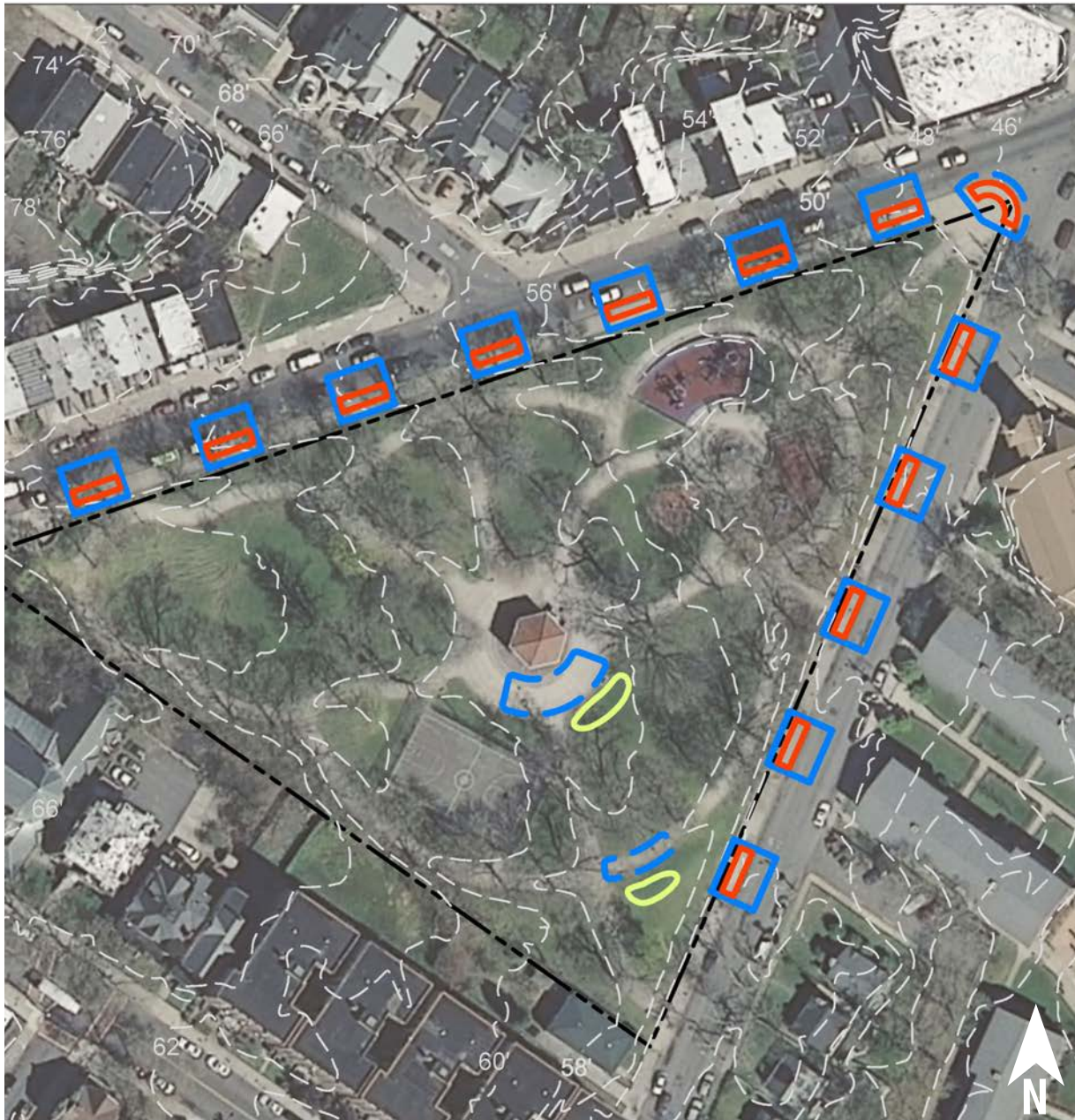







Arlington Park  
Green Infrastructure Information Sheet

<p><b>Location:</b> 752 Grand Street Jersey City, NJ 07302</p>	<p><b>Site Use:</b> Public</p>
<p><b>Ward:</b> F</p>	<p><b>Watershed Name:</b> Hudson River</p> <p><b>Targeted Pollutants:</b> total nitrogen (TN), total phosphorus (TP), and total suspended solids (TSS) in surface runoff</p>
<p><b>Green Infrastructure Description:</b> Rain garden</p>	<p><b>Estimated Stormwater Captured and Treated Per Year:</b> ~24,100 gallons</p>
<p><b>Implementation Date:</b> 8/15/16 <b>Green Infrastructure System:</b> one (1) rain garden 250 square feet <b>Drainage Area:</b> ~975 square feet (walkway and compacted lawn area)</p>	
<p><b>Funding Sources:</b> Surdna Foundation</p>	
<p><b>Partners/Stakeholders:</b> Rutgers Cooperative Extension Water Resources Program, New Jersey AmeriCorps Watershed Ambassador, Jersey City Parks Coalition, Friends of Arlington Park, Jersey City Department of Public Works, Architecture, and Engineering</p>	
<p><b>Appendix A:</b> Green Infrastructure Feasibility Study for Jersey City</p> <p><b>Appendix B:</b> Rain Garden Design Plans</p> <p><b>Appendix C:</b> Completed Project Photographs</p>	



-  bioretention systems
-  stormwater planters
-  drainage area
-  property line
-  2012 Aerial: NJOIT, OGIS

# ARLINGTON PARK

752 Grand Street  
Jersey City, NJ 07304, Ward F



Arlington Park is a triangular city park at the junction of Grand Street and Arlington Avenue. Stormwater runoff from the adjacent streets can be managed in stormwater planters in the wide sidewalks. Rain gardens could manage stormwater on the site in open lawn areas throughout the park.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	From the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
21.2	32,192	1.6	16.3	147.8	0.025	0.88

Recommended Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size ( sq. ft.)	Estimated Cost
Bioretention systems	0.053	9	16,149	0.61	850	\$4,250
Stormwater planters	0.361	60	26,606	1.00	3,200	\$320,000

# ARLINGTON PARK RAIN GARDEN DEMONSTRATION PROJECT

ARLINGTON AVENUE AT GRAND STREET, JERSEY CITY  
HUDSON COUNTY, NEW JERSEY

PROJECT DESCRIPTION:

AT THIS SITE, A BIORETENTION SYSTEM (RAIN GARDEN) WILL BE IMPLEMENTED ON THE SOUTHEAST SIDE OF ARLINGTON PARK. RUNOFF FROM THE CEMENT PATHWAY WILL BE REDIRECTED USING A CURBCUT INTO THE BIORETENTION SYSTEM. A DRAINTECH OUTLET WILL BE PLACED IN THE CENTER OF THE BIORETENTION SYSTEM, DIRECTING RUNOFF TO THE NEARBY CATCH BASIN BY 4" DIA. HDPE PIPE.

