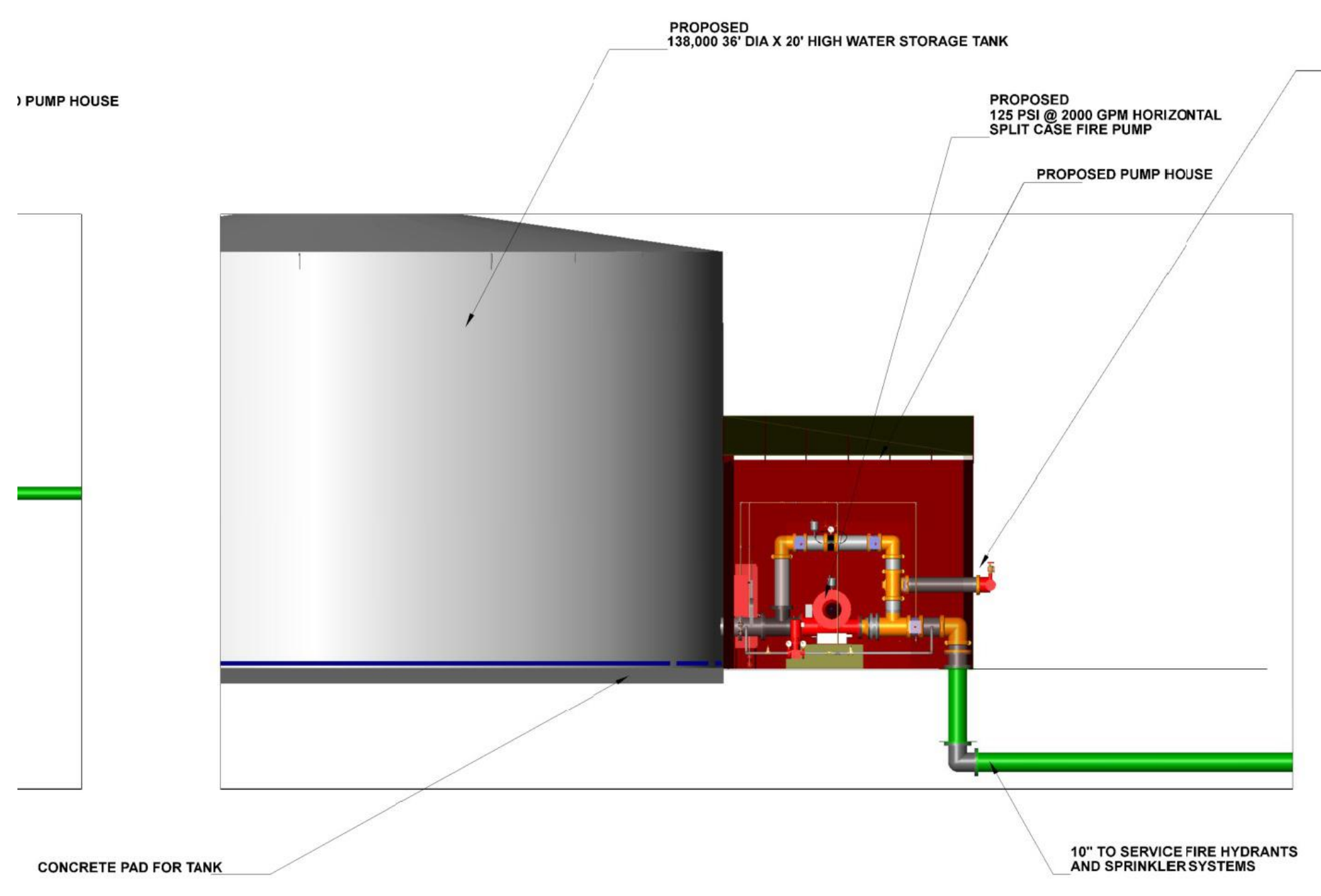
DYKSTRA WALKER DESIGN GROUP
PROFESSIONAL ENGINEERS, PLANNERS & SURVEYORS
21 BOWLING GREEN PARKWAY, SUITE 204 - LAKE HOPATCONG, NJ 07849
PHONE (973) 663-5540 - FAX (973) 663-0042
WWW.DYKSTRAWALKER.COM

