

Site Plans for

THE RESIDENCE AT LIMEROCK

A MAJOR LAND DEVELOPMENT (3 PHASES)

DOUGLAS PIKE, HARRIS ROAD & LIMEROCK ROAD
SMITHFIELD, RHODE ISLAND
AP 45, LOTS 43A, 181, 182 & 183

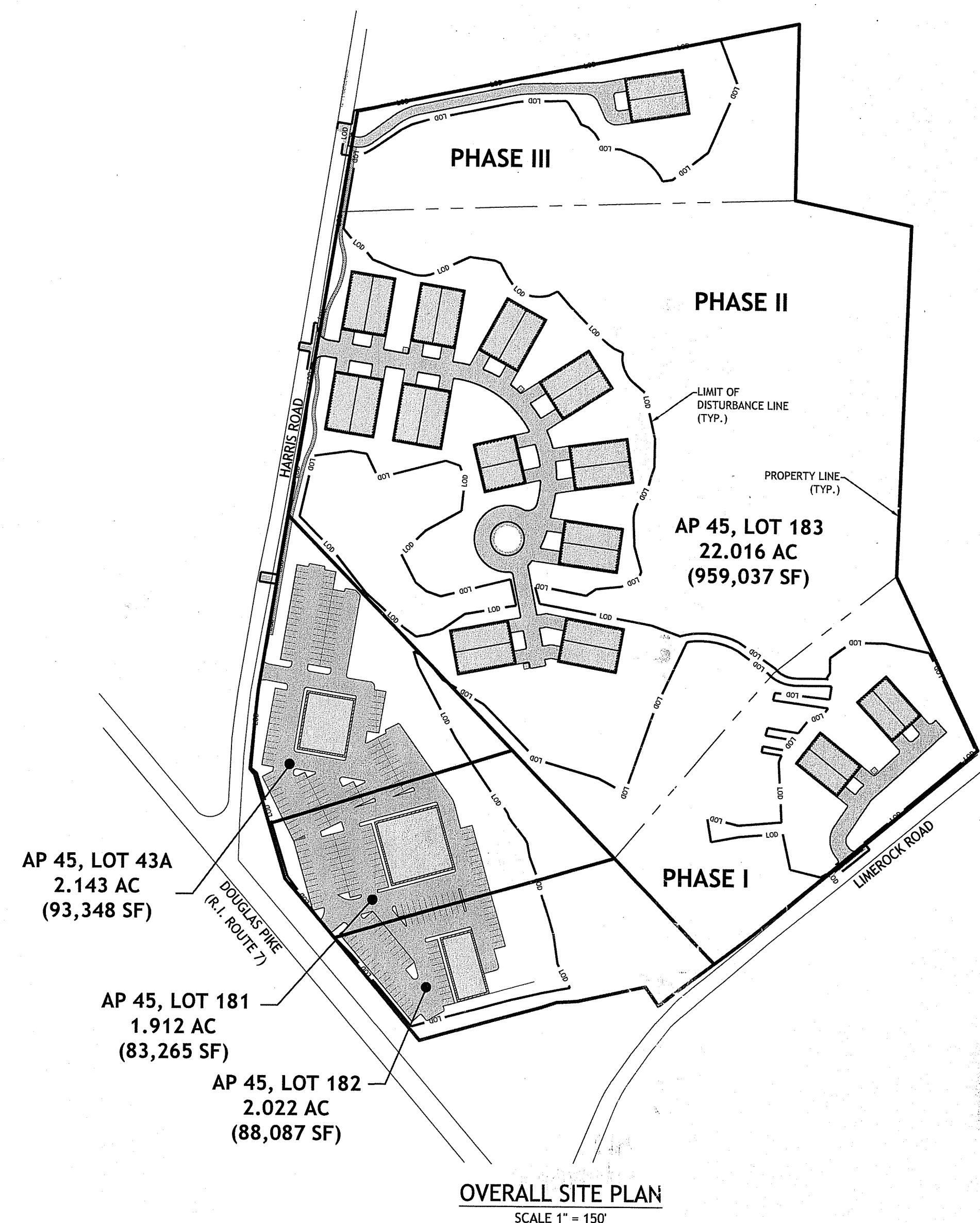
ZONING DISTRICTS:
COMMERCIAL (C) & MULTI-FAMILY, RESIDENTIAL (R-20M)

APPROVALS:

SMITHFIELD PLANNING DEPARTMENT - MASTER PLAN APPROVAL (OCTOBER 30, 2014)
SMITHFIELD TOWN COUNCIL - ZONE CHANGE & COMPREHENSIVE PLAN AMENDMENTS (APRIL 7, 2015)

FILINGS:

SMITHFIELD PLANNING DEPARTMENT - PRELIMINARY PLAN SUBMISSION FOR A MAJOR LAND DEVELOPMENT
SMITHFIELD WATER DEPARTMENT
SMITHFIELD ENGINEERING DEPARTMENT - SOIL EROSION PERMIT
SMITHFIELD SEWER AUTHORITY
RHODE ISLAND DEPARTMENT OF TRANSPORTATION - PHYSICAL ALTERATION PERMIT
RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT - PRELIMINARY DETERMINATION APPLICATION (#14-0174)



DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED JAN 22 2016 FILE # 14-0174
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE
Charles A. Hester

JOSEPH A. CASALI
No. 7250
REGISTERED PROFESSIONAL ENGINEER
CIVIL
1.11.16

THE RESIDENCE AT LIMEROCK
SMITHFIELD, RHODE ISLAND
AP 45, LOTS 43A, 181, 182 & 183

REVISIONS:

NO.	DATE	DESCRIPTION

DESIGNED BY: JWH
DRAWN BY: JMM
CHECKED BY: JAC
DATE: DECEMBER 2015
PROJECT NO: 13-14b

PRELIMINARY, NOT FOR CONSTRUCTION

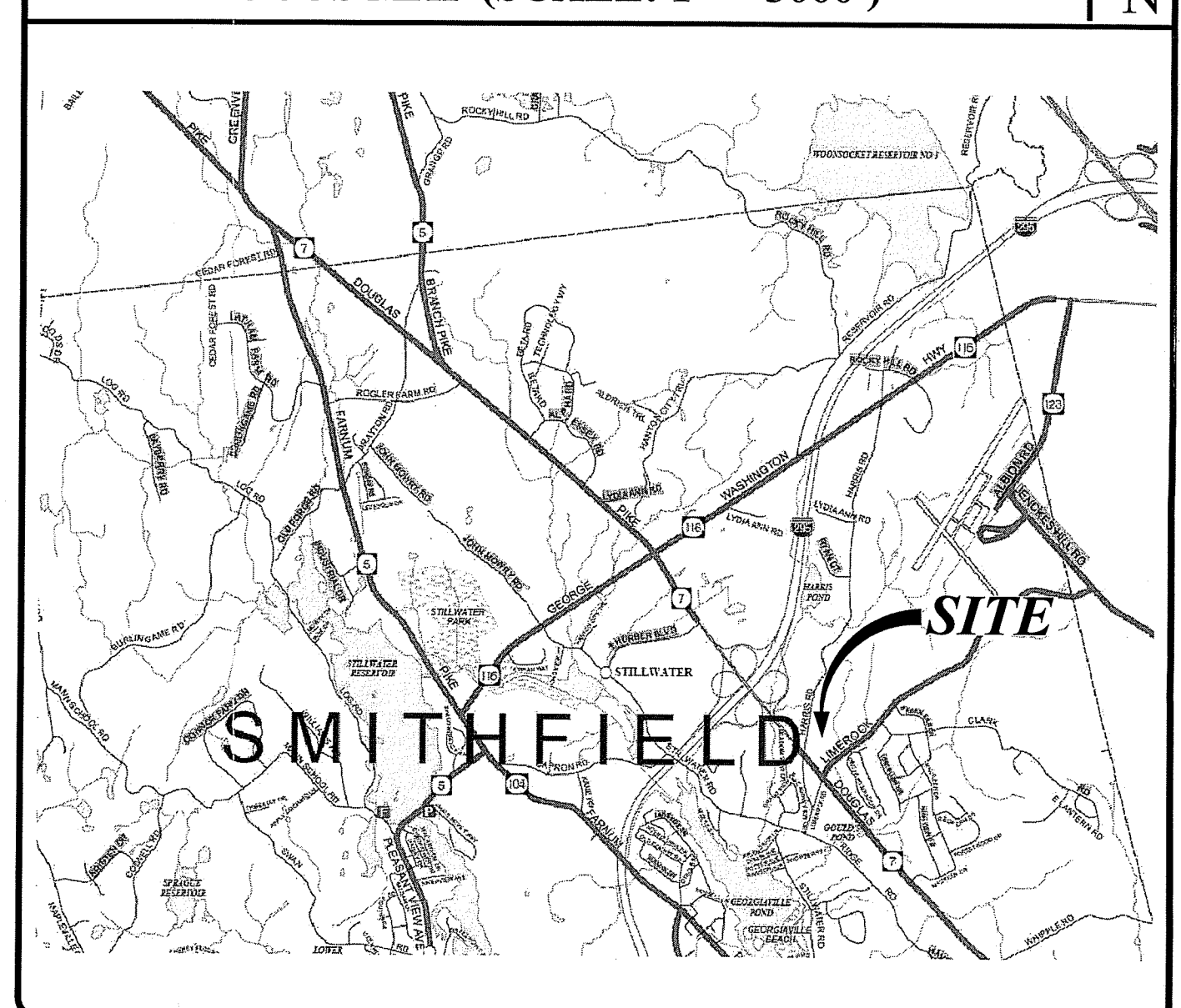
COVER SHEET

SHEET 1 OF 17

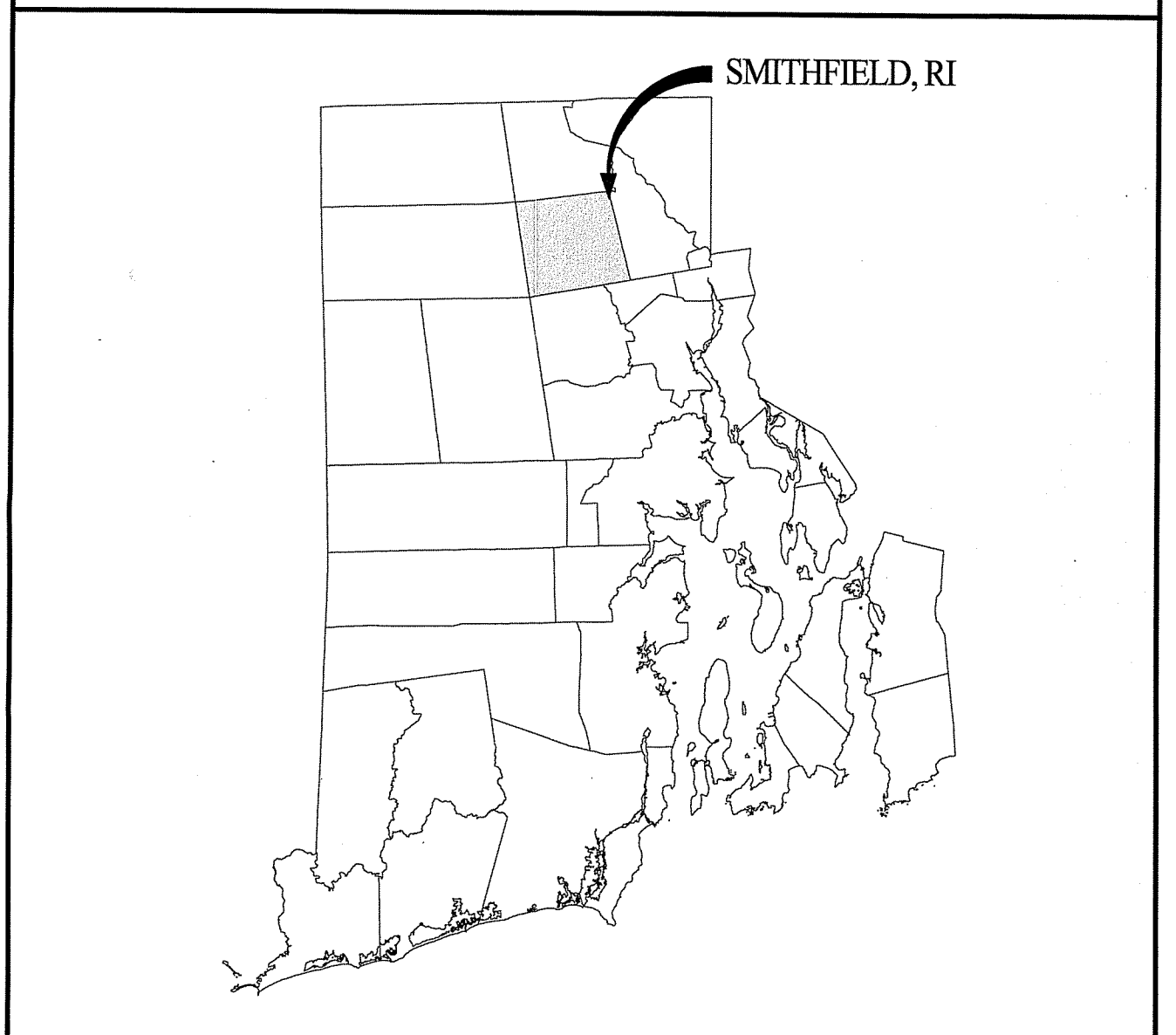
PROJECT TEAM

OWNER /APPLICANT:	A & R ONE, LLC 10 POND VIEW COURT SMITHFIELD, RI 02917
CIVIL ENGINEER:	JOE CASALI ENGINEERING, INC. 300 POST ROAD WARWICK, RI 02888 PHONE: 401-944-1300 FAX: 401-944-1313
SURVEYOR:	WATERMAN ENGINEERING COMPANY 46 SUTTON AVENUE EAST PROVIDENCE, RI 02920 PHONE: 401-438-5775 FAX: 401-438-5773
WETLANDS BIOLOGISTS:	NATURAL RESOURCE SERVICE, INC. P.O. BOX 311 190 TINKHAM LANE HARRISVILLE, RI 02830 PHONE: 401-568-7390 FAX: 401-568-7490
LANDSCAPE ARCHITECT:	DIANE C. SOULE & ASSOCIATES, ASLA 422 FARNUM PIKE SMITHFIELD, RI 02917 PHONE: 401-231-0736

LOCUS MAP (SCALE: 1" = 3000')



STATE WIDE MAP



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Q:\13-14 Anthony Rongione\13-14b Condo Development\CAD\2014-08-21 Condo\PlanSet\RIDEA_PLANSET.dwg Jan. 11, 2016 1:31pm

- GENERAL NOTES:**
- CONTRACTOR SHALL NOTIFY "DIGSAFE" (811) AT LEAST 72 HOURS BEFORE EXCAVATING.
 - CLASS I PROPERTY LINE AND CLASS III TOPOGRAPHIC SURVEY PROVIDED BY WATERMAN ENGINEERING COMPANY., 46 SUTTON AVENUE, EAST PROVIDENCE, RI IN JULY 2013 AND STAMPED AUGUST 26 2015.
 - 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.
 - 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, PANELS 167, 169, 188, 186 OF 451, MAP NUMBERS 44007C0167H, 44007C0169H, 44007C0188H, EFFECTIVE DATE OCTOBER 2, 2009. MAP NUMBER 44007C0186G, EFFECTIVE MARCH 2, 2009
 - THERE ARE NO KNOWN HIGH HAZARD AREAS ON THE PROJECT SITE.
 - SOILS EXISTING ON THE SITE CONSIST OF CANTON AND CHARLTON (ChC), RIDGEBURY (Re), WOODBRIDGE (WhB) AND WOODBRIDGE (WhA).
 - TEST PIT EVALUATIONS WERE CONDUCTED BY NATURAL RESOURCES, INC. IN OCTOBER 2013 AND ARE AVAILABLE TO THE CONTRACTOR UPON REQUEST. ESTIMATED SEASONAL HIGH GROUND WATER ELEVATIONS ARE PROVIDED ON THE DETAIL SHEETS.
 - THERE ARE NO KNOWN EASEMENTS WITHIN THE PROJECT AREA.
 - TELEPHONE, ELECTRIC, SEWER, GAS, AND WATER SERVICES ARE ALL AVAILABLE FROM WITHIN THE CONDOMINIUM ASSOCIATION.

- SITE NOTES:**
- CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND LEGALLY DISPOSING (R&D) OF ALL MATERIALS INDICATED ON THE PLANS.
 - 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.
 - STOCKPILES OF EARTH MATERIALS SHALL NOT BE LOCATED ADJACENT TO DRAINAGE STRUCTURES.
 - ALL DISTURBED AREAS OUTSIDE OF THE PAVED AREAS WILL RECEIVE A MINIMUM OF 6" OF LOAM AND SEED.
 - 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 ENGINEER'S ATTENTION PRIOR TO CONSTRUCTION FOR REVIEW. NO WORK SHALL PROCEED UNTIL AUTHORIZED BY THE ENGINEER.
 - 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.
 - 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.
 - 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.
 - WHERE NECESSARY TO REMOVE CURBS, CATCH BASINS OR DRAINS TO COMPLETE WORK, THE CONTRACTOR SHALL REPLACE SUCH ITEMS TO THE SATISFACTION OF THE OWNER AT NO ADDITIONAL COST TO THE OWNER.
 - ANY EXISTING PIPE OR UTILITY DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED IMMEDIATELY BY THE CONTRACTOR AT NO COST TO THE OWNER.
 - 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.
 - THE TOPS OF ALL VALVE BOXES AND CURB BOXES SHALL BE FLUSH WITH GROUND OR PAVEMENT SURFACE LEVEL AND PLUMB, UNLESS OTHERWISE DIRECTED.
 - ROADWAYS SHALL BE LEFT PASSABLE AT ALL TIMES. CLOSURE OF ROADWAY IS NOT PERMITTED.
 - WATER SERVICE SHALL BE MAINTAINED AT ALL TIMES.
 - ALL LEDGE TO BE REMOVED BY MECHANICAL MEANS.
 - 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.
 - REFER TO PLUMBING PLANS FOR CONTINUATION OF ALL UTILITIES WITHIN 5' (FIVE) FEET OF THE BUILDING.
 - 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:**
- 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.
 - 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.
 - THE PRIVATE VEHICLES OF CONSTRUCTION WORKERS SHALL NOT BE PARKED IN THE STATE OR TOWN RIGHT-OF-WAY.
 - 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.
 - SIGN MOUNTINGS SHALL BE IN ACCORDANCE WITH THE RIDOT SPECIFICATIONS FOR TEMPORARY CONSTRUCTION SIGNS.

- DRAINAGE SYSTEM NOTES:**
- THE PROPOSED DRAINAGE LINES SHALL BE ADS N-12 HDPE PIPE OR AN APPROVED EQUAL UNLESS OTHERWISE NOTED ON THE SITE PLANS.
 - ALL RIM ELEVATIONS SHOWN ARE APPROXIMATE AND ARE TO BE SET FLUSH WITH FINAL GRADES.
- SOIL EROSION AND SEDIMENTATION CONTROL NOTES:**
- 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.
 - 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.
 - 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.
 - 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.
 - 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.
 - 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.
 - 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.
 - 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.
 - 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:**
- 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.
 - OVERHEAD ELECTRIC AND TELEPHONE SERVICES ARE TO BE REMOVED BY THE APPROPRIATE UTILITY COMPANY AND COORDINATED BY THE CONTRACTOR.
 - 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.
 - 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.
 - 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.
 - ALL SEWER CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE TOWN OF SMITHFIELD SEWER AUTHORITY "STANDARD SPECIFICATIONS AND DETAILS FOR THE INSTALLATION OF SEWER AND APPURTENANCES BY PRIVATE DEVELOPERS."
 - ALL NEW SEWER PIPES AND MANHOLES SHALL BE CLEANED AND TESTED PRIOR TO ACCEPTANCE. GRAVITY SEWER PIPES SHALL BE REQUIRED TO PASS BOTH LOW PRESSURE AIR AND DEFLECTION (IE., MANDREL) TESTING. LOW PRESSURE SEWER PIPING SHALL BE REQUIRED TO PASS A LOW PRESSURE (IE., HYDROSTATIC) TEST.
 - A BACKFLOW PREVENTION DEVICE MUST BE INSTALLED AT EACH SEWER SERVICE BUILDING CONNECTION THAT IS BELOW THE RIM ELEVATION OF THE NEAREST SEWER MANHOLE, AS REQUIRED BY THE INTERNATIONAL PLUMBING CODE AND THE TOWN OF SMITHFIELD.
 - APPLICANT IS REQUIRED TO PROVIDE TWO SETS OF FINAL AS-BUILT PLANS TO SEWER AUTHORITY AND ENGINEERING DEPARTMENT UPON COMPLETION OF CONSTRUCTION, PRIOR TO FINAL ACCEPTANCE. AS-BUILT PLANS SHALL INCLUDE FIELD MEASUREMENTS OF ALL INSTALLED PIPE AND APPURTENANCES, INCLUDING LENGTH, SLOPE, MANHOLE RIMS AND INVERTS, AS WELL AS SWING TIES/MEASUREMENTS TO ALL MANHOLES, SEWER STUBS, AND/OR LATERAL SERVICE CONNECTIONS.
 - INSPECTION OF ALL SEWER CONSTRUCTION SHALL BE PERFORMED BY TOWN OF SMITHFIELD SEWER CONSULTANT. APPLICANT SHALL PROVIDE SCHEDULE FOR CONSTRUCTION AS SOON AS POSSIBLE TO ALLOW FOR DEVELOPMENT OF INSPECTION FEE, TO BE PAID BY APPLICANT DIRECTLY TO TOWN OF SMITHFIELD, ENGINEERING DEPARTMENT. UPON PAYMENT OF FEE, COMMENCEMENT OF CONSTRUCTION INSPECTION REQUIRES MINIMUM NOTIFICATION OF 48-HOURS.
 - APPLICANT IS RESPONSIBLE FOR SECURING ALL REQUIRED PERMITS FROM LOCAL, STATE, AND/OR FEDERAL AGENCIES WITH REGULATORY JURISDICTION OVER THE PROPOSED WORK. COPIES OF ALL PERMITS SHALL BE PROVIDED TO SMITHFIELD SEWER AUTHORITY AND TOWN ENGINEER PRIOR TO CONSTRUCTION. ALL SEWER CONSTRUCTION SHALL BE PERFORMED BY A DRAIN LAYER LICENSED IN THE STATE OF RHODE ISLAND AND THE TOWN OF SMITHFIELD.
 - NO FLOW WILL BE ACCEPTED UNTIL A COMPLETION CERTIFICATE IS ISSUED.
 - THE CONTRACTOR SHALL CONFINE HIS CONSTRUCTION OPERATIONS AND ACTIVITIES TO WITHIN THE STREET LINES, EASEMENT AND/OR RIGHT-OF-WAY, AS SHOWN ON THE DRAWINGS.
 - ALL CONSTRUCTION MATERIALS, AS WELL AS ALL MATERIAL SHOP DRAWINGS AND MANUFACTURERS DATA SHEETS SHALL BE REVIEWED AND APPROVED BY THE DESIGN ENGINEER, THE SEWER AUTHORITY, OR ITS REPRESENTATIVE PRIOR TO FABRICATION AND INSTALLATION, AND SUBMITTED TO THE SMITHFIELD SEWER AUTHORITY AND TOWN ENGINEER PRIOR TO CONSTRUCTION FOR THEIR RECORDS.
 - PRIOR TO CONSTRUCTION OF THE RELOCATION OF ALL WATER MAINS, THE CONTRACTOR SHALL COORDINATE WITH SMITHFIELD WATER SUPPLY BOARD FOR INSPECTION AND CHLORINATION OF NEW PIPING, FITTINGS AND VALVES.
 - THE CONTRACTOR SHALL COORDINATE THE PROPOSED CONNECTION INTO THE EXISTING 4-INCH LPFM WITH THE OWNER.

- SEEDING AND SOILING 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:
 - 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.
 - 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).
 - 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.
 - APPLY LIME AT A RATE OF ONE TON PER ACRE AND UNIFORMLY INCORPORATE INTO THE TOP 1-2" OF TOPSOIL.
 - 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.