LOCATION MAP:



LEGEND:

- EXISTING DRAINAGE AREA
- EXISTING TREE
- EXISTING CONTOURS
- EXISTING CENTERLINE
- EXISTING UTILITY POLE
- EXISTING CATCH BASIN
- EDGE OF PAVEMENT
- LIMIT OF WORK
- PROPOSED GREEN INFRASTRUCTURE

LIST OF DRAWINGS:

SHEET NAME	TITLE
COVER	COVER SHEET
P-1	EXISTING CONDITIONS AND DEMOLITION PLAN
P-2	PROPOSED SITE PLAN
P-3	PLANTING PLAN
DT-1	RAIN GARDEN DETAILS
DT-2	CURB CUT AND TRENCH DRAIN DETAILS
DT-3	PLANTING PLAN DETAILS

CHRISTOPHER C. OBROPTA, Ph.D., P.E.  
PROFESSIONAL ENGINEER - NJ LICENSE # 37532  
*Christopher C. Obropta*  
DATE 06/09/16  
APPROVED CCO  
CHECKED CP  
DRAWN KTC

REVISIONS	No.	DATE	DESCRIPTION

ARLINGTON PARK  
RAIN GARDEN DEMONSTRATION PROJECT  
ARLINGTON AVENUE AT GRAND STREET, JERSEY CITY  
HUDSON COUNTY, NEW JERSEY  
COVER SHEET



SHEET NAME  
COVER

52'

ARLINGTON AVENUE

PLAN NOTES:

1. CONTRACTOR SHALL SCHEDULE MEETING WITH ENGINEER AND PROPERTY OWNER PRIOR TO MOBILIZATION.
2. CONTRACTOR SHALL VERIFY ALL INFORMATION INCLUDING ELEVATIONS AND UTILITIES PRIOR TO MOBILIZATION.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING REQUIRED APPROVALS FROM AUTHORITIES WITH JURISDICTION OVER PROPOSED WORK.
4. CONTRACTOR SHALL COORDINATE AND CONFIRM PROJECT SCHEDULE AND WORKING HOURS WITH ENGINEER AND PROPERTY OWNER AND PROCEED IN ACCORDANCE WITH LOCAL REQUIREMENTS.
5. CONTRACTOR SHALL COORDINATE UTILITY MARK OUT PRIOR TO MOBILIZATION.
6. CONTRACTOR SHALL DEMO AND REMOVE ALL EXISTING ASPHALT PAVING AS SHOWN ON PLAN.
7. CONTRACTOR SHALL HAUL REMOVED DEBRIS OFF SITE UNLESS OTHERWISE NOTED BY PROPERTY OWNER.

CHRISTOPHER C. OBROPTA, Ph.D., P.E.  
 PROFESSIONAL ENGINEER - NJ LICENSE # 37532

DATE 06/09/16  
 APPROVED CCO  
 CHECKED CP  
 DRAWN KTC

REVISIONS

No. | DATE

DESCRIPTION

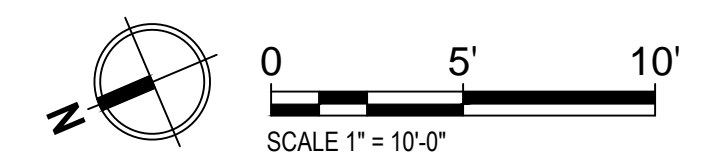
EXISTING CATCH BASIN

DRAINAGE AREA (975 SF)

LIMIT OF WORK

ARLINGTON PARK

EXISTING CATCH BASIN



EXISTING PLAN

ARLINGTON PARK  
 RAIN GARDEN DEMONSTRATION PROJECT  
 ARLINGTON AVENUE AT GRANT STREET, JERSEY CITY  
 HUDSON COUNTY, NEW JERSEY

EXISTING CONDITIONS AND DEMOLITION PLAN



SHEET NAME  
 P-1

52'

ARLINGTON AVENUE

- PLAN NOTES:**
1. CONTRACTOR SHALL SCHEDULE MEETING WITH ENGINEER AND PROPERTY OWNER PRIOR TO MOBILIZATION AND CONSTRUCTION.
  2. CONTRACTOR SHALL VERIFY ALL INFORMATION INCLUDING ELEVATIONS AND UTILITIES PRIOR TO CONSTRUCTION.
  3. CONTRACTOR SHALL VERIFY ALL PROPOSED MATERIALS WITH PROPERTY OWNER AND ENGINEER PRIOR TO CONSTRUCTION.
  4. CONTRACTOR SHALL STAKE OUT LOCATIONS OF PROPOSED RAIN GARDENS, STONE CHANNELS, AND TRENCH DRAIN AND OBTAIN APPROVAL FROM ENGINEER PRIOR TO INSTALLATION.
  5. CONTRACTOR SHALL INSTALL CONVENTIONAL ASPHALT AS SHOWN ON PLAN. THE ASPHALT AND CONCRETE MIXING PLANT, HAULING AND PLACING EQUIPMENT, AND INSTALLATION SHALL BE IN CONFORMANCE WITH NAPA IS 131 AND THE NJDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2007 OR LATEST VERSION.
  6. CONTRACTOR SHALL GRADE SITE AS SHOWN ON PLAN. CUT SOIL SHALL BE REUSED ON SITE FOR FILL LOCATIONS.
  7. CONTRACTOR SHALL HAUL EXCESS SOIL OFF SITE UNLESS OTHERWISE NOTED BY PROPERTY OWNER.
  8. ALL FINISHED ELEVATIONS SHALL MATCH ADJOINING PAVEMENT ENSURING SMOOTH TRANSITIONS AND NO TRIPPING HAZARDS.
  9. CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING ALL AREAS DISTURBED DURING CONSTRUCTION TO ORIGINAL CONDITIONS.

**NOTE 1:** STONE SHALL BE COMPRISED OF 3"-5" DIAMETER CLEAN, WASHED RIVER STONE. ALL AREAS OF EROSION PROTECTION STONE SHALL BE UNDERLAIN WITH GEOTEXTILE FABRIC (GEOTEX 801 BY PROPEX OR APPROVED EQUIVALENT).

