

Site Plans for the Proposed

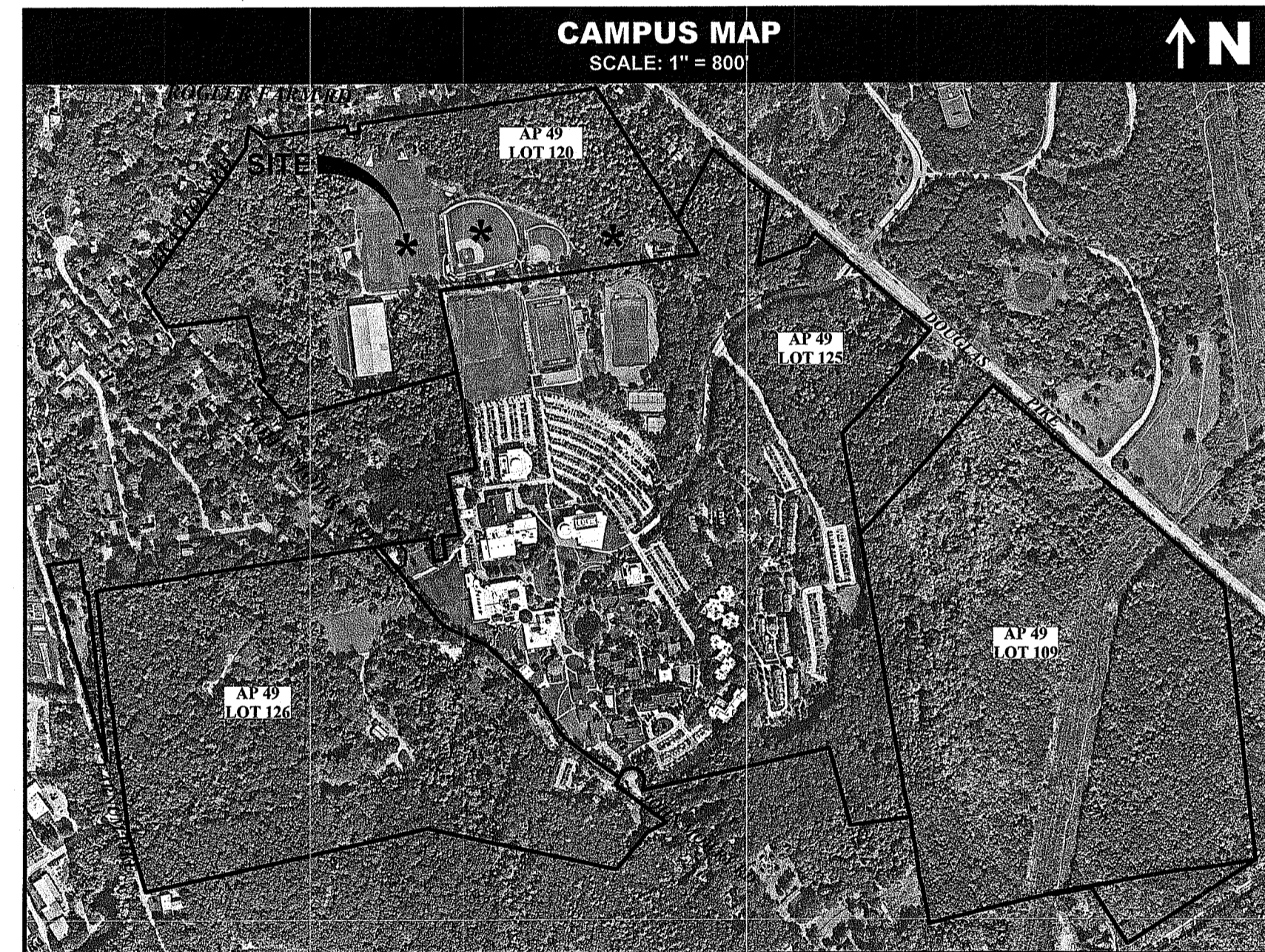
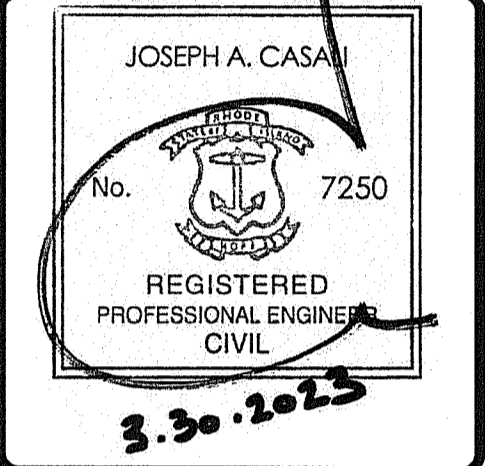
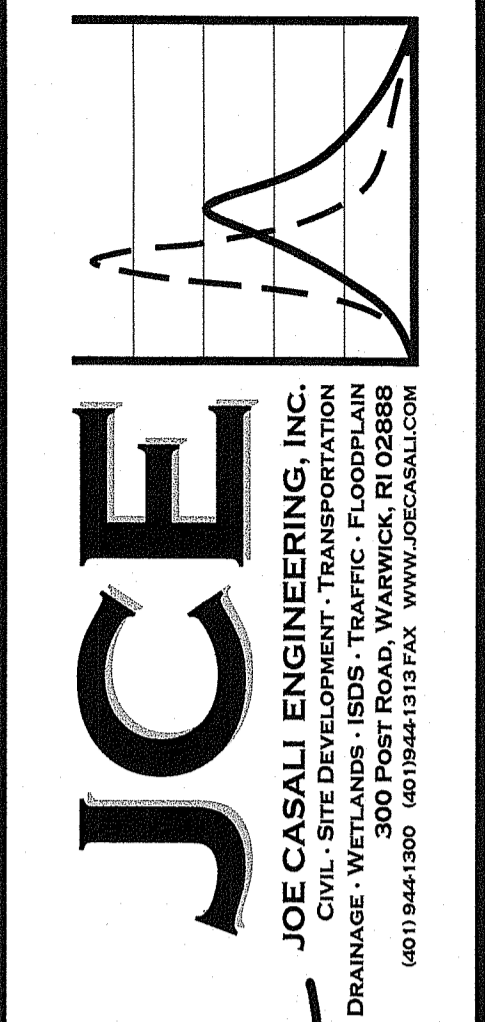
ATHLETIC FIELD IMPROVEMENTS

at

BRYANT UNIVERSITY

1150 DOUGLAS PIKE
SMITHFIELD, RHODE ISLAND
AP 49, LOTS 120 & 125

ZONING DISTRICT: PD



APPROVALS:

MASTER PLAN APPROVAL (OCTOBER 20, 2022): SMITHFIELD PLANNING BOARD OF REVIEW
SPECIAL USE PERMIT GRANTED (DECEMBER 7, 2022): ZONING BOARD OF REVIEW
PRELIMINARY PLAN APPROVAL (FEBRUARY 16, 2023); SMITHFIELD PLANNING BOARD OF REVIEW

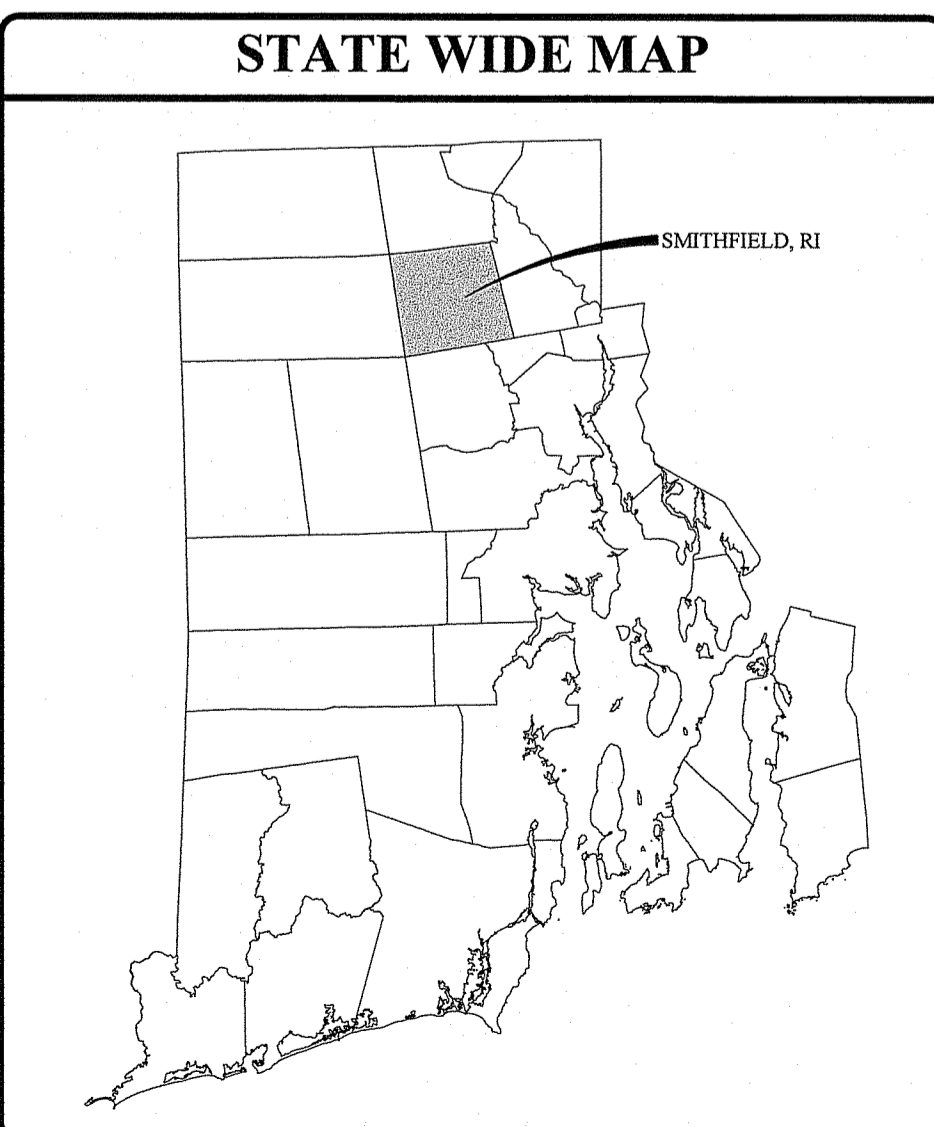
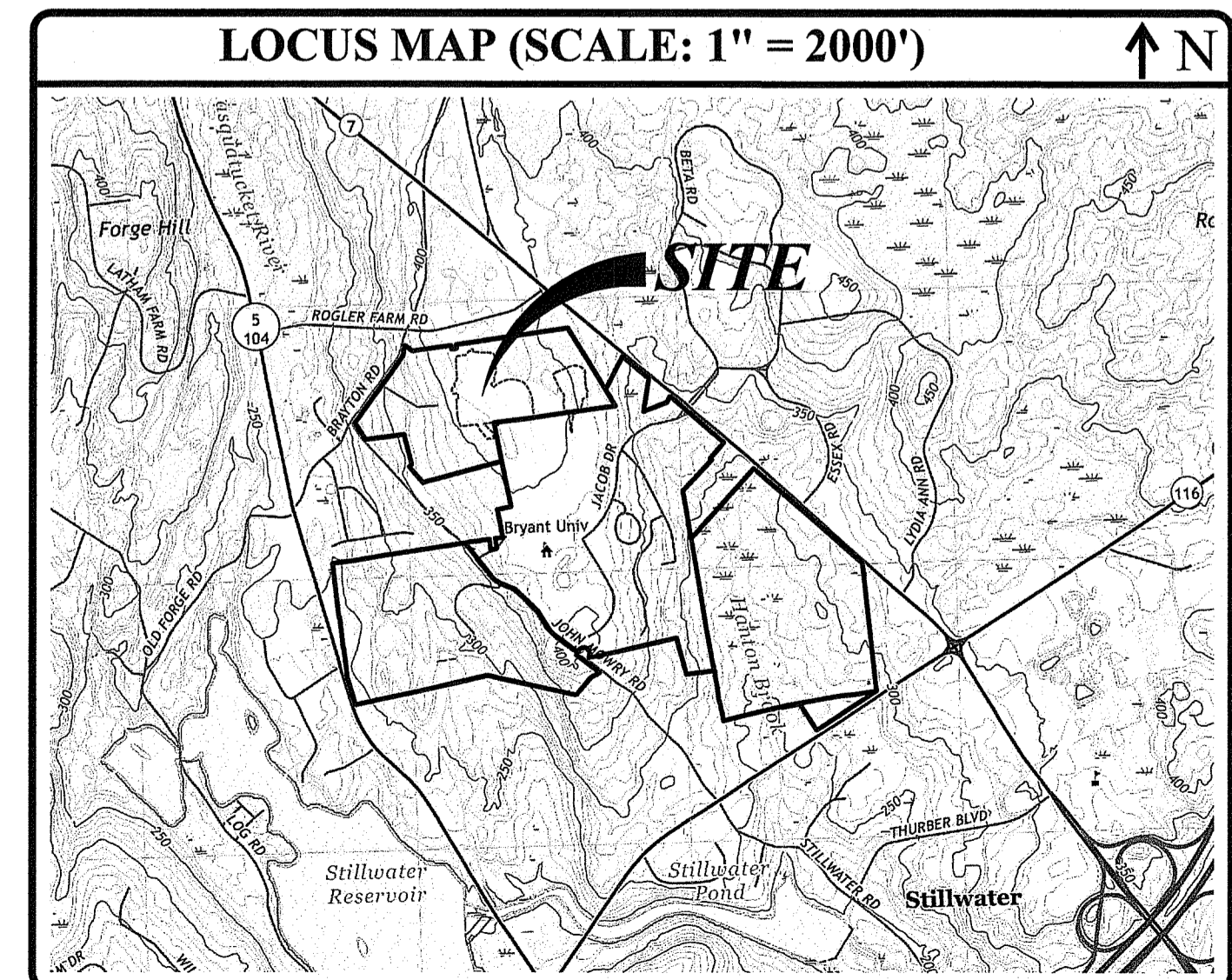
FILINGS:

RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT - OFFICE OF WATER RESOURCES, DIVISION OF FRESHWATER WETLANDS
SMITHFIELD SOIL EROSION COMMITTEE

ATHLETICS FIELD IMPROVEMENTS
BRYANT UNIVERSITY
SMITHFIELD, RHODE ISLAND

Q:\09-05 Bryant University\09-05bb Field Enabling [Permit Set] - [RTCRIDEM].dwg Mar_30_2023 11:10am

PROJECT TEAM			
OWNER / APPLICANT:	BRYANT UNIVERSITY 1150 DOUGLAS PIKE SMITHFIELD, RI 02903	LANDSCAPE ARCHITECT:	ACTIVITAS 70 MILTON STREET DEDHAM, MA 02026-2915 PHONE: 401-326-2600
CIVIL:	JOE CASALI ENGINEERING, INC. 300 POST ROAD WARWICK, RI 02888 PHONE: 401-944-1300 FAX: 401-944-1313	BIOLOGIST:	NATURAL RESOURCE SERVICES, INC. 180 TINKHAM LANE HARRISVILLE, RI 02830 PHONE: 401-568-7390
SURVEYOR:	DOUGLAS DESIGN GROUP 101 PLAIN STREET LOWER LEVEL, SUITE C PROVIDENCE, RI 02903 PHONE: 401-284-0085		



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REVISIONS:		
NO.	DATE	DESCRIPTION
1	03/2023	RIDEM RTC

PRELIMINARY, NOT FOR CONSTRUCTION

COVER SHEET

SHEET 1 OF 14

RI Environmental Management
MAR 30 2023
Office of Water Resources

GENERAL NOTES:

- 1. CONTRACTOR SHALL NOTIFY "DIGSAFE" (811) AT LEAST 72 HOURS BEFORE EXCAVATING.
- 2. CLASS 1 PROPERTY LINE SURVEY COMPLETED BY INTERNATIONAL MAPPING AND SURVEYING CORP., 19 INDUSTRIAL DRIVE, SMITHFIELD, RI 02917 IN APRIL 2014. EXISTING CONDITIONS AND TOPOGRAPHIC SURVEY PROVIDED BY DOUGLAS DESIGN GROUP, 101 PLAN STREET, LOWER LEVEL, SUITE C, PROVIDENCE, RI 02903 IN JULY AND DECEMBER 2022.
- 3. THE LOCATION AND DEPTH OF EXISTING UTILITIES ARE APPROXIMATE AND HAVE BEEN PLOTTED FROM THE LATEST AVAILABLE INFORMATION. THE UTILITY LOCATIONS ARE APPROXIMATE AND MAY NOT BE ALL INCLUSIVE. THE CONTRACTOR SHALL CHECK AND VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES, BOTH OVERHEAD AND UNDERGROUND, AND "DIG-SAFE" MUST BE NOTIFIED PRIOR TO COMMENCING ANY CONSTRUCTION OPERATIONS. RESTORATION AND REPAIR OF DAMAGE TO EXISTING UTILITIES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR WITH NO ADDITIONAL COST TO THE OWNER. NO EXCAVATION SHALL COMMENCE UNTIL ALL INVOLVED UTILITY COMPANIES AND/OR CITY WHOSE FACILITIES MIGHT BE AFFECTED BY ANY WORK TO BE PERFORMED BY THE CONTRACTOR ARE NOTIFIED AT LEAST 72 HOURS IN ADVANCE.
- 4. THE ENTIRE PROJECT SITE LIES WITHIN ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) AS SHOWN ON THE FIRM MAP FOR PROVIDENCE COUNTY, RHODE ISLAND, PANEL 166 OF 451, MAP NUMBER 44007C0166G, EFFECTIVE DATE MARCH 2, 2009.
- 5. THERE ARE NO KNOWN HIGH HAZARD AREAS ON THE PROJECT SITE.
- 6. SOILS EXISTING ON THE SITE CONSIST OF UDORTHEMENTS-URBAN LAND COMPLEX (UD), WOODBRIDGE (Wob & Wha) AND PAXTON (Pbc).
- 7. FRESHWATER WETLANDS DELINEATED BY NATURAL RESOURCE SERVICES, INC. OF BURRILLVILLE, RI IN SEPTEMBER 2022.
- 8. SOIL EVALUATIONS CONDUCTED BY JOE CASALI ENGINEERING, INC. IN JUNE 2022 AND JANUARY 2023. SOIL EVALUATION FORMS CONTAINING ESTIMATED SEASONAL HIGH GROUND WATER ELEVATIONS ARE PROVIDED ON THE DETAIL SHEETS AND ARE AVAILABLE TO THE CONTRACTOR UPON REQUEST.
- 9. THERE ARE NO KNOWN EASEMENTS WITHIN THE PROJECT AREA.
- 10. TELEPHONE, ELECTRIC, SEWER, GAS, AND WATER SERVICES ARE ALL AVAILABLE FROM WITHIN THE BRYANT UNIVERSITY CAMPUS.

SITE NOTES:

- 1. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND LEGALLY DISPOSING (R&D) OF ALL MATERIALS INDICATED ON THE PLANS.
- 2. ACCESSIBLE ROUTES, PARKING SPACES, RAMPS, SIDEWALKS, AND WALKWAYS SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE FEDERAL AMERICAN WITH DISABILITIES ACT AND WITH ALL APPLICABLE STATE AND LOCAL LAWS AND REGULATIONS, WHICHEVER IS MORE STRINGENT.
- 3. STOCKPILES OF EARTH MATERIALS SHALL NOT BE LOCATED ADJACENT TO DRAINAGE STRUCTURES.
- 4. ALL DISTURBED AREAS OUTSIDE OF THE PAVED AREAS WILL RECEIVE A MINIMUM OF 6" OF LOAM AND SEED.
- 5. THE LAYOUT SHOWN REPRESENTS A GRAPHICAL DESIGN, AND PRIOR TO THE CONSTRUCTION, THE CONTRACTOR SHALL ENGAGE A PROFESSIONAL LAND SURVEYOR (PLS) REGISTERED IN THE STATE OF RHODE ISLAND TO SET AND VERIFY ALL LINES AND GRADES. ALL EXISTING UTILITY LOCATIONS AND ELEVATIONS ARE TO BE CONFIRMED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. ANY ITEMS FOUND WHICH DO NOT MATCH THE PLANS MUST BE BROUGHT TO THE ENGINEERS ATTENTION PRIOR TO CONSTRUCTION FOR REVIEW. NO WORK SHALL PROCEED UNTIL AUTHORIZED BY THE ENGINEER.
- 6. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN SURVEY LAYOUT SERVICES FOR THE WORK AND SHALL SUBMIT "AS-BUILT" DRAWINGS OF ALL WORK, WHICH SHALL BE STAMPED AND CERTIFIED BY A RHODE ISLAND REGISTERED PROFESSIONAL LAND SURVEYOR.
- 7. ANY ITEM OF WORK NOT SPECIFICALLY INDICATED ON THE PLANS BUT IS REQUIRED FOR THE COMPLETE CONSTRUCTION OF THE PROJECT WILL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND INCLUDED IN THE CONTRACT BID PRICE. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL EXISTING SITE CONDITIONS.
- 8. REFER TO ARCHITECTURAL PLANS, STRUCTURAL PLANS, PLUMBING PLANS, FIRE PROTECTION PLANS, AND ELECTRICAL PLANS, FOR ACTUAL SIZE OF THE PROPOSED BUILDING AND WORK WITHIN 5 FEET OF THE PROPOSED BUILDING.
- 9. WHERE NECESSARY TO REMOVE CURBS, CATCH BASINS OR DRAINS TO COMPLETE WORK, THE CONTRACTOR SHALL REPLACE SUCH ITEMS TO THE SATISFACTION OF BRYANT UNIVERSITY AT NO ADDITIONAL COST TO THE OWNER.
- 10. ANY EXISTING PIPE OR UTILITY DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED IMMEDIATELY BY THE CONTRACTOR AT NO COST TO THE OWNER.
- 11. THE CONTRACTOR SHALL RESTORE TO ITS ORIGINAL CONDITION OR REPLACE TREES, SHRUBS, FENCES, SIGNS, GUARDRAILS, DRIVEWAYS, SIDEWALKS AND ANY OTHER OBJECT AFFECTED BY THIS OPERATION, UNLESS OTHERWISE NOTED ON THE SITE PLANS.
- 12. THE TOPS OF ALL VALVE BOXES AND CURB BOXES SHALL BE FLUSH WITH GROUND OR PAVEMENT SURFACE LEVEL AND PLUMB, UNLESS OTHERWISE DIRECTED.
- 13. ROADWAYS SHALL BE LEFT PASSABLE AT ALL TIMES. CLOSURE OF ROADWAY IS NOT PERMITTED.
- 14. WATER SERVICE SHALL BE MAINTAINED AT ALL TIMES.
- 15. ALL LEDGE TO BE REMOVED BY MECHANICAL MEANS.
- 16. ALL CONSTRUCTION WORK SHALL BE PERFORMED IN THE DRY. THE CONTRACTOR SHALL PROVIDE, OPERATE AND MAINTAIN ALL PUMPS, DRAINS, WET POINTS, SCREENS, OR OTHER FACILITIES NECESSARY TO CONTROL, COLLECT AND DISPOSE OF ALL SURFACE AND SUBSURFACE WATER ENCOUNTERED IN THE PERFORMANCE OF THE WORK.
- 17. REFER TO PLUMBING PLANS FOR CONTINUATION OF ALL UTILITIES WITHIN 5' (FIVE) FEET OF THE BUILDING.
- 18. ALL SITE WORK, INCLUDING BUT NOT LIMITED TO, BITUMINOUS PAVEMENT, ROADWAY CONSTRUCTION, AGGREGATE MATERIALS, DRAINAGE STRUCTURES, CURBING, SIDEWALK, LANDSCAPING, SAW CUTTING, ETC. SHALL CONFORM TO THE RHODE ISLAND DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADWAY AND BRIDGE CONSTRUCTION, AMENDED DECEMBER 2010 (WITH LATEST ADDENDA) AND THE RIDOT STANDARD DETAILS, 1998 EDITION (WITH LATEST ADDENDA).

