

Dr. Frank Napier, Jr. School of Technology 4
Green Infrastructure Information Sheet

<p>Location: 55 Clinton Street Paterson, NJ 07522</p>	<p>Site Use: School</p>
<p>Ward: 1</p>	<p>Watershed Name: Lower Passaic River</p> <p>Targeted Pollutants: total nitrogen (TN), total phosphorus (TP), and total suspended solids (TSS) in surface runoff</p>
<p>Green Infrastructure Description: Bioretention system and enhanced tree pits</p>	<p>Estimated Stormwater Captured and/or Treated Per Year: 137,200 gallons</p>
<p>Implementation Date: 10/10/2017 Green Infrastructure System: 1,540 sq. ft. rain garden and three 16 sq. ft. enhanced tree pits Drainage Area: 6,130 sq. ft. (blacktop playground runoff)</p>	
<p>Funding Sources: New Jersey Department of Environmental Protection 319(h)</p>	
<p>Partners/Stakeholders: Rutgers Cooperative Extension Water Resources Program, New Jersey Department of Environmental Protection, Great Swamp Watershed Association, Paterson Public Schools Board of Education and Facilities, School 4 Staff and Students, and Passaic County</p>	
<p>Appendix A: Site Photograph – Previous Condition</p> <p>Appendix B: Site Concept Plan</p> <p>Appendix C: Site Design Plan</p> <p>Appendix D: Site Photograph – Current Condition</p>	

APPENDIX A:

Site Photograph – Previous Condition

August 24, 2015



APPENDIX B:

Site Concept Plan



APPENDIX C:

Site Design Plan

DR. FRANK NAPIER JR. SCHOOL OF TECHNOLOGY PUBLIC SCHOOL 4

PATERSON GREEN INFRASTRUCTURE

55 CLINTON STREET, PATERSON
PASSAIC COUNTY, NEW JERSEY

PROJECT DESCRIPTION:

AN UNUSED AND ERODED ASPHALT AREA WILL BE DEPAVED AND REPLACED WITH A RAIN GARDEN THAT WILL CAPTURE STORMWATER RUNOFF FROM 6,130 SF OF IMPERVIOUS SURFACES FROM THE PLAYGROUND. THREE ENHANCED TREE PITS WILL BE CONSTRUCTED TO CAPTURE ADDITIONAL RUNOFF AND TO PROVIDE SHADE TO THE AREA.

LOCATION MAP:



LEGEND:

- EXISTING FENCE
- EXISTING DRAINAGE AREA
- EXISTING TREE
- LIMIT OF WORK
- ▨ PROPOSED GREEN INFRASTRUCTURE
- EXISTING CENTERLINE
- ▭ EXISTING BUILDING
- ⊙ EXISTING UTILITY POLE
- EXISTING CATCH BASIN
- EDGE OF PAVEMENT
- ▨ AREA TO BE DEPAVED
- ~ EXISTING CONTOURS
- + 100.00 EXISTING SPOT ELEVATIONS

SPOT ELEVATION CODES:
AC - AREA CORNER EP - EDGE OF PAVEMENT
BL - BUILDING CORNER CB - CATCH BASIN

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	TREE PIT DETAILS
DT-3	PLANTING AND LANDSCAPE DETAILS
DT-4	SOIL EROSION AND SEDIMENT CONTROL

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

Christopher C. Obropta

DATE: 06/21/17

APPROVED: [Signature]

CHECKED: [Signature]

DRAWN: [Signature]

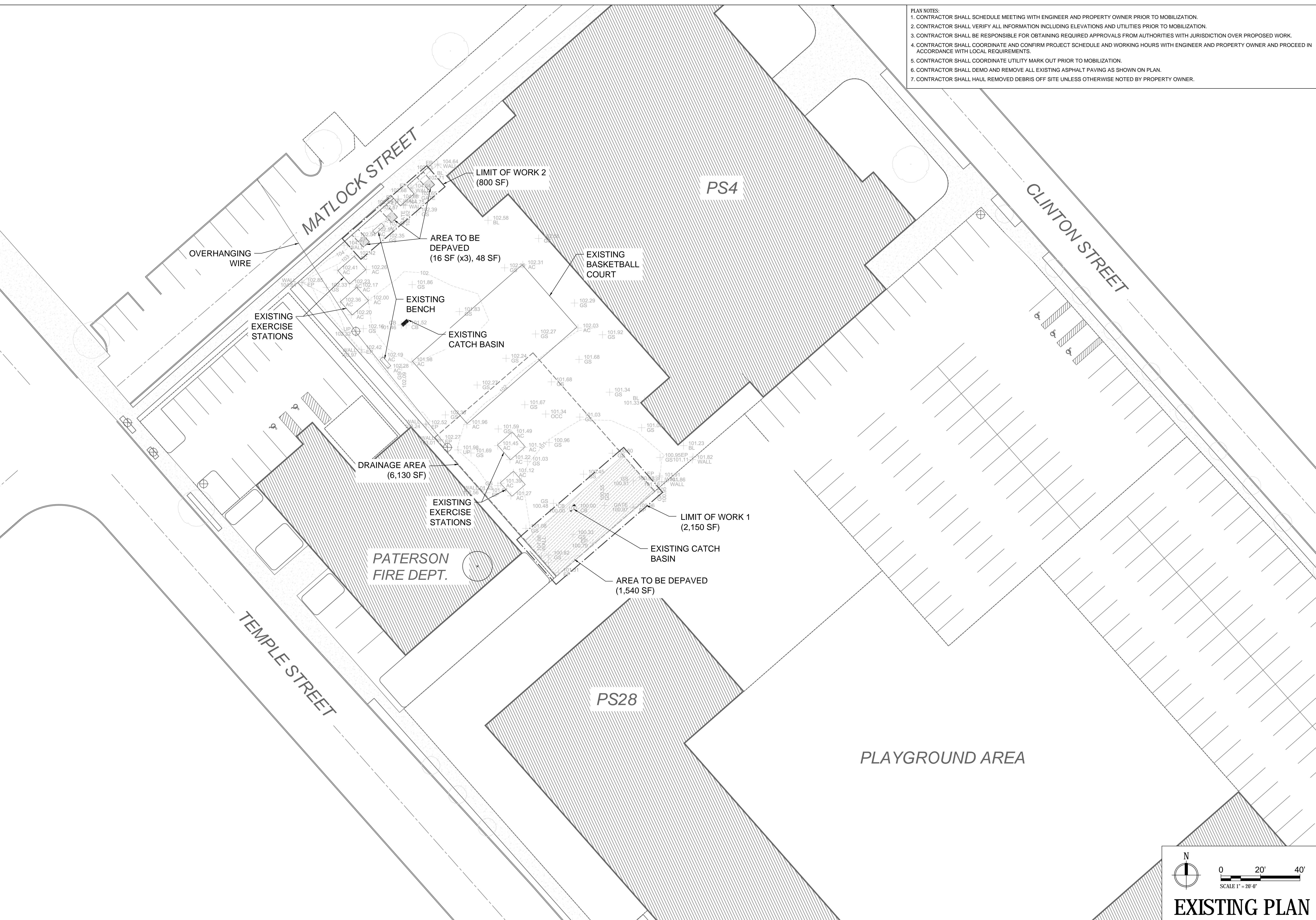
REVISIONS	No.	DATE	DESCRIPTION

DR. FRANK NAPIER JR. SCHOOL OF TECHNOLOGY
PUBLIC SCHOOL 4
PATERSON GREEN INFRASTRUCTURE 319(h)
55 CLINTON STREET, PATERSON
PASSAIC COUNTY, NJ
COVER SHEET



SHEET NAME
COVER

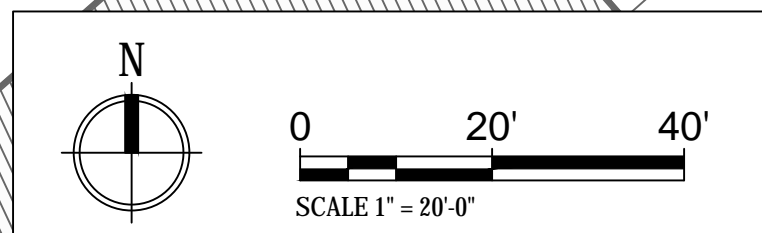
- PLAN NOTES:
1. CONTRACTOR SHALL SCHEDULE MEETING WITH ENGINEER AND PROPERTY OWNER PRIOR TO MOBILIZATION.
 2. CONTRACTOR SHALL VERIFY ALL INFORMATION INCLUDING ELEVATIONS AND UTILITIES PRIOR TO MOBILIZATION.
 3. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING REQUIRED APPROVALS FROM AUTHORITIES WITH JURISDICTION 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.



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 PROFESSIONAL ENGINEER - NJ LICENSE # 37532
 DATE 06/21/17
 APPROVED
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 DRAWN
 DATE 06/21/17

REVISIONS	No.	DATE	DESCRIPTION
	1	04.12.17	TOPO DATA, PLAYGROUND, TREE PIT DEPAVING
	2	06.21.17	SURVEY BASE ELEVATION ADJUSTED

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 PATERSON GREEN INFRASTRUCTURE 319(h)
 55 CLINTON STREET, PATERSON
 PASSAIC COUNTY, NJ
 EXISTING CONDITIONS AND DEMOLITION PLAN



EXISTING PLAN

SHEET NAME
 P-1

MATLOCK STREET

- 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 GRADE SITE AS SHOWN ON PLAN. CUT SOIL SHALL BE REUSED ON SITE FOR FILL LOCATIONS.
 6. CONTRACTOR SHALL HAUL EXCESS SOIL OFF SITE UNLESS OTHERWISE NOTED BY PROPERTY OWNER.
 7. ALL FINISHED ELEVATIONS SHALL MATCH ADJOINING PAVEMENT ENSURING SMOOTH TRANSITIONS AND NO TRIPPING HAZARDS.
 8. 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).
- NOTE 2: UNDERDRAIN ONLY TO BE IMPLEMENTED IF INFILTRATION IS INADEQUATE AT THE SITE.

