TOWNSHIP of HOPEWELL
MERCER COUNTY

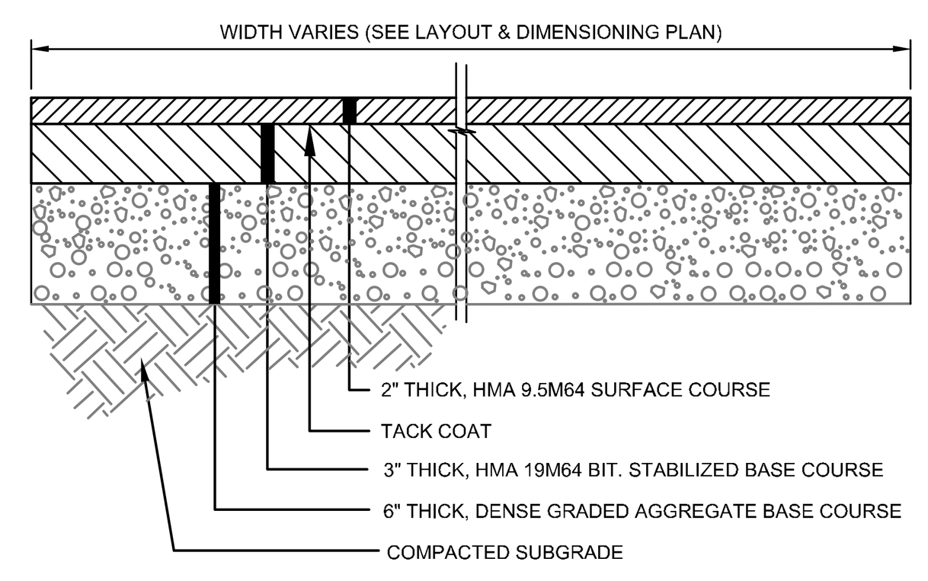
201 WASHINGTON CROSSING – PENNINGTON ROAD
TITUSVILLE, NEW JERSEY 08560-1410

PROJECT / APPLICATION

BLOCK:	85 / 86
LOT:	3 & 9 / 32, 33, 34 & 130
ADDRESS:	12 Wash Cross Penn Road, 1646 Reed Road, 24 & 26 Diverty Road
PROJECT NAME:	The Collection at Hopewell - Preliminary/Final Major Subdivision and Site Plan

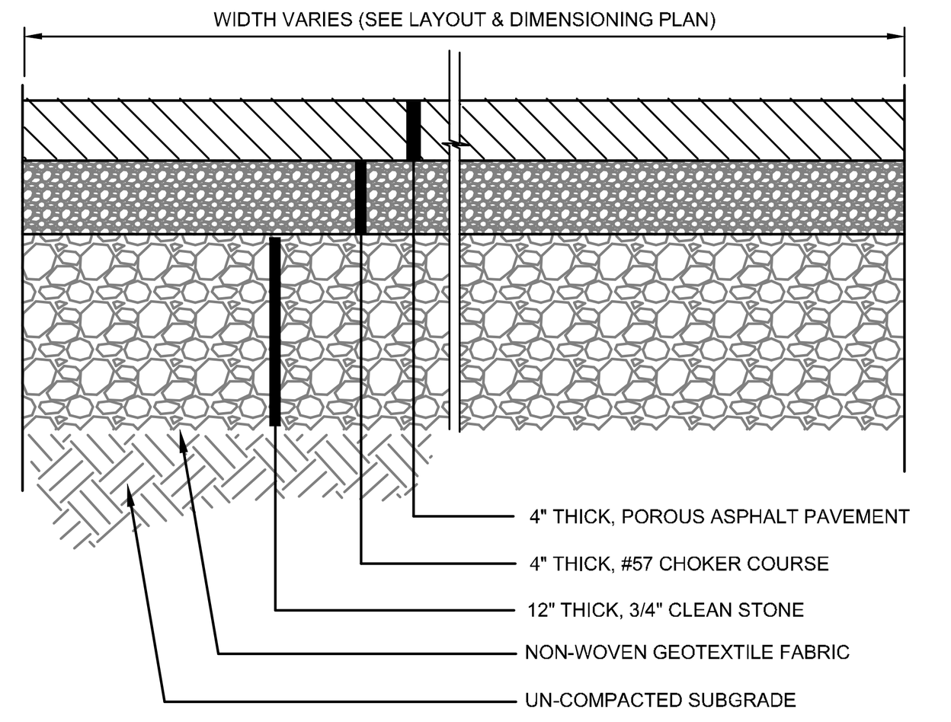
PLANS

Part 12 - Construction Details



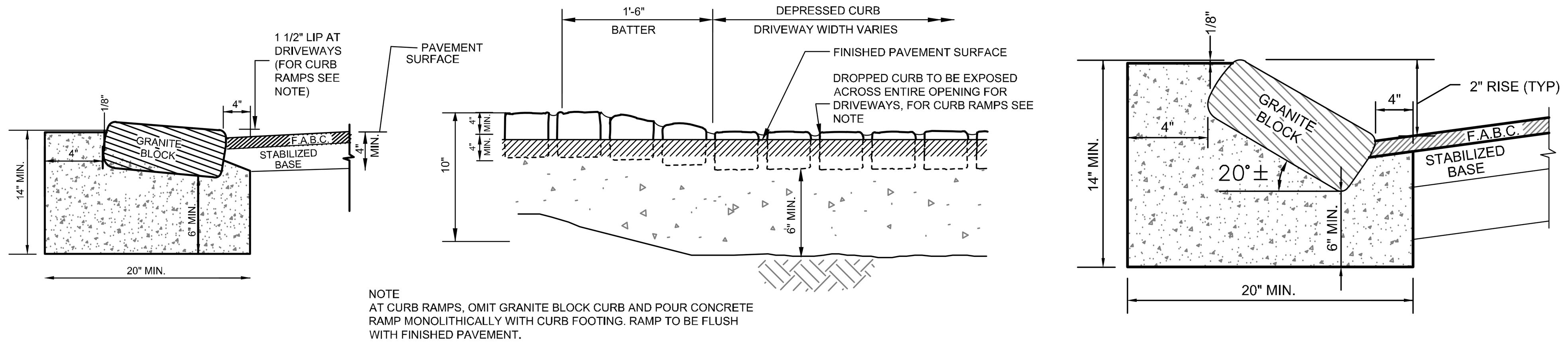
ON-SITE HOT MIX ASPHALT PAVEMENT DETAIL

NOT TO SCALE



POROUS ASPHALT PAVEMENT DETAIL

NOT TO SCALE



NOTE
AT CURB RAMPS, OMIT GRANITE BLOCK CURB AND POUR CONCRETE RAMP MONOLITHICALLY WITH CURB FOOTING. RAMP TO BE FLUSH WITH FINISHED PAVEMENT.

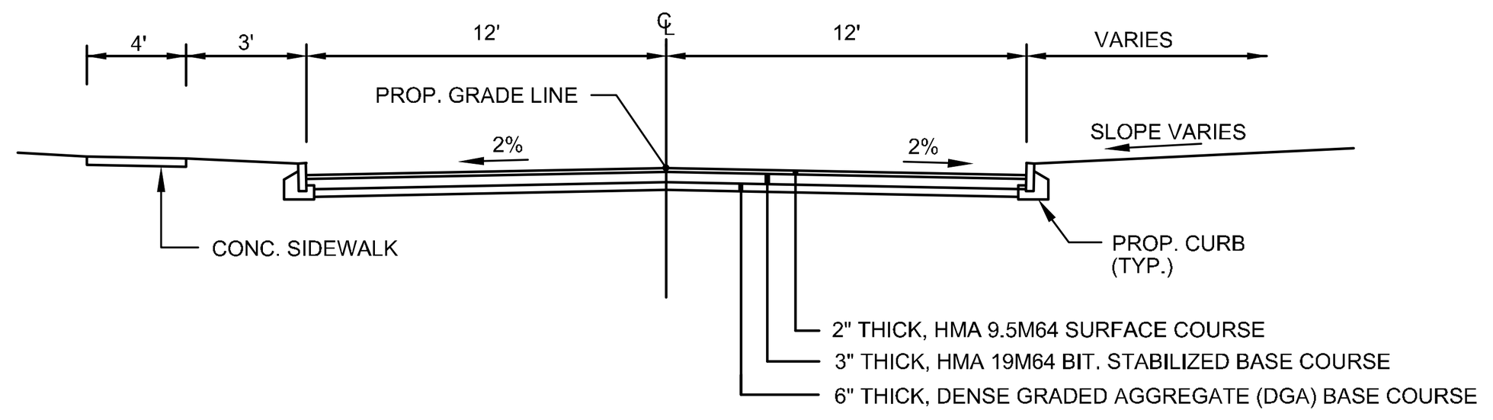
MOUNTABLE GRANITE BLOCK CURB AND TRANSITION DETAIL

NOT TO SCALE

GENERAL NOTES:

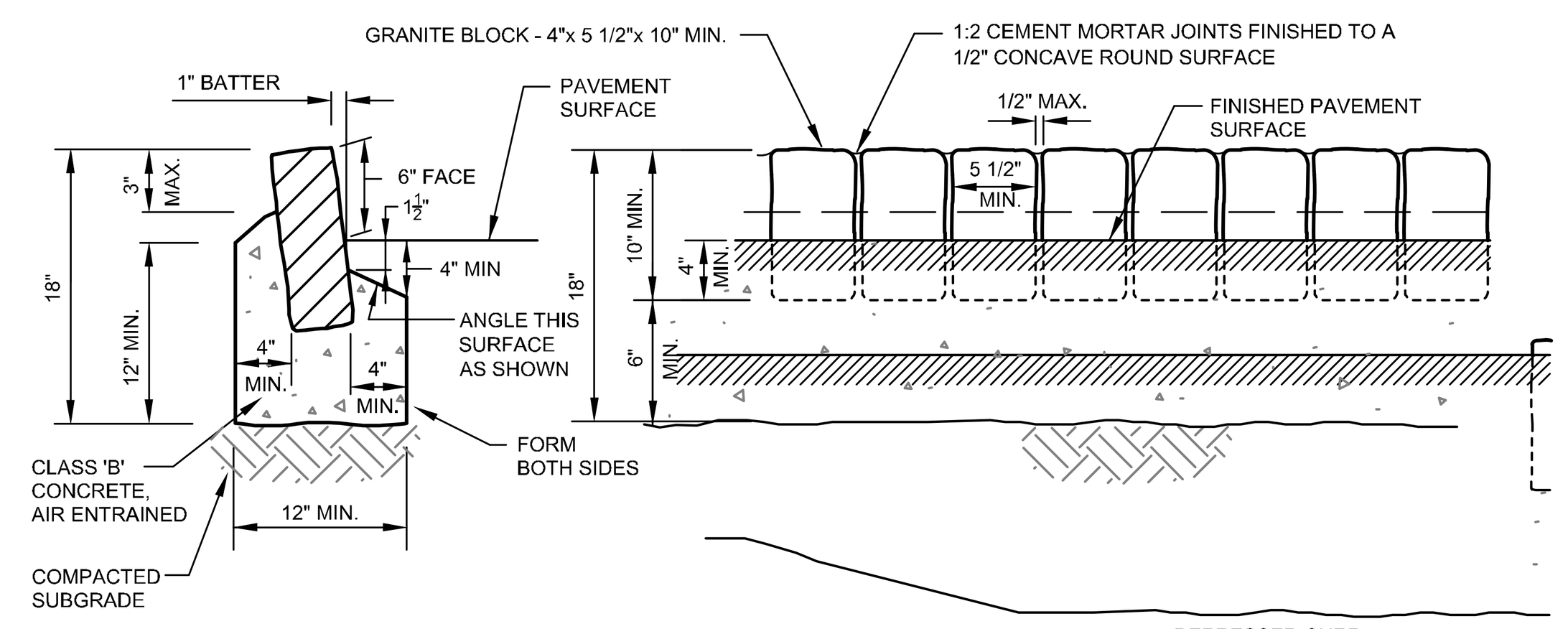
1. LANDING AREA, APPROACH SIDEWALK TRANSITIONS, AND CURB RAMP SHALL BE KEPT CLEAR.
2. DIMENSIONS SHOWN IN TABLES ARE FOR RELATIVELY FLAT SIDEWALK AREAS. CARE SHOULD BE TAKEN WHEN DETERMINING CURB RAMP SIZE BASED ON CURB HEIGHT (H) WHERE ELEVATION. OF CURB AND SIDEWALK VARY DRASTICALLY IN AREA OF PROPOSED CURB RAMP.
3. CURB (DROPPED CURB) GUTTERLINE SHALL BE FLUSH WITH ROADWAY PAVEMENT A MINIMUM OF 4 FEET AT ALL CURB RAMPS, EXCEPT THAT CURB RAMP TYPE 6 SHALL BE A MINIMUM OF 5 FEET.
4. WHERE THE DISTANCE FROM THE GUTTER LINE TO THE OUTSIDE EDGE OF SIDEWALK IS 6 FEET OR LESS, THE PUBLIC SIDEWALK CURB RAMP DELINEATION (SHADED AREA) SHALL BE SAFETY RED IN COLOR.
5. WHERE THE DISTANCE FROM THE GUTTER LINE TO THE OUTSIDE EDGE OF THE SIDEWALK IS 6 FEET OR LESS, CURB RAMP TYPE 7 SHOULD BE USED, INSTEAD OF CURB RAMP TYPES 1 THROUGH 3.
6. CROSSWALKS AND STOP LINES MAY BE MARKED OR UNMARKED, SEE PLANS.
7. DIMENSIONS SHOWN ON THE TABLES ARE FOR 4, 6, OR 8 INCH CURB HEIGHTS, WHERE THE CURB HEIGHTS ARE OTHER THAN WHAT IS PROVIDED IN THE TABLES, THE DIMENSIONS OF THE RAMPS WILL HAVE TO BE CALCULATED BASED ON THE CROSS SLOPES SHOWN.
8. ALL FULL CURB DEPRESSIONS SHALL BE CONSTRUCTED OF CONCRETE, REGARDLESS OF THE CURB TYPE THROUGHOUT THE PROJECT.

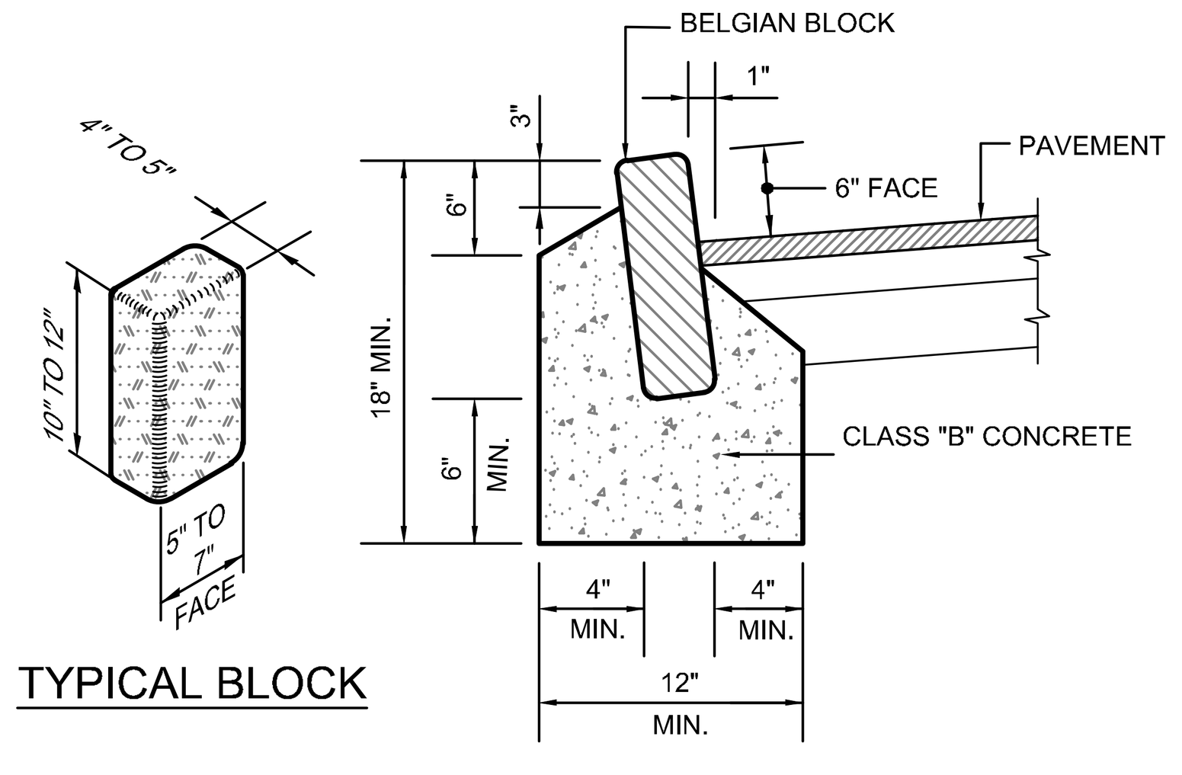
ADA SIDEWALK AND CURB RAMP NOTES



TYPICAL SECTION – ONSITE ROADS

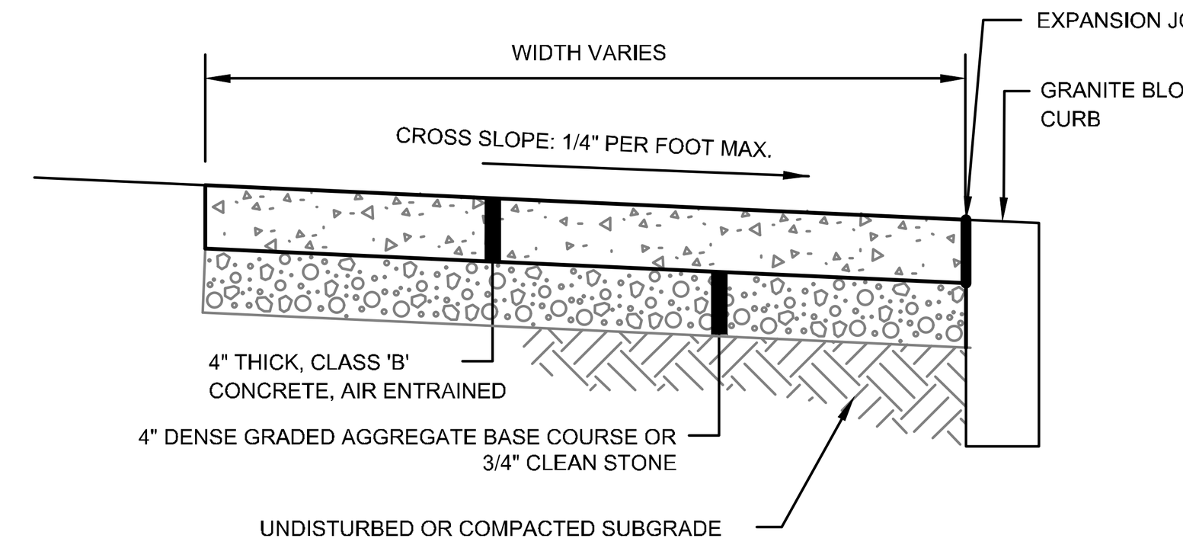
NOT TO SCALE





GRANITE BLOCK CURB DETAIL

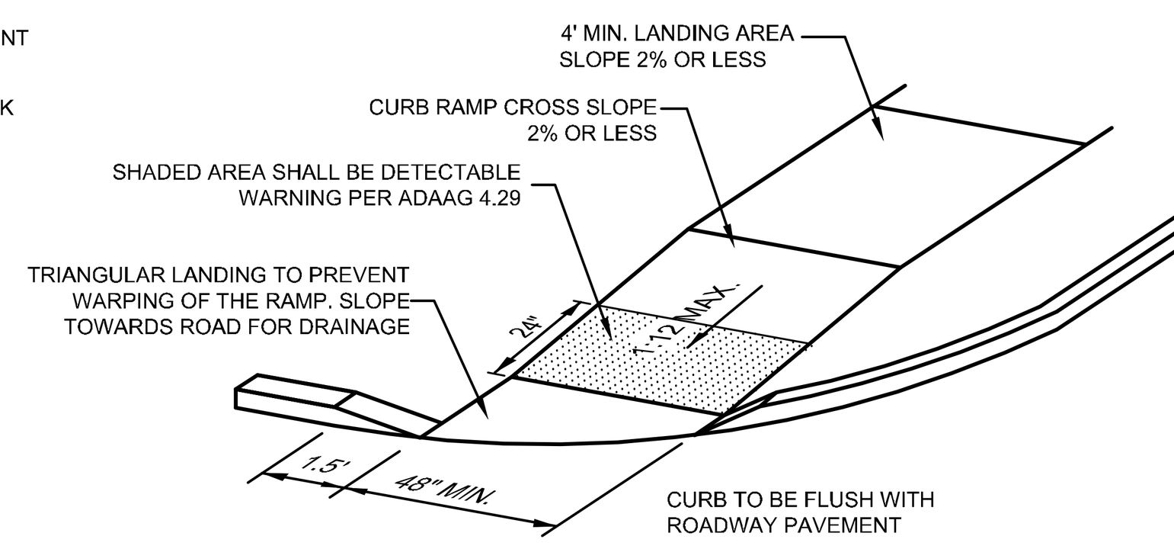
NOT TO SCALE



NOTE:
1. ALL CONCRETE TO BE AIR ENTRAINED, 4,500 PSI AT 28 DAYS, NJDOT CLASS B.

CONCRETE SIDEWALK SECTION (ADJACENT TO PARKING STALLS)

NOT TO SCALE



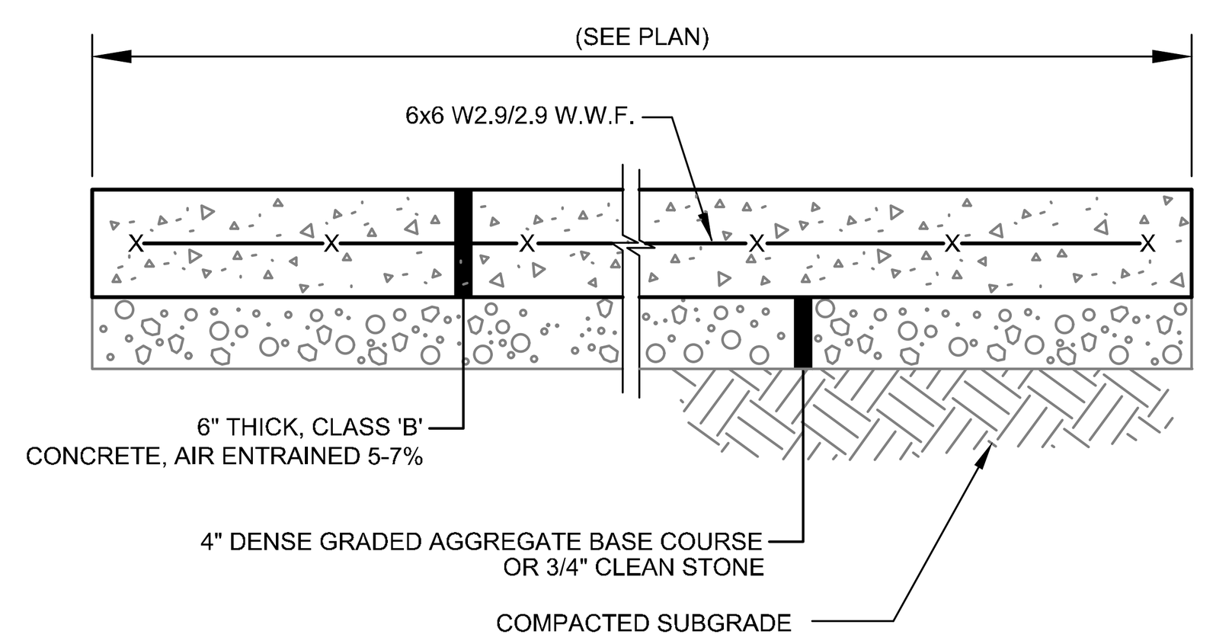
CURB RAMP NOTES:

1. LANDING AREA, APPROACH SIDEWALK TRANSITIONS, AND CURB RAMP SHALL BE KEPT CLEAR OF OBSTRUCTIONS.
2. CURB (DROPPED CURB) GUTTERLINE TO BE FLUSH WITH ROADWAY PAVEMENT A MINIMUM OF 4' AT PARALLEL CURB RAMPS.
3. ALL CONCRETE TO BE 4,500 PSI, NJDOT CLASS B, AIR ENTRAINED AT 30 DAYS.
4. ALL DETECTABLE WARNING OR TRUNCATED DOME SURFACES SHALL BE CAST-IN-PLACE CONSTRUCTION.

CURB RAMP DETAIL (TYPE 'A')

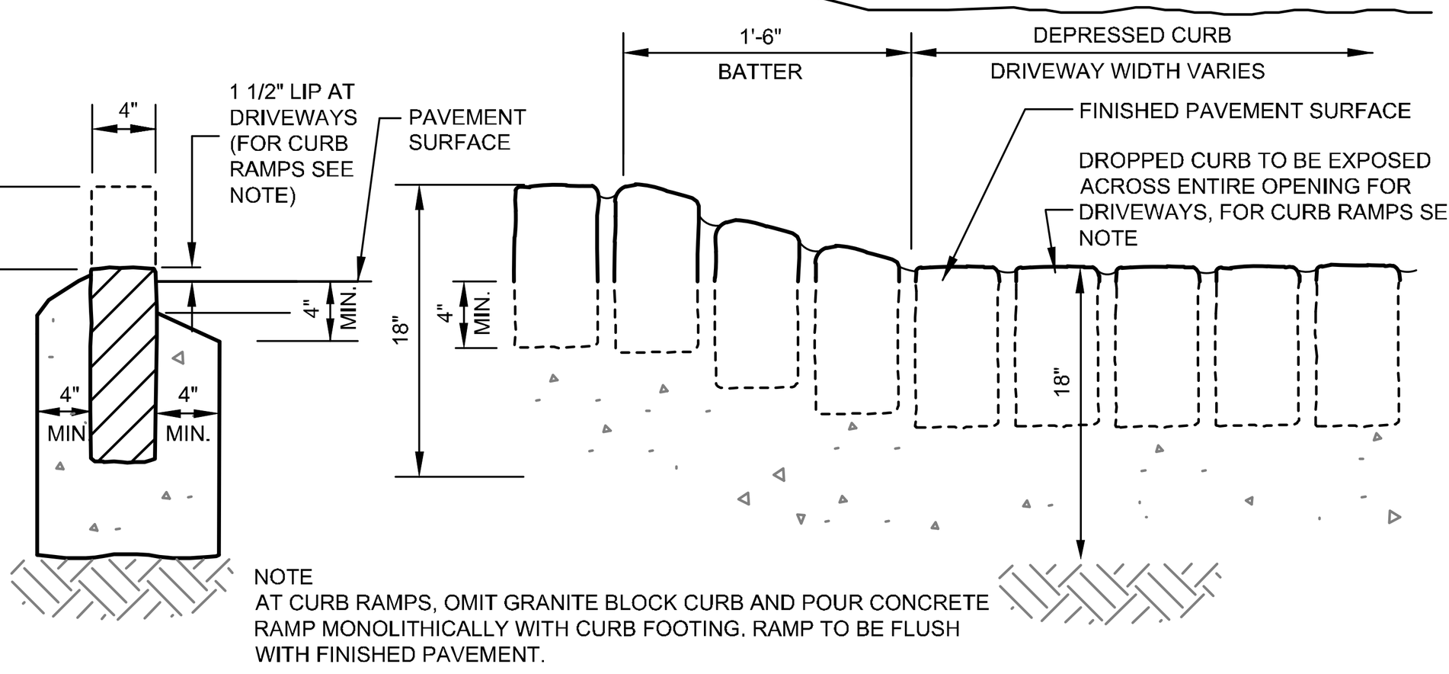
SIDEWALK NOT PERPENDICULAR TO CURB

NOT TO SCALE



CONCRETE APRON–TYPICAL SECTION

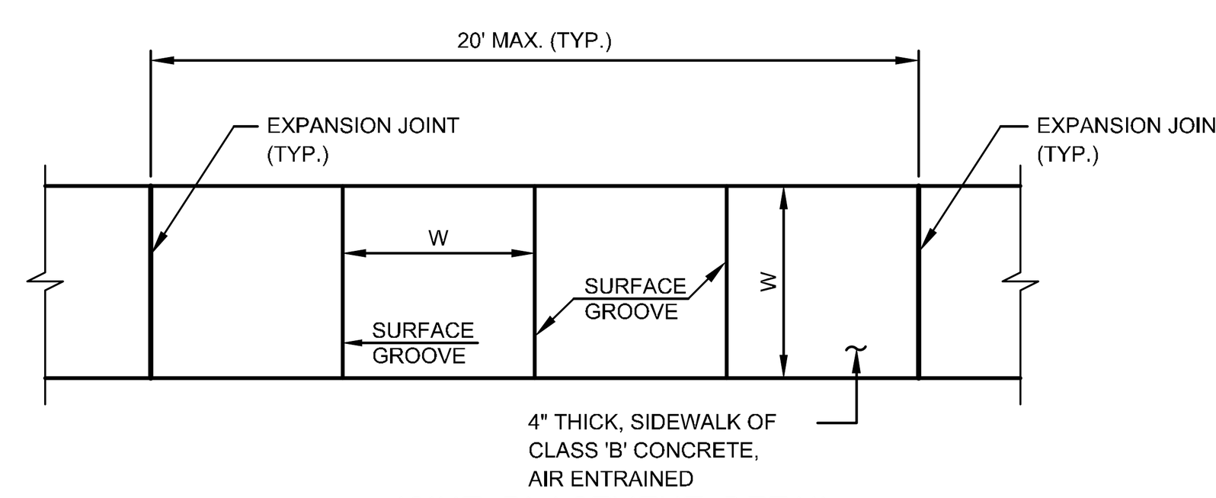
NOT TO SCALE



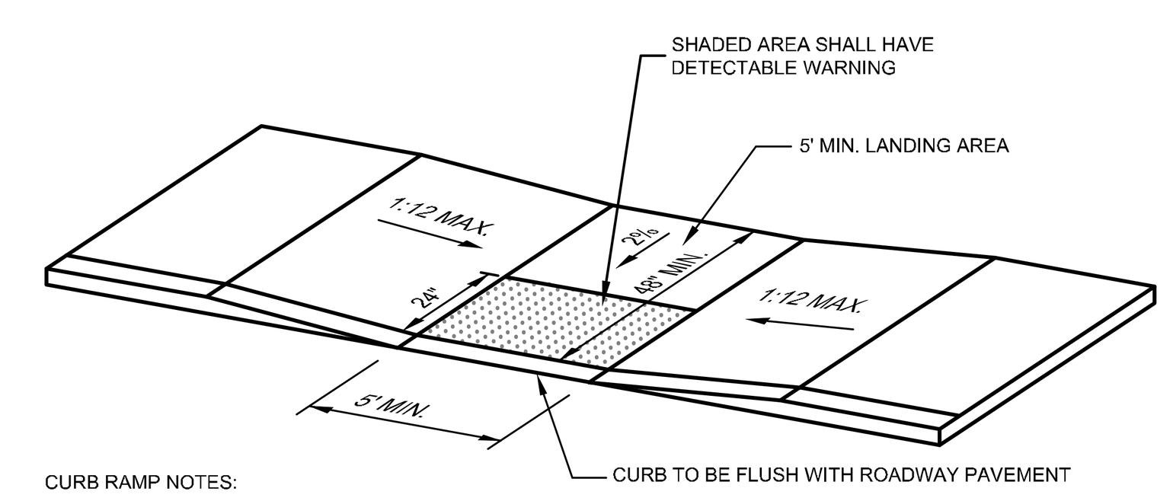
NOTE
AT CURB RAMPS, OMIT GRANITE BLOCK CURB AND POUR CONCRETE RAMP MONOLITHICALLY WITH CURB FOOTING. RAMP TO BE FLUSH WITH FINISHED PAVEMENT.