MAINTENANCE AND PROTECTION OF TRAFFIC NOTES:

- 1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MAINTENANCE AND PROTECTION OF PEDESTRIAN AND VEHICULAR TRAFFIC INCLUDING POLICE PROTECTION. ALL TEMPORARY AND VEHICULAR SIGNS, BARRICADES AND LANE CLOSURES SHALL BE IN CONFORMANCE WITH THE LATEST REVISIONS OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), 2009 EDITION.
- 2. TEMPORARY CONSTRUCTION SIGNS AND ALL APPLICABLE TRAFFIC CONTROL DIVIDES SHALL BE IN PLACE PRIOR TO THE START OF WORK IN ANY AREA OPEN TO TRAFFIC.
- 3. THE PRIVATE VEHICLES OF CONSTRUCTION WORKERS SHALL NOT BE PARKED IN THE STATE OR TOWN RIGHT-OF-WAY.
- 4. ALL MAINTENANCE AND PROTECTION OF TRAFFIC CONTROL SETUPS, SIGNS CHANNELING DEVICES, ETC, SHALL BE IN ACCORDANCE WITH THE LATEST REVISIONS OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, 2009 EDITION.
- 5. SIGN MOUNTINGS SHALL BE IN ACCORDANCE WITH THE RIDOT SPECIFICATIONS FOR TEMPORARY CONSTRUCTION SIGNS.

DRAINAGE SYSTEM NOTES:

- 1. THE PROPOSED DRAINAGE LINES SHALL BE ADS N-12 HDPE PIPE OR AN APPROVED EQUAL UNLESS OTHERWISE NOTED ON THE SITE PLANS.
- 2. ALL RIM ELEVATIONS SHOWN ARE APPROXIMATE AND ARE TO BE SET FLUSH WITH FINAL GRADES.

SOIL EROSION AND SEDIMENTATION CONTROL NOTES:

- 1. THE SILT FENCE / HAY BALE LINE ILLUSTRATED ON THESE PLANS SHALL SERVE AS THE STRICT LIMIT OF DISTURBANCE FOR THE PROJECT WITHIN OR ADJACENT TO REGULATED FRESHWATER WETLAND AREAS.
- 2. THE LIMITS OF CLEARING, GRADING, AND DISTURBANCE SHALL BE KEPT TO A MINIMUM WITHIN THE PROPOSED AREA OF CONSTRUCTION. ALL AREAS OUTSIDE OF THESE LIMITS, AS DEPICTED ON THE PLAN SHALL BE TOTALLY UNDISTURBED, TO REMAIN IN NATURAL CONDITION.
- 3. ALL CATCH BASINS AND CULVERTS SHALL BE PROTECTED WITH STAKED HAYBALES (R.I. STD. 9.8.0) DURING CONSTRUCTION ACTIVITIES. ALL PROPOSED STORM WATER DISCHARGE AREAS SHALL BE LINED WITH A RIPRAP SPLASH PAD AND PROTECTED WITH STAKED HAYBALE OUTLET PROTECTION (R.I. STD. 9.1.0), OR STAKED HAYBALE WITH SILT FENCE (R.I. STD. 9.3.0) OUTLET PROTECTION (STAKED HAYBALE OR STAKED HAYBALE WITH SILT FENCE) SHALL ALSO BE INSTALLED AT ALL EXISTING STORMWATER DISCHARGE LOCATIONS WHERE DISTRIBUTING PIPES, CATCH BASINS, AND MANHOLES ARE TO BE CLEANED AND FLUSHED.
- 4. ALL DISTURBED SLOPES EITHER NEWLY CREATED OR CURRENTLY EXPOSED SHALL BE SEEDED, PROTECTED AND MAINTAINED BY THE CONTRACTOR. THE CONTRACTOR SHALL REGULARLY CHECK ALL SEEDED AREAS TO ENSURE THAT A GOOD STAND IS MAINTAINED.
- 5. ALL SILT FENCE, TEMPORARY TREATMENT (HAY, STRAW, ETC.) AND TEMPORARY EROSION PROTECTION SHALL BE MAINTAINED BY THE CONTRACTOR THROUGHOUT CONSTRUCTION AND SHALL REMAIN IN PLACE UNTIL AN ACCEPTABLE STAND OF GRASS OR APPROVED GROUND COVER IS ESTABLISHED.
- 6. STOCKPILES OF TOPSOIL SHALL NOT BE LOCATED NEAR WATERWAYS. THEY SHALL HAVE SIDE SLOPES OF NO GREATER THAN 2:1 AND SHALL BE TEMPORARILY SEEDED AND/OR STABILIZED PER CONTRACT SPECIFICATIONS.
- 7. THE SILT FENCE/HAYBALES SHALL BE CHECKED BY THE CONTRACTOR ON A WEEKLY BASIS AND AFTER EACH STORM FOR UNDERMINING OR DETERIORATION. THE CONTRACTOR SHALL REPAIR OR REPLACE ANY SILT FENCE/HAYBALES AS NEEDED. THE CONTRACTOR SHALL CLEAN THE ACCUMULATED SEDIMENT IF HALF OF THE ORIGINAL HEIGHT OF THE HAY-BALES BECOMES FILLED WITH SEDIMENTS.
- 8. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN ALL SOIL EROSION AND SEDIMENT CONTROLS ON THE PROJECT SITE FOR THE ENTIRE DURATION OF THE CONSTRUCTION PERIOD. THE CONTRACTOR SHALL FOLLOW THE DIRECTION OF THE RESIDENT ENGINEER WITH REGARD TO INSTALLATION, MAINTENANCE, AND REPAIR OF ALL SOIL EROSION AND SEDIMENTATION CONTROLS ON THE PROJECT SITE. TEMPORARY SOIL EROSION AND SEDIMENTATION CONTROLS (HAYBALES, SILT FENCE, ETC.) SHALL BE MAINTAINED UNTIL ALL EXPOSED SOILS ARE SATISFACTORILY STABILIZED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING AND/OR RESEEDING ALL AREAS THAT DO NOT DEVELOP WITHIN ONE YEAR FROM THE COMPLETION OF CONSTRUCTION.
- 9. UPON FINAL STABILIZATION OF THE SITE, AS DETERMINED BY THE ENGINEER, CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL AND DISPOSAL OF ALL SOIL EROSION AND SEDIMENT CONTROL DEVICES.
- 10. ALL REFERENCED SOIL EROSION AND SEDIMENTATION CONTROLS INCLUDING MATERIALS USED, APPLICATION RATES AND THE INSTALLATION PROCEDURES SHALL BE PERFORMED PER THE "RHODE ISLAND EROSION AND SEDIMENTATION HANDBOOK", DATED 1993 AMENDED 2014.

MISCELLANEOUS UTILITY NOTES:

- 1. PRIOR TO CONSTRUCTION ALL POTENTIAL UTILITY/DRAINAGE CONFLICTS MUST BE IDENTIFIED BY THE CONTRACTOR. ANY MODIFICATIONS TO THE PROPOSED UTILITIES TO AVOID CONFLICTS MUST BE APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION.
- 2. OVERHEAD ELECTRIC AND TELEPHONE SERVICES ARE TO BE REMOVED BY THE APPROPRIATE UTILITY COMPANY AND COORDINATED BY THE CONTRACTOR.
- 3. THE CONTRACTOR SHALL AT ALL TIMES PROVIDE A SUFFICIENT NUMBER OF WORKMEN AND GUARDS AS MAY BE NECESSARY TO PROPERLY SAFEGUARD THE PUBLIC FROM THEIR OPERATIONS.
- 4. THE CONTRACTOR SHALL TAKE PRECAUTIONS AGAINST DAMAGING OF PAVING, SIDEWALKS, UTILITIES, OR PRIVATE PROPERTIES AND SHALL PROMPTLY REPAIR AT HIS OWN EXPENSE ANY DAMAGE TO SUCH PAVING, SIDEWALKS, UTILITIES, OR PRIVATE PROPERTIES TO THE SATISFACTION OF THE OWNER OR TOWN.
- 5. EXISTING UTILITY FRAMES AND COVERS FOR SANITARY SEWER, WATER, GAS, STORM DRAINAGE AND OTHER UTILITIES SHALL BE ADJUSTED TO GRADE AS REQUIRED IN NEW PAVING AND PAVEMENT OVERLAY AREAS.

SEDIMENTATION CONTROL PROGRAM:

- 1. EXTREME CARE SHALL BE EXERCISED SO AS TO PREVENT ANY UNSUITABLE MATERIAL FROM ENTERING THE STORMWATER MANAGEMENT AREAS. THESE AREAS CANNOT BE USED AS SEDIMENT CONTROL DEVICES.
- 2. ALL DISTURBED AREAS SUBJECT TO EROSION TENDENCIES WHETHER THEY ARE NEWLY FILLED OR EXCAVATED, SHALL RECEIVE SUITABLE SLOPE PROTECTION.
- 3. ALL UPSLOPED AREAS ARE TO BE STABILIZED PRIOR TO CONNECTING TO THE STORMWATER FACILITIES
- 4. DURING CONSTRUCTION, THE CONTRACTOR AND/OR DEVELOPER SHALL BE RESPONSIBLE FOR MAINTAINING DRAINAGE AND RUNOFF DURING STORMS AND PERIODS OF RAINFALL.
- 5. SEDIMENTATION CONTROL DEVICES SHALL BE INSPECTED PERIODICALLY AND AFTER PERIODS OF RAINFALL. SUCH DEVICES SHALL BE REPAIRED OR REPLACED AS NEEDED.
- 6. REFERENCE THE "RHODE ISLAND EROSION AND SEDIMENT CONTROL HANDBOOK" PREPARED BY THE U.S. DEPT. OF AGRICULTURE, SOIL CONSERVATION SERVICE 1989, AS A GUIDE (REVISED 2014).

SEQUENCE & STAGING OF PROPOSED CONSTRUCTION ACTIVITIES:

- THIS IS A GENERAL SEQUENCE AND STAGING OF CONSTRUCTION ACTIVITIES. A DETAILED SEQUENCE WITH TIME LINES SHALL BE ESTABLISHED BY THE CONTRACTOR IN COORDINATION WITH THE OWNER, ENGINEER AND SITE CONTRACTORS PRIOR TO THE START OF CONSTRUCTION.
- 1. SURVEY AND STAKE THE PROPOSED DRAINAGE BMPs (SEDIMENT FOREBAY, INFILTRATION BASIN, TREE FILTERS, AND GRASS SWALES), ROADWAY CENTERLINE, WATER LINE, OWTS LOCATIONS AND LIMIT OF DISTURBANCE. THE CONTRACTOR SHALL NOT COMPACT THE AREAS OF THE DRAINAGE BMPs DURING CONSTRUCTION OPERATIONS. CONTRACTOR SHALL INSTALL CONSTRUCTION FENCE TO PROTECT BMPs.
- 2. PLACE SEDIMENTATION BARRIERS (HAY BALES OR SILT FENCE) AS SHOWN ON THE PLANS AND AS STAKED OUT IN THE FIELD. IN NO CASE IS THE LIMIT OF WORK TO EXTEND BEYOND THE SEDIMENTATION BARRIERS.
- 3. BEGIN SITE WORK (CLEARING AND GRUBBING, EXCAVATING AND GRADING ETC.) TOPSOIL IS TO STRIPPED AND STOCKPILED WITHIN DISTURBANCE LIMITS. THE STOCKPILES ARE TO BE PROTECTED BY A ROW OF SEDIMENTATION BARRIERS. STOCKPILES TO BE COVERED OR TEMPORARILY SEEDED.
- 4. EXCAVATE AND CONSTRUCT STORMWATER MANAGEMENT AREAS AS SHOWN ON PLAN. DIVERT ALL THE RUNOFF FROM DISTURBED AREAS TO THE PROPOSED STORMWATER STORAGE AREA. DIVERT ALL THE RUNOFF FROM DISTURBED AREAS TO THE PROPOSED STORMWATER STORAGE AREA.
- 5. INSTALL UTILITIES AND DRAINAGE INCLUDING DRAINAGE PIPE. IMMEDIATELY PLACE THE RIP-RAP AT THE DISCHARGE POINTS. SEED ALL DISTURBED AREAS.
- 6. BEGIN PAVEMENT AND PROPOSED GRADING. BRING ROADWAY TO SUBBASE GRADE WITH GRAVEL. SEED ALL DISTURBED AREAS.
- 7. FINISH PAVEMENT CONSTRUCTION.
- 8. MAINTAIN SEDIMENT AND EROSIONS CONTROLS WHILE BUILDING ARE CONSTRUCTED.
- 9. FINISH LANDSCAPING AND PERMANENT STABILIZATION.
- 10. INSPECT AND REPAIR ALL DRAINAGE STRUCTURES INCLUDING DISCHARGE POINTS. REMOVE ANY DEBRIS (LEAVES, TREE LIMBS, BOULDERS, ETC.) FROM DRAINAGE INLETS AND OUTLETS. FLUSH ALL SEDIMENTS FROM DRAINAGE PIPES AND APPLY TOPSOIL TO PONDS.
- 11. REMOVE ALL TEMPORARY SOIL EROSION AND SEDIMENTATION CONTROL MEASURES ONCE VEGETATION HAS BEEN ESTABLISHED TO ALL DISTURBED AREAS.

BMP MAINTENANCE SCHEDULE:

- 1. ALL MAINTENANCE (INCLUDING CLEANING) REQUIRED DURING THE CONSTRUCTION PHASE OF THE PROJECT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL INCLUDE:
 - A. MEASURES NEEDED TO ENSURE THE PROPER OPERATION OF THE STORMWATER RUNOFF (DRAINAGE) AND WATER QUALITY CONTROL SYSTEMS TO INCLUDE INSPECTION, CLEANING AND REPAIRS ALL PIPES, INTAKE AND DISCHARGE STRUCTURES, CATCH BASIN SUMPS, AND MANHOLES.
 - B. INSPECTION OF ALL SLOPES, BERMS, AND OTHER CONTROL STRUCTURES FOR STRUCTURAL INTEGRITY/STABILITY AND EVIDENCE OF SOIL EROSION PROCESSES, AND MAINTENANCE OF THESE STRUCTURES IF NECESSARY. INSPECTIONS SHALL BE PERFORMED FOLLOWING ALL RAIN EVENTS OF 1/2 INCH RAINFALL OR MORE IN A 24-HOUR PERIOD, OR BI-MONTHLY IF NO RAINFALL EVENT OCCURS.
- 2. UPON COMPLETION OF THE PROJECT CONSTRUCTION, AND PRIOR TO VACATING THE SITE, THE CONTRACTOR SHALL CONDUCT A FINAL INSPECTION AND CLEANING OF THE DRAINAGE SYSTEM AND ALL ASSOCIATED STRUCTURES.
- 3. ALL INSTALLATION, CLEANING, AND MAINTENANCE OF THE STORMWATER DRAINAGE SYSTEM SHALL FOLLOW AT LEAST THE RHODE ISLAND DEPARTMENT OF TRANSPORTATION MINIMUM STANDARDS, SECTION 212 AND SECTION 708. WHERE APPROPRIATE, PROCEDURES REGARDING THE DRAINAGE INSTALLATION, CLEANING, INSPECTION, AND MAINTENANCE OF THE STORMWATER DRAINAGE SYSTEM SHALL BE FOLLOWED AS OUTLINED IN THE "RHODE ISLAND STORMWATER DESIGN AND INSTALLATION STANDARDS MANUAL" (RIDEM/RICRMC, 2010).
- 4. AFTER CONSTRUCTION, STORMWATER BMPs SHALL BE INSPECTED AND MAINTAINED BY THE UNIVERSITY AS FOLLOWS:

CATCH BASINS

- INSPECTIONS SHALL BE PERFORMED A MINIMUM OF 2 TIMES PER YEAR (SPRING/FALL). UNITS SHALL BE CLEANED WHENEVER THE DEPTH OF SEDIMENT IS GREATER THAN OR EQUAL TO 2-FEET (LESS THAN 2-FEET FROM THE BOTTOM OF PIPE). ALL REMOVED SEDIMENT SHALL BE TESTED TO DETERMINE POLLUTANT CONTENT AND SHALL BE REMOVED IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS.
- THE INLET GRATE SHALL NOT BE WELDED TO THE FRAME SO THAT THE SUMP CAN BE EASILY INSPECTED AND MAINTAINED.

INFILTRATION BASINS

- DURING THE SIX MONTHS IMMEDIATELY AFTER CONSTRUCTION, THE INFILTRATION BASINS SHALL BE INSPECTED AFTER THE FIRST TWO RAINFALL EVENTS OF AT LEAST 1.0 INCH TO ENSURE THE SYSTEM IS FUNCTIONING PROPERLY. THEREAFTER, INSPECTIONS SHALL BE CONDUCTED ON A BI-ANNUAL BASIS AND AFTER STORM EVENTS OF GREATER THAN OR EQUAL TO 2 INCHES.
- SILT AND SEDIMENT SHALL BE REMOVED FROM THE INFILTRATION BASINS WHEN THE ACCUMULATION EXCEEDS 6 INCHES, OR WHEN WATER PONDS ON THE SURFACE OF THE INFILTRATION BASIN FOR MORE THAN 48 HOURS.
- SOIL EROSION GULLIES SHALL BE REPAIRED WHEN THEY OCCUR.
- THE OUTLET DEVICES SHALL BE CLEANED/REPAIRED WHEN NECESSARY.
- TRASH AND DEBRIS SHALL BE REMOVED WHEN NECESSARY OR ANNUALLY AT A MINIMUM.
- THE OUTFLOW WEIR SHOULD BE INSPECTED ANNUALLY TO ENSURE THAT IT IS FUNCTIONING PROPERLY.

INFILTRATION TRENCHES

- AFTER CONSTRUCTION, THE INFILTRATION TRENCHES SHALL BE INSPECTED ON AN ANNUAL BASIS FOR SEDIMENT BUILDUP AND SEDIMENT SHALL BE REMOVED WHEN IT REACHES 25% OF THE TOTAL STORAGE VOLUME.
- LITTER AND DEBRIS SHALL BE REMOVED AND PROPERLY DISPOSED OF
- VEGETATION ALONG THE SYSTEM SHOULD BE MOWED AS FREQUENTLY AS NEEDED TO MAINTAIN HEIGHTS BETWEEN 2 TO 3 INCHES
- SNOW STORAGE IS PROHIBITED WITHIN THE INFILTRATION TRENCHES

BIORETENTION BASIN:

- DURING THE SIX MONTHS IMMEDIATELY AFTER CONSTRUCTION, THE INFILTRATION BASIN SHALL BE INSPECTED AFTER THE FIRST TWO RAINFALL EVENTS OF AT LEAST 1.0 INCH TO ENSURE THE SYSTEM IS FUNCTIONING PROPERLY. THEREAFTER INSPECTIONS SHALL BE CONSTRUCTED ON AN ANNUAL BASIS AND AFTER STORM EVENTS GREATER THAN OR EQUAL TO 2 INCHES.
- SILT AND SEDIMENT SHALL BE REMOVED FROM THE BASIN WHEN THE ACCUMULATION EXCEEDS SIX INCHES, OR WHEN WATER PONDS ON THE SURFACE OF THE INFILTRATION BASIN FOR MORE THAN 48 HOURS.
- SOIL EROSION GULLIES SHALL BE REPAIRED WHEN THEY OCCUR.
- THE OUTLET DEVICES SHALL BE CLEANED/REPAIRED WHEN NECESSARY.
- TRASH AND DEBRIS SHALL BE REMOVED WHEN NECESSARY.
- THE OUTLET CONTROL STRUCTURE SHALL BE INSPECTED ANNUALLY TO ENSURE THAT IT IS FUNCTIONING PROPERLY.

ALL REMOVED SEDIMENT IS TO BE TESTED TO DETERMINE POLLUTANT CONTENT. SEDIMENT IS TO BE PROPERLY DISPOSED OF BASED UPON THE TEST RESULTS AND LOCAL, STATE, AND FEDERAL REGULATIONS.

LOAMING & SEEDING NOTES:

SEEDING ACTIVITIES SHALL BE PERFORMED IN ACCORDANCE WITH SECTION L.02 SEEDING OF THE RHODE ISLAND DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADWAY AND BRIDGE CONSTRUCTION, 2010 EDITION (WITH LATEST ADDENDA), AND SHALL ALSO CONFORM TO THE FOLLOWING:

- 1. AFTER ROUGH GRADING IS COMPLETED, ALL DISTURBED AREAS AND AREAS LABELED AS "LOAM AND SEED" ARE TO BE BROUGHT TO AN ELEVATION OF 6" BELOW THE PROPOSED FINISHED GRADE. SCARIFY THE SUBGRADE TO A DEPTH OF 12" WITH THE TEETH OF A BACKHOE OR A POWER RAKE TO RESULT IN AN UNCOMPACTED SUBSOIL. 6" OF GOOD QUALITY TOPSOIL IS TO BE APPLIED AND RAKED TO FINISHED GRADE.
- 2. THE TOPSOIL IS TO BE GOOD QUALITY LOAM, FERTILE AND FREE OF WEEDS, STICKS AND STONES OVER 3/4" IN SIZE AND OTHERWISE COMPLYING WITH SECTION M.18.01 OF THE RHODE ISLAND DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADWAY AND BRIDGE CONSTRUCTION, 2010 EDITION (WITH LATEST ADDENDA).
- 3. PRIOR TO SEEDING OR SODDING, FERTILIZE WITH 10-10-10 OR EQUIVALENT ANALYSIS. AT LEAST 40% OF THE FERTILIZER NITROGEN SHALL BE IN SLOW RELEASE FORM. INCORPORATE THE FERTILIZER INTO THE TOP 1-2" OF THE PLANTING SOIL. APPLY AT A RATE OF 8 LBS. PER 1000 SQUARE FEET.
- 4. APPLY LIME AT A RATE OF ONE TON PER ACRE AND UNIFORMLY INCORPORATE INTO THE TOP 1-2" OF TOPSOIL.
- 5. SEEDING
AFTER THE SEED BED IS PREPARED, SEED IS TO BE BROADCAST EVENLY OVER THE SURFACE AND WORKED INTO THE TOP 1" OF SOIL. SEED SHALL BE APPROVED URI #2 OR APPROVED EQUAL. APPLY AT A RATE OF 4-5 LBS. PER 1000 SQUARE FEET OR AS OTHERWISE DIRECTED BY THE MANUFACTURER.

URI #2 IMPROVED SEED MIX, % BY WEIGHT:

- 40% CREEPING RED FESCUE
- 20% IMPROVED PERENNIAL RYEGRASS
- 20% IMPROVED KENTUCKY BLUEGRASS
- 20% KENTUCKY BLUEGRASS

RECOMMENDED SEEDING DATES ARE MARCH 15 TO JUNE 15 AND SEPTEMBER 15 TO NOVEMBER 15. AT THE CONTRACTORS DISCRETION, SEED MAY BE APPLIED BY HYDROSEEDING RATHER THAN THE METHOD DESCRIBED ABOVE.