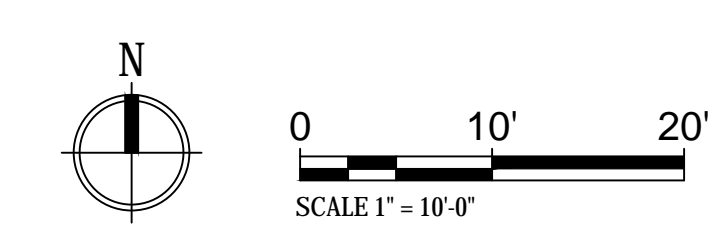
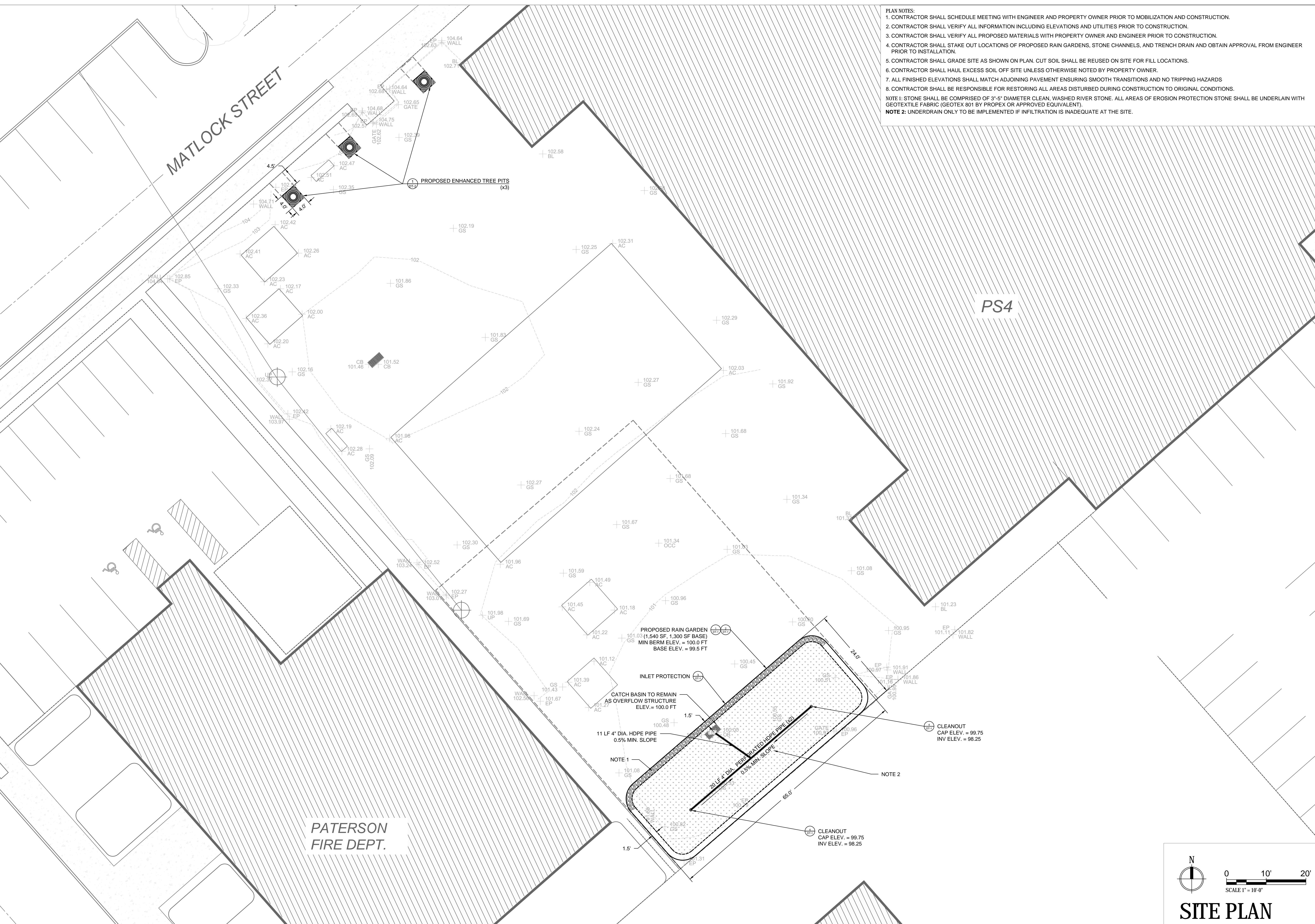
CHRISTOPHER C. OBROPTA, Ph.D., P.E.
 PROFESSIONAL ENGINEER - NJ LICENSE # 37532
 DATE 06/21/17
 CHECKED WALL
 APPROVED CCO
 DATE 06/21/17
 DRAWN CCO

REVISIONS	No.	DATE	DESCRIPTION
1	04.12.17	TOPO, TREE PLANTER PITS, PLAYGROUND SURVEY BASE ELEVATION ADJUSTED	
2	06.21.17		

DR. FRANK NAPIER JR. SCHOOL OF TECHNOLOGY
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 PASSAIC COUNTY, NJ
 PROPOSED SITE PLAN



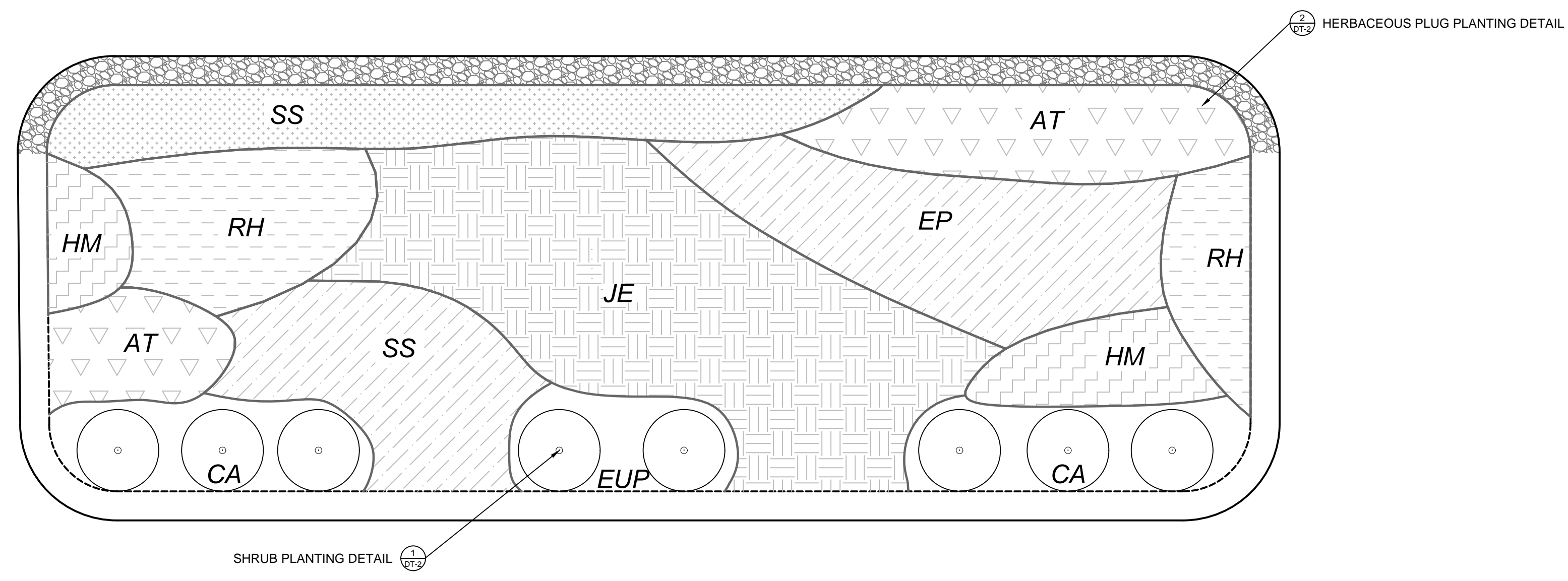
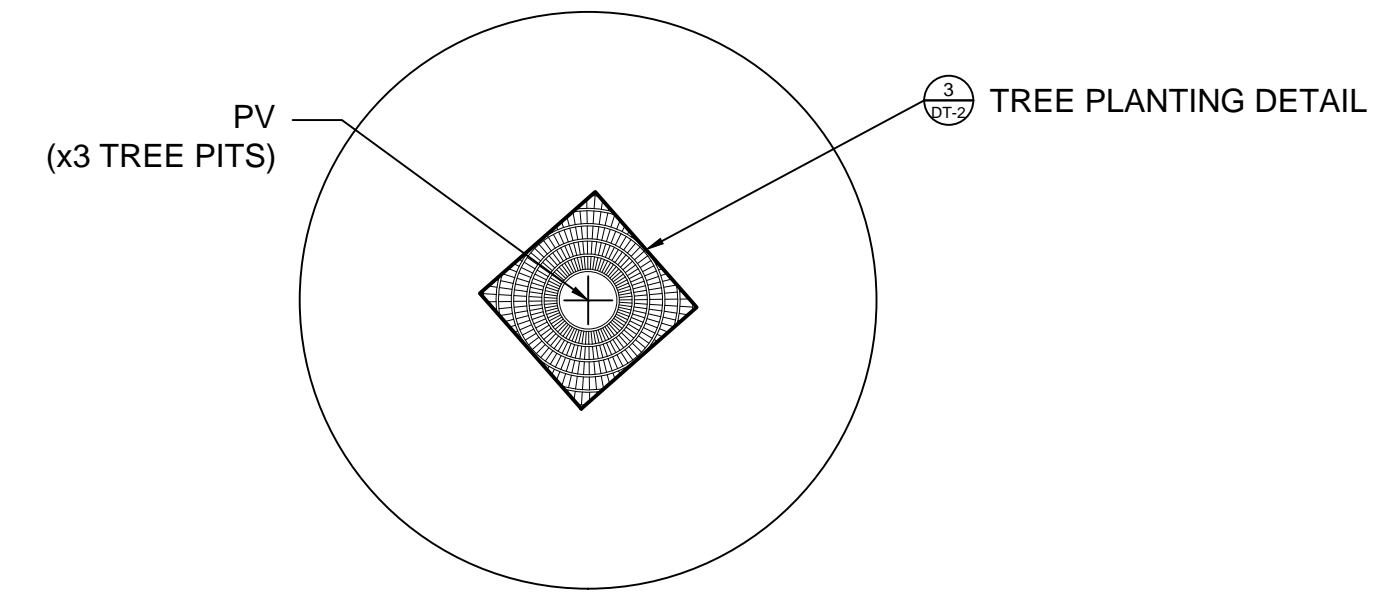
SHEET NAME
 P-2