GRANITE BLOCK CURB AND TRANSITION DETAIL

NOT TO SCALE



JOINT PLACEMENT DETAIL



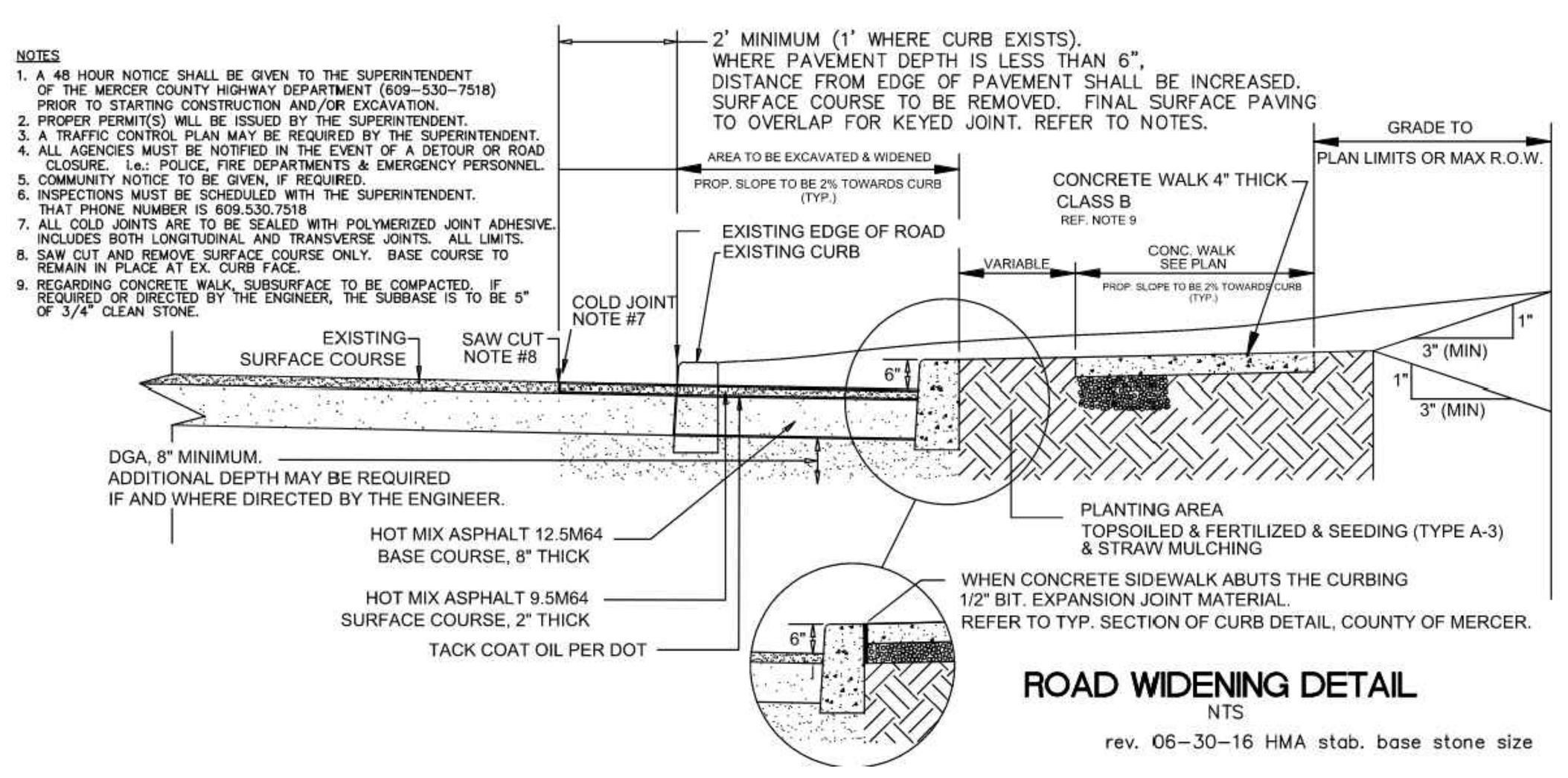
CURB RAMP NOTES:

1. LANDING AREA, APPROACH SIDEWALK TRANSITIONS, AND CURB RAMP SHALL BE KEPT CLEAR OF OBSTRUCTIONS.
2. CURB (DROPPED CURB) GUTTERLINE TO BE FLUSH WITH ROADWAY PAVEMENT A MINIMUM OF 5' AT PARALLEL CURB RAMPS.
3. IF CURB IS GRANITE BLOCK, OMIT THE BLOCK WITHIN THE FLUSH AREA AND FORM WITH CONCRETE ONLY. RAMP MAY BE POURED MONOLITHICALLY WITH THE CURB
4. RAMP LENGTH IS AS REQUIRED TO NOT EXCEED MAX SLOPE, AND SHALL BE VERIFIED IN FIELD. RAMPS DRAWN IN PLAN VIEW MAY BE SCHEMATIC TO INDICATE TYPE OF RAMP AND MAY NOT INDICATE ACTUAL LENGTH
5. ALL DETECTABLE WARNING OR TRUNCATED DOME SURFACES SHALL BE EMBEDDED IN THE SIDEWALK

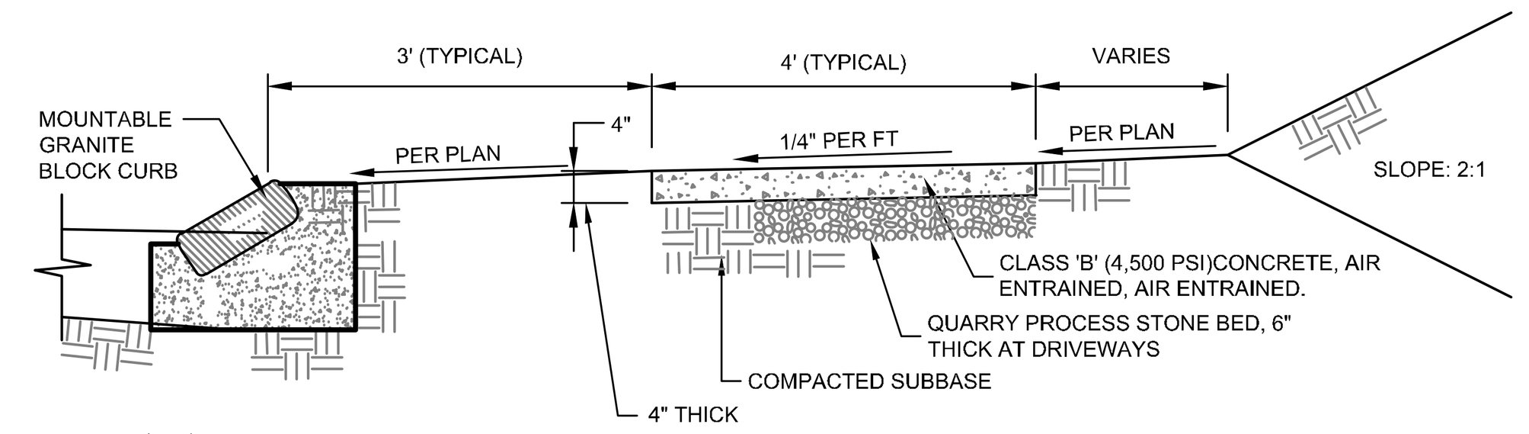
CURB RAMP 'B' DETAIL

SIDEWALK ADJACENT TO CURB

NOT TO SCALE



rev. 06-30-16 HMA stab. base stone size

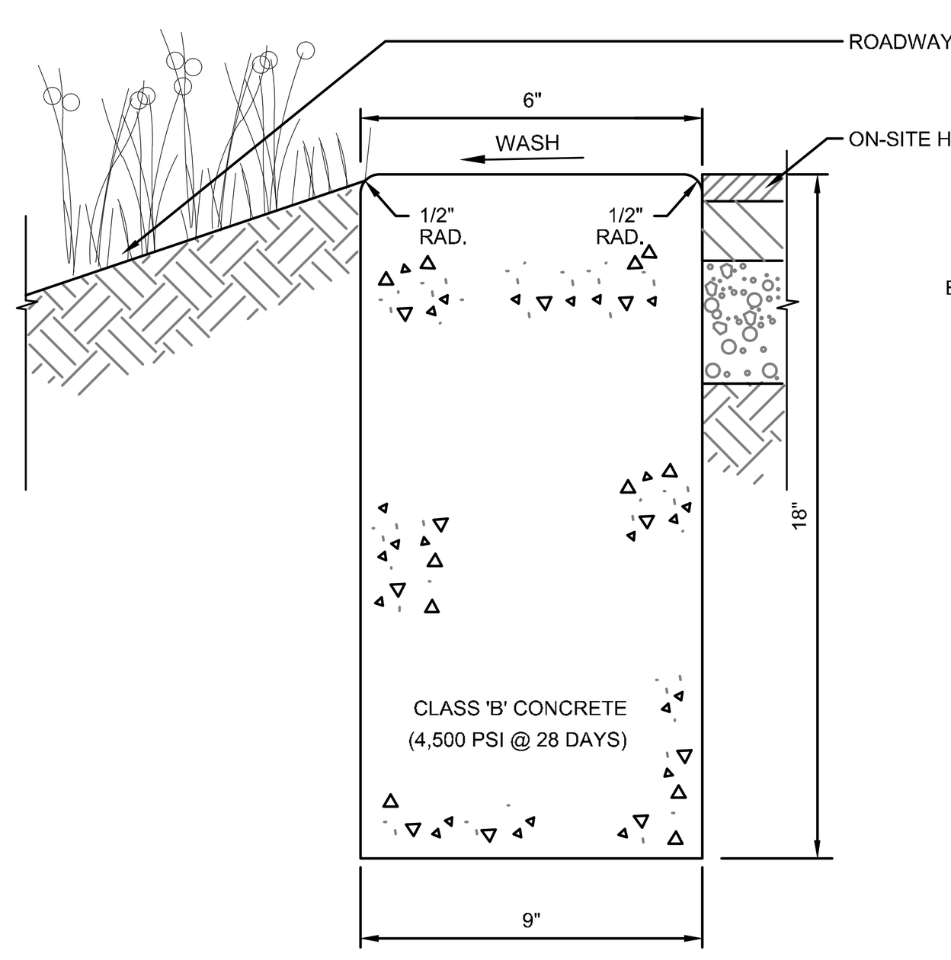


NOTES:

1. 4" CLEAN STONE SUBBASE SHALL BE COMPACTED TO A FIRM AND EVEN SURFACE TO THE SATISFACTION OF THE ENGINEER.
2. ALL CONCRETE SHALL BE AIR-ENTRAINED AND CONTAIN AN AIR CONTENT OF 6% ±1.5%
3. CONCRETE SHALL BE STRUCK OFF WITH A TRANSVERSE TEMPLATE AND FINISHED WITH FLOATS AND STRAIGHTEDGES UNTIL A SMOOTH SURFACE HAS BEEN OBTAINED.
4. THE SURFACE SHALL BE FINISHED WITH A WOODEN FLOAT AND BRUSHED WITH A WET, SOFT-HAIRED BRUSH.
5. ALL EDGES SHALL BE FINISHED AND ROUNDED WITH AN EDGING TOOL HAVING A RADIUS OF 1/4 INCH.
6. PREFORMED EXPANSION JOINT FILLER, 1/4" INCH THICK, SHALL BE FORMED AROUND ALL APPURTENANCES, SUCH AS MANHOLES AND UTILITY POLES, EXTENDING INTO OR THROUGH THE CONCRETE.
7. THE SURFACE OF THE CONCRETE SHALL BE SO FINISHED AS TO DRAIN COMPLETELY AT ALL TIMES.

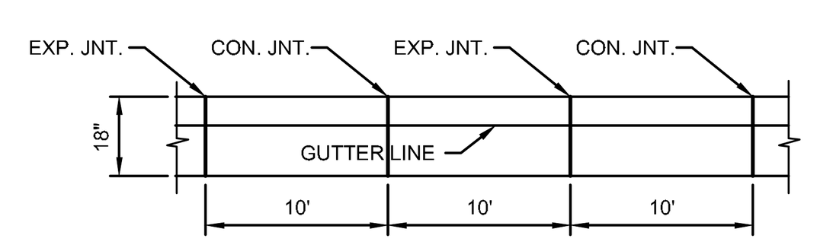
CONCRETE SIDEWALK DETAIL

NOT TO SCALE



CURB SECTION DETAIL

NOT TO SCALE



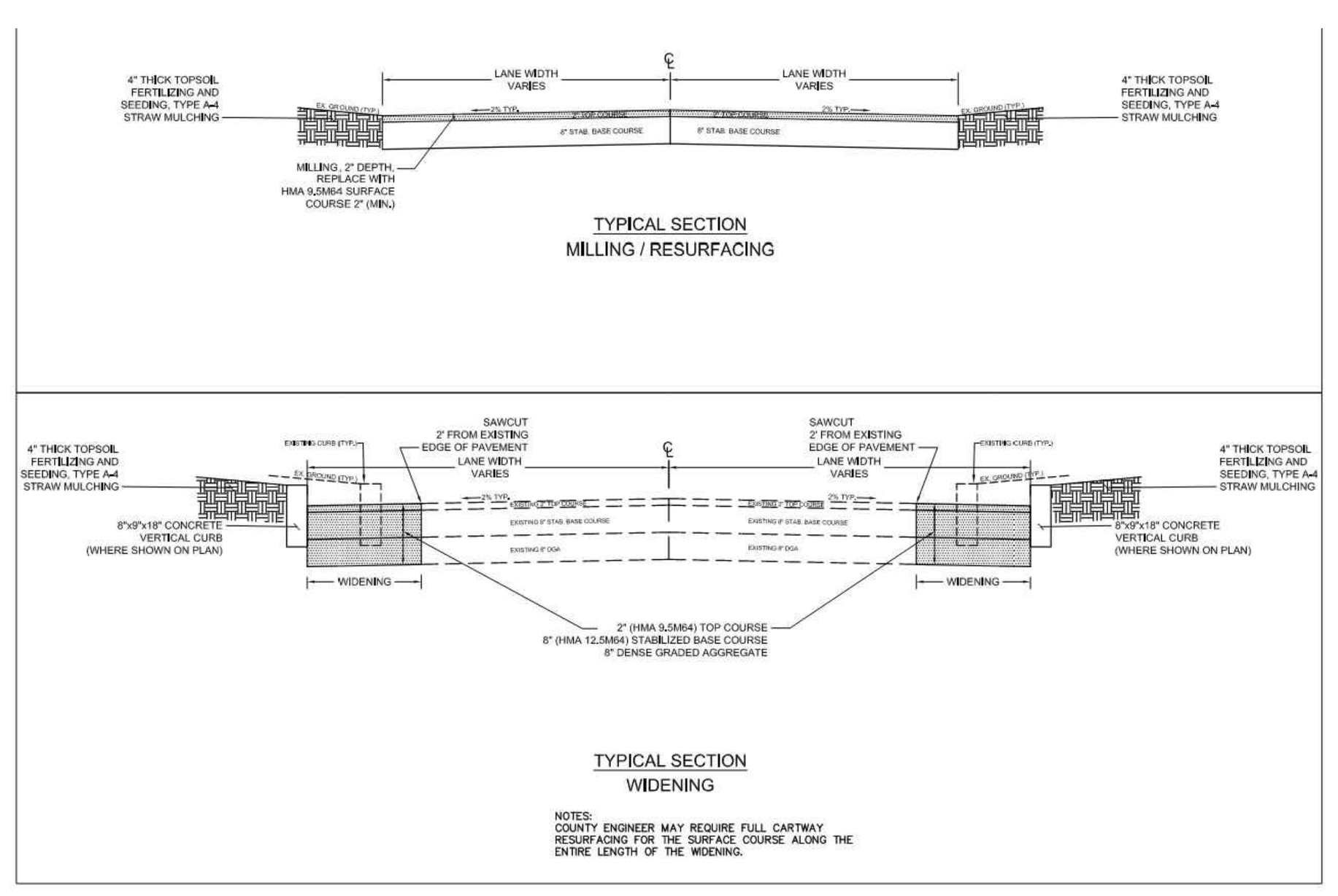
CURB JOINT DETAIL

NOTES:

1. EXPANSION JOINTS SHALL BE FILLED WITH PREFORMED, BITUMINOUS IMPREGNATED FIBER JOINT FILLER; RECESSED 1/4" FROM FACE AND TOP OF CURB.
2. EXPANSION JOINTS SHALL BE INSTALLED BETWEEN CURB AND INLET HEADS.
3. EXPANSION JOINTS SHALL ALTERNATE WITH CONSTRUCTION JOINTS EVERY 10' (SEE DETAIL ABOVE)
4. ALL JOINTS SHALL EXTEND FULL 18" DEPTH OF CURB.
5. EXPANSION JOINTS THROUGH AND ADJACENT TO THE CURB SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CURB.

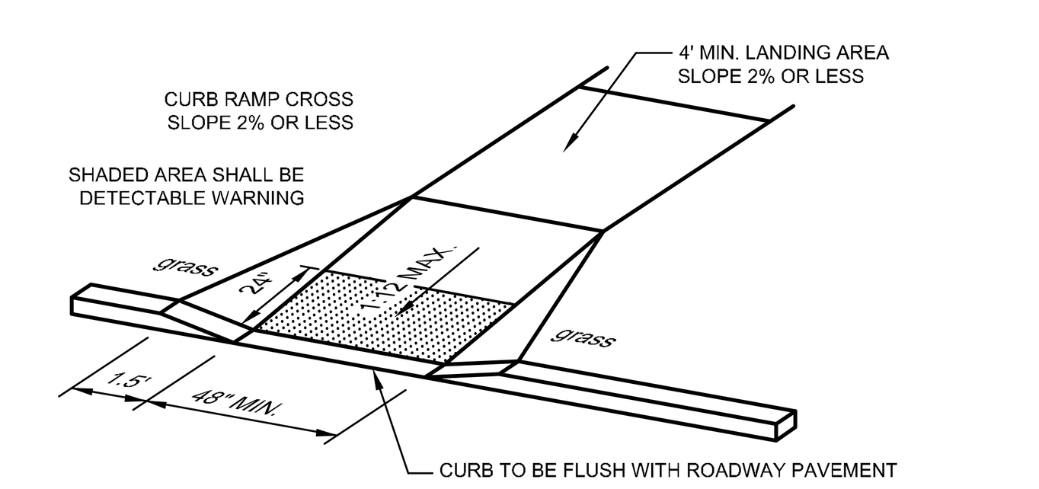
9"x 18" CONCRETE DEPRESSED CURB

NOT TO SCALE



MERCER COUNTY STANDARD ROAD WIDENING

NOT TO SCALE



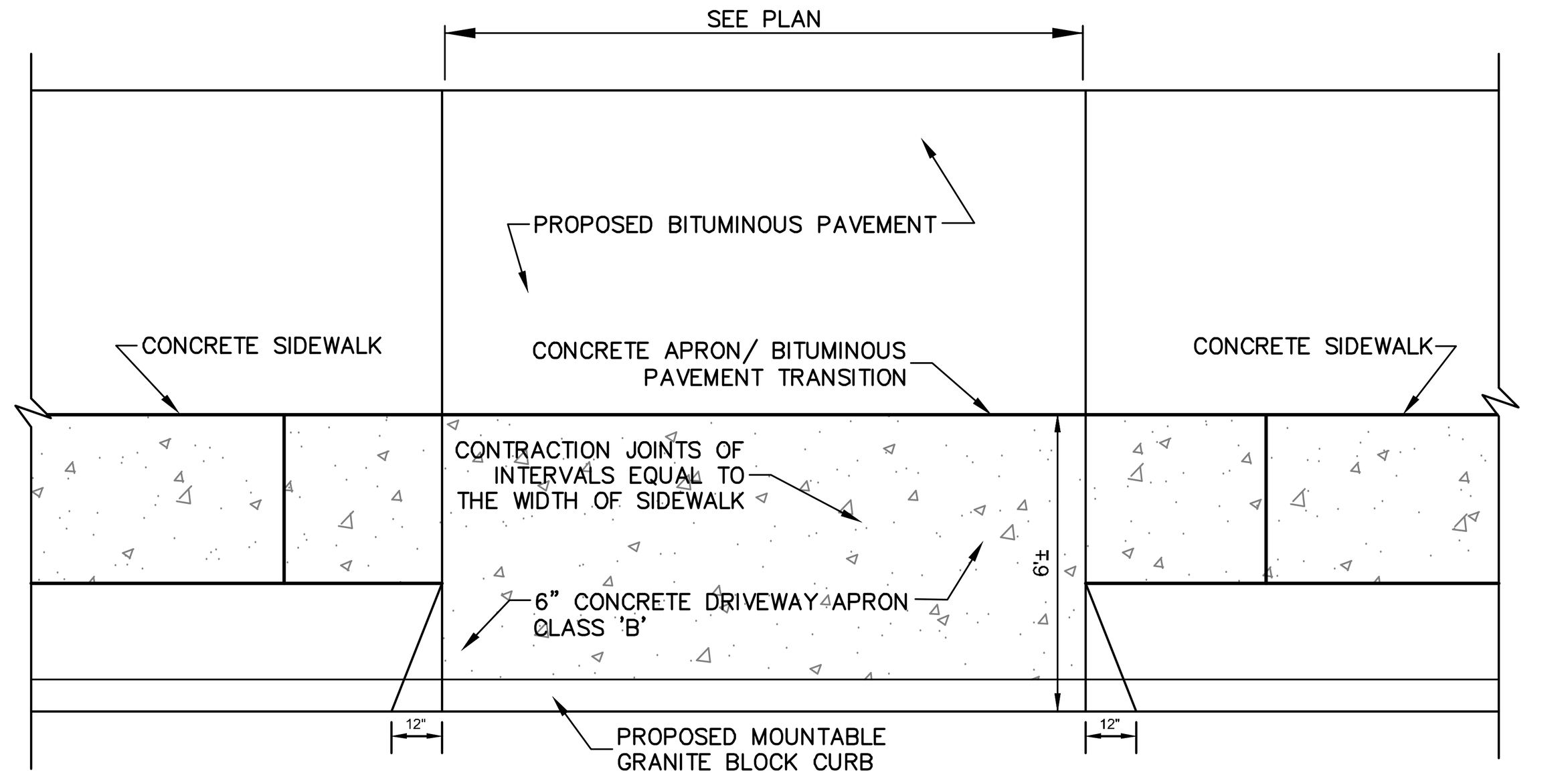
CURB RAMP NOTES:

1. LANDING AREA, APPROACH SIDEWALK TRANSITIONS, AND CURB RAMP SHALL BE KEPT CLEAR OF OBSTRUCTIONS.
2. CURB (DROPPED CURB) CENTERLINE TO BE FLUSH WITH ROADWAY PAVEMENT A MINIMUM OF 4' AT ALL CURB RAMPS.
3. IF CURB IS GRANITE BLOCK, OMIT THE BLOCK WITHIN THE FLUSH AREA AND FORM WITH CONCRETE ONLY. RAMP MAY BE POURED MONOLITHICALLY WITH THE CURB
4. RAMP LENGTH IS AS REQUIRED TO NOT EXCEED MAX SLOPE, AND SHALL BE VERIFIED IN FIELD. RAMPS DRAWN IN PLAN VIEW MAY BE SCHEMATIC TO INDICATE TYPE OF RAMP AND MAY NOT INDICATE ACTUAL LENGTH

CURB RAMP 'C' DETAIL

SIDEWALK PERPENDICULAR TO CURB

NOT TO SCALE

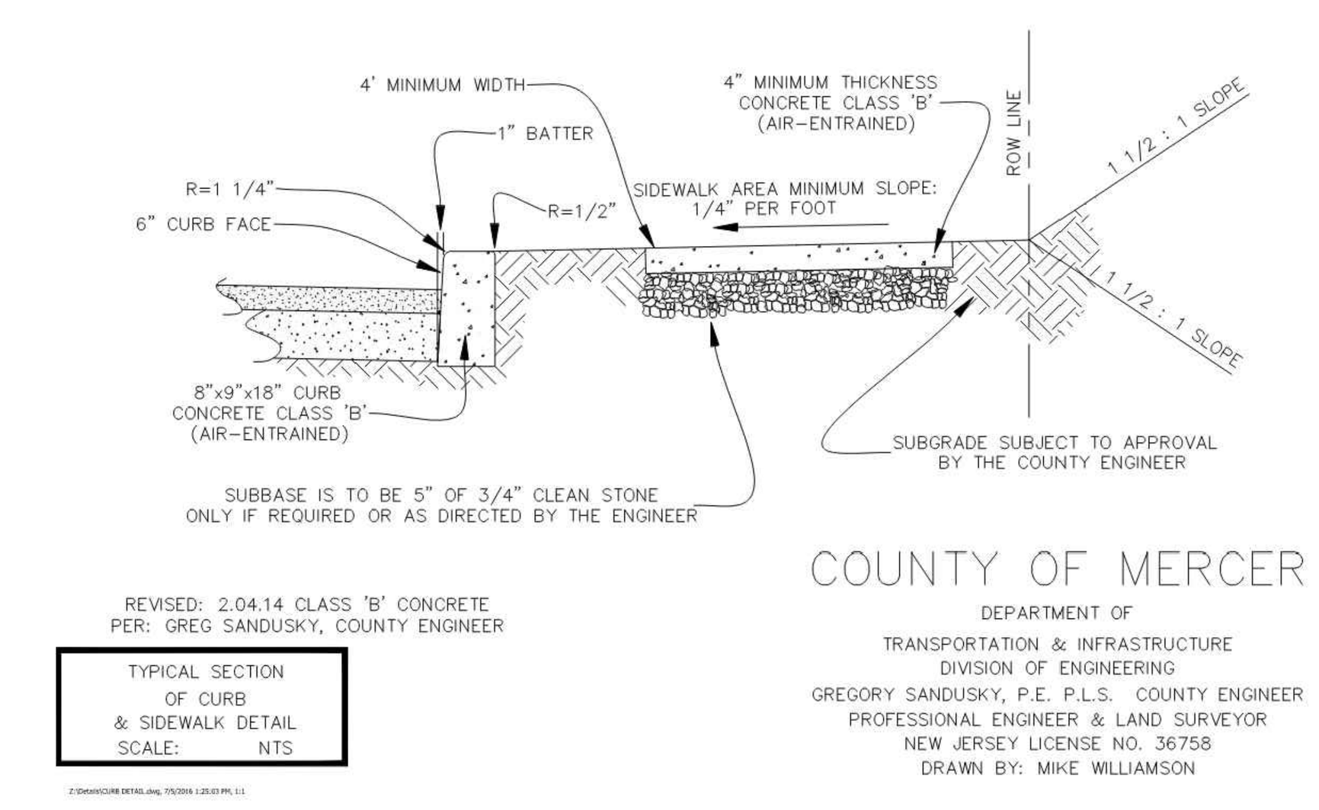


NOTE: CONTRACTION/EXPANSION JOINTS TO BE PLACED AT EQUAL WIDTH OF SIDEWALKS

TYPICAL DRIVEWAY APRON DETAIL

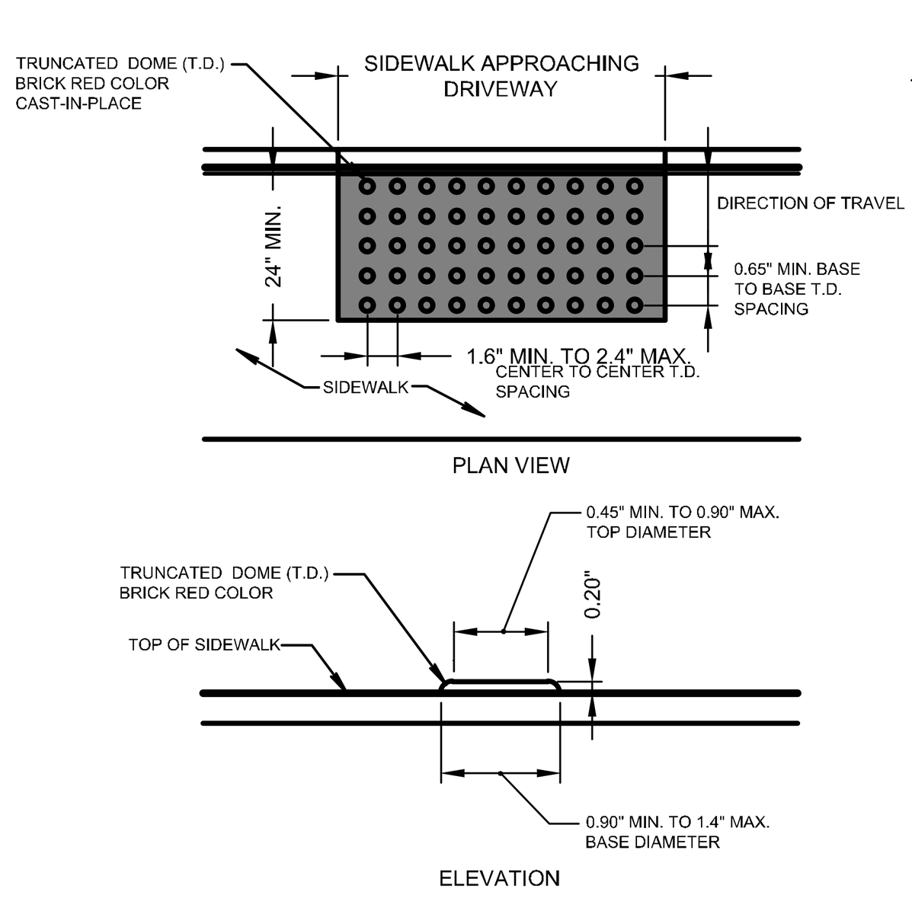
NOT TO SCALE

NOTE: 1/2" EXPANSION JOINTS OF CELLULAR COMPRESSION MATERIAL TO BE PLACED AT 20' INTERVALS AND 1/4" PREMOLDED EXPANSION JOINTS TO BE PLACED LONGITUDINALLY ADJACENT TO ALL ABUTTING CONCRETE STRUCTURES AS THE ENGINEER MAY DIRECT. CONSTRUCTION JOINTS TO BE PROVIDED EVERY 20' ALTERNATING WITH EXPANSION JOINTS.



COUNTY CURB AND SIDEWALK DETAIL

NOT TO SCALE



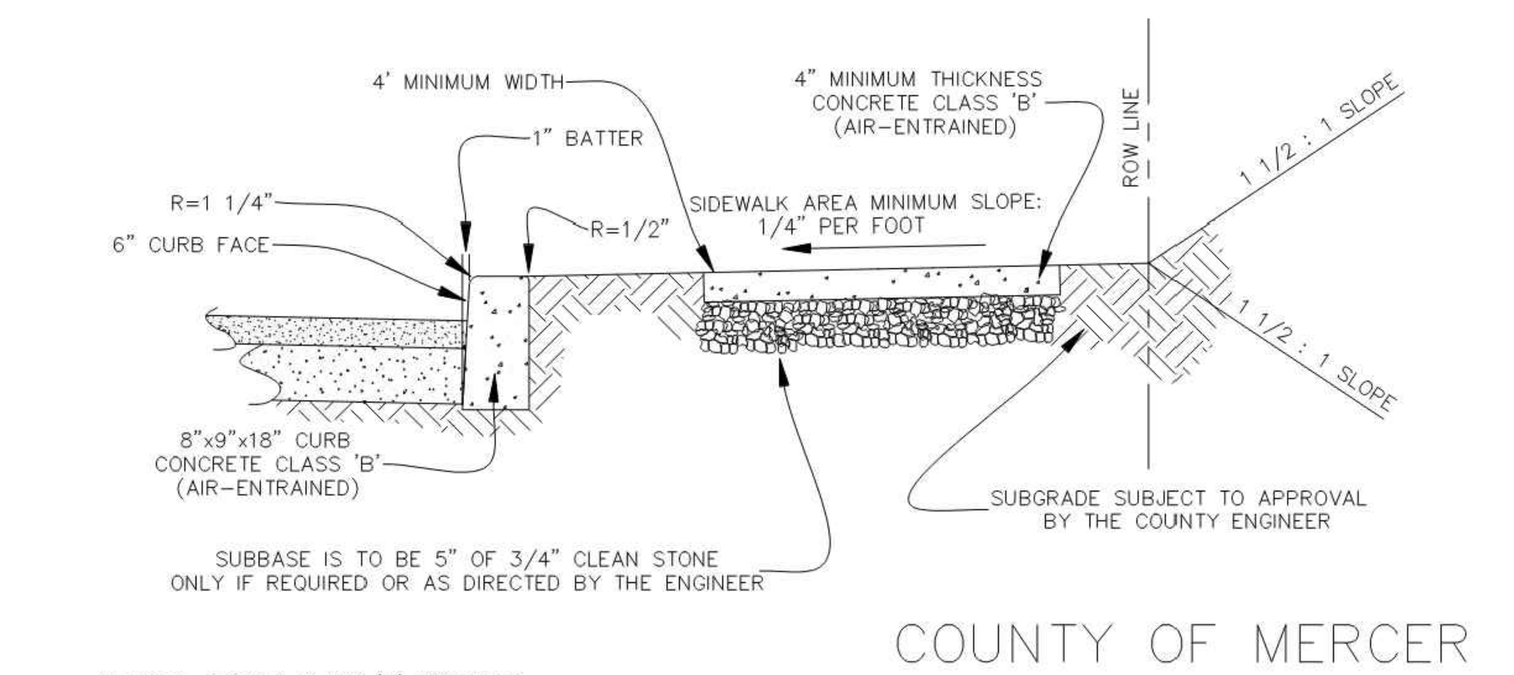
NOTES:

1. DETECTABLE WARNING SURFACE SHALL BE 70% COLOR RED CAST-IN-PLACE CONRETE.
2. CONTRACTOR SHALL PROVIDE A DETECTABLE WARNING SURFACE SUBMITTAL TO PROJECT ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION.