- DRAINAGE SYSTEM MAINTENANCE SCHEDULE:**
- UPON PROJECT COMPLETION, THE PROPERTY OWNER SHALL ADHERE TO THE FOLLOWING MAINTENANCE PLAN AND SCHEDULE:
- MANHOLES AND DRAIN LINES:** AN INSPECTION MUST OCCUR ON AN ANNUAL BASIS BY QUALIFIED PERSONAL TO ENSURE PROPER OPERATION. THE INSPECTION SHOULD, AS A MINIMUM, CONCENTRATE ON THE FOLLOWING:
 - DAMAGE TO GRATE/ COVERS
 - EVIDENCE OF STANDING WATER
 - DEBRIS REMOVAL
 - STRUCTURAL ALIGNMENT / INTEGRITY

- 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.
- SURVEY AND STAKE THE PROPOSED DRAINAGE BMP'S (SEDIMENT FOREBAY, INFILTRATION BASIN, TREE FILTERS, AND GRASS SWALES), ROADWAY CENTERLINE, WATER LINE, DOWNS LOCATIONS AND LIMIT OF DISTURBANCE. THE CONTRACTOR SHALL NOT COMPACT THE AREAS OF THE DRAINAGE BMP'S DURING CONSTRUCTION OPERATIONS. CONTRACTOR SHALL INSTALL CONSTRUCTION FENCE TO PROTECT BMP'S.
 - 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.
 - BEGIN SITE WORK (CLEARING AND GRUBBING, EXCAVATING AND GRADING ETC.) TOPSOIL IS TO BE 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.
 - 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.
 - INSTALL UTILITIES AND DRAINAGE INCLUDING DRAINAGE PIPE. IMMEDIATELY PLACE THE RIP-RAP AT THE DISCHARGE POINTS. SEED ALL DISTURBED AREAS.
 - BEGIN BUILDING CONSTRUCTION.
 - BEGIN PAVEMENT AND PROPOSED GRADING. BRING ROADWAY TO SUBBASE GRADE WITH GRAVEL. SEED ALL DISTURBED AREAS.
 - FINISH PAVEMENT CONSTRUCTION.
 - MAINTAIN SEDIMENT AND EROSION CONTROLS WHILE BUILDING ARE CONSTRUCTED.
 - FINISH LANDSCAPING AND PERMANENT STABILIZATION.
 - 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.
 - REMOVE ALL TEMPORARY SOIL EROSION AND SEDIMENTATION CONTROL MEASURES ONCE VEGETATION HAS BEEN ESTABLISHED TO ALL DISTURBED AREAS.

- ORDER OF PROCEDURE:**
- SEDIMENT CONTROL DEVICES SHALL SET IN PLACE PRIOR TO THE START OF ANY CONSTRUCTION.
 - ALL EROSION AND SEDIMENTATION CONTROL STRUCTURES SHALL BE PERIODICALLY CLEANED AND MAINTAINED DURING THE CONSTRUCTION.
 - IF WORK PROGRESS IS INTERRUPTED AT ANY TIME, REFERENCE EROSION & SEDIMENTATION PROGRAMS FOR TEMPORARY CONTROL.
 - SPECIFIED PLANTINGS ARE TO TAKE PLACE IN EARLY SPRING (APRIL 1 THRU MAY 30) OR EARLY FALL (SEPTEMBER 1 THRU 30) AND ARE TO BE MAINTAINED FOR A PERIOD OF ONE GROWING SEASON AND SHALL BE REPLACED IF NECESSARY.

- BMP MAINTENANCE SCHEDULE:**
- ALL MAINTENANCE (INCLUDING CLEANING) REQUIRED DURING THE CONSTRUCTION PHASE OF THE PROJECT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL INCLUDE:
 - 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.
 - 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.
 - 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.
 - 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/RICRM, 2010).
 - AFTER CONSTRUCTION, STORMWATER BMP'S SHALL BE INSPECTED AND MAINTAINED BY THE CONDOMINIUM ASSOCIATION 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.

ROOF DRAIN LEADERS

 - PERFORM ROUTINE ROOF INSPECTIONS QUARTERLY.
 - KEEP ROOFS CLEAN AND FREE OF DEBRIS.
 - KEEP ROOF DRAINAGE SYSTEMS CLEAR.

SAND FILTER SYSTEM

 - DURING THE SIX MONTHS IMMEDIATELY AFTER CONSTRUCTION, THE SAND FILTER 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 AN ANNUAL BASIS AND AFTER STORM EVENTS OF GREATER THAN OR EQUAL TO 2 INCHES.
 - SILT/SEDIMENT SHALL BE REMOVED FROM THE FILTER BED WHEN THE ACCUMULATION EXCEEDS ONE INCH. WHEN THE FILTERING CAPACITY OF THE SAND FILTER DIMINISHES SUBSTANTIALLY (I.E. WHEN WATER POUNDS ON THE SURFACE OF THE FILTER BED FOR MORE THAN 48 HOURS), THE TOP FEW INCHES OF DISCOLORED MATERIAL SHALL BE REMOVED AND SHALL BE REPLACED WITH FRESH MATERIAL. THE REMOVED SEDIMENTS SHALL BE DISPOSED IN AN ACCEPTANCE MANNER AT AN APPROVED AND PERMITTED LOCATION.

- LOAMING & SEEDING**
- 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:
- 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.
 - 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).
 - 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.
 - APPLY LIME AT A RATE OF ONE TON PER ACRE AND UNIFORMLY INCORPORATE INTO THE TOP 1-2" OF TOPSOIL.
 - 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.

- DRAINAGE SYSTEM MAINTENANCE SCHEDULE:**
- UPON PROJECT COMPLETION, THE PROPERTY OWNER SHALL ADHERE TO THE FOLLOWING MAINTENANCE PLAN AND SCHEDULE:
- MANHOLES AND DRAIN LINES:** AN INSPECTION MUST OCCUR ON AN ANNUAL BASIS BY QUALIFIED PERSONAL TO ENSURE PROPER OPERATION. THE INSPECTION SHOULD, AS A MINIMUM, CONCENTRATE ON THE FOLLOWING:
 - DAMAGE TO GRATE/ COVERS
 - EVIDENCE OF STANDING WATER
 - DEBRIS REMOVAL
 - STRUCTURAL ALIGNMENT / INTEGRITY

- 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.
- SURVEY AND STAKE THE PROPOSED DRAINAGE BMP'S (SEDIMENT FOREBAY, INFILTRATION BASIN, TREE FILTERS, AND GRASS SWALES), ROADWAY CENTERLINE, WATER LINE, DOWNS LOCATIONS AND LIMIT OF DISTURBANCE. THE CONTRACTOR SHALL NOT COMPACT THE AREAS OF THE DRAINAGE BMP'S DURING CONSTRUCTION OPERATIONS. CONTRACTOR SHALL INSTALL CONSTRUCTION FENCE TO PROTECT BMP'S.
 - 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.
 - BEGIN SITE WORK (CLEARING AND GRUBBING, EXCAVATING AND GRADING ETC.) TOPSOIL IS TO BE 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.
 - 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.
 - INSTALL UTILITIES AND DRAINAGE INCLUDING DRAINAGE PIPE. IMMEDIATELY PLACE THE RIP-RAP AT THE DISCHARGE POINTS. SEED ALL DISTURBED AREAS.
 - BEGIN BUILDING CONSTRUCTION.
 - BEGIN PAVEMENT AND PROPOSED GRADING. BRING ROADWAY TO SUBBASE GRADE WITH GRAVEL. SEED ALL DISTURBED AREAS.
 - FINISH PAVEMENT CONSTRUCTION.
 - MAINTAIN SEDIMENT AND EROSION CONTROLS WHILE BUILDING ARE CONSTRUCTED.
 - FINISH LANDSCAPING AND PERMANENT STABILIZATION.
 - 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.
 - REMOVE ALL TEMPORARY SOIL EROSION AND SEDIMENTATION CONTROL MEASURES ONCE VEGETATION HAS BEEN ESTABLISHED TO ALL DISTURBED AREAS.

- ORDER OF PROCEDURE:**
- SEDIMENT CONTROL DEVICES SHALL SET IN PLACE PRIOR TO THE START OF ANY CONSTRUCTION.
 - ALL EROSION AND SEDIMENTATION CONTROL STRUCTURES SHALL BE PERIODICALLY CLEANED AND MAINTAINED DURING THE CONSTRUCTION.
 - IF WORK PROGRESS IS INTERRUPTED AT ANY TIME, REFERENCE EROSION & SEDIMENTATION PROGRAMS FOR TEMPORARY CONTROL.
 - SPECIFIED PLANTINGS ARE TO TAKE PLACE IN EARLY SPRING (APRIL 1 THRU MAY 30) OR EARLY FALL (SEPTEMBER 1 THRU 30) AND ARE TO BE MAINTAINED FOR A PERIOD OF ONE GROWING SEASON AND SHALL BE REPLACED IF NECESSARY.

LEGEND

- EXISTING PROPERTY LINE
- ABUTTING PROPERTY LINE
- BUILDING SETBACK LINE
- EXISTING CONTOUR
- PROPOSED CONTOUR
- EXISTING STONE WALL
- EXISTING CURB
- PROPOSED CURB
- EXISTING GUARD RAIL
- EXISTING DRAIN LINE
- PROPOSED DRAIN LINE
- EXISTING DRAINAGE MANHOLE
- PROPOSED DRAINAGE MANHOLE
- EXISTING CATCH BASIN
- PROPOSED CATCH BASIN
- EXISTING UTILITY POLE
- PROPOSED UTILITY POLE
- EXISTING TELECOM DUCTBANK
- EXISTING ELECTRIC DUCTBANK
- RELOCATED ELECTRIC DUCTBANK
- EXISTING GAS LINE
- PROPOSED GAS LINE
- EXISTING WATER LINE
- PROPOSED WATER LINE
- EXISTING WATER SHUT OFF VALVE
- PROPOSED WATER SHUT OFF VALVE
- EXISTING SEWER LINE
- PROPOSED SEWER LINE
- EXISTING SEWER MANHOLE
- PROPOSED SEWER MANHOLE
- N/F --- NOW OR FORMERLY
- TREELINE
- HAY BALES
- SILT FENCE
- LIMIT OF DISTURBANCE
- TEMPORARY LIMIT OF DISTURBANCE
- TEST HOLE

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JOSEPH A. CASALI
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 1.11.16

THE RESIDENCE AT LIMEROCK
 SMITHFIELD, RHODE ISLAND
 AP 45, LOTS 43A, 181, 182 & 183

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
 FRESHWATER WETLANDS PROGRAM
 APPROVED WITH CONDITIONS
 AS SPECIFIED IN THE LETTER OF APPROVAL
 DATED JAN 22 2016 FILE # 14-0177
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE

REVISIONS:		
NO.	DATE	DESCRIPTION

DESIGNED BY: JWH
 DRAWN BY: JMM
 CHECKED BY: JAC
 DATE: DECEMBER 2015
 PROJECT NO: 13-14b

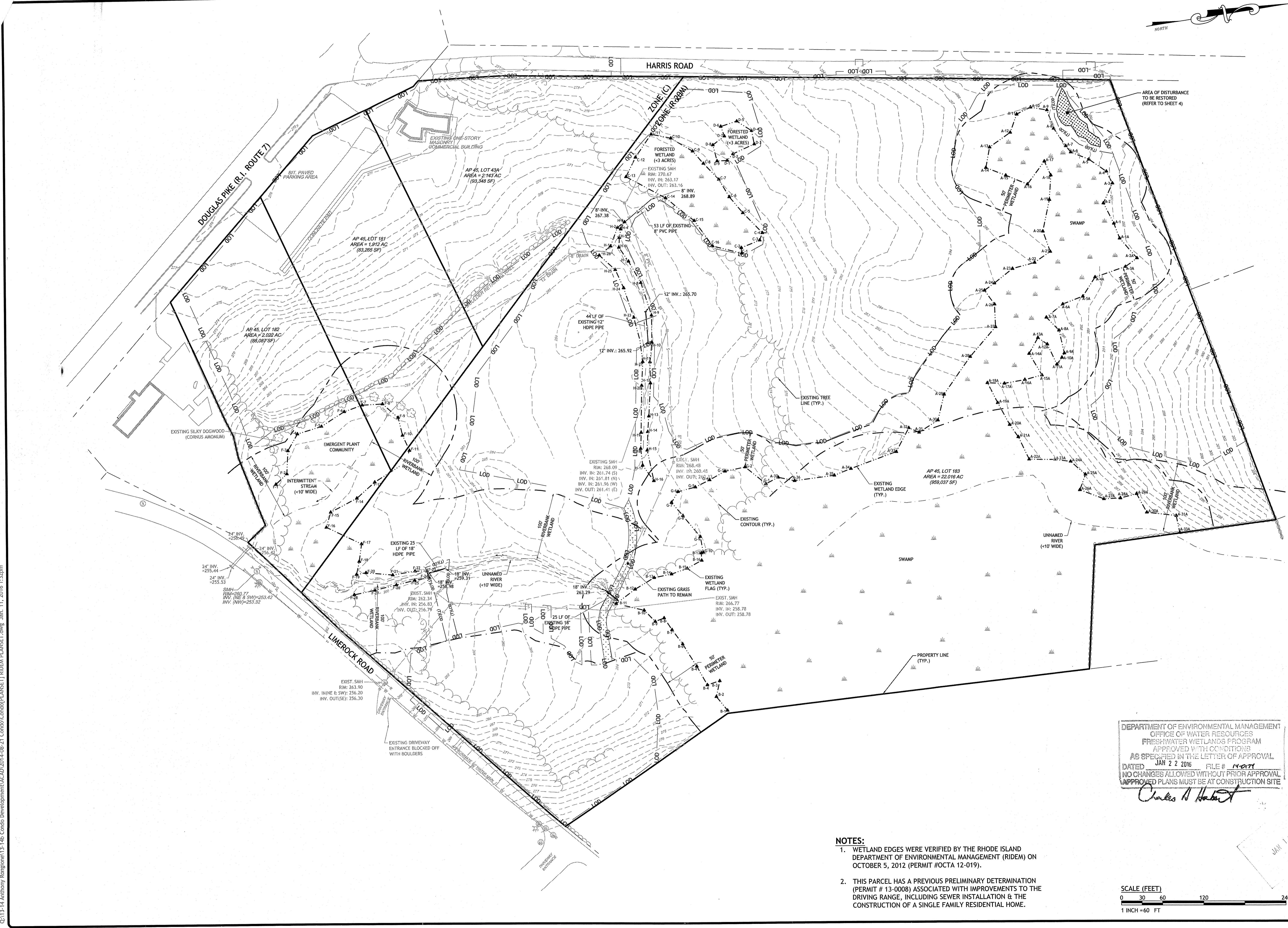
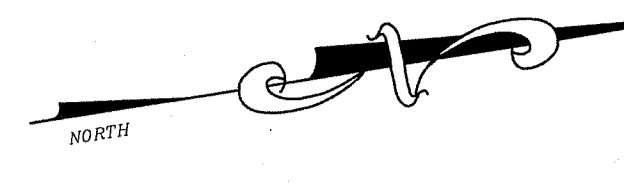
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GENERAL NOTES & LEGEND

SHEET 2 OF 17

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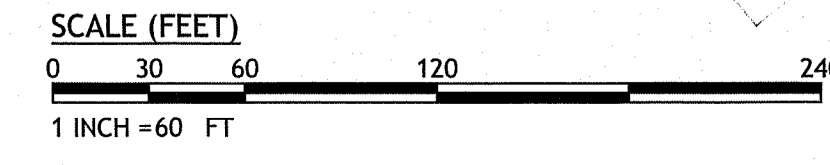
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 DATED JAN 22 2016 FILE # 14-077
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Charles H. Hurd

- NOTES:**
1. WETLAND EDGES WERE VERIFIED BY THE RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (RIDEM) ON OCTOBER 5, 2012 (PERMIT #OCTA 12-019).
 2. THIS PARCEL HAS A PREVIOUS PRELIMINARY DETERMINATION (PERMIT # 13-0008) ASSOCIATED WITH IMPROVEMENTS TO THE DRIVING RANGE, INCLUDING SEWER INSTALLATION & THE CONSTRUCTION OF A SINGLE FAMILY RESIDENTIAL HOME.



REVISIONS:	NO.	DATE	DESCRIPTION

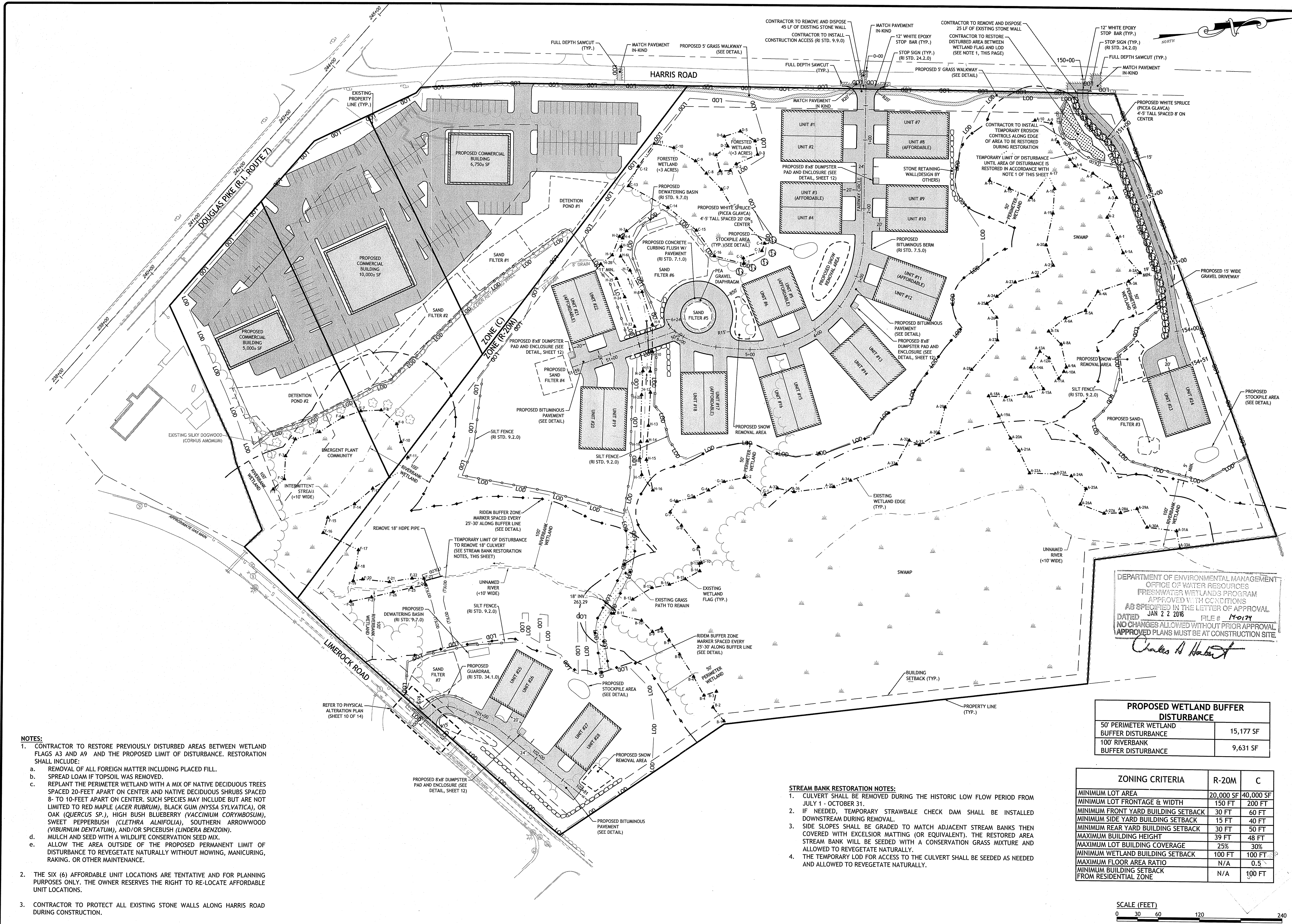
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EXISTING CONDITIONS PLAN

SHEET 3 OF 17

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- NOTES:**
- CONTRACTOR TO RESTORE PREVIOUSLY DISTURBED AREAS BETWEEN WETLAND FLAGS A3 AND A9 AND THE PROPOSED LIMIT OF DISTURBANCE. RESTORATION SHALL INCLUDE:
 - REMOVAL OF ALL FOREIGN MATTER INCLUDING PLACED FILL.
 - SPREAD LOAM IF TOPSOIL WAS REMOVED.
 - REPLANT THE PERIMETER WETLAND WITH A MIX OF NATIVE DECIDUOUS TREES SPACED 20-FOOT APART ON CENTER AND NATIVE DECIDUOUS SHRUBS SPACED 8- TO 10-FOOT APART ON CENTER. SUCH SPECIES MAY INCLUDE BUT ARE NOT LIMITED TO RED MAPLE (*ACER RUBRUM*), BLACK GUM (*NYSSA SYLVATICA*), OR OAK (*QUERCUS SP.*), HIGH BUSH BLUEBERRY (*VACCINIUM CORYMBOSUM*), SWEET PEPPERBUSH (*CLETHRA ALNIFOLIA*), SOUTHERN ARROWWOOD (*VIBURNUM DENTATUM*), AND/OR SPICEBUSH (*LINDERA BENZOIN*).
 - MULCH AND SEED WITH A WILDLIFE CONSERVATION SEED MIX.
 - ALLOW THE AREA OUTSIDE OF THE PROPOSED PERMANENT LIMIT OF DISTURBANCE TO REVEGETATE NATURALLY WITHOUT MOWING, MANICURING, RAKING, OR OTHER MAINTENANCE.
 - THE SIX (6) AFFORDABLE UNIT LOCATIONS ARE TENTATIVE AND FOR PLANNING PURPOSES ONLY. THE OWNER RESERVES THE RIGHT TO RE-LOCATE AFFORDABLE UNIT LOCATIONS.
 - CONTRACTOR TO PROTECT ALL EXISTING STONE WALLS ALONG HARRIS ROAD DURING CONSTRUCTION.

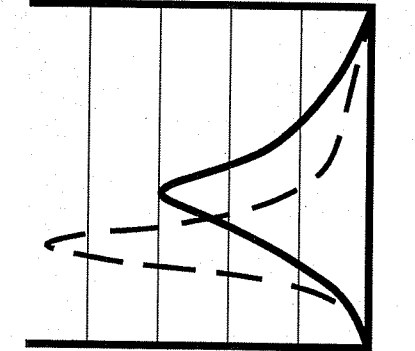
- STREAM BANK RESTORATION NOTES:**
- CULVERT SHALL BE REMOVED DURING THE HISTORIC LOW FLOW PERIOD FROM JULY 1 - OCTOBER 31.
 - IF NEEDED, TEMPORARY STRAWBALE CHECK DAM SHALL BE INSTALLED DOWNSTREAM DURING REMOVAL.
 - SIDE SLOPES SHALL BE GRADED TO MATCH ADJACENT STREAM BANKS THEN COVERED WITH EXCELSIOR MATTING (OR EQUIVALENT). THE RESTORED AREA STREAM BANK WILL BE SEEDING WITH A CONSERVATION GRASS MIXTURE AND ALLOWED TO REVEGETATE NATURALLY.
 - THE TEMPORARY LOD FOR ACCESS TO THE CULVERT SHALL BE SEEDING AS NEEDED AND ALLOWED TO REVEGETATE NATURALLY.