LEGEND:

- EXISTING PROPERTY LINE
- - - - - ABUTTING PROPERTY LINE
- - - - - BUILDING SETBACK LINE
- - - - - WETLAND EDGE
- △ W/F WETLAND FLAG
- - - - - 100 - - - - - EXISTING CONTOUR
- - - - - 100 - - - - - PROPOSED CONTOUR
- EXISTING CURB
- PROPOSED CURB
- ○ ○ ○ ○ EXISTING METAL FENCE
- ○ ○ ○ ○ CHAIN LINK FENCE
- ○ ○ ○ ○ EXISTING DRAIN LINE
- ○ ○ ○ ○ PROPOSED DRAIN LINE
- ⊙ ⊙ ⊙ ⊙ EXISTING DRAINAGE MANHOLE
- ⊙ ⊙ ⊙ ⊙ PROPOSED DRAINAGE MANHOLE
- ⊙ ⊙ ⊙ ⊙ EXISTING CATCH BASIN
- ⊙ ⊙ ⊙ ⊙ PROPOSED CATCH BASIN
- UP#T2 ○ ○ ○ ○ ○ EXISTING UTILITY POLE
- ○ ○ ○ ○ PROPOSED UTILITY POLE
- TEL TEL EXISTING TELECOM DUCT/BANK
- TEL TEL EXISTING ELECTRIC DUCT/BANK
- GAS GAS EXISTING GAS LINE
- W W W W EXISTING WATER LINE
- W W W W PROPOSED WATER LINE
- WG ○ ○ ○ ○ ○ WATER GATE
- ○ ○ ○ ○ WATER VALVE
- EXISTING SEWER LINE
- PROPOSED SEWER LINE
- ⊙ ⊙ ⊙ ⊙ EXISTING SEWER MANHOLE
- ⊙ ⊙ ⊙ ⊙ PROPOSED SEWER MANHOLE
- N/F --- NOW OR FORMERLY
- TREELINE
- ○ ○ ○ ○ SILT FENCE
- 100 100 LIMIT OF DISTURBANCE
- ○ ○ ○ ○ TEST HOLE
- ○ ○ ○ ○ BOLLARD
- ○ ○ ○ ○ HYDRANT
- ○ ○ ○ ○ LAMP POLE
- FDC ○ ○ ○ ○ ○ FIRE DEPTMENT CONTROL
- ⊗ ⊗ ⊗ ⊗ EXISTING HANDICAP
- ⊗ ⊗ ⊗ ⊗ PROPOSED HANDICAP
- ○ ○ ○ ○ EXISTING TREE

JOE CASALI ENGINEERING, INC.
CIVIL, SITE DEVELOPMENT, TRANSPORTATION
DRAINAGE, WETLANDS, ISDS, TRAFFIC, FLOODPLAIN
300 POB ROAD, WARWICK, RI 02888
401.944.1500 06110441317 FAX WWW.JOECSALI.COM

JOSEPH A. CASALI
No. 7250
REGISTERED PROFESSIONAL ENGINEER
CIVIL
3.30.2025

ATHLETICS FIELD IMPROVEMENTS
BRYANT UNIVERSITY
SMITHFIELD, RHODE ISLAND

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL
DATED: MAY 09 2023 FILE #: 23-0020
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE
Justin D. Seneck

REVISIONS:

NO.	DATE	DESCRIPTION
1	03/2023	RIDEM RTC

DESIGNED BY: WMLJR
DRAWN BY: SEJPSD
CHECKED BY: JAC
DATE: JAN. 2023
PROJECT NO: 09-05bb

PRELIMINARY, NOT FOR CONSTRUCTION

GENERAL NOTES & LEGEND

SHEET 2 OF 14

Environmental Management
MAR 30 2023
Office of Water Resources

LOCATION OF EXISTING UTILITIES SHOWN, ARE FROM GATE LOCATION AND EXISTING DOCUMENTATION AND MAY NOT BE ACCURATE. EXACT LOCATION TO BE DONE BY THE APPROPRIATE UTILITY COMPANY OR MUNICIPALITY PRIOR TO ANY EXCAVATION CALL DIGSAFE AT:
1-888-DIG-SAFE
1-888-344-7233

Q:\09-05 Bryant University\09-05bb Field Enabling - [R]TCRIDE[M]Bryant Field Enabling [Permit-Set] - [R]TCRIDE[M].dwg Mar. 30. 2023 11:10am

Q:\09-05 Bryant University\09-058b Field Enabling [Permit Set] - [RTCRIDEM].dwg Mar. 30, 2023 11:10am



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JOSEPH A. CASALI
 No. 7250
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 CIVIL
 3.30.2023

**ATHLETICS FIELD IMPROVEMENTS
 BRYANT UNIVERSITY
 SMITHFIELD, RHODE ISLAND**

REVISIONS:

NO.	DATE	DESCRIPTION
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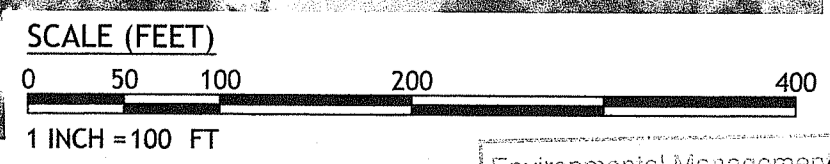
DESIGNED BY: WMLJR
 DRAWN BY: SEP/SD
 CHECKED BY: JAC
 DATE: JAN 2023
 PROJECT NO: 09-058b

PRELIMINARY, NOT FOR CONSTRUCTION

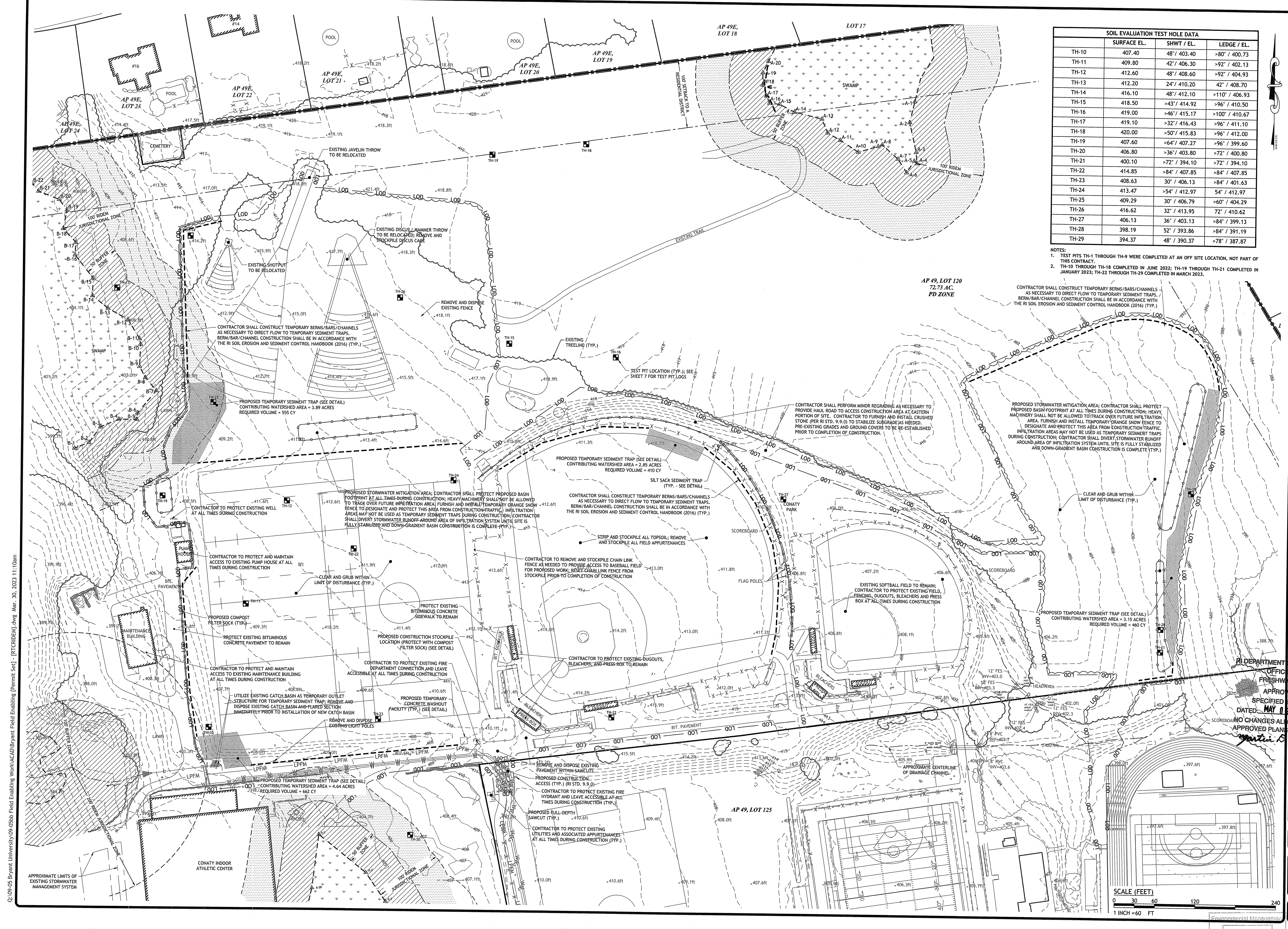
OVERALL EXISTING CONDITIONS PLAN

SHEET 3 OF 14

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
 FRESHWATER WETLANDS PROGRAM
 APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL
 DATED: MAY 09 2023 FILE #: 23-0010
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Justin D. Wencik



MAR 30 2023
 Office of Water Resources



SOIL EVALUATION TEST HOLE DATA			
	SURFACE EL.	SHWT / EL.	LEDGE / EL.
TH-10	407.40	48' / 403.40	>80' / 400.73
TH-11	409.80	42' / 406.30	>92' / 402.13
TH-12	412.60	48' / 408.60	>92' / 404.93
TH-13	412.20	24' / 410.20	42' / 408.70
TH-14	416.10	48' / 412.10	>110' / 406.93
TH-15	418.50	>43' / 414.92	>96' / 410.50
TH-16	419.00	>46' / 415.17	>100' / 410.67
TH-17	419.10	>32' / 416.43	>96' / 411.10
TH-18	420.00	>50' / 415.83	>96' / 412.00
TH-19	407.60	>64' / 407.27	>96' / 399.60
TH-20	406.80	>36' / 403.80	>72' / 400.80
TH-21	400.10	>72' / 394.10	>72' / 394.10
TH-22	414.85	>84' / 407.85	>84' / 407.85
TH-23	408.63	30' / 406.13	>84' / 401.63
TH-24	413.47	>54' / 412.97	54' / 412.97
TH-25	409.29	30' / 406.79	>60' / 404.29
TH-26	416.62	32' / 413.95	72' / 410.62
TH-27	406.13	36' / 403.13	>84' / 399.13
TH-28	398.19	52' / 393.86	>84' / 391.19
TH-29	394.37	48' / 390.37	>78' / 387.87

NOTES:
 1. TEST PITS TH-1 THROUGH TH-9 WERE COMPLETED AT AN OFF SITE LOCATION, NOT PART OF THIS CONTRACT.
 2. TH-10 THROUGH TH-18 COMPLETED IN JUNE 2022; TH-19 THROUGH TH-21 COMPLETED IN JANUARY 2023; TH-22 THROUGH TH-29 COMPLETED IN MARCH 2023.

JCE
 JOE CASALI ENGINEERING, INC.
 TRANSPORTATION ENGINEERING
 DRAINAGE, WETLANDS, EROSION CONTROL, SITE PREPARATION
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JOSEPH A. CASALI
 No. 7250
 REGISTERED PROFESSIONAL ENGINEER
 CIVIL
 3.30.2025

**ATHLETICS FIELD IMPROVEMENTS
 BRYANT UNIVERSITY
 SMITHFIELD, RHODE ISLAND**

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
 FRESHWATER WETLANDS PROGRAM
 APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL DATED MAY 11, 2022 FILE # 23-0020

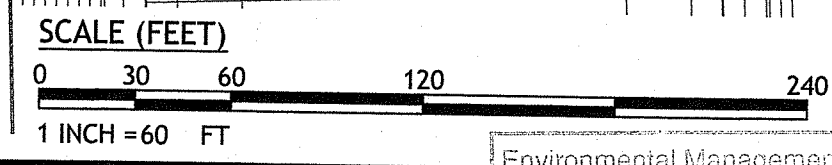
NO CHANGES ALLOWED TO THIS APPROVED PLAN WITHOUT THE WRITTEN APPROVAL OF THE DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 REVISIONS: FROM APPROVAL DATE: 05/11/2022
 APPROVED BY: [Signature]

DESIGNED BY: WMLR
 DRAWN BY: SEPSD
 CHECKED BY: JAC
 DATE: JAN. 2023
 PROJECT NO: 09-05bb

PRELIMINARY, NOT FOR CONSTRUCTION

SITE PREPARATION PLAN

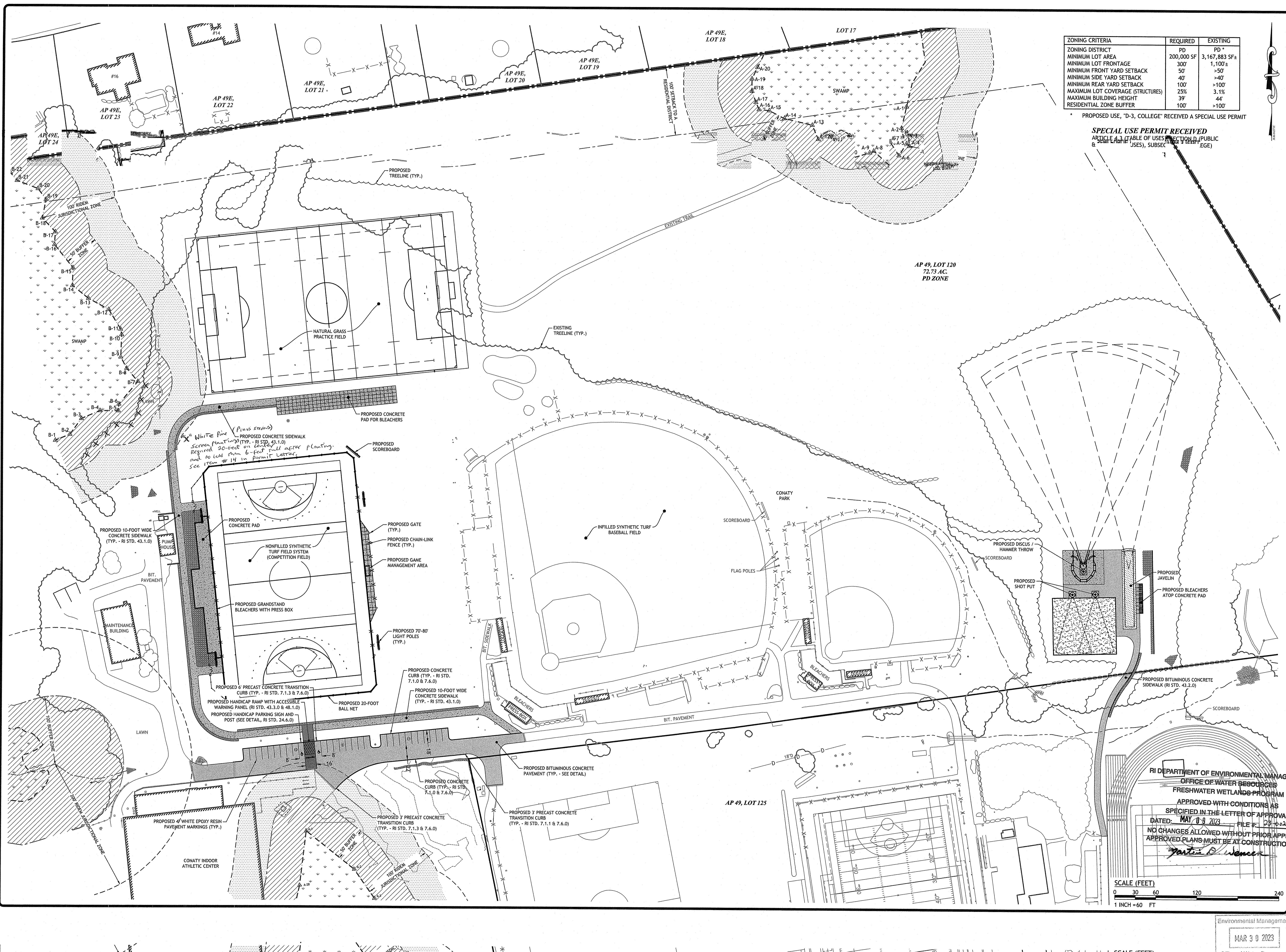
SHEET 4 OF 14



MAR 30 2023

C:\09-05 Bryant University\09-05bb Field Enabling Work\ACAD\Bryant Field Enabling (Permit Set) - [RTCRIDEM].dwg Mar. 30, 2023 11:10am

Q:\09-05 Bryant University\09-05B Bryant Field Enabling\Work\ACAD\Bryant Field Enabling [Permits Set] - [RTCRIDEM].dwg, Mar. 30, 2023 11:10am



ZONING CRITERIA	REQUIRED	EXISTING
ZONING DISTRICT	PD	PD*
MINIMUM LOT AREA	200,000 SF	3,167,883 SF±
MINIMUM LOT FRONTAGE	300'	1,100±
MINIMUM FRONT YARD SETBACK	50'	>50'
MINIMUM SIDE YARD SETBACK	40'	>40'
MINIMUM REAR YARD SETBACK	100'	>100'
MAXIMUM LOT COVERAGE (STRUCTURES)	25%	3.1%
MAXIMUM BUILDING HEIGHT	39'	44'
RESIDENTIAL ZONE BUFFER	100'	>100'

PROPOSED USE, "D-3, COLLEGE" RECEIVED A SPECIAL USE PERMIT
 SPECIAL USE PERMIT RECEIVED
 ARTICLE 3 (TABLE OF USES SECTION D (PUBLIC USES), SUBSECTION D (E))

JOE ENGINEERING, INC.
 CITY OF BRYANT, RHODE ISLAND
 300 POST ROAD, SMITHFIELD, RI 02888
 (401) 944-1300 | 10119441@JOEENGINEERING.COM

JOSEPH A. CASALI
 No. 7250
 REGISTERED PROFESSIONAL ENGINEER
 CIVIL
 3.30.2023

ATHLETICS FIELD IMPROVEMENTS BRYANT UNIVERSITY SMITHFIELD, RHODE ISLAND

NO.	DATE	DESCRIPTION
1	03/2023	RIDEM RTC

DESIGNED BY: WMLJR
 DRAWN BY: SEPSD
 CHECKED BY: JAC
 DATE: JAN. 2023
 PROJECT NO: 09-05B

PRELIMINARY, NOT FOR CONSTRUCTION

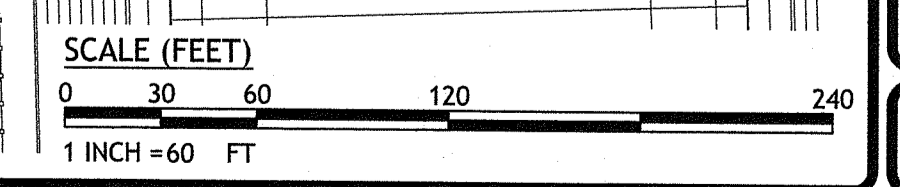
SITE PLAN

SHEET 5 OF 14

SHEET

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
 FRESHWATER WETLANDS PROGRAM
 APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL
 DATED: MAY 09 2023 FILE # 23-002
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
 APPROVED PLANS MUST BE AT CONSTRUCTION

Environmental Management
 MAR 30 2023
 Office of Water Resources



C:\09-05 Bryant University\09-05B Bryant Field Enabling\Permit Set - [R]CDB[EN]Bryant Field Enabling.dwg Mar. 2023 11:18am



SOIL EVALUATION TEST HOLE DATA			
	SURFACE EL.	SHWT / EL.	LEDGE / EL.
TH-10	407.40	48' / 403.40	>80' / 400.73
TH-11	409.80	42' / 406.30	>92' / 402.13
TH-12	412.60	48' / 408.60	>92' / 404.93
TH-13	412.20	24' / 410.20	42' / 408.70
TH-14	416.10	48' / 412.10	>110' / 406.93
TH-15	418.50	>43' / 414.92	>96' / 410.50
TH-16	419.00	>46' / 415.17	>100' / 410.67
TH-17	419.10	>32' / 416.43	>96' / 411.10
TH-18	420.00	>50' / 415.83	>96' / 412.00
TH-19	407.60	>64' / 407.27	>96' / 399.60
TH-20	406.80	>36' / 403.80	>72' / 400.80
TH-21	400.10	NOT DETERMINED	>72' / 394.10
TH-22	414.85	>84' / 407.85	>84' / 407.85
TH-23	408.63	30' / 406.13	>84' / 401.63
TH-24	413.47	>54' / 412.97	54' / 412.97
TH-25	409.29	30' / 406.79	>60' / 404.29
TH-26	416.62	32' / 413.95	72' / 410.62
TH-27	406.13	36' / 403.13	>84' / 399.13
TH-28	398.19	52' / 393.86	>84' / 391.19
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NOTES:
 1. TEST PITS TH-1 THROUGH TH-9 WERE COMPLETED AT AN OFF SITE LOCATION, NOT PART OF THIS CONTRACT.
 2. TH-10 THROUGH TH-18 COMPLETED IN JUNE 2022; TH-19 THROUGH TH-21 COMPLETED IN JANUARY 2023; TH-22 THROUGH TH-29 COMPLETED IN MARCH 2023.