DETECTABLE WARNING SURFACE

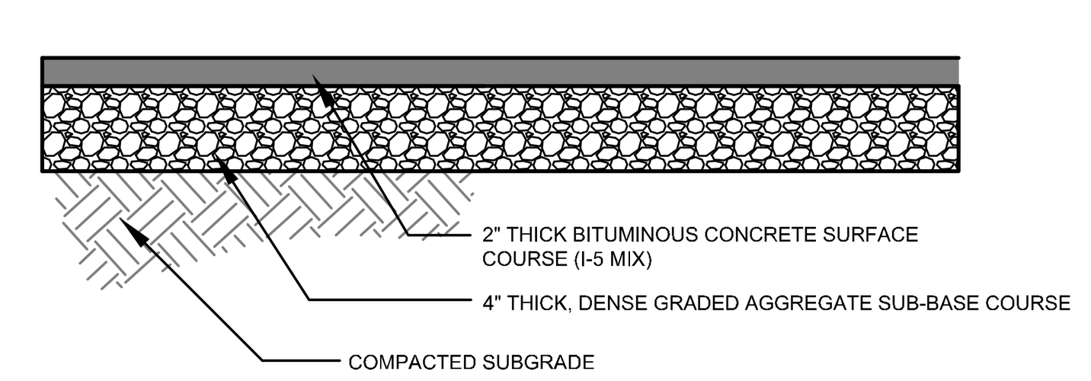
NOT TO SCALE

NOTE: 1/2" EXPANSION JOINTS OF CELLULAR COMPRESSION MATERIAL TO BE PLACED AT 20' INTERVALS AND 1/4" PREMOLDED EXPANSION JOINTS TO BE PLACED LONGITUDINALLY ADJACENT TO ALL ABUTTING CONCRETE STRUCTURES AS THE ENGINEER MAY DIRECT. CONSTRUCTION JOINTS TO BE PROVIDED EVERY 20' ALTERNATING WITH EXPANSION JOINTS.



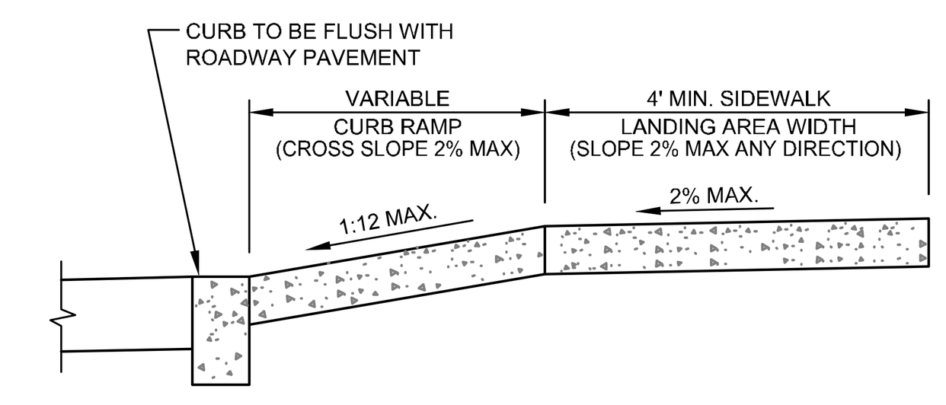
MERCER COUNTY STANDARD CURB DETAIL

NOT TO SCALE



TYPICAL PAVEMENT SECTION–DRIVEWAY

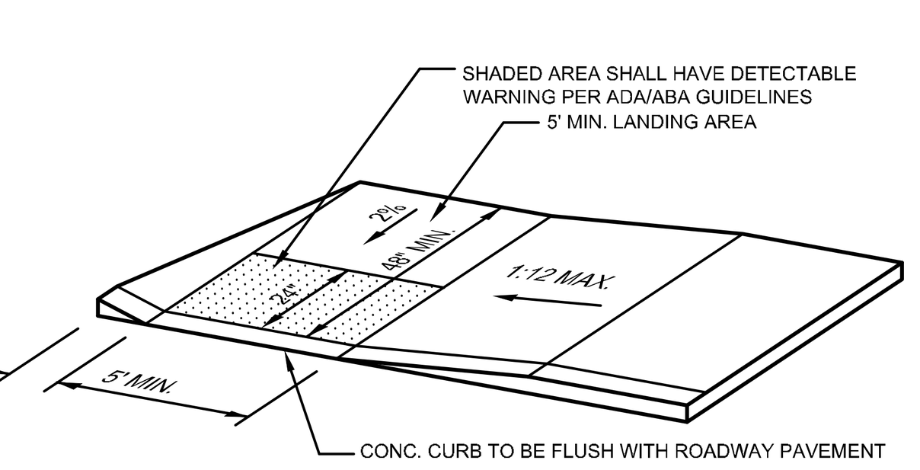
NOT TO SCALE



NOTE: ALL CONCRETE TO BE 4,500 PSI, NJDOT CLASS B, AIR ENTRAINED.

SECTION THROUGH CURB RAMP

NOT TO SCALE



CURB RAMP NOTES:

1. LANDING AREA, APPROACH SIDEWALK TRANSITIONS, AND CURB RAMP SHALL BE KEPT CLEAR OF OBSTRUCTIONS.
2. CURB (DROPPED CURB) GUTTERLINE TO BE FLUSH WITH ROADWAY PAVEMENT A MINIMUM OF 5' AT PARALLEL CURB RAMPS.
3. REFER TO PLANS BY MELLILO & BAUER FOR DETECTABLE WARNING PAVERS.
4. CURB RAMPS TO BE CONSISTED OF CLASS B CONCRETE, AIR ENTRAINED (4500 PSI @ 28 DAYS) OR ASPHALT (SEE PLAN).
5. RAMP CURB TO BE CONSTRUCTED OF CLASS B CONCRETE.

CURB RAMP 'D' DETAIL

SIDEWALK ADJACENT TO CURB

NOT TO SCALE

THESE PLANS ARE NOT TO BE USED FOR BID OR CONSTRUCTION

PLANS ARE FINAL FOR SANITARY SEWER AND WATER MAIN DESIGN

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Phone: 732-665-5500
FAX: 732-665-5501
NJ Certificate of Authorization No. 24GA28222600
SEAN A. DELANY, N.J. Professional Engineer, Lic. 24GE04447100

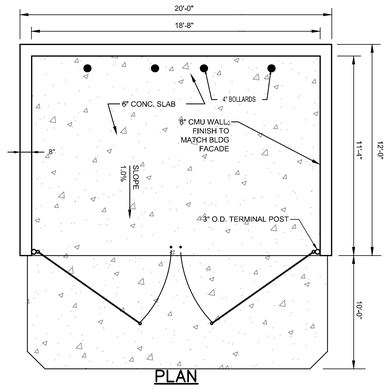
PRELIMINARY & FINAL MAJOR SUBDIVISION AND PRELIMINARY & FINAL SITE PLAN

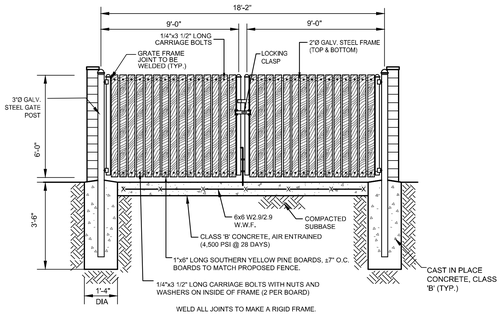
THE COLLECTION at HOPEWELL

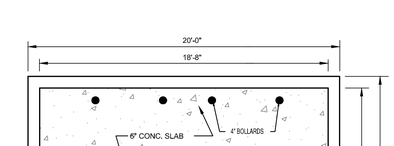
CONSTRUCTION DETAILS-SITE

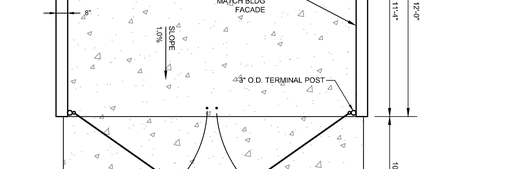
BLOCK 85, LOT 3; BLOCK 86, LOTS 32-34 &130; AND PART OF BLOCK 85, LOT 9
TOWNSHIP OF HOPEWELL, MERCER COUNTY, NEW JERSEY

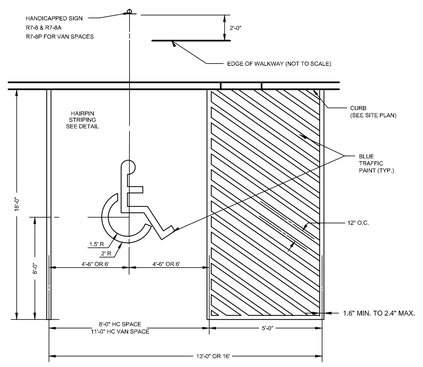
SHEET No. 15 OF A

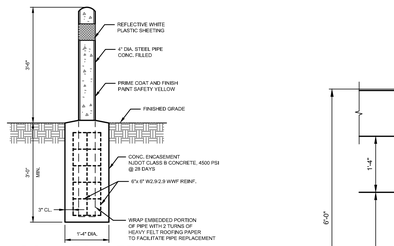


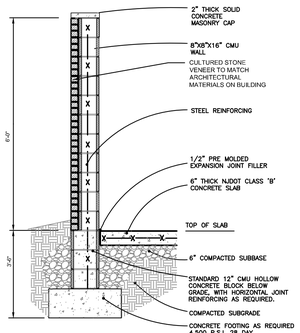


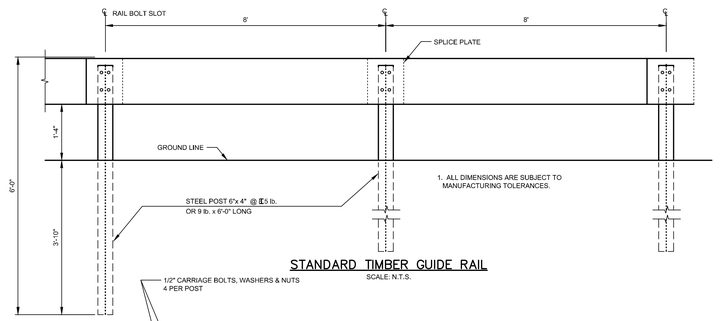


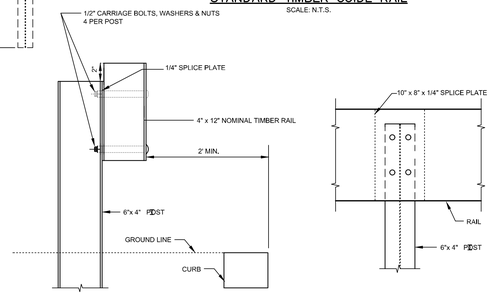


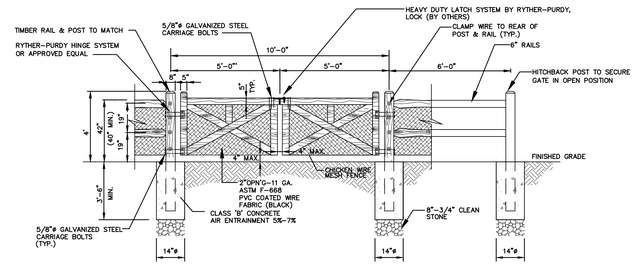


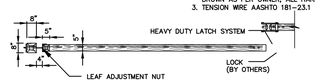


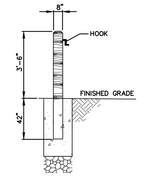


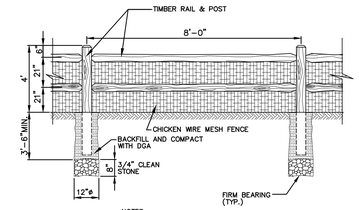


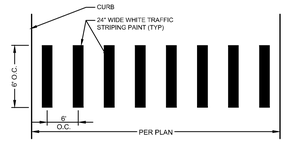


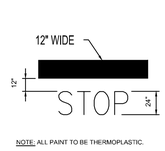


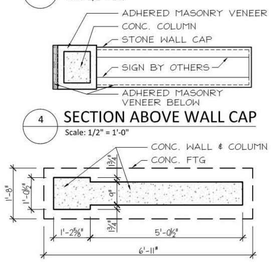












PLAN

WELD ALL JOINTS TO MAKE A RIGID FRAME.

TRASH ENCLOSURE DETAIL – COAH LOT

NOT TO SCALE

SECTION VIEW

PLAN VIEW

NOTES:

1. CONTRACTOR SHALL FURNISH AND INSTALL ALL FASTENERS IN ORDER TO ANCHOR BENCH TO CONCRETE PAVEMENT.

BENCH ON CONCRETE PAD

NOT TO SCALE

TYPICAL HC ACCESSIBLE ADA PARKING SPACE

NOT TO SCALE

BOLLARD DETAIL

NOT TO SCALE

TRASH ENCLOSURE SECTION VIEW

NOT TO SCALE

NOTE:
STREET SIGN TO BE LYLE - SERIES E, EMBOSSED (E-435 OR E-440 DESIGN, AS REQUIRED) OR EQUAL APPROVED BY TOWNSHIP ENGINEER.

STREET SIGN DETAIL

NOT TO SCALE

SIGN POST DETAIL

NOT TO SCALE

1. ALL DIMENSIONS ARE SUBJECT TO MANUFACTURING TOLERANCES.

STANDARD TIMBER GUIDE RAIL

SCALE: N.T.S.

Furnish timber conforming to AASHTO M 168. Fabricate the timber rail from Douglas Fir or Southern Pine. Treat timber according to AASHTO M 133

TIMBER BEAM GUIDE RAIL OR APPROVED EQUAL

NOT TO SCALE

5 VIEW FROM ABOVE
Scale: 1/2" = 1'-0"

4 SECTION ABOVE WALL CAP
Scale: 1/2" = 1'-0"

1 SIDE ELEVATION
Scale: 1/2" = 1'-0"

2 CROSS SECTION
Scale: 1/2" = 1'-0"

3 SECTION BELOW GRADE
Scale: 1/2" = 1'-0"

MONUMENT ENTRANCE SIGN

NOT TO SCALE

NOTES:

1. DRIVE ANCHOR POST ASSEMBLY TO WITHIN APPROXIMATELY 12 INCHES ABOVE GROUND LEVEL. PLACE BOLT AND WASHER IN FIRST AND FIFTH HOLES FROM THE TOP END, AND SECURE BOLTS ONTO SPACER.
2. DRIVE ANCHOR POST ASSEMBLY TO WITHIN A MAXIMUM OF 4 INCHES ABOVE GROUND LEVEL.
3. DIG OUT AROUND BACK OF ANCHOR POST ASSEMBLY TO ALLOW ROOM FOR TOP POST TO BE ATTACHED.
4. NEST TOP POST ASSEMBLY ONTO PROTRUDING ANCHOR POST ASSEMBLY BOLTS, THROUGH THE FIRST AND FIFTH HOLES FROM THE BOTTOM OF THE TOP POST.
5. PLACE AND TIGHTEN A SELF-LOCKING FLANGE NUT ON EACH BOLT. WHEN INSTALLATION IS COMPLETE, TOP OF GROUND POST SHALL NOT EXCEED 4 INCHES ABOVE GROUND LEVEL.
6. SIZE OF CONNECTOR BOLT FOR TYPE 1, 5/16" x 1½"
   SIZE OF CONNECTOR BOLT FOR TYPE 2, 5/16" x 2"
7. THE CONNECTOR BOLTS SHALL BE FULLY THREADED. EACH CONNECTOR BOLT AND NUT SHALL BE CLEARLY STAMPED WITH MANUFACTURER'S IDENTIFYING MARK.

ANCHOR POST ASSEMBLY SIGN SUPPORTS

WHEN X IS GREATER THAN 0.75", USE TYPE 1 SPACER BAR
WHEN X IS 0.75" OR LESS, USE TYPE 2 SPACER BAR

BREAKAWAY SIGN POST DETAIL

NOT TO SCALE

GENERAL NOTES:

1. ALL POSTS SHALL BE OF ADEQUATE LENGTH TO MEET THE REQUIREMENTS FOR ERECTION AS STATED IN THE CURRENT "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREET AND HIGHWAYS".
2. ALL STEEL POSTS AND BRACKETS SHALL BE CUT, BENT AND HOLES PUNCHED AND DRILLED BEFORE GALVANIZING. GALVANIZING SHALL BE IN CONFORMANCE WITH CURRENT A.S.T.M. SPECIFICATIONS A 123.
3. POSTS SHALL BE 2 PIECE STEEL U-POST IN CONFORMANCE WITH THE NOTES BELOW.
4. BOLTS SHALL NOT PROTRUDE MORE THAN 3/4" BEYOND THE NUT WHEN TIGHT BUT SHALL ENGAGE ALL THREADS IN THE NUT.

SIGN POST DETAIL

NOT TO SCALE

GATE ELEVATION

NOTE:
1. SEE SITE PLAN FOR LOCATION
2. WOOD FENCE TO BE STAINED NATURAL OR DARK BROWN AS PER OWNER, ALL HARDWARE PAINTED BLACK
3. TENSION WIRE AASHTO 181-23.1

GATE LOCKING LATCH SYSTEM (PLAN VIEW)

HITCHBACK POST DETAIL

10' WIDE SPLIT RAIL FENCE DOUBLE LEAF WOOD GATE DETAIL AT STORMWATER BASIN

NOT TO SCALE

NOTES:
1. SEE SITE PLAN FOR LOCATION
2. GATE AND CORNER POSTS TO HAVE 14" DIA. FOOTINGS.

SPLIT RAIL FENCE DETAIL OR APPROVED EQUAL

NOT TO SCALE

NOTE: ALL PAINT TO BE THERMOPLASTIC.

CROSSWALK STRIPING

NOT TO SCALE

NOTE: ALL PAINT TO BE THERMOPLASTIC.

STOP BAR DETAILS

NOT TO SCALE

NOTE:
1. SIGNS TO BE MOUNTED IN ACCORDANCE WITH MUTCD.

SIGN DETAILS

NOT TO SCALE

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PROJ.: 080661-F1-001
DATE: 11-20-2020
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THE COLLECTION at HOPEWELL

CONSTRUCTION DETAILS-SITE

BLOCK 85, LOT 3; BLOCK 86, LOTS 32-34 &130; AND PART OF BLOCK 85, LOT 9
TOWNSHIP OF HOPEWELL, MERCER COUNTY, NEW JERSEY

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XREFS: TM-LENNAR-ZAITZ.dwg

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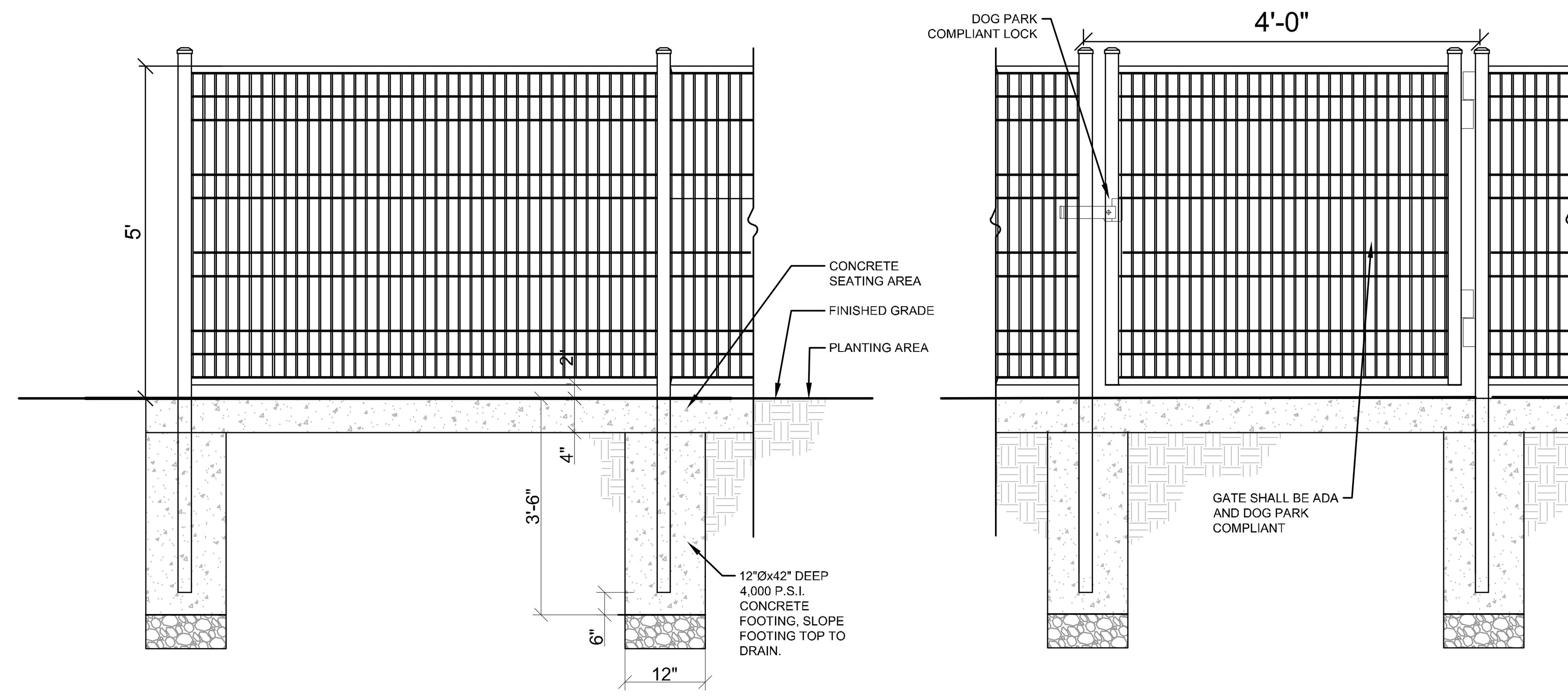
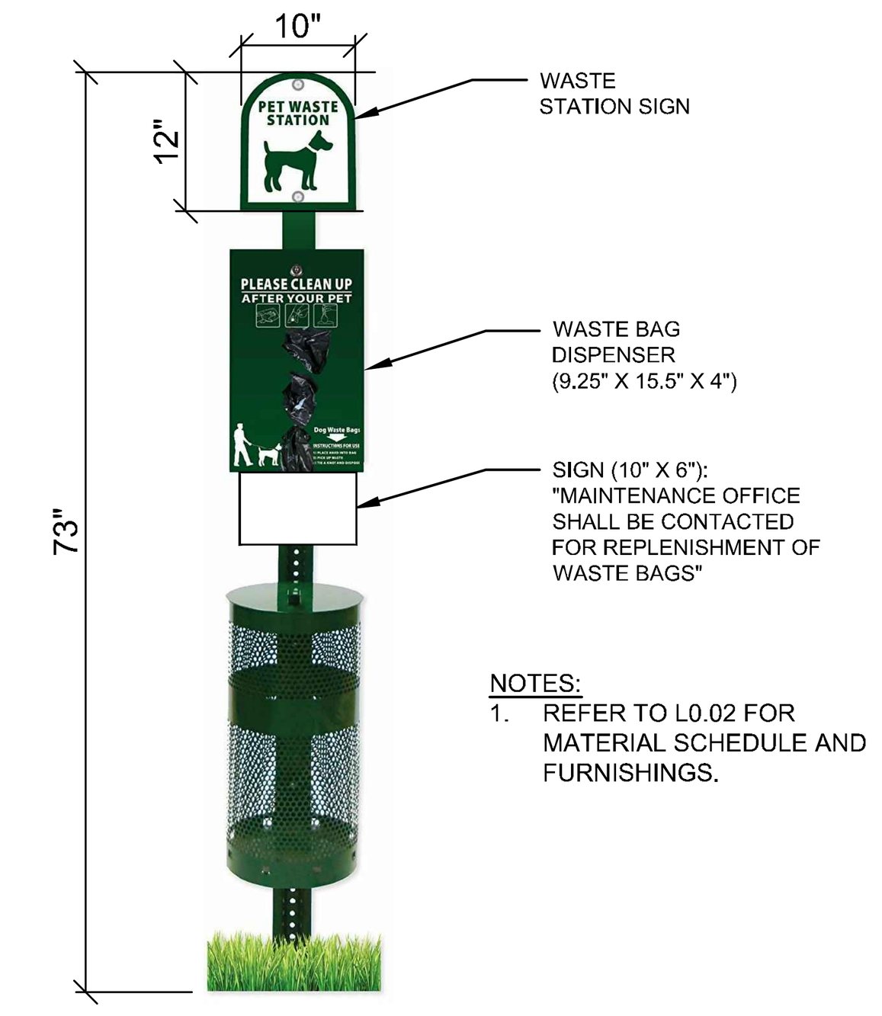
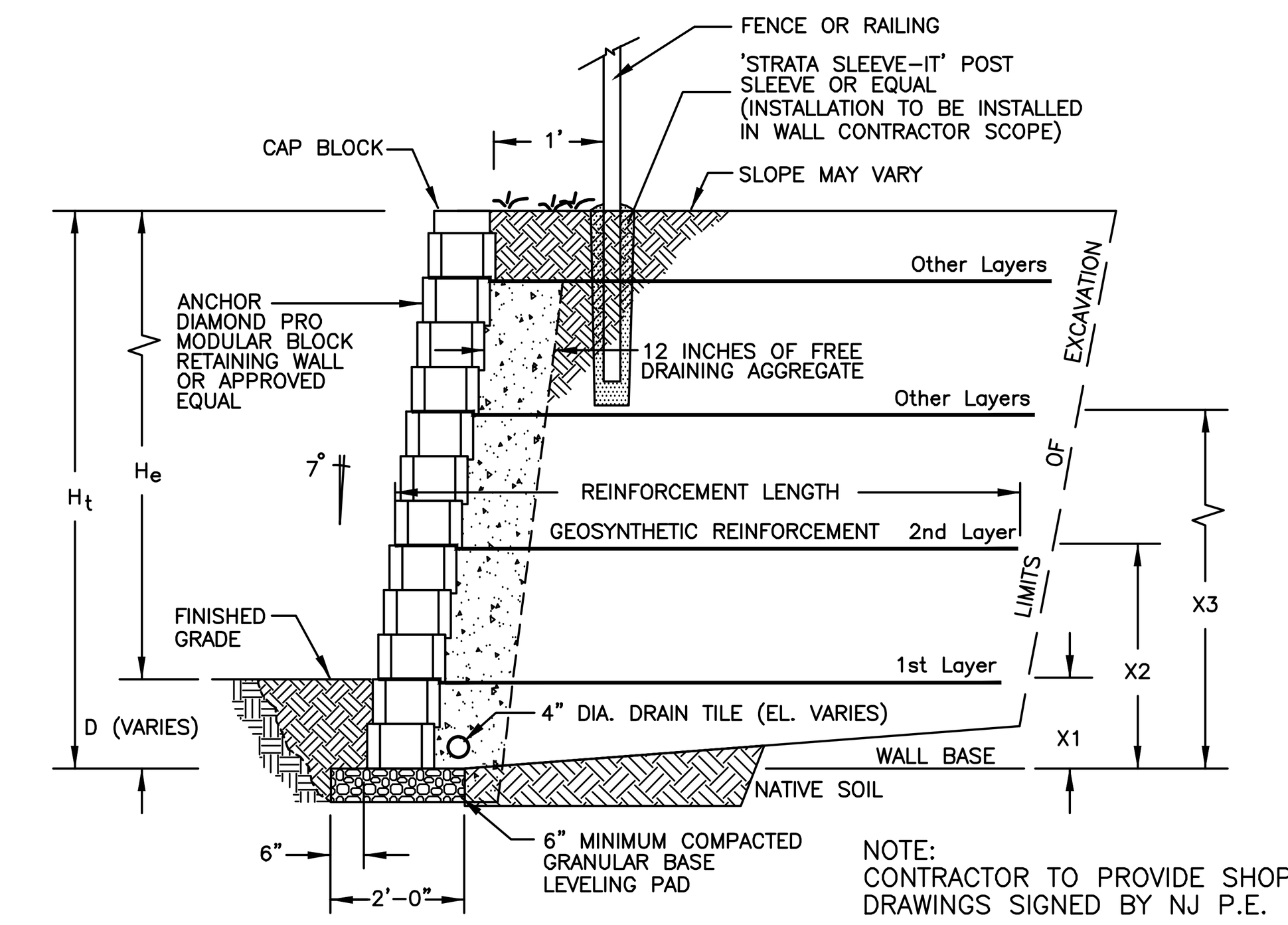