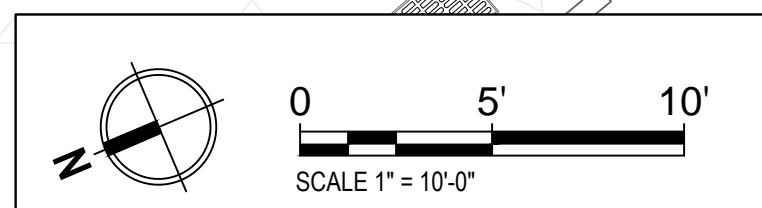
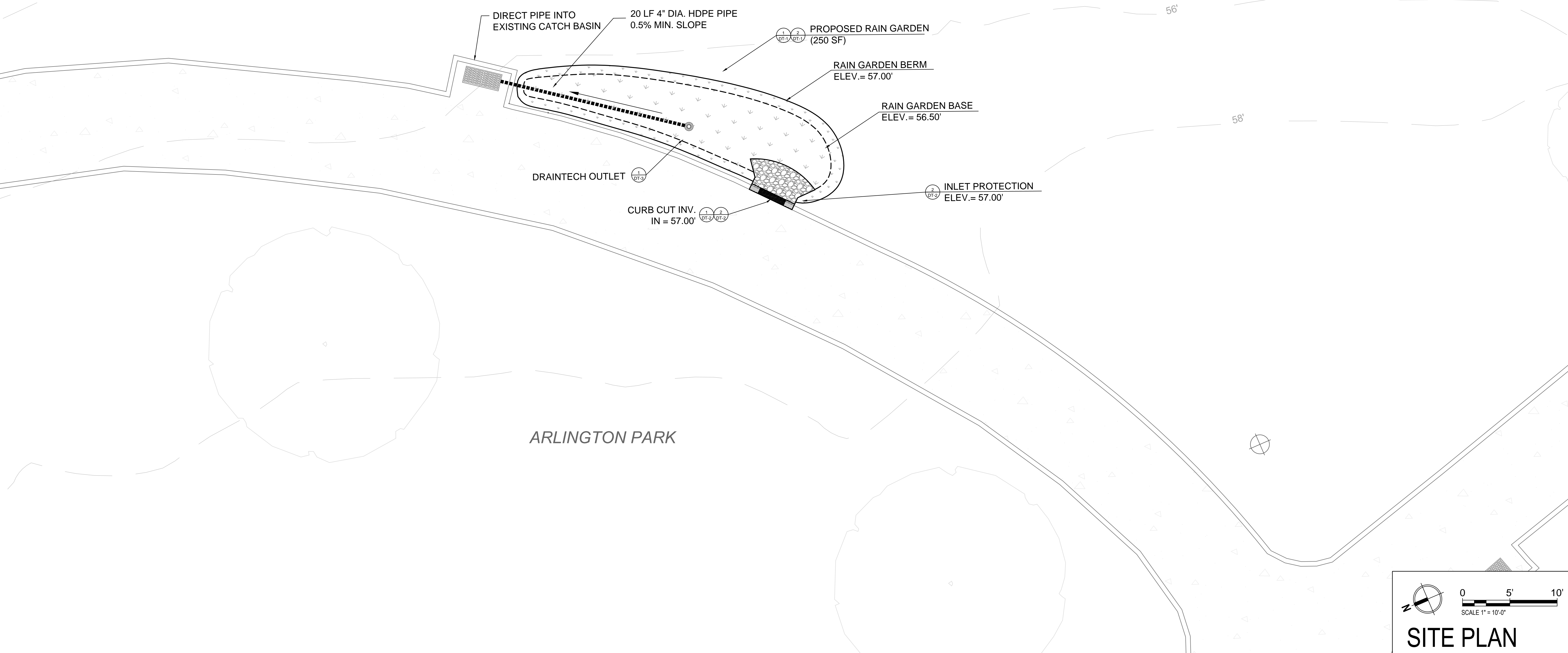
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 PROFESSIONAL ENGINEER - NJ LICENSE # 37532  
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 CHECKED CP  
 DRAWN KTC

REVISIONS	DATE	DESCRIPTION
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ARLINGTON PARK  
 RAIN GARDEN DEMONSTRATION PROJECT  
 ARLINGTON AVENUE AT GRAND STREET, JERSEY CITY  
 HUDSON COUNTY, NEW JERSEY  
 PROPOSED SITE PLAN



SHEET NAME  
 P-2



**SITE PLAN**

**PLANT LIST**

QUANTITY	SIZE	PLANT SPECIES LIST
75	1 PLUG	Perennials
50	1 PLUG	EP <i>Echinacea purpurea</i>
75	1 PLUG	JE <i>Juncus effusus</i>
		RF <i>Rudbeckia fulgida</i>

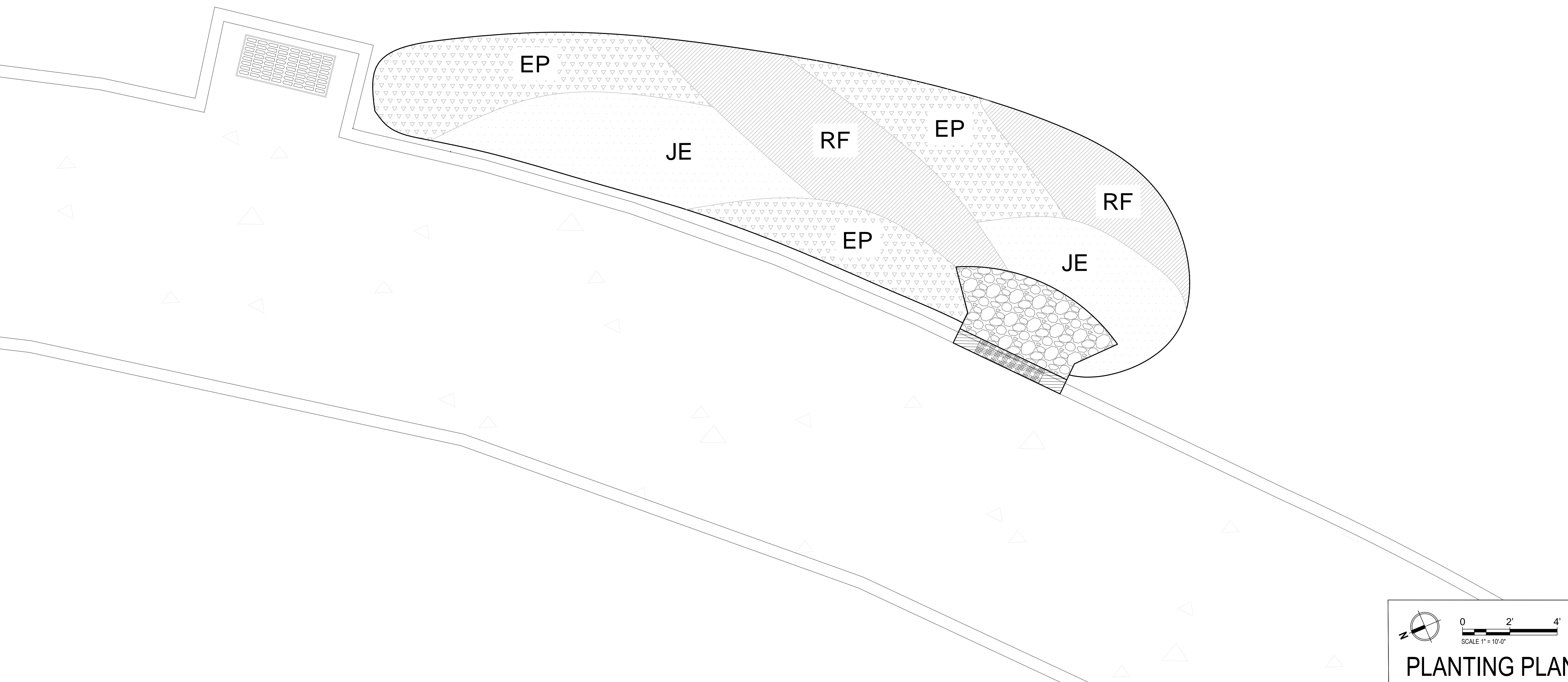
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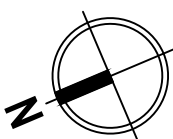
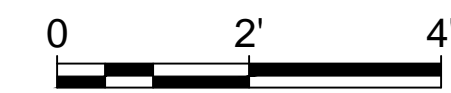
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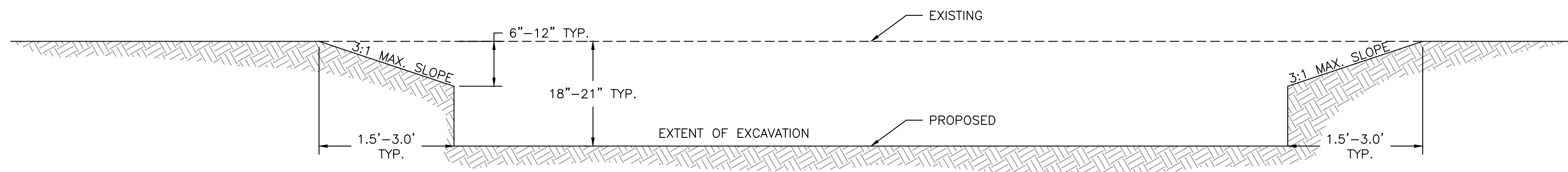
ARLINGTON PARK  
 RAIN GARDEN DEMONSTRATION PROJECT  
 ARLINGTON AVENUE AT GRAND STREET, JERSEY CITY  
 HUDSON COUNTY, NEW JERSEY  
 PLANTING PLAN