JCE
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 CIVIL
 3.30.2023

ATHLETICS FIELD IMPROVEMENTS
BRYANT UNIVERSITY
SMITHFIELD, RHODE ISLAND

REVISIONS:		
NO.	DATE	DESCRIPTION
1	03/2023	RIDEM RTC

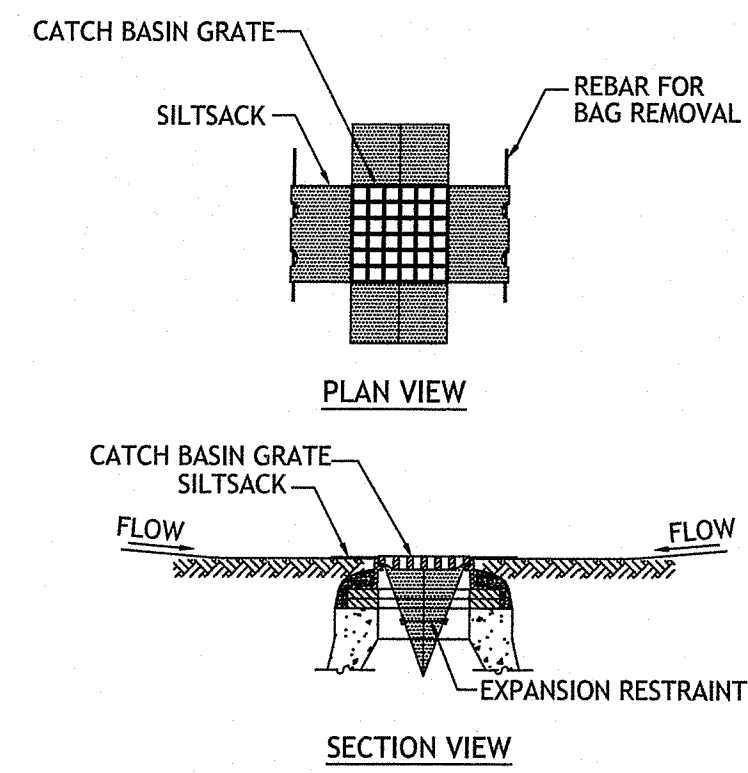
DESIGNED BY: WMLJR
 DRAWN BY: SEPSD
 CHECKED BY: JAC
 DATE: JAN 2023
 PROJECT NO.: 09-05B
 PRELIMINARY, NOT FOR CONSTRUCTION

GRADING & DRAINAGE PLAN
SHEET 6 OF 14

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
 FRESHWATER WETLANDS PROGRAM
 APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL DATED: **MAY 09 2023** FILE # **23-0422**
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL. APPROVED PLANS MUST BE AT CONSTRUCTION SITE.
 [Signature]

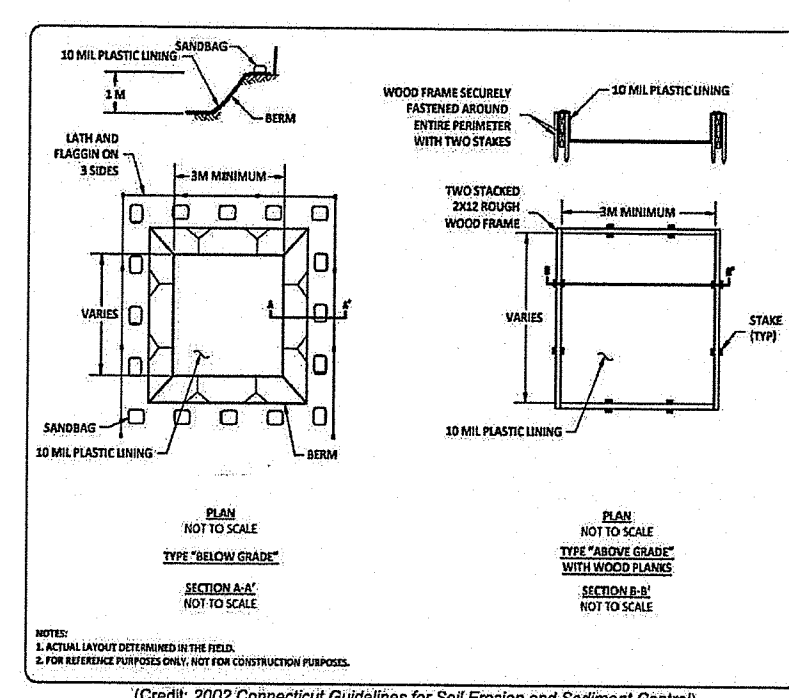
SCALE (FEET)
 0 30 60 120 240
 1 INCH = 60 FT

MAR 30 2023
 Office of Water Resources

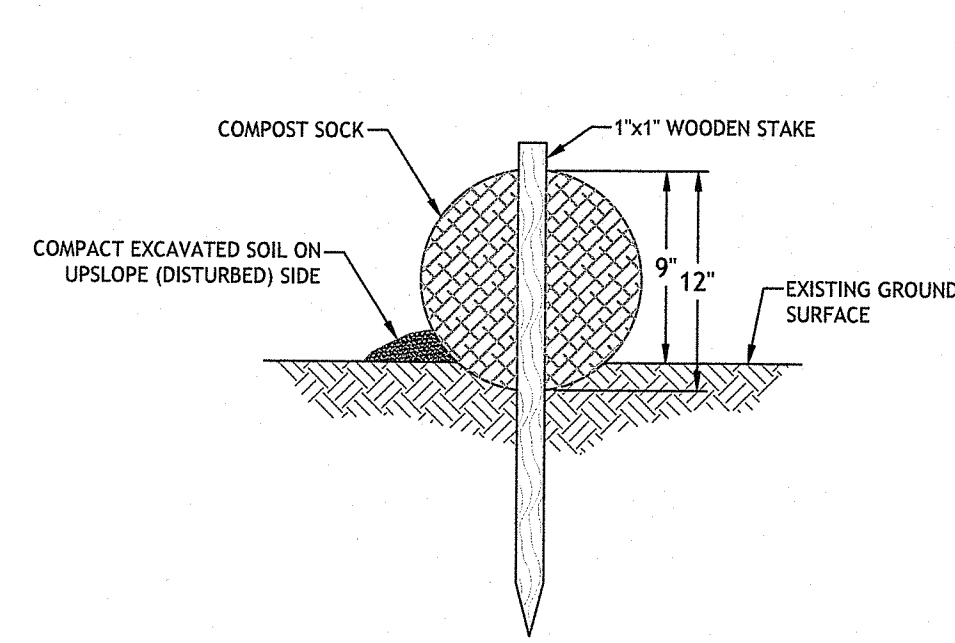


- NOTES:**
1. INSTALL SILTSACK IN SELECTED CATCH BASINS IDENTIFIED ON THE SITE PREPARATION PLAN BEFORE COMMENCING WORK.
 2. GRATE TO BE PLACED OVER SILTSACK. SILTSACK SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS AND CLEANING OR REPLACEMENT SHALL BE PERFORMED PROMPTLY AS NEEDED. MAINTAIN UNTIL UPSTREAM AREAS HAVE BEEN PERMANENTLY STABILIZED.

1 SILT SACK SEDIMENT TRAP
NOT TO SCALE



2 TEMP. CONCRETE WASHOUT FACILITY
NOT TO SCALE



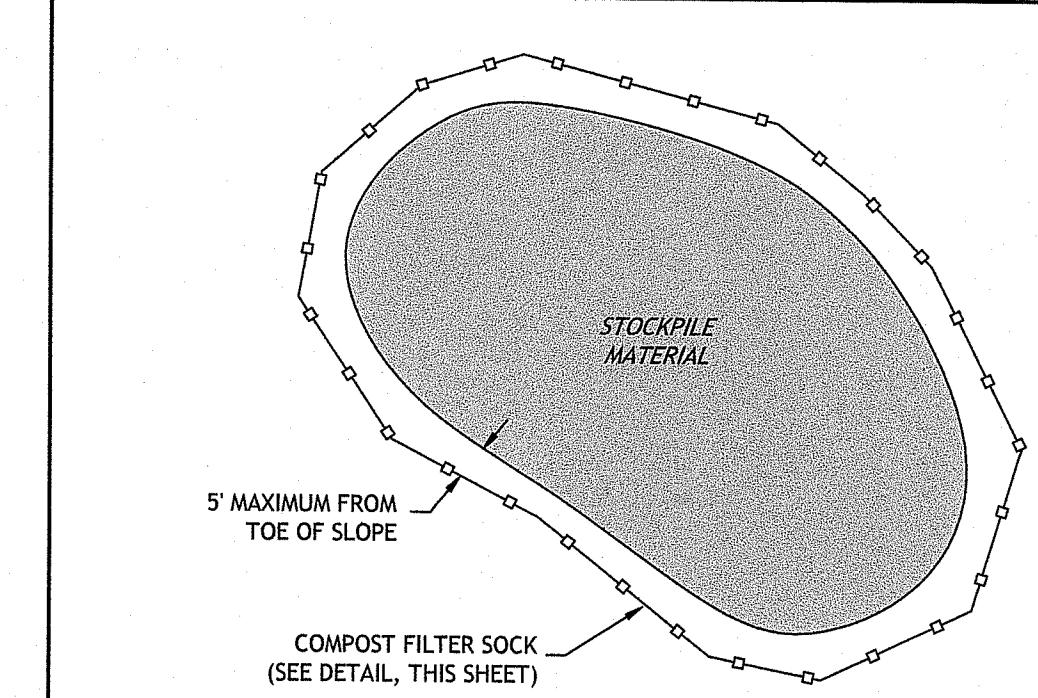
NOTES:

1. BEGIN SOCK INSTALLATION BY EXCAVATING A 2 TO 3-INCH-DEEP BY 9\"/>

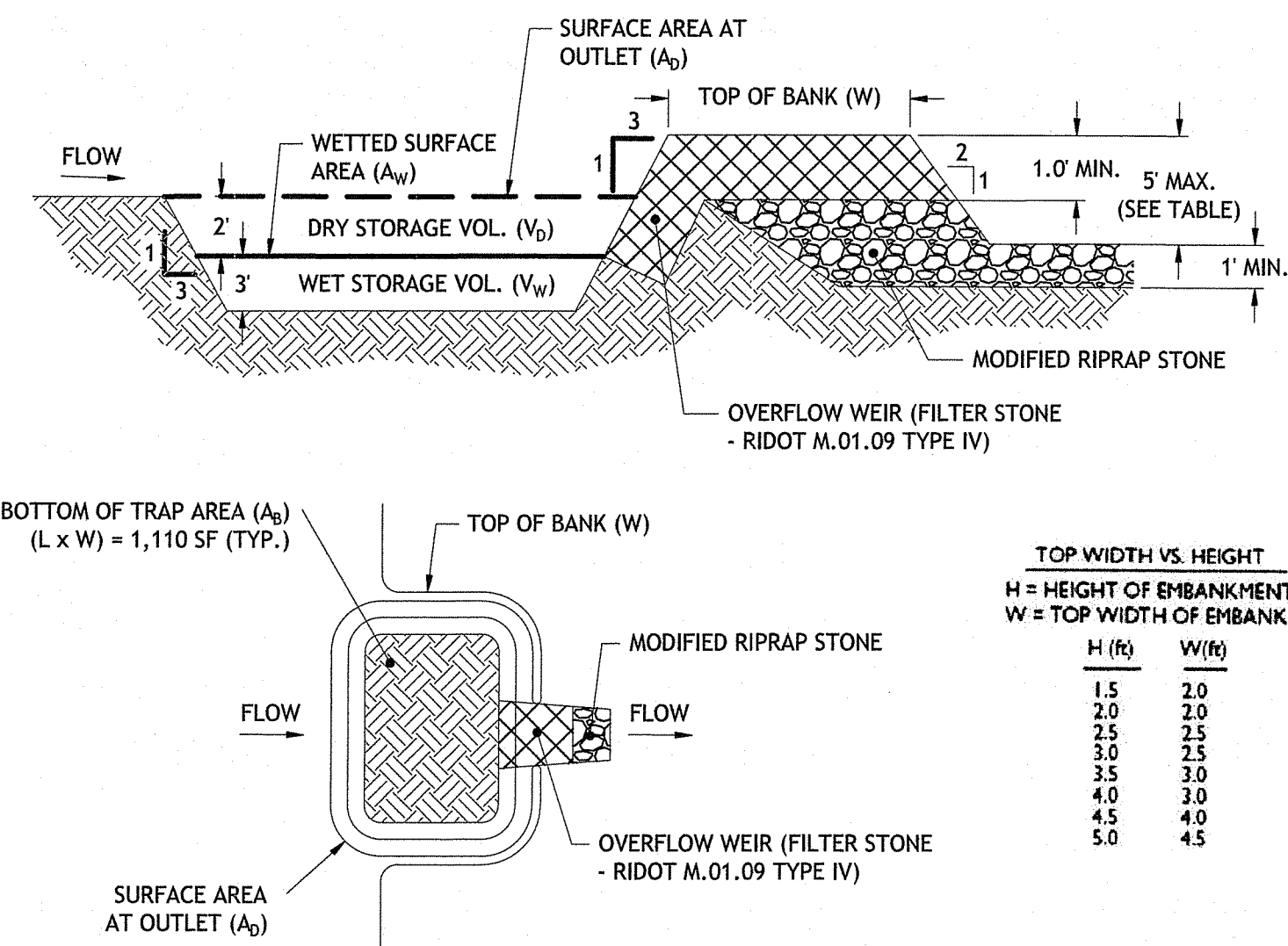
3 COMPOST FILTER SOCK
NOT TO SCALE

Slope %	Maximum slope length above compost filter sock in ft (m)			
	8-inch (200-mm)	12-inch (300-mm)	18-inch (450-mm)	24-inch (600-mm)
3 (or less)	900 (300)	975 (110)	600 (180)	650 (200)
5	300 (90)	250 (70)	270 (80)	325 (100)
10	100 (30)	125 (35)	150 (40)	200 (60)
15	70 (20)	85 (25)	100 (30)	100 (30)
20	60 (15)	65 (20)	70 (20)	100 (40)
25	40 (12)	50 (15)	55 (10)	100 (30)
30	30 (9)	40 (12)	45 (13)	65 (20)
35	30 (9)	40 (12)	45 (13)	65 (18)
40	30 (9)	40 (12)	45 (13)	60 (15)
45	30 (9)	25 (8)	30 (9)	40 (12)
50	30 (9)	25 (8)	30 (9)	35 (10)

FIGURE 2: RECOMMENDED SPACING AND DIAMETER REQUIREMENTS FOR COMPOST FILTER SOCKS



4 STOCKPILE DETAIL
NOT TO SCALE

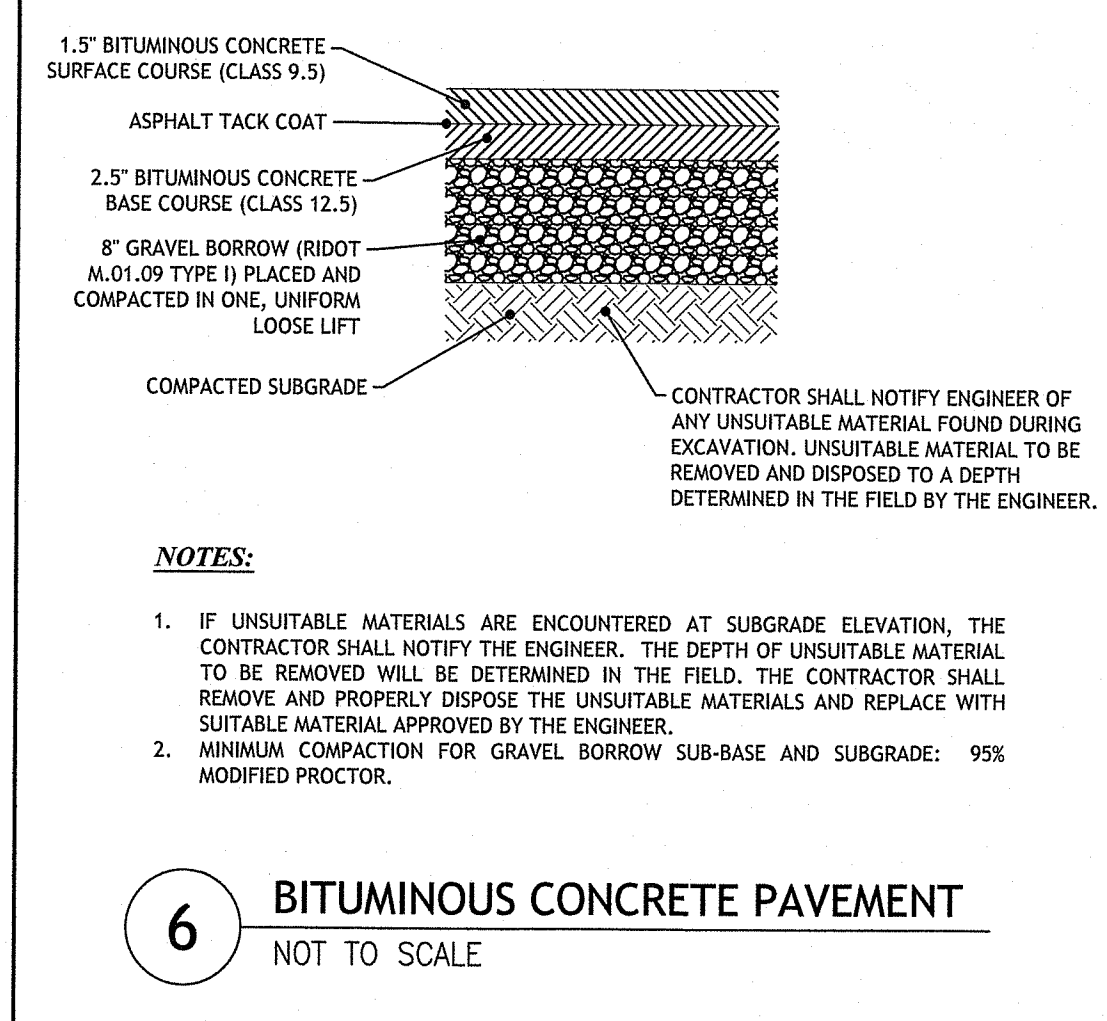


TOP WIDTH VS. HEIGHT
H = HEIGHT OF EMBANKMENT
W = TOP WIDTH OF EMBANKMENT

H (ft)	W (ft)
1.5	2.0
2.0	2.0
2.5	2.5
3.0	2.5
3.5	3.0
4.0	3.0
4.5	4.0
5.0	4.5

- NOTES:**
1. PHASING IS ANTICIPATED TO BE UTILIZED FOR THIS PROJECT IN ORDER TO COMPLETE DISTURBANCE ACTIVITIES WITHIN A SIX (6) MONTH WINDOW. A DETAILED PHASING PLAN WILL BE DEVELOPED UPON ENGAGEMENT OF A SITE CONTRACTOR AND SUBMITTED TO THE DESIGN ENGINEERING AND THE TOWN OF COVENTRY FOR REVIEW AND APPROVAL.
 2. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD FIT AND DETERMINE ACTUAL SEDIMENT TRAP SIZES, LOCATIONS, DIVERSION BERM LOCATIONS, SWALES, SILT FENCE LOCATIONS AND ANY OTHER APPROPRIATE SEDIMENT CONTROL MEASURES. ALL SOIL EROSION MEASURES SHALL BE IN ACCORDANCE WITH THE RHODE ISLAND SOIL EROSION AND SEDIMENT CONTROL HANDBOOK (2016).
 3. PROPOSED SEDIMENT TRAP SHOWN SHALL BE DESIGNED TO ACCOMMODATE DRAINAGE FROM CONTRIBUTING AREAS OF 1 TO 5 ACRES.
 4. EACH TEMPORARY SEDIMENT TRAP SHALL BE PROVIDED A SEDIMENT STORAGE STAKE AND MARKER, IN ACCORDANCE WITH THE RHODE ISLAND SOIL EROSION AND SEDIMENT CONTROL HANDBOOK (2016).

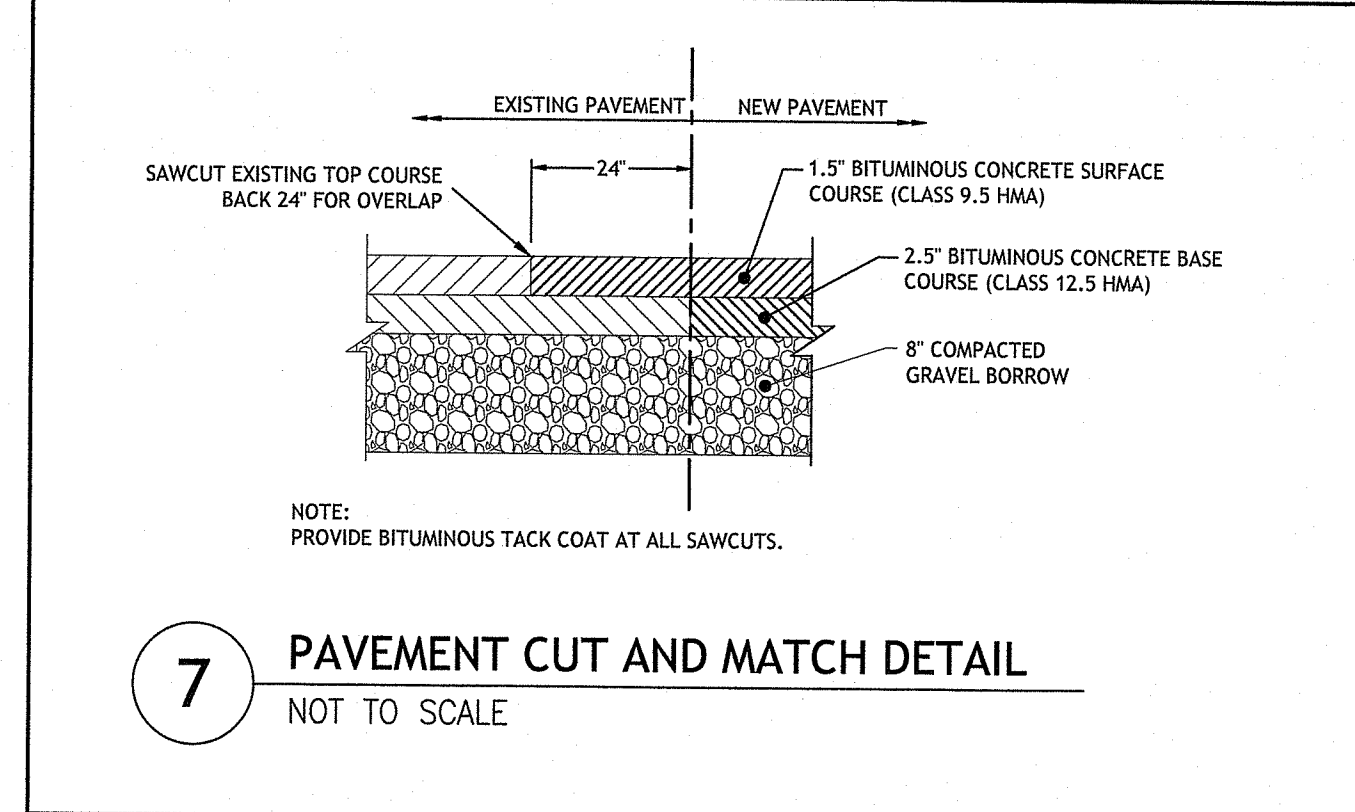
5 TEMPORARY SEDIMENT TRAP DETAIL
NOT TO SCALE



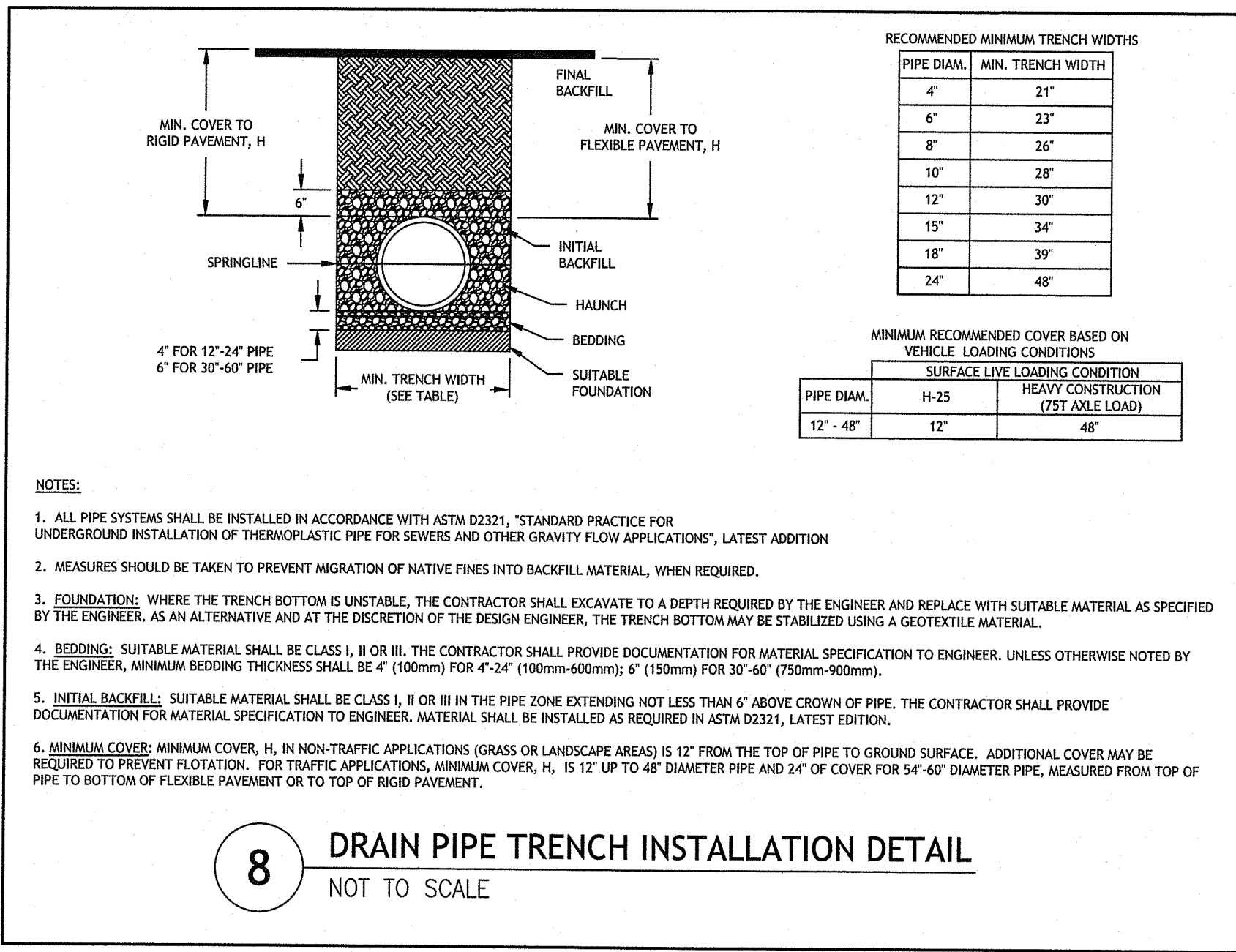
NOTES:

1. IF UNSUITABLE MATERIALS ARE ENCOUNTERED AT SUBGRADE ELEVATION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER. THE DEPTH OF UNSUITABLE MATERIAL TO BE REMOVED WILL BE DETERMINED IN THE FIELD. THE CONTRACTOR SHALL REMOVE AND PROPERLY DISPOSE THE UNSUITABLE MATERIALS AND REPLACE WITH SUITABLE MATERIAL APPROVED BY THE ENGINEER.
2. MINIMUM COMPACTION FOR GRAVEL BORROW SUB-BASE AND SUBGRADE: 95% MODIFIED PROCTOR.