KEVIN J. ROBINE, P.E.
PROFESSIONAL ENGINEER, N.J. LIC. NO. 24GE04965200

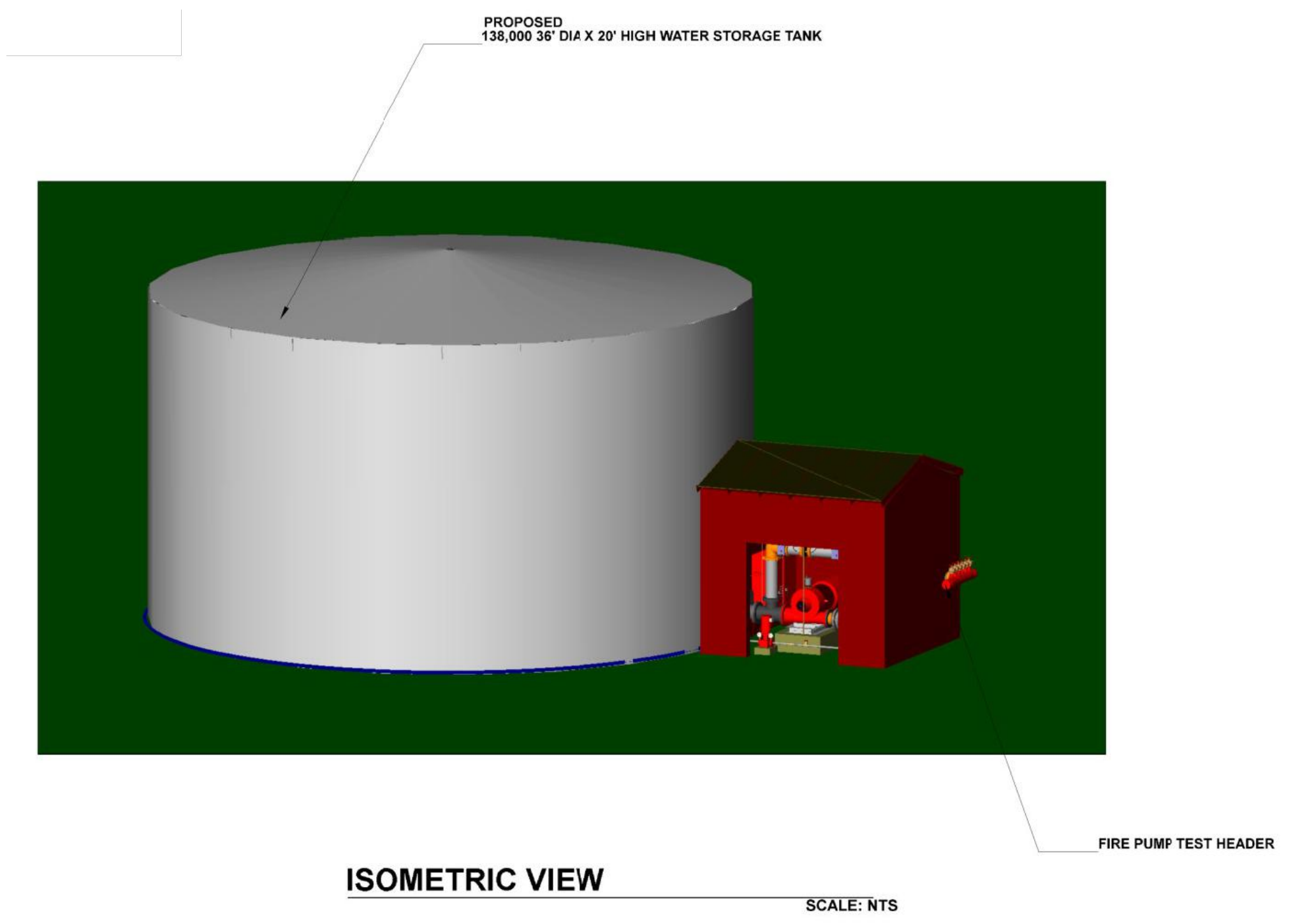
2/22/24	REVISED BASED ON BOARD ENGINEER'S COMMENTS
DATE	REVISION



PLAN VIEW
SCALE: N.T.S.