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Charles A. Hester

PROPOSED WETLAND BUFFER DISTURBANCE	
50' PERIMETER WETLAND BUFFER DISTURBANCE	15,177 SF
100' RIVERBANK BUFFER DISTURBANCE	9,631 SF

ZONING CRITERIA	R-20M	C
MINIMUM LOT AREA	20,000 SF	40,000 SF
MINIMUM LOT FRONTAGE & WIDTH	150 FT	200 FT
MINIMUM FRONT YARD BUILDING SETBACK	30 FT	60 FT
MINIMUM SIDE YARD BUILDING SETBACK	15 FT	40 FT
MINIMUM REAR YARD BUILDING SETBACK	30 FT	50 FT
MAXIMUM BUILDING HEIGHT	39 FT	48 FT
MAXIMUM LOT BUILDING COVERAGE	25%	30%
MINIMUM WETLAND BUILDING SETBACK	100 FT	100 FT
MAXIMUM FLOOR AREA RATIO	N/A	0.5
MINIMUM BUILDING SETBACK FROM RESIDENTIAL ZONE	N/A	100 FT

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



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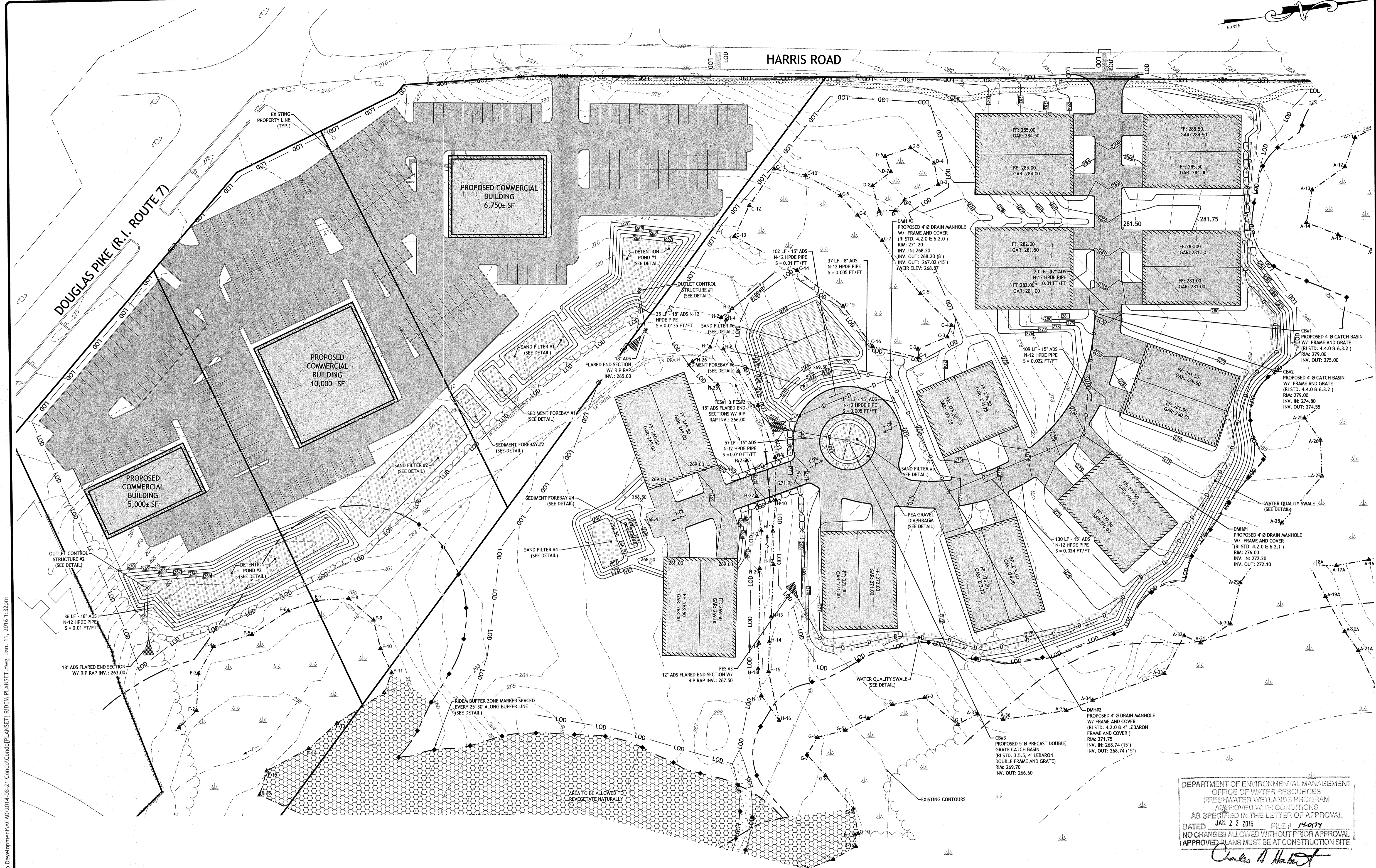
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 PROJECT NO: 13-14b

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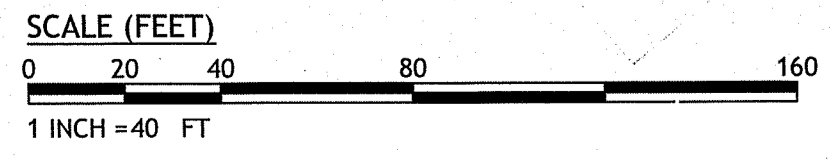
SITE PLAN

SHEET 4 OF 17



GRADING & DRAINAGE PLAN VIEWPORT #1
SCALE 1" = 40'

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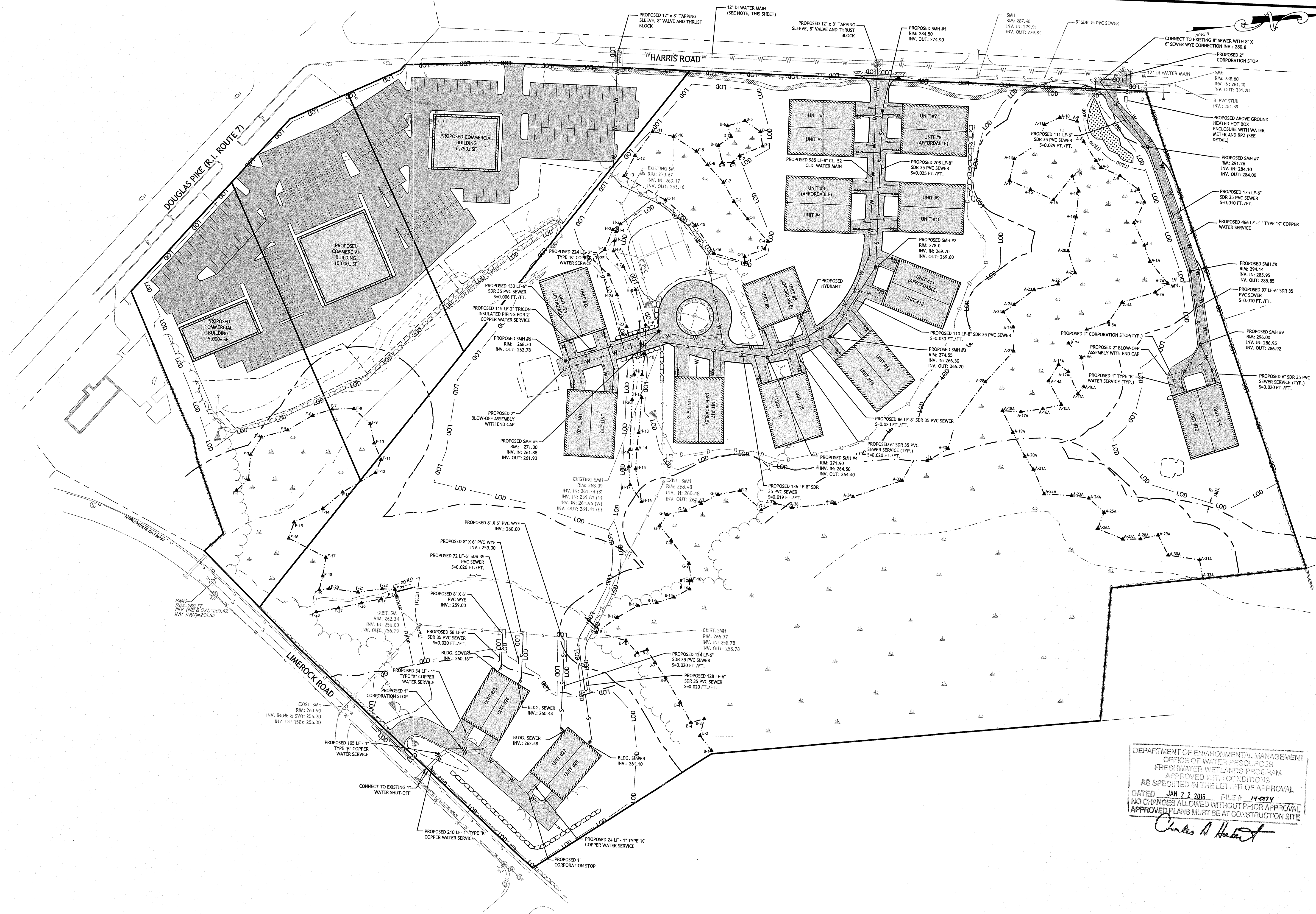
GRADING & DRAINAGE PLAN I

SHEET 5 OF 17

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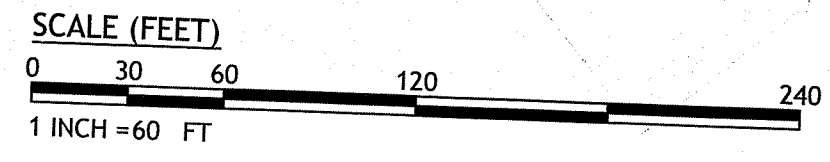
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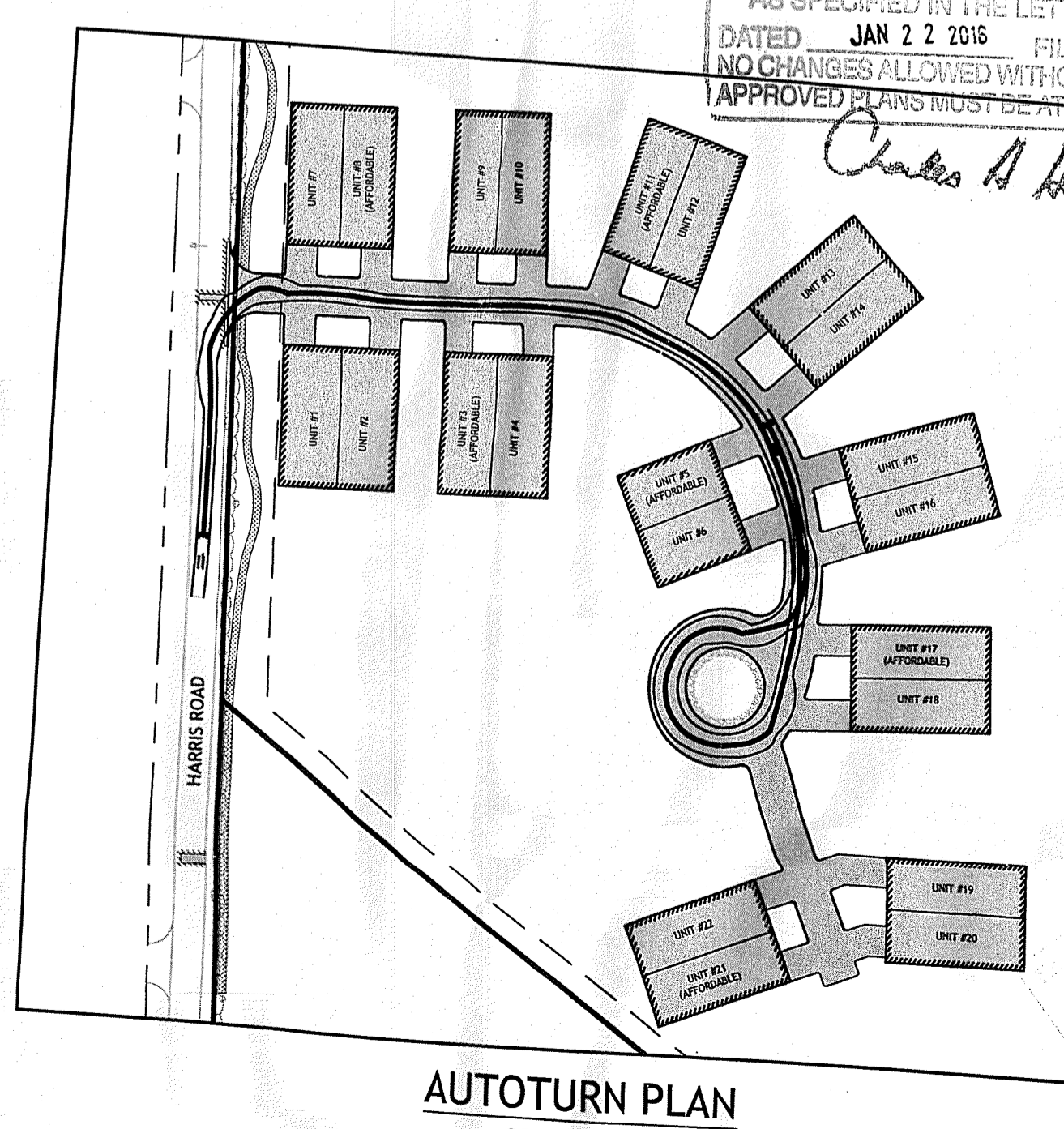
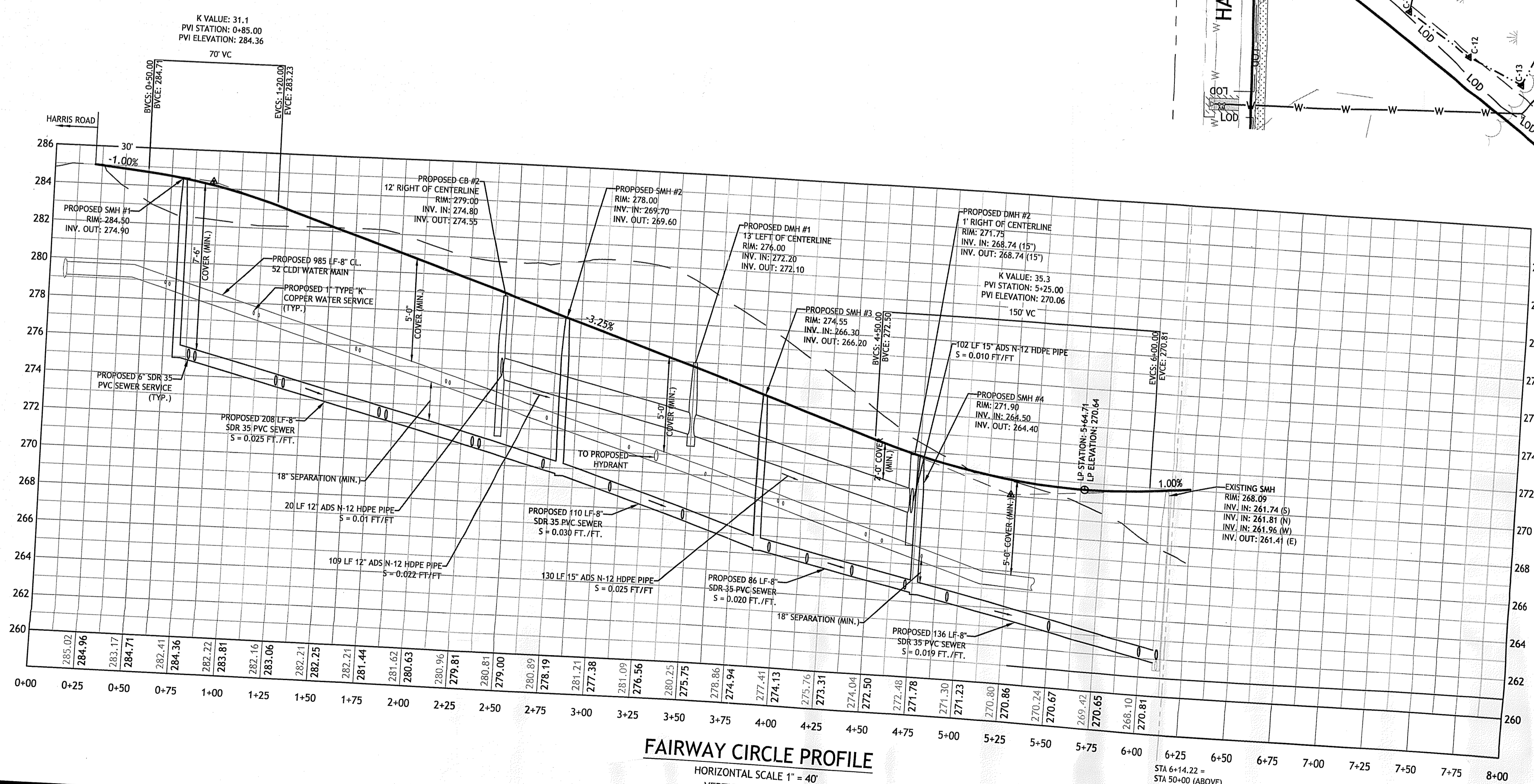
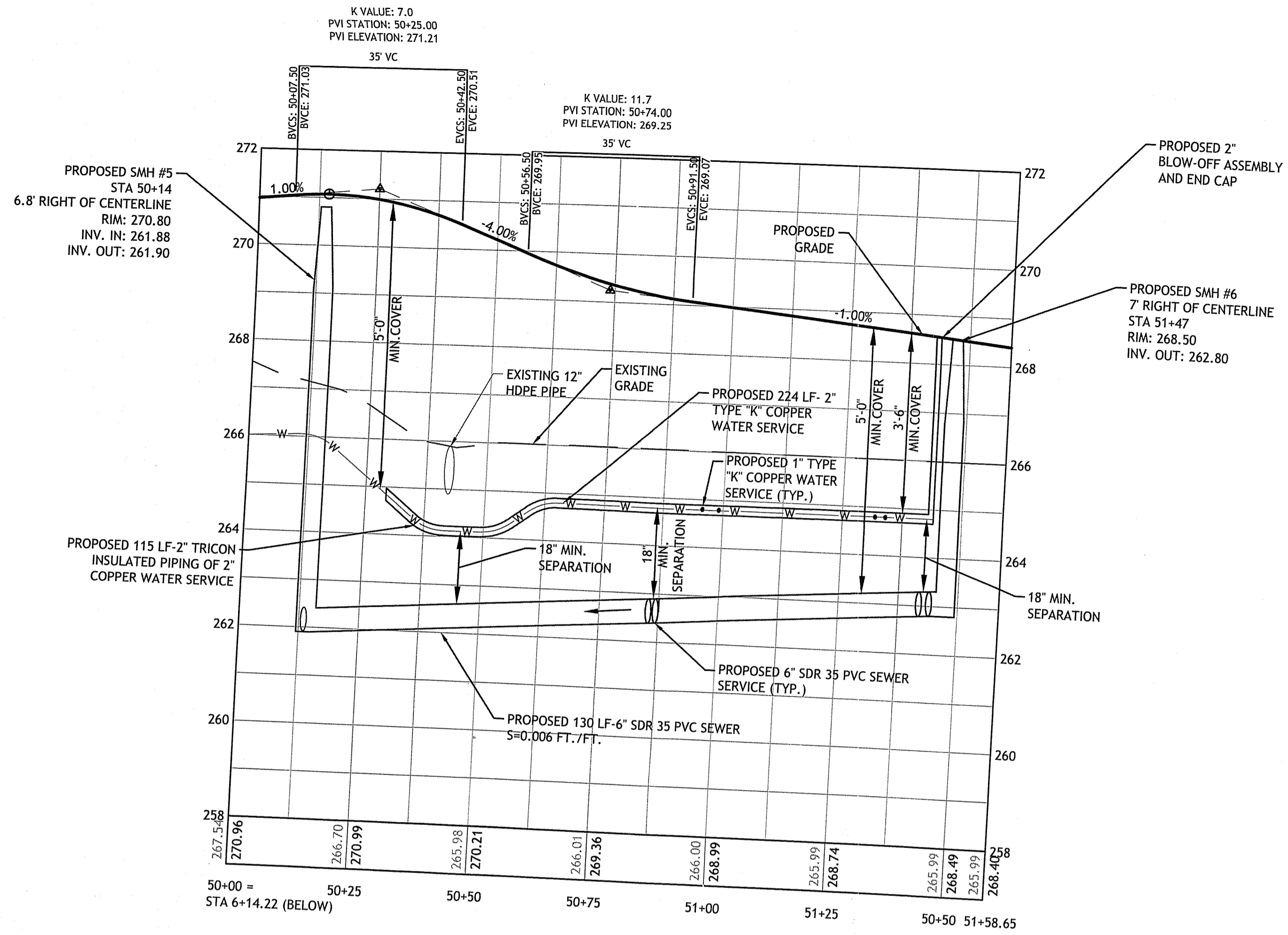
UTILITY PLAN

SHEET 7 OF 17

NOTE:
 1. THE 12" DI WATER MAIN, AS SHOWN, IS NOT YET INSTALLED, BUT WILL BE AS A COLLABORATIVE EFFORT BETWEEN THE OWNER AND THE PROPOSED DEVELOPMENT ON THE WEST SIDE OF HARRIS ROAD.



JAN 11 2016



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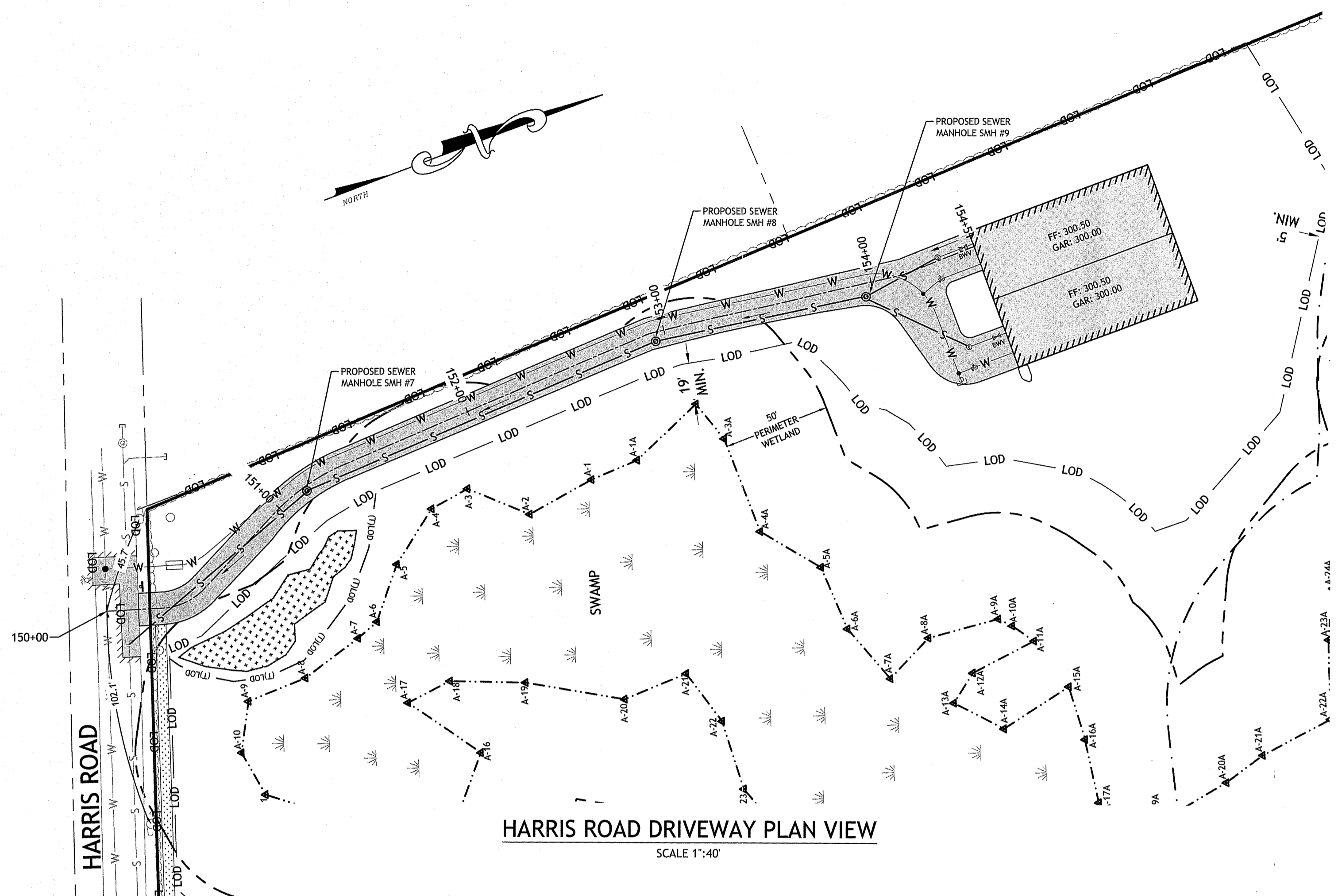
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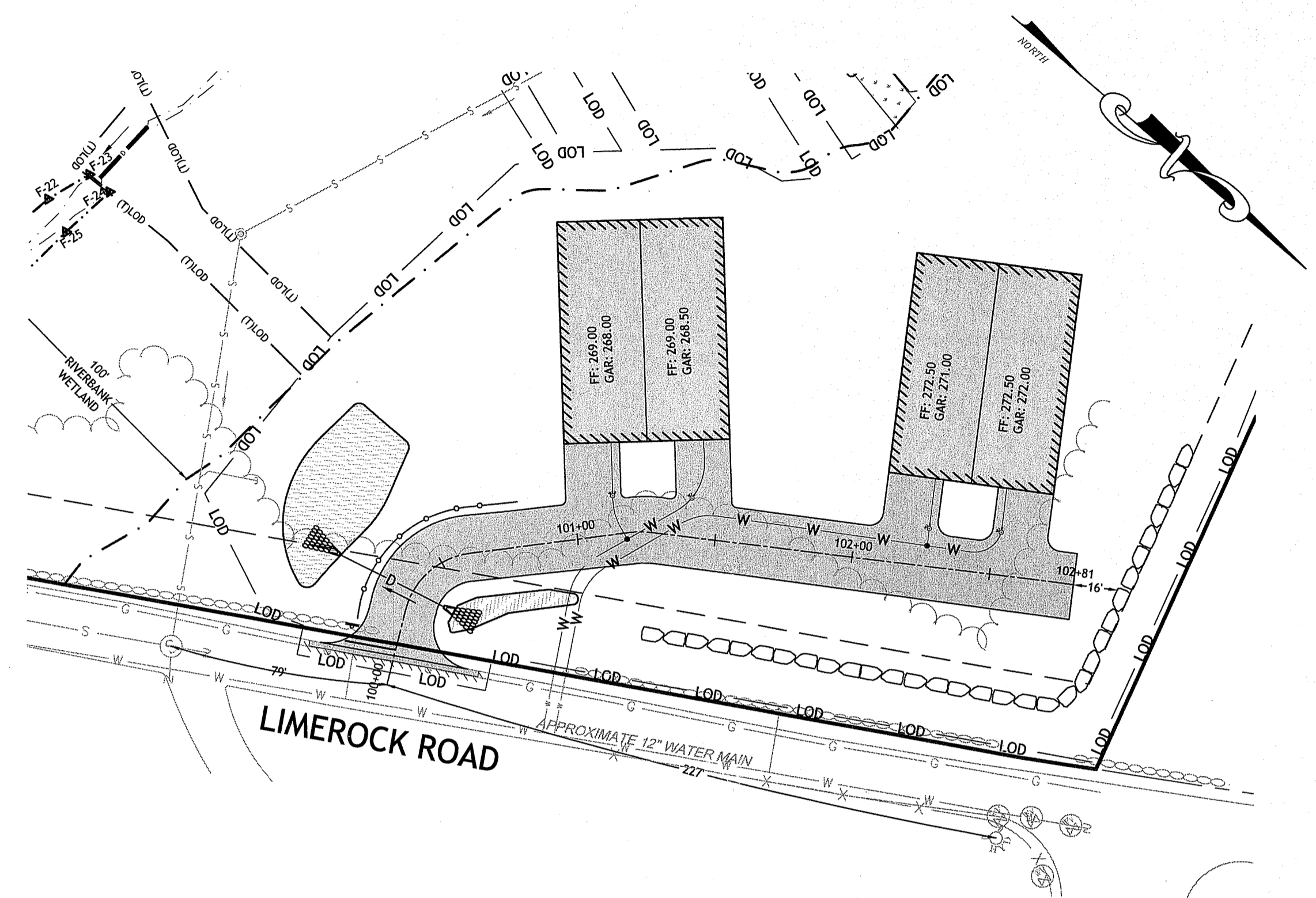
ROADWAY PROFILE I