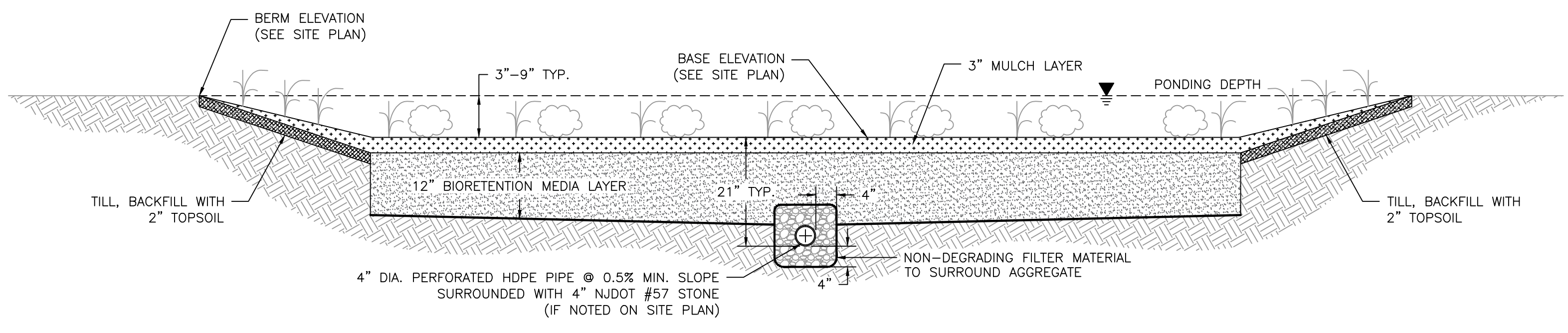
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 P-3



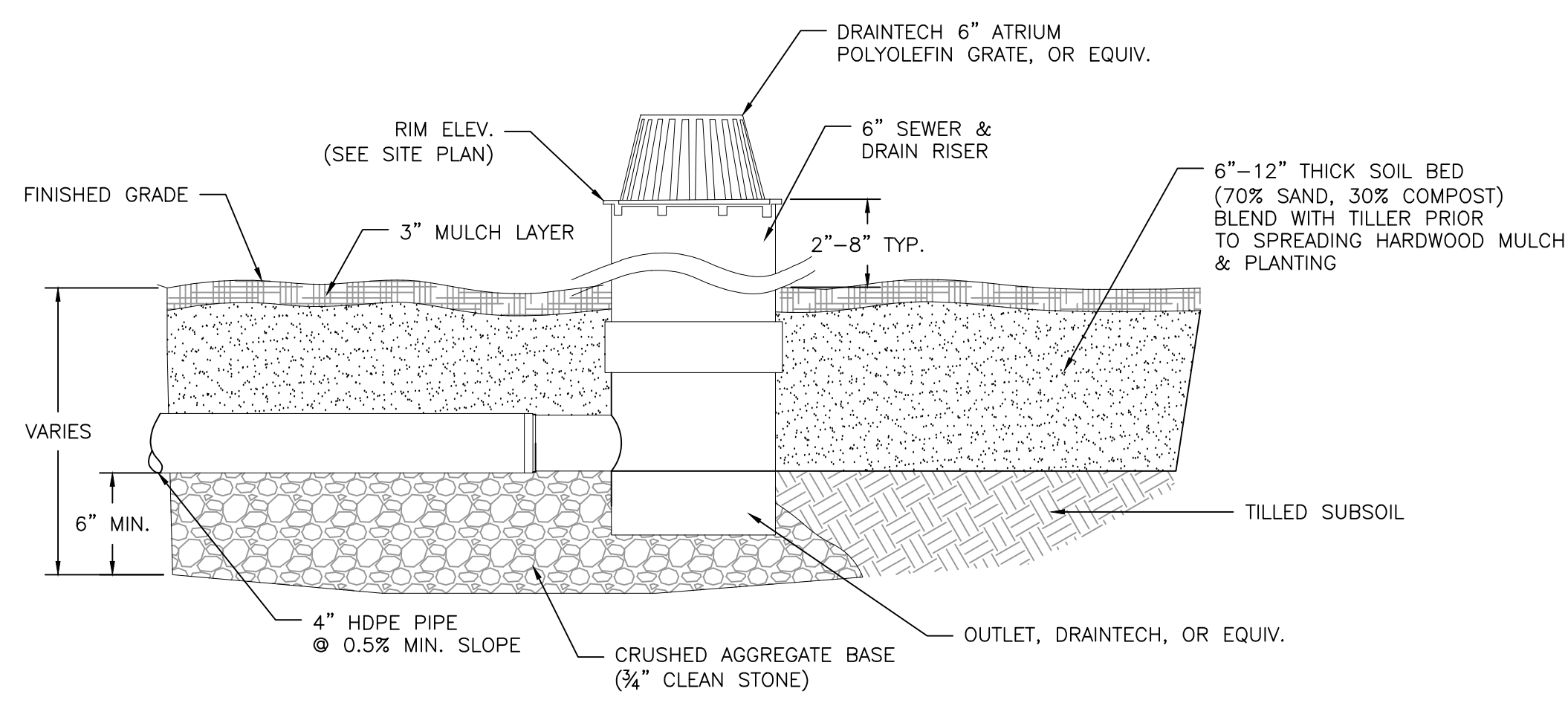

  
 SCALE 1" = 10'-0"  
**PLANTING PLAN**



1 RAIN GARDEN EXCAVATION SECTION  
DT-1 N.T.S.



2 RAIN GARDEN CROSS-SECTION  
DT-1 N.T.S.



3 DRAINTECH OUTLET DETAIL  
DT-1 N.T.S.

CONSTRUCTION NOTES:

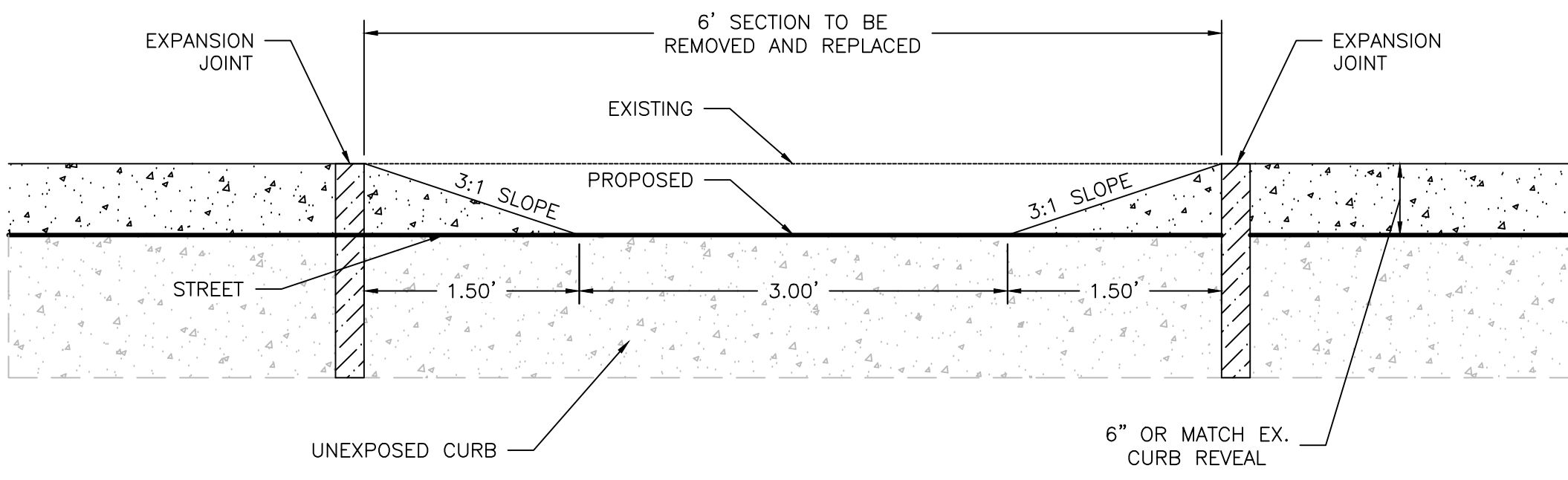
1. THE CONTRACTOR SHALL VERIFY ALL INFORMATION PRIOR TO EXCAVATION INCLUDING ELEVATIONS AND LOCATIONS OF EXISTING UTILITIES.
2. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY IF ANY FIELD CONDITIONS DIFFER MATERIALLY FROM THOSE REPRESENTED ON THESE DRAWINGS AND THE SPECIFICATIONS OR IF, IN THE CONTRACTOR'S OPINION, SAID CONDITIONS CONFLICT WITH THE DESIGNS SHOWN HEREON.
3. THE ENGINEER SHALL INSPECT ALL PLANTING BED AREAS BEFORE MULCHING TO INSURE THAT ADEQUATE DRAINAGE EXISTS. IF ANY AREAS TO BE MULCHED SHOW EVIDENCE OF POOR DRAINAGE, THE CONTRACTOR SHALL TAKE CORRECTIVE ACTION.
4. THE CONTRACTOR SHALL AVOID DISTURBING ALL EXISTING TREES. ANY DISTURBANCE TO TREES OR TREE ROOTS MUST BE COORDINATED WITH THE PROPERTY OWNER.
5. DIMENSIONS AND SHAPE WILL VARY, REFER TO SITE PLAN.
6. RIVER STONE PROTECTION DIMENSIONS ARE TYPICAL AND MAY VARY PER SITE. CONSULT THE ENGINEER AND SITE PLAN FOR DIMENSIONS ON A PER SITE BASIS.
7. RIVER STONE PROTECTION SHALL SLOPE TO RAIN GARDEN BASE.
8. REFER TO SITE PLAN TO DETERMINE OUTLET TYPE (ROCK-LINED OVERFLOW OR DRAINTECH RISER).
9. REFER TO SITE PLAN FOR ALL ELEVATIONS AND INVERTS.
10. THE CONTRACTOR SHALL EXCAVATE 12" LOWER THAN THE BASE ELEVATION SHOWN ON THE SITE PLANS. THE SLOPES OF THE RAIN GARDEN SHALL BE AT A 2:1 MAXIMUM.
11. THE SUBGRADE OF THE RAIN GARDEN SHALL BE LEVEL TO ENSURE PROPER DRAINAGE. CONTRACTOR SHALL OBTAIN ENGINEER APPROVAL PRIOR TO BACKFILLING WITH 12" OF BIORETENTION MEDIA.
12. THE CONTRACTOR SHALL INSTALL OVERFLOW IF SPECIFIED IN SITE PLANS PRIOR TO BACKFILLING WITH BIORETENTION MEDIA.
13. THE BIORETENTION LAYER SHALL BE LEVEL TO ENSURE PROPER DRAINAGE. CONTRACTOR SHALL OBTAIN ENGINEER APPROVAL PRIOR TO SPREADING MULCH AND PLANTING.
14. INLET AND OUTLET PROTECTION SHALL BE UNDERLAIN WITH GEOTEXTILE FABRIC.
15. INLETS AND OUTLETS SHALL NOT INHIBIT THE FLOW OF WATER FROM THE STREET. THE RIVER STONE SHALL BE PLACED BELOW THE BOTTOM OF THE PIPE.
16. THE CONTRACTOR SHALL TILL THE BERM SECTION AND BACKFILL WITH TOPSOIL.
17. ALL DISTURBED AREAS EXCLUSIVE OF RAIN GARDEN AND SLOPED BERM SHALL BE RESTORED TO ORIGINAL CONDITIONS BY CONTRACTOR.
18. THE CONTRACTOR SHALL HAVE A PRE-CONSTRUCTION MEETING WITH THE PROJECT ENGINEER PRIOR TO ANY WORK ON SITE.