SITE PLAN

PLANT LIST

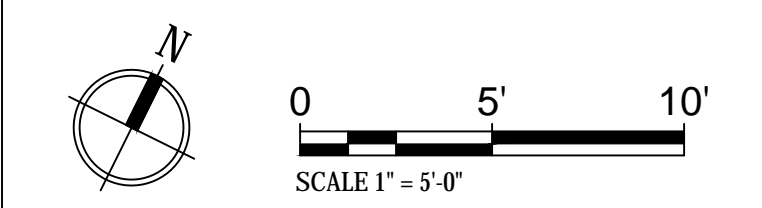
QUANTITY	SIZE	PLANT SPECIES LIST
35	QUART	AT ASCLEPIAS TUBEROSA
40	QUART	EP ECHINACEA PURPUREA
80	QUART	JE JUNCUS EFFUSUS
20	QUART	HM HIBISCUS MOSCHEUTOS
35	QUART	RH RUDBECKIA HIRTA
30	QUART	SS SCHIZACHYRIUM SCOPARIUM
6	3-4 FT SPREAD	CA CLETHRA ALNIFOLIA
2	3-4 FT SPREAD	EUP EUPATORIUM PURPUREUM
3	2-3" CAL. B&B	PV PRUNUS VIRGINIANA



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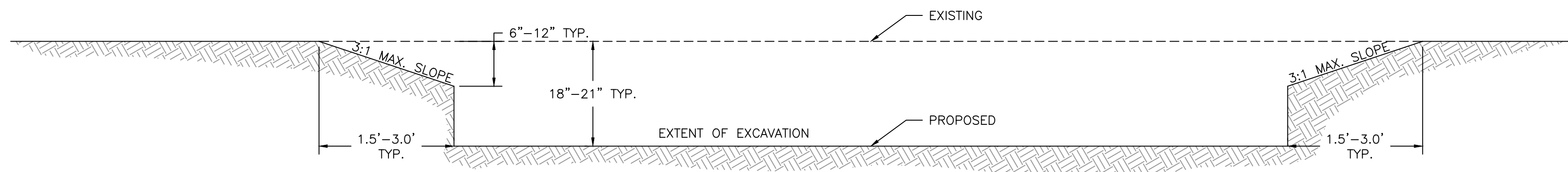
REVISIONS	No.	DATE	DESCRIPTION
1	04.17.17	TREES ADDED	

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 PATERSON GREEN INFRASTRUCTURE 319(h)
 55 CLINTON STREET, PATERSON
 PASSAIC COUNTY, NJ
PLANTING PLAN