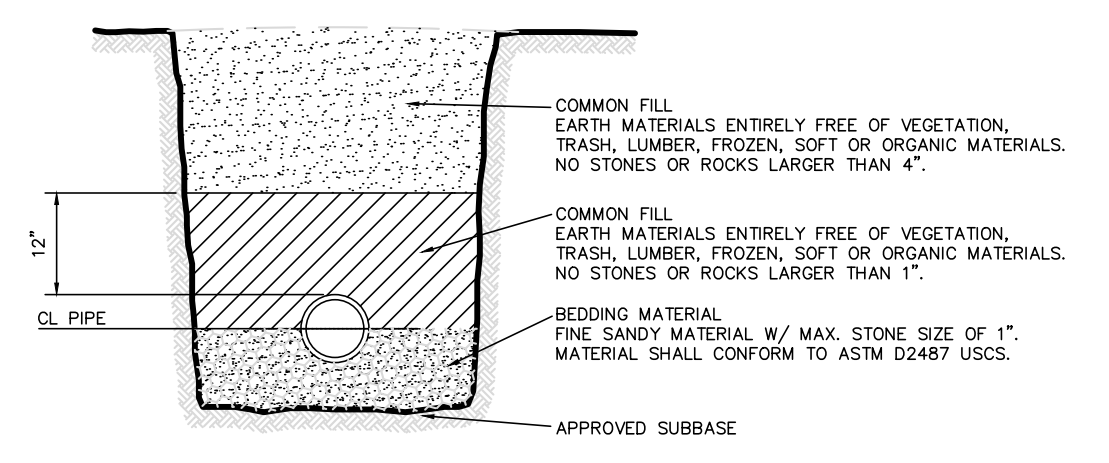
SIDE VIEW
SCALE: N.T.S.



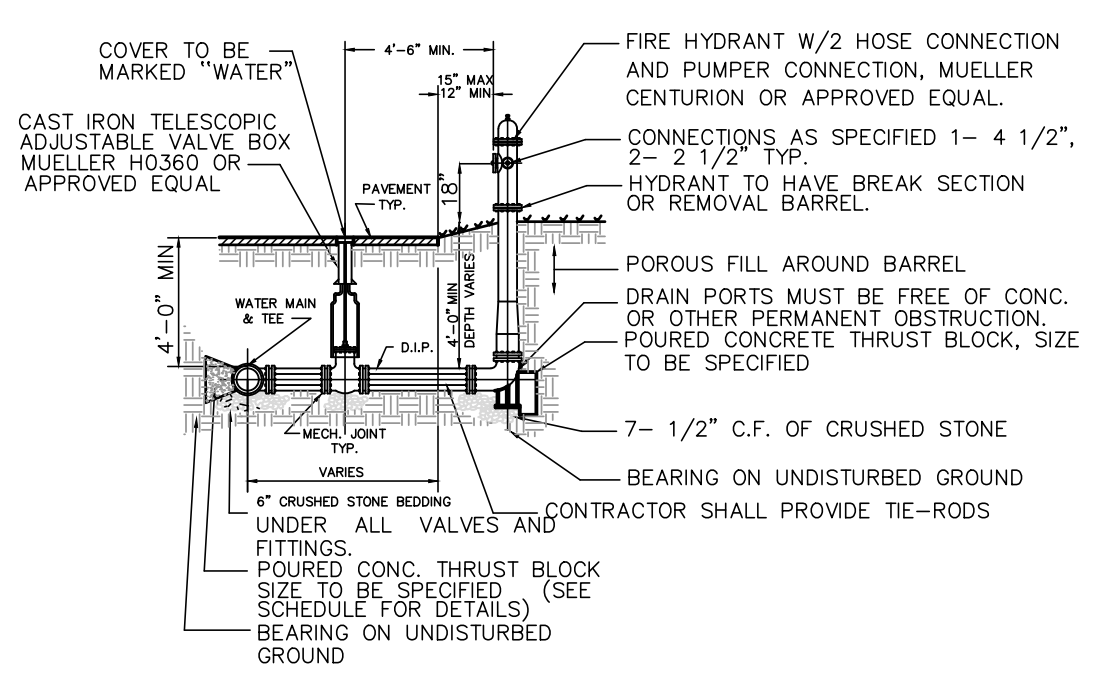
ISOMETRIC VIEW
SCALE: N.T.S.