6 BITUMINOUS CONCRETE PAVEMENT
NOT TO SCALE



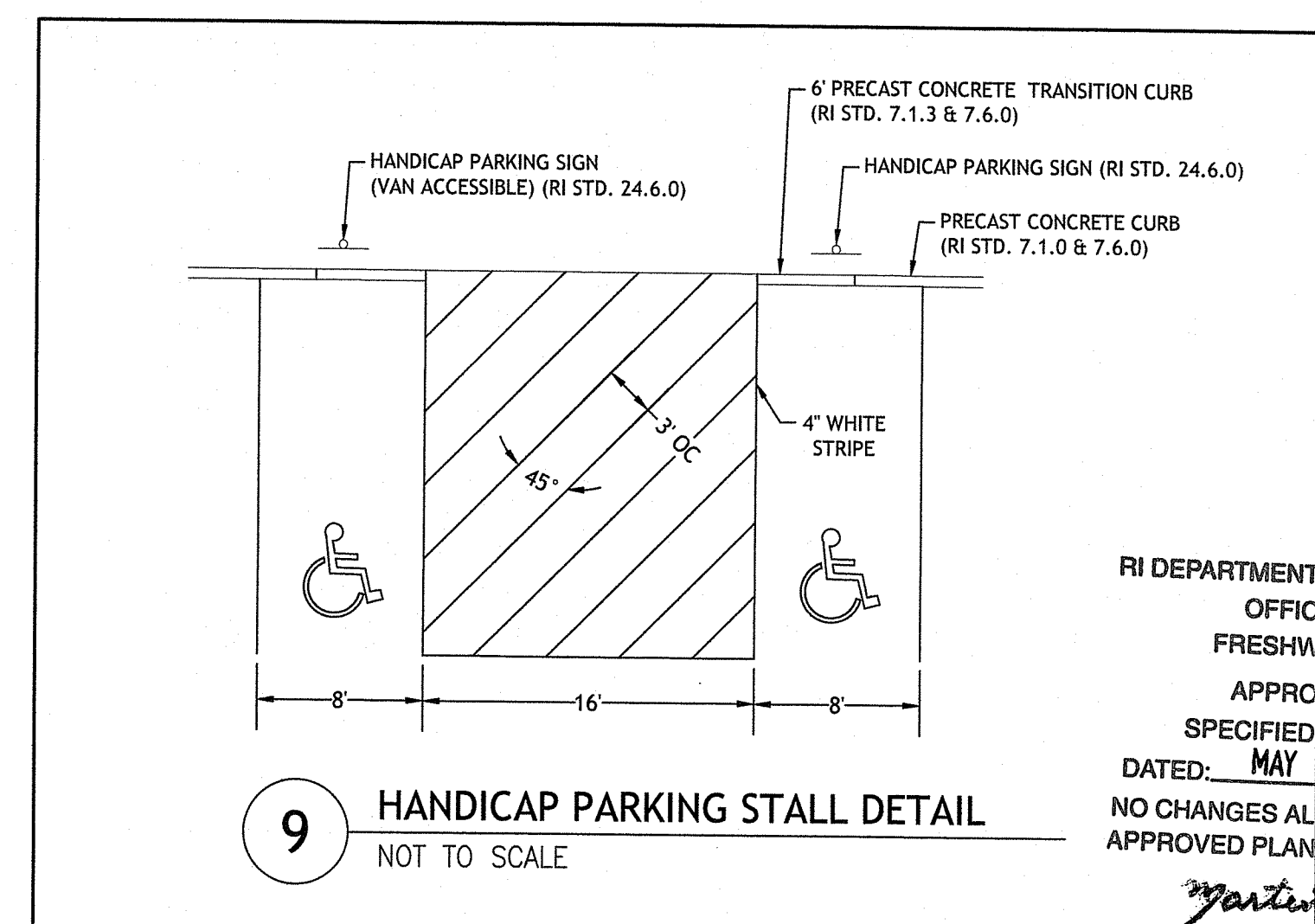
7 PAVEMENT CUT AND MATCH DETAIL
NOT TO SCALE



NOTES:

1. ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST ADDITION.
2. MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL, WHEN REQUIRED.
3. FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER. AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.
4. BEDDING: SUITABLE MATERIAL SHALL BE CLASS I, II OR III. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. UNLESS OTHERWISE NOTED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 4\"/>

8 DRAIN PIPE TRENCH INSTALLATION DETAIL
NOT TO SCALE



9 HANDICAP PARKING STALL DETAIL
NOT TO SCALE

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
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Martin D. Wenczek

JOE CASALI ENGINEERING, INC.
CIVIL - SITE DESIGN
DRAINAGE - WETLANDS - ISDS - TRAFFIC - FLOODPLAIN
300 POST ROAD, WARWICK, RI 02888
(401) 944-1300 (401) 944-1313 FAX - WWW.JOECSALLI.COM

JOSEPH A. CASALI
No. 7250
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CIVIL
3.30.2023

ATHLETICS FIELD IMPROVEMENTS
BRYANT UNIVERSITY
SMITHFIELD, RHODE ISLAND

REVISIONS:

NO.	DATE	DESCRIPTION
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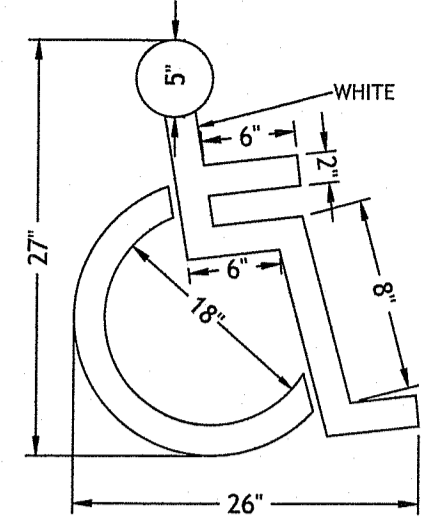
DESIGNED BY: WMLJR
DRAWN BY: SEP/SD
CHECKED BY: JAC
DATE: JAN. 2023
PROJECT NO: 09-05bb

PRELIMINARY, NOT FOR CONSTRUCTION

CIVIL DETAILS I

SHEET 8 OF 14

Environmental Management
MAR 30 2023
Office of Water Resources



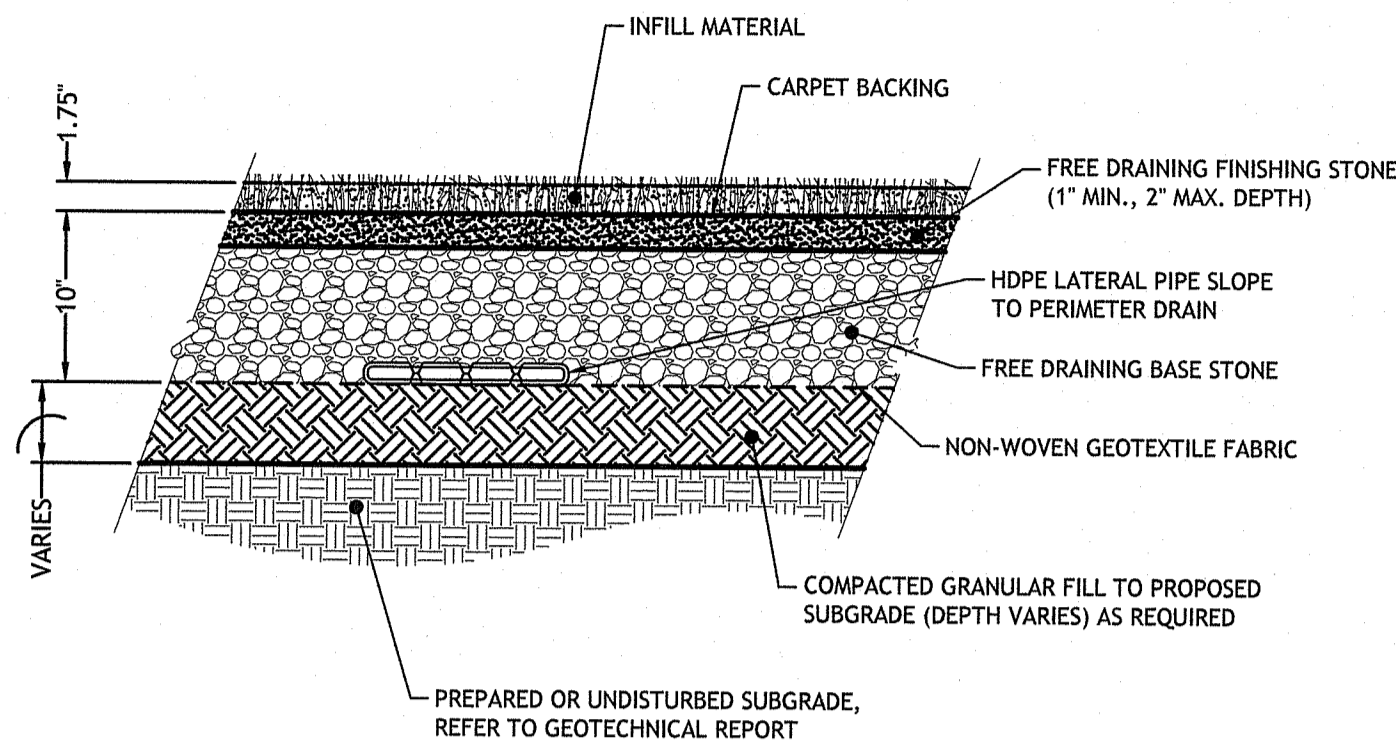
NOTE:
1. ALL HANDICAP PARKING AND SIGNAGE SHALL BE IN ACCORDANCE WITH THE RHODE ISLAND STATE BUILDING CODE.

10 HANDICAP PAVEMENT MARKING
NOT TO SCALE



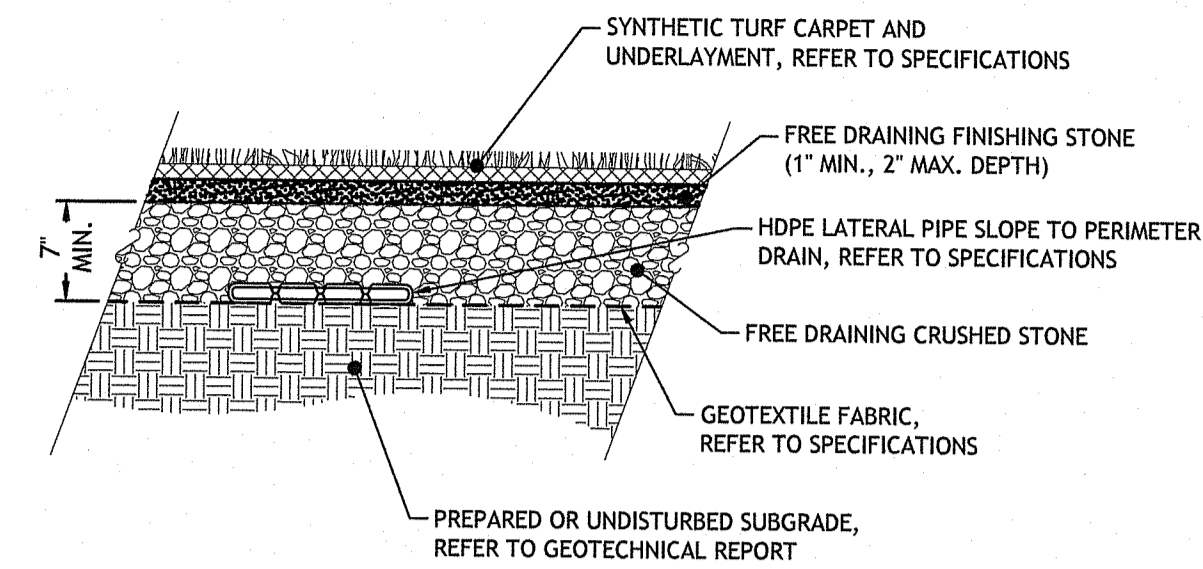
NOTE:
SIGNS ARE TO CONFORM WITH THE MOST RECENT EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
* VAN ACCESSIBLE SIGNS FOR SPACES ADJACENT TO THE 8' STRIPED ISLE.
SIGN NOTES:
1. SIGN POSTS SHALL BE GALVANIZED STEEL U-CHANNEL (3 1/2" WIDE-MIN) AND INSTALLED IN CONFORMANCE TO A.L.T.C.D. AND RHODE ISLAND STANDARD SPECIFICATIONS.
2. POSTS SHALL BE DRIVEN TO A DEPTH OF 4 FEET (MIN).
3. THE EDGE OF THE SIGN SHALL BE 18" FROM THE FACE OF THE CURB.
4. WITHIN SIDEWALK LOCATIONS THE SIGN POST WILL BE INSTALLED WITHIN A 8'X8' SQUARE BOX FORM.

11 HANDICAP PARKING SIGNS
NOT TO SCALE

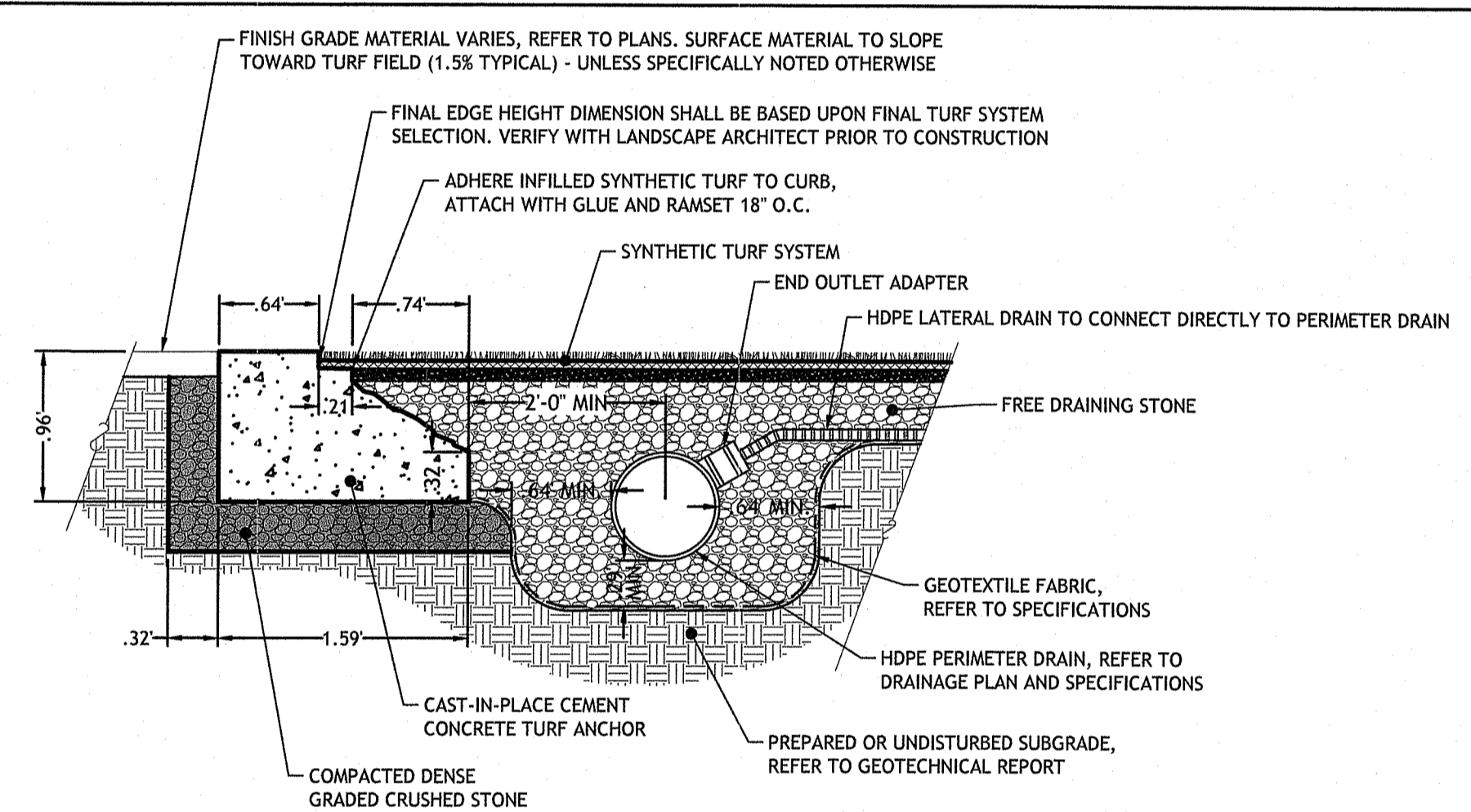


NOTE:
TOP OF INFILL MATERIAL IS FINISHED GRADE, REFER TO GRADING PLAN.