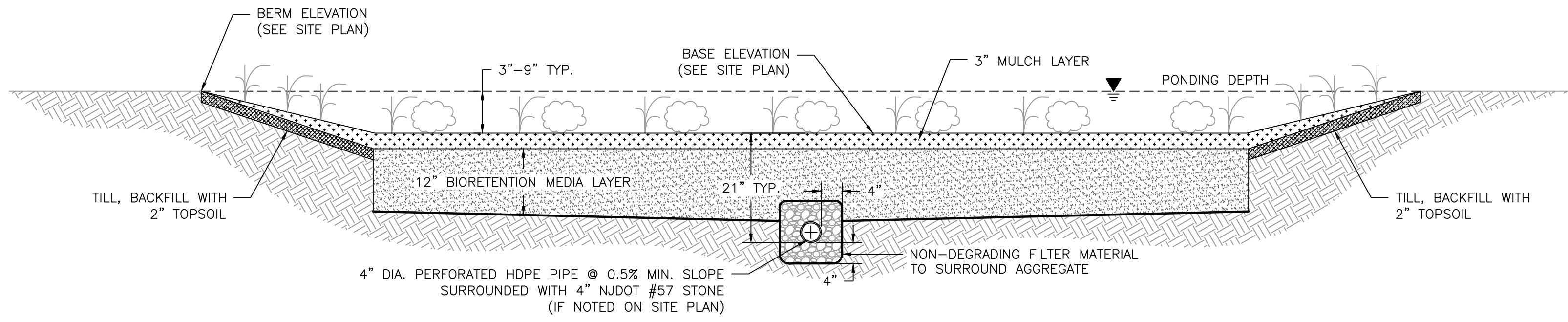


PLANTING PLAN

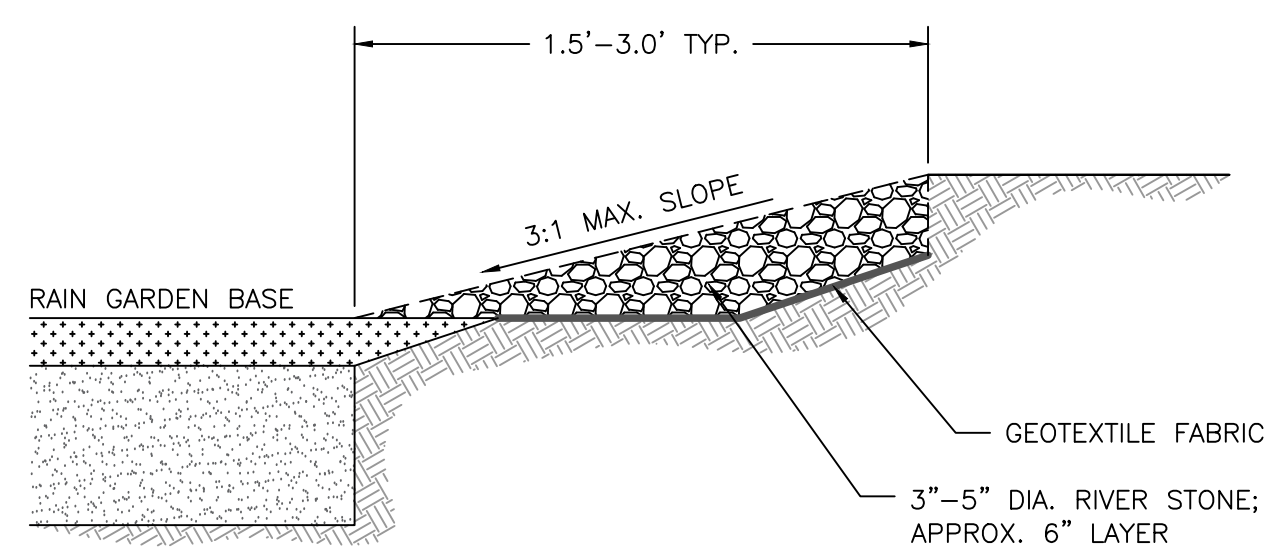
SHEET NAME
P-3



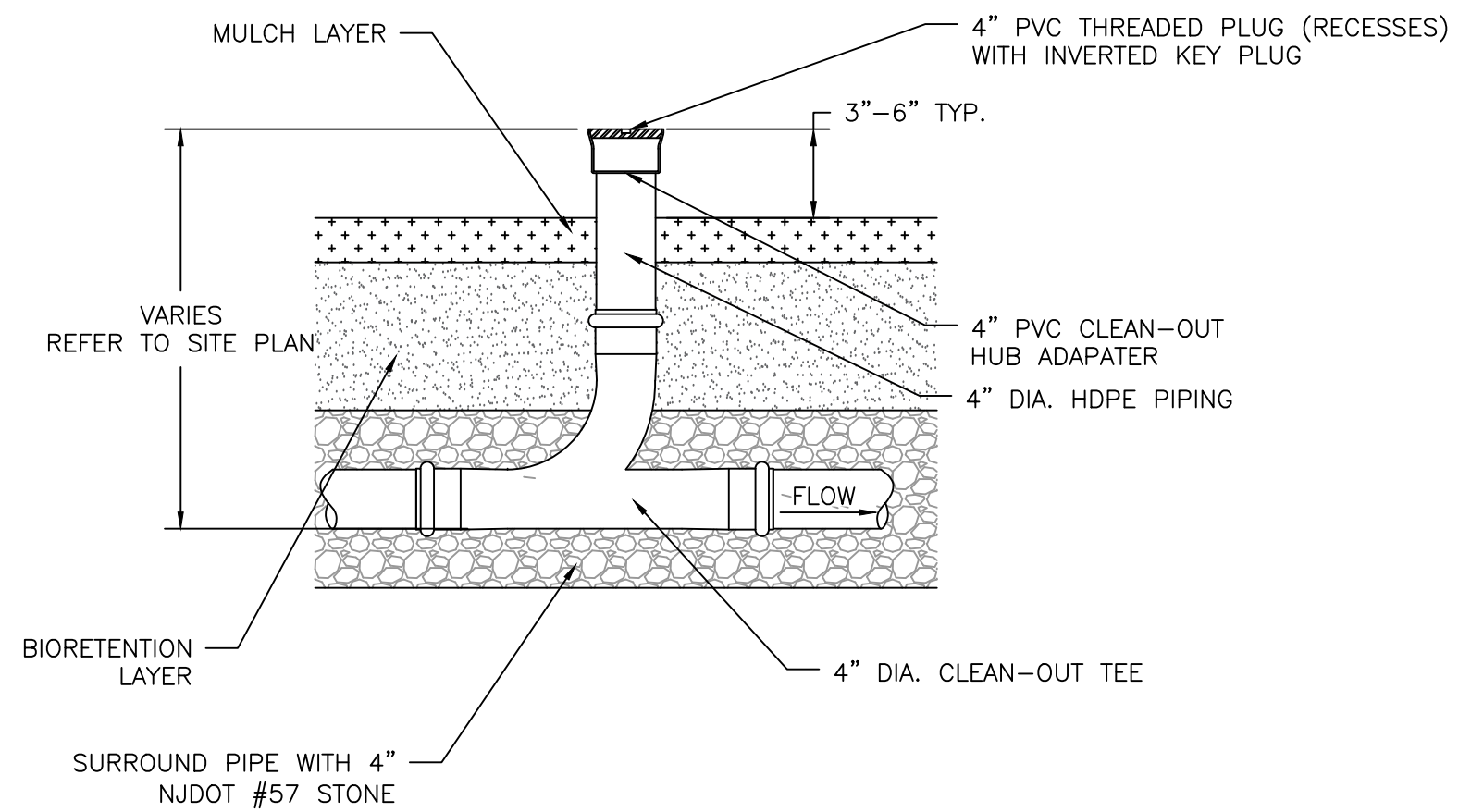
1 RAIN GARDEN EXCAVATION SECTION
DT-1 N.T.S.



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



3 INLET PROTECTION CROSS-SECTION
DT-1 N.T.S.



4 CLEAN OUT 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.
19. CONTRACTOR SHALL PERFORM REQUIRED TESTING TO DETERMINE SOIL PERMEABILITY AND SEASONAL HIGH WATER TABLE ELEVATION AT THE SITE. TESTING SHALL BE DONE PRIOR TO EXCAVATION AND INSTALLATION OF POROUS ASPHALT, BIOSWALES, AND RAIN GARDENS. PROJECT ENGINEER SHALL BE PRESENT DURING TESTING AND SHALL BE INFORMED OF THE RESULTS.

SPECIFICATIONS:

1. 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.
2. 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.
3. UNDERLYING SOILS SHALL BE TILLED/SCARIFIED PRIOR TO SPREADING/MIXING OF BIORETENTION MEDIA.
4. 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.
5. RAIN GARDEN SHALL BE CONSTRUCTED TO DIMENSIONS INDICATED ON THE SITE PLAN.
6. 3-5 INCH DELAWARE RIVER STONE SHALL BE USED FOR STONE CHANNEL AND INLET/OUTLET PROTECTION.
7. NON-DYED, TRIPLE-SHREDDED HARDWOOD MULCH SHALL BE USED.
8. PLANTING OF RAIN GARDEN AND SLOPED BERM SHALL BE COMPLETED AS INDICATED ON THE SITE PLAN.
9. THE CONTRACTOR SHALL PERFORM ALL WORK IN CONFORMANCE WITH THE NJDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2007 OR LATEST VERSION.

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PUBLIC SCHOOL 4
PATERSON GREEN INFRASTRUCTURE 319(h)
55 CLINTON STREET, PATERSON
PASSAIC COUNTY, NJ
RAIN GARDEN DETAILS



OPEN LAWN AND TURF AREAS

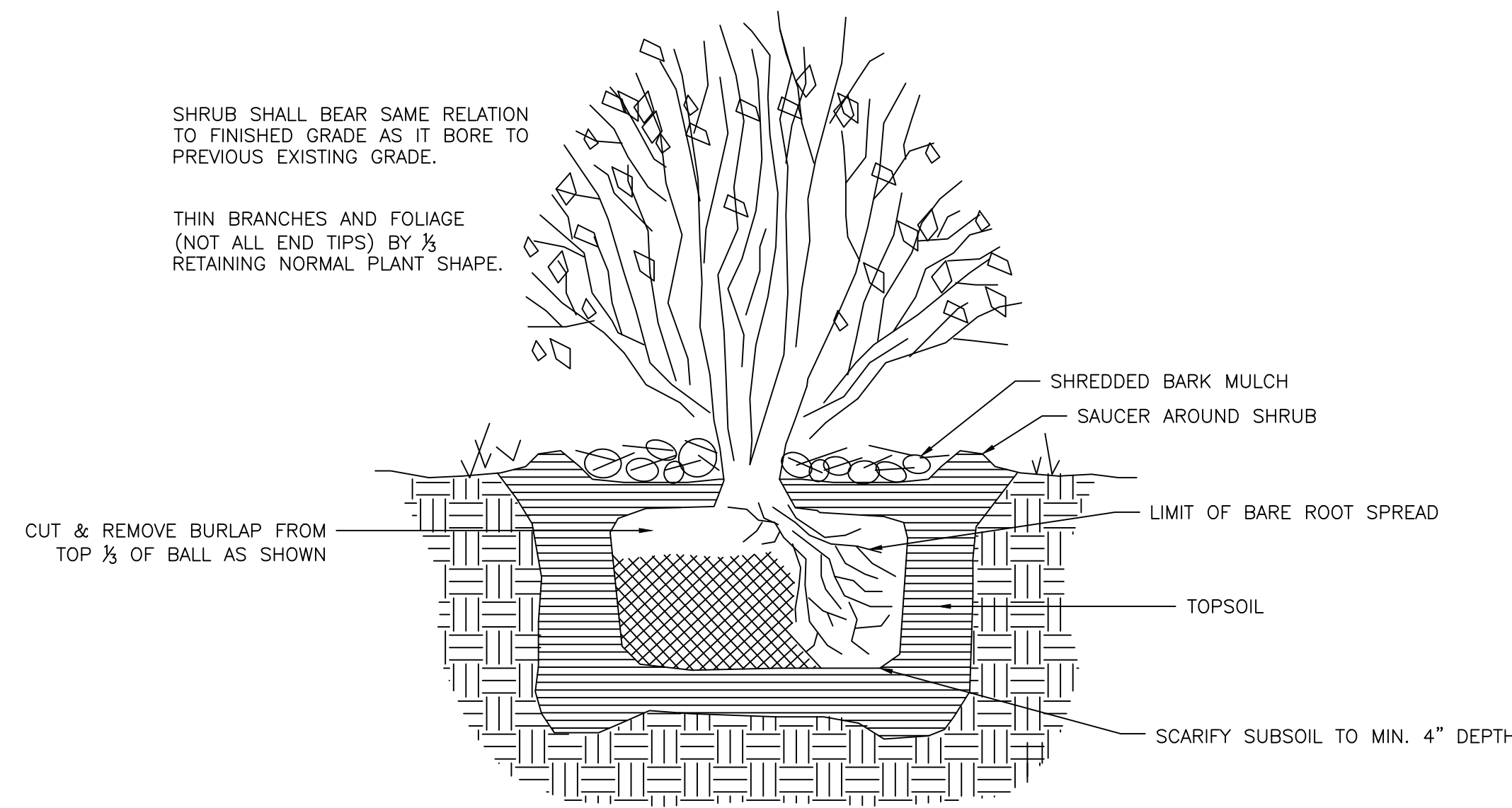
- SEED ALL REMAINING PARK AREAS WITH TURF TYPE FALL FESCUE AND PERENNIAL RYEGRASS BLEND (LOFTS – SUMMER STRESS MIX II OR APPROVED EQUIVALENT). INSTALL AT A RATE OF 350 LBS. PER ACRE PER MANUFACTURERS SPECIFICATIONS.