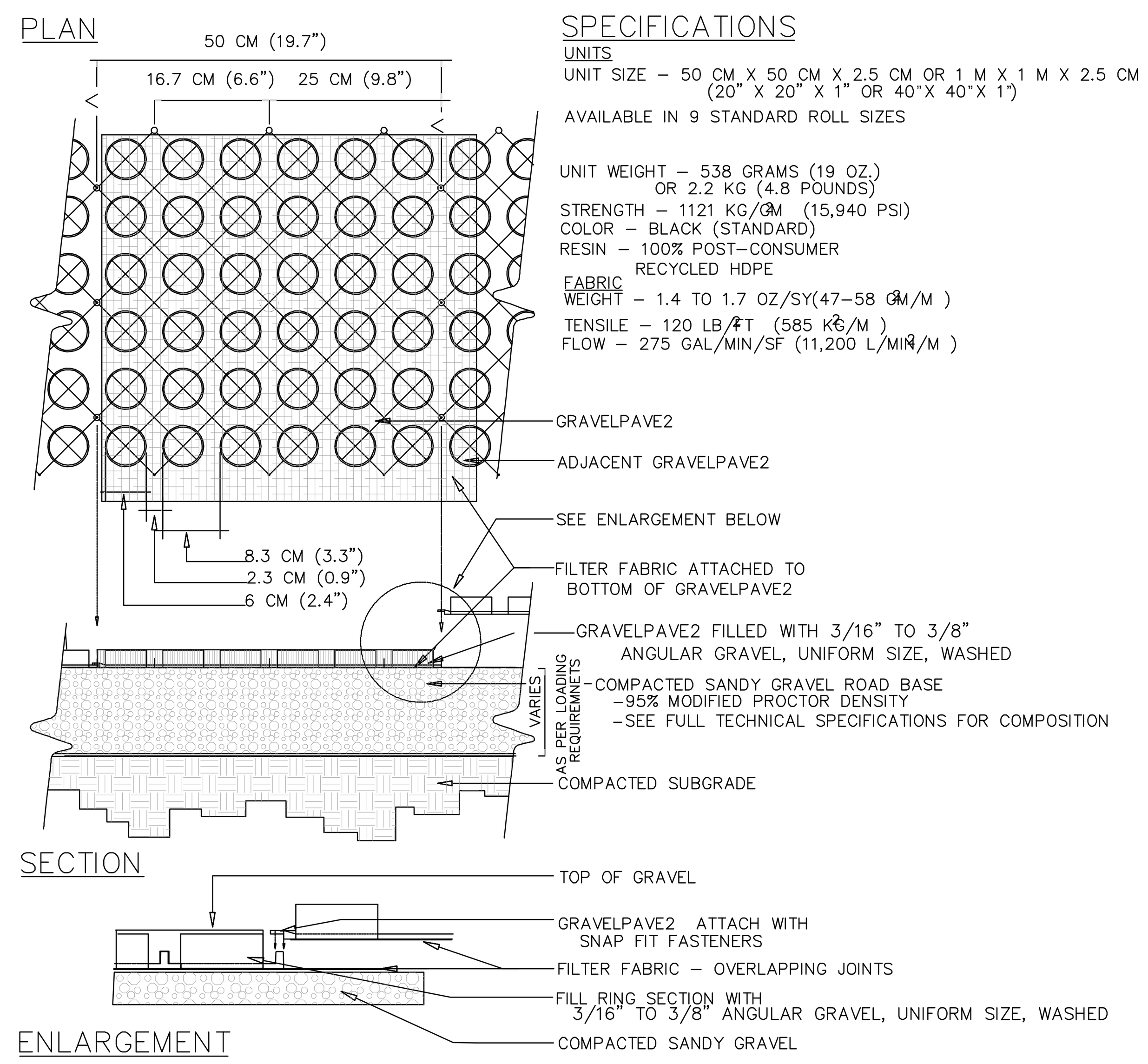
WIRE MESH FENCE AND GATES
NOT TO SCALE



DOG WASTER STATION
NOT TO SCALE

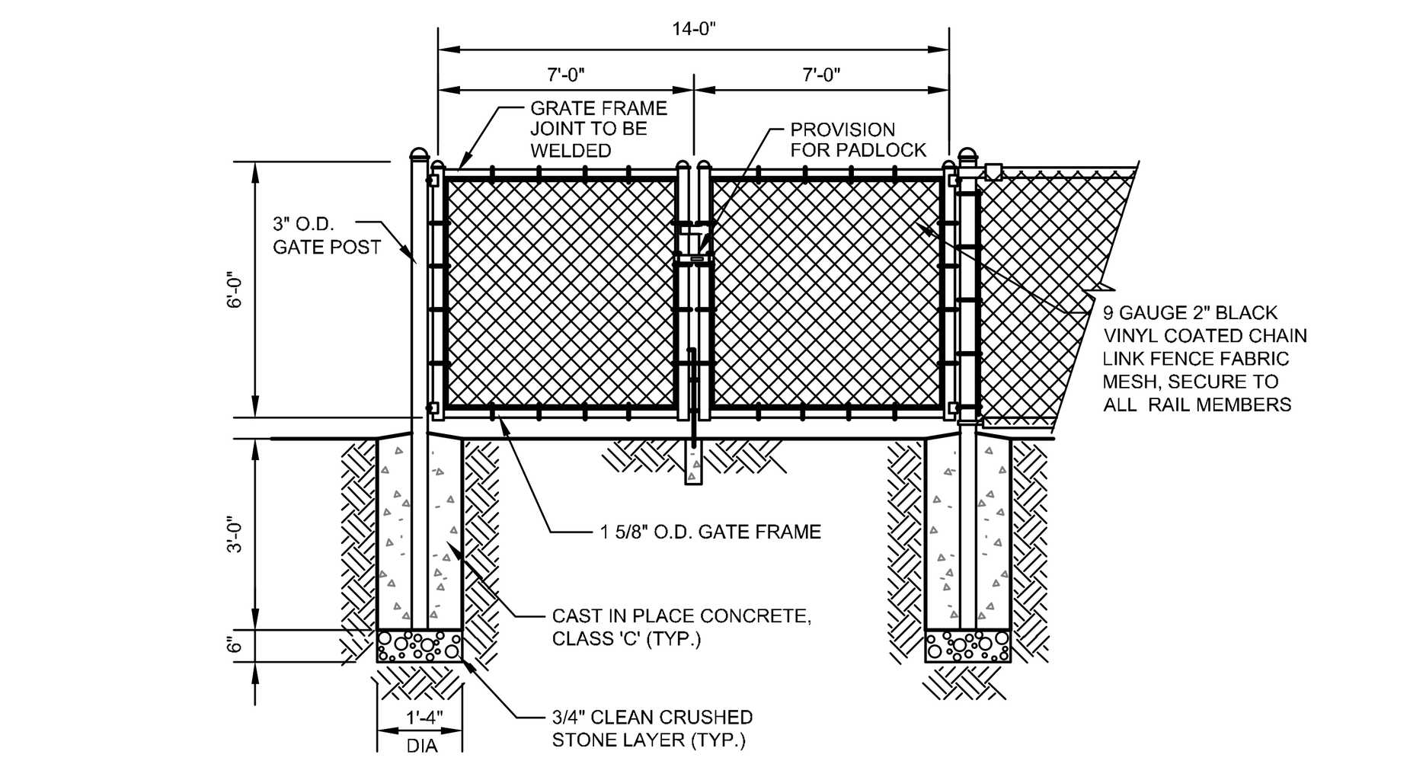


MODULAR BLOCK RETAINING WALL (OR EQUAL) – GEOSYNTHETIC REINFORCED (WALL HEIGHT > 4')
NOT TO SCALE

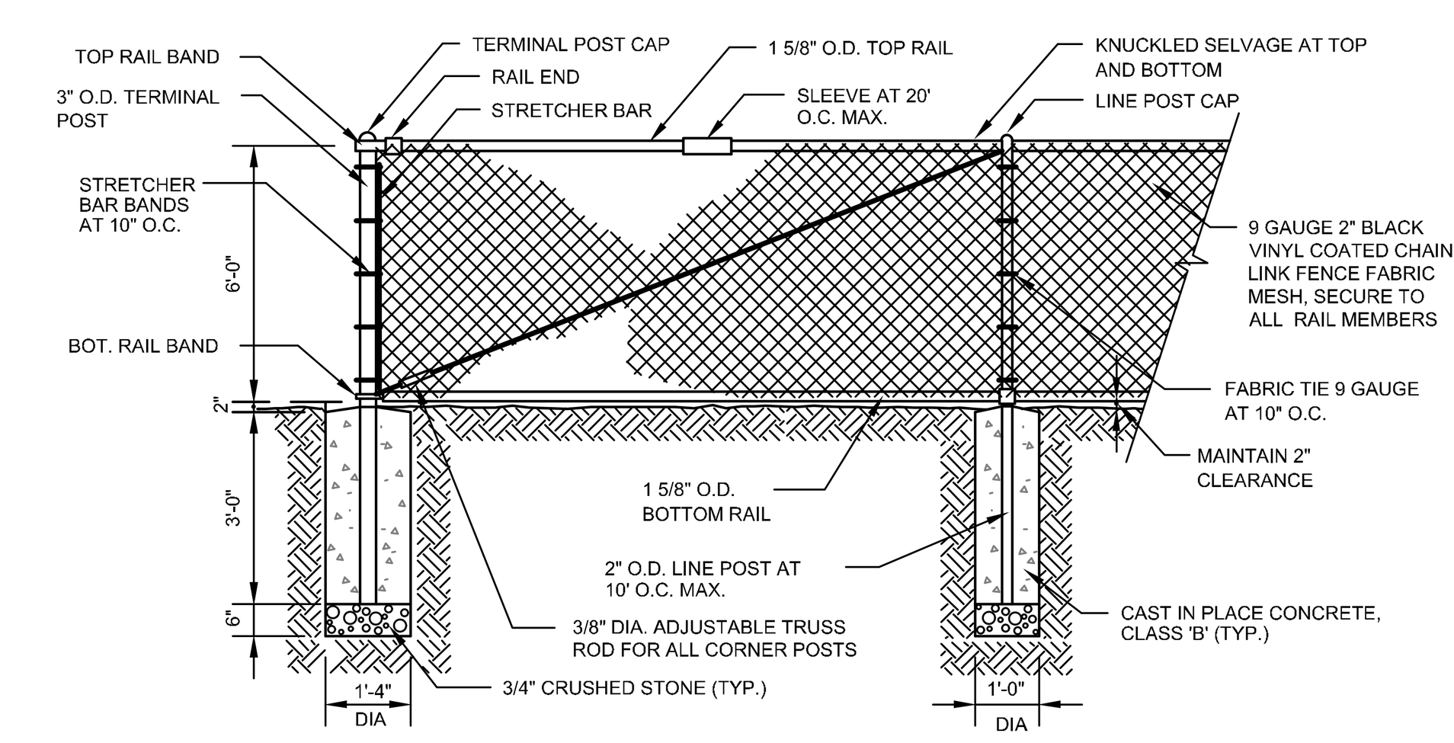


GRAVELPAVE2
OR APPROVED EQUAL
800-233-1510 OR 303-233-8383
WWW.INVISIBLESTRUCTURES.COM

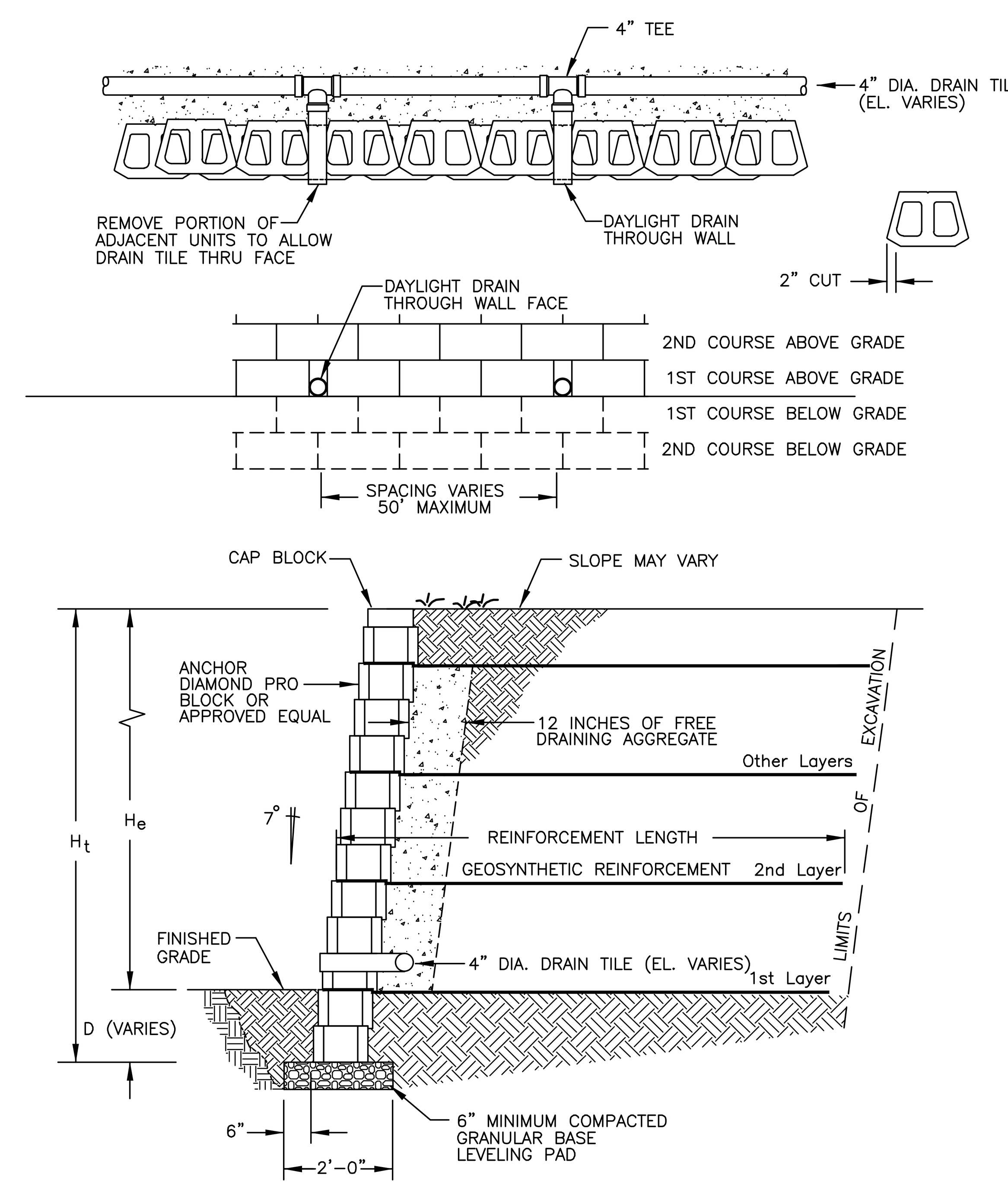
STABILIZED GRAVEL EMERGENCY ACCESS
NOT TO SCALE



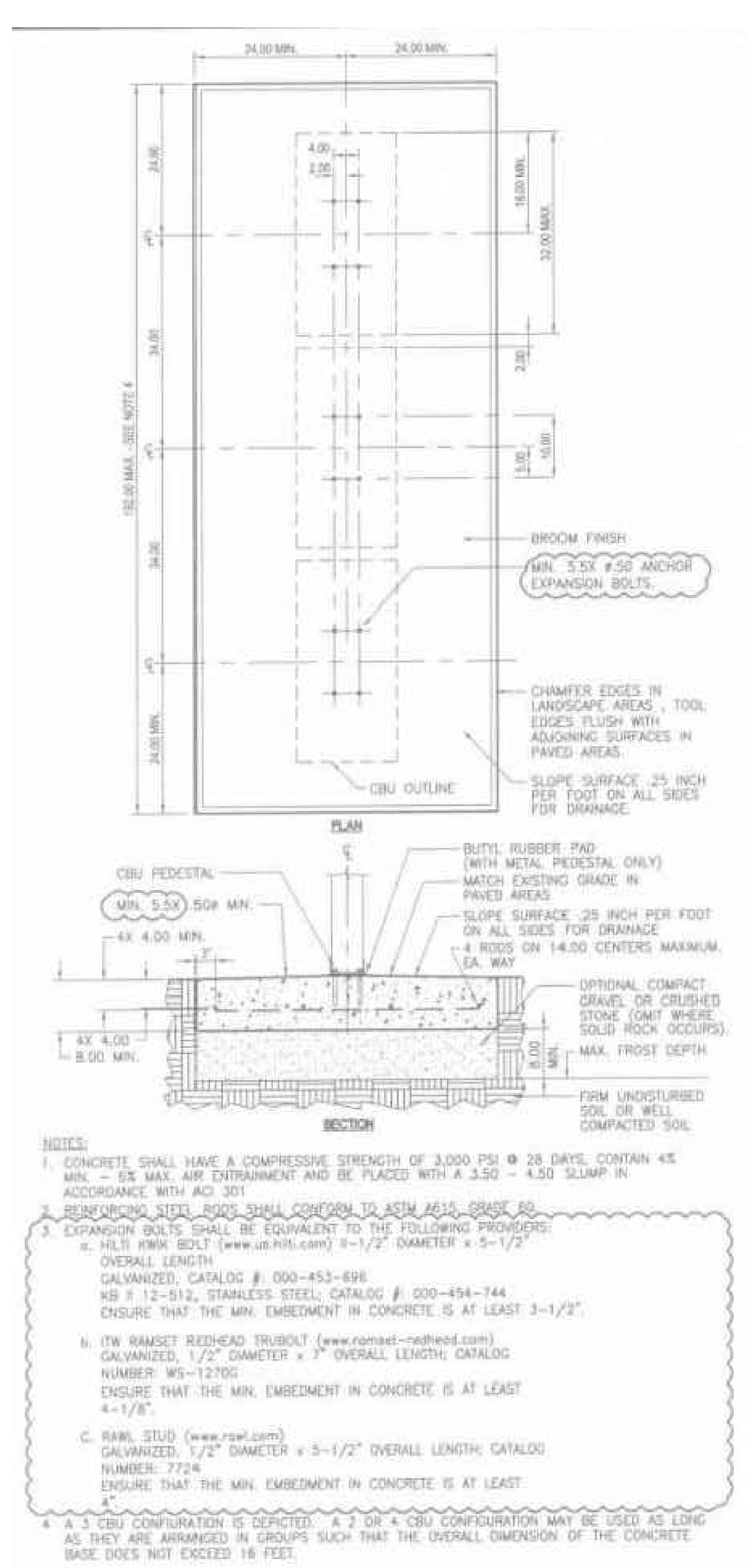
DOUBLE LEAF GATE–BLACK VINYL COATED
SCALE: NTS

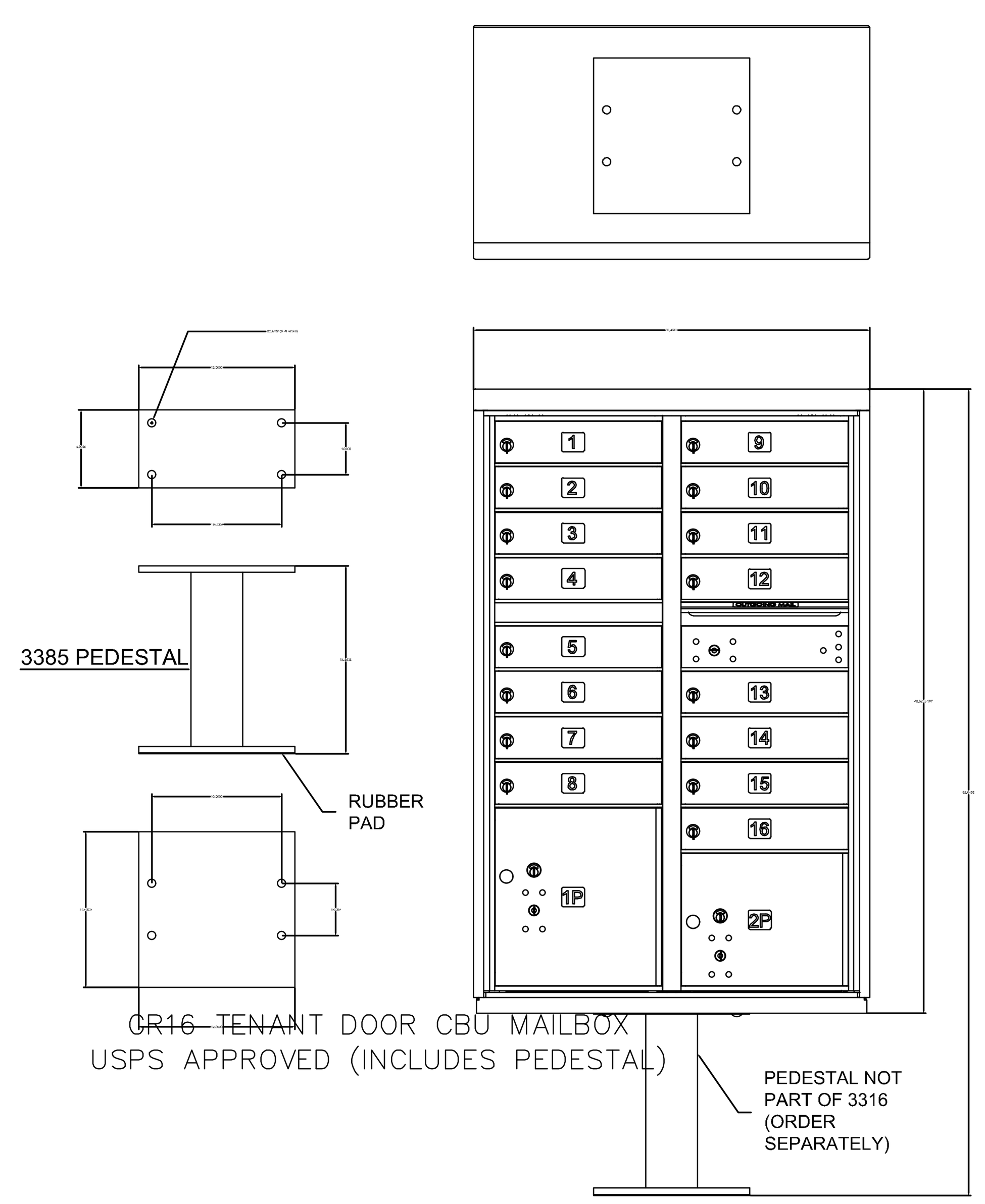


CHAIN LINK FENCE–BLACK VINYL COATED
SCALE: NTS



DAYLIGHT DRAIN TILE THROUGH WALL
NOT TO SCALE



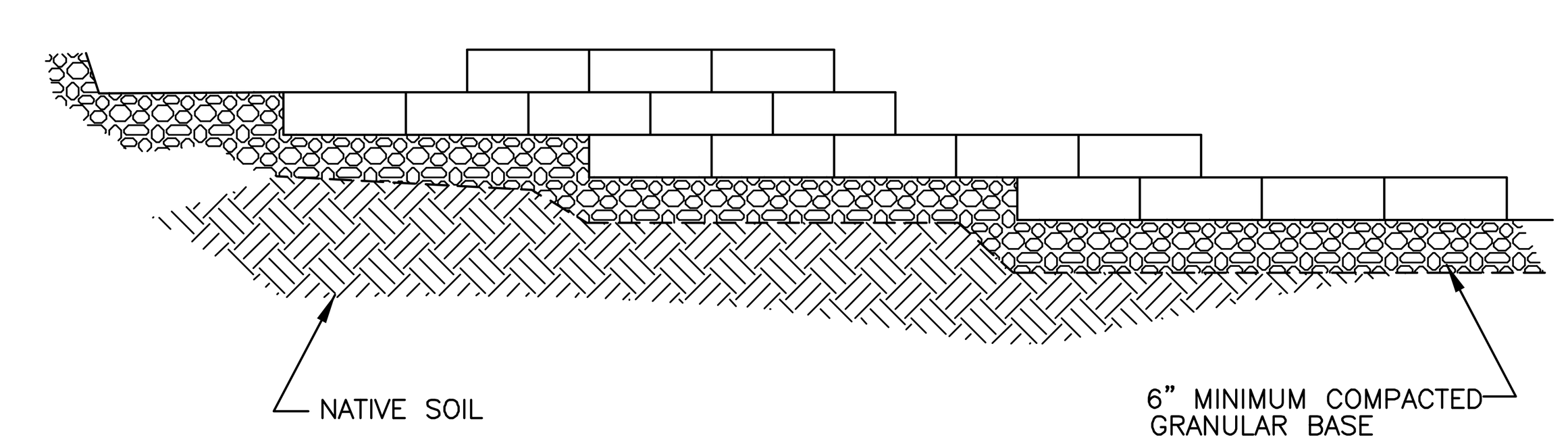


CR16- TENANT DOOR CBU MAILBOX
USPS APPROVED (INCLUDES PEDESTAL)

CLUSTER BOX UNIT MAILBOX–16 UNIT
NOT TO SCALE

NOTE:
'SLEEVE-IT NEEDS TO BE IN THE WALL CONTRACTOR SCOPE

'SLEEVE-IT' INSTALLATION FOR FENCING AT RETAINING WALLS



TYPICAL STEP-UP DETAIL
NOT TO SCALE

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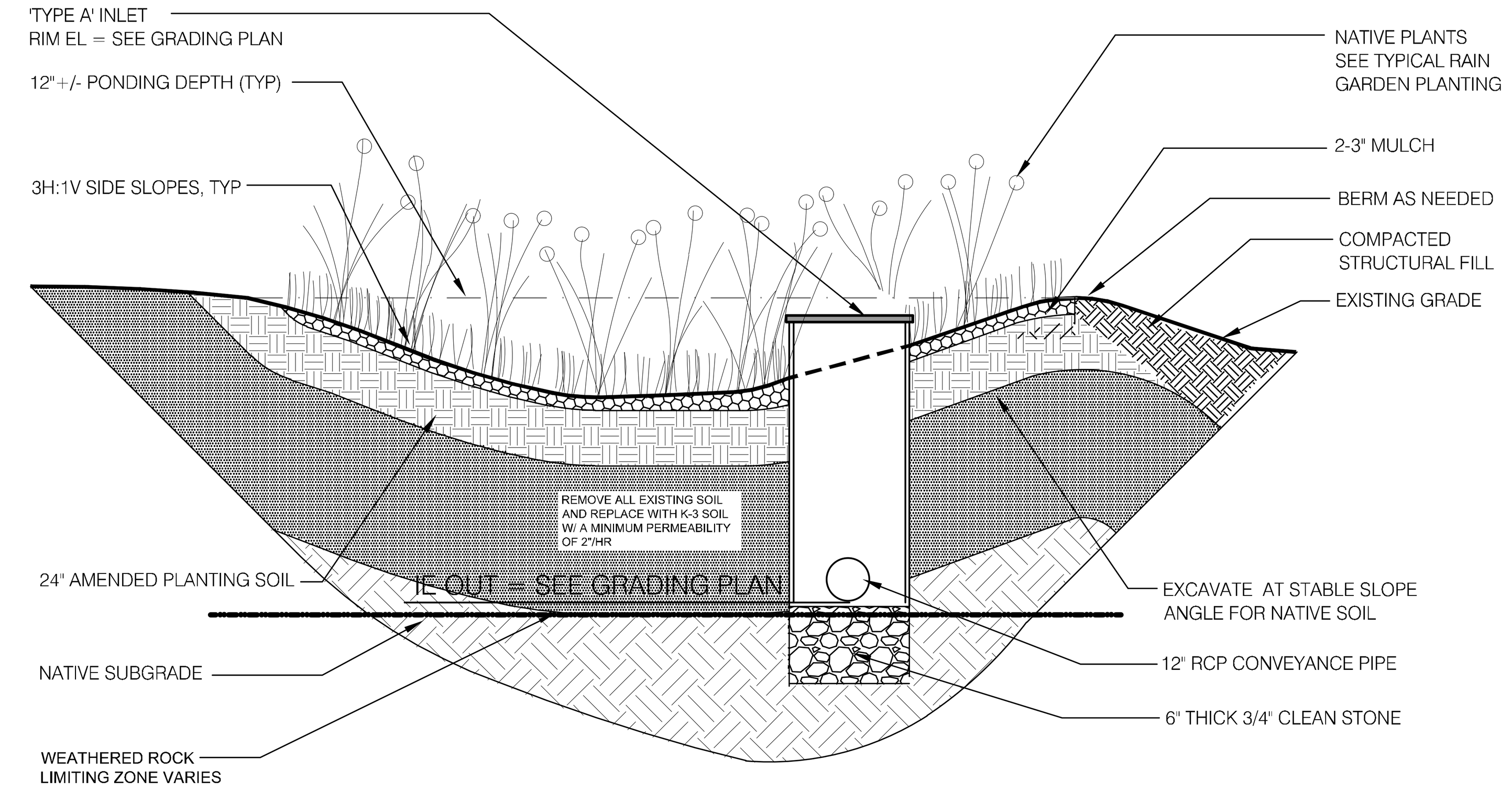
BIORETENTION SWALE & RAIN GARDEN SOIL NOTES:

1. THE AMENDED PLANTING SOIL BED MATERIAL SHOULD CONSIST OF THE FOLLOWING MIX, BY WEIGHT: 85 TO 95 PERCENT 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. THE MIX MUST BE CERTIFIED BY EITHER THE VENDOR WHO PREMIXES THE SOIL OR BY A PROFESSIONAL ENGINEER LICENSED BY THE STATE OF NEW JERSEY PRESENT DURING ANY ONSITE SOIL MATERIAL MIXING. THE MATERIAL'S PH SHOULD RANGE FROM 5.5 TO 6.5. THE MATERIAL SHALL BE PLACED IN 12 TO 18 INCH LIFTS. ADDITIONAL MATERIAL MAY BE NECESSARY TO ACCOUNT FOR THE SUBSEQUENT SETTLING OF THE MATERIAL OVER TIME.
2. THE MULCH LAYER ON THE SURFACE OF THE PLANTING SOIL BED PROVIDES AN ENVIRONMENT FOR PLANT GROWTH BY MAINTAINING MOISTURE, PROVIDING MICROORGANISMS, AND DECOMPOSING INCOMING ORGANIC MATTER. THE MULCHLAYER MAY ALSO ACT AS A FILTER FOR FINER PARTICLES STILL IN SUSPENSION AND MAINTAIN AN ENVIRONMENT FOR THE MICROBIAL COMMUNITY TO HELP BREAK DOWN URBAN RUNOFF POLLUTANTS. CARE MUST BE TAKEN TO ENSURE THAT THE MULCH LAYER DOES REDUCE THE DESIGN PERMEABILITY RATE OF THE SURFACE. THE MULCH LAYER SHOULD CONSIST OF STANDARD 1 TO 2 INCH SHREDDED HARDWOOD OR CHIPS. IT SHOULD BE APPLIED TO A DEPTH OF 2 TO 4 INCHES AND REPLENISHED AS NECESSARY. HOWEVER, PRIOR TO UTILIZING A MULCH LAYER, CONSIDERATION SHOULD BE GIVEN TO PROBLEMS CAUSED BY SCOUR AND FLOATATION DURING STORM EVENTS AND THE POTENTIAL FOR MOSQUITO BREEDING.

BIORETENTION SWALE SEEDING NOTES:

COMMON NAME	SCIENTIFIC NAME	SEASON	PERCENT
ALKALI SALTGRASS	PUCCINELLIA DISTANS	COOL	5%
FOWL BLUEGRASS	POA PALUSTRIS	COOL	5%
CANADA BLUEJOINT	CALAMAGROSTIS CANADENSIS	COOL	10%
CREEPING BENTGRASS	AGROSTIS PALUSTRIS	COOL	5%
RED FESCUE	FESTUCA RUBRA	COOL	15%
REDTOP	AGROSTIS GIGANTEA	COOL	10%
ROUGH BLUEGRASS	POA TRIVIALIS	COOL	15%
SWITCHGRASS	PANICUM VIRGATUM	WARM	15%
SHEEP FESCUE	FESTUCA OVINA	COOL	5%
BLACK-EYED SUSAN	RUDBECKIA HIRTA	PERENNIAL	10%
COREOPSIS	COREOPSIS LANCEOLATA	PERENNIAL	5%

NOTES:
THESE GRASSES ARE SOD FORMING AND CAN WITHSTAND FREQUENT INUNDATION, AND ARE IDEAL FOR THE ROADWAY SWALE. COOL REFERS TO COOL SEASON GRASSES THAT GROW DURING THE COOLER TEMPERATURES OF SPRING AND FALL. WARM REFERS TO WARM SEASON GRASSES THAT GROW MOST VIGOROUSLY DURING THE HOT, MID-SUMMER MONTHS.

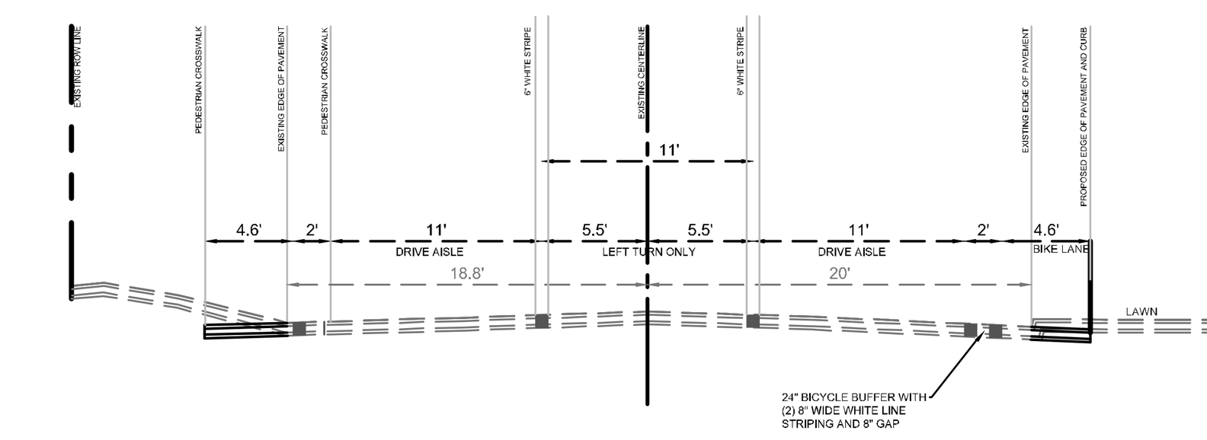


RAIN GARDEN DETAIL
NOT TO SCALE

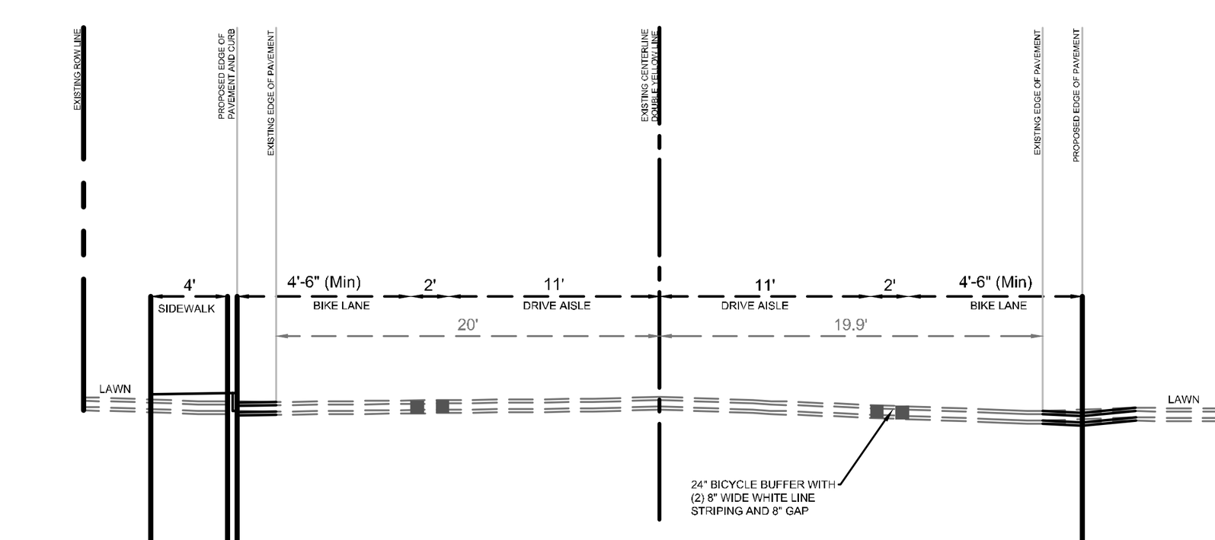
INFILTRATION RAIN GARDEN
WITH PLANTING SOIL NOTES

DESIGN NOTES:
1. PLANT WITH PLANTS PER LANDSCAPE ARCHITECT DWGS. NATIVE PLANTS ARE PREFERRED, BECAUSE NON-NATIVE AND INVASIVE SPECIES CAN MOVE DOWNSTREAM AND DAMAGE HABITAT. IF NON-NATIVES ARE CHOSEN, BE SURE THAT THEY WILL NOT DAMAGE DOWNSTREAM HABITAT.