12 (BMP ID: F2) BASEBALL FIELD INFILLED SYNTHETIC TURF SYSTEM DETAIL
NOT TO SCALE

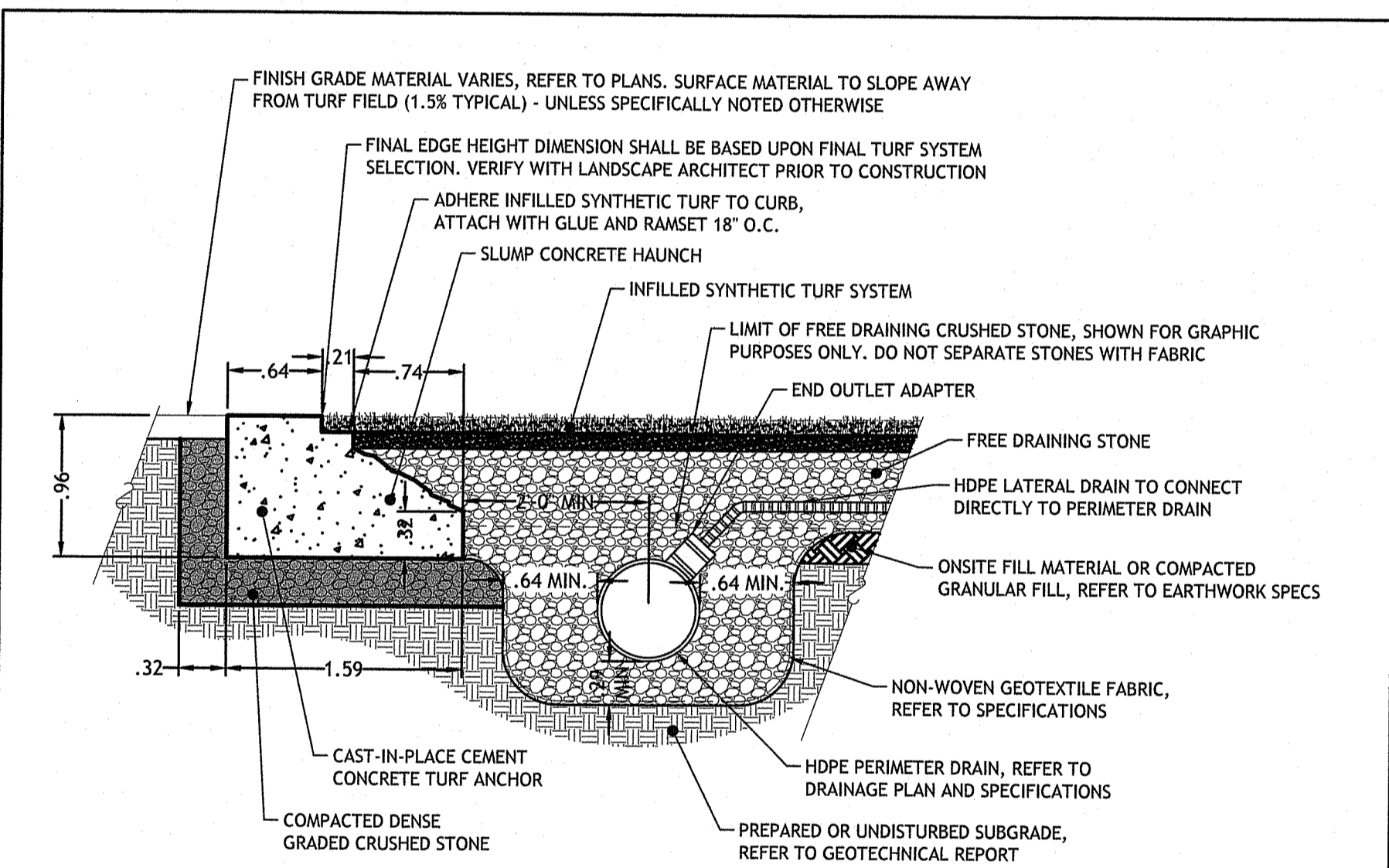


13 (BMP ID: F1) COMPETITION FIELD NONFILLED SYNTHETIC TURF SYSTEM DETAIL
NOT TO SCALE



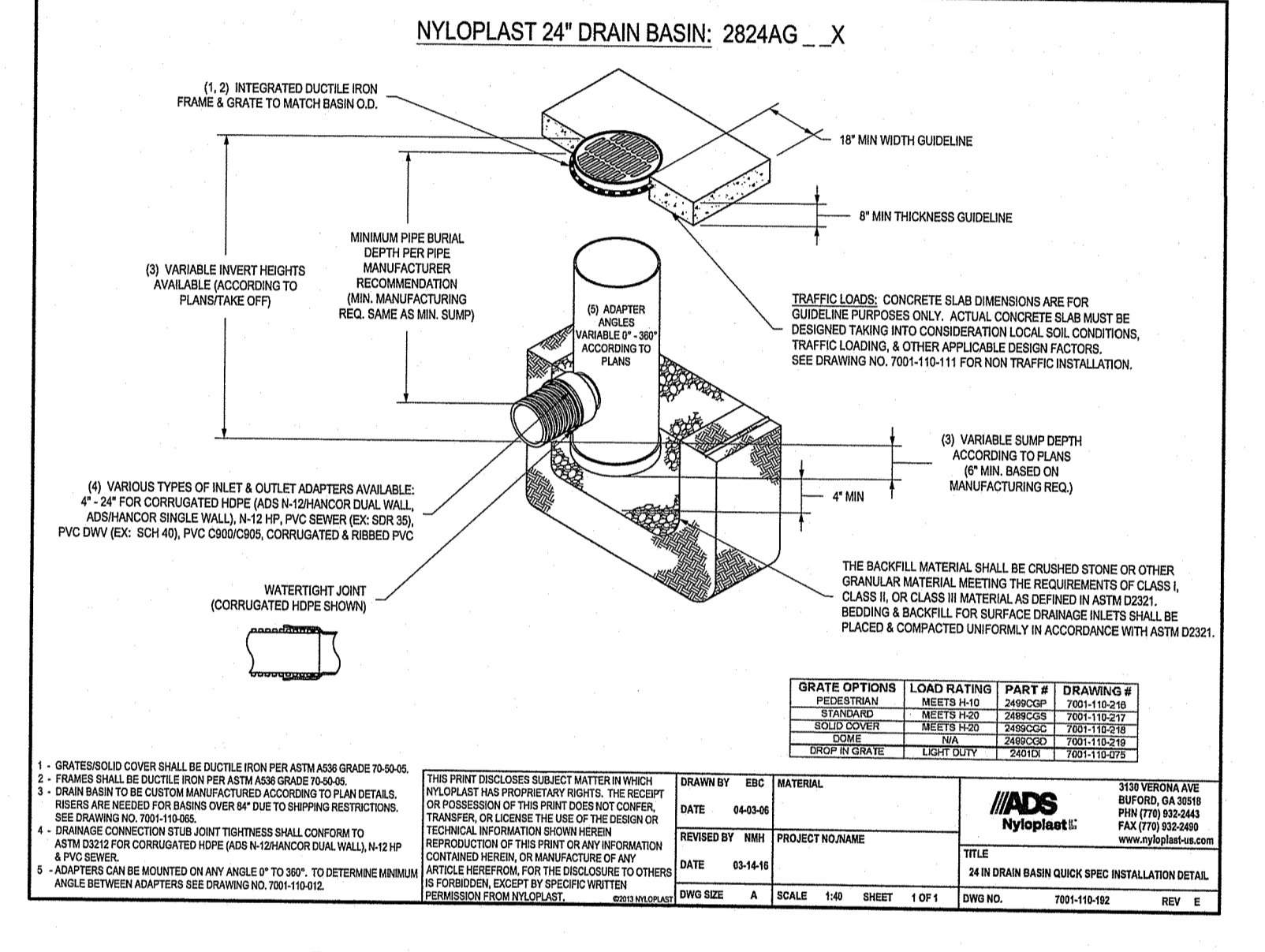
NOTES:
1. CONTRACTOR SHALL PROVIDE SHO PDRAWINGS FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.
2. SHOP DRAWINGS SHALL INDICATE LOCATIONS FOR ALL EXPANSION AND CONTROL JOINTS EQUALLY AND RELEVANTLY SPACED BETWEEN STRUCTURES, NET POSTS, FENCE POSTS, ETC.

14 CEMENT CONCRETE TURF ANCHOR AT NONFILLED SYNTHETIC TURF SYSTEM
NOT TO SCALE



NOTES:
1. CONTRACTOR SHALL PROVIDE SHO PDRAWINGS FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.
2. SHOP DRAWINGS SHALL INDICATE LOCATIONS FOR ALL EXPANSION AND CONTROL JOINTS EQUALLY AND RELEVANTLY SPACED BETWEEN STRUCTURES, NET POSTS, FENCE POSTS, ETC.

15 CEMENT CONCRETE TURF ANCHOR AT INFILLED SYNTHETIC TURF SYSTEM
NOT TO SCALE



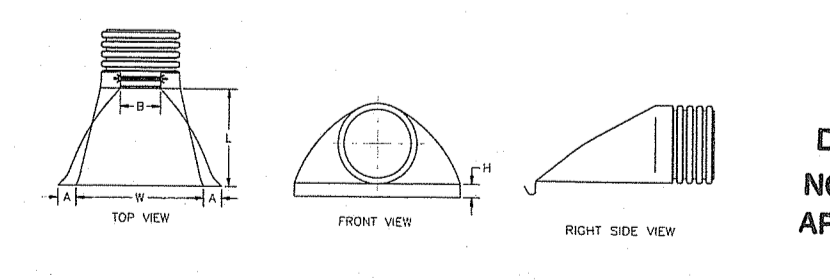
16 NYLOPLAST DRAIN BASIN DETAIL
NOT TO SCALE

ADS, Inc. Drainage Handbook Specifications • 1-48

ADS FLARED END SECTION SPECIFICATION

Scope
This specification describes 12- through 96-inch (300 to 900mm) ADS Flared End Sections for use in culvert and drainage outlet applications.
Requirements
The ADS Flared End Section shall be high density polyethylene meeting ASTM D3350 minimum cell classification 213200C; contact manufacturer for additional cell classification information. When provided, the metal threaded fastening rod shall be stainless steel.
Installation
Installation shall be in accordance with ADS Installation Instructions and with those issued by state or local authorities. Contact your local ADS representative or visit www.ads-corp.com for the latest installation instructions.

Diameter	PIPE DIAMETER, in (mm)					
	12	15	18	24	30	36
A	1.50	1.75	2.00	2.50	3.00	3.50
B	1.50	1.75	2.00	2.50	3.00	3.50
C	1.50	1.75	2.00	2.50	3.00	3.50
D	1.50	1.75	2.00	2.50	3.00	3.50
E	1.50	1.75	2.00	2.50	3.00	3.50
F	1.50	1.75	2.00	2.50	3.00	3.50
G	1.50	1.75	2.00	2.50	3.00	3.50
H	1.50	1.75	2.00	2.50	3.00	3.50
I	1.50	1.75	2.00	2.50	3.00	3.50
J	1.50	1.75	2.00	2.50	3.00	3.50
K	1.50	1.75	2.00	2.50	3.00	3.50
L	1.50	1.75	2.00	2.50	3.00	3.50
M	1.50	1.75	2.00	2.50	3.00	3.50
N	1.50	1.75	2.00	2.50	3.00	3.50
O	1.50	1.75	2.00	2.50	3.00	3.50
P	1.50	1.75	2.00	2.50	3.00	3.50
Q	1.50	1.75	2.00	2.50	3.00	3.50
R	1.50	1.75	2.00	2.50	3.00	3.50
S	1.50	1.75	2.00	2.50	3.00	3.50
T	1.50	1.75	2.00	2.50	3.00	3.50
U	1.50	1.75	2.00	2.50	3.00	3.50
V	1.50	1.75	2.00	2.50	3.00	3.50
W	1.50	1.75	2.00	2.50	3.00	3.50
X	1.50	1.75	2.00	2.50	3.00	3.50
Y	1.50	1.75	2.00	2.50	3.00	3.50
Z	1.50	1.75	2.00	2.50	3.00	3.50



17 FLARED END SECTION DETAIL
NOT TO SCALE

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL
DATED: MAY 09 2023 FILE # 23-0020
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION

Martin D. Semech

Environmental Management
MAR 30 2023
Office of Water Resources

JCE
JOE CASALI ENGINEERING, INC.
1000 W. MAIN STREET, SUITE 100
WARRICK, RI 02888
TEL: 401-944-1300 FAX: 401-944-1313
WWW.JOECASALI.COM

JOSEPH A. CASALI
No. 7250
REGISTERED PROFESSIONAL ENGINEER
CIVIL
3.30.2023

ATHLETICS FIELD IMPROVEMENTS
BRYANT UNIVERSITY
SMITHFIELD, RHODE ISLAND

REVISIONS:

NO.	DATE	DESCRIPTION
1	03/2023	RIDEM RTC

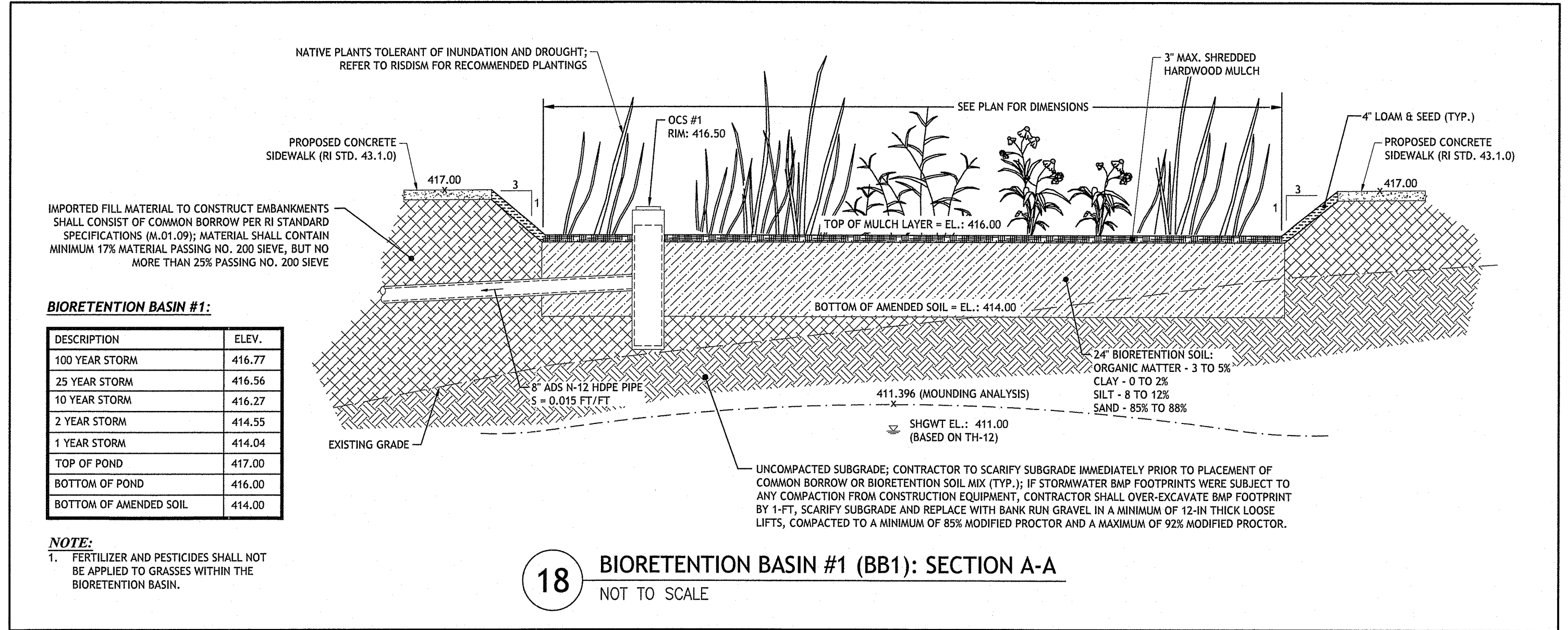
DESIGNED BY: WMLJR
DRAWN BY: SEPSD
CHECKED BY: JAC
DATE: JAN. 2023
PROJECT NO: 09-05bb

PRELIMINARY, NOT FOR CONSTRUCTION

CIVIL DETAILS II

SHEET 9 OF 14

Q:\09-05 Bryant University\09-05bb Field Enabling\Work\ACAD\DWG\Plant\Field Enabling [Permit Set] - [RTCRIDEM].dwg, Mar. 30, 2023 11:11:23am

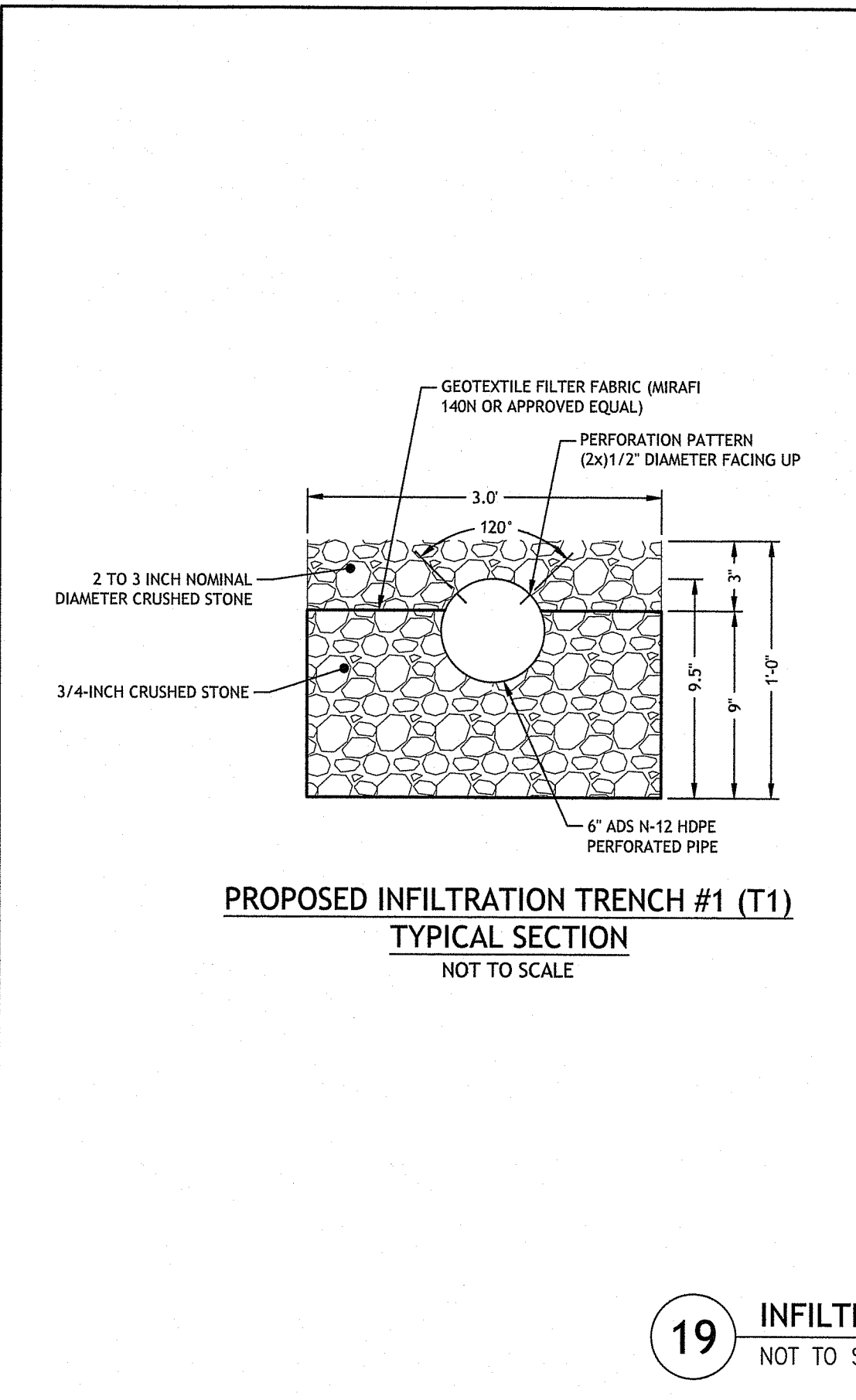


BIORETENTION BASIN #1:

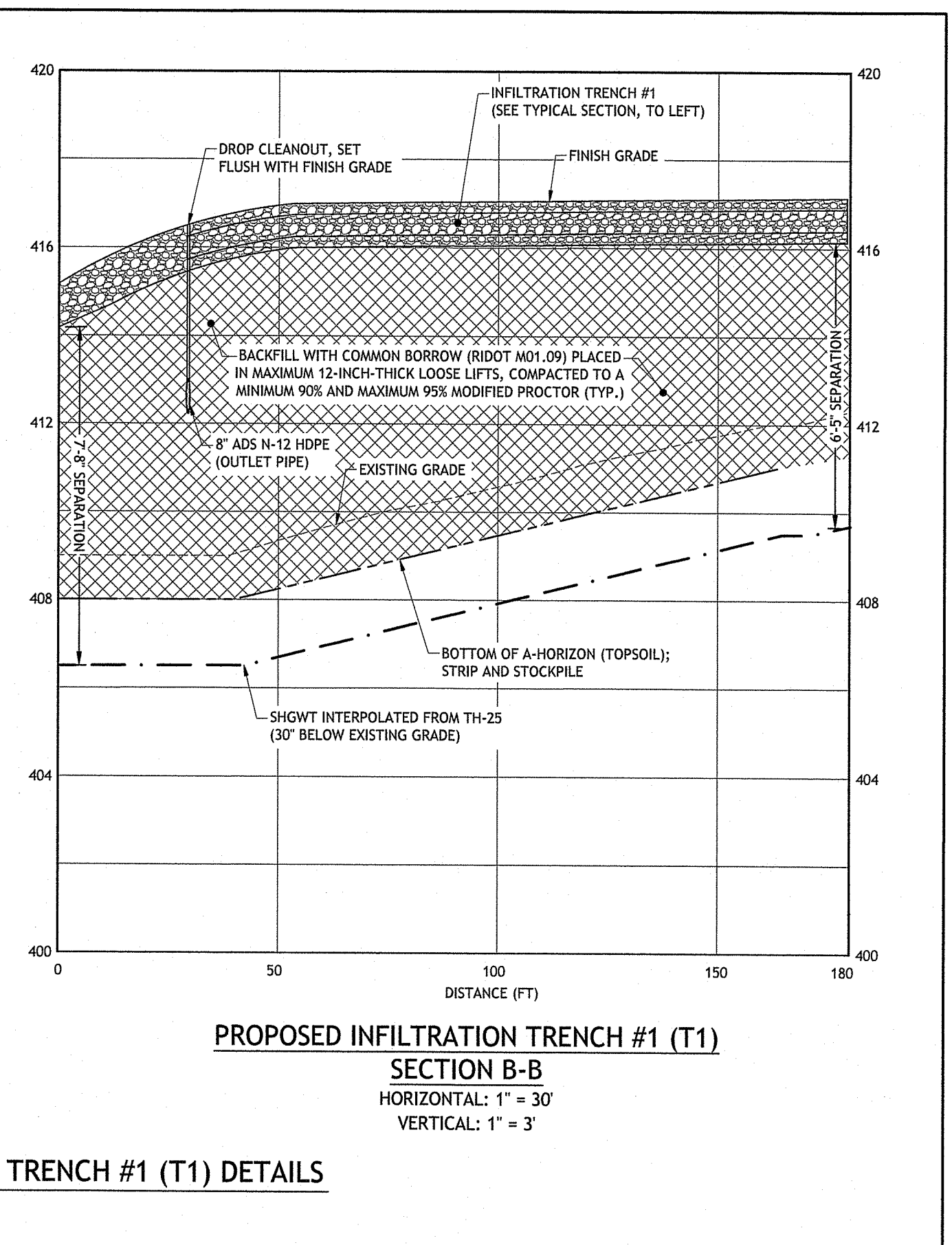
DESCRIPTION	ELEV.
100 YEAR STORM	416.77
25 YEAR STORM	416.56
10 YEAR STORM	416.27
2 YEAR STORM	414.55
1 YEAR STORM	414.04
TOP OF POND	417.00
BOTTOM OF POND	416.00
BOTTOM OF AMENDED SOIL	414.00

NOTE:
 1. FERTILIZER AND PESTICIDES SHALL NOT BE APPLIED TO GRASSES WITHIN THE BIORETENTION BASIN.

18 BIORETENTION BASIN #1 (BB1): SECTION A-A
 NOT TO SCALE

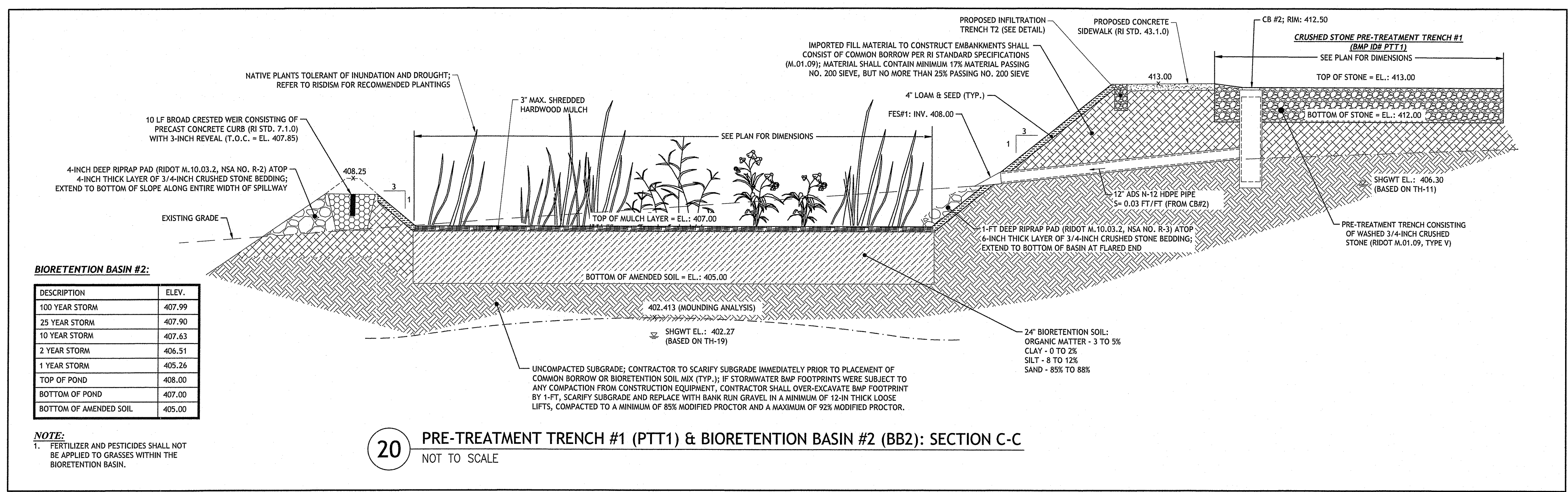


PROPOSED INFILTRATION TRENCH #1 (T1) TYPICAL SECTION
 NOT TO SCALE



PROPOSED INFILTRATION TRENCH #1 (T1) SECTION B-B
 HORIZONTAL: 1" = 30'
 VERTICAL: 1" = 3'

19 INFILTRATION TRENCH #1 (T1) DETAILS
 NOT TO SCALE



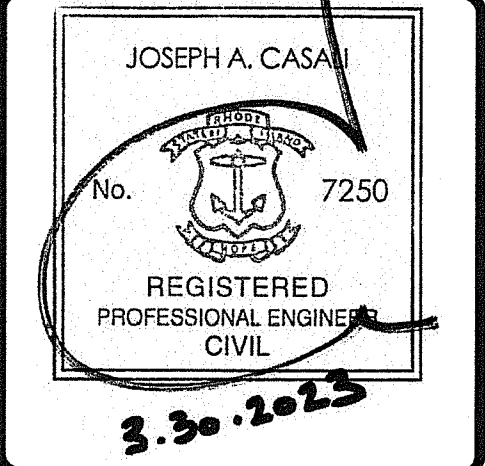
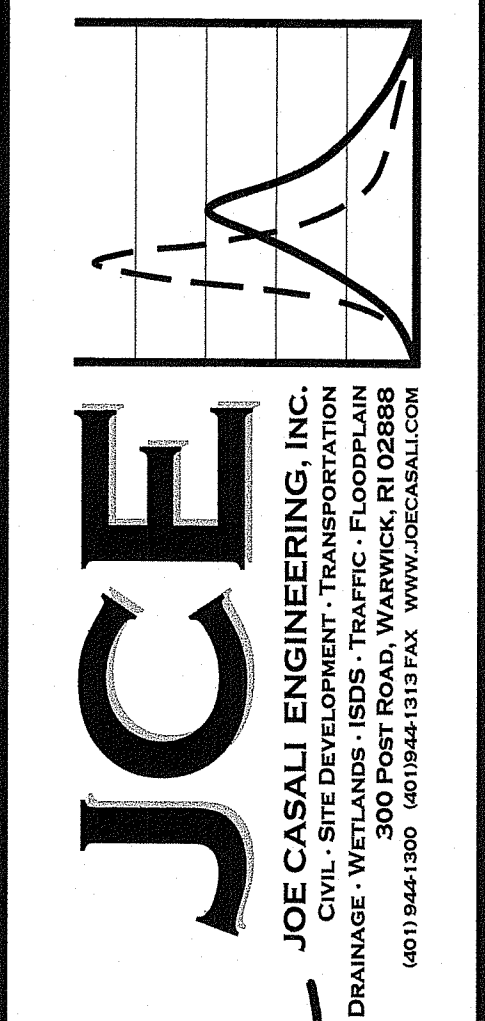
BIORETENTION BASIN #2:

DESCRIPTION	ELEV.
100 YEAR STORM	407.99
25 YEAR STORM	407.90
10 YEAR STORM	407.63
2 YEAR STORM	406.51
1 YEAR STORM	405.26
TOP OF POND	408.00
BOTTOM OF POND	407.00
BOTTOM OF AMENDED SOIL	405.00

NOTE:
 1. FERTILIZER AND PESTICIDES SHALL NOT BE APPLIED TO GRASSES WITHIN THE BIORETENTION BASIN.