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

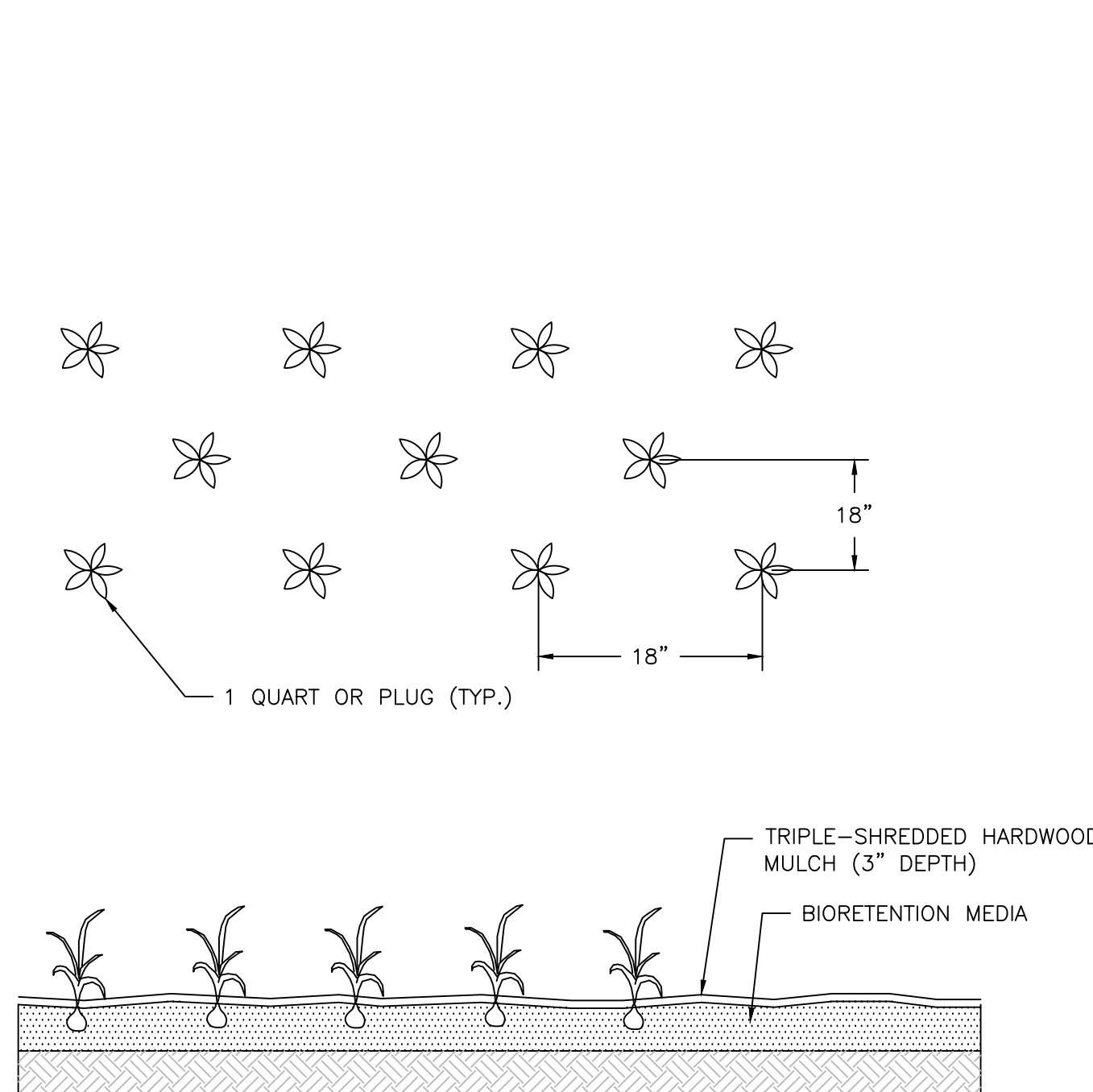
GENERAL LANDSCAPING NOTES

- 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. MULCH 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.

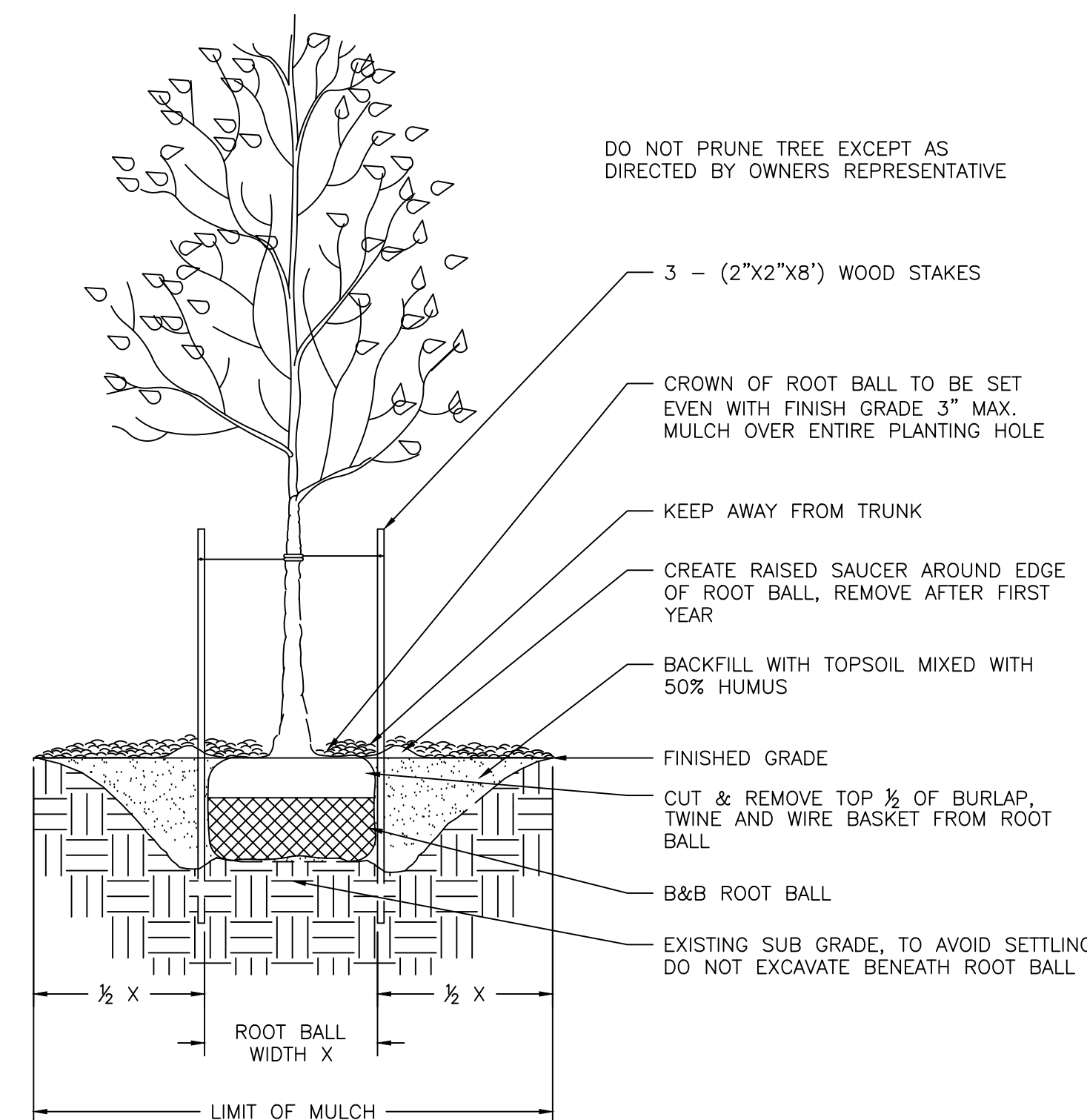


- NOTES:
1. DEER PROTECTION REQUIRED AROUND SHRUB PLANTINGS.

1 SHRUB PLANTING DETAIL
DT-3 N.T.S.



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



- NOTES:
1. DO NOT DAMAGE MAIN ROOTS OR ROOT BALL WHEN INSTALLING TREE STAKE.
2. WATER THOROUGHLY AFTER INSTALLATION.
3. REMOVE SAUCER AND STAKES TWO YEARS OR LESS AFTER INSTALLATION.
4. CONTRACTOR IS NOT TO USE TREE WRAP.

3 TREE PLANTING DETAIL
DT-3 N.T.S.

PLANTING SCHEDULE

PERENNIALS & GRASSES PLANT LIST

QTY.	KEY	BOTANICAL NAME	COMMON NAME	SIZE
35	AT	<i>Asclepias Tuberosa</i>	BUTTERFLY MILKWEED	QUART
40	EP	<i>Echinacea Purpurea</i>	PURPLE CONEFLOWER	QUART
80	JE	<i>Juncus effusus</i>	SOFT RUSH	QUART
20	HM	<i>Hibiscus Moscheutos</i>	ROSE MALLOW	QUART
35	RH	<i>Rudbeckia Hirta</i>	BLACK-EYED SUSAN	QUART
30	SS	<i>Schizachyrium Scoparium</i>	LITTLE BLUESTEM	QUART

SHRUB PLANT LIST

QTY.	KEY	BOTANICAL NAME	COMMON NAME	SIZE
6	CA	<i>Clethra alnifolia</i>	SWEET PEPPERBUSH	3-4 FT SPREAD
2	EUP	<i>Eupatorium Pupureum</i>	JOE PYE WEED	3-4 FT SPREAD

TREE PLANT LIST

QTY.	KEY	BOTANICAL NAME	COMMON NAME	SIZE
3	PV	<i>Prunus Virginiana</i>	CHOKEBERRY	2-3' CAL. B&B

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PROFESSIONAL ENGINEER - NJ LICENSE # 37532

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	1	04.17.17	TREES DETAILS ADDED

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PLANTING AND LANDSCAPE DETAILS