SPECIFICATIONS:

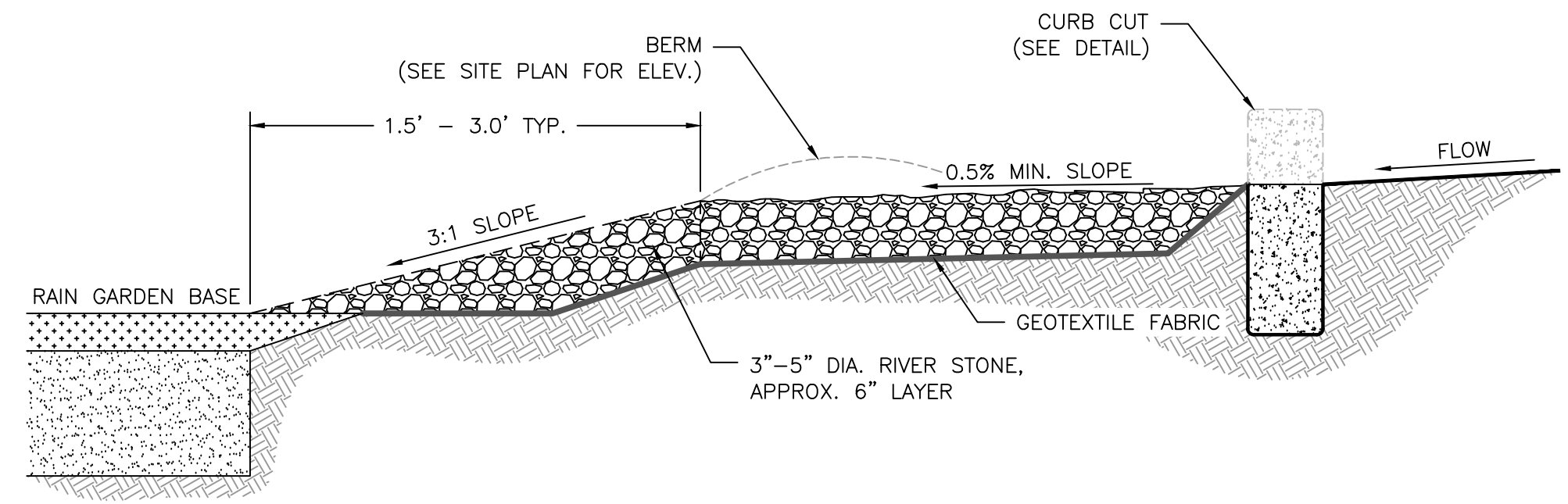
1. MAX COVER OVER TOP OF PIPE IS 4 FT. CONTACT ADS IF OTHERWISE GREATER.
2. THE APPROVAL OF MATERIALS AND MIXING OF SAND, COMPOST, AND SOIL SHALL BE DONE UNDER THE SUPERVISION OF THE PROJECT ENGINEER/LANDSCAPE ARCHITECT. BIORETENTION MEDIA SHALL CONSIST OF 70% SAND AND 30% COMPOST MIXTURE.
3. SAND SHALL AT THE MINIMUM CONFORM TO THE SIEVE ANALYSIS FOR CONCRETE AGGREGATE SAND (ASTM C-33). USGA TEE/GREEN SIEVE GRADATION MIX IS PREFERABLE WHERE AVAILABLE.
4. UNDERLYING SOILS SHALL BE TILLED/SCARIFIED PRIOR TO SPREADING/MIXING OF BIORETENTION MEDIA.
5. ALL BIORETENTION MEDIA SHALL BE PLACED FROM THE SIDES OF THE FACILITIES, AND IN NO EVENT SHALL ANY TRACKED OR WHEELED EQUIPMENT BE PERMITTED TO CROSS THE RAIN GARDEN.
6. RAIN GARDEN SHALL BE CONSTRUCTED TO DIMENSIONS INDICATED ON THE SITE PLAN.
7. 3-5 INCH DELAWARE RIVER STONE SHALL BE USED FOR STONE CHANNEL AND INLET/OUTLET PROTECTION.
8. NON-DYED, TRIPLE-SHREDED HARDWOOD MULCH SHALL BE USED.
9. PLANTING OF RAIN GARDEN AND SLOPED BERM SHALL BE COMPLETED AS INDICATED ON THE SITE PLAN.
10. THE CONTRACTOR SHALL PERFORM ALL WORK IN CONFORMANCE WITH THE NJDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2007 OR LATEST VERSION.

<p>ARLINGTON PARK RAIN GARDEN DEMONSTRATION PROJECT ARLINGTON STREET AT GRAND STREET, JERSEY CITY HUDSON COUNTY, NJ</p>	<p>RAIN GARDEN DETAILS</p>	<p>CHRISTOPHER C. OBROPTA, Ph.D., P.E. PROFESSIONAL ENGINEER - NJ LICENSE # 37532</p> <p><i>Christopher C. Obropta</i></p> <p>CHECKED: CP APPROVED: CCO DRAWN: KTC DATE: 06/09/16</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 5%;">REVISIONS</th> <th style="width: 10%;">No.</th> <th style="width: 10%;">DATE</th> <th style="width: 75%;">DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	REVISIONS	No.	DATE	DESCRIPTION																
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<p>RUTGERS New Jersey Agricultural Experiment Station</p>		<p>SHEET NAME DT-1</p>																					





1 CURB CUT CROSS-SECTION  
DT-2 N.T.S.



2 INLET/OUTLET CURB CUT PROTECTION  
DT-2 N.T.S.

CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL VERIFY ALL INFORMATION PRIOR TO EXCAVATION INCLUDING ELEVATIONS AND LOCATIONS OF EXISTING UTILITIES.
2. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY IF ANY FIELD CONDITIONS DIFFER MATERIALLY FROM THOSE REPRESENTED ON THESE DRAWINGS AND THE SPECIFICATIONS OR IF, IN THE CONTRACTOR'S OPINION, SAID CONDITIONS CONFLICT WITH THE DESIGNS SHOWN HEREON.
3. THE CONTRACTOR SHALL AVOID DISTURBING ALL EXISTING TREES. ANY DISTURBANCE TO TREES OR TREE ROOTS MUST BE COORDINATED WITH THE BOROUGH DEPARTMENT OF PUBLIC WORKS.
4. INLET AND OUTLET PROTECTION SHALL BE UNDERLAIN WITH GEOTEXTILE FABRIC.
5. INLET AND OUTLET CURB CUTS SHALL NOT INHIBIT THE FLOW OF WATER FROM THE STREET. THE CURB CUT SHALL BE SLIGHTLY LOWER THAN THE ROAD. THE CONCRETE SLAB SHALL BE PLACED JUST BELOW THE BOTTOM OF THE CURB CUT.
6. THE CONTRACTOR SHALL SAWCUT, REMOVE AND REPLACE A 6 FOOT SECTION OF CURB FOR THE CONCRETE FUNNEL. THE ENTIRE CURB SHALL BE REINSTALLED WITH A 3 FOOT DEPRESSED SECTION FLUSH WITH THE PAVEMENT AND ADJOINING 18" 3:1 SLOPED SECTIONS.
7. THE CONTRACTOR SHALL POUR THE CONCRETE FLOW PAD AS SHOWN WITH 60" RIDGES. THE RIDGES SHALL BE 1 1/4" IN HEIGHT.
8. ALL AREAS EXCLUSIVE FROM THE TRENCH DRAIN AND/OR CURB CUT SHALL BE RESTORED TO ORIGINAL CONDITIONS.
9. THE CONTRACTOR SHALL HAVE A PRE-CONSTRUCTION MEETING WITH THE ENGINEER PRIOR TO ANY WORK ON SITE.