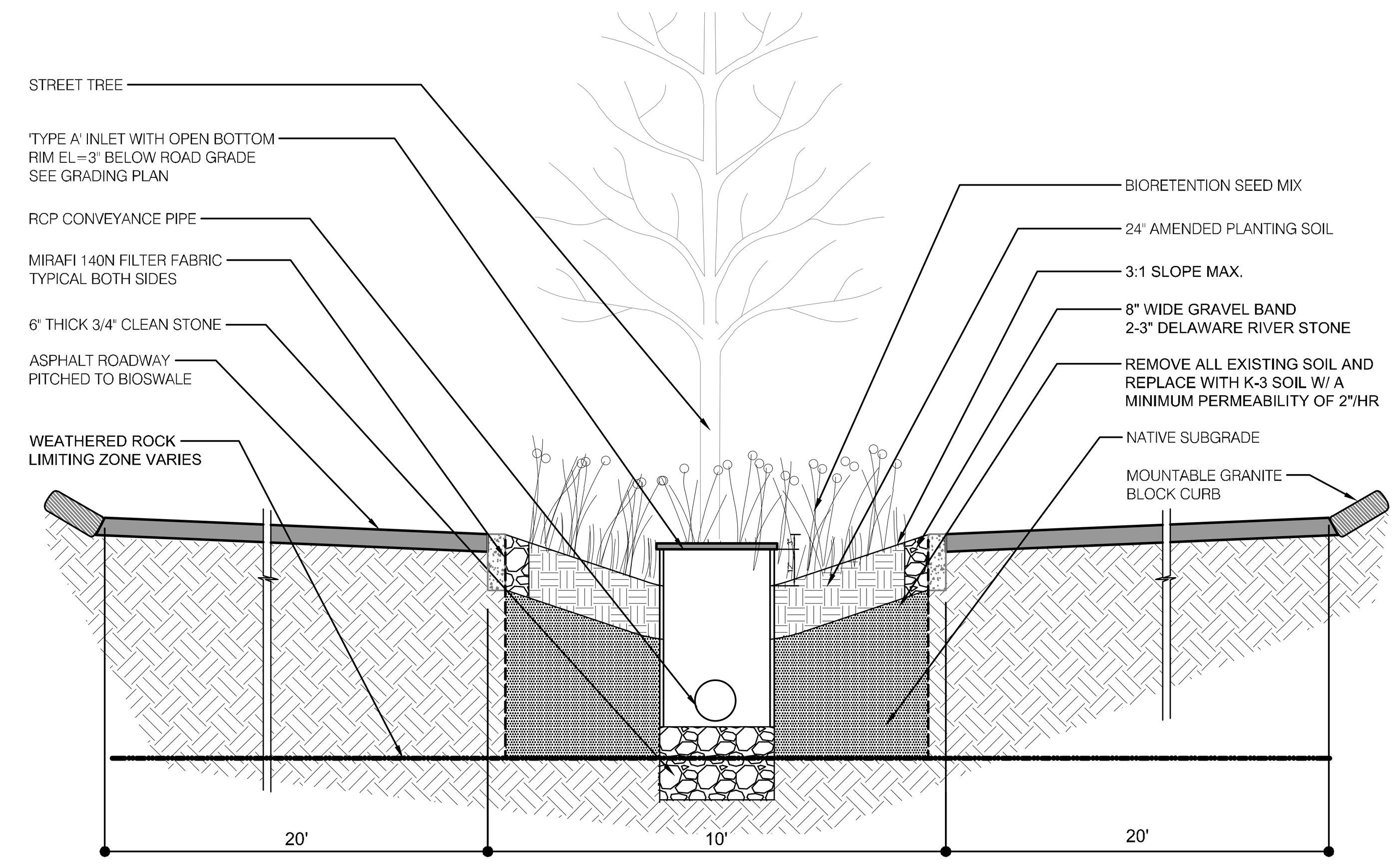
CONSTRUCTION NOTES:
2. BUILD AND VEGETATE RAIN GARDEN AS EARLY AS POSSIBLE TO ESTABLISH PLANTINGS BEFORE DIRECTING STORMWATER RUNOFF TO IT OR DIVERT STORMWATER AROUND FACILITY. PREFERABLY, THIS PERIOD WOULD LAST A MINIMUM OF 3 MONTHS OR PER LANDSCAPE ARCHITECT GUIDELINES.
3. INFILTRATION AREAS (THE AREA OF THE RAIN GARDEN AS DEFINED BY THE TOP ELEVATION OF THE FACILITY) SHALL BE FENCED OFF FROM THE FIRST DAY OF EARTH MOVING UNTIL PROJECT COMPLETION TO PREVENT COMPACTION OF THE SUBGRADE, DIRT TRACKING ONTO ANY LAYER OF THE FACILITY AND STOCKPILING OF CONSTRUCTION MATERIALS THAT MAY CLOG THE SURFACE.
4. DURING EXCAVATION OF NATIVE SOILS TO THE BOTTOM OF THE FACILITY, RAINFALL MAY CAUSE FINES TO CLOG THE SURFACE OF THE FACILITY. IF THE NATIVE SOIL HAS BEEN EXPOSED TO RAINFALL, HAND RAKE THE SURFACE TO A DEPTH OF 3" TO RESTORE INFILTRATION CAPACITY.
5. DURING AREA DRAIN INSTALLATION, DISTURB NATIVE SOILS AS LITTLE AS POSSIBLE.



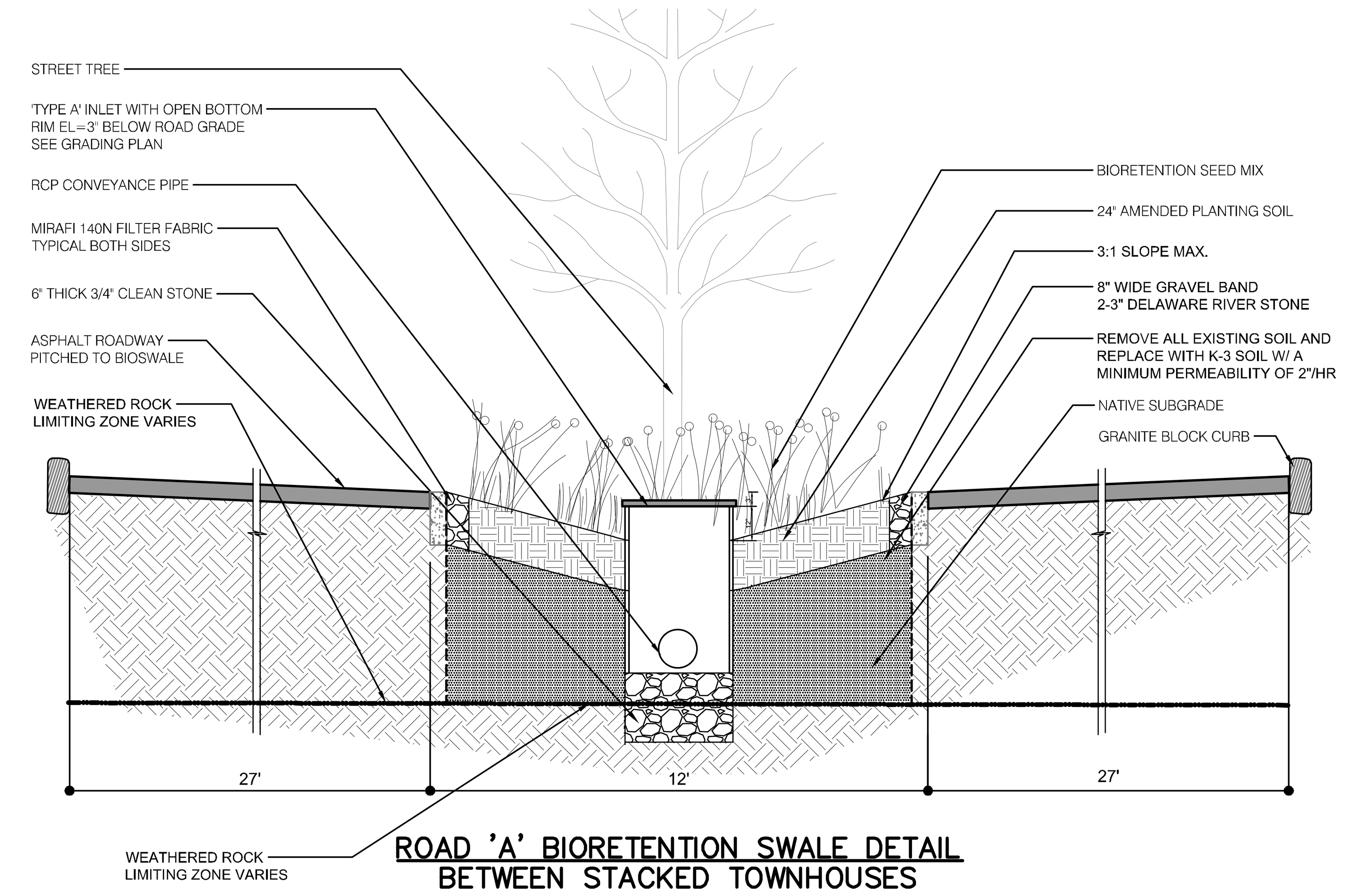
ROAWAY SECTION AT LEFT ONLY TURNING LANE
WASHINGTON CROSSING PENNINGTON ROAD
NOT TO SCALE



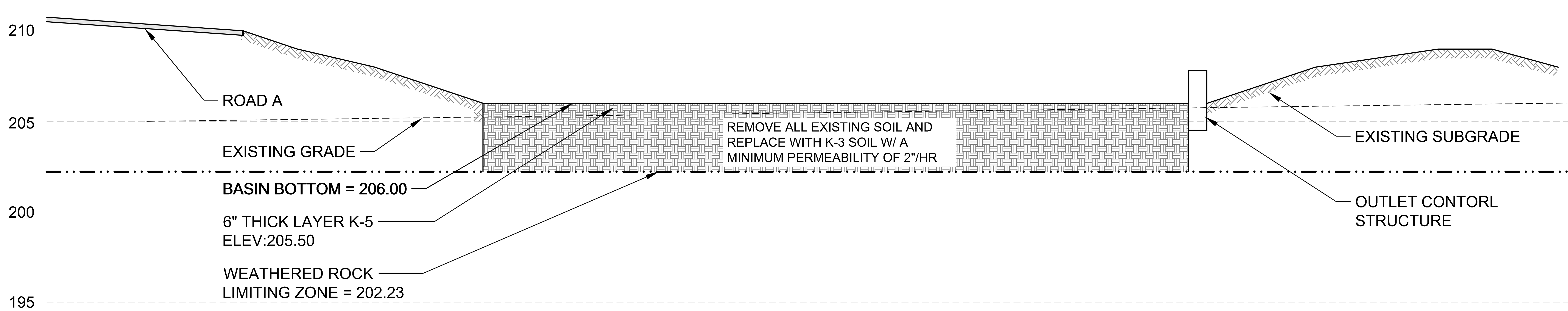
ROADWAY SECTION WITH BIKE LANE
WASHINGTON CROSSING PENNINGTON ROAD
NOT TO SCALE



ROADWAY BIORETENTION SWALE DETAIL
TYPICAL
NOT TO SCALE



ROAD 'A' BIORETENTION SWALE DETAIL
BETWEEN STACKED TOWNHOUSES
NOT TO SCALE



BASIN A
EXTENDED DETENTION—INFILTRATION BASIN DETAIL
SCALE: 1"=5'-0"

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SEAN A. DELANY, N.J. Professional Engineer, Lic. 24GE04447100

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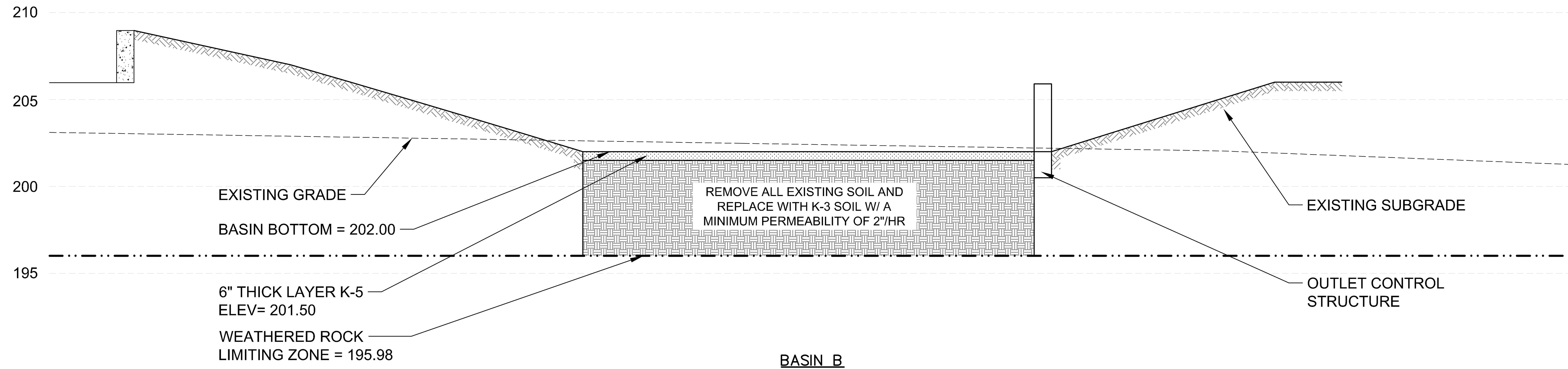
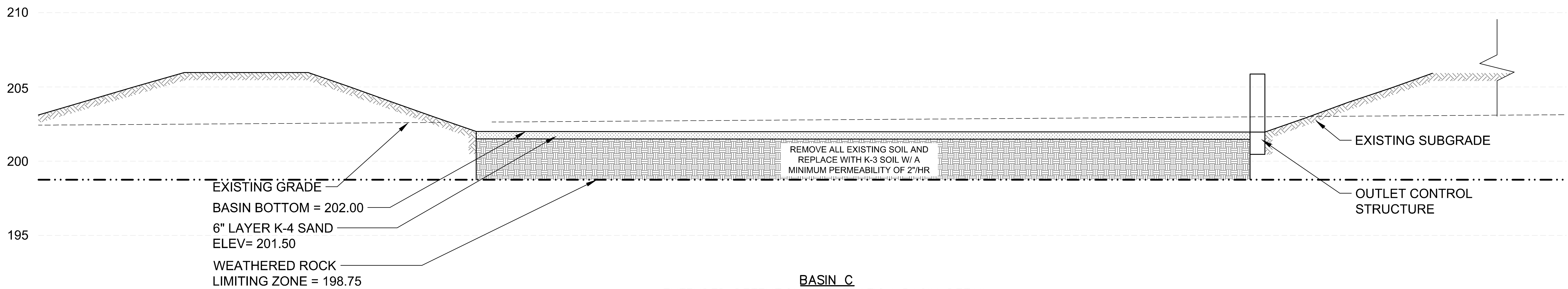


BASIN B
EXTENDED DETENTION—INFILTRATION BASIN DETAIL
SCALE: 1"=3'-0"



BASIN C
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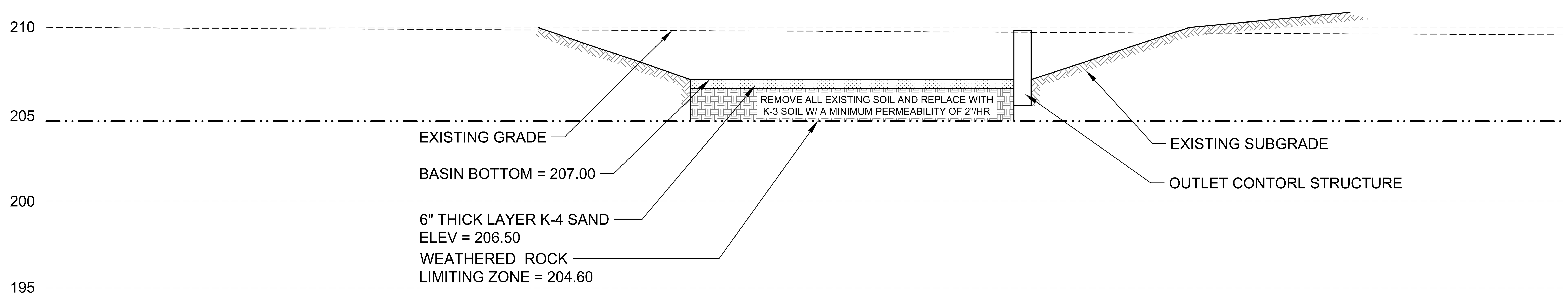
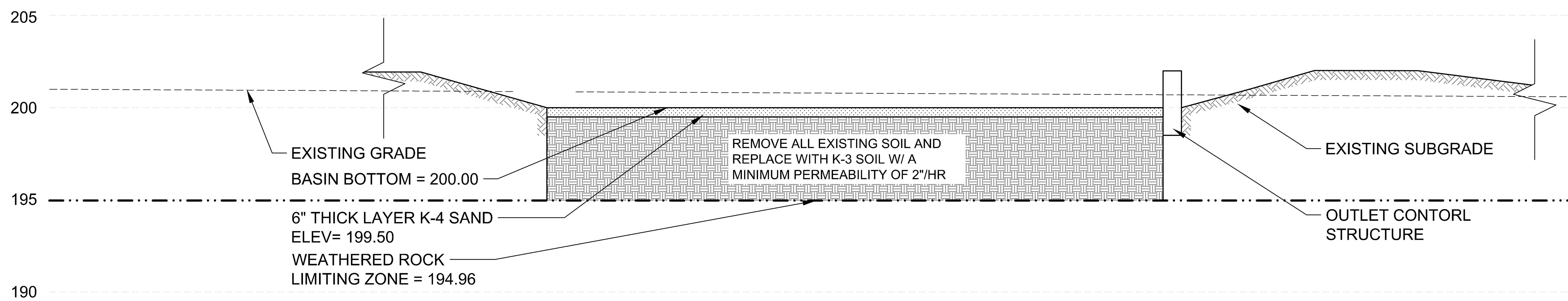


BASIN D
EXTENDED DETENTION—INFILTRATION BASIN DETAIL
SCALE: 1"=3'-0"



BASIN E
EXTENDED DETENTION—INFILTRATION BASIN DETAIL
SCALE: 1"=3'-0"

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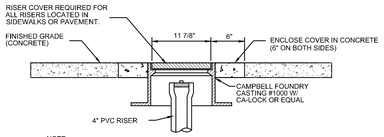
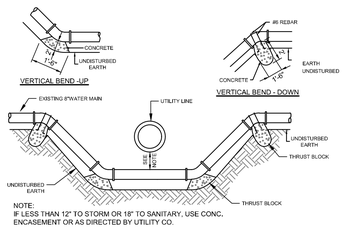


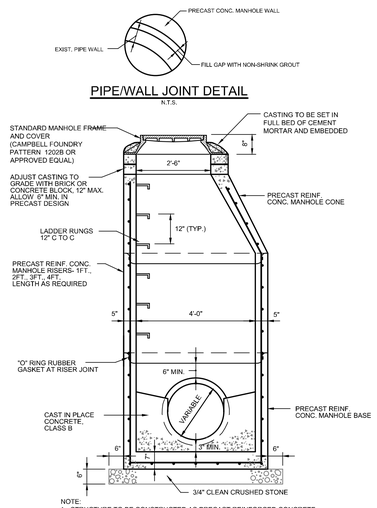
CLEANOUT RISER COVER DETAIL

NOT TO SCALE



DEPRESSED WATERLINE

NOT TO SCALE



PIPE/WALL JOINT DETAIL

N.T.S.

STORM PRECAST MANHOLE

NOT TO SCALE

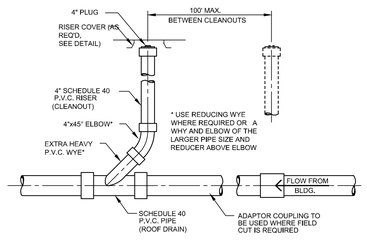
STORM INLET & MANHOLE NOTES

1. CORBELLING OF INLET WALLS WILL BE PERMITTED AT THE RATE OF 1/2" PER 8" OF HEIGHT OF WALL. MAXIMUM CORBEL 6" PER WALL.
2. WHEN THE ITEM MANHOLES, INLETS AND CATCH BASINS, ADDITIONAL DEPTH, IS SCHEDULED IN THE PROPOSAL AND THE DEPTH OF A STRUCTURE EXCEEDS 10' AS MEASURED FROM TOP OF COVER OR GRATE TO INVERT OF DRAINAGE STRUCTURE, THE WALLS OF THE STRUCTURE BELOW A DEPTH OF 8' SHALL BE 12" THICK, AND THE OVERALL HORIZONTAL DIMENSIONS OF FOUNDATIONS SHALL BE INCREASED 12", AND EXCEPT IN ROCK THE DEPTH INCREASED TO 12".
3. EXCEPT FOR CATCH BASINS AND TYPE A INLETS, FOOTINGS AND INVERTS SHALL BE CONSTRUCTED IN TWO STAGES, AND THE BOTTOM OF THE FOOTINGS SHALL BE 8" BELOW THE OUTER WALL OF THE LOWEST PIPE IN INLETS AND 10" IN MANHOLES.
4. LADDER RUNGS OF PRECAST INLETS SHALL BE SPACED A MAXIMUM OF 18".
5. INLET FOUNDATIONS WHICH ARE PRECAST SHALL BE PLACED ON A 6" THICK BED OF COMPACTED COARSE AGGREGATE SIZE No. 57, THE COARSE AGGREGATE SHALL EXTEND 6" BEYOND THE HORIZONTAL LIMITS OF THE INLET FOUNDATION.
6. CASTINGS FOR PRECAST INLETS AND MANHOLES SHALL BE ADJUSTED TO GRADE WITH COURSES OF BRICK, AS REQUIRED, 12" MAXIMUM. 6" MIN. SHALL BE ALLOWED FOR IN PRECAST DESIGN.
7. WHEN THE DEPTH OF A PRECAST INLET EXCEEDS 10' AS MEASURED FROM TOP OF GRATE TO INVERT, THE FOUNDATION SHALL BE INCREASED TO 12", WHEN ROCK IS ENCOUNTERED THE DEPTH OF THE FOUNDATION SHALL NOT BE INCREASED.
8. MINIMUM WALL REINFORCEMENT FOR PRECAST INLETS TYPE A, B, C, E, D-1 AND B MODIFIED.

DEPTH BELOW TOP OF GRATE	HORIZONTAL REINFORCEMENT	VERTICAL REINFORCEMENT	WALL THICKNESS
0' TO 10'-0"	#4 @ 10" C.C.	#4 @ 18" C.C.	6"
10'-1" TO 15'-0"	#4 @ 8" C.C.	#4 @ 18" C.C.	6"
15'-1" TO 20'-0"	#4 @ 6" C.C.	#4 @ 18" C.C.	6"

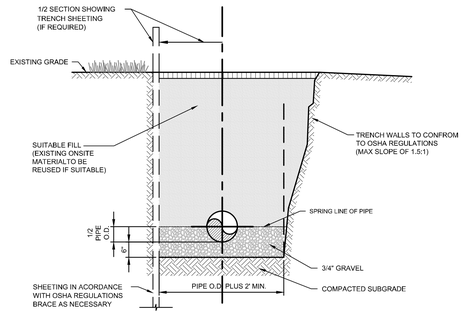
REINFORCING SHOWN FOR PRECAST INLETS IS THE MINIMUM REQUIRED. ADDITIONAL REINFORCING FOR HANDLING IS THE RESPONSIBILITY OF THE CONTRACTOR.

9. THE ITEM OF RESET HEADS SHALL INCLUDE RAISING OR LOWERING THE HEAD CASTINGS OF INLETS AND CATCH BASINS, OR THE RAISING OF MANHOLE HEAD CASTINGS, FOR A MAXIMUM OF 12". ALL OTHER CHANGES IN POSITION OF HEAD CASTING SHALL BE CONSIDERED AS RECONSTRUCTED MANHOLES OR RECONSTRUCTED INLETS OR CATCH BASINS.
10. WHEN CURB PIECE HEIGHT SPECIFIED IS GREATER THAN CURB FACE HEIGHT, DEPRESS THE GUTTER OF GRATE SO THAT THE TOP OF CURB PIECE IS AT THE SAME ELEVATION AS THE TOP OF CURB.



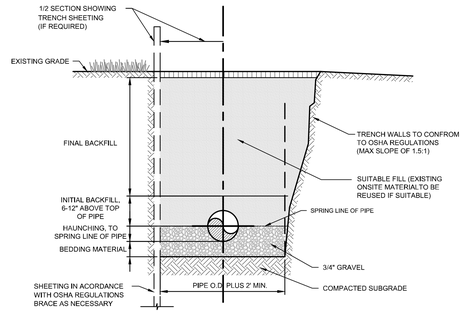
ROOF DRAIN CLEANOUT DETAIL

NOT TO SCALE



PIPE TRENCH DETAIL – RCP PIPE

NOT TO SCALE



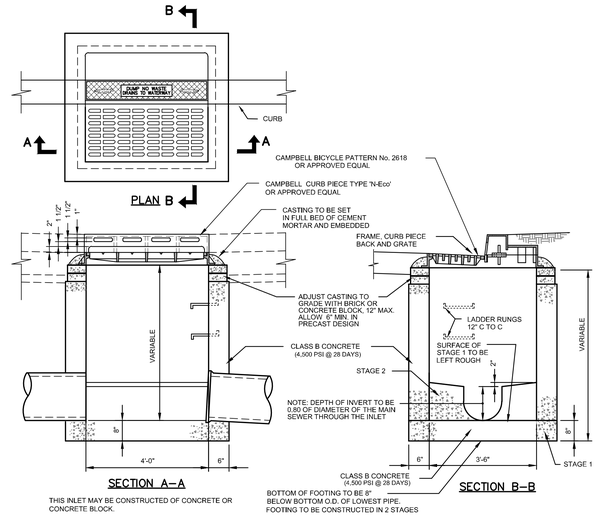
PIPE TRENCH DETAIL – H.D.P.E. PIPE

NOT TO SCALE

NOTES:

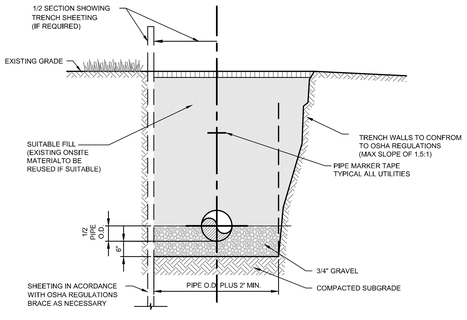
1. FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH A FOUNDATION OF CLASS I OF II MATERIAL AS DEFINED IN ASTM D2321, "STANDARD PRACTICE FOR INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS ANDOTHER GRAVITY-FLOW APPLICATIONS." LATEST EDITION. AS AN ALTERNATIVE AND AT THE DISCRETION OF THE ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A WOVEN GEOTEXTILE FABRIC.
2. BEDDING: SUITABLE MATERIAL SHALL BE CLASS I, II, OR III AND INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.

   UNLESS OTHERWISE SPECIFIED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 4" FOR 4" TO 24" AND 42" TO 48" CORRUGATED POLYETHYLENE PIPE AND 6" FOR 30 TO 26" CPEP.
3. HAUNCHING AND INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE CLASS I, II, OR III AND INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.



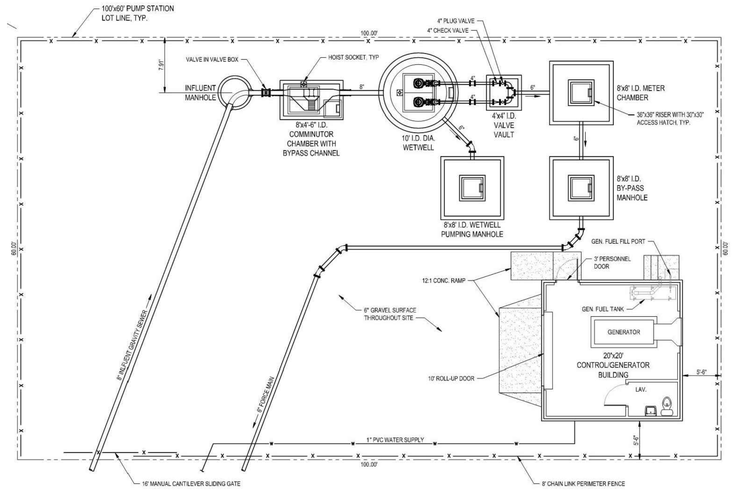
INLET TYPE "B" DETAIL WITH C.I. CURB PIECE–BACK–FRAME AND GRATE

NOT TO SCALE



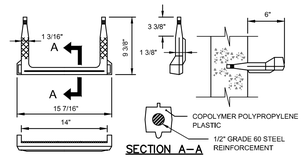
WATER MAIN TRENCH DETAIL

NOT TO SCALE



SEWER PUMP STATION LAYOUT

NOT TO SCALE

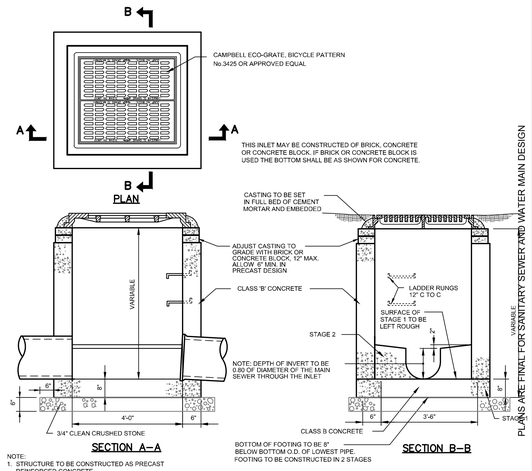


SECTION A–A

FOR ROADWAY LOCATIONS STEPS SHALL BE ORIENTED TO ALLOW VIEWING OF ONCOMING TRAFFIC WHEN EXITING STRUCTURE

COPOLYMER POLYPROPYLENE PLASTIC LADDER RUNG

NOT TO SCALE



NOTE:
1. STRUCTURE TO BE CONSTRUCTED AS PRECAST REINFORCED CONCRETE.
2. ALL CONCRETE TO BE 4,500 PSI, NJDOT CLASS B, AIR ENTRAINED.