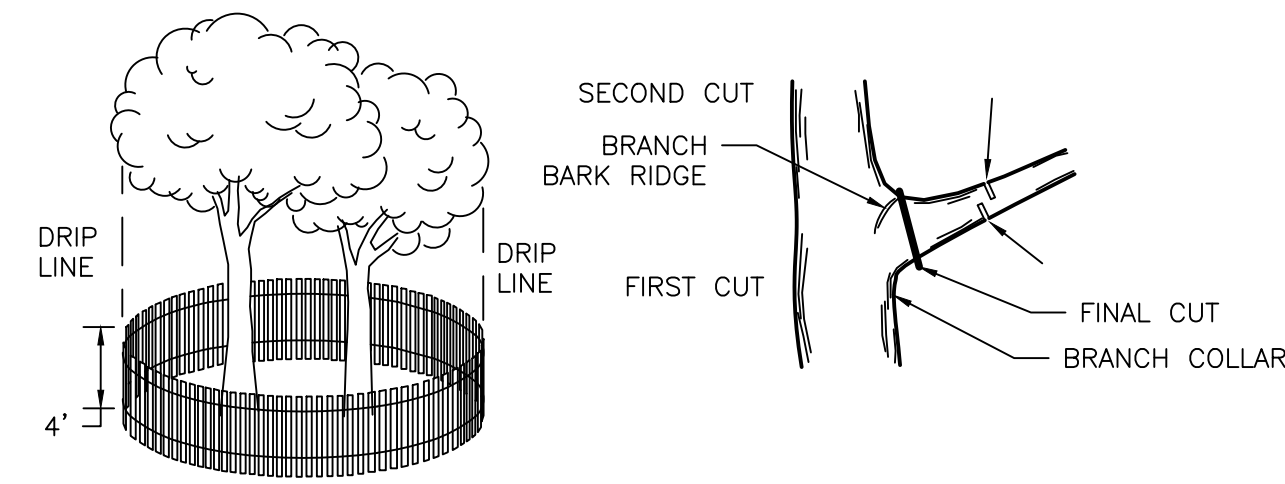


SOIL EROSION AND SEDIMENT CONTROL NOTES

Hudson Essex Passaic Soil Conservation District

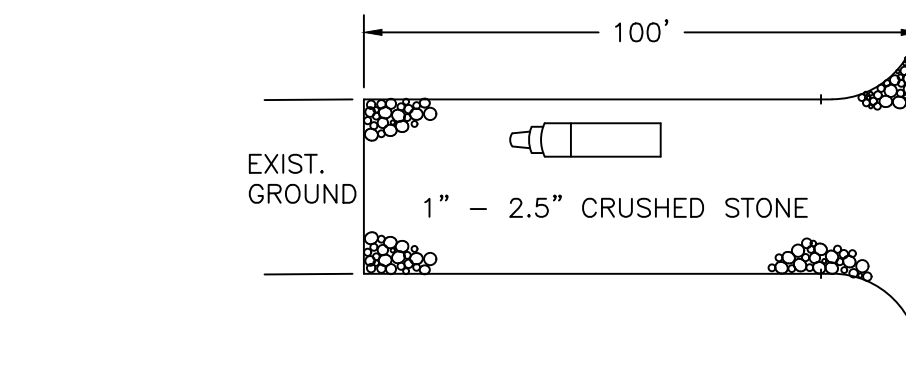
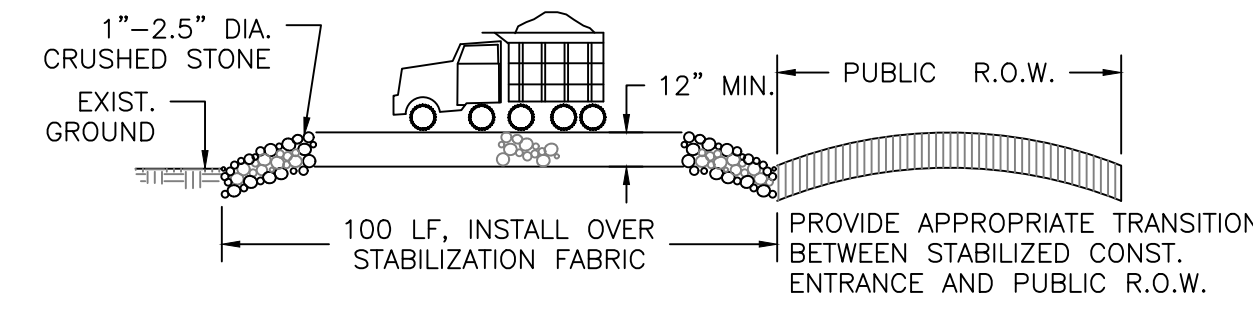
- ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES ON THIS PLAN WILL BE CONSTRUCTED IN ACCORDANCE WITH THE "NEW JERSEY STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL" 7TH EDITION LAST REVISED JANUARY 2014. THESE MEASURES WILL BE INSTALLED PRIOR TO ANY MAJOR SOIL DISTURBANCE OR IN THEIR PROPER SEQUENCE AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED.
- ALL SOIL TO BE EXPOSED OR STOCKPILED FOR A PERIOD OF GREATER THAN 14 DAYS, AND NOT UNDER ACTIVE CONSTRUCTION, WILL BE TEMPORARILY SEEDED AND HAY MULCHED OR OTHERWISE PROVIDED WITH VEGETATIVE COVER. THIS TEMPORARY COVER SHALL BE MAINTAINED UNTIL SUCH TIME WHEREBY PERMANENT DESTABILIZATION IS ESTABLISHED.
- SEEDING DATES: THE FOLLOWING SEEDING DATES ARE BEST RECOMMENDED TO ESTABLISH PERMANENT VEGETATIVE COVER WITHIN MOST LOCATIONS IN THE HEPCSD: SPRING - 3/1-5/15 AND FALL - 8/15-10/1
- SEDIMENT FENCES ARE TO BE PROPERLY TRENCHED AND MAINTAINED UNTIL PERMANENT VEGETATIVE COVER IS ESTABLISHED.
- ALL STORM DRAINAGE INLETS SHALL BE PROTECTED BY ONE OF THE PRACTICES ACCEPTED IN THE STANDARDS, AND PROTECTION SHALL REMAIN UNTIL PERMANENT STABILIZATION HAS BEEN ESTABLISHED. STORM DRAINAGE OUTLET POINTS SHALL BE PROTECTED AS REQUIRED BEFORE THEY BECOME FUNCTIONAL.
- MULCH MATERIALS SHALL BE UN-ROTTED SMALL GRAIN STRAW APPLIED AT THE RATE OF 70 TO 90 POUNDS PER 1,000 SQUARE FEET AND ANCHORED WITH A MULCH ANCHORING TOOL, LIQUID MULCH BINDERS, OR NETTING TIE DOWN. OTHER SUITABLE MATERIALS MAY BE USED IF APPROVED BY THE SOIL CONSERVATION DISTRICT.
- ALL EROSION CONTROL DEVICES SHALL BE PERIODICALLY INSPECTED, MAINTAINED AND CORRECTED BY THE CONTRACTOR. ANY DAMAGE INCURRED BY EROSION SHALL BE RECTIFIED IMMEDIATELY.
- THE HUDSON-ESSEX-PASSAIC SOIL CONSERVATION DISTRICT WILL BE NOTIFIED IN WRITING AT LEAST 48 HOURS PRIOR TO ANY SOIL DISTURBING ACTIVITIES. FAX - (862) 333-4507 OR EMAIL - INFORMATION@HEPCSD.ORG
- THE APPLICANT MUST OBTAIN A DISTRICT ISSUED REPORT-OF-COMPLIANCE PRIOR TO APPLYING FOR THE CERTIFICATE OF OCCUPANCY OR TEMPORARY CERTIFICATE OF OCCUPANCY FROM THE RESPECTIVE MUNICIPALITY, NJ - DCA OR ANY OTHER CONTROLLING AGENCY. CONTACT THE DISTRICT AT 862-333-4505 TO REQUEST A FINAL INSPECTION, GIVING ADVANCED NOTICE UPON COMPLETION OF THE RESTABILIZATION MEASURES. A PERFORMANCE DEPOSIT MAY BE POSTED WITH THE DISTRICT WHEN WINTER WEATHER OR SNOW COVER PROHIBITS THE PROPER APPLICATION OF SEED, MULCH, FERTILIZER OR HYDRO-SEED.
- PAVED ROADWAYS MUST BE KEPT CLEAN AT ALL TIMES. DO NOT UTILIZE A FIRE OR GARDEN HOSE TO CLEAN ROADS UNLESS THE RUNOFF IS DIRECTED TO A PROPERLY DESIGNED AND FUNCTIONING SEDIMENT BASIN. WATER PUMPED OUT OF THE EXCAVATED AREAS CONTAINS SEDIMENTS THAT MUST BE REMOVED PRIOR TO DISCHARGING TO RECEIVING BODIES OF WATER USING REMOVABLE PUMPING STATIONS, SUMP PITS, PORTABLE SEDIMENTATION TANKS AND/OR SILT CONTROL BAGS.
- ALL SURFACES HAVING LAWNS OR LANDSCAPING AS FINAL COVER ARE TO BE PROVIDED TOPSOIL PRIOR TO RE-SEEDING, SODDING OR PLANTING. A DEPTH OF 5 INCHES (UNSETTLED) IS RECOMMENDED.
- ALL PLAN REVISIONS MUST BE SUBMITTED TO THE DISTRICT FOR PROPER REVIEW AND APPROVAL.
- A CRUSHED STONE WHEEL CLEANING TRACKING-PAD IS TO BE INSTALLED AT ALL SITE EXITS USING 2 1/2" - 1" CRUSHED ANGULAR STONE (ASTM 2 OR 3) TO A MINIMUM LENGTH OF 50 FEET AND MINIMUM DEPTH OF 6". ALL DRIVEWAYS MUST BE PROVIDED WITH CRUSHED STONE UNTIL PAVING IS COMPLETE.
- STEEP SLOPES INCURRING DISTURBANCE MAY REQUIRE ADDITIONAL STABILIZATION MEASURES. THESE "SPECIAL" MEASURES SHALL BE DESIGNED BY THE APPLICANT'S ENGINEER AND BE APPROVED BY THE SOIL CONSERVATION DISTRICT.
- THE HUDSON-ESSEX-PASSAIC SOIL CONSERVATION DISTRICT SHALL BE NOTIFIED, IN WRITING, FOR THE SALE OF ANY PORTION OF THE PROJECT OR FOR THE SALE OF INDIVIDUAL LOTS. NEW OWNER'S INFORMATION SHALL BE PROVIDED. ADDITIONAL MEASURES DEEMED NECESSARY BY DISTRICT OFFICIALS SHALL BE IMPLEMENTED AS CONDITIONS WARRANT.