SPECIFICATIONS:

1. TRENCH DRAIN SHALL BE ECONODRAIN® SERIES #12 AS MANUFACTURED BY ECONODRAIN®, OR APPROVED EQUIVALENT.
2. GRATE FOR TRENCH DRAIN SHALL BE CAST IRON ADA GRATE #EG14242CIADA WITH LOCKING FASTENERS, OR EQUAL.
3. END CAP CUTOUTS TO BE REMOVED UPON APPROVAL.
4. STONE FOR PROTECTION SHALL BE 3"-5" DIAMETER WASHED RIVER STONE.
5. THE CONTRACTOR SHALL BE PERFORMED IN CONFORMANCE WITH THE NJDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2007 OR LATEST VERSION.
6. THE CONTRACTOR SHALL ONLY USE CONCRETE WITH 4,500 PSI STRENGTH.

CHRISTOPHER C. OBROPTA, Ph.D., P.E.  
PROFESSIONAL ENGINEER - NJ LICENSE # 37532

DATE 06/09/16

APPROVED CCO

CHECKED CJC

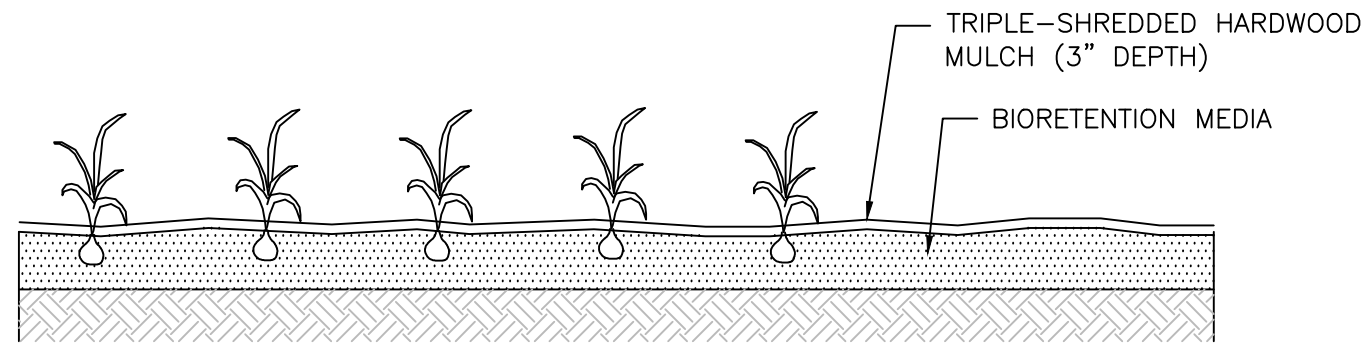
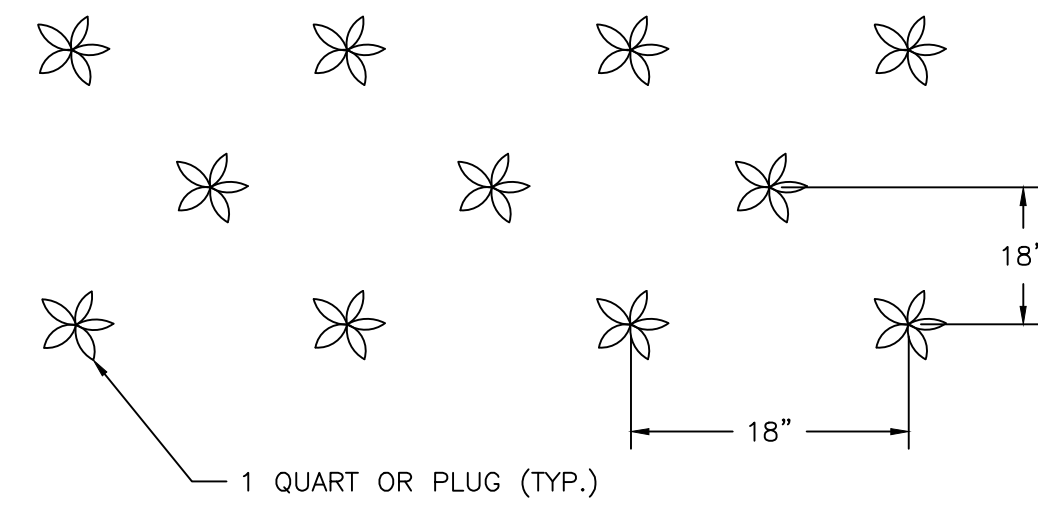
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ARLINGTON PARK  
RAIN GARDEN DEMONSTRATION PROJECT  
ARLINGTON AVENUE AT GRAND STREET, JERSEY CITY  
HUDSON COUNTY, NEW JERSEY

CURB CUT DETAILS





1 HERBACEOUS PLUG PLANTING DETAIL  
DT-3 N.T.S.

PLANTING SCHEDULE

PERENNIALS & GRASSES PLANT LIST

QTY.	KEY	BOTANICAL NAME	COMMON NAME	SIZE
75	RF	<i>Rudbeckia fulgida</i>	BLACK EYED SUSAN	1 PLUG
75	EP	<i>Echinacae purpurea</i>	PURPLE CONEFLOWER	1 PLUG
50	JE	<i>Juncus effusus</i>	SOFT RUSH	1 PLUG

OPEN LAWN AND TURF AREAS

- SEED ALL REMAINING PARK AREAS WITH TURF TYPE FALL FESCUE AND PERENNIAL RYEGRASS BLEND (LOFTS – SUMMER STRESS MIX II OR APPROVED EQUIVALENT). INSTALL AT A RATE OF 350 LBS. PER ACRE PER MANUFACTURERS SPECIFICATIONS.