SHEET 8 OF 17

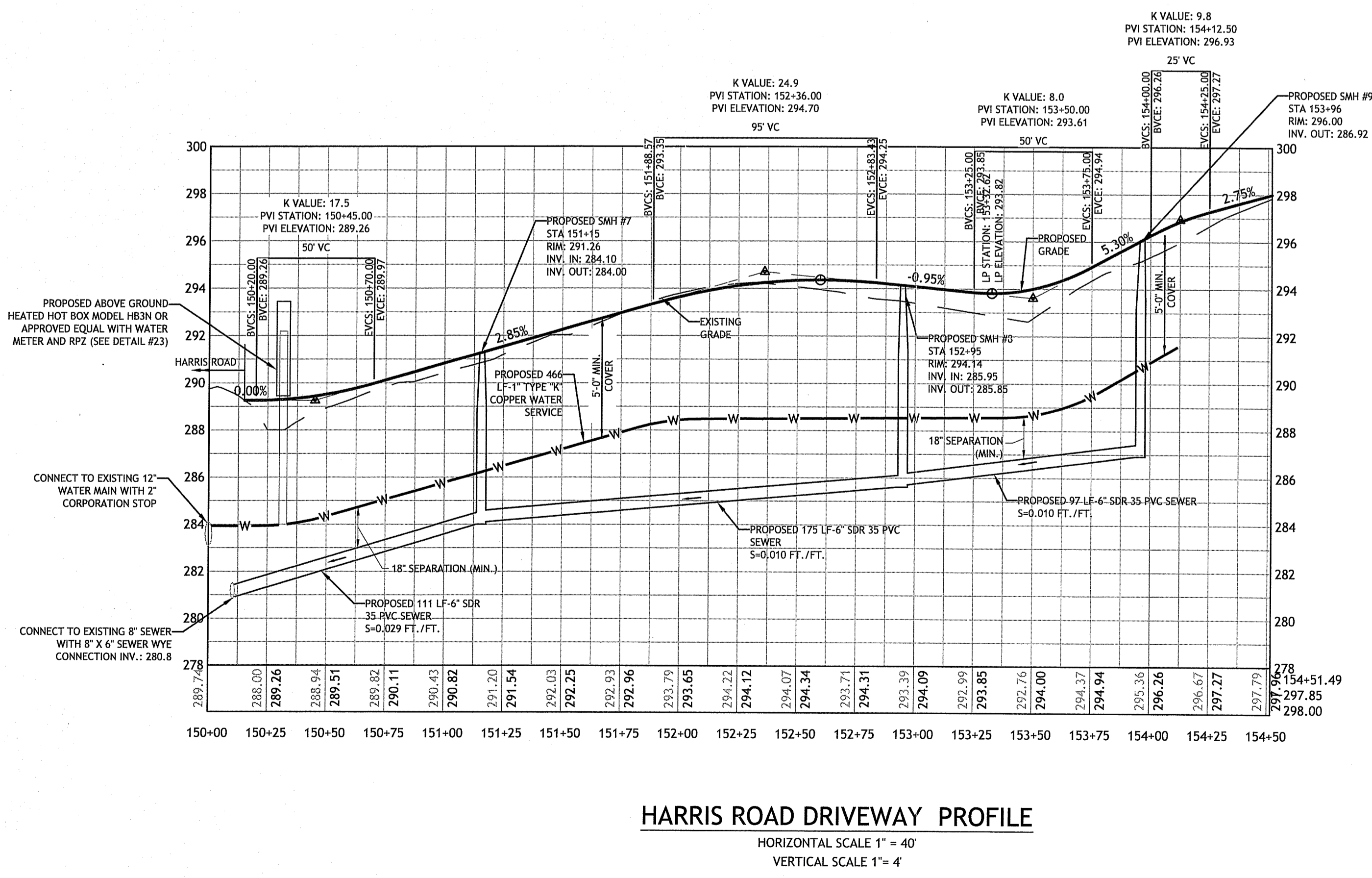
Q:\13-14 Anthony Rongione\13-14b Condo Development\ACAD\2014-08-21 Condo\Roadway\PLANSET\BUDA PLANSET.dwg, Jan. 11, 2016 1:32pm



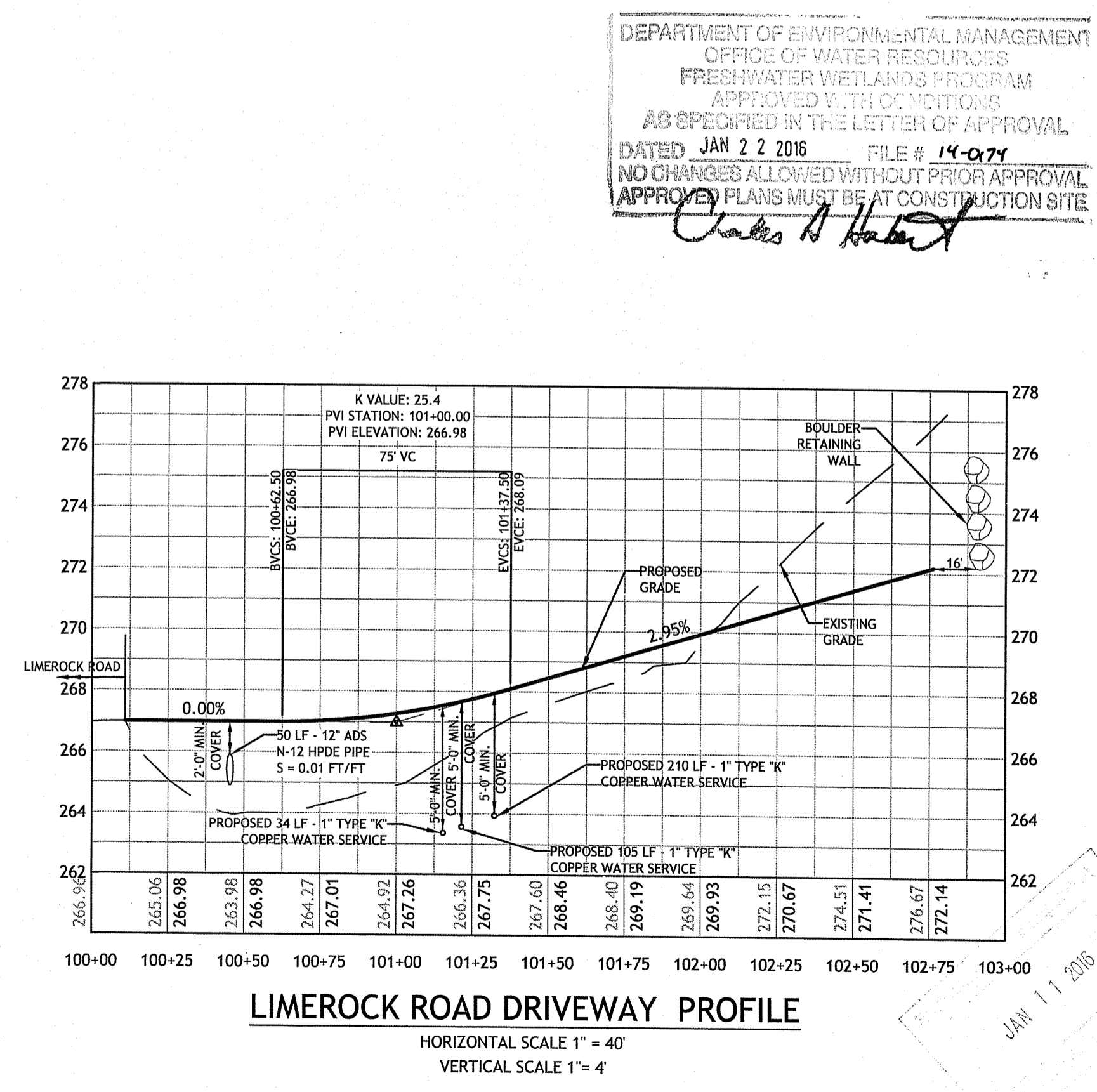
HARRIS ROAD DRIVEWAY PLAN VIEW
SCALE 1"=40'



LIMEROCK ROAD DRIVEWAY PLAN VIEW
SCALE 1"=40'

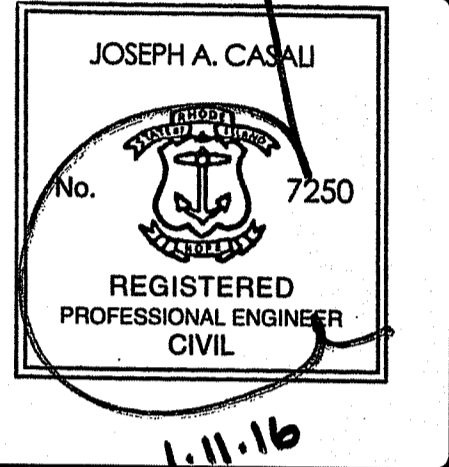
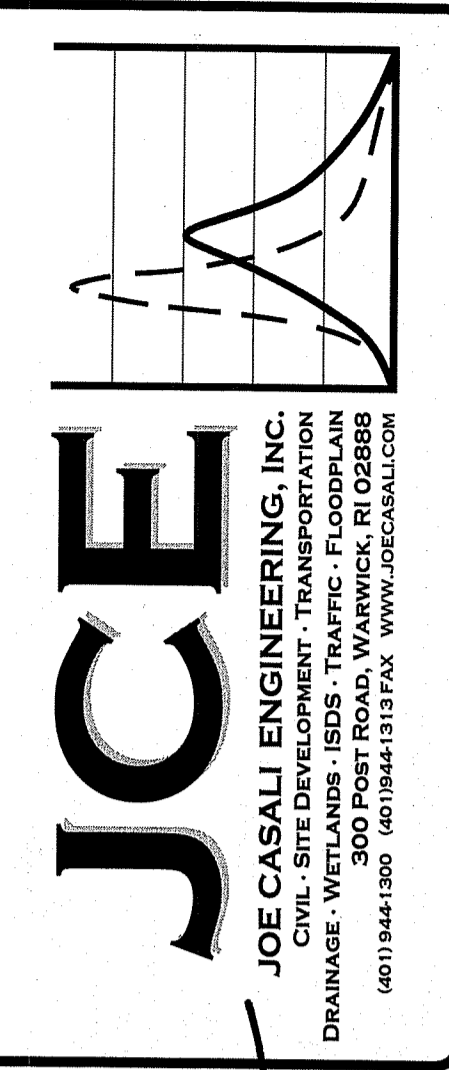


HARRIS ROAD DRIVEWAY PROFILE
HORIZONTAL SCALE 1"=40'
VERTICAL SCALE 1"=4'



LIMEROCK ROAD DRIVEWAY PROFILE
HORIZONTAL SCALE 1"=40'
VERTICAL SCALE 1"=4'

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESH WATER WETLANDS PROGRAM
APPROVED BY THE COMMISSIONER
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED JAN 22 2016 FILE # 14-074
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE
Charles A. Hackett



THE RESIDENCE AT LIMEROCK
SMITHFIELD, RHODE ISLAND
AP 45, LOTS 43A, 181, 182 & 183

REVISIONS:

NO.	DATE	DESCRIPTION

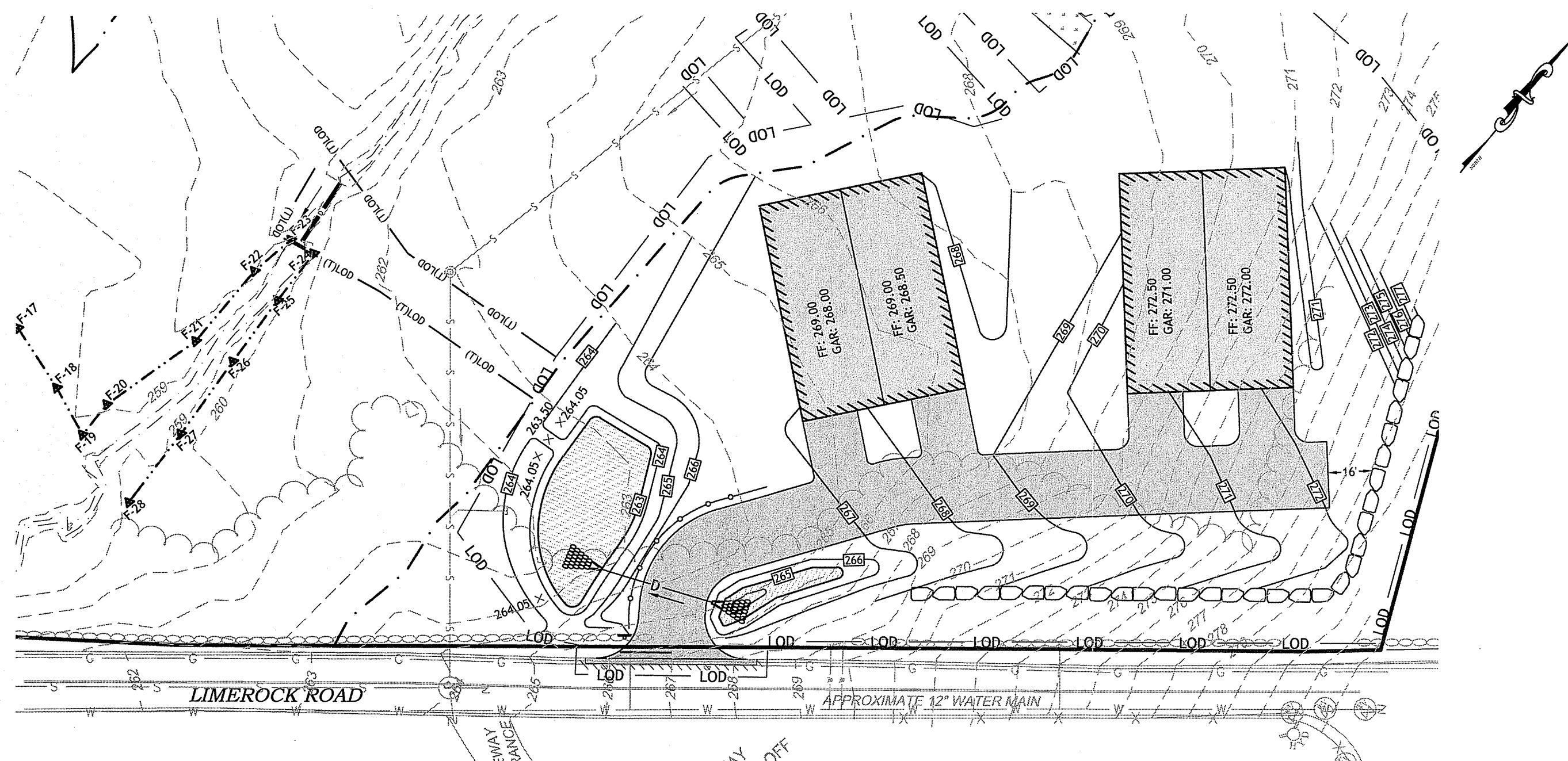
DESIGNED BY: JWH
DRAWN BY: JMM
CHECKED BY: JAC
DATE: DECEMBER 2015
PROJECT NO: 13-14b

PRELIMINARY, NOT FOR CONSTRUCTION

ROADWAY PROFILE II

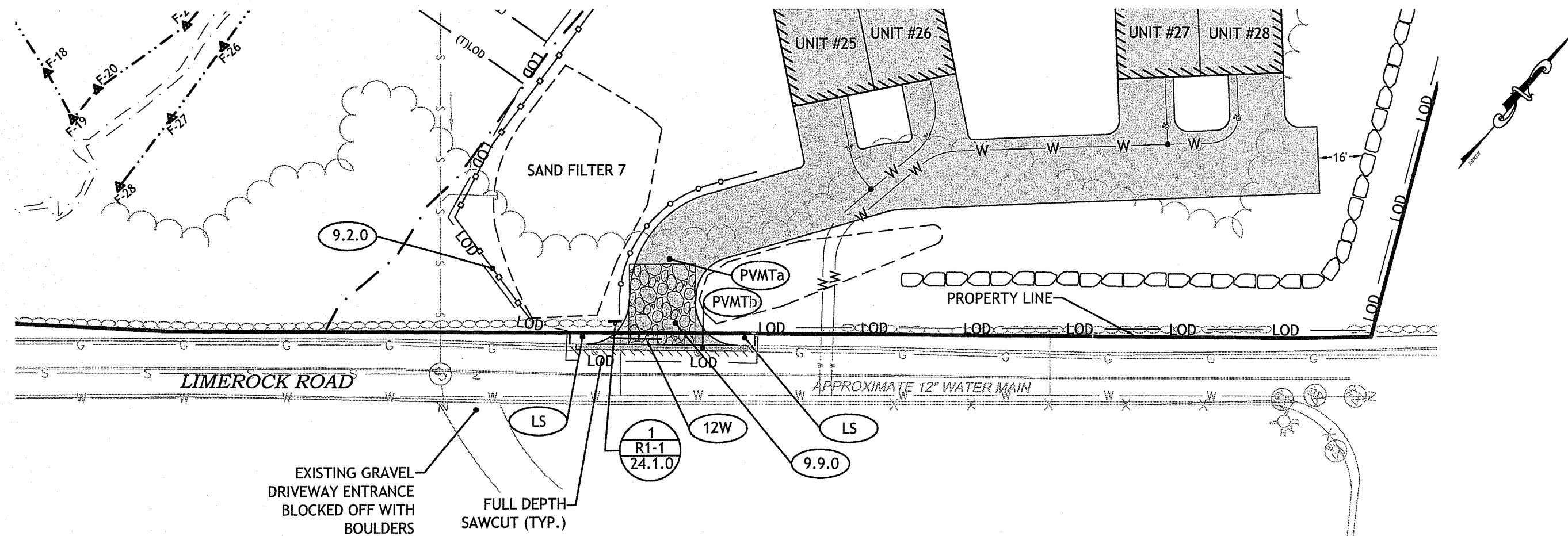
SHEET 9 OF 17

Q:\13-14 Anthony Rongione\13-14b Condo Development\ACAD\2014-08-21 Condo\Condo\PLANSET\ RIDEA PLANSET.dwg Jan 11, 2016 1:32pm



LIMEROCK ROAD DRIVEWAY GRADING PLAN

SCALE 1"=40'



LIMEROCK ROAD DRIVEWAY SITE PLAN

SCALE 1"=40'

- NOTES:**
1. MINIMUM COMPACTION FOR GRAVEL SUB-BASE OR SUBGRADE: 95% MODIFIED PROCTOR.
 2. NO WORK SHOULD BE DONE OUTSIDE OF THE PROJECT'S LOD. PAVEMENT SHOULD MATCH WHERE NOTED ON THE SITE PLANS.
 3. WHEN MATCHING EXISTING PAVEMENT, THE LONGITUDINAL CUT AND MATCH SECTION SHOULD NOT EXCEED PAST THE SHOULDER STRIPING.

POSTED SPEED LIMIT ON LIMEROCK ROAD: 35 MPH
AASHTO STOPPING SIGHT DISTANCE (SSD) REQUIREMENTS

SPEED	DISTANCE
25	155 FT.
30	200 FT.
35	250 FT.
40	305 FT.
50	425 FT.
55	495 FT.

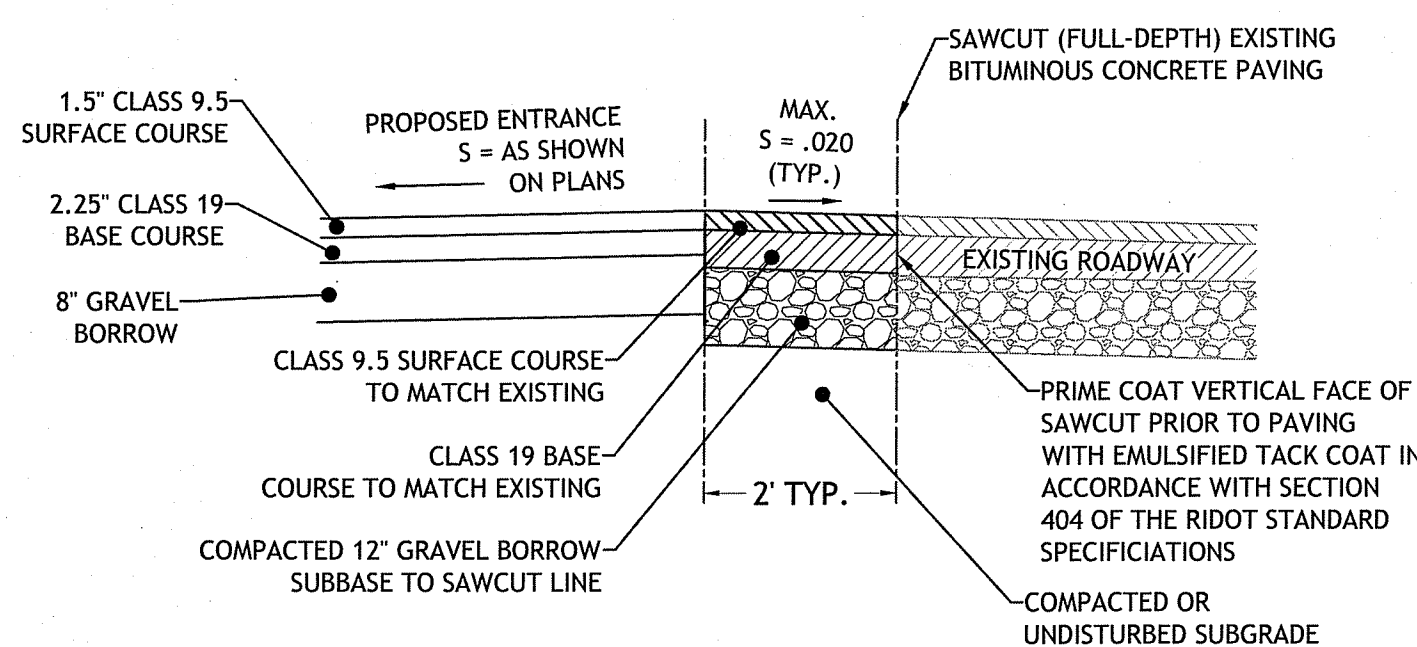
SITE MEETS REQUIREMENTS FOR THE POSTED SPEED LIMIT ON LIMEROCK ROAD. IT SHOULD BE NOTED THAT SPEEDS WERE IN EXCESS OF THE POSTED SPEED LIMIT HOWEVER THE STOPPING SIGHT DISTANCE MEASURED ALLOW FOR SPEEDS UP TO 40 MPH.

NOTES:

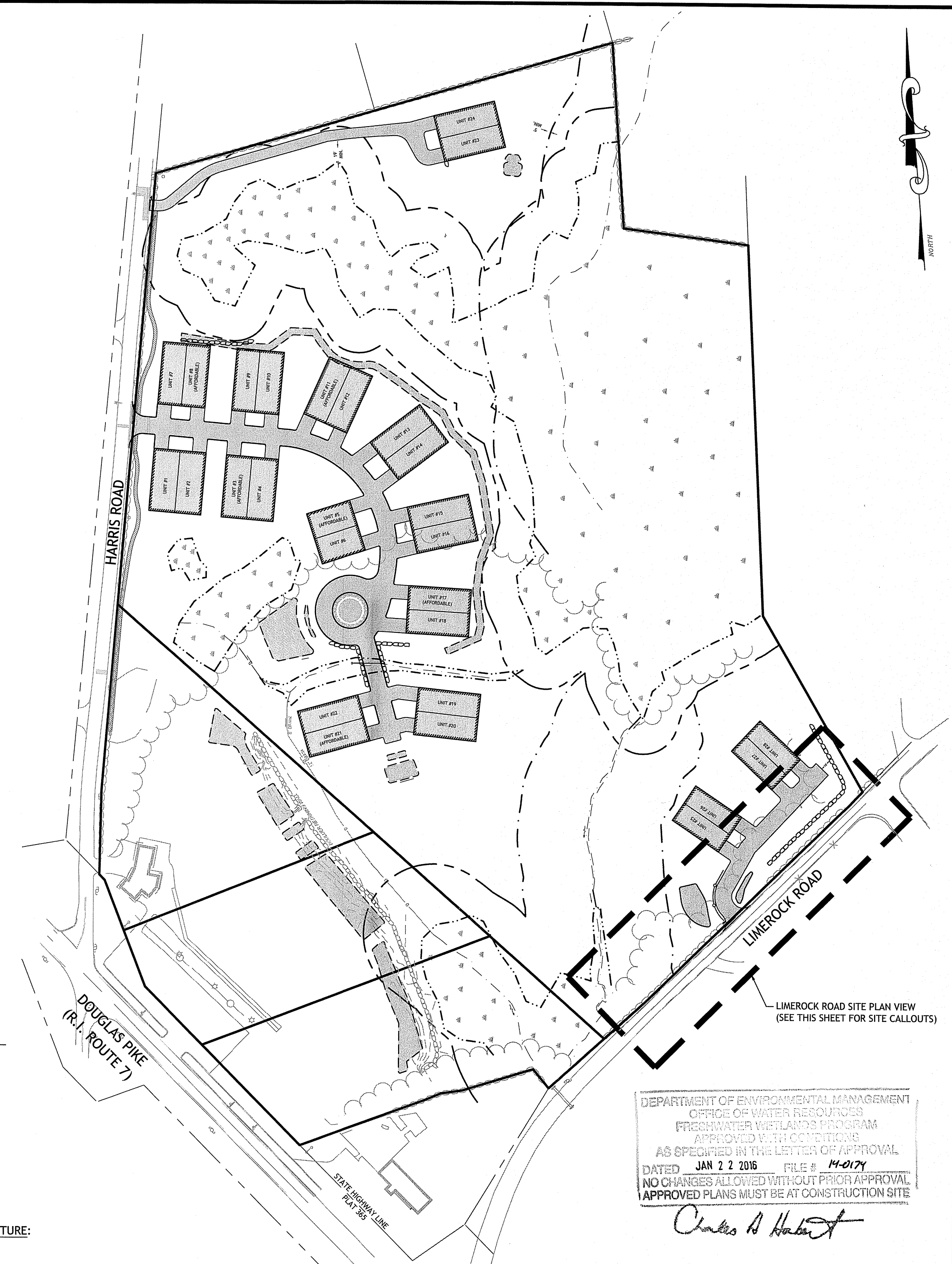
1. ALL WORK WITHIN THE STATE'S RIGHT-OF-WAY SHALL CONFORM TO RIDOT'S STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AMENDED 2013 WITH ALL REVISIONS AND ADDENDA. STANDARD DETAILS FOR THIS WORK ARE RI STANDARD DETAILS 1998 EDITION WITH ALL REVISIONS.
2. ALL UTILITY WORK SHOWN WITHIN THE STATE'S ROW IS SHOWN AS A REFERENCE. THE CONTRACTOR WILL NEED TO PROCURE A SUBSEQUENT UTILITY PERMIT BY FILING A PHYSICAL UTILITY PERMIT (PUP) WITH RIDOT'S DIVISION OF MAINTENANCE.
3. 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 MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
4. THE CONTRACTOR SHALL PROVIDE TEMPORARY EROSION CONTROLS TO PROTECT THE STATE ROW DURING THE CONSTRUCTION OF NEW DRIVEWAY.

RHODE ISLAND STANDARDS

- (9.2.0) SILT FENCE
- (9.9.0) CONSTRUCTION ACCESS
- (24.1.0) SIGN POST SELECTION AND INSTALLATION DETAILS SQUARE POST
- (27.1.0) REGULATORY SIGNS
- (DFP) REMOVE AND DISPOSE FLEXIBLE PAVEMENT
- (LS) LOAM & SEED
- (PVMT)a **PROPOSED DRIVEWAY ENTRANCE PAVEMENT STRUCTURE:**
1.5" BITUMINOUS SURFACE TYPE (CLASS 9.5)
2.25" BITUMINOUS BASE COURSE (CLASS 19)
8" GRAVEL BORROW SUBBASE COURSE
- (PVMT)b **REPLACE PAVEMENT IN KIND WITHIN STATE ROW AT MINIMUM:**
3.75" BITUMINOUS SURFACE COURSE (CLASS 9.5)
2.25" BITUMINOUS BASE COURSE (CLASS 19)
12" GRAVEL BORROW SUBBASE COURSE
- (12W) 12" WHITE STRIPING
- (X) SIGN NUMBER
- (XX) SIGN DESIGNATION
- (XX) SIGN POST



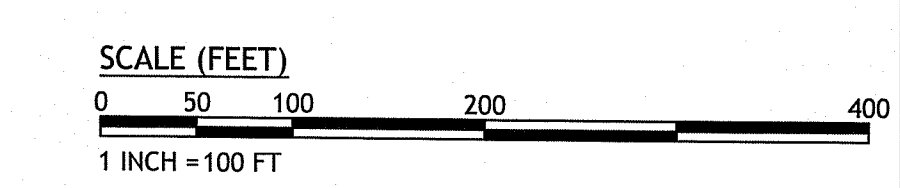
(PVMT) ENTRANCE ACCESS SAWCUT AND MATCH DETAIL
NOT TO SCALE



LIMEROCK ROAD SITE PLAN VIEW
(SEE THIS SHEET FOR SITE CALLOUTS)

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED JAN 22 2016 FILE # 14-0174
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Charles A. Herbert



JCE
JOE CASALI ENGINEERING, INC.
CIVIL - SITE DEVELOPMENT - TRANSPORTATION
DRAINAGE - WETLANDS - ISDS - TRAFFIC - FLOODPLAIN
1601 944-1300 16019441303 FAX WWW.JCEENR.COM

JOSEPH A. CASALI
No. 7250
REGISTERED PROFESSIONAL ENGINEER CIVIL
1.11.16

THE RESIDENCE AT LIMEROCK
SMITHFIELD, RHODE ISLAND
AP 45, LOTS 43A, 181, 182 & 183

REVISIONS:

NO.	DATE	DESCRIPTION

DESIGNED BY: JWH
DRAWN BY: JMM
CHECKED BY: JAC
DATE: DECEMBER 2015
PROJECT NO: 13-14b

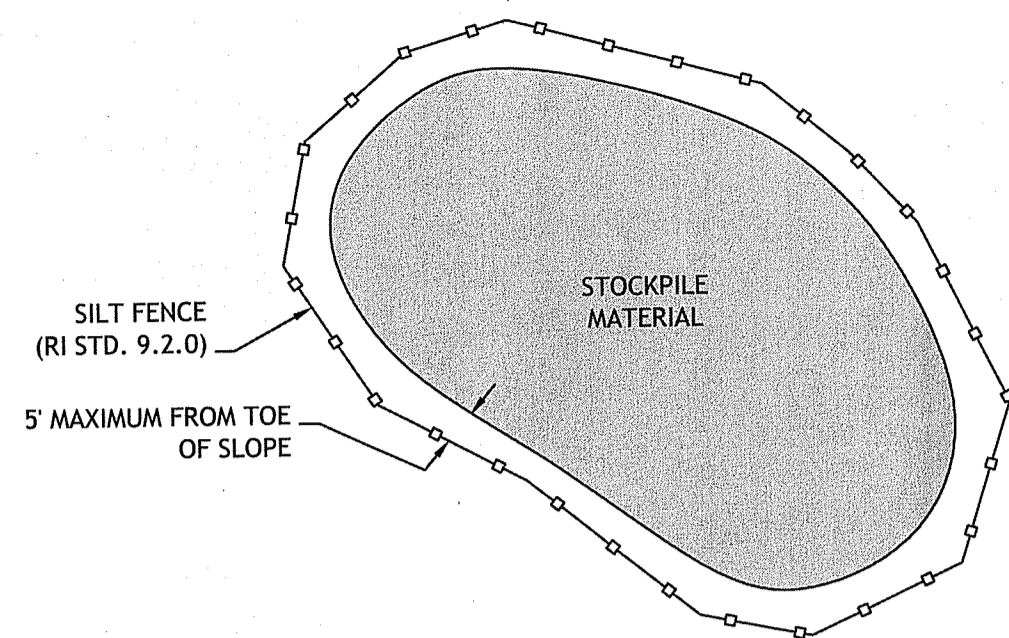
PRELIMINARY, NOT FOR CONSTRUCTION

RIDOT PAPA PLAN

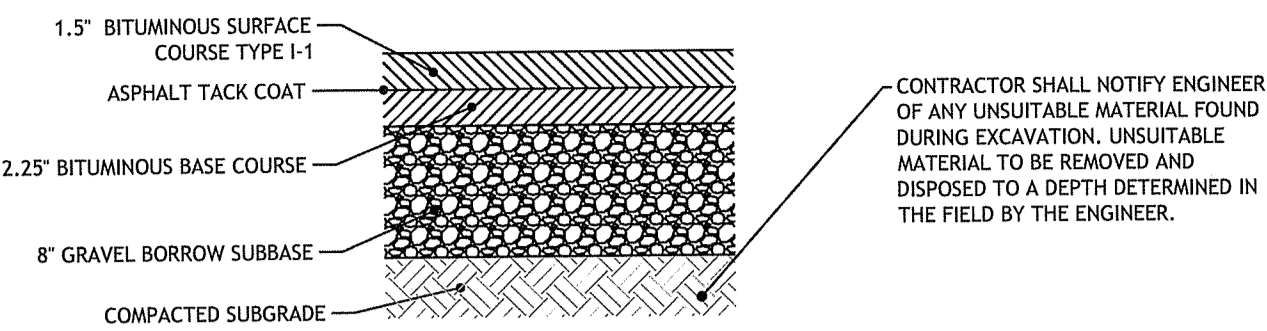
SHEET 10 OF 17

Q:\13-14 Anthony Rongione\13-14b Condo Development\CAD\2014-08-21 Condo\Condo\PLANS\SET\RDDEM PLANSET.dwg Jan. 11, 2016 1:33pm

NOTE TO CONTRACTOR:
CONTRACTOR TO COORDINATE WITH OWNER
ON LOCATION OF CONSTRUCTION TRAILER AND
STAGING AREAS



1 STOCKPILE DETAIL
NOT TO SCALE

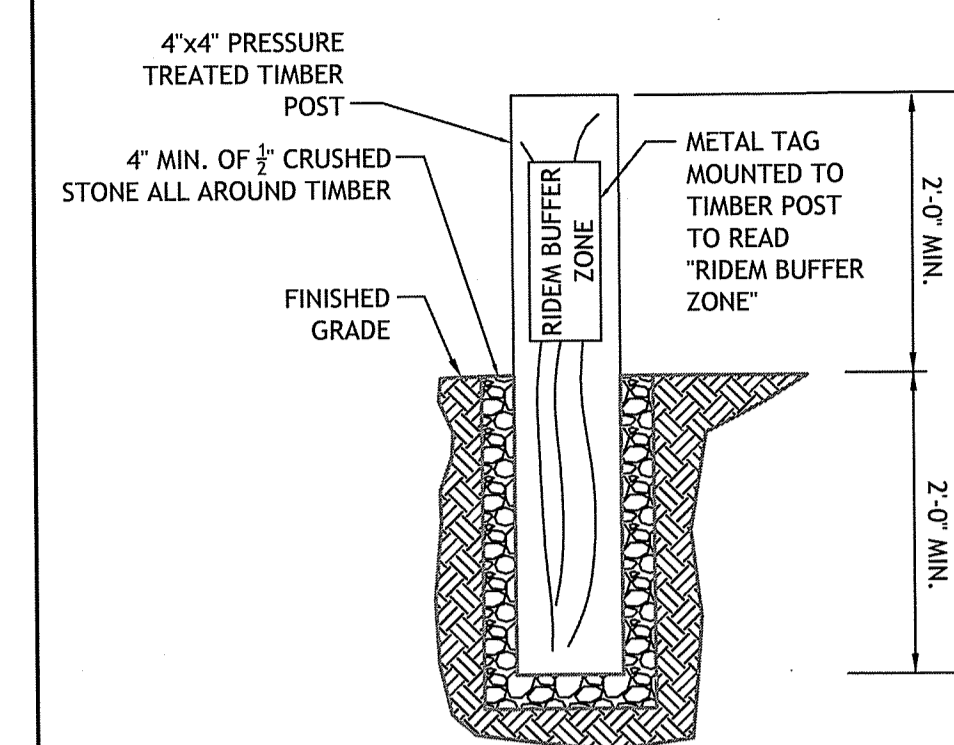


CONTRACTOR SHALL NOTIFY ENGINEER
OF ANY UNSUITABLE MATERIAL FOUND
DURING EXCAVATION. UNSUITABLE
MATERIAL TO BE REMOVED AND
DISPOSED TO A DEPTH DETERMINED IN
THE FIELD BY THE ENGINEER.

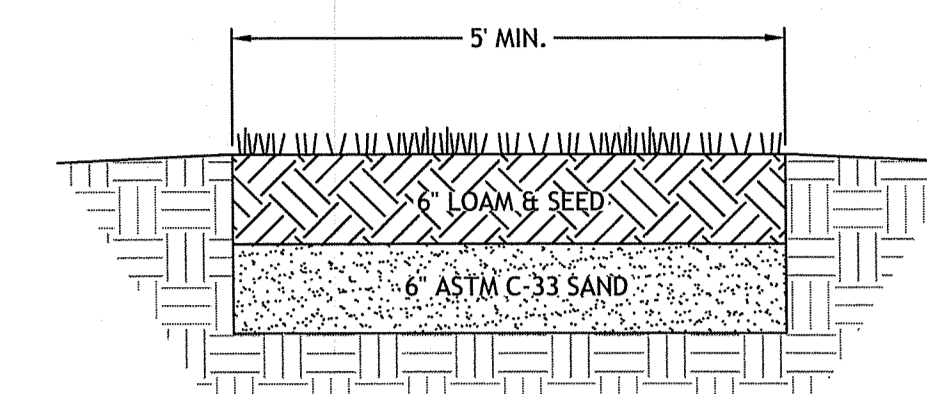
NOTE:

1. IN AREAS OF EARTH EXCAVATION FOR BITUMINOUS CONCRETE PAVEMENT, THE CONTRACTOR SHALL REMOVE 12 INCHES OF EXISTING MATERIAL. IF UNSUITABLE MATERIALS ARE ENCOUNTERED, 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. PAVEMENT DETAIL IS FOR THE DRIVEWAY AND PRIVATE ROADWAYS ONLY. PLEASE REFER TO THE RIDOT PAP PLAN (SHEET 10 OF 14) FOR PAVEMENT DETAILS WITHIN THE RIDOT ROW.

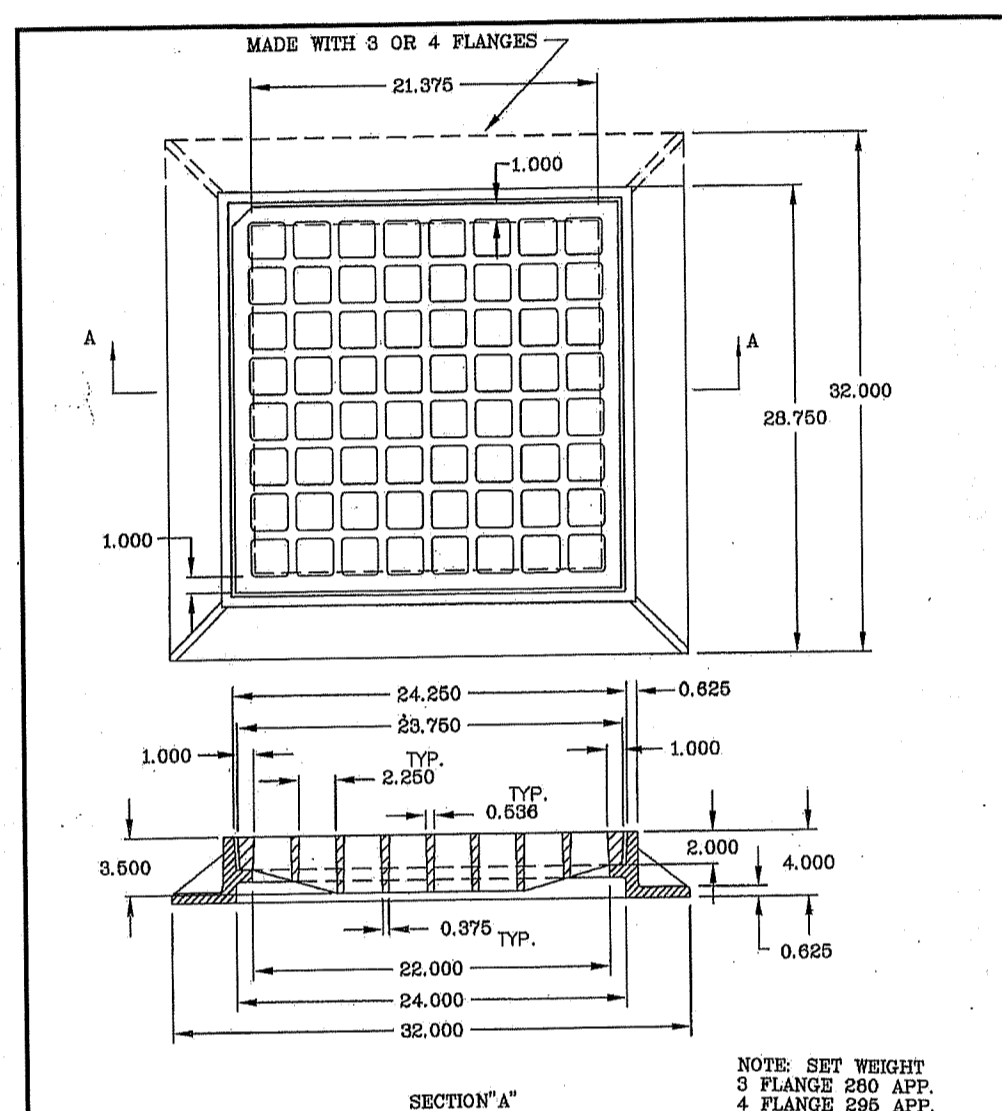
2 BITUMINOUS CONCRETE PAVEMENT
NOT TO SCALE



3 RIDEM BUFFER ZONE MARKER DETAIL
NOT TO SCALE

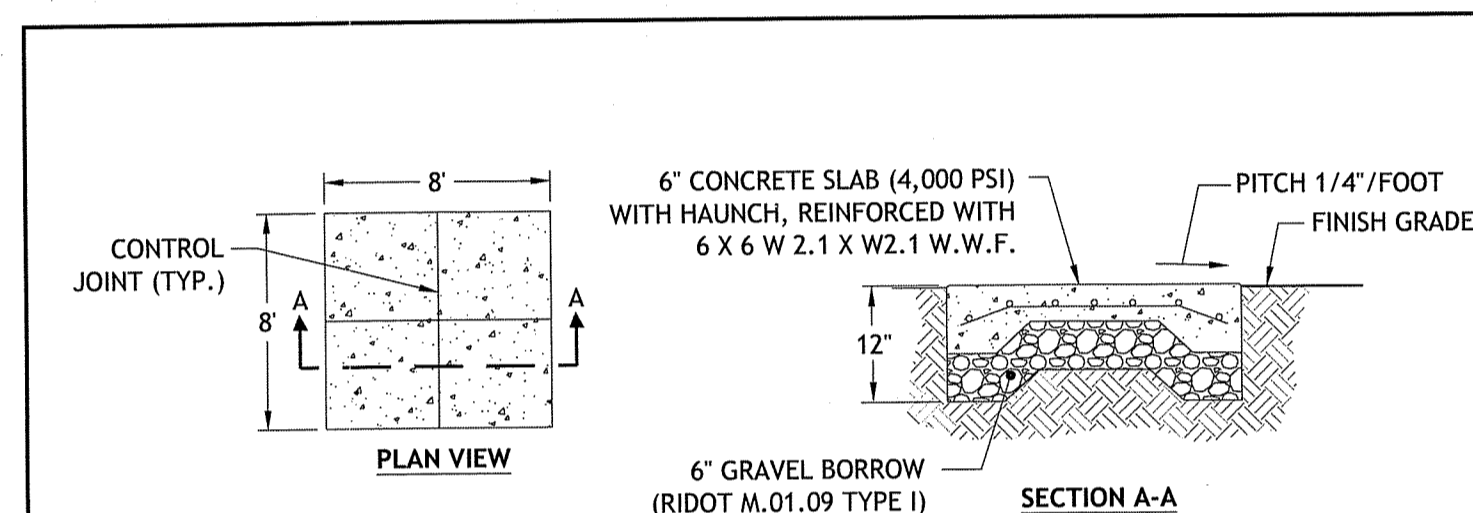


4 5' WIDE GRASS WALKWAY
NOT TO SCALE

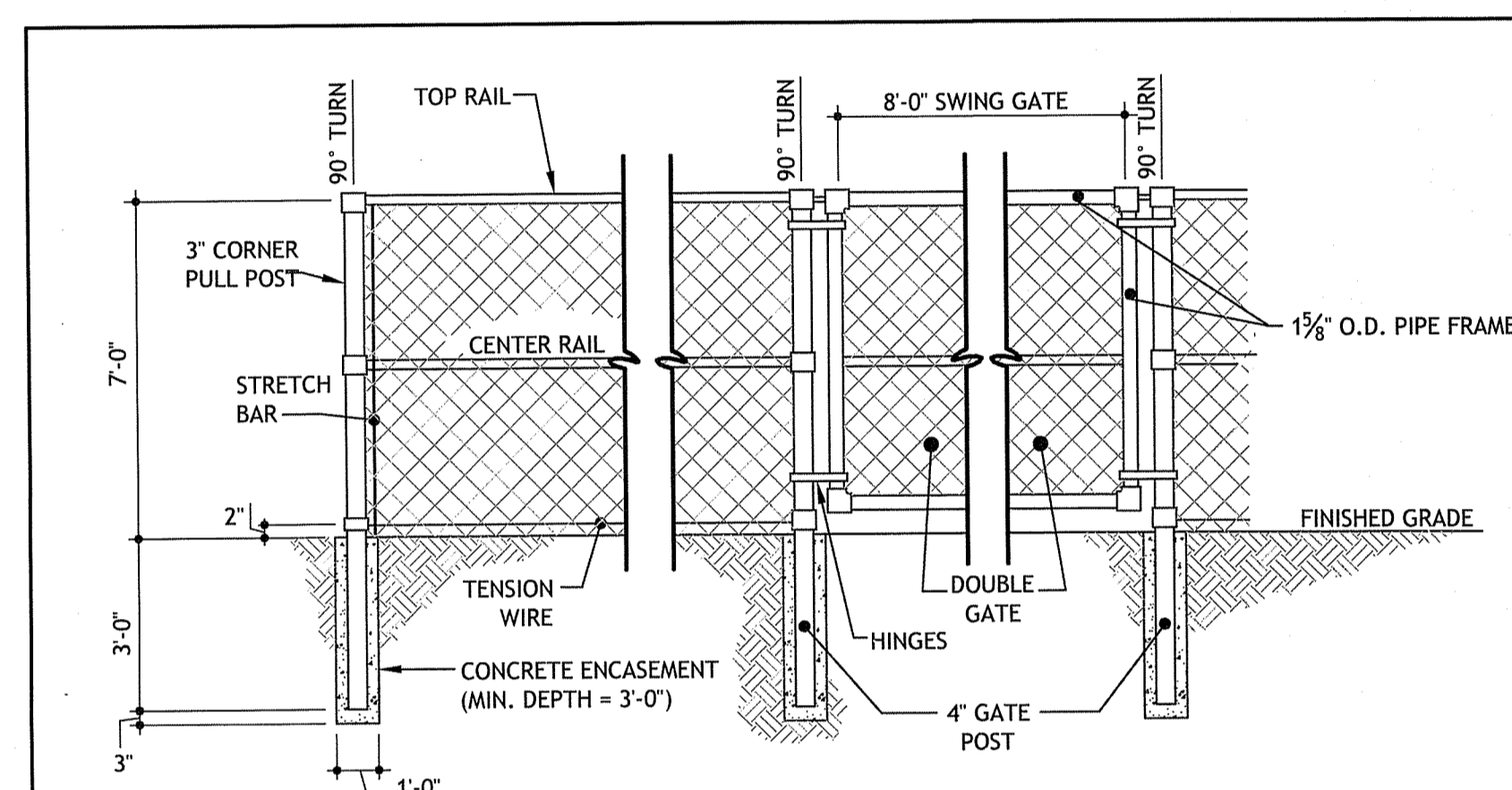


LeBARON FOUNDRY INC., BROCKTON, MASS.			
CLASSIFICATION:	DESCRIPTION:	TOL. #	REV.
ASTM A-48	24" X 4" SQUARE FRAME WITH SQUARE GRATE	CK	J.M.S./S
CLASS 30 GRAY IRON			
AS OF 9-1-89 CASTINGS			
FURNISHED WITH NO			
BLACK ASPHALT COATING			
	PAT. NOS. 1P244-2 / 1248G17	W.T. LBS. NOTED	
	SCALE: 1/2" = 1'-0"	DATE: 08/19/00	DR. NO.: 1P244-2

5 LEBARON FRAME & GRATE
NOT TO SCALE

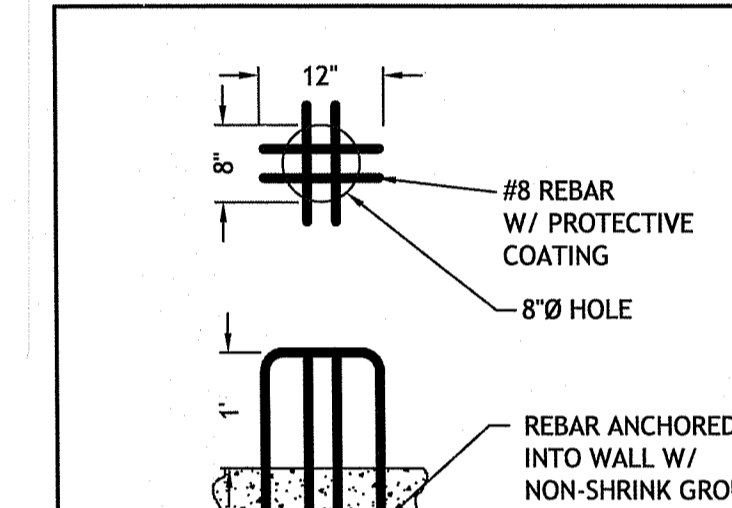


6 DUMPSTER PAD DETAIL
NOT TO SCALE



- NOTES:**
1. DOUBLE GATE SHALL HAVE A LOCKING MECHANISM, DROP ROD, AND TRUSS ROD.
 2. ALL FENCING MATERIALS SHALL BE IN ACCORDANCE WITH SECTION 902 OF THE RHODE ISLAND STANDARD SPECIFICATIONS.
 3. FENCE MESH TO BE SECURED TO TOP RAIL AND CORNER POSTS USING TIE WIRES SPACED 12" ON CENTER.
 4. PRIVACY SLATS TO BE INSTALLED AT THE COMPLETION OF CONSTRUCTION. PRIVACY SLATS SHALL BE GREEN AND SHALL BE BOTTOM-LOCKING AS MANUFACTURED BY PDS FENCE PRODUCTS INC. OR APPROVED EQUAL.

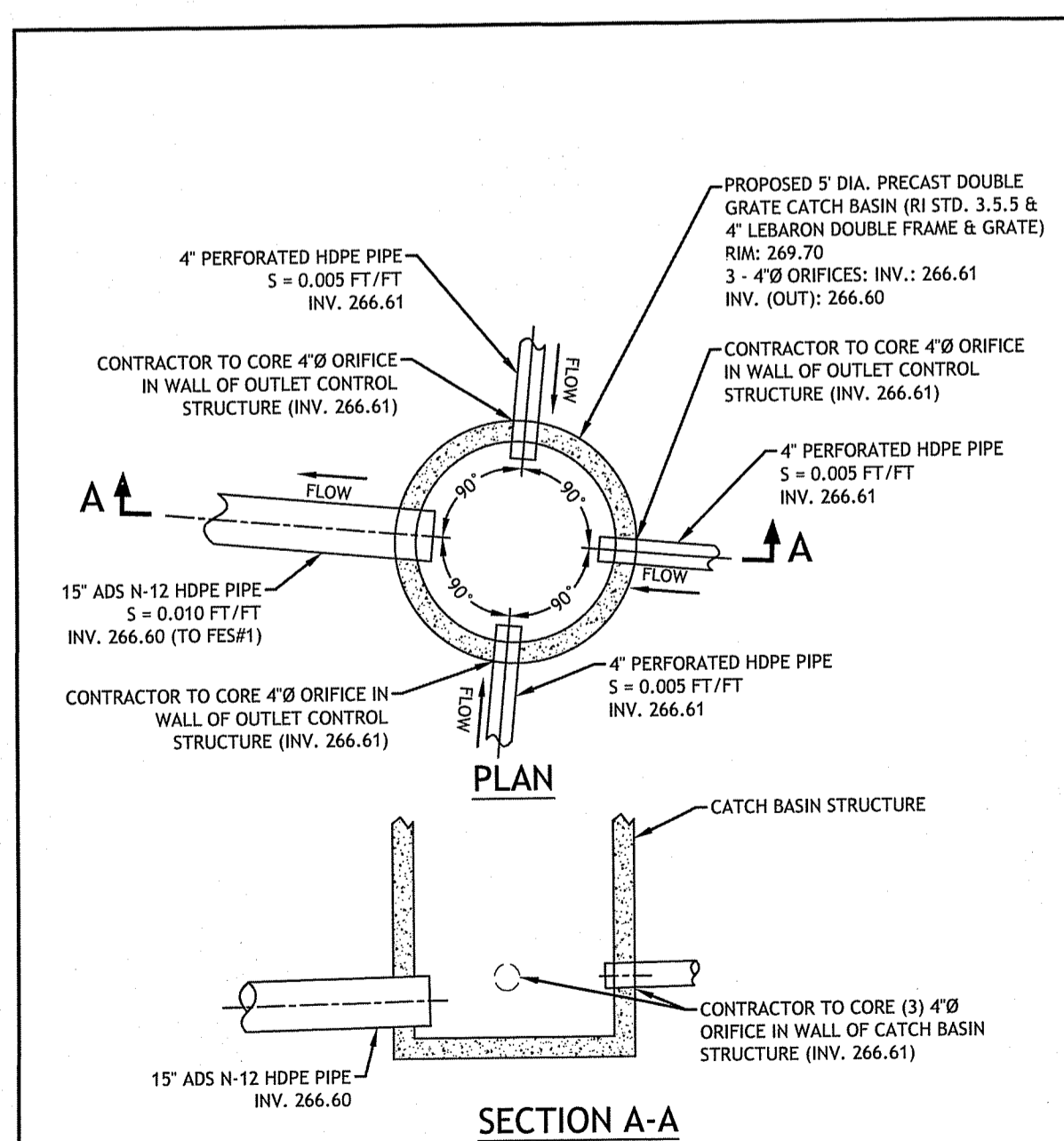
7 CHAIN LINK FENCING DETAIL
NOT TO SCALE



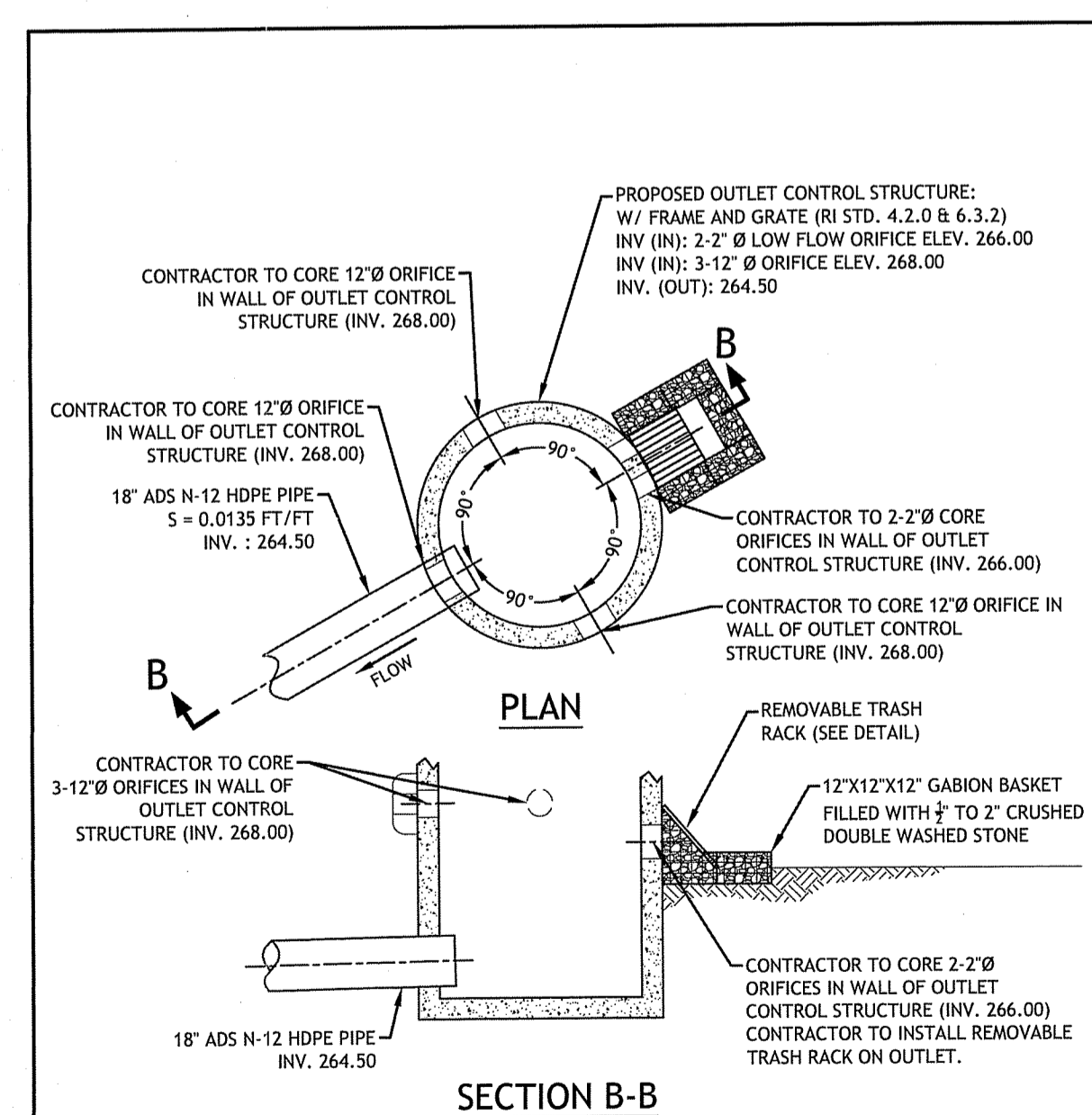
8 TRASH RACK DETAIL
NOT TO SCALE

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
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DATED JAN 22 2016 FILE # 14-079
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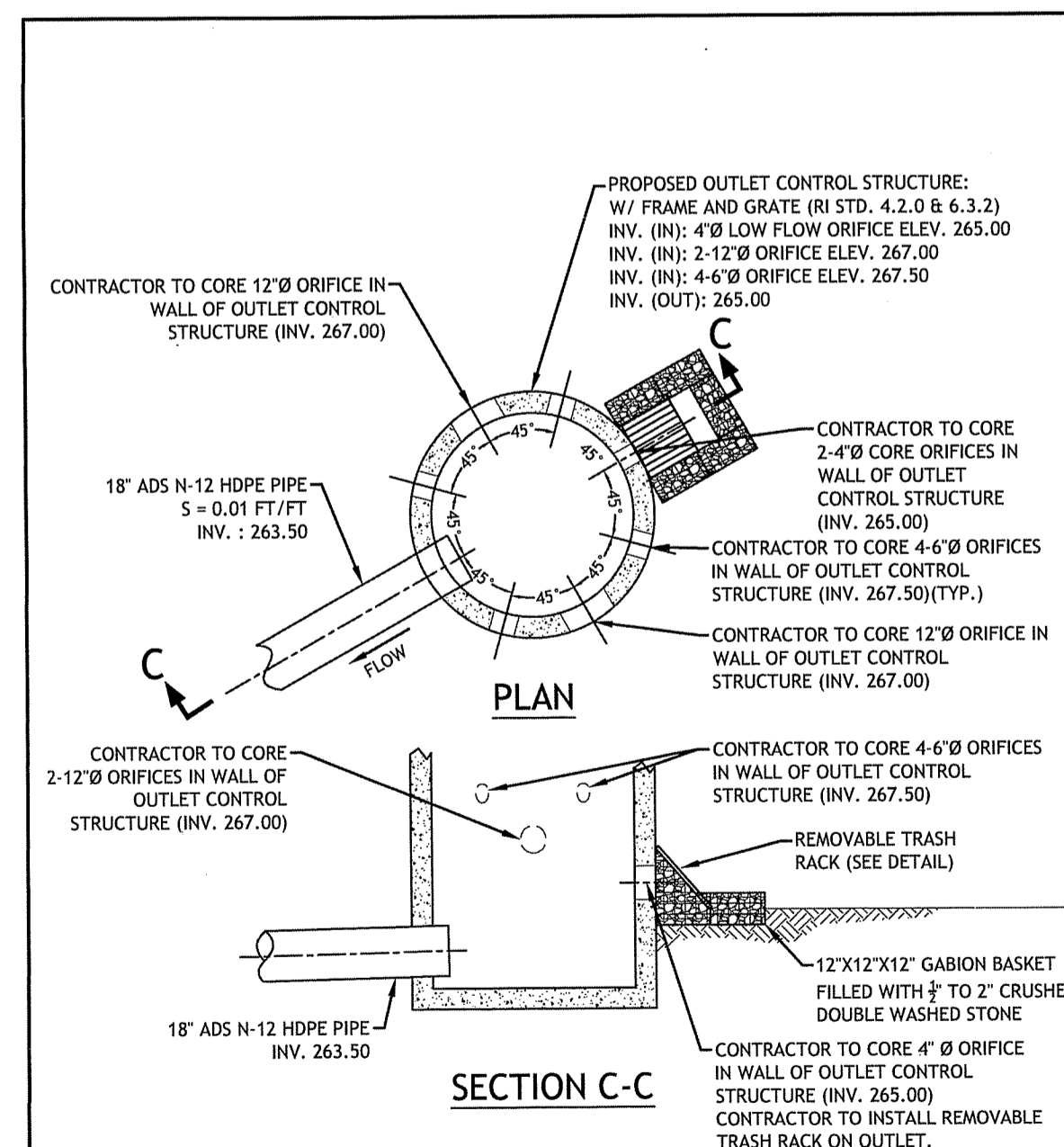
Charles A. Habert



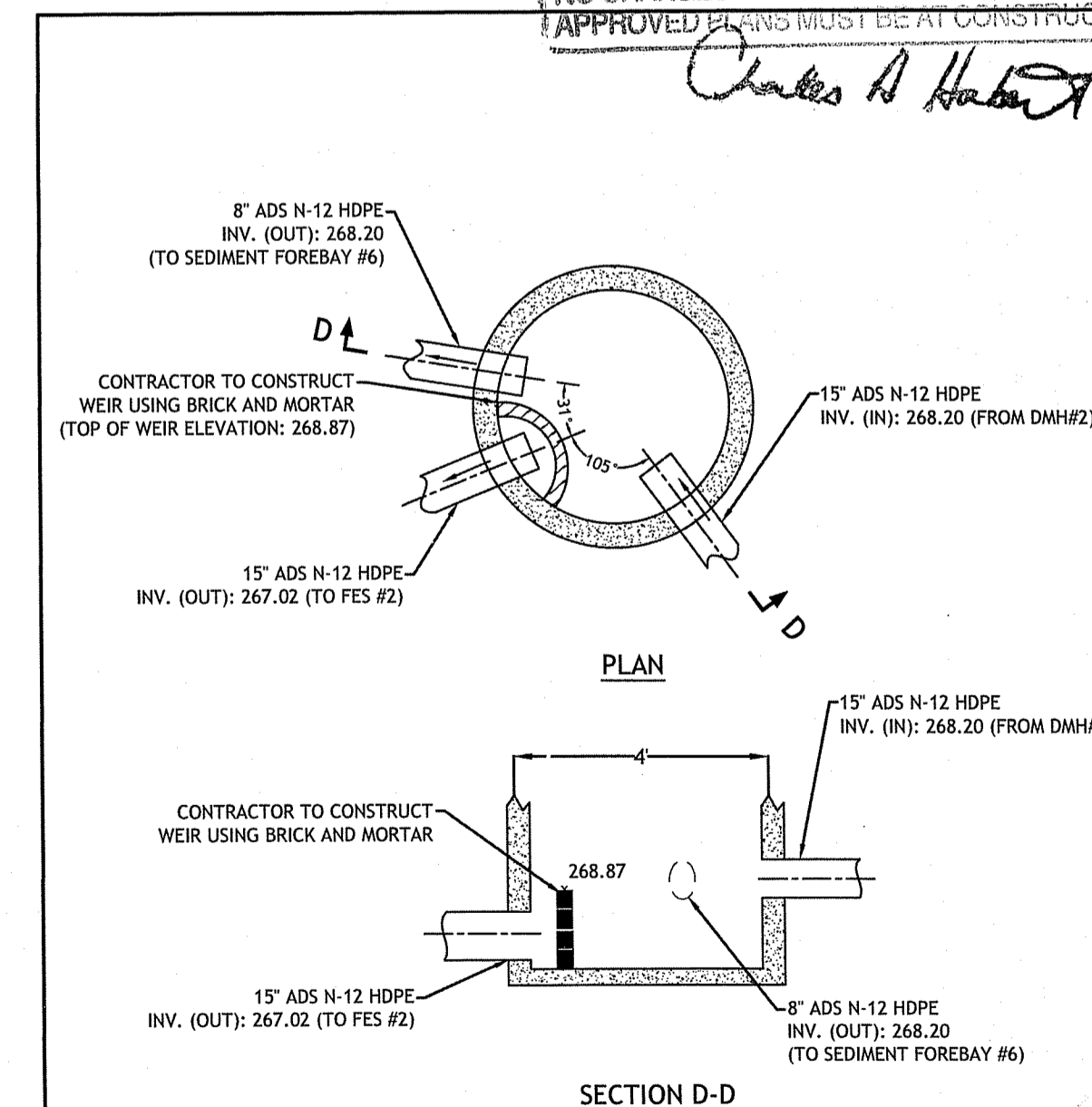
9 CATCH BASIN #3 (CB#3) DETAIL
NOT TO SCALE



10 OUTLET CONTROL STRUCTURE #1 AND NON-CLOGGING LOW FLOW ORIFICE DETAIL
NOT TO SCALE

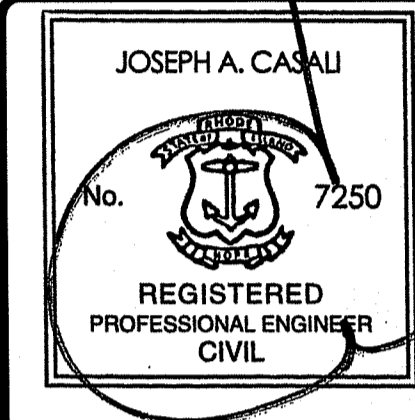
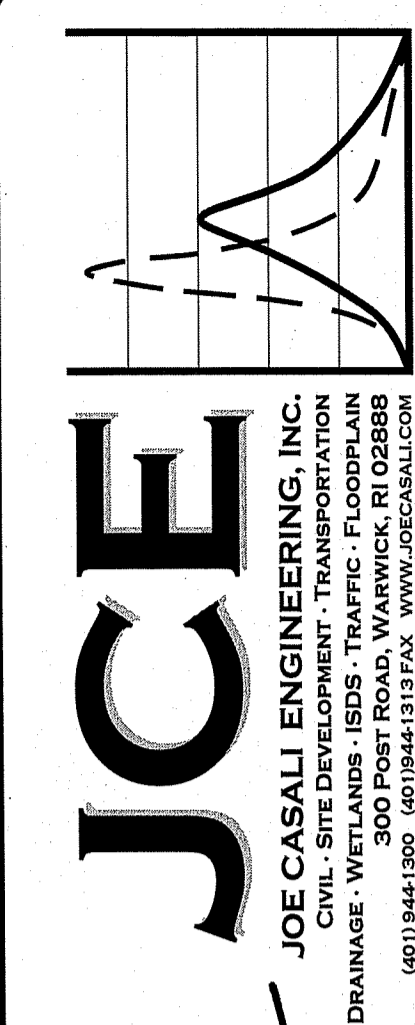


11 OUTLET CONTROL STRUCTURE #2 AND NON-CLOGGING LOW FLOW ORIFICE DETAIL
NOT TO SCALE



12 DRAINAGE MANHOLE 3 (DMH#3)
NOT TO SCALE

Q:\13-14 Anthony Romig\one13-14b Condo Development\CAD\2014-08-21 Condo\Condo\PLANSET\FINDEN PLANSET.dwg Jan. 11, 2016 1:33pm



THE RESIDENCE AT LIMEROCK
SMITHFIELD, RHODE ISLAND
AP 45, LOTS 43A, 181, 182 & 183

REVISIONS:

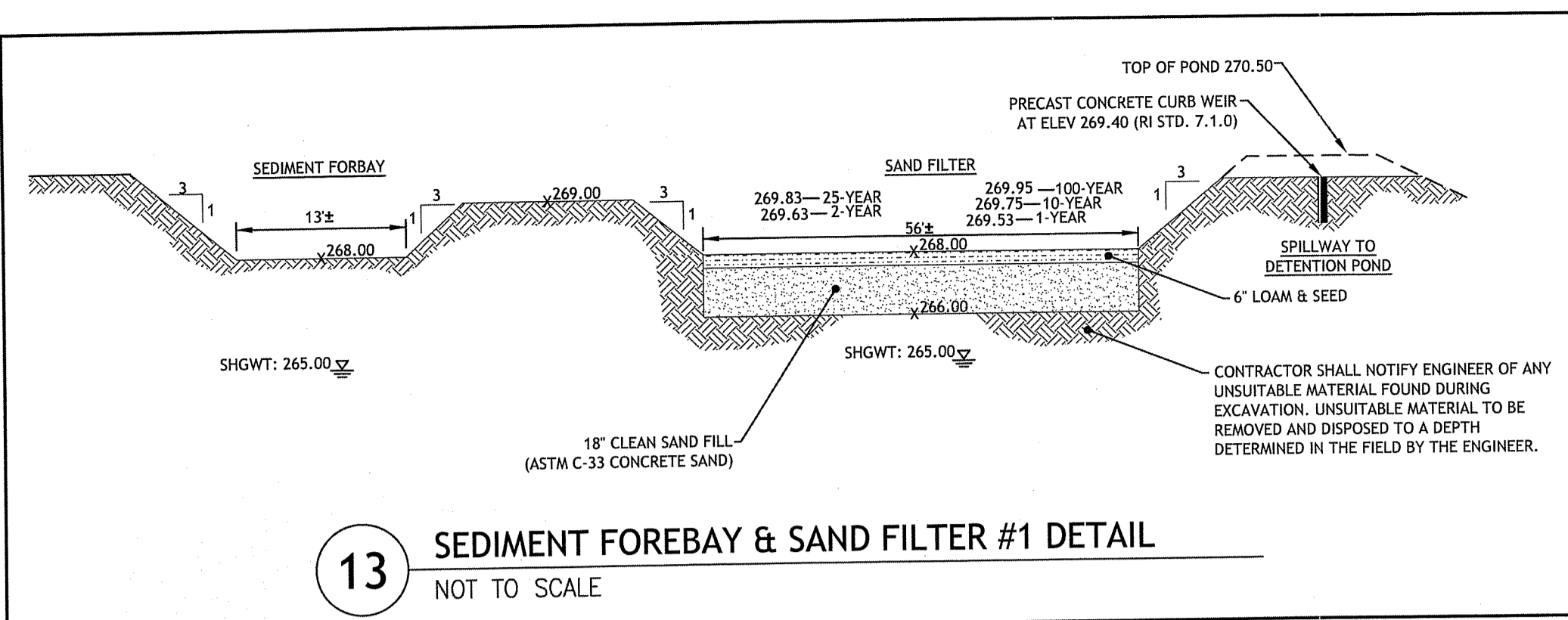
NO.	DATE	DESCRIPTION

DESIGNED BY: JWH
DRAWN BY: JMM
CHECKED BY: JAC
DATE: DECEMBER 2015
PROJECT NO: 13-14b

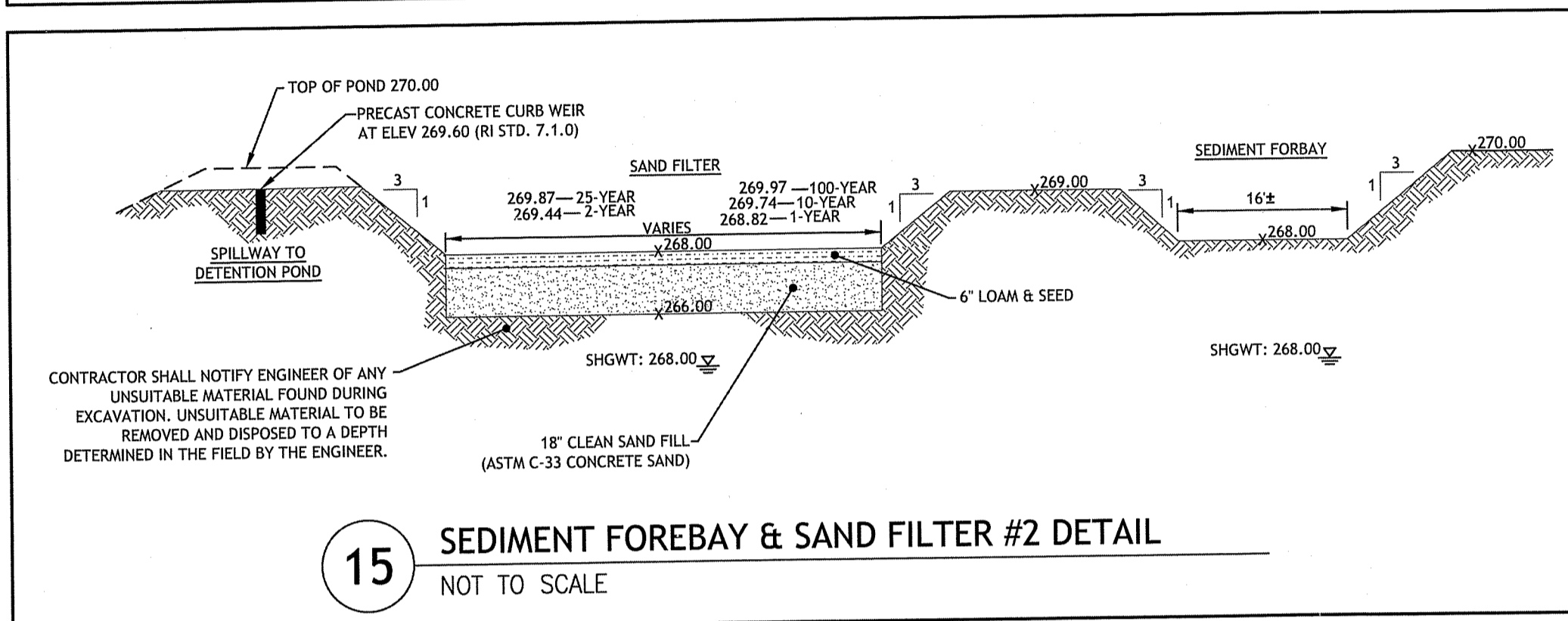
PRELIMINARY, NOT FOR CONSTRUCTION

DETAIL SHEET I

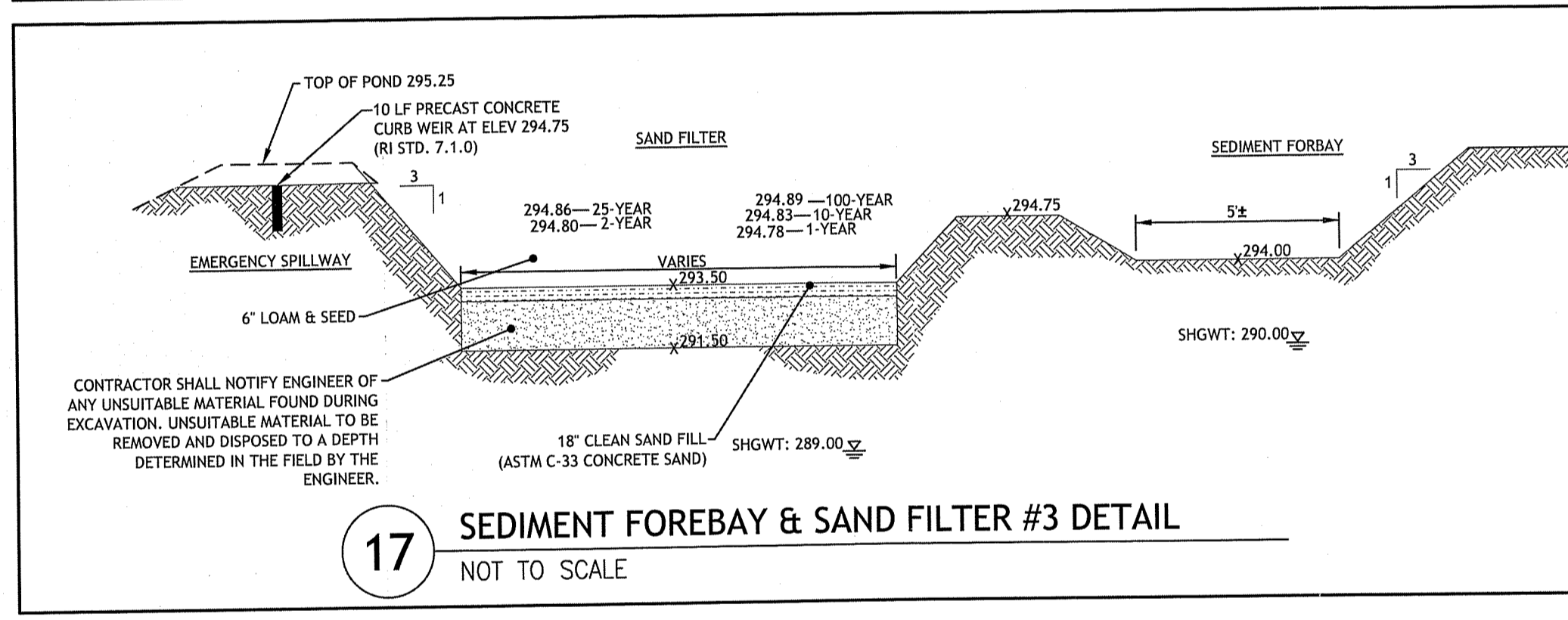
SHEET 12 OF 17



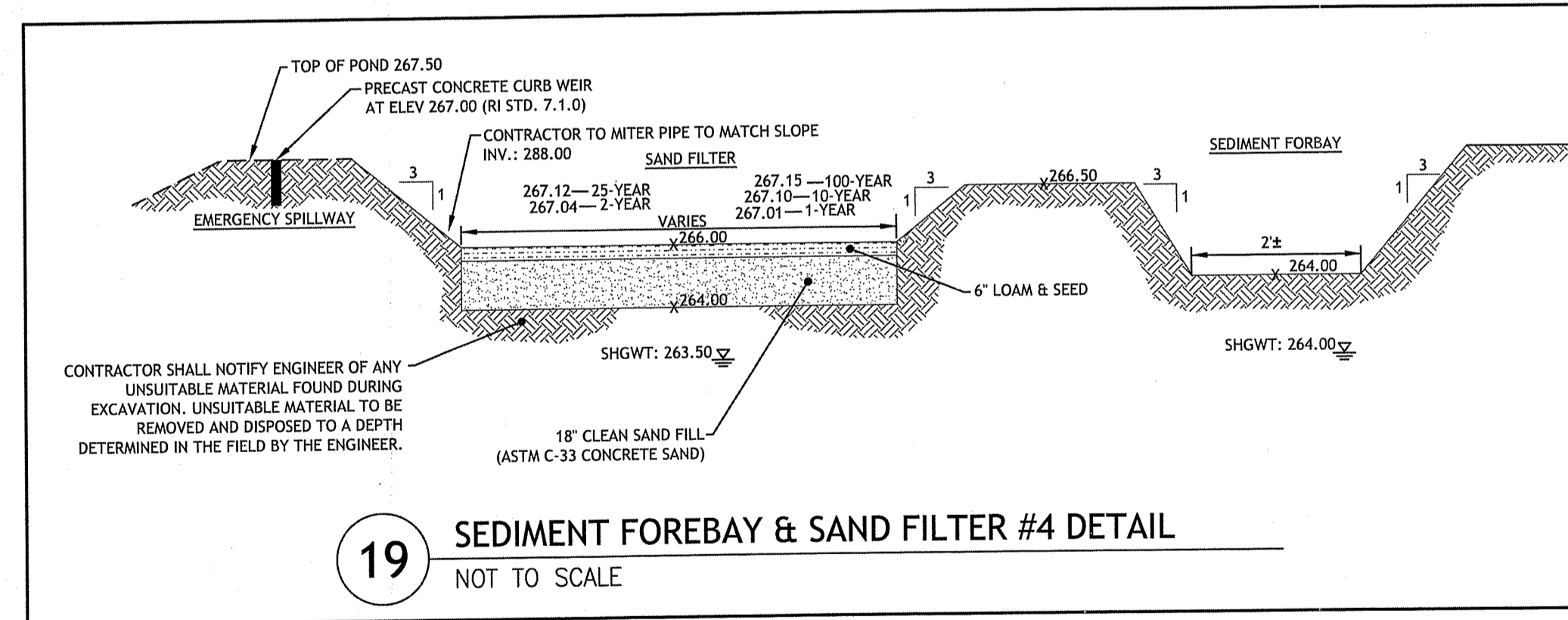
13 SEDIMENT FOREBAY & SAND FILTER #1 DETAIL
NOT TO SCALE



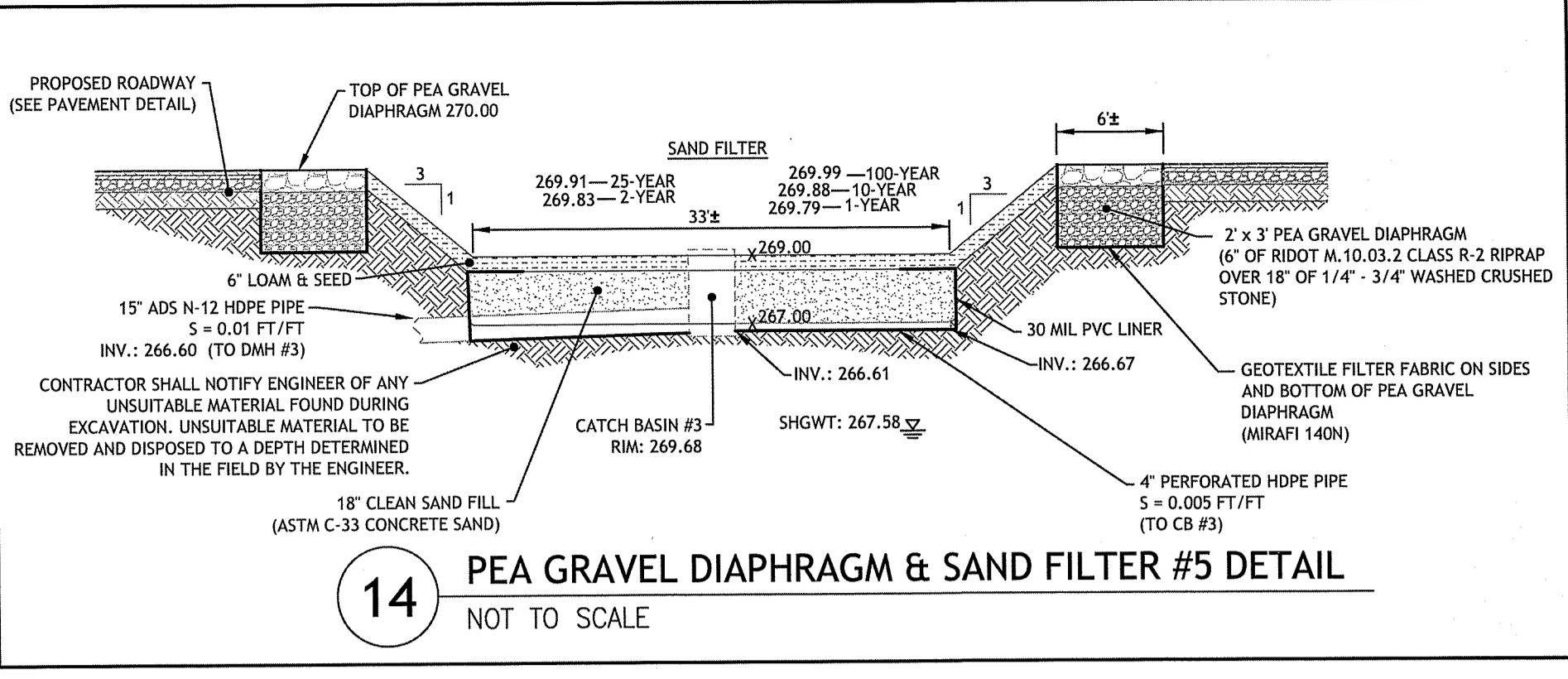
15 SEDIMENT FOREBAY & SAND FILTER #2 DETAIL
NOT TO SCALE



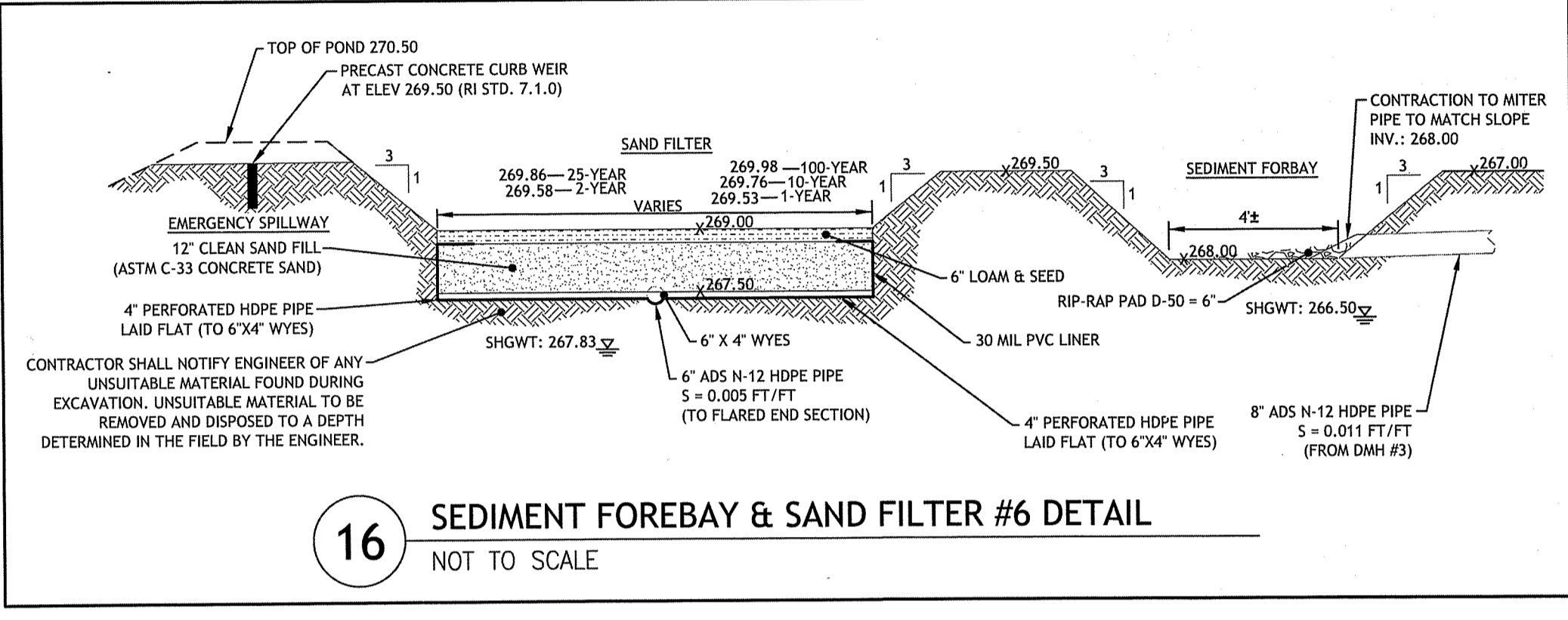
17 SEDIMENT FOREBAY & SAND FILTER #3 DETAIL
NOT TO SCALE



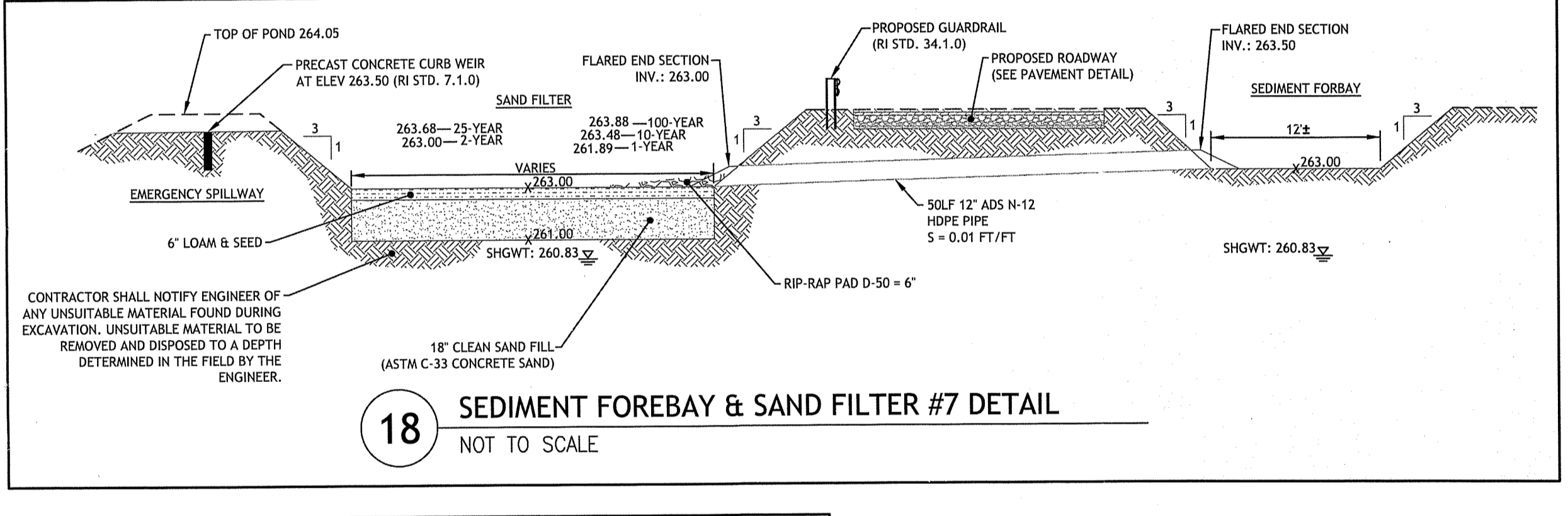
19 SEDIMENT FOREBAY & SAND FILTER #4 DETAIL
NOT TO SCALE



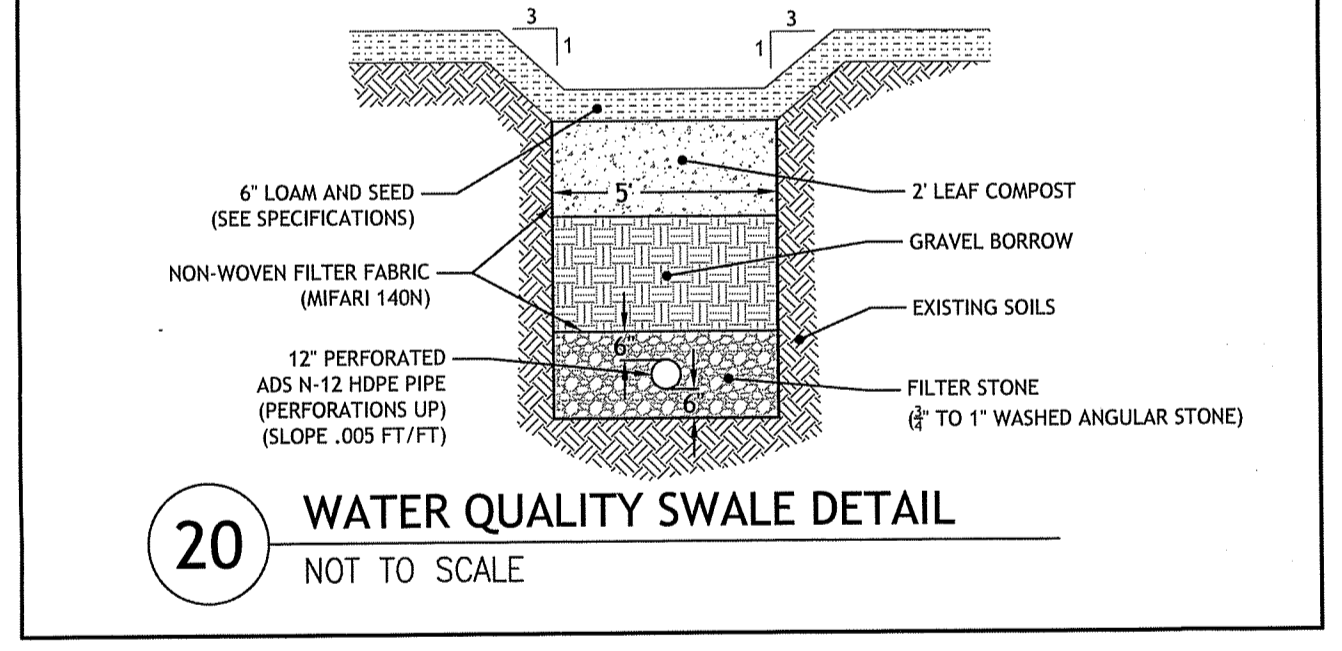
14 PEA GRAVEL DIAPHRAGM & SAND FILTER #5 DETAIL
NOT TO SCALE



16 SEDIMENT FOREBAY & SAND FILTER #6 DETAIL
NOT TO SCALE

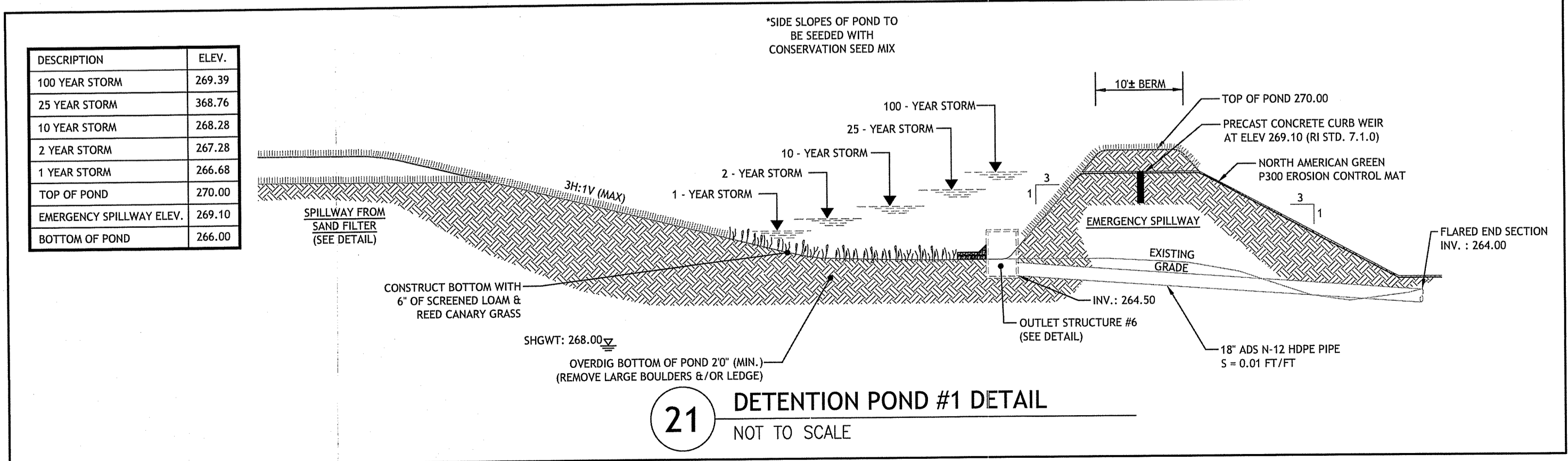


18 SEDIMENT FOREBAY & SAND FILTER #7 DETAIL
NOT TO SCALE

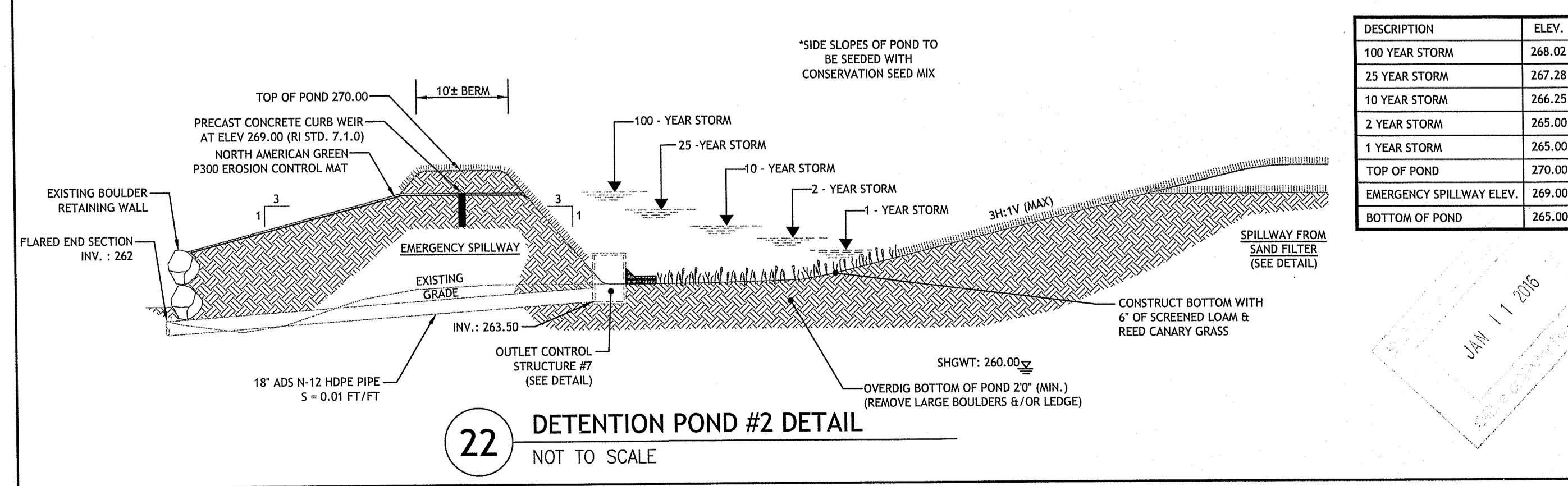


20 WATER QUALITY SWALE DETAIL
NOT TO SCALE

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
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Charles A. Haba



21 DETENTION POND #1 DETAIL
NOT TO SCALE



22 DETENTION POND #2 DETAIL
NOT TO SCALE

DESCRIPTION	ELEV.
100 YEAR STORM	269.39
25 YEAR STORM	268.76
10 YEAR STORM	268.28
2 YEAR STORM	267.28
1 YEAR STORM	266.68
TOP OF POND	270.00
EMERGENCY SPILLWAY ELEV.	269.10
BOTTOM OF POND	266.00

DESCRIPTION	ELEV.
100 YEAR STORM	268.02
25 YEAR STORM	267.28
10 YEAR STORM	266.25
2 YEAR STORM	265.00
1 YEAR STORM	265.00
TOP OF POND	270.00
EMERGENCY SPILLWAY ELEV.	269.00
BOTTOM OF POND	265.00

JCE
JOE CASALI ENGINEERING, INC.
CIVIL - SITE DEVELOPMENT - TRANSPORTATION
DESIGN - WETLANDS - IBCS - TRAFFIC - PLANNING
DRAINAGE - WEIRLAB - (601) 944-1300 (601) 944-1313 FAX WWW.JCECASALI.COM

JOSEPH A. CASALI
No. 7250
REGISTERED PROFESSIONAL ENGINEER
CIVIL
1.11.16

THE RESIDENCE AT LIMEROCK
SMITHFIELD, RHODE ISLAND
AP 45, LOTS 43A, 181, 182 & 183

REVISIONS:
NO. DATE DESCRIPTION

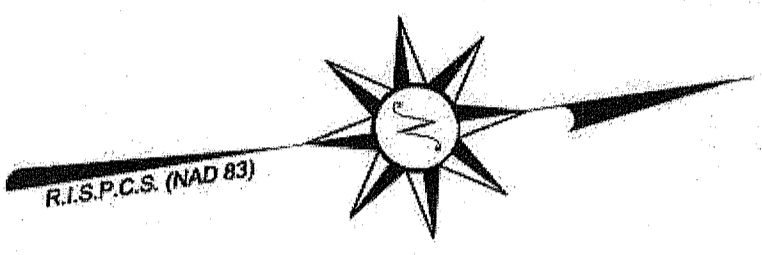
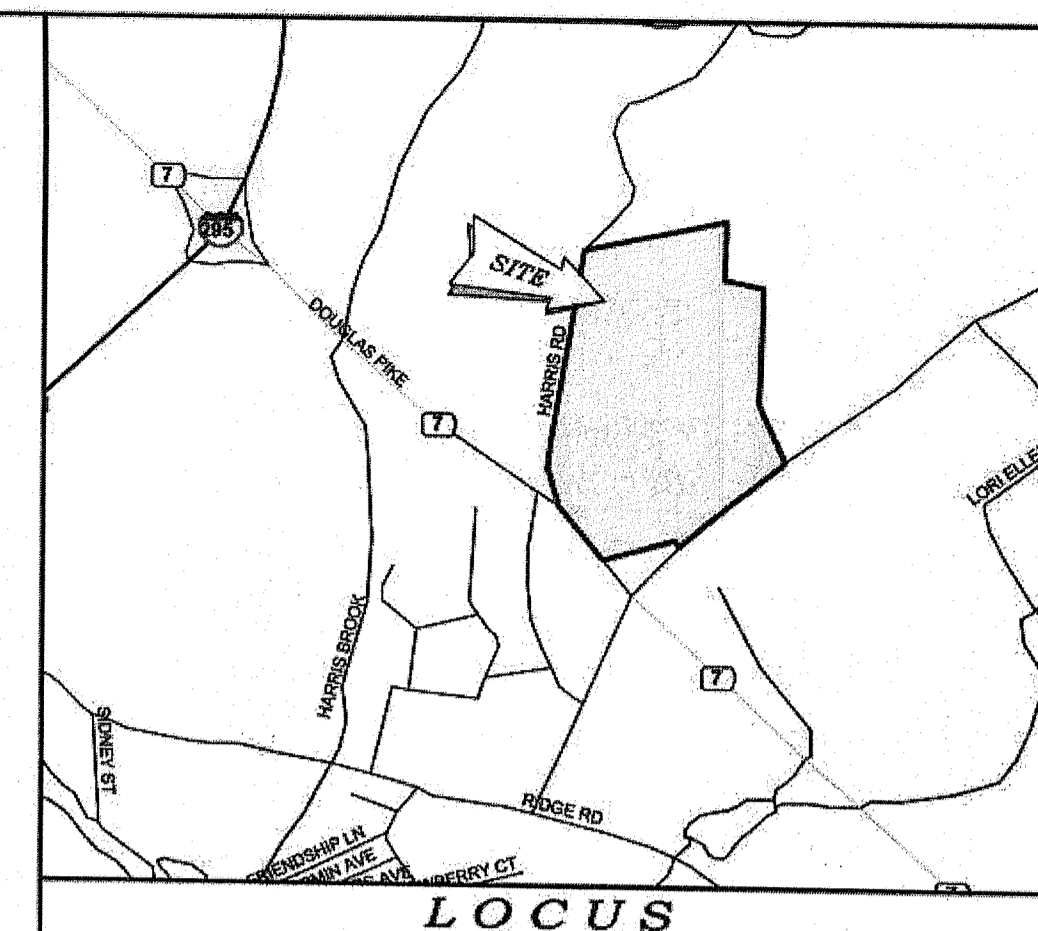
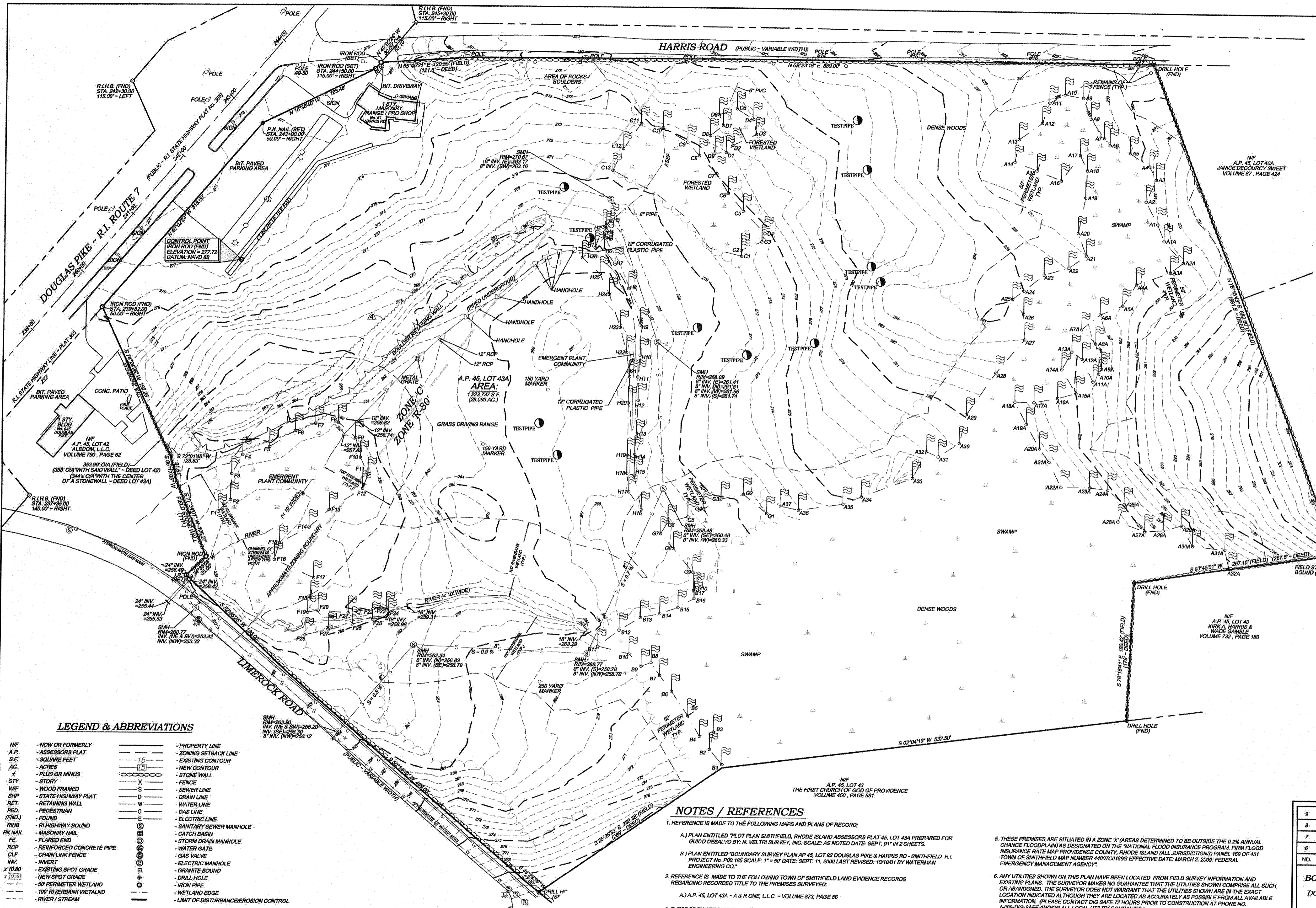
DESIGNED BY: JWH
DRAWN BY: JMM
CHECKED BY: JAC
DATE: DECEMBER 2015
PROJECT NO: 13-14B

PRELIMINARY, NOT FOR CONSTRUCTION

DRAINAGE DETAILS

SHEET 13 OF 17

Q:\13-14 Anthony Romagnolo\13-14b Condo Development\ACAD\2014-08-21 Condo\Condo\PLANSET\BUDGET PLANSET.dwg Jan. 11, 2016 1:33pm



NF
A.P. 45, LOT 40A
JANICE DECOURCY SWEET
VOLUME 87, PAGE 424

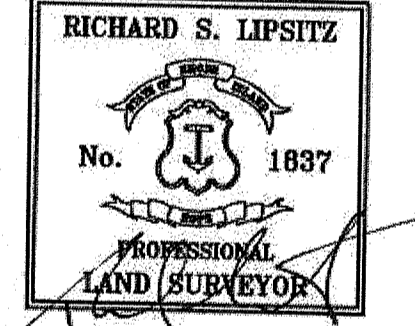
NF
A.P. 45, LOT 40C
CYNTHIA A. MARTONE
VOLUME 536, PAGE 20

NF
A.P. 45, LOT 40D
KIRK A. HARRIS &
WIDE GAMBLE
VOLUME 732, PAGE 180

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
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DATED JAN 22 2016 FILE # 14-077
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Charles H. Harbert

** SIGNATURES MUST BE IN BLUE INK
TO CONSTITUTE AN ORIGINAL PLAN



CERTIFICATION
THIS SURVEY AND PLAN CONFORM TO THE FOLLOWING CLASS STANDARDS AS
ADOPTED BY THE RHODE ISLAND BOARD OF REGISTRATION FOR PROFESSIONAL
LAND SURVEYORS, EFFECTIVE APRIL 1, 1994.

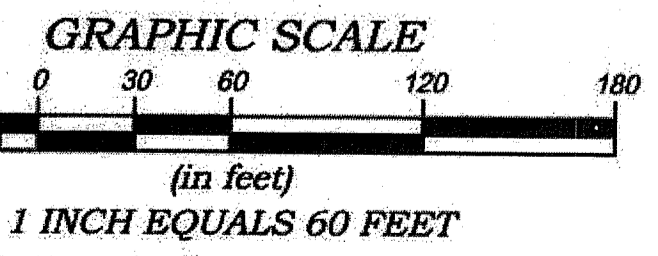
BOUNDARY SURVEY - CLASS I
TOPOGRAPHIC SURVEY - CLASS III

Richard S. Lipsitz

RICHARD S. LIPSITZ
WATERMAN ENGINEERING COMPANY
REG. NO. 1837
DATE 8-26-15

LEGEND & ABBREVIATIONS

- | | | | |
|---------|----------------------------|---|--|
| NF | - NOW OR FORMERLY | - | - PROPERTY LINE |
| A.P. | - ASSESSORS PLAT | - | - ZONING SETBACK LINE |
| S.F. | - SQUARE FEET | - | - EXISTING CONTOUR |
| AC. | - ACRES | - | - NEW CONTOUR |
| ± | - PLUS OR MINUS | - | - STONE WALL |
| STY. | - STORY | X | - FENCE |
| W/F | - WOOD FRAMED | S | - SEWER LINE |
| SH/P | - STATE HIGHWAY PLAT | D | - DRAIN LINE |
| RET. | - RETAINING WALL | W | - WATER LINE |
| PED. | - PEDESTRIAN | C | - GAS LINE |
| (FND.) | - FOUND | E | - ELECTRIC LINE |
| R/HB | - RI HIGHWAY BOUND | S | - SANITARY SEWER MANHOLE |
| PK/MAIL | - MASONRY WALL | C | - CATCH BASIN |
| FE | - FLARED END | W | - STORM DRAIN MANHOLE |
| RCP | - REINFORCED CONCRETE PIPE | W | - WATER GATE |
| CLF | - CHAIN LINK FENCE | W | - GAS VALVE |
| INV. | - INVERT | W | - ELECTRIC MANHOLE |
| x 10.80 | - EXISTING SPOT GRADE | W | - GRANITE BOUND |
| x 10.80 | - NEW SPOT GRADE | W | - DRILL HOLE |
| - | - 50' PERIMETER WETLAND | W | - IRON PIPE |
| - | - 100' RIVERBANK WETLAND | W | - WETLAND EDGE |
| - | - RIVER / STREAM | - | - LIMIT OF DISTURBANCE/EROSION CONTROL |



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© THESE DRAWINGS ARE THE PROPERTY OF THE
ENGINEERS/SURVEYORS AND HAVE BEEN PREPARED
FOR THE OWNER FOR THIS PROJECT AT THIS SITE
AND ARE NOT TO BE USED FOR ANY OTHER
PURPOSE. LOCATION OR OWNER WITHOUT WRITTEN
CONSENT OF THE OWNER OR ONE OF ITS
DIRECTORS

WATERMAN ENGINEERING CO.
CIVIL ENGINEERS & SURVEYORS
150 TINKHAM LANE
SMITHFIELD, RI 02914-3006

NOTES / REFERENCES

- REFERENCE IS MADE TO THE FOLLOWING MAPS AND PLANS OF RECORD:
A) PLAN ENTITLED "PLAT PLAN SMITHFIELD, RHODE ISLAND ASSESSORS PLAT 45, LOT 43A PREPARED FOR GUIDO DESALVO BY: N. VELTRI SURVEY, INC. SCALE: AS NOTED DATE: SEPT. 91" IN 2 SHEETS.
B) PLAN ENTITLED "BOUNDARY SURVEY PLAN AP 45, LOT 92 DOUGLAS PIKE & HARRIS RD - SMITHFIELD, R.I. PROJECT NO. P00.185 SCALE: 1" = 50' DATE: SEPT. 11, 2000 LAST REVISED: 10/10/01 BY WATERMAN ENGINEERING CO."
 - REFERENCE IS MADE TO THE FOLLOWING TOWN OF SMITHFIELD LAND EVIDENCE RECORDS REGARDING RECORDED TITLE TO THE PREMISES SURVEYED:
A) A.P. 45, LOT 43A - A & R ONE, L.L.C. - VOLUME 873, PAGE 56
 - THESE PREMISES MAY BE SUBJECT TO THE FOLLOWING EASEMENTS, RIGHTS OF WAY OR AGREEMENTS OF RECORD:
A) NONE FOUND RECORDED
 - THESE PREMISES ARE SITUATED IN A 'C' ZONE' & 'R-80 ZONE'.
DIMENSIONAL REQUIREMENTS

MIN. LOT AREA	= 40,000 SQ.FT.	= 80,000 SQ.FT.	MIN. S/B SIDE YARD	= 40 FT.	= 25 FT.
MIN. FRONTAGE/WIDTH	= 200 FT.	= 200 FT.	MAX. STRUCTURE HEIGHT	= 48 FT.	= 39 FT.
MIN. S/B FRONT YARD	= 60 FT.	= 40 FT.	MAX. LOT COVERAGE	= 30%	= 10%
MIN. S/B REAR YARD	= 50 FT.	= 75 FT.			
- NOTE - ZONING INFORMATION IS FROM CURRENT ZONING AND MAY NOT REFLECT THE CONDITIONS AT THE TIME OF CONSTRUCTION OR ANY VARIANCES GRANTED.

- THESE PREMISES ARE SITUATED IN A ZONE 'X' (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) AS DESIGNATED ON THE "NATIONAL FLOOD INSURANCE PROGRAM, FIRM FLOOD INSURANCE RATE MAP PROVIDENCE COUNTY, RHODE ISLAND (ALL JURISDICTIONS) PANEL 169 OF 451 TOWN OF SMITHFIELD MAP NUMBER 44807C01896 EFFECTIVE DATE: MARCH 2, 2008. FEDERAL EMERGENCY MANAGEMENT AGENCY".
- ANY UTILITIES SHOWN ON THIS PLAN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING PLANS. THE SURVEYOR MAKES NO GUARANTEE THAT THE UTILITIES SHOWN COMPRISE ALL SUCH OR ABANDONED. THE SURVEYOR DOES NOT WARRANT THAT THE UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM ALL AVAILABLE INFORMATION. PLEASE CONTACT DIG SAFE 72 HOURS PRIOR TO CONSTRUCTION AT PHONE NO. 1-888-DIG-SAFE AND/OR ALL LOCAL UTILITY COMPANIES.
- THE HORIZONTAL DATUM FOR THIS PROJECT IS THE R.I.S.P.C.S. (NAD 83) AND THE VERTICAL DATUM FOR THIS PROJECT IS NAVD 88. THE PROJECT DATUMS WERE ESTABLISHED FROM DATA TRANSMITTED FROM MTS REFERENCE STATIONS USING THE MTS RTK NETWORK VIA LEICA GPS1200 SERIES ANTENNAS / RECEIVERS.
- WETLAND FLAGS DELINEATED BY: NATURAL RESOURCE SERVICES, INC. P.O. BOX 311 - 180 TINKHAM LANE HARRISVILLE, RHODE ISLAND 02830
- CONSTRUCTION ACTIVITIES WERE OBSERVED IN PROGRESS ON 08/03/15 THAT ARE NOT SHOWN ON THIS PLAN.

NO.	DATE	REVISION	CHECKED BY
9	8/26/15	SMH RIMS/INVERTS ASBULTS ONLY	RSL
8	01/09/15	SURVEY UPDATE	RSL
7	11/26/14	SMH RIM / INVERT ASBULTS ONLY	RSL
6	09/11/14	ASBULT NEW SMHS	RSL

PROJECT NO. 12-027
SCALE: 1" = 60'
DATE: 07/13/12
DRAWN BY: BJT
CHECKED BY: RSL
REVISION: 12-027_SU1_REVS
1 of 1 SHEETS
DRAWN BY: SU1

BOUNDARY & TOPOGRAPHIC SURVEY PLAN
A.P. 45, LOT 43A
DOUGLAS PIKE, HARRIS ROAD & LIMEROCK ROAD
SMITHFIELD, RHODE ISLAND