INLET TYPE "E"

NOT TO SCALE

THESE PLANS ARE NOT TO BE USED FOR BID OR CONSTRUCTION

NO.	REVISION	DATE	CHKD
11			
10			
9			
8			
7			
6			
5			
4			
3			
2			
1			

PROJ.: 080661-F-001
DATE: 11-20-2020
CHKD: SAD

Bowman Consulting Group, Ltd.
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NJ Certificate of Authorization No. 24GA28222600

SEAN A. DELANY, N.J. Professional Engineer, Lic. 24GE04447100

PRELIMINARY & FINAL MAJOR SUBDIVISION AND PRELIMINARY & FINAL SITE PLAN

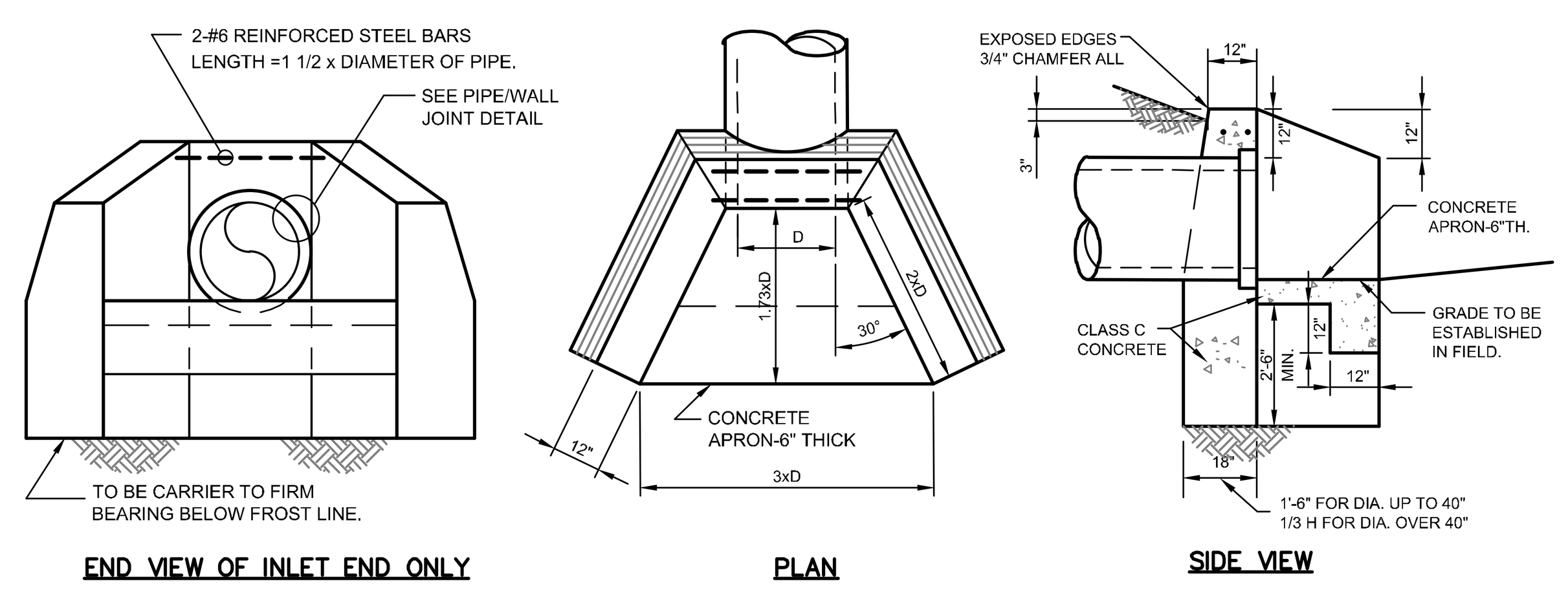
THE COLLECTION at HOPEWELL

CONSTRUCTION DETAILS-UTILITY

BLOCK 85, LOT 3, BLOCK 86, LOTS 32-34 &130, AND PART OF BLOCK 85, LOT 9
TOWNSHIP OF HOPEWELL, MERCER COUNTY, NEW JERSEY

PLANS ARE FINAL FOR SANITARY SEWER AND WATER MAIN DESIGN

SHEET No. 16 OF A



HEADWALLS IN CUBIC YARDS

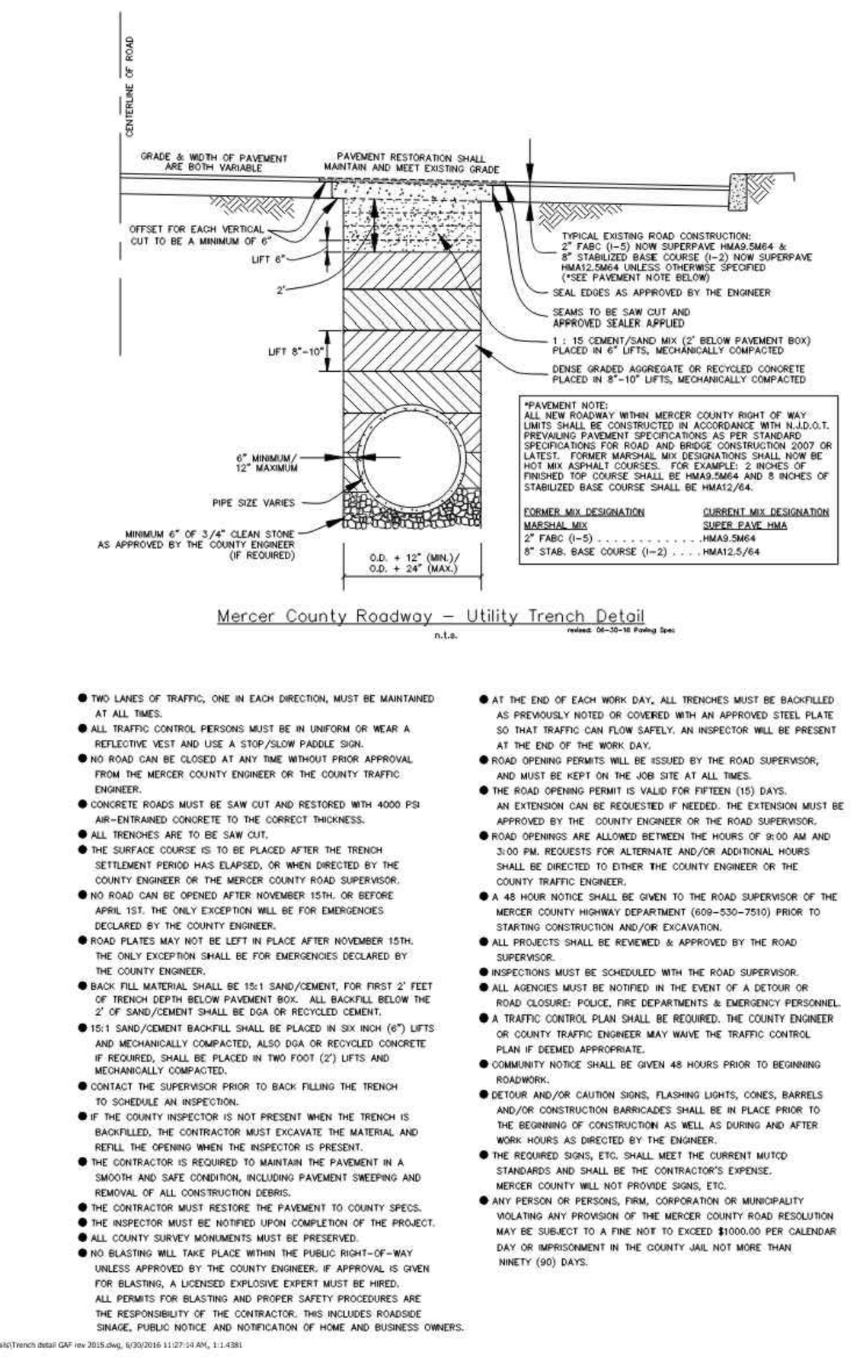
PIPE SIZE	CORR. STEEL PIPE IN C.Y.	REIN. CONC. PIPE IN C.Y.	APRONS IN C.Y.
12"	1.4	1.4	0.2
15"	1.7	1.7	0.2
18"	2.1	2.1	0.3
21"	2.5	2.5	0.4
24"	2.9	2.9	0.5
27"	3.3	3.4	0.6
30"	3.7	3.8	0.7
36"	4.7	4.8	0.9
42"	5.8	6.3	1.2
48"	7.6	8.4	1.5
54"	9.7	10.7	1.8
60"	12.2	13.4	2.1
66"	15.0	16.4	2.5
72"	18.1	19.9	3.0

GENERAL NOTES:

1. ALL EDGES TO BE CHAMFERED 1".
2. THE RUBBING OF HEADWALLS TO REMOVE FORM MARKS AS REQUIRED IN SUBSECTIONS 501.14 FOR CONCRETE STRUCTURES, WILL NOT BE REQUIRED FOR HEADWALLS AT THE BOTTOM OF EMBANKMENTS IN RURAL AREAS.
3. FOR SLOPE DRAIN HEADWALLS, DIMENSIONS AND APRON GRADES SHALL BE SET BY ENGINEER.
4. FOR MORE THAN ONE PIPE, SET THE PIPES A MINIMUM OF ONE FOOT APART (OUTSIDE BARREL TO OUTSIDE BARREL); THERE SHALL BE 12" ABOVE THE TOP OF A PIPE IN A WINGWALL. THE TERMINUS OF THE WINGWALL SHALL BE 2D FROM THE CENTERLINE OF THE PIPE IN A WINGWALL.
5. THE TERMINUS FOR OUTLET AND INLET APRONS SHALL BE SET BY EXTENDING THE PIPE GRADE AHEAD AND BACK, RESPECTIVELY.
6. FOR ARCH PIPE, THE SPAN SHALL BE SUBSTITUTED FOR D.
7. IF PRECAST HEADWALLS ARE TO BE USED, SHOP DRAWINGS OF THE UNITS SHALL BE PROVIDED TO THE ENGINEER FOR REVIEW AND APPROVAL.

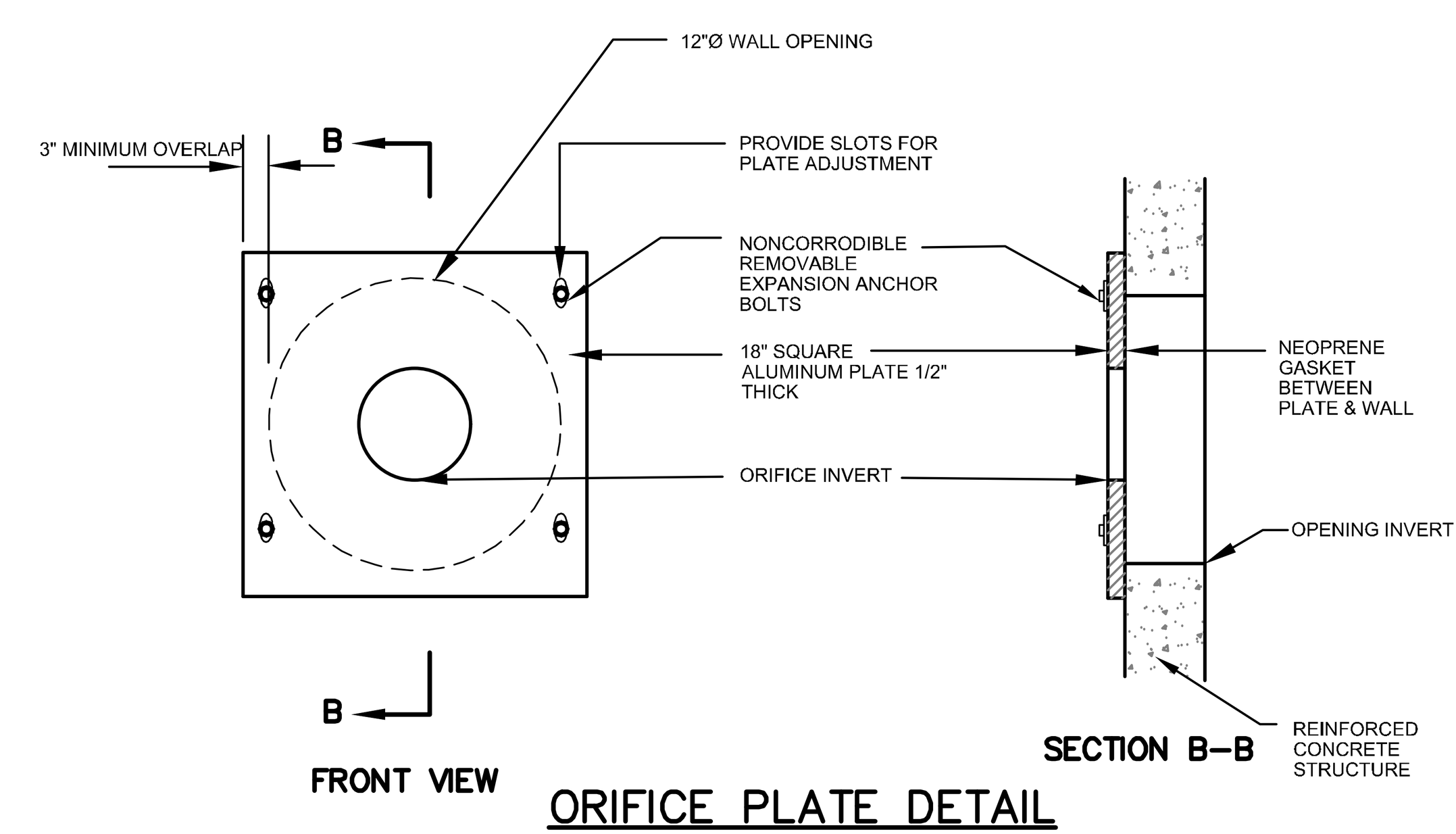
PRECAST CONCRETE HEADWALL WITH WINGWALLS

NOT TO SCALE



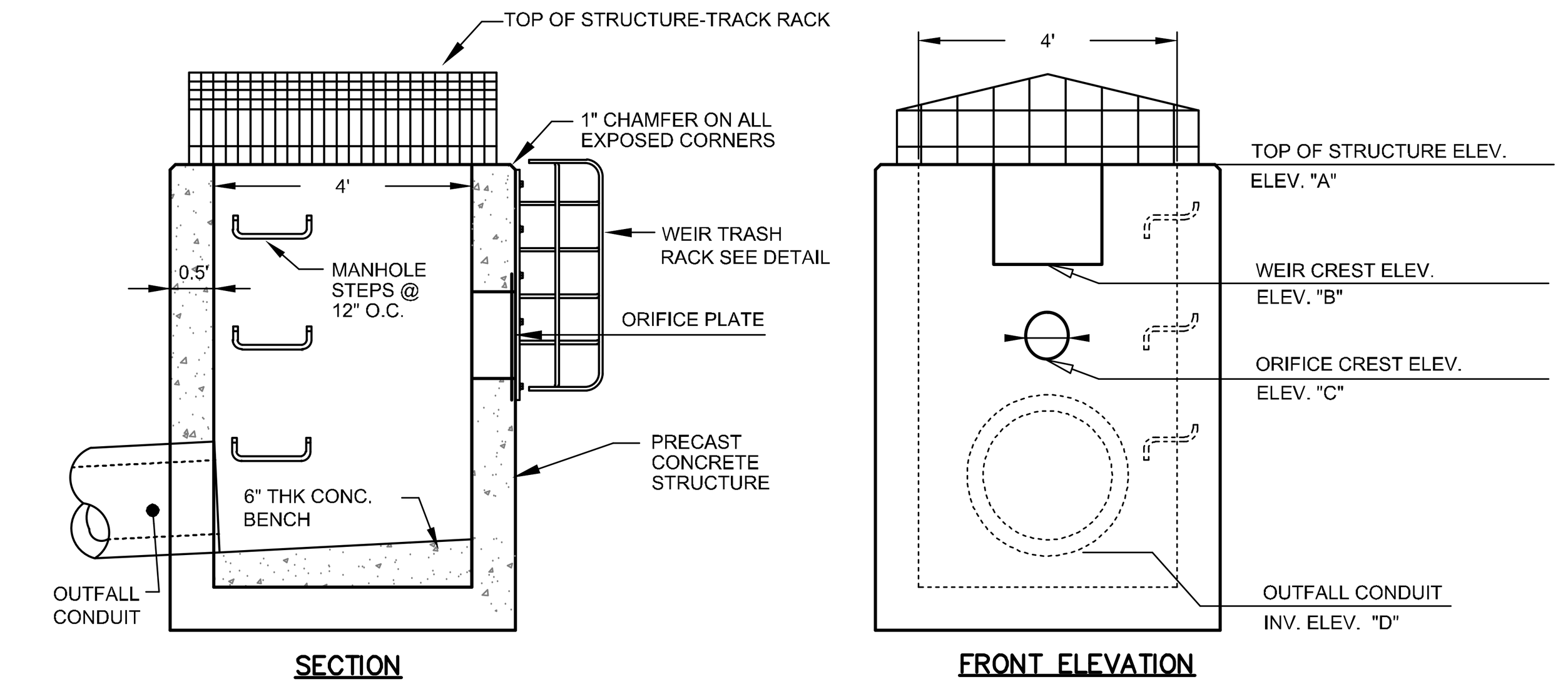
MERCER COUNTY STANDARD UTILITY TRENCH DETAIL

NOT TO SCALE



ORIFICE PLATE DETAIL

NOT TO SCALE

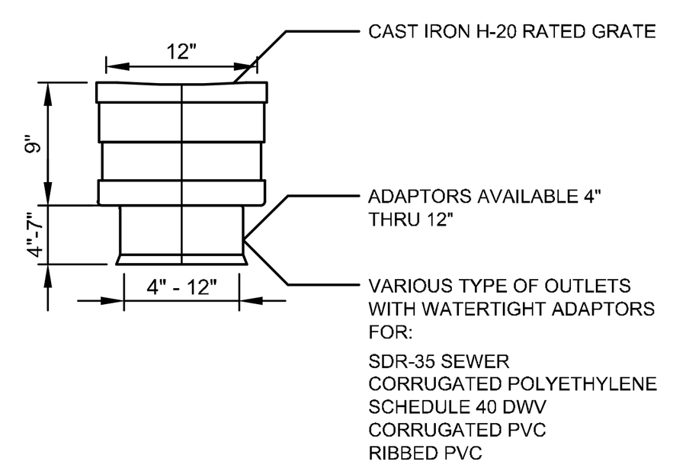


TRASH RACKS NOT SHOWN FOR CLARITY
SEE PLAN FOR GRADING

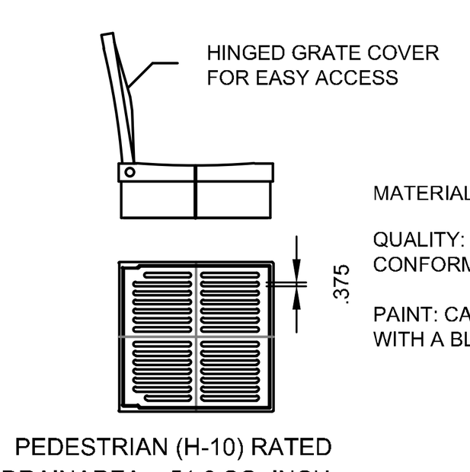
LOCATION	ELEV. "A"	WEIR LENGTH	ELEV. "B"	ORIFICE SIZE	ELEV. "C"	OUTLET PIPE SIZE	ELEV. "D"
OS 1	X	X'	X	X"	X	X"	X
OS 2	X	X'	X	X"	X	X"	X

OUTLET CONTROL STRUCTURE DETAIL

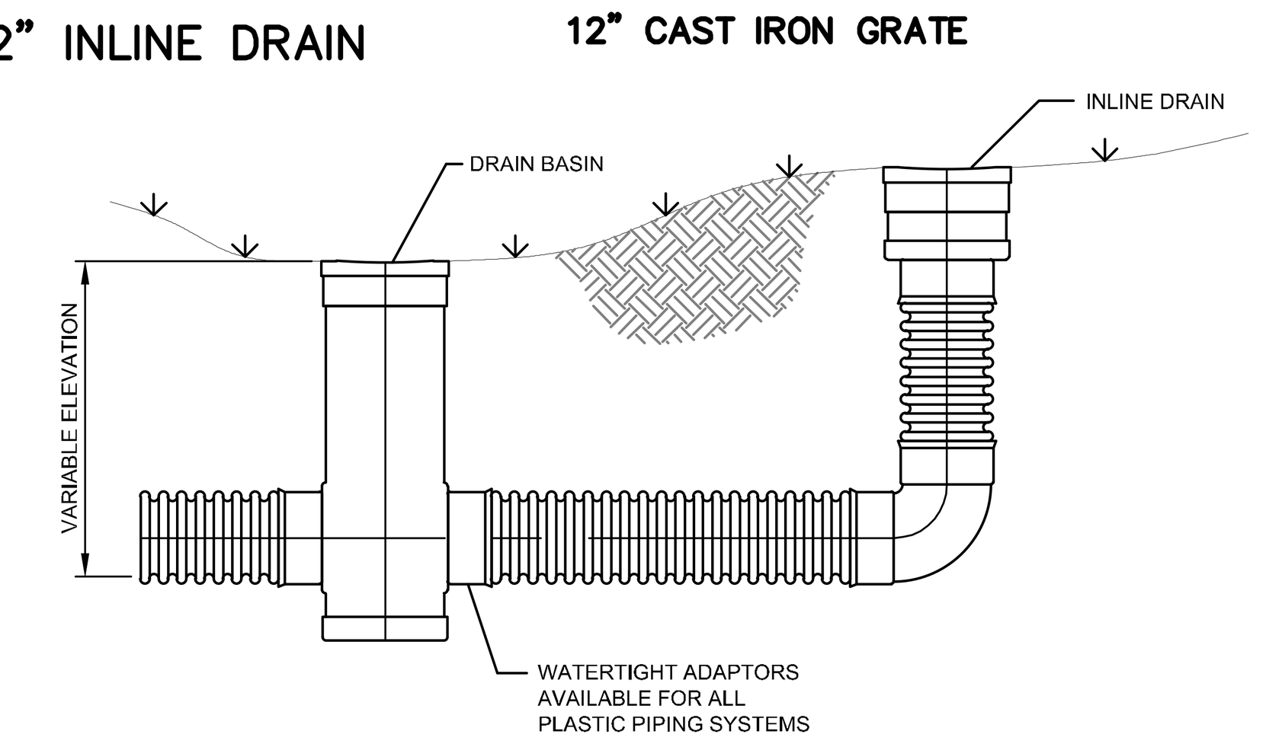
NOT TO SCALE



12" INLINE DRAIN



12" CAST IRON GRATE

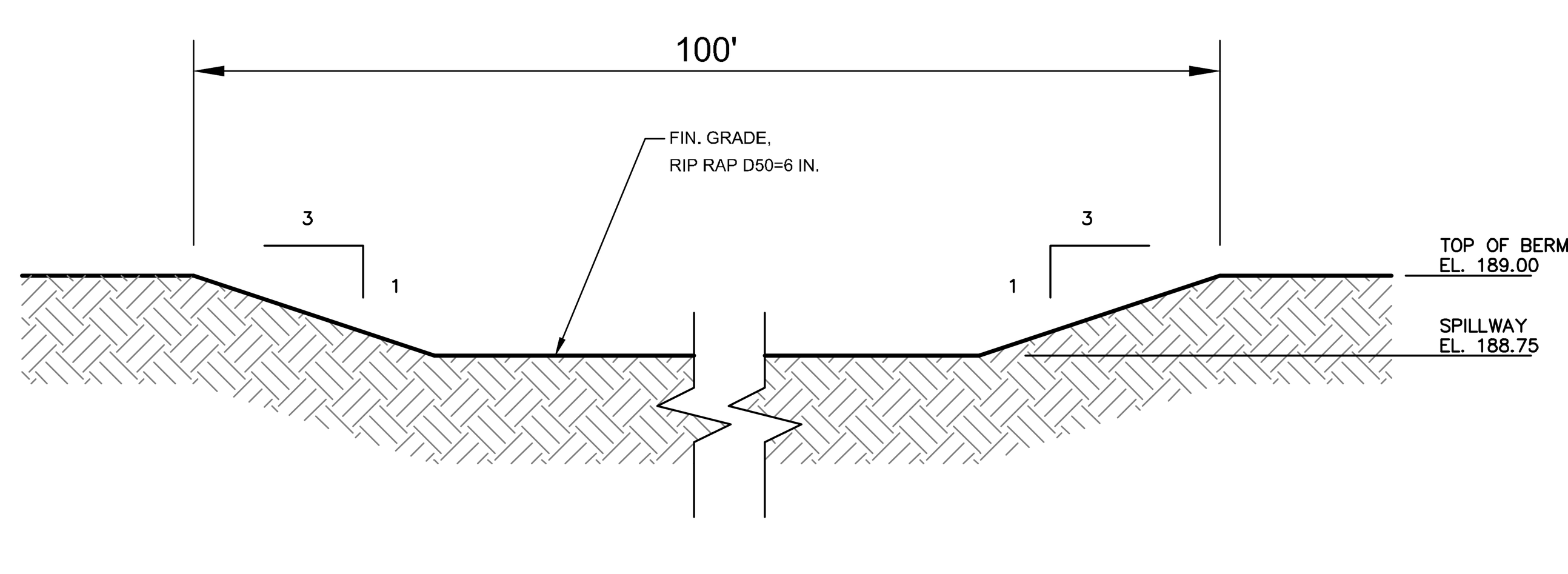


TYPICAL INSTALLATIONS

NYLOPLAST DRAIN BASIN AND INLINE DRAIN
OR APPROVED EQUAL (TO BE INSTALLED AS NEEDED)

GRASS SWALE YARD INLET DETAIL

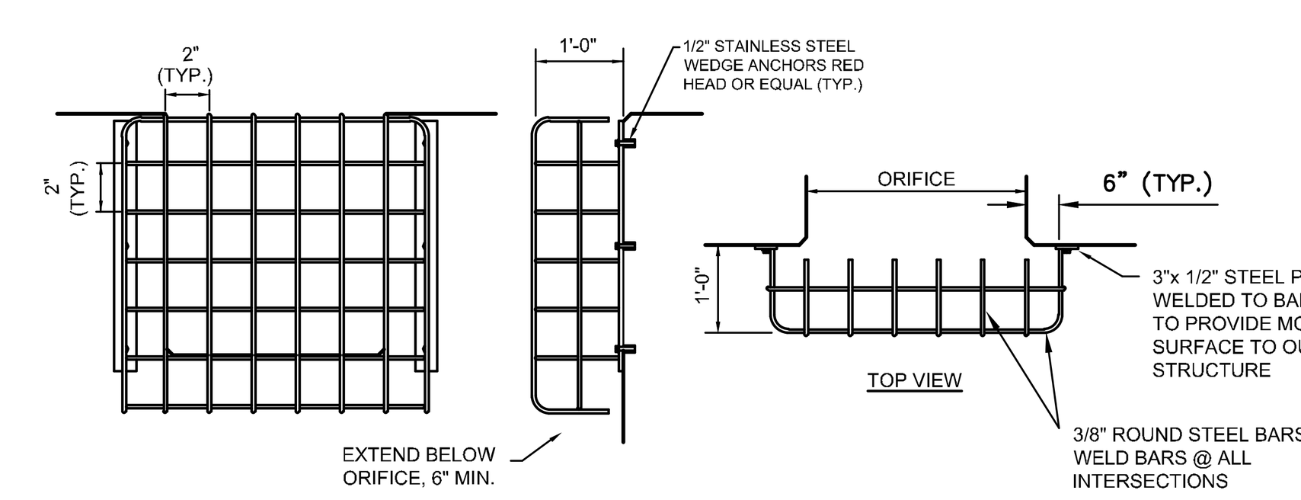
NOT TO SCALE



TYPICAL SECTION THRU SPILLWAY

EMERGENCY SPILLWAY DETAIL

NOT TO SCALE

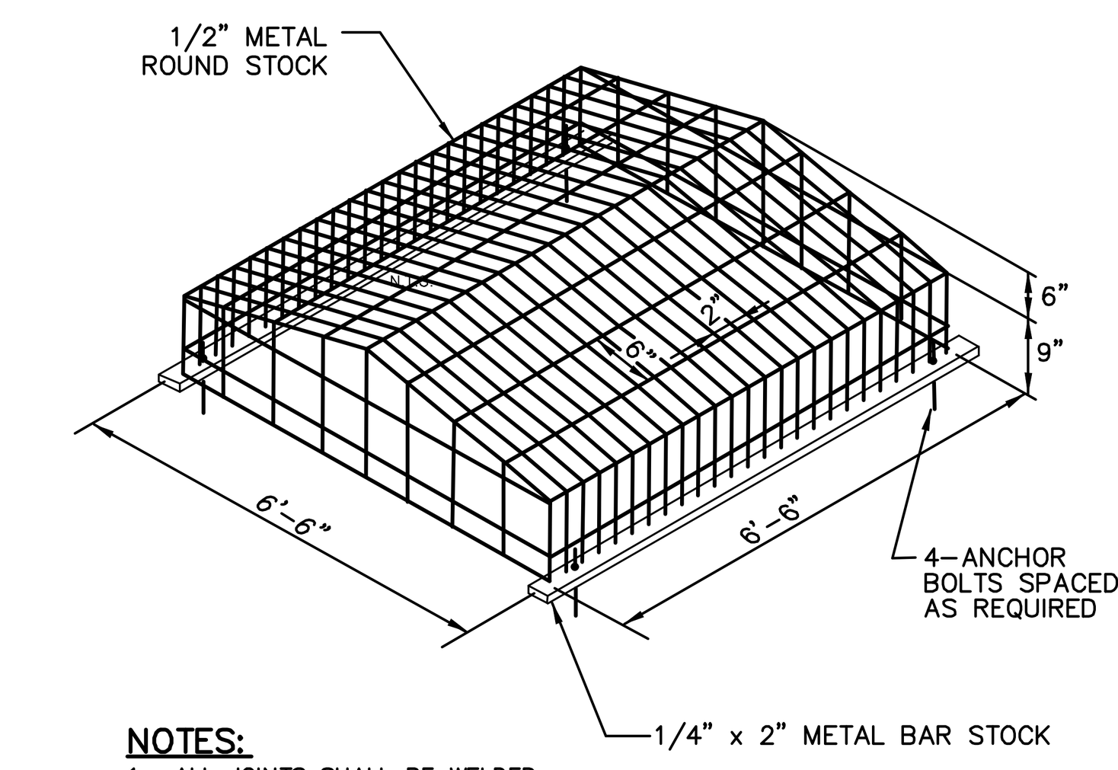


NOTES:

1. ALL JOINTS SHALL BE WELDED.
2. ALL METAL SHALL CONSIST OF STAINLESS STEEL OR GALVANIZED STEEL.

ORIFICE TRASH RACK DETAIL

NOT TO SCALE

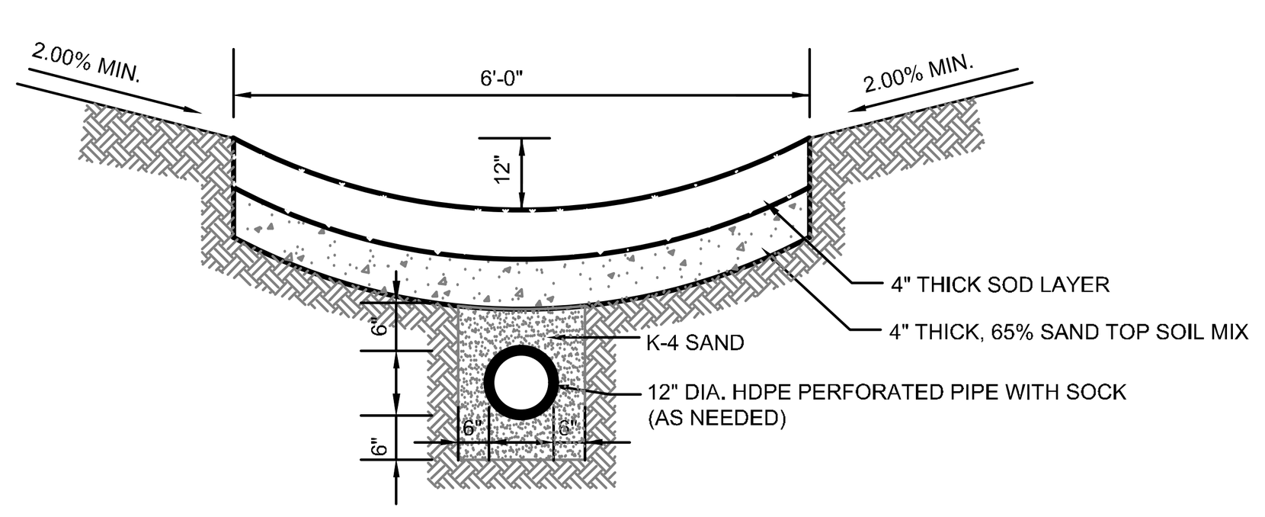


NOTES:

1. ALL JOINTS SHALL BE WELDED.
2. ALL METAL SHALL CONSIST OF STAINLESS STEEL OR GALVANIZED STEEL.

TOP OF STRUCTURE TRASH RACK

NOT TO SCALE



SECTION

NOTES:

1. 12" HDPE PERFORATED PIPE WITH SOCK UNDERDRAINS AND YARD INLETS TO BE INSTALLED AT THE OWNER'S DISCRETION ON AN AS NEEDED BASIS WITHIN DRAINAGE EASEMENTS IN BACKYARDS OF LOTS.
2. UNDERDRAINS SHALL TIE INTO DOWNSTREAM INLETS AS LOCATED ON UTILITY PLANS.