TOPSOILING, SEEDING AND MULCHING NOTES

- ANY UNDISTURBED AREA ON WHICH ACTIVITY HAS CEASED AND WHICH WILL REMAIN EXPOSED FOR MORE THAN 10 DAYS MUST BE SEEDED AND MULCHED IMMEDIATELY. DURING NON-GERMINATING PERIODS, MULCH MUST BE APPLIED AT THE REQUIRED RATES. DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE REDISTURBED WITHIN 1 YEAR SHALL BE SEEDED AND MULCHED WITH A QUICK GROWING TEMPORARY SEEDING MIXTURE AND MULCH. DISTURBED AREAS WHICH ARE EITHER AT FINISHED GRADE OR WILL NOT BE REDISTURBED WITHIN 1 YEAR MUST BE SEEDED AND MULCHED WITH A PERMANENT SEED MIXTURE AND MULCH.
- DIVERSIONS, CHANNELS, SEDIMENTATION BASINS, SEDIMENT TRAPS, AND STOCKPILES MUST BE SEEDED AND MULCHED IMMEDIATELY.
- GRADED AREAS SHALL BE TEMPORARILY SEEDED AND MULCHED IMMEDIATELY FOLLOWING EARTH MOVING PROCEDURES. TEMPORARY SEED SHALL BE ANNUAL RYE GRASS APPLIED AT A RATE OF 3 LBS. PER 1000 SQ. FT.
- AFTER SEEDING, HAY OR STRAW MULCH MUST BE APPLIED AT A RATE OF AT LEAST 3.0 TONS PER ACRE. MULCH SHALL BE ANCHORED BY EITHER CRIMPING WITH A COULTER IMPLEMENT, OR BY STAPLING BIODEGRADABLE NETTING TO THE SURFACE.
- SITE PREPARATION TO UPLAND AREAS: APPLY 1 TON OF AGRICULTURAL-GRADE LIMESTONE PER ACRE PLUS 10-20-10 FERTILIZER AT THE RATE OF 500 LB. PER ACRE. WORK IN WHERE POSSIBLE. SEEDING OF DISTURBED UPLAND AREAS (BEYOND LIMITS OF RIPARIAN ENHANCEMENT AREA) TO BE DONE USING MIX OF FINE FESCUE AT 35 LBS/ACRE (PURE LIVE SEED) PLUS PERENNIAL RYEGRASS AT 15 LBS/ACRE (PURE LIVE SEED).
- TOPSOIL SHALL BE A CLEAN FRIABLE LOAM WITH SUFFICIENT ORGANIC CONTENT (2.75%) TO PROMOTE PLANT VIGOR. AMENDMENTS SHALL BE ADDED AS NEEDED TO IMPROVE DEFICIENT SOILS. TOPSOIL SHALL BE RETURNED AT A LOOSE DEPTH OF FIVE INCHES TO ALLOW FOR SETTLEMENT.
- ESTABLISH PERMANENT SEEDING AS SOON AS POSSIBLE AFTER FINAL GRADING IS COMPLETE. UNLESS OTHERWISE INDICATED, PERMANENT SEEDING SHALL BE SEED MIXTURE SPECIFIED IN TABLE.
- SEE TABLES FOR SEED SPECIES MIXTURE AND APPLICATION RATES.
- SEED MIXES ARE AVAILABLE AT ERNST CONSERVATION SEEDS IN MEADVILLE, PA. WEBSITE: WWW.ERNSTSEED.COM OR PHONE: 1-800-873-3321.
- NATIVE SHRUBS AND HERBACEOUS PLUGS ARE AVAILABLE AT PINELANDS NURSERY AND SUPPLY, COLUMBUS NJ. WEBSITE: WWW.PINELANDSNURSERY.COM OR PHONE 1-800-667-2729

GENERAL LANDSCAPING NOTES

- ALL PLANT MATERIALS SHALL CONFIRM TO THE AMERICAN ASSOCIATION OF NURSERYMEN'S AMERICAN STANDARD FOR NURSERY STOCK (LATEST EDITION)
- INSPECTION OF PLANTING BEDS – THE LANDSCAPE ARCHITECT SHALL INSPECT ALL PLANTING AREAS BEFORE ANY TOPSOILING OR PLANTING IS BEGUN TO INSURE THAT ADEQUATE DRAINAGE EXISTS. IF ANY AREAS TO BE LANDSCAPED SHOW EVIDENCE OF POOR DRAINAGE, THE LANDSCAPE ARCHITECT SHALL NOTIFY THE OWNER IMMEDIATELY FOR CORRECTIVE ACTION
- THE LANDSCAPE ARCHITECT SHALL APPROVE ALL PLANT MATERIAL AND STAKED PLANT LOCATIONS PRIOR TO INSTALLATION. ALL HERBACEOUS PLUG PLANTINGS SHALL BE A MINIMUM 3 INCH DEPTH. PLUGS SHALL BE PLANTED 1 FOOT O.C. AS INDICATED ON PLAN.
- ALL TREES, SHRUBS, AND GROUNDCOVER SHALL BE PLACED IN CONTINUOUS MULCHED BEDS 4" IN DEPTH. MUCH SHALL BE TRIPLE SHREDDED HARDWOOD.
- ALL TREES, SHRUBS, AND GROUNDCOVER SHALL BE AS SPECIFIED AND SHALL BE INSTALLED IN ACCORDANCE WITH THE DETAILS AND COMMENTS NOTED ON THE DRAWINGS.
- TOPSOIL SHALL BE PROVIDED BY THE LANDSCAPE CONTRACTOR FOR PLANTING ACCORDING TO THE PLANS AND DETAILS.
- PREPARED TOPSOIL FOR BACKFILLING AROUND TREE BALLS SHALL BE A MIXTURE OF VOLUME OF THE FOLLOWING MATERIALS IN QUANTITIES SPECIFIED: 1/3 COMPOST, 2/3 TOPSOIL
- ALL HERBACEOUS PLUG PLANTINGS SHALL BE MINIMUM 3 INCH DEPTH. PLUGS SHALL BE PLANTED 1 FOOT O.C. AS INDICATED ON PLAN.

CHRISTOPHER C. OBROPTA, Ph.D., P.E.  
PROFESSIONAL ENGINEER - NJ LICENSE # 37532  
DATE 06/09/16  
APPROVED CCO  
CHECKED CP  
DRAWN KTC

REVISIONS	DESCRIPTION
No.	DATE

ARLINGTON PARK  
RAIN GARDEN DEMONSTRATION PROJECT  
ARLINGTON AVENUE AT GRAND STREET, JERSEY CITY  
HUDSON COUNTY, NEW JERSEY  
PLANTING AND LANDSCAPE DETAILS





Site Visit: May 20, 2016 – The site was selected for a demonstration rain garden at Arlington Park.



Construction Day 1: July 13, 2016 – Ms. Balladares, the RCE Water Resources Program, and the Jersey City DPW excavated the demonstration rain garden.



Construction Day 2: July 15, 2016 – Jersey City DPW provided mulch and assisted the RCE Water Resources Program in spreading the mulch. The RCE Water Resources Program constructed the inlet in preparation for a curb cut.



Construction Day 3: July 21, 2016 – The RCE Water Resources Program added additional sand mixture to the base of the rain garden.



Construction Day 4: August 10, 2016 – Jersey City DPW completed the curb cut and added additional mulch to the rain garden.



Construction Day 5: August 15, 2016 – Ms. Balladares, Friends of Arlington Park volunteers, and the RCE Water Resources Program completed the planting of Arlington Park’s rain garden.





Post Installation: September 16, 2016 – The RCE Water Resources Program inspects the rain garden at Arlington Park and found the garden in good condition.