PROPOSED FIRE TANK AND PUMP HOUSE DETAIL
NOT TO SCALE

GENERAL NOTES:
1) ALL CONSTRUCTION SHALL MEET STANDARD DOT SPECIFICATIONS, THE LATEST EDITION.
2) ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST OSHA STANDARDS.

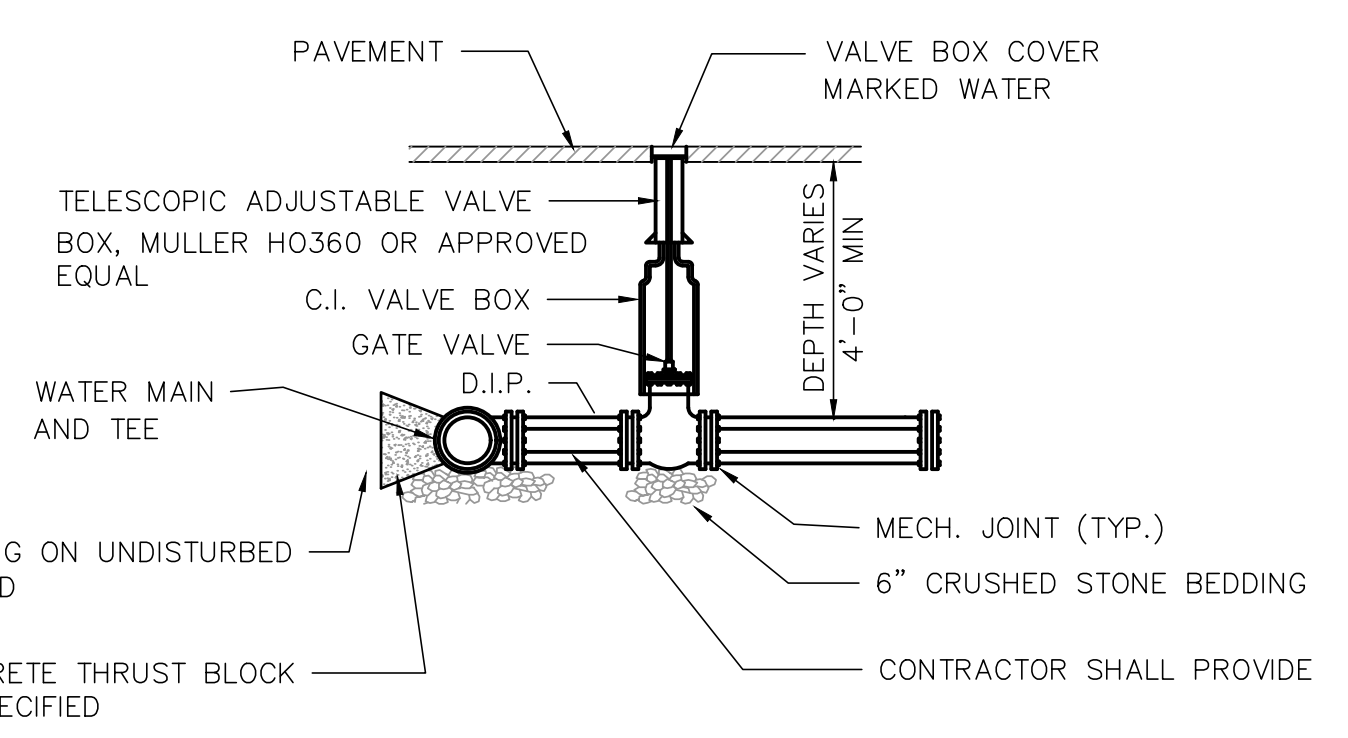


TYPICAL WATER MAIN TRENCH DETAIL
N.T.S.