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HEPCSD251SESCNOTESrev2014

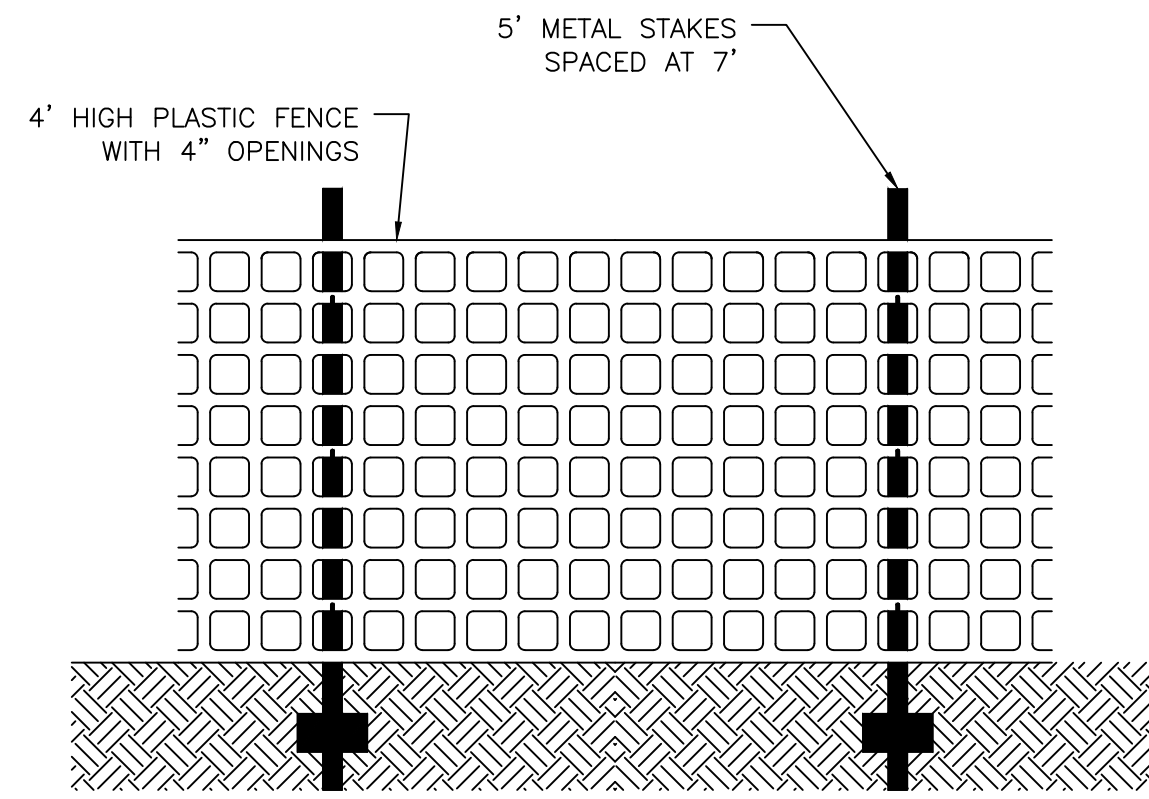


- NOTES:
- TREE PROTECTION SHALL BE PROVIDED FOR ANY AND ALL TREES TO BE PROTECTED DURING AND AFTER CONSTRUCTION.
 - 4 FOOT HIGH SNOW FENCE SHALL BE PLACED AT THE DRIP LINE OF THE TREE AND ENIRCLE THE ENTIRE TREE.
 - ROOTS SHALL NOT BE CUT IN ANY AREA INSIDE THE DRIP LINE OF THE BRANCHES.
 - TREE LIMB REMOVAL, WHERE NECESSARY, WILL BE DONE FLUSH WITH TRUNK OR MAIN LIMB, GOOD GRADE OF TREE PAINT AND BE PERFORMED UNDER THE SUPERVISION OF A LICENSED NURSERYMAN.

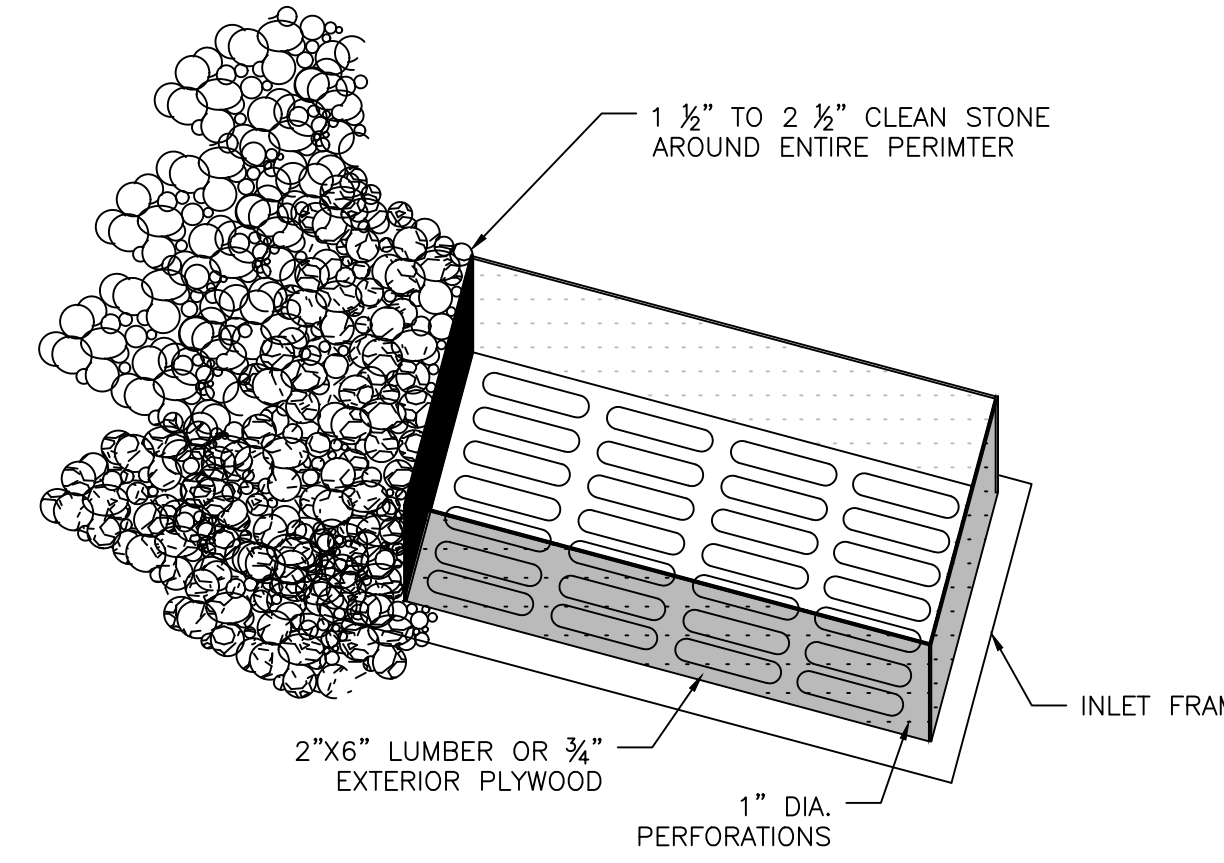
1 TREE PROTECTION AND LIMB REMOVAL
DT-4 N.T.S.



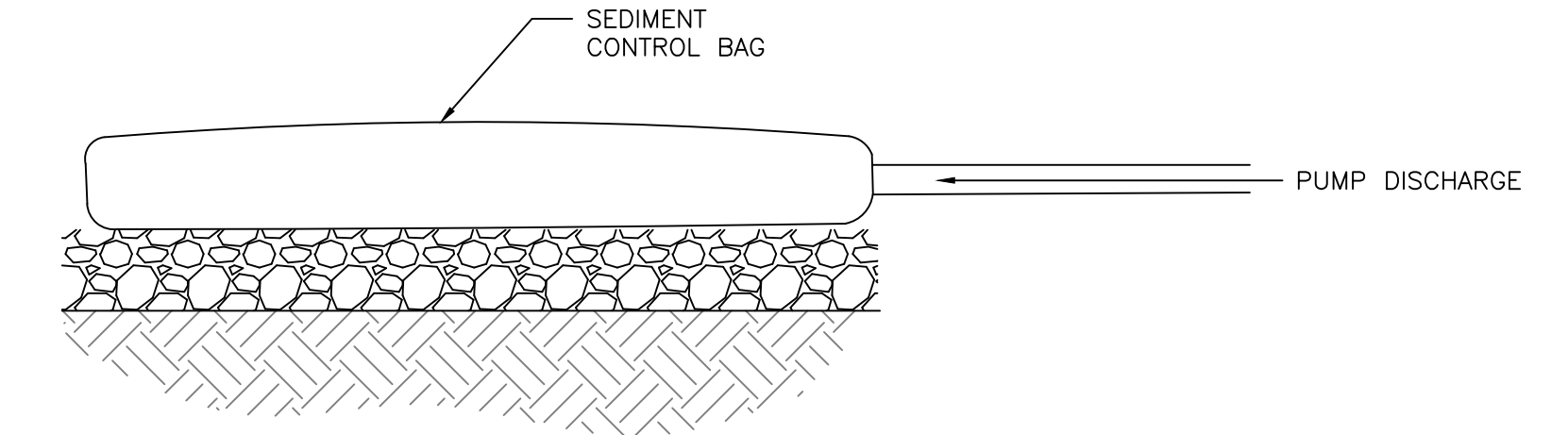
4 CONSTRUCTION ENTRANCE
DT-4 N.T.S.