GRASS SWALE AND UNDERDRAIN DETAIL

NOT TO SCALE

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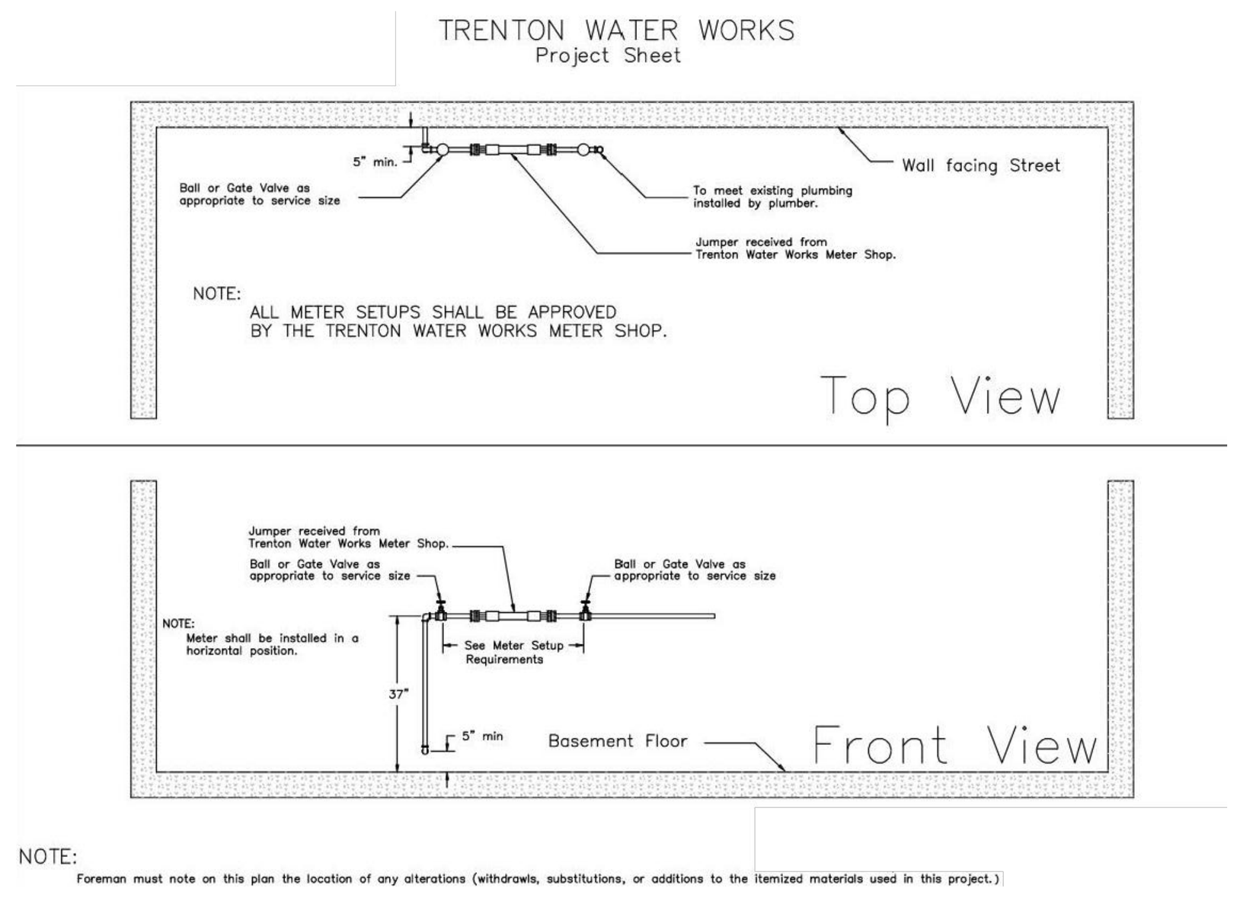
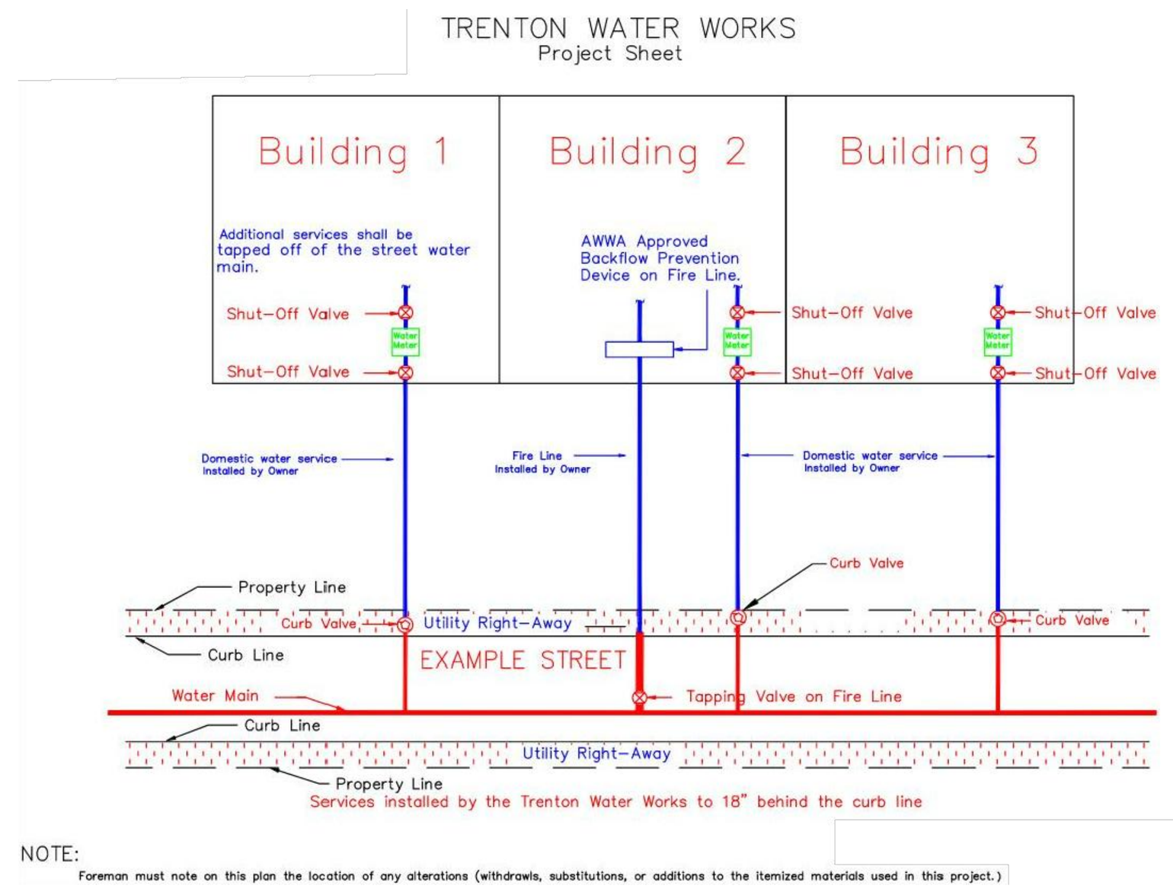
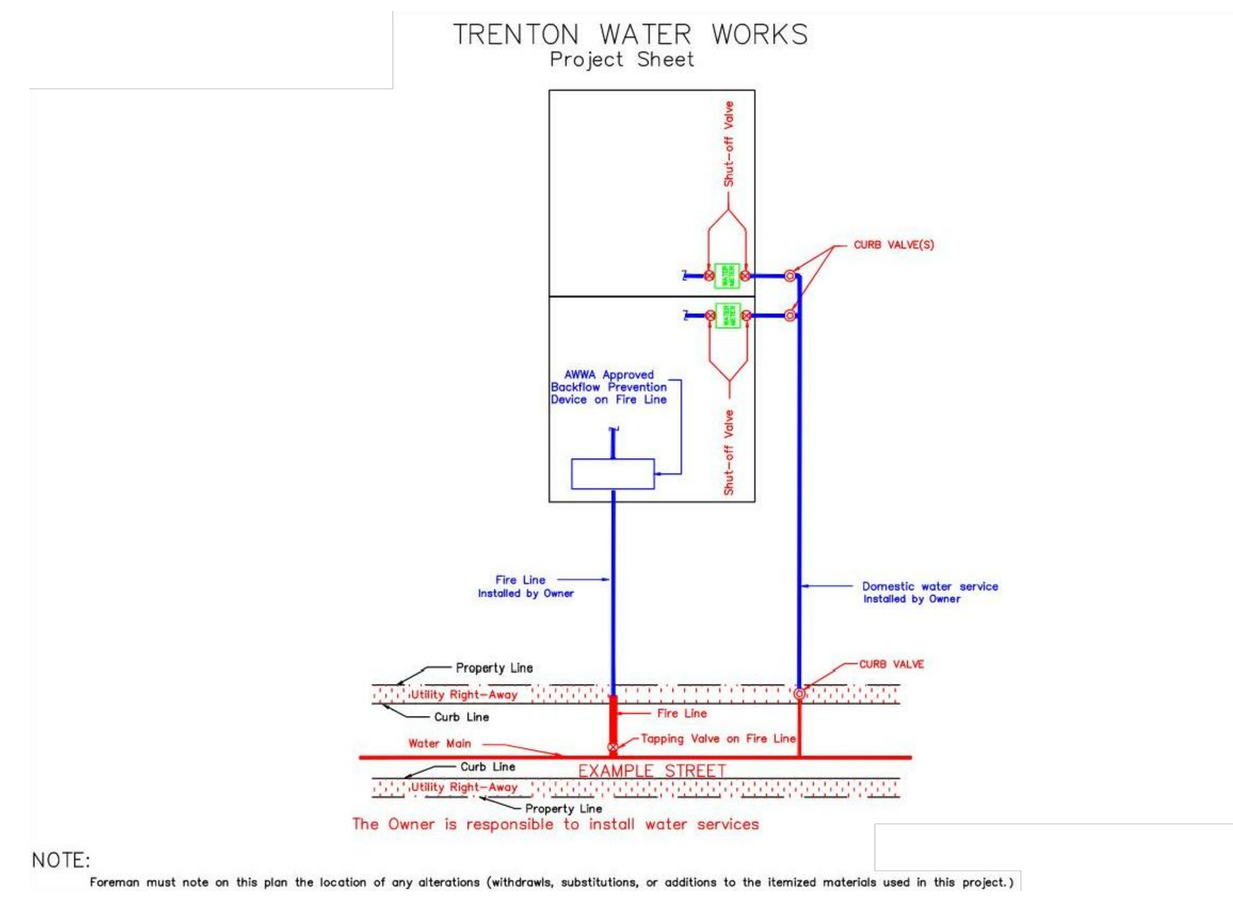
SHEET No. 16 OF B



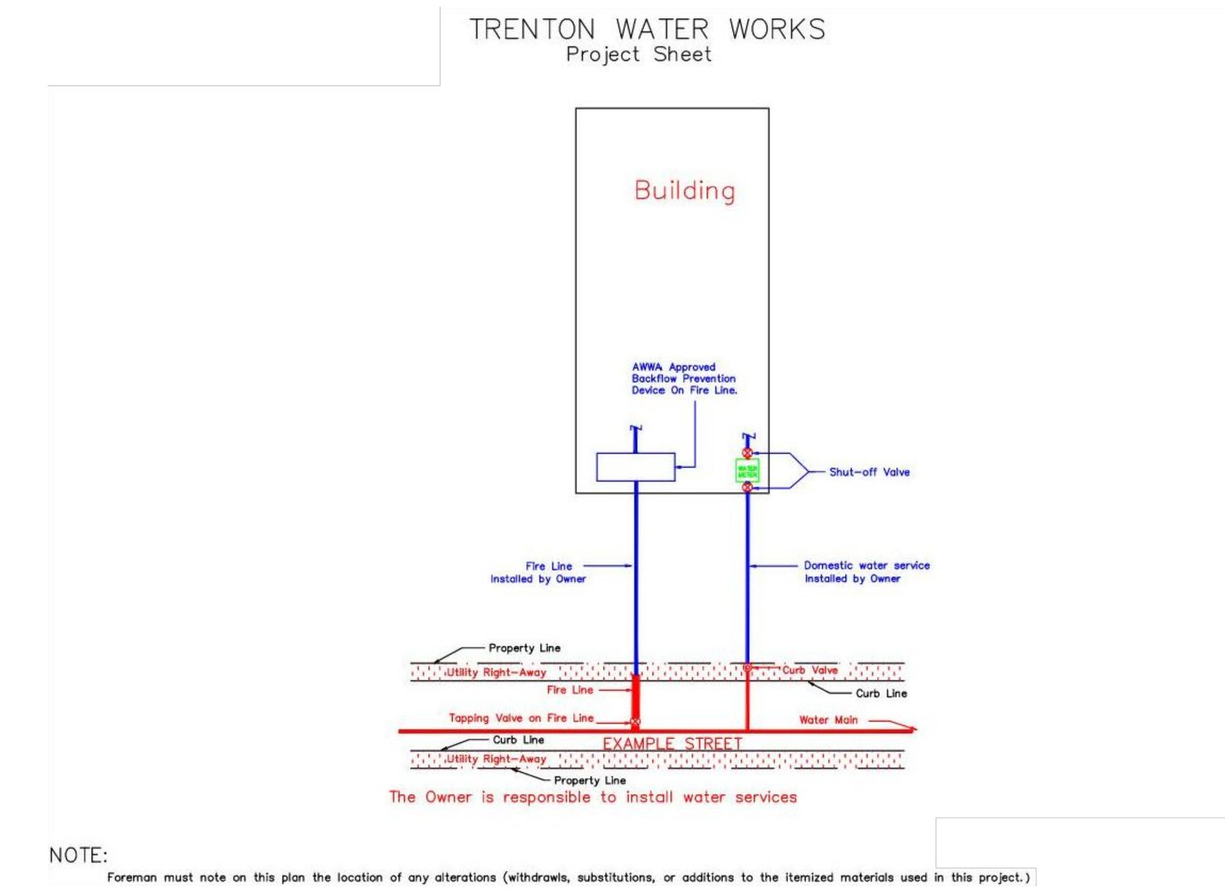
STANDARD METER SETUP DETAIL
NOT TO SCALE



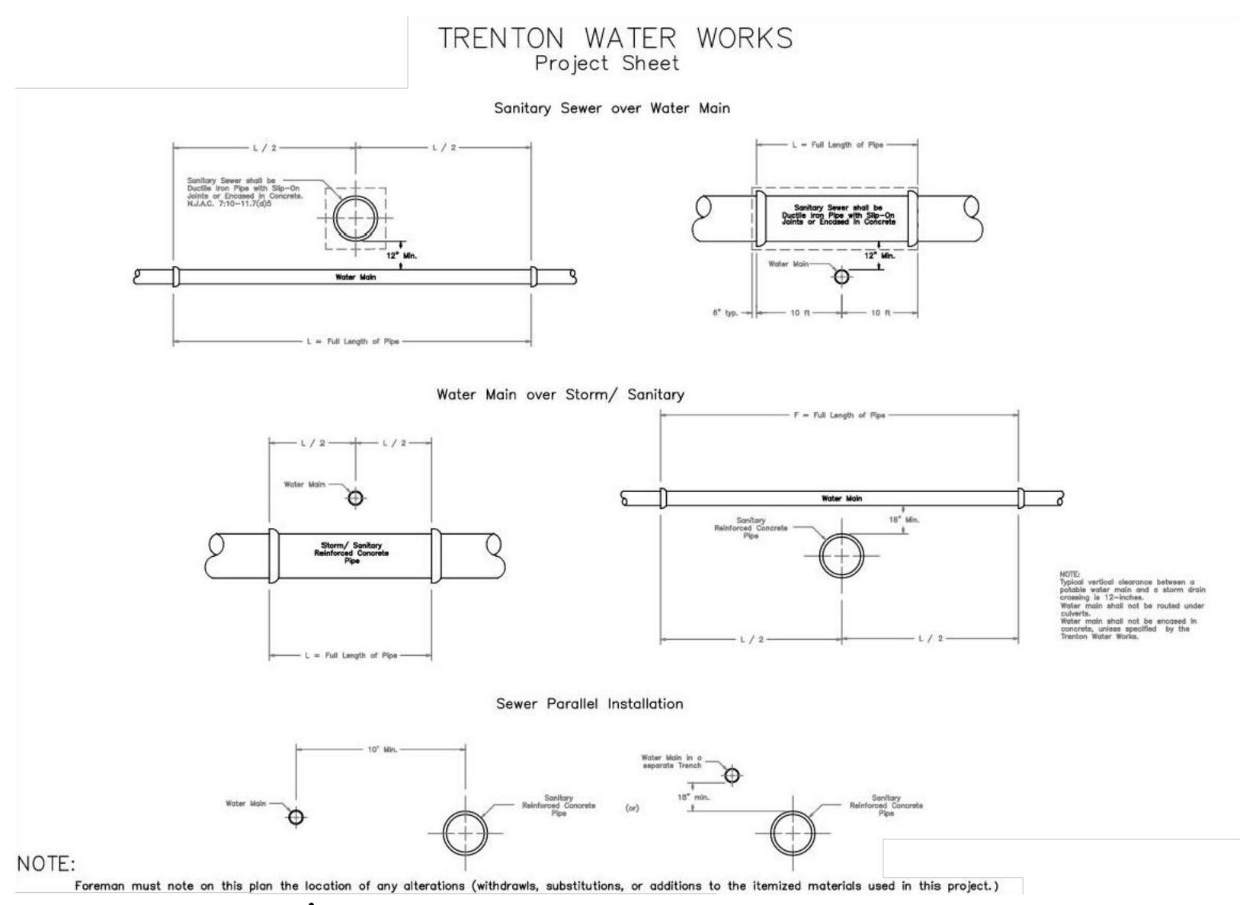
FIRE PREVENTION & METERING DETAIL
NOT TO SCALE



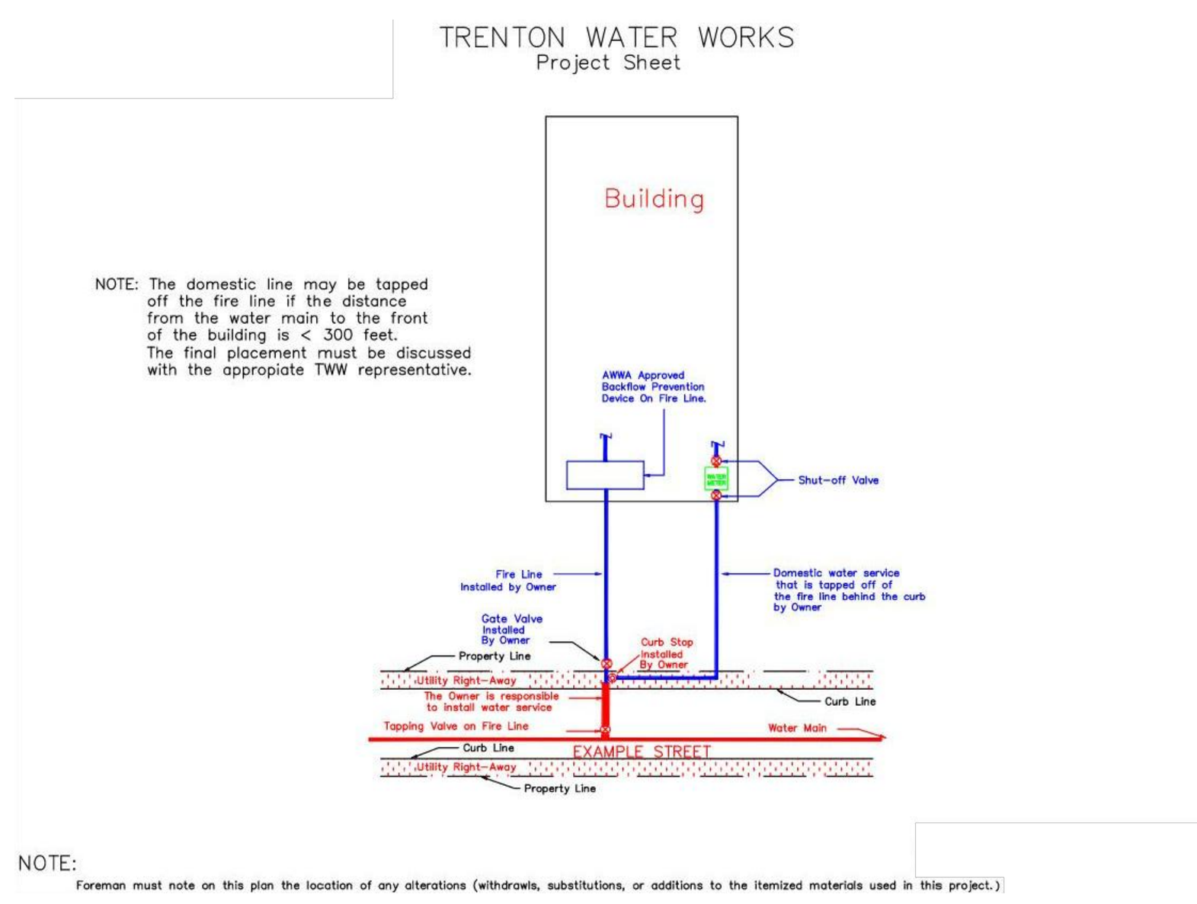
FIRE PREVENTION & METERING DETAIL
NOT TO SCALE



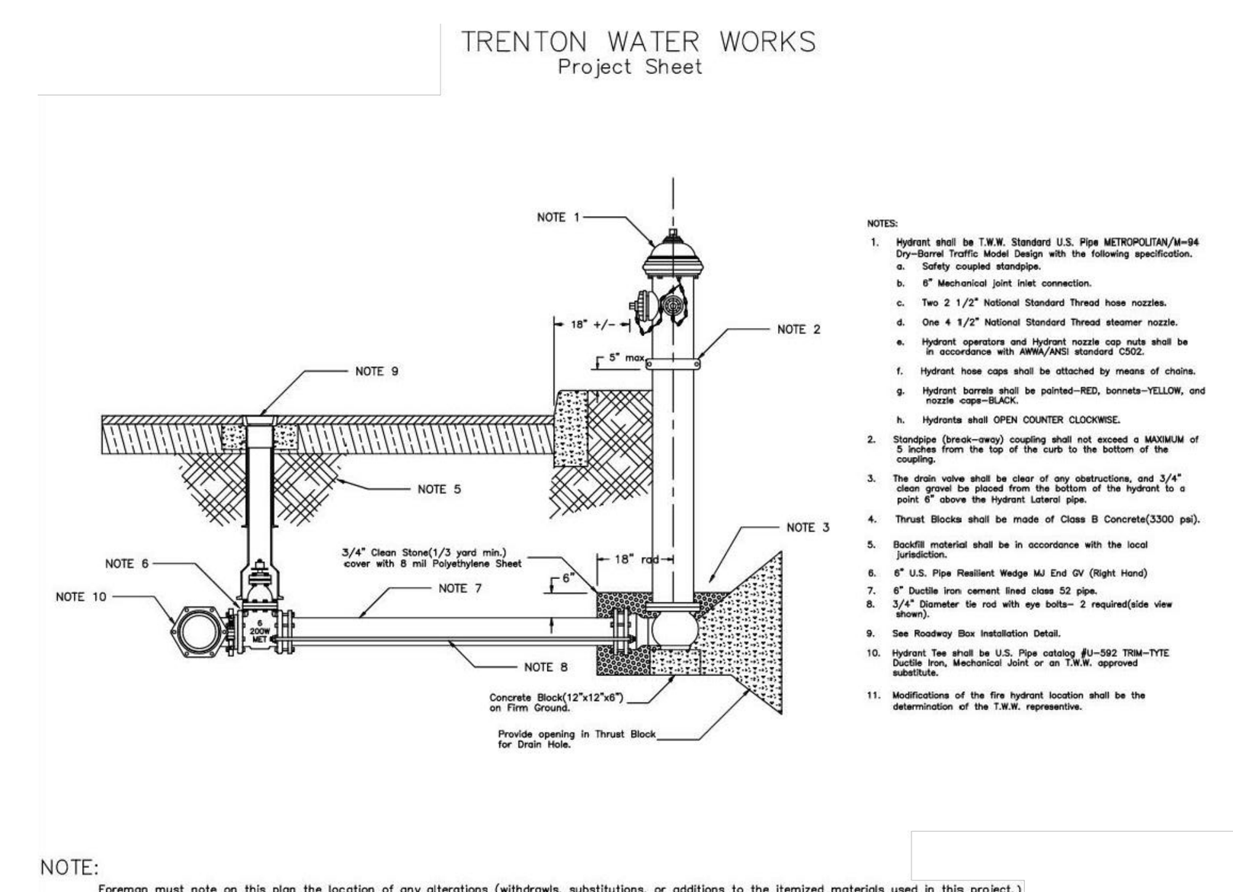
FIRE PREVENTION & METERING DETAIL
NOT TO SCALE



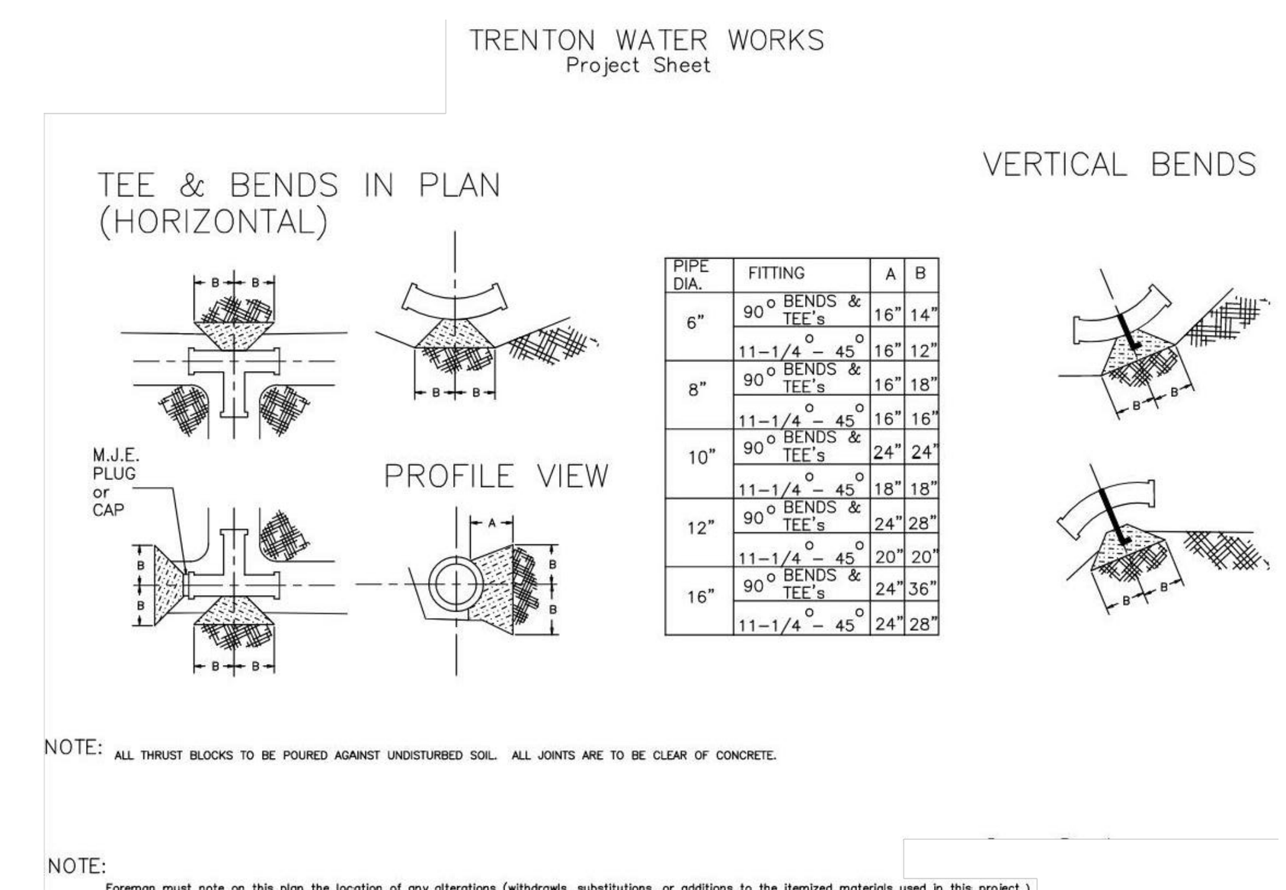
STORM/ SANITARY INSTALLATION AROUND WATER MAIN
NOT TO SCALE



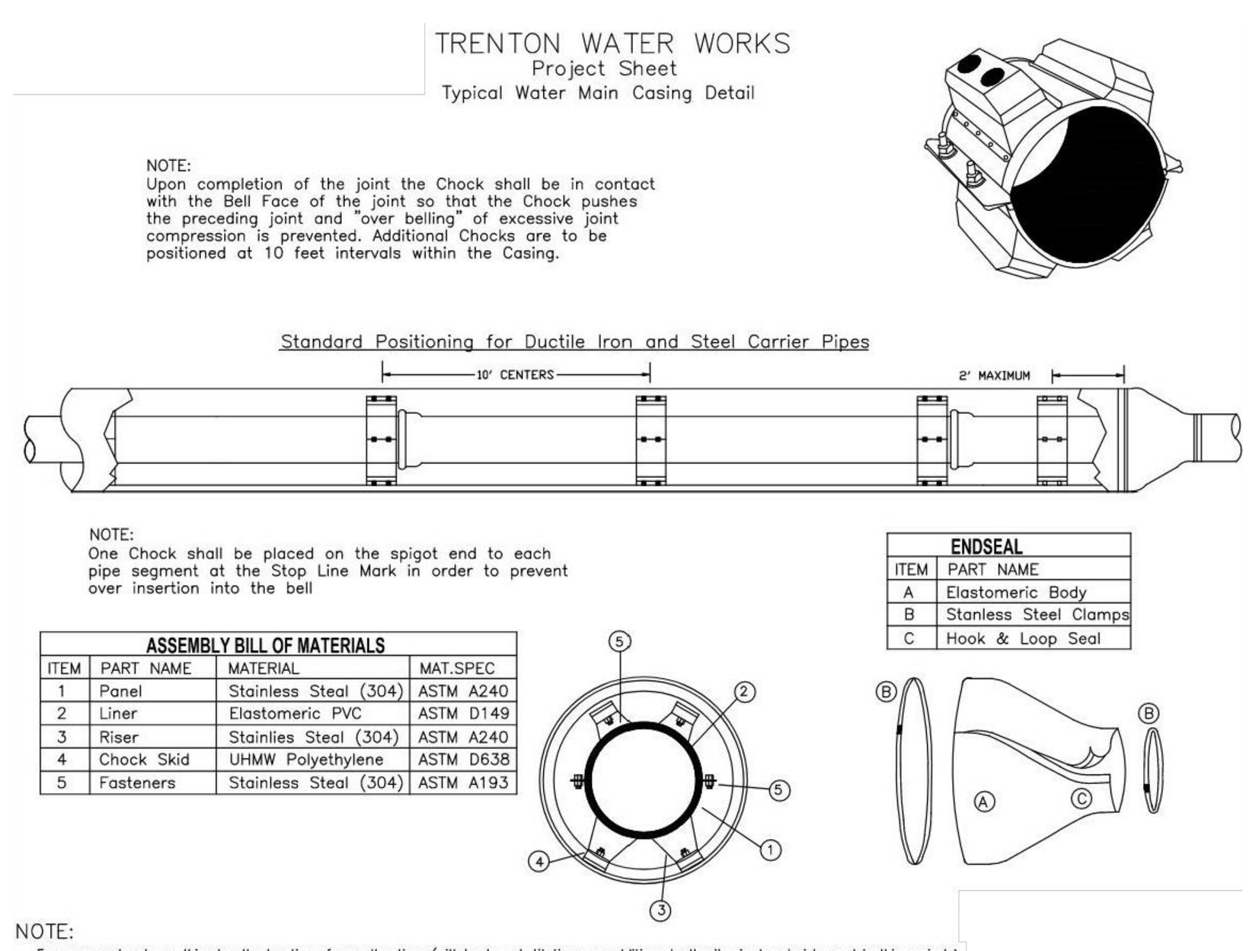
FIRE PREVENTION & METERING DETAIL
NOT TO SCALE



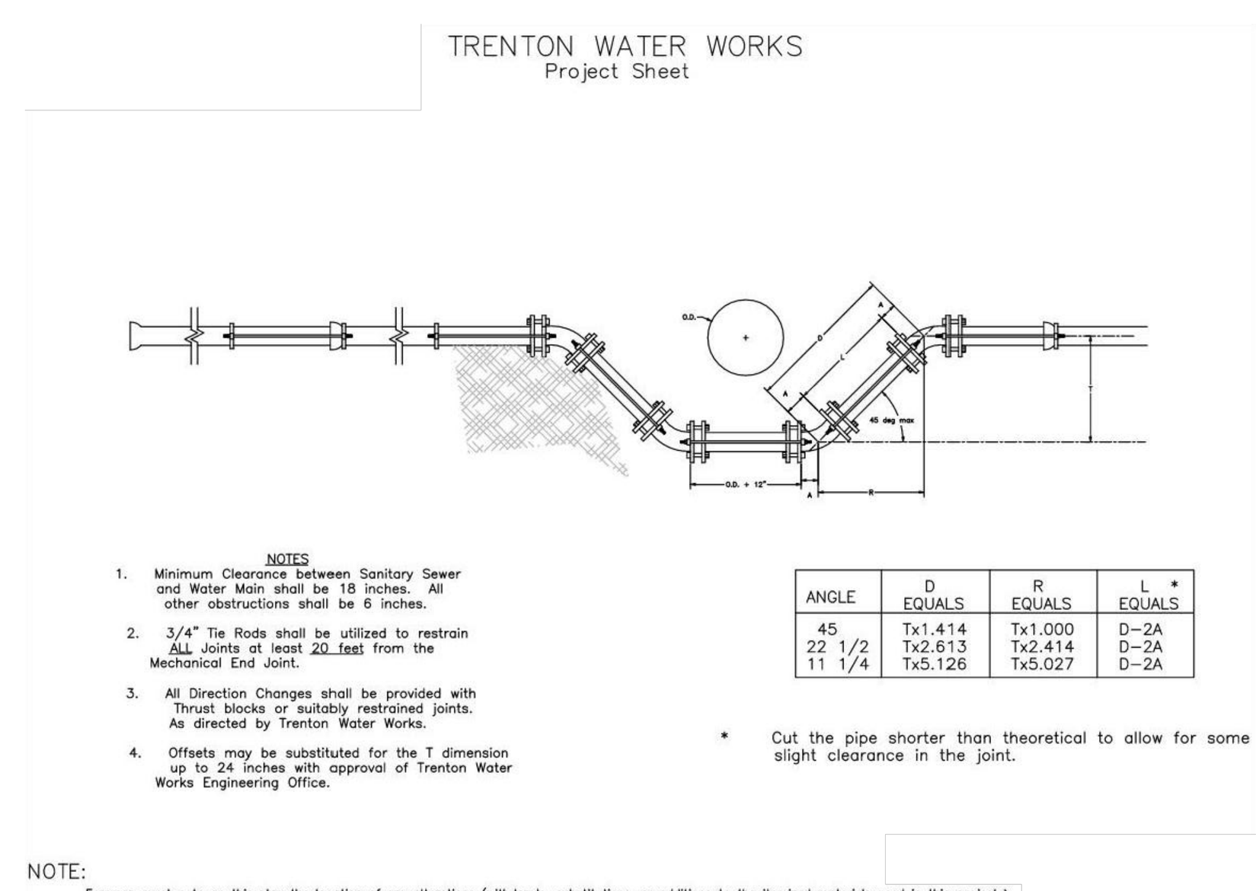
STANDARD HYDRANT DETAIL
NOT TO SCALE



CONCRETE THRUST BLOCK DETAIL
NOT TO SCALE



TYPICAL WATER MAIN CASING DETAIL
NOT TO SCALE



OFFSET AROUND OBSTRUCTION
NOT TO SCALE

METER SETUP REQUIREMENTS

* Where the laying length is flanged on both sides of the meter setup subtract 3/8 inch.

Meter Size	Meter Type	Valve before and after meter	Length before the meter	Length after the meter	Meter Size above 2" Include the strainer & flanged adaptor dimension in the laying length
5/8"	Disc	Ball Valve	N/A	N/A	25 inches
3/4"	Disc	Ball Valve	N/A	N/A	25 inches
1"	Disc	Ball Valve	N/A	N/A	25 inches
1 1/2"	Disc	Ball Valve	N/A	N/A	35 Inches
2"	Disc	Ball Valve	N/A	N/A	35 inches
3"	Disc (Compound)	Gate Valve	21 inches	21 inches	17-1/4 inches *
3"	Turbo	Gate Valve	21 inches	21 inches	19-3/8 inches *
4"	Disc (Compound)	Gate Valve	28 inches	28 inches	29-3/8 inches *
4"	Turbo	Gate Valve	28 inches	28 inches	23-3/8 inches *
6"	Turbo	Gate Valve	42 inches	42 inches	27-3/8 inches *
6"	Compact Fire Line Meter Assembly	Gate Valve	42 inches	18 inches	45-5/8 inches
8"	Turbo	Gate Valve	56 inches	56 inches	30-3/8 inches *
8"	Compact Fire Line Meter Assembly	Gate Valve	56 inches	24 inches	53-5/8 inches *
10"	Turbo	Gate Valve	70 inches	70 inches	41-3/8 inches *
10"	Compact Fire Line Meter Assembly	Gate Valve	70 inches	30 inches	68-5/8 inches *

1. Services 2 inches and smaller shall be copper pipe and straight on both sides of the meter setup.
2. For 3 inch and larger meter setups and where the pipe is Ductile Iron or Cast Iron, the street side of the meter setup shall be flanged pipe and the customer's side of the meter setup shall be flanged.
3. For 3 inch and larger meter setups where the pipe is copper or steel, both sides of the meter setup shall be flanged.
4. The service pipe before and after a Compact Fire line Meter Assembly shall be Ductile Iron pipe only, with a flanged pipe on the street side and a plain end pipe on the customer's side.
5. All meters must be installed horizontally. No unmetered bypasses shall be accepted.
6. All 3 inch or larger meters, strainers, as well as Compact Fire line Meter Assemblies shall be supported by concrete pillars.