20 PRE-TREATMENT TRENCH #1 (PTT1) & BIORETENTION BASIN #2 (BB2): SECTION C-C
 NOT TO SCALE

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
 FRESHWATER WETLANDS PROGRAM
 APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL
 DATED: MAY 09 2023 FILE #: 23-0020
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 APPROVED PLANS MUST BE AT CONSTRUCTION SITE
Martin D. Wemer



ATHLETICS FIELD IMPROVEMENTS
BRYANT UNIVERSITY
SMITHFIELD, RHODE ISLAND

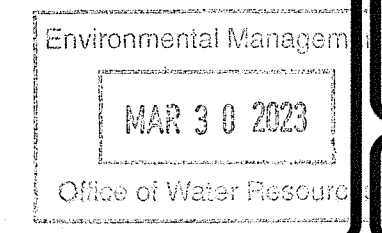
REVISIONS:

NO.	DATE	DESCRIPTION
1	03/2023	RIDEM RTC

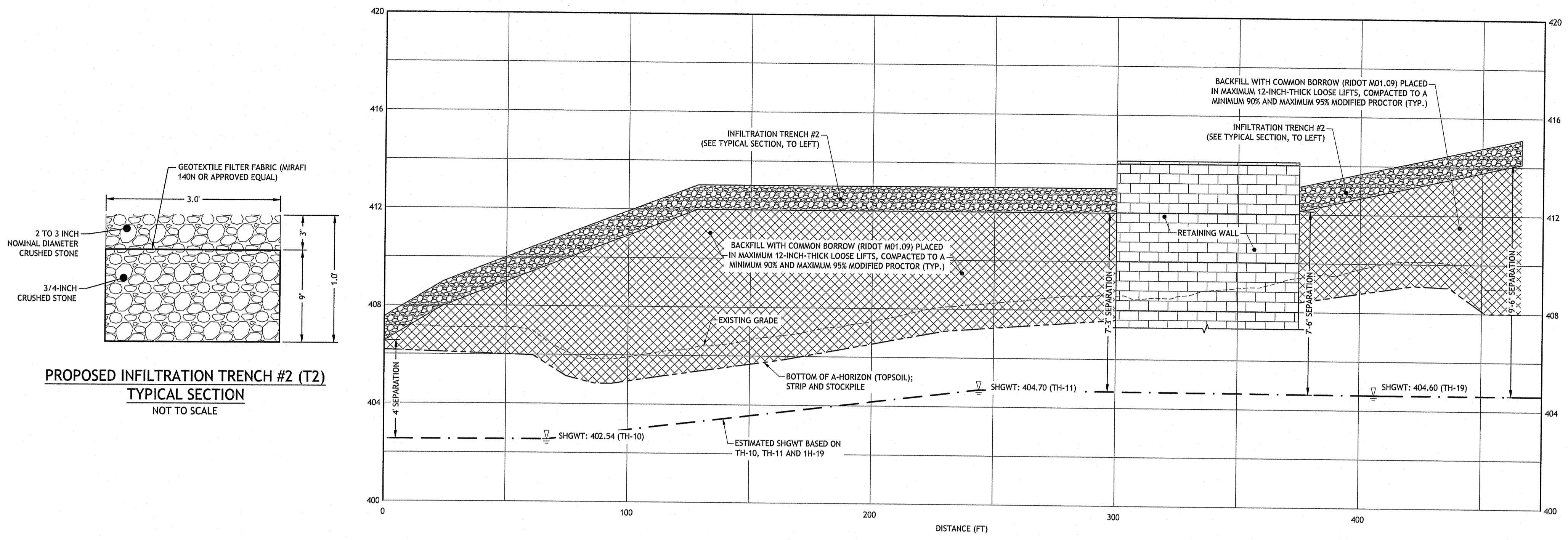
DESIGNED BY: WMLJR
 DRAWN BY: SEP/SD
 CHECKED BY: JAC
 DATE: JAN 2023
 PROJECT NO: 09-05bb

PRELIMINARY, NOT FOR CONSTRUCTION

DRAINAGE DETAILS I
SHEET 10 OF 14

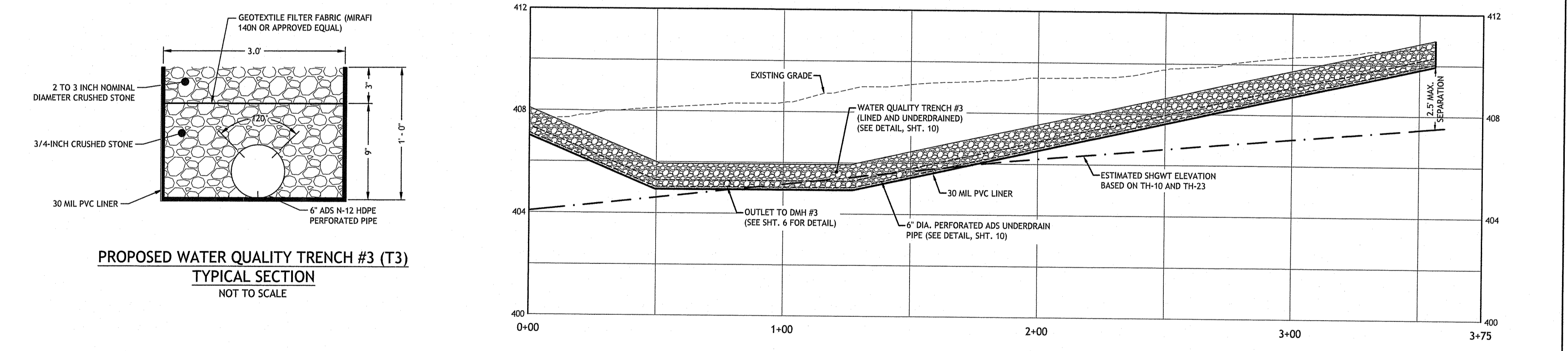


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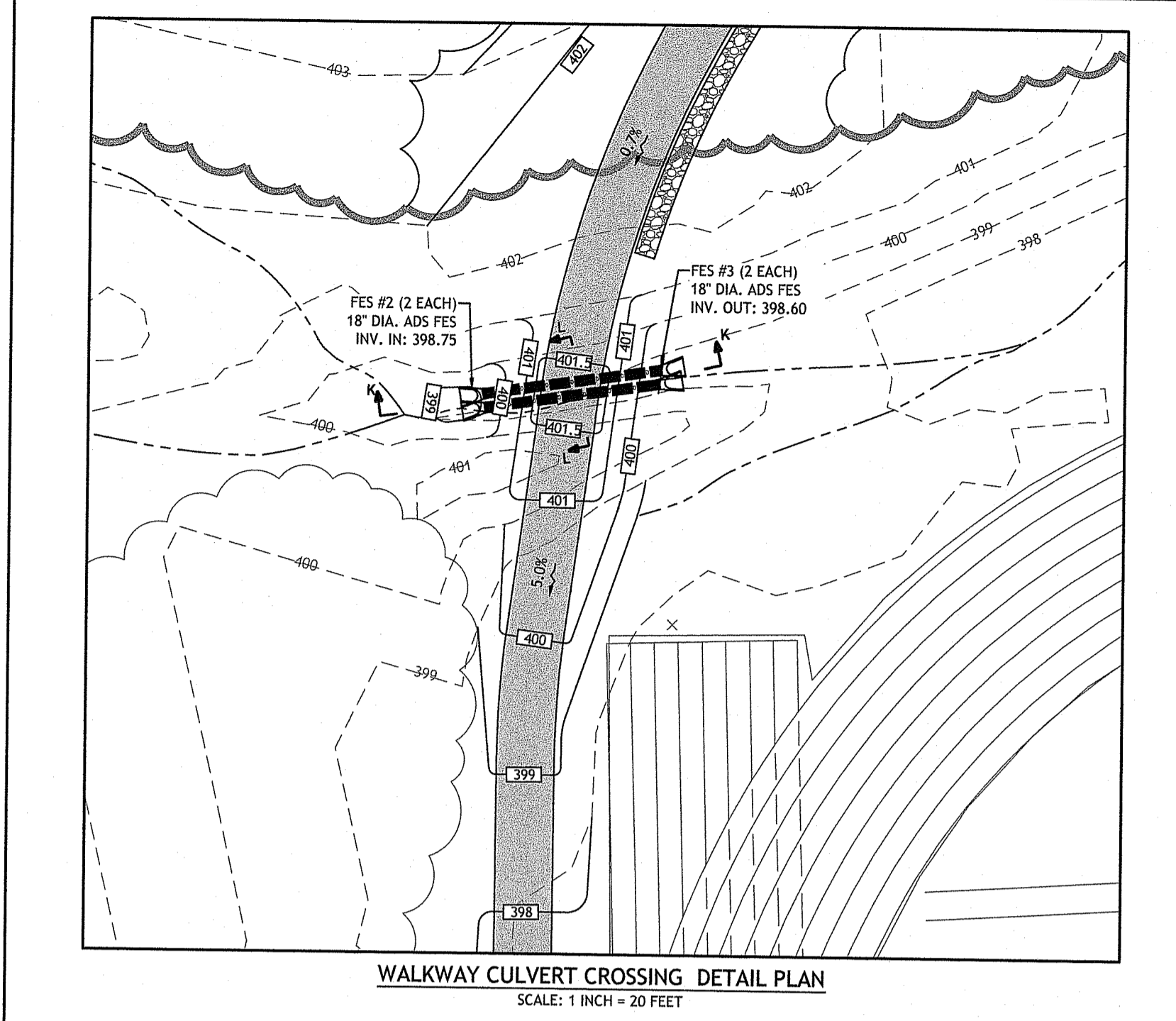
PROPOSED INFILTRATION TRENCH #2 (T2)
SECTION D-D
HORIZONTAL: 1" = 30'
VERTICAL: 1" = 3'

21 INFILTRATION TRENCH #2 (T2) DETAILS
NOT TO SCALE

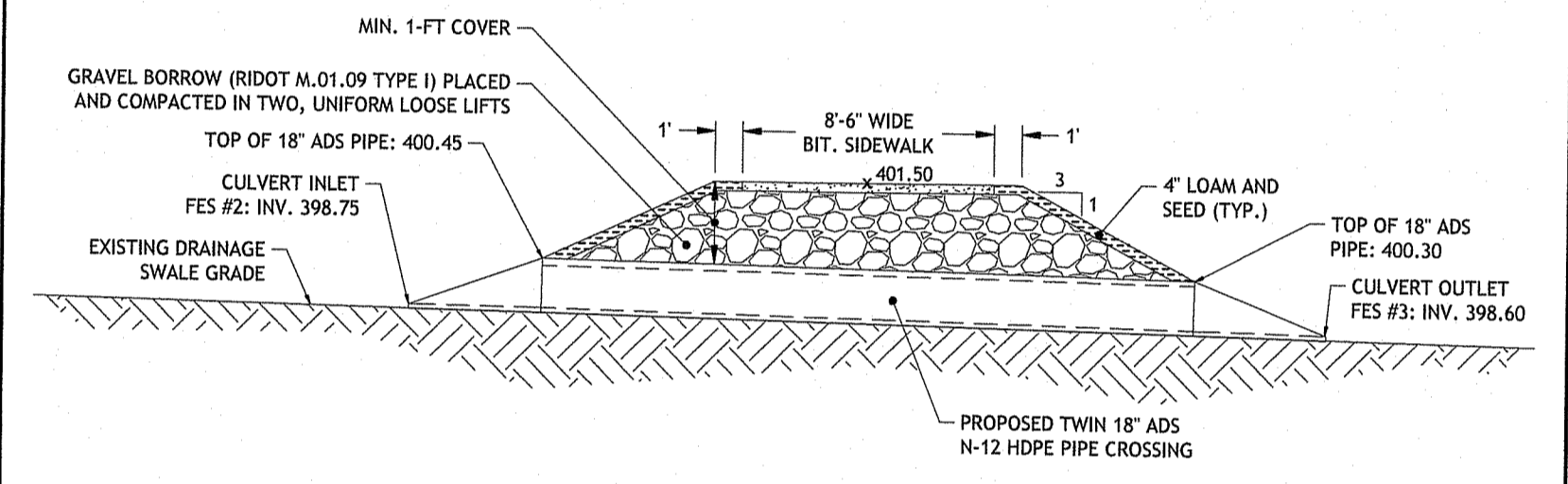


PROPOSED WATER QUALITY TRENCH #3 (BMP ID:T3)
SECTION E-E
HORIZONTAL: 1" = 30'
VERTICAL: 1" = 3'

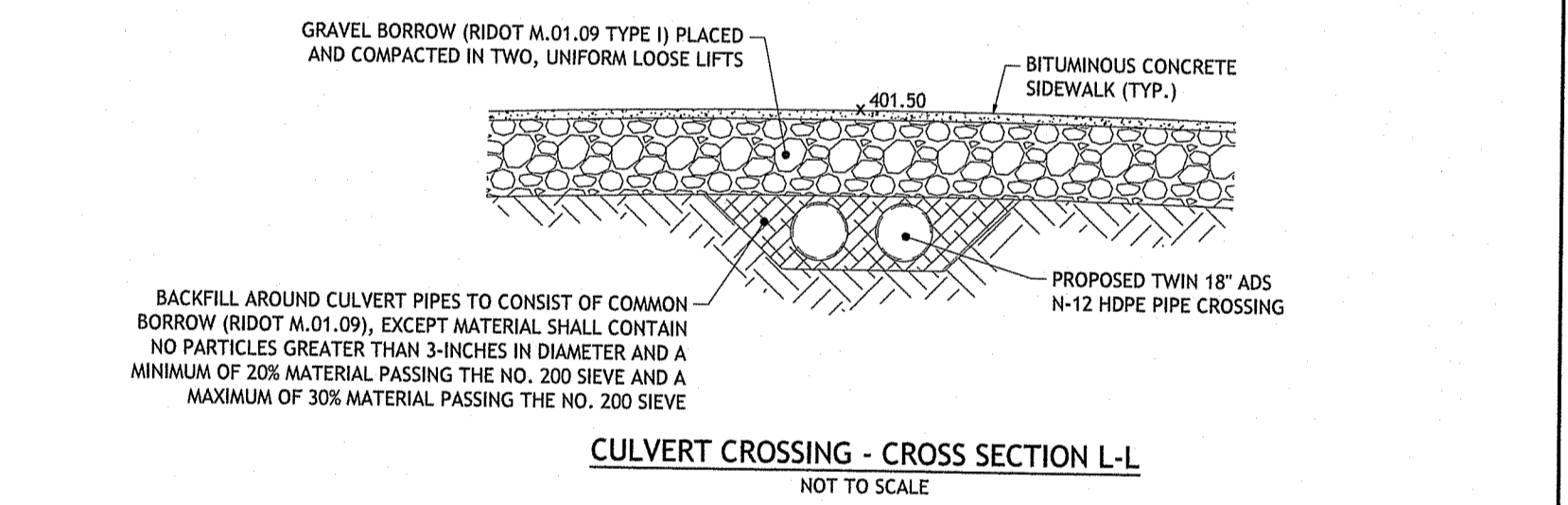
22 WATER QUALITY TRENCH #3 (T3) DETAILS
NOT TO SCALE



WALKWAY CULVERT CROSSING DETAIL PLAN
SCALE: 1 INCH = 20 FEET



CULVERT CROSSING - CROSS SECTION K-K
NOT TO SCALE



CULVERT CROSSING - CROSS SECTION L-L
NOT TO SCALE

23 WALKWAY CULVERT CROSSING DETAIL
NOT TO SCALE

JCE
JOE CASALI ENGINEERING, INC.
INCORPORATION
DRAINAGE, WETLANDS, EROSION CONTROL, SITE DEVELOPMENT, ENVIRONMENTAL
300 POST ROAD, WARWICK, RI 02886
401.944.1900 401.944.1313 FAX WWW.JOECASALI.COM

JOSEPH A. CASALI
No. 7250
REGISTERED PROFESSIONAL ENGINEER
CIVIL
3.30.2023

**ATHLETICS FIELD IMPROVEMENTS
BRYANT UNIVERSITY
SMITHFIELD, RHODE ISLAND**

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS AS
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DATED: MAY 09 2023 FILE # 23-0020
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Justin D. Weneck

REVISIONS:	NO.	DATE	DESCRIPTION
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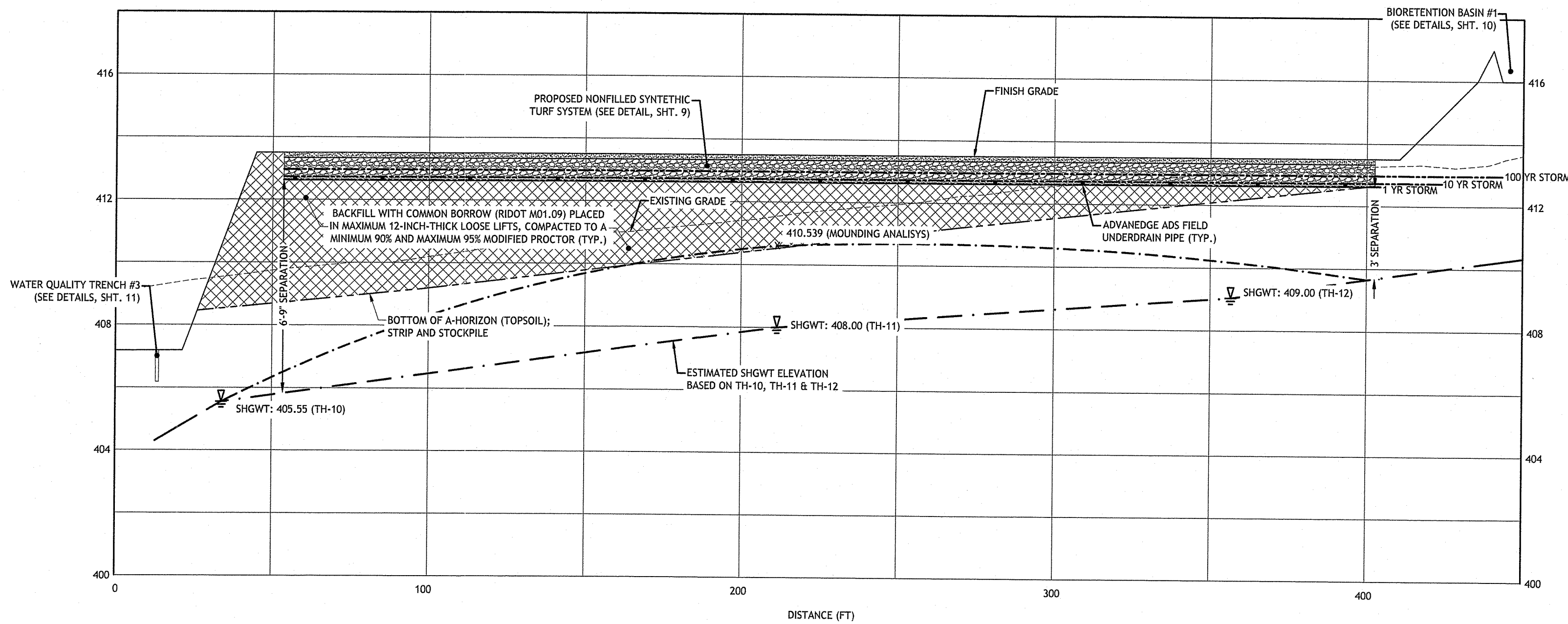
DESIGNED BY:	WMLJR
DRAWN BY:	SEP/SD
CHECKED BY:	JAC
DATE:	JAN, 2023
PROJECT NO.:	09-05bb