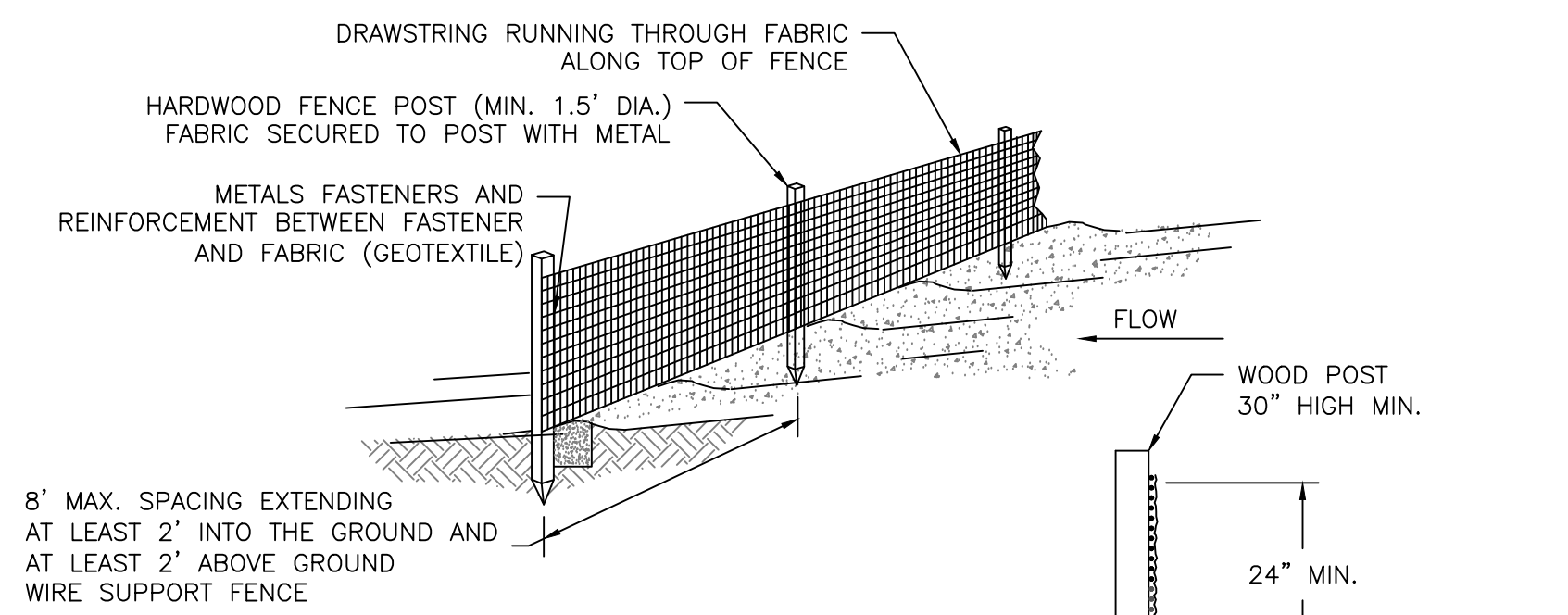
2 ORANGE BARRIER FENCE
DT-4 N.T.S.



5 INLET PROTECTION
DT-4 N.T.S.

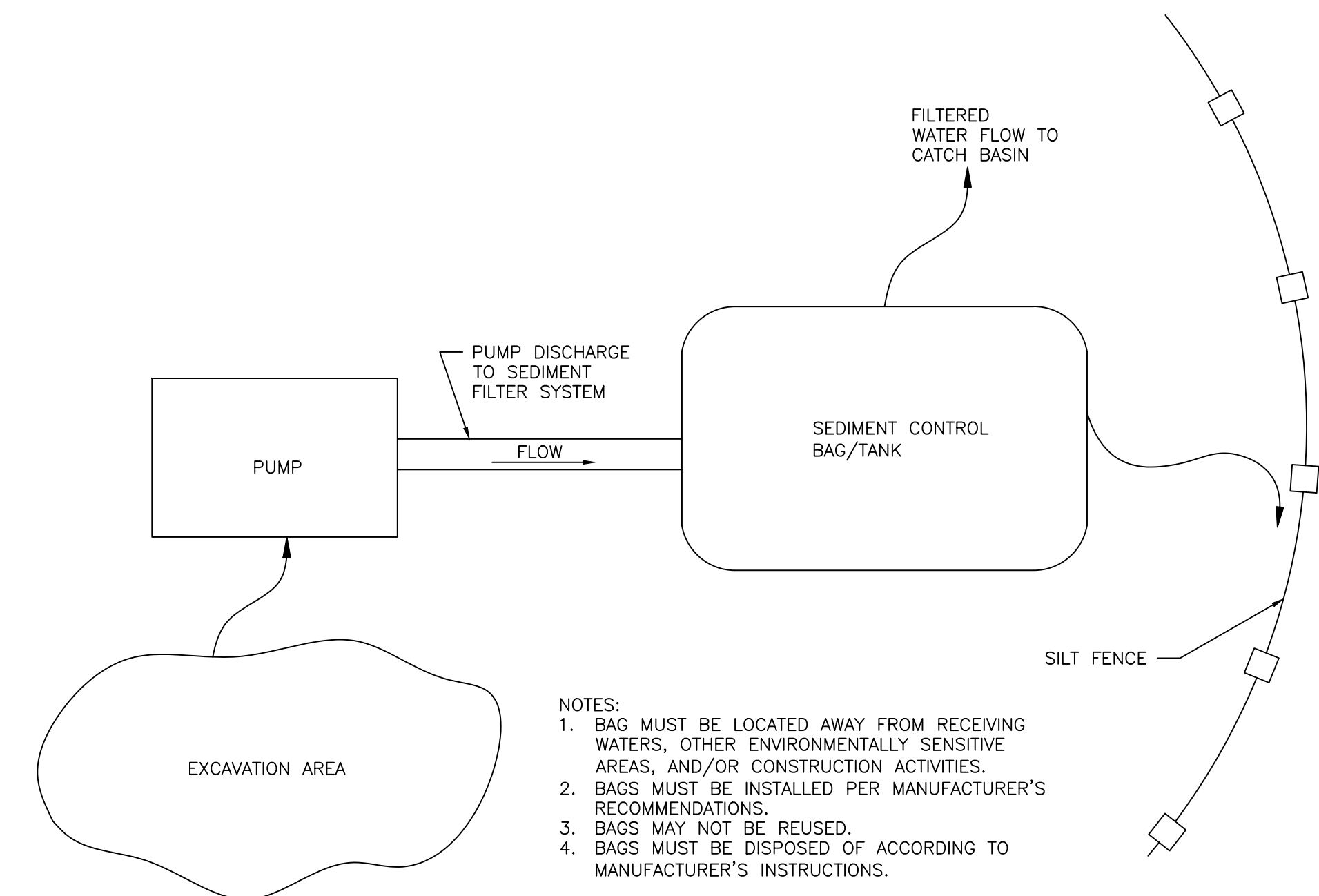


6 DEWATERING ELEVATION DETAIL
DT-4 N.T.S.



- NOTES:
- SILT FENCE SHALL BE PLACED ALONG SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.
 - INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY. (9\"/>
 - REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.
 - PLACE SILT FENCE AT LOCATIONS SHOWN ON THE SOIL EROSION PLAN.
 - THE SLOPE OF THE LAND FOR AT LEAST 30 FEET ADJACENT TO ANY SILT FENCE SHALL NOT EXCEED 5%.
 - SILT FENCE SHALL REMAIN IN PLACE FOR THE DURATION OF THE PROJECT UNLESS OTHERWISE DIRECTED BY ENGINEER.

3 SILT FENCE
DT-4 N.T.S.



- NOTES:
- BAG MUST BE LOCATED AWAY FROM RECEIVING WATERS, OTHER ENVIRONMENTALLY SENSITIVE AREAS, AND/OR CONSTRUCTION ACTIVITIES.
 - BAGS MUST BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.
 - BAGS MAY NOT BE REUSED.
 - BAGS MUST BE DISPOSED OF ACCORDING TO MANUFACTURER'S INSTRUCTIONS.

7 DEWATERING PLAN DETAIL
DT-4 N.T.S.

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

DATE 06/21/17
DRAWN CCO
CHECKED MALL
APPROVED CCO

DR. FRANK NAPIER JR. SCHOOL OF TECHNOLOGY
PUBLIC SCHOOL 4
PATERSON GREEN INFRASTRUCTURE 319(h)
55 CLINTON STREET, PATERSON
PASSAIC COUNTY, NJ
SOIL EROSION AND SEDIMENT CONTROL DETAILS



SHEET NAME
DT-4

APPENDIX D:

Site Photograph – Current Condition

October 10, 2017