Trenton Water Works
Specifications and Requirements for Developers
August 14, 2015 Page 19 of 20

METER SETUP REQUIREMENTS

THESE PLANS ARE NOT TO BE USED FOR BID OR CONSTRUCTION

PLANS ARE FINAL FOR SANITARY SEWER AND WATER MAIN DESIGN

REVISION	DATE	CHKD
12		
11		
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PROJ.: 080661-F1-001
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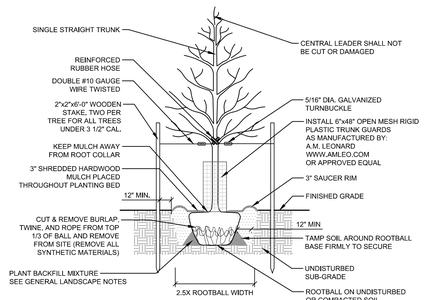
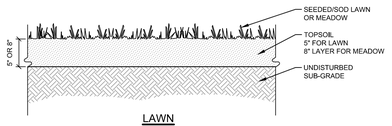
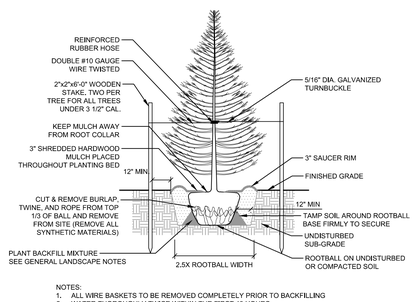
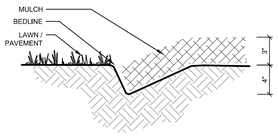
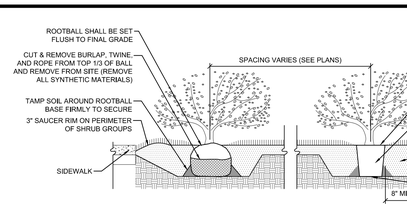
SHEET No. 16 OF C

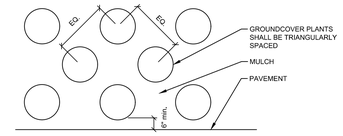


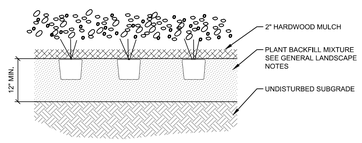


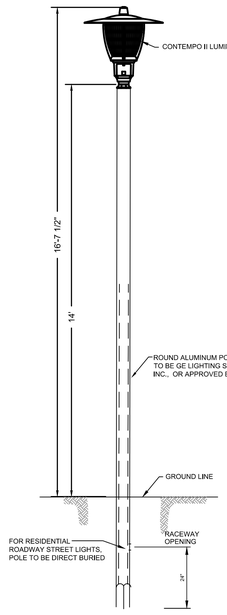


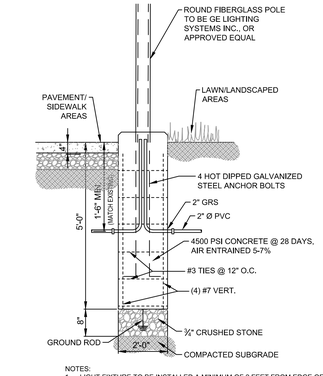












NOTES:
1. ALL WIRE BASKETS TO BE REMOVED COMPLETELY PRIOR TO BACKFILLING
2. AT PLANTING, PRUNE ONLY CROSSING LIMBS, CO-DOMINANT LEADERS, BROKEN OR DEAD BRANCHES WHILE MAINTAINING NORMAL TREE SHAPE.
3. WATER THOROUGHLY TWICE WITHIN THE FIRST 48 HOURS.
4. TOP OF ROOTBALL SHALL BE SET FLUSH TO GRADE. TRUNK FLARE SHALL BE VISIBLE AT TOP OF ROOTBALL. DO NOT COVER TOP OF ROOT BALL WITH SOIL.

DECIDUOUS TREE PLANTING
NOT TO SCALE

LAWN
NOT TO SCALE

DIRECT BURIAL POLE DETAIL
NOT TO SCALE

NOTES:
1. ALL FIXTURES TO BE SINGLE FUSE

FIXTURE SPEC:
1. FIXTURE TO BE WIRED BY PROJECT ELECTRICAL CONTRACTOR.
2. ALL ELECTRICAL WIRING AND COMPONENTS TO COMPLY WITH N.E.C. AND ALL OTHER APPLICABLE CODES.
3. BOLT CIRCLE AS PER MANUFACTURER'S STANDARD SPECIFICATIONS.

FOUNDATION SPEC:
1. PIERS SHALL BE CAST-IN-PLACE OR PRECAST UNITS.
2. PIERS SHALL BE PLACED ON AND AGAINST UNDISTURBED SOIL OR PROPERLY COMPACTED FILL.
3. TOP OF PIER TO EXTEND 6" ABOVE FINISHED GRADE.

NOTES:
1. LIGHT FIXTURE TO BE INSTALLED A MINIMUM OF 2 FEET FROM EDGE OF PAVEMENT OR FACE OF CURB.
2. A MINIMUM OF 6" SHALL BE PROVIDED BETWEEN SIDEWALKS AND THE OUTSIDE EDGE OF THE LIGHT FIXTURE FOUNDATION.

LIGHT FIXTURE FOUNDATION-PARKING LOT DETAIL
NOT TO SCALE

NOTES:
1. ALL WIRE BASKETS TO BE REMOVED COMPLETELY PRIOR TO BACKFILLING
2. WATER THOROUGHLY TWICE WITHIN THE FIRST 48 HOURS.
3. TOP OF ROOTBALL SHALL BE SET FLUSH TO GRADE. TRUNK FLARE SHALL BE VISIBLE AT TOP OF ROOTBALL. DO NOT COVER TOP OF ROOT BALL WITH SOIL.

EVERGREEN TREE PLANTING
NOT TO SCALE

BEDLINE
NOT TO SCALE

LIGHT FIXTURE NOTES:
1. SITE LIGHTING TO MEET ALL STANDARDS OF PSEG AND IS SUBJECT TO THE TOWNSHIP ENGINEER'S APPROVAL.
2. ALL LIGHTING TO RECEIVE UNDERGROUND ELECTRICAL SERVICE.
3. POLES TO BE 14 FOOT FIBERGLASS MODELS AND ARE TO CONFORM TO THE STANDARDS OF THE UTILITY COMPANY
4. ALL SITE LIGHTING WITHIN THE RESIDENTIAL DEVELOPMENT HAS BEEN DESIGNED TO PROVIDE A DISTRIBUTION IN ACCORDANCE WITH TOWNSHIP ORDINANCE STANDARDS AT INTERSECTIONS AND IN PARKING AREAS. READINGS SHOWN ARE A MAINTAINED HORIZONTAL ILLUMINANCE AND ARE TAKEN AT GRADE.
5. THE UTILITY COMPANY IS TO MAKE THE FINAL DECISION REGARDING POLE LOCATIONS, STANDARDS, ETC., TO MEET THEIR STANDARDS AND SPECIFICATIONS.

NOTE:
1. LIGHT FIXTURE TO BE INSTALLED A MINIMUM OF 30" FROM EDGE OF PAVEMENT OR FACE OF CURB.

CONTEMPO II
Dave Murphy & Associates, L.L.C.
114 Essex Street
Rochelle Park, NJ 07662
Email: streetscape@davemurphy.com
Telephone: (201-501-8336
Fax: (201-501-8312

LightGrid Wireless Control System
CAT-M Cellular Node

Product Specifications

Node Specifications:
- Input Voltage: 120-480V
- Both 0-10V and DALI Dimming Supported per ANSI C136.41-2013
- Operating Temp: -40° to +50°C

Network, Compliance & Security:
- Wireless networks: 4G Cellular (LTE) Cat-M1
- Band Compliance: CAT-M Bands 2, 4, and 12
- Carrier Certifications: AT&T, PTCRB
- Digital emissions: FCC part 15B (US), ICES-005 (Ca), Class A

System Architecture
Why Cat-M?
Product Features
Ordering Number Logic
GE current
a Daintree company
www.GEcurrent.com

NOTE:
LIGHT FIXTURES TO BE DIMMED AT 50% POWER AFTER 11:00 PM

LIGHTING CONTROLS (OR EQUIVALENT)
NOT TO SCALE

NOTES:
1. ALL WIRE BASKETS TO BE REMOVED COMPLETELY PRIOR TO BACKFILLING
2. WATER THOROUGHLY TWICE WITHIN THE FIRST 48 HOURS.
3. TOP OF ROOTBALL SHALL BE SET FLUSH TO GRADE. TRUNK FLARE SHALL BE VISIBLE AT TOP OF ROOTBALL. DO NOT COVER TOP OF ROOT BALL WITH SOIL.
4. IF SHRUB IS IN LEAF APPLY WILT-PROOF, OR EQUAL AS PER MANUFACTURERS RECOMMENDATION.

SHRUB PLANTING
NOT TO SCALE

PLAN

SECTION

NOTE:
1. LAYER OF MULCH SHALL BE PLACED DOWN BEFORE PLANTING.

PERENNIAL/GROUNDCOVER PLANTING
NOT TO SCALE

C/C	PART #	DESCRIPTION	EPA	WEIGHT
05-9940	C4728G-A	Contempo II, 80 LED, T5, Black	2.25 ea.	49 lbs. ea.
04-0199	CP3068A-14-A	NDD Pedestrian Pole, Black	20.00	136 lbs.

Lumilock LED Specifications:

- 64, 4000K (neutral) LEDs, typical 75 Color Rendering Index (CRI), >100,000 hours of operational life (at 25°C ambient temperature & 70% lumen maintenance), injection molded optical plates, IP66 rated LED module.
- Integral Philips Advance Xitanium LED driver, class 1, IP66 rated, specify 200mA or 450mA, 0-10V dimming, IntelliVolt 120-277 VAC, 50-60Hz, RoHS compliant, field replaceable 20kV/20kA in-series surge protection.

Lumilock Certifications:

- ETL/cETL listed to U.S. & Canadian safety standards for wet locations, manufactured to ISO 9001:2008 Standards, vibration tested to ANSI C136.31 for normal applications, UL8750 & UL1598 compliant, LM79 & LM80 tested, DLC listed.

LIGHT FIXTURE AND POLE DETAIL (OR EQUIVALENT)
NOT TO SCALE

General Information

Sea Gull 8039EN-965
Lancaster 2 Light 21 inch Antique Brushed Nickel Outdoor Wall Lantern

Light has a way of sparkling against glass to create a warm and inviting welcome, and the Lancaster Collection is a classic example of such traditional design.

Brand Information
- Brand: Sea Gull
- Collection: Lancaster
- SKU: 8039EN-965
- UPC: 785652031878

Dimensions and Weight
- Width: 10.00 in.
- Height: 20.50 in.
- Extension/Depth: 9.50 in.
- Backplate/Canopy Width: 4.50 in.
- Backplate/Canopy Length: 9.25 in.
- Backplate/Canopy Thickness: 0.75 in.
- Weight: 8.00 lb.

Other Specifications
- Ships Via: Ground (FREE SHIPPING)
- Included Suspension: Wire/Cord: 6.5in.
- Warranty: 3 Year Warranty

Additional Details
- Cord Color: Black/White
- Qty Fabric/Glass Shades: 1
- Canopy Shape: Octagonal

Design Information
- Category: Outdoor Wall Lights
- Finish: Antique Brushed Nickel
- Glass: Clear Curved Beveled
- Material: Brass

Bulb Information
- Bulbs Included: Yes
- Primary Bulb(s): 2 x 3.50 watts Torpedo

Product Rating
- Voltage: 120V
- Safety Rating: UL Wet
- Energy Star Efficient
- Title 24 Approved

TOWNHOUSE WALL MOUNTED ENTRANCE LIGHTS (OR EQUIVALENT)
NOT TO SCALE

LAWN SOD SPECIFICATIONS:
1. THE SOD COMPOSITION SHALL BE AS FOLLOWS:
   80% TALL FESCUE
   20% KENTUCKY BLUEGRASS
2. 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.
3. THE 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 SAN FIRMLY ADHERING TO THE ROOTS.
4. INDIVIDUAL PIECES OF SOD SHALL BE CUT TO THE SUPPLIER'S STANDARD WIDTHS AND LENGTH. IF GREATER THAN 5% OF SOD PIECES HAS BROKEN PADS OR TORN OR UNEVEN EDGES, IT WILL NOT BE ACCEPTED.
5. 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 SECTIONS.
6. 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.
7. DUMPING FROM TRANSPORT VEHICLE WILL NOT BE PERMITTED. DAMAGED SOD THAT HAS TURNED YELLOW IN COLOR WILL BE REJECTED. SOD SHALL BE INSPECTED AT THE TIME OF DELIVERY BY THE LANDSCAPE ARCHITECT AND/OR OWNER'S REPRESENTATIVE AND ANY SOD THAT DOES NOT MEET THE SPECIFIED STANDARDS WILL BE REJECTED AND REMOVED FROM THE JOB SITE AT THE CONTRACTOR'S EXPENSE.
8. 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.

LAWN SEED MIXTURE:

	LBS. PER ACRE	LBS. PER 1,000 SF	OPTIMUM SEED DATE	ACCEPTABLE SEED DATE
HARD FESCUE	130	3	8/15 - 10/15	3/1 - 4/30 *5/1 - 8/14
CHEWINGS FESCUE	45	1		
STRONG CREEPINGS RED FESCUE	45	1		
PERENNIAL RYEGRASS	10	0.25		

*Summer seedings should only be conducted when the site is irrigated. Mixes including white clover require that at least six weeks of growing season remain after seeding to ensure establishment before freezing conditions.

STORMWATER MANAGEMENT SEED MIXTURE - ERNMX-126

	Botanical Name	Common Name
20.00 %	*Panicum clandestinum, Tioga*	Deertongue, Tioga
20.00 %	*Puccinellia distans, Fults*	Alkaligrass, Fults
18.00 %	*Elymus virginicus, 'Madison'*	Virginia Wildrye, 'Madison'
15.00 %	*Agrostis stolonifera*	Creeping Bentgrass
15.00 %	*Poa palustris*	Fowl Bluegrass
10.00 %	*Carex vulpinoidea, PA Ecotype*	Fox Sedge, PA Ecotype
1.00 %	*Carex scoparia, PA Ecotype*	Blunt Broom Sedge, PA Ecotype
1.00 %	*Juncus effusus*	Soft Rush

Seeding Rate: 20-40 lbs per acre

GENERAL PLANTING NOTES

PLANTING:
1. THE PLANTING PLAN SHALL BE USED FOR LANDSCAPE PLANTING PURPOSES ONLY. EXAMINE ALL ENGINEERING DRAWINGS AND FIELD CONDITIONS FOR SPECIFIC LOCATIONS OF UTILITIES, STRUCTURES, ETC. AND NOTIFY THE LANDSCAPE ARCHITECT IN REFERENCE TO ANY DISCREPANCIES OR LOCATION CONFLICTS PRIOR TO PLANTING INSTALLATION.
2. THE CONTRACTOR SHALL ENSURE THAT WORK DOES NOT INTERRUPT ESTABLISHED OR PROJECTED DRAINAGE PATTERNS.
3. IN THE EVENT OF VARIATION BETWEEN WRITTEN QUANTITIES AND QUANTITIES SHOWN ON THE PLAN, THE PLANS SHALL TAKE PRECEDENCE. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL PLANT QUANTITIES PRIOR TO THE COMMENCEMENT OF WORK. SOD AND SEED QUANTITY TAKE-OFFS ARE THE RESPONSIBILITY OF THE CONTRACTOR. ALL DISCREPANCIES SHALL BE REPORTED TO THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE FOR CLARIFICATION PRIOR TO BIDDING. THE CONTRACTOR SHALL FURNISH PLANT MATERIAL IN SIZES AS SPECIFIED IN PLANT LIST(S).
4. PLANTS SHALL BE LOCATED AS SHOWN ON THE DRAWINGS OR UNLESS OTHERWISE NOTED.
5. ALL PLANT MATERIAL SHALL CONFORM TO CURRENT "AMERICAN STANDARDS FOR NURSERY STOCK" BY AMERICAN NURSERY & LANDSCAPE ASSOCIATION (ANLA). TREES SHALL BE NURSERY-GROWN, FREE OF DISEASE, SUBSTANTIALLY UNIFORM IN SIZE AND SHAPE AND HAVE STRAIGHT TRUNKS.
6. ALL PLANTS (B&B OR CONTAINER) SHALL BE PROPERLY IDENTIFIED BY WEATHERPROOF LABELS SECURELY ATTACHED THERETO BEFORE DELIVERY TO PROJECT SITE. LABELS SHALL IDENTIFY PLANTS BY SPECIES AND SIZE. LABELS SHALL NOT BE REMOVED UNTIL THE FINAL INSPECTION BY THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE AND TOWNSHIP ENGINEER.
7. ANY MATERIAL AND/OR WORK MAY BE REJECTED BY THE LANDSCAPE ARCHITECT, OWNER'S REPRESENTATIVE, OR TOWNSHIP ENGINEER IF IT DOES NOT MEET THE REQUIREMENTS OF THE SPECIFICATIONS. ALL REJECTED MATERIALS SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR.
8. PLANT SUBSTITUTIONS SHALL BE PERMITTED ONLY WITH WRITTEN CONSENT OF THE OWNER OR LANDSCAPE ARCHITECT AND TOWNSHIP ENGINEER RELATIVE TO SIZE, SPECIES AND VARIETY. ALL PLANT MATERIAL SHALL BE TO TRUE SPECIES, VARIETY, AND SIZE AND BE CERTIFIED DISEASE AND INSECT FREE. WRITTEN PROOF OF UNAVAILABLE PLANT MATERIAL MUST BE DOCUMENTED.
9. ALL PROPOSED TREES SHALL BE INSTALLED EITHER ENTIRELY IN OR ENTIRELY OUT OF PLANTING BEDS. PLANTING BED LINES ARE NOT TO BE OBSTRUCTED. ALL SHRUBS AND GROUND COVER AREAS SHALL BE PLANTED IN CONTINUOUS PREPARED BED AND TOP DRESSED WITH A 3 INCH LAYER OF SHREDDED HARDWOOD MULCH. MULCH SHALL HAVE BEEN SHREDDED WITHIN THE LAST SIX MONTHS.

11. TRANSPLANTING:
   A. PLANTS SHALL NOT BE DUG FOR TRANSPLANTING BETWEEN APRIL 10 AND JUNE 30.
   B. ALL TRANSPLANTS SHALL BE DUG WITH INTACT ROOT BALLS CAPABLE OF SUSTAINING THE PLANT.
   C. IF PLANTS ARE TO BE STOCKPILED BEFORE REPLANTING, THEY SHALL BE HEALED IN WITH MULCH OR SOIL, ADEQUATELY WATERED AND PROTECTED FROM EXTREME HEAT, SUN AND WIND.
   D. UPON REPLANTING, BACKFILL SOIL SHALL BE AMENDED WITH FERTILIZER AND ROOT GROWTH HORMONE.
   E. TRANSPLANTS SHALL BE GUARANTEED FOR THE LENGTH OF THE GUARANTEE PERIOD SPECIFIED HEREIN.
   F. IF TRANSPLANTS DIE, SHRUBS LESS THAN SIX INCHES (6") DBH SHALL BE REPLACED IN KIND.
12. BULBS SHALL BE PLANTED IN ACCORDANCE WITH SECTION 11 OF THE ANLA STANDARDS.
13. THE CONTRACTOR SHALL BE WHOLLY RESPONSIBLE FOR STABILITY AND CONDITIONS OF ALL TREES AND SHRUBS AND SHALL BE LEGALLY LIABLE FOR ANY DAMAGE CAUSED BY INSTABILITY OF ANY PLANT MATERIALS. STAKING OF ALL TREES SHALL BE DONE AS INDICATED ON THE DOCUMENTS.
14. ALL TREE STAKES AND WIRES WILL BE REMOVED BY THE APPLICANT AFTER ONE (1) YEAR FROM THE DATE OF INSTALLATION.
15. VEGETATION PROPOSED AMONG EXISTING VEGETATION IS TO BE PLANTED TO AVOID DAMAGE TO THE EXISTING VEGETATION.
16. ALL STREET TREES AND SHADE TREES PLANTED NEAR PEDESTRIAN OR VEHICULAR ACCESS SHOULD NOT BE BRANCHED LOWER THAN 7' ABOVE GRADE.
17. MAINTAIN POSITIVE DRAINAGE OUT OF PLANTING BEDS AT A MINIMUM 2% SLOPE, UNLESS OTHERWISE NOTED. ALL GRADES, DIMENSIONS AND EXISTING CONDITIONS SHALL BE VERIFIED BY THE CONTRACTOR ON SITE BEFORE CONSTRUCTION BEGINS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT, ENGINEER, OR OWNER.
18. ALL PLANTING BEDS SHALL RECEIVE A 3 INCH LAYER OF SHREDDED HARDWOOD MULCH WITH WEED INHIBITING FABRIC BENEATH.
19. PLANT MATERIALS SHALL NOT BE INSTALLED UNTIL FINISHED GRADING HAS BEEN COMPLETED.
20. UPON COMPLETION OF ALL PLANTING, AN ACCEPTANCE MEETING OF THE WORK SHALL BE HELD. THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE FOR SCHEDULING THE INSPECTION AT LEAST SEVEN (7) DAYS PRIOR TO THE ANTICIPATED INSPECTION DATE.
21. ALL TREES SHALL BE GUARANTEED FOR 24 MONTHS FROM TO DATE OF ACCEPTANCE. ALL SHRUBS AND GROUND COVERS SHALL BE GUARANTEED FOR 24 MONTHS FROM THE DATE OF ACCEPTANCE. REPLACEMENT PLANTS USED SHALL BE GUARANTEED FOR AN ADDITIONAL 90 DAYS.
22. PLANTING DATES:

FALL	
AUGUST 15 - DECEMBER 15:	EVERGREEN TREES
OCTOBER 15 - DECEMBER 15:	DECIDUOUS TREES
SPRING	
MARCH 1 - MAY 15:	ALL PLANTS

LAWN:
23. ALL DISTURBED AREA OF THE SITE NOT PLANTED WITH SHRUBS OR GROUND COVER SHALL BE FINE GRADED AND SEEDED OR SODDED.
24. ALL SOD SHALL BE OBTAINED FROM AREAS HAVING GROWING CONDITIONS FAMILIAR TO AREAS TO BE COVERED. AREAS TO BE SODDED SHALL BE RAKED FREE OF STONES AND DEBRIS. DEBRIS AND STONES OVER 1 INCH IN DIAMETER SHALL BE REMOVED FROM THE SITE. ALL DAMAGED SOD WILL BE REJECTED. ALL SOD MUST BE PLACED WITH STAGGERED JOINTS, BUTTED WITH NO INEQUALITIES IN GRADE. PLACE ALL SOD IN ROWS AT RIGHT ANGLES TO SLOPES (WHERE APPLICABLE).
25. ALL PLANTING BEDS ADJACENT TO LAWN AREAS (SOD OR SEEDED) SHALL BE SPADE EDGED.

STORMWATER MANAGEMENT BASIN SEED MIX:
26. ERNST SEEDS - SEED MIX: ERNMX-183 @ SEEDING RATE OF 1/2 LB/1,000 SF

Native Detention Area Mix Composition
26.0% Panicum clandestinum, Tioga (Deertongue, Tioga)
25.0% Panicum virgatum, 'Shelter' (Switchgrass, 'Shelter')
20.0% Carex vulpinoidea, PA Ecotype (Fox Sedge, PA Ecotype)
20.0% Elymus virginicus, 'Madison' (Virginia Wildrye, 'Madison')
4.0% Agrostis perennans, Albany Pine Bush-NY Ecotype (Autumn Bentgrass, Albany Pine Bush-NY)
3.0% Juncus effusus (Soft Rush)
1.0% Juncus tenuis, PA Ecotype (Path Rush, PA Ecotype)
1.0% Panicum rigidulum, PA Ecotype (Redtop Panicgrass, PA Ecotype)

SOILS:
27. THE CONTRACTOR SHALL PROVIDE A CERTIFIED SOIL TEST OF TOPSOIL AND EXISTING ON SITE SOILS TO BE USED AS PART OF PLANTING BACKFILL MIXTURE.
28. THE CONTRACTOR SHALL PROVIDE PLANTING BACKFILL MIXTURE TO PROPOSED DEPTHS AS FOLLOWS: TREES (24 INCH MINIMUM OF PLANTING BACKFILL MIXTURE), SHRUBS (18 INCH MINIMUM OF PLANTING BACKFILL MIXTURE), PERENNIALS AND GROUNDCOVER (12 INCH MINIMUM OF PLANTING BACKFILL MIXTURE).
29. IF WET SOIL CONDITIONS EXIST THEN PLANT PITS SHALL BE EXCAVATED AN ADDITIONAL 12" AND THE ADDITIONAL AREA FILLED WITH SAND.
30. IMPORTED OR ON-SITE TOPSOIL MAY BE USED TO REFILL THE EXCAVATED AREA. TOPSOIL FROM THE SITE MAY BE REJECTED IF IT HAS NOT BEEN PROPERLY REMOVED, STORED AND PROTECTED PRIOR TO CONSTRUCTION. CONTRACTOR SHALL FURNISH TO THE APPROVING AGENCY AN ANALYSIS OF BOTH IMPORTED AND ON-SITE TOPSOIL TO BE UTILIZED IN ALL PLANTING AREAS. CONTRACTOR TO MODIFY THE SOIL AS NEEDED TO MEET REQUIRED PH AND NUTRIENT LEVELS.
31. LAWN/LANDSCAPE RESTORATION AREAS: CONTRACTOR TO COMPLETELY REMOVE ALL UNDERLYING CONSTRUCTION MATERIALS AND SCARIFY/RIP REMAINING SOIL TO A DEPTH OF 24", INCLUDING A MINIMUM OF 6" THICK TOPSOIL.
32. ALL AREAS, WHICH ARE TO BE SEEDED OR SODDED, SHALL RECEIVE 5" OF TOPSOIL PRIOR TO SEEDING. PRIOR TO TOPSOIL PLACEMENT THE EXISTING SOIL SHALL BE RAKED CLEAN OF WEEDS, VEGETATION AND EXTRANEOUS MATERIALS SUCH AS WOOD, STONES, ROCKS, CONSTRUCTION DEBRIS, ETC. LARGER THAN TWO (2) INCHES IN ANY DIMENSION. TOPSOIL SHALL BE SANDY LOAM FREE FROM SUBSOIL, STONES LARGER THAN 1", OR ANY UNDESIRABLE MATERIAL: CONTAIN 5% ORGANIC MATTER, 6.0 TO 6.5 PH. TOPSOIL SHALL NOT BE WORKED IN MUDDY OR WET CONDITIONS.
33. TOPSOIL AND SEED ALL AREAS DISTURBED AS A RESULT OF ANY AND ALL CONSTRUCTION DISTURBANCES AND STORAGE OF EQUIPMENT, WHETHER SUCH AREAS ARE SHOWN ON THE PLANS OR NOT. CONTRACTOR TO FIELD VERIFY AREAS OF SEED AND SOD PRIOR TO SUBMITTING A BID.
34. THE CONTRACTOR IS RESPONSIBLE FOR TESTING PROJECT SOILS. THE CONTRACTOR IS TO PROVIDE A CERTIFIED SOILS REPORT TO THE OWNER. THE CONTRACTOR SHALL VERIFY THAT THE SOILS ON SITE ARE ACCEPTABLE FOR THE PROPER GROWTH OF THE PROPOSED PLANT MATERIAL. SHOULD THE CONTRACTOR FIND POOR SOIL CONDITIONS, THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE SOIL AMENDMENTS AS NECESSARY. THE AMENDMENTS SHALL INCLUDE, BUT NOT BE LIMITED TO, FERTILIZERS, LIME, AND TOPSOIL. PROPER PLANTING SOILS MUST BE VERIFIED PRIOR TO PLANTING OF MATERIALS.
35. ALL PLANTING AREAS WITHIN EXISTING ASPHALT PAVEMENT AREAS SHALL BE DECOMPACTED A MINIMUM DEPTH OF 24 INCHES. CONTRACTOR TO REMOVE ASPHALT/BASE MATERIALS AND SCARIFY/RIP REMAINING SOIL TO A DEPTH OF 24". TAKE CARE TO NOT RIP SOIL WITHIN THE DRIP LINE OF EXISTING TREES.

COORDINATION:
36. THE CONTRACTOR SHALL COORDINATE WITH ALL TRADES/SUBS/CONTRACTOR (WHEN / WHERE APPLICABLE) REGARDING TIMING OF INSTALLATION OF PLANT MATERIAL.
37. THE CONTRACTOR SHALL VERIFY THE EXISTENCE OF UNDERGROUND UTILITIES ON THE SITE THREE (3) DAYS PRIOR TO ANY EXCAVATION. PRIOR TO ANY DIGGING OPERATIONS, THE EXACT LOCATION OF UTILITIES SHALL BE VERIFIED IN THE FIELD WITH THE GENERAL CONTRACTOR OR OWNER'S REPRESENTATIVE. IN THE EVENT UTILITIES ARE UNCOVERED, THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ALL DAMAGE TO THE UTILITIES AND SUCH DAMAGE SHALL NOT RESULT IN ANY ADDITIONAL EXPENSES TO THE OWNER'S REPRESENTATIVE. ANY DAMAGE OF UNREPORTED LINES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
38. IF UTILITY LINES ARE ENCOUNTERED IN EXCAVATION OF TREE PITS, OTHER LOCATIONS FOR TREES SHALL BE MADE BY THE CONTRACTOR WITHOUT ADDITIONAL COMPENSATION. NO CHANGES OF LOCATION SHALL BE MADE WITHOUT APPROVAL OF THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE.

INSTALLATION:
39. ALL EQUIPMENT AND TOOLS SHALL BE PLACED SO AS NOT TO INTERFERE OR HINDER THE PEDESTRIAN AND VEHICULAR TRAFFIC FLOW.
40. DURING PLANTING OPERATIONS EXCESS WASTE MATERIALS SHALL BE PROMPTLY AND FREQUENTLY REMOVED FROM THE SITE.
41. EVERY POSSIBLE SAFEGUARD SHALL BE TAKEN TO PROTECT BUILDING SURFACES, EQUIPMENT, AND FURNISHING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE OR INJURY TO PERSON OR PROPERTY WHICH MAY OCCUR AS A RESULT OF HIS NEGLIGENCE IN THE EXECUTION OF THE WORK.

MAINTENANCE:
42. MAINTENANCE SHALL BEGIN AFTER EACH PLANT HAS BEEN INSTALLED AND SHALL CONTINUE UNTIL 90 DAYS AFTER FINAL ACCEPTANCE BY THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE. MAINTENANCE INCLUDES: WATERING. PRUNING, FERTILIZING, WEEDING, MULCHING, REPLACEMENT OF DISEASED OR DEAD PLANTS, AND ANY OTHER CARE NECESSARY FOR THE PROPER GROWTH OF THE PLANT MATERIAL. THE CONTRACTOR MUST BE ABLE TO PROVIDE CONTINUED MAINTENANCE IF REQUESTED BY THE OWNER. NEWLY INSTALLED PLANT MATERIAL SHALL BE WATERED AT THE TIME OF INSTALLATION. REGULAR WATERING SHALL BE PROVIDED TO ENSURE THE ESTABLISHMENT, GROWTH AND SURVIVAL OF PLANTS.

PLANS ARE FINAL FOR SANITARY SEWER AND WATER MAIN DESIGN

THESE PLANS ARE NOT TO BE USED FOR BID OR CONSTRUCTION

REVISION	DATE	CHKD
12		
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6		
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4		
3		
2		
1		

PROJ.: 080661-F1-001
DATE: 11-20-2020
CHKD: SAD

Bowman
CONSULTING

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SEAN A. DELANY, N.J. Professional Engineer, Lic. 24GE04447100

PRELIMINARY & FINAL MAJOR SUBDIVISION AND PRELIMINARY & FINAL SITE PLAN
THE COLLECTION at HOPEWELL
CONSTRUCTION DETAILS
LIGHTING
BLOCK 85, LOT 3; BLOCK 86, LOTS 32-34 &130; AND PART OF BLOCK 85, LOT 9
TOWNSHIP OF HOPEWELL, MERCER COUNTY, NEW JERSEY

SHEET No.
17
OF
A