- NOTES:**
1. CONCRETE FOR THRUST BLOCKS TO BE N.J.D.O.T., CLASS "C".
 2. SIZE AND BEARING AREA FOR THRUST BLOCKS SHALL CONFORM TO CURRENT A.W.W.A. STANDARDS OR SHALL BE DESIGNATED ON THE PLANS.
 3. FINISH PAINTING AND MARKING SHALL BE DESIGNATED ON THE PLANS OR CONTRACT DOCUMENTS OR SHALL BE AS DIRECTED BY THE ENGINEER.
 4. TYPICAL HYDRANT LOCATION ADJACENT TO ROADWAY, FOR SPECIAL LOCATION REFER TO PLANS.
 5. SPECIAL HYDRANT ARRANGEMENT OR SETTINGS TO BE DETAILED BY CONTRACTOR AND SUBJECT TO THE ENGINEER'S APPROVAL.
 6. ALL CONNECTIONS TO BE MECHANICAL JOINT OR LOCK RING TYPE JOINT AS SPECIFIED.

TYPICAL HYDRANT INSTALLATION
N.T.S.



- NOTES:**
1. SIZE AND BEARING FOR THRUST BLOCK SHALL CONFORM TO CURRENT A.W.W.A. STANDARDS, OR SHALL BE DESIGNATED ON THE PLANS.
 2. CONCRETE FOR THE THRUST BLOCKS TO BE N.J.D.O.T., CLASS "C".
 3. ALL CONNECTIONS TO BE MECHANICAL JOINT, OR LOCK RING TYPE JOINTS, AS SPECIFIED.

GATE VALVE ASSEMBLY
N.T.S.

DIAMETER OF PIPE (d)	22 1/2" ELBOW	45° ELBOW	90° ELBOW	TEE	PLUG
d	"A"	"A"	"A"	"A"	"A"
6"	0.5	1.1	2.0	1.4	1.4
8"	1.0	1.9	3.6	2.7	2.7
10"	1.5	3.0	5.5	4.2	4.2
12"	2.2	4.3	8.0	5.7	5.7
16"	4.5	7.7	14.2	10.0	10.0
20"	6.1	12.0	22.3	15.7	15.7
24"	8.8	17.2	32.0	22.7	22.7

"A" - CONTACT BEARING AREA OF BLOCK WITH EARTH, IN SQUARE FEET

- NOTES:**
1. BEARING AREAS ARE BASED ON UNDISTURBED SOIL WITH A BEARING CAPACITY OF 4000LBS. PER SQ. FT. FOR A LESSER SOIL BEARING CAPACITY, THESE AREAS SHALL BE INCREASED ACCORDINGLY.
 2. ALL CONCRETE THRUST BLOCKS SHALL BE CLASS B.
 3. THRUST BLOCKS SHALL BE POURED AGAINST UNDISTURBED EARTH.
 4. TEST PRESSURE = 150 P.S.I.

THRUST BLOCK TABLE
N.T.S.

J:\edtek\PROJ\01\0109\dwg\Site Plan_2023_01109.dwg 02/22/24 04:37:38PM Kevin_Layout.CONSTRUCTION NOTES (5)

<p>DYKSTRA WALKER DESIGN DW GROUP PA PROFESSIONAL ENGINEERS, PLANNERS & SURVEYORS 21 BOWLING GREEN PARKWAY, SUITE 204 - LAKE HOPATCONG, NJ 07849 PHONE (973) 663-5540 - FAX (973) 663-0042 WWW.DYKSTRAWALKER.COM</p> <p><i>Kevin J. Robine</i> KEVIN J. ROBINE, P.E. PROFESSIONAL ENGINEER, N.J. LIC. NO. 24GE04965200</p>		<p>CONSTRUCTION NOTES & DETAILS</p> <p>PRELIMINARY SITE PLAN BLOCK 158, LOT 6 U.S.HIGHWAY ROUTE 206 & BRIGHTON ROAD (C.R. 603) TOWNSHIP OF ANDOVER SUSSEX COUNTY NEW JERSEY</p>	<p>DW</p> <p>SCALE: AS NOTED JOB NO.: 01109 DRAWN BY: TJB CHECKED BY: KJR DATE: 2/22/24 SHEET NO. 21 OF 21</p>
DATE	REVISION		