PRELIMINARY, NOT FOR CONSTRUCTION

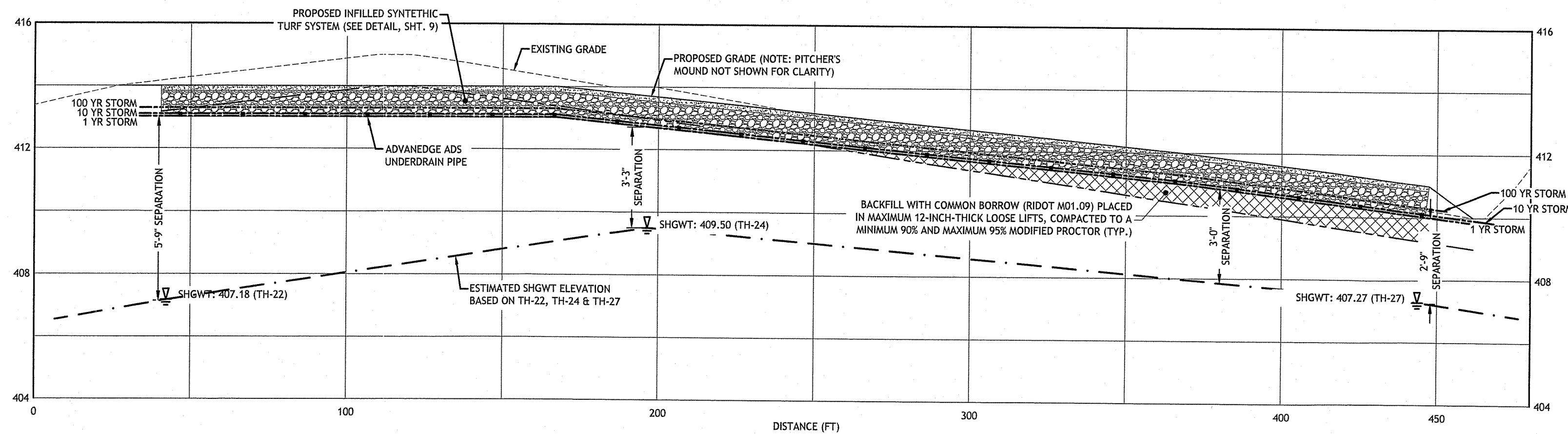
DRAINAGE DETAILS II

SHEET 11 OF 14

Environmental Management
MAR 30 2023
Office of Water Resources

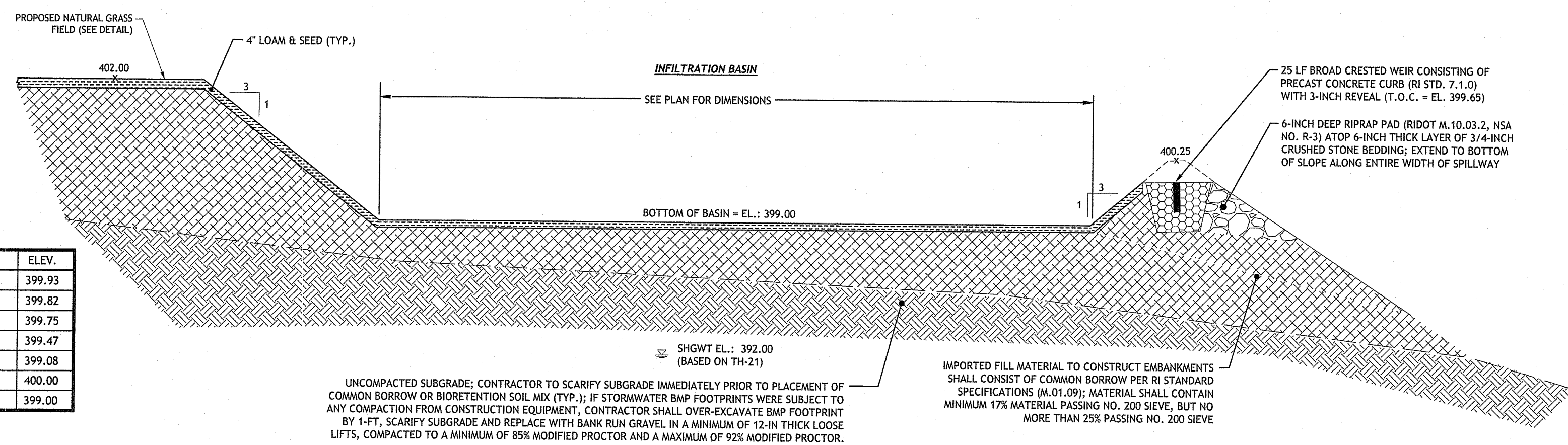


PROPOSED NON-FILLED SYNTHETIC TURF FIELD
COMPETITION FIELD: SECTION F-F
 HORIZONTAL: 1" = 30'
 VERTICAL: 1" = 3'



PROPOSED INFILLED SYNTHETIC TURF FIELD
BASEBALL FIELD: SECTION G-G
 HORIZONTAL: 1" = 30'
 VERTICAL: 1" = 3'

24 SYNTHETIC FIELD SECTIONS
 NOT TO SCALE



INFILTRATION BASIN:

DESCRIPTION	ELEV.
100 YEAR STORM	399.93
25 YEAR STORM	399.82
10 YEAR STORM	399.75
2 YEAR STORM	399.47
1 YEAR STORM	399.08
TOP OF POND	400.00
BOTTOM OF POND	399.00

NOTE:
 1. FERTILIZER AND PESTICIDES SHALL NOT BE APPLIED TO GRASSES WITHIN THE BIORETENTION BASIN.

UNCOMPACTED SUBGRADE; CONTRACTOR TO SCARIFY SUBGRADE IMMEDIATELY PRIOR TO PLACEMENT OF COMMON BORROW OR BIORETENTION SOIL MIX (TYP.); IF STORMWATER BMP FOOTPRINTS WERE SUBJECT TO ANY COMPACTION FROM CONSTRUCTION EQUIPMENT, CONTRACTOR SHALL OVER-EXCAVATE BMP FOOTPRINT BY 1-FT., SCARIFY SUBGRADE AND REPLACE WITH BANK RUN GRAVEL IN A MINIMUM OF 12-IN THICK LOOSE LIFTS, COMPACTED TO A MINIMUM OF 85% MODIFIED PROCTOR AND A MAXIMUM OF 92% MODIFIED PROCTOR.

IMPORTED FILL MATERIAL TO CONSTRUCT EMBANKMENTS SHALL CONSIST OF COMMON BORROW PER RI STANDARD SPECIFICATIONS (M.01.09); MATERIAL SHALL CONTAIN MINIMUM 17% MATERIAL PASSING NO. 200 SIEVE, BUT NO MORE THAN 25% PASSING NO. 200 SIEVE

25 INFILTRATION BASIN (IB1); SECTION H-H
 NOT TO SCALE

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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Justin D. Wencsek

JOE CASALI ENGINEERING, INC.
 CIVIL ENGINEERING
 DRAINAGE • WETLANDS • TRAFFIC • FLOODPLAIN
 300 POST ROAD, WARWICK, RI 02888
 (401) 944-1390 (401) 944-1313 FAX • WWW.JOECASALI.COM

JOSEPH A. CASALI
 No. 7250
 REGISTERED PROFESSIONAL ENGINEER
 CIVIL
 3.30.2023

ATHLETICS FIELD IMPROVEMENTS
BRYANT UNIVERSITY
SMITHFIELD, RHODE ISLAND

REVISIONS:

NO.	DATE	DESCRIPTION
1	03/2023	RIDEM RTC

DESIGNED BY: WMLJR
 DRAWN BY: SEP/SD
 CHECKED BY: JAC
 DATE: JAN. 2023
 PROJECT NO: 09-0566

PRELIMINARY, NOT FOR CONSTRUCTION

DRAINAGE DETAILS III

SHEET 12 OF 14

Environmental Management
 MAR 30 2023
 Office of Water Resources

Q:\09-05 Bryant University\09-05bb Field Enabling Work\CAD\Bryant Field Enabling [Permit Set] - [RTCRIDEAM].dwg, Mar. 30, 2023 11:11am

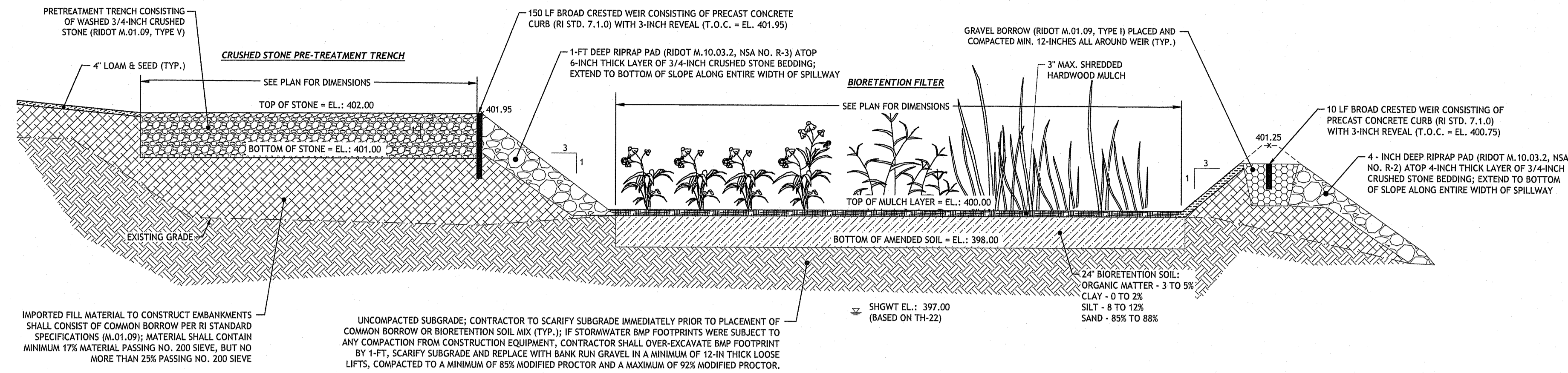
PRE-TREATMENT TRENCH:

DESCRIPTION	ELEV.
100 YEAR STORM	401.99
25 YEAR STORM	401.98
10 YEAR STORM	401.97
2 YEAR STORM	401.96
1 YEAR STORM	401.96
TOP OF POND	402.00
BOTTOM OF TRENCH	401.00

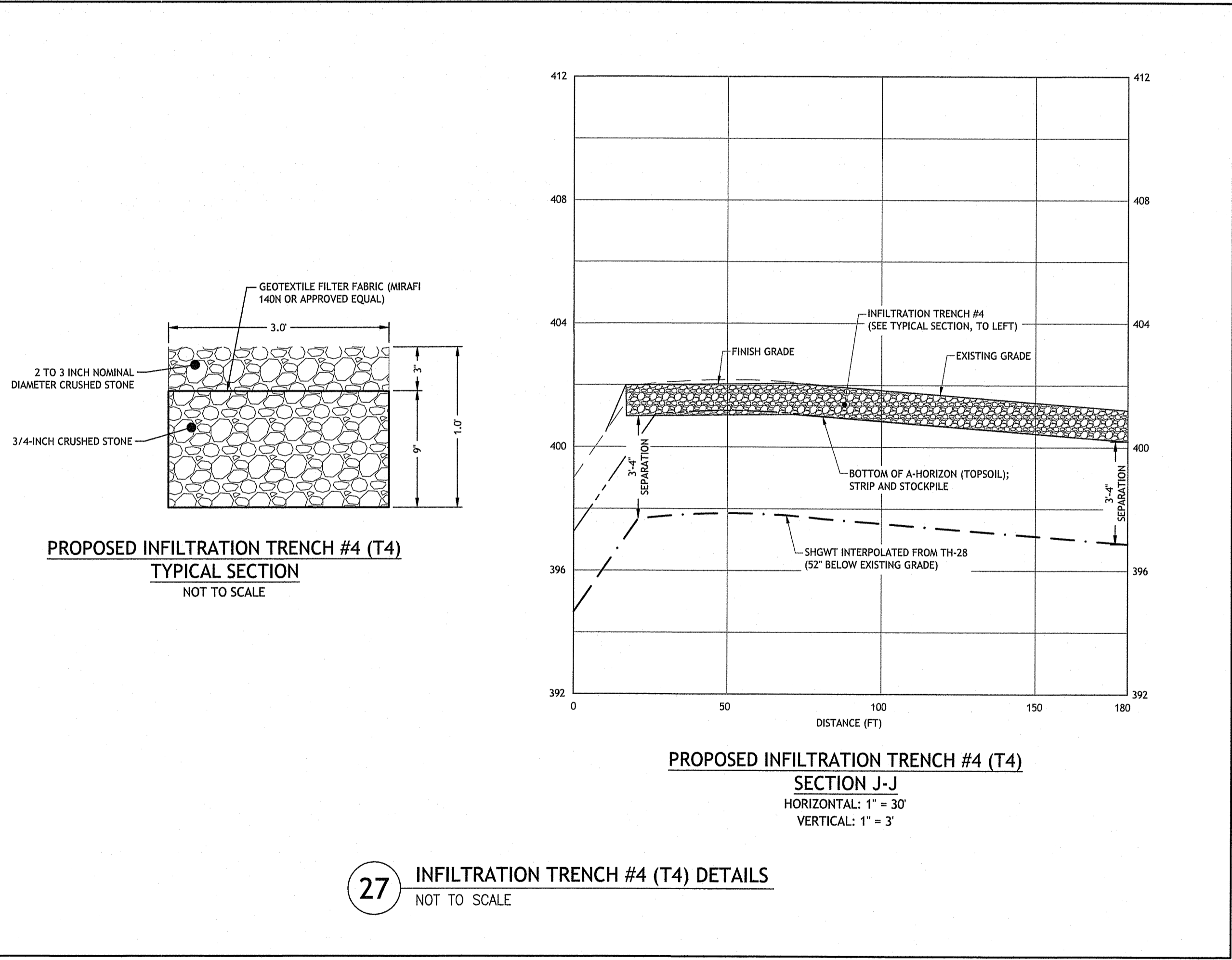
BIRETENTION BASIN #4:

DESCRIPTION	ELEV.
100 YEAR STORM	400.97
25 YEAR STORM	400.77
10 YEAR STORM	400.08
2 YEAR STORM	391.84
1 YEAR STORM	398.74
TOP OF POND	401.00
BOTTOM OF POND	400.00
BOTTOM OF AMENDED SOIL	398.00

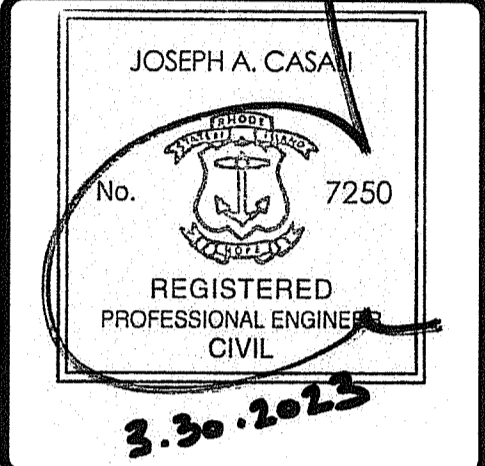
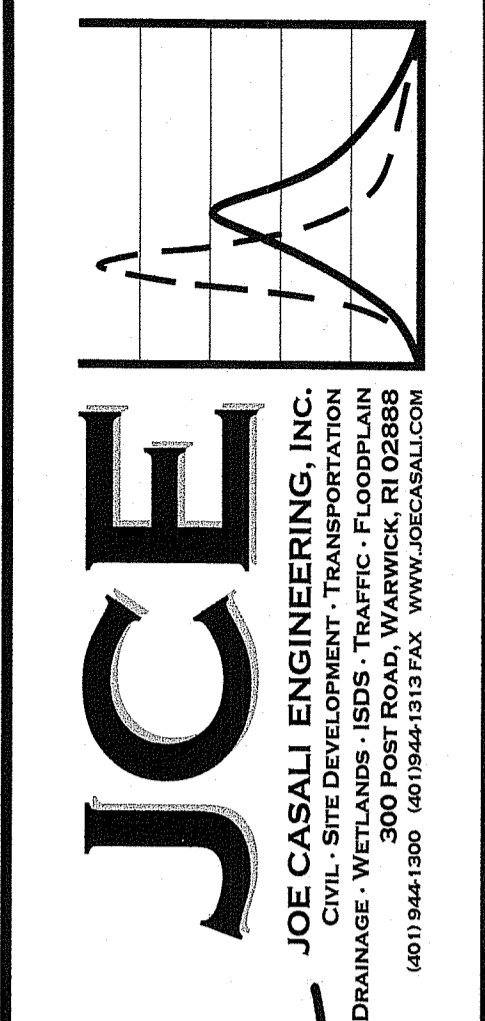
NOTE:
1. FERTILIZER AND PESTICIDES SHALL NOT BE APPLIED TO GRASSES WITHIN THE BIRETENTION BASIN.



26 PRE-TREATMENT STONE TRENCH (PTT2) & BIRETENTION BASIN #3 (BB3): SECTION I-I
NOT TO SCALE



27 INFILTRATION TRENCH #4 (T4) DETAILS
NOT TO SCALE



ATHLETICS FIELD IMPROVEMENTS
BRYANT UNIVERSITY
SMITHFIELD, RHODE ISLAND

REVISIONS:

NO.	DATE	DESCRIPTION
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 OFFICE OF WATER RESOURCES
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Martin B. Wenczek

DESIGNED BY:	WMLJR
DRAWN BY:	SEPSID
CHECKED BY:	JAC
DATE:	JAN 2023
PROJECT NO.:	09-055b

PRELIMINARY, NOT FOR CONSTRUCTION

DRAINAGE DETAILS IV

Environmental Management
 MAR 30 2023
 Office of Water Resources

SHEET 13 OF 14

Q:\09-05 Bryant University\09-055b Field Enabling Work\ACAD\Bryant Field Enabling [Permits Set] - [RTCRIDEM].dwg Mar. 30, 2023 11:11 am

Q:\09-05 Bryant University\09-05b Bryant Field Enabling (Permit Set) - [RTCRIDEM].dwg, Mar. 30, 2023 11:11am

TH-10 Subsurface Exploration Log Sheet. Includes title block, data table with columns for Depth, Sample Type, Remarks, and Laboratory/Field Conductivity. Project: Bryant Field Enabling Work.

TH-11 Subsurface Exploration Log Sheet. Includes title block, data table with columns for Depth, Sample Type, Remarks, and Laboratory/Field Conductivity. Project: Bryant Field Enabling Work.

TH-12 Subsurface Exploration Log Sheet. Includes title block, data table with columns for Depth, Sample Type, Remarks, and Laboratory/Field Conductivity. Project: Bryant Field Enabling Work.

TH-13 Subsurface Exploration Log Sheet. Includes title block, data table with columns for Depth, Sample Type, Remarks, and Laboratory/Field Conductivity. Project: Bryant Field Enabling Work.

TH-14 Subsurface Exploration Log Sheet. Includes title block, data table with columns for Depth, Sample Type, Remarks, and Laboratory/Field Conductivity. Project: Bryant Field Enabling Work.

TH-15 Subsurface Exploration Log Sheet. Includes title block, data table with columns for Depth, Sample Type, Remarks, and Laboratory/Field Conductivity. Project: Bryant Field Enabling Work.

TH-16 Subsurface Exploration Log Sheet. Includes title block, data table with columns for Depth, Sample Type, Remarks, and Laboratory/Field Conductivity. Project: Bryant Field Enabling Work.

TH-17 Subsurface Exploration Log Sheet. Includes title block, data table with columns for Depth, Sample Type, Remarks, and Laboratory/Field Conductivity. Project: Bryant Field Enabling Work.

TH-18 Subsurface Exploration Log Sheet. Includes title block, data table with columns for Depth, Sample Type, Remarks, and Laboratory/Field Conductivity. Project: Bryant Field Enabling Work.

TH-19 Subsurface Exploration Log Sheet. Includes title block, data table with columns for Depth, Sample Type, Remarks, and Laboratory/Field Conductivity. Project: Bryant Field Enabling Work.

TH-20 Subsurface Exploration Log Sheet. Includes title block, data table with columns for Depth, Sample Type, Remarks, and Laboratory/Field Conductivity. Project: Bryant Field Enabling Work.

TH-21 Subsurface Exploration Log Sheet. Includes title block, data table with columns for Depth, Sample Type, Remarks, and Laboratory/Field Conductivity. Project: Bryant Field Enabling Work.

TH-22 Subsurface Exploration Log Sheet. Includes title block, data table with columns for Depth, Sample Type, Remarks, and Laboratory/Field Conductivity. Project: Bryant Field Enabling Work.

TH-23 Subsurface Exploration Log Sheet. Includes title block, data table with columns for Depth, Sample Type, Remarks, and Laboratory/Field Conductivity. Project: Bryant Field Enabling Work.

TH-24 Subsurface Exploration Log Sheet. Includes title block, data table with columns for Depth, Sample Type, Remarks, and Laboratory/Field Conductivity. Project: Bryant Field Enabling Work.

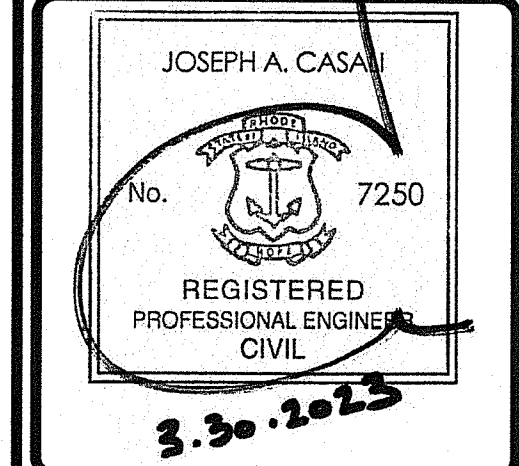
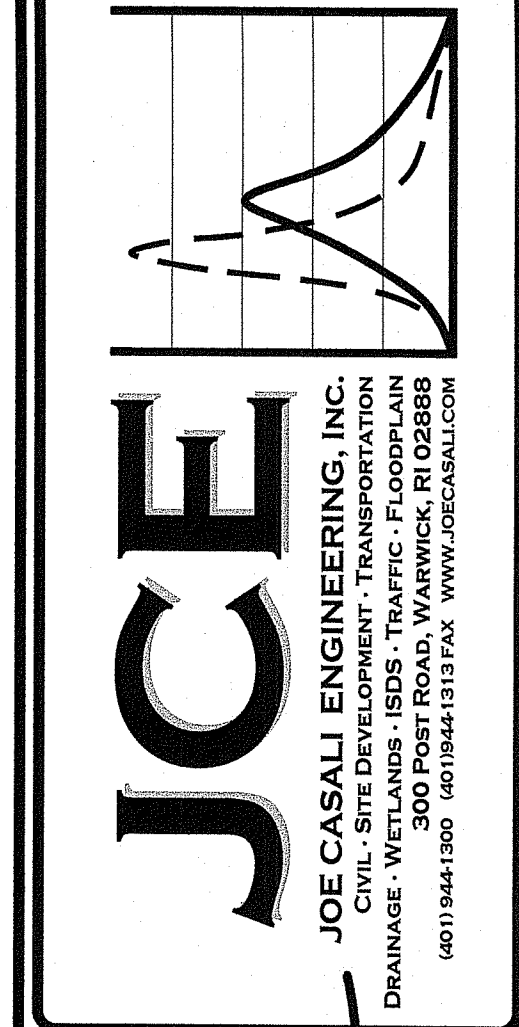
TH-25 Subsurface Exploration Log Sheet. Includes title block, data table with columns for Depth, Sample Type, Remarks, and Laboratory/Field Conductivity. Project: Bryant Field Enabling Work.

TH-26 Subsurface Exploration Log Sheet. Includes title block, data table with columns for Depth, Sample Type, Remarks, and Laboratory/Field Conductivity. Project: Bryant Field Enabling Work.

TH-27 Subsurface Exploration Log Sheet. Includes title block, data table with columns for Depth, Sample Type, Remarks, and Laboratory/Field Conductivity. Project: Bryant Field Enabling Work.

TH-28 Subsurface Exploration Log Sheet. Includes title block, data table with columns for Depth, Sample Type, Remarks, and Laboratory/Field Conductivity. Project: Bryant Field Enabling Work.

TH-29 Subsurface Exploration Log Sheet. Includes title block, data table with columns for Depth, Sample Type, Remarks, and Laboratory/Field Conductivity. Project: Bryant Field Enabling Work.



ATHLETICS FIELD IMPROVEMENTS
BRYANT UNIVERSITY
SMITHFIELD, RHODE ISLAND

REVISIONS table with columns: NO., DATE, DESCRIPTION. Revision 1: 03/20/23, RIDEM RTC.

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL
DATED: MAY 09 2023 FILE #: 23-0020
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE
Yantia B. Wenzel

DESIGNED BY: WMLJR
DRAWN BY: SEP/SD
CHECKED BY: JAC
DATE: JAN 2023
PROJECT NO: 09-05b

PRELIMINARY, NOT FOR CONSTRUCTION

SUBSURFACE EXPLORATION LOGS

SHEET 14 OF 14

Environmental Management
MAR 30 2023
Office of Water Resources