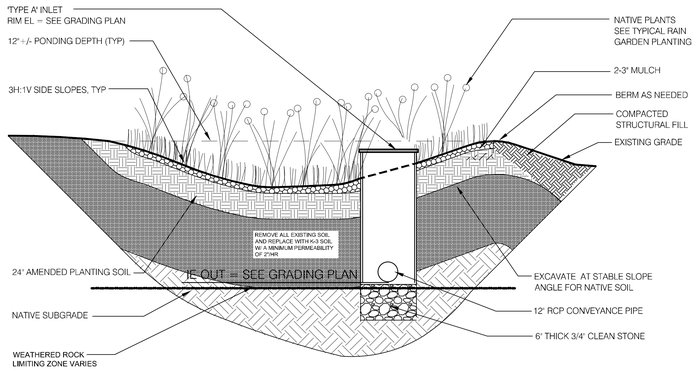
BIORETENTION SWALE & RAIN GARDEN SOIL NOTES:

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.

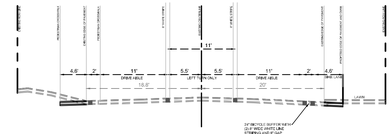


RAIN GARDEN DETAIL
NOT TO SCALE

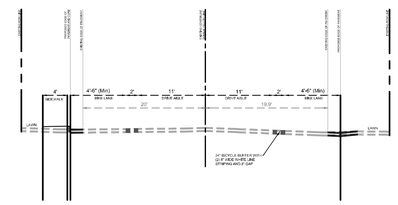
INFILTRATION RAIN GARDEN
WITH PLANTING SOIL NOTES

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.

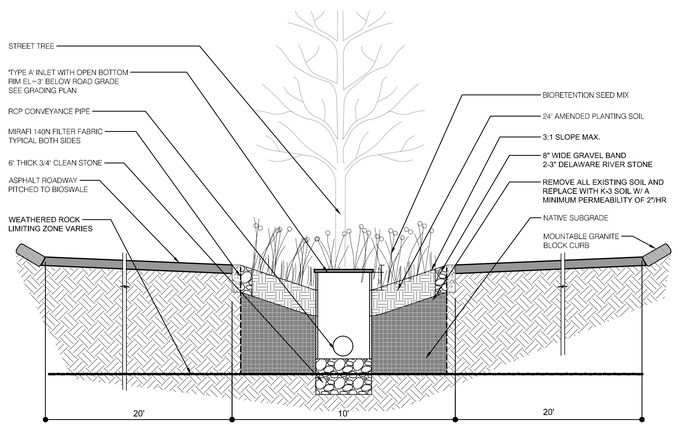
CONSTRUCTION NOTES:
2. BUILD AND VEGETATE RAIN GARDEN AS EARLY AS POSSIBLE TO ESTABLISH PLANTINGS BEFORE DIRECTING STORMWATER RUNOFF TO IT OR DIVERT STORMWATER AROUND FACILITY. PREFERABLY, THIS PERIOD WOULD LAST A MINIMUM OF 3 MONTHS OR PER LANDSCAPE ARCHITECT GUIDELINES.
3. INFILTRATION AREAS (THE AREA 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.



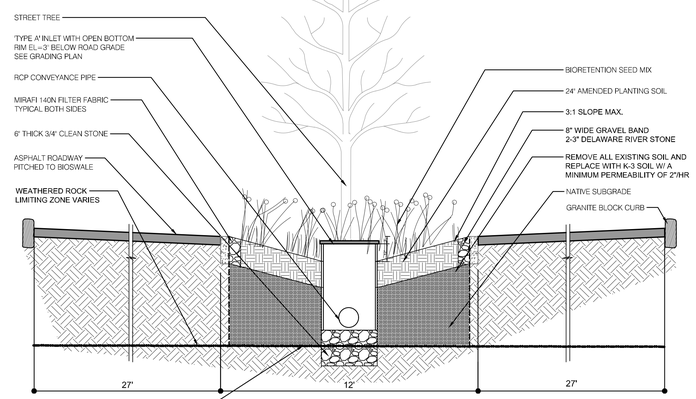
ROAWAY SECTION AT LEFT ONLY TURNING LANE
WASHINGTON CROSSING PENNINGTON ROAD
NOT TO SCALE



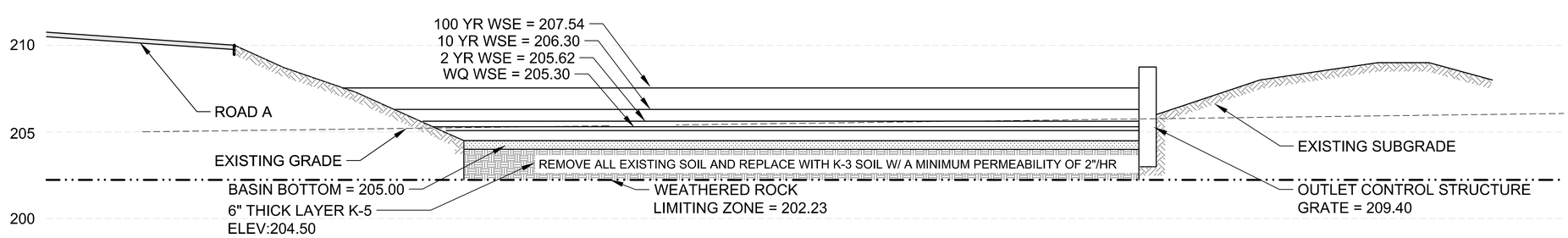
ROADWAY SECTION WITH BIKE LANE
WASHINGTON CROSSING PENNINGTON ROAD
NOT TO SCALE



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"=3'-0"

THESE PLANS ARE NOT TO BE USED FOR BID OR CONSTRUCTION

PLANS ARE FINAL FOR SANITARY SEWER AND WATER MAIN DESIGN

12			
11			
10			
9			
8			
7	REVISION	DATE	DRWN

6			
5			
4			
3	REV. PER NJDEP FHA	5/12/21	KK
2	REV. FOR TOWN SUBMISSION	4/13/21	KK
1	REGULATORY AGENCY SUBMISSION	1/29/21	SAD
	REVISION	DATE	DRWN

PROJ.: 08061-H1-001
DATE: 11/30/2020
DWN: SAD
CHKD: SAD

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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-SITE

BLOCK 86, 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 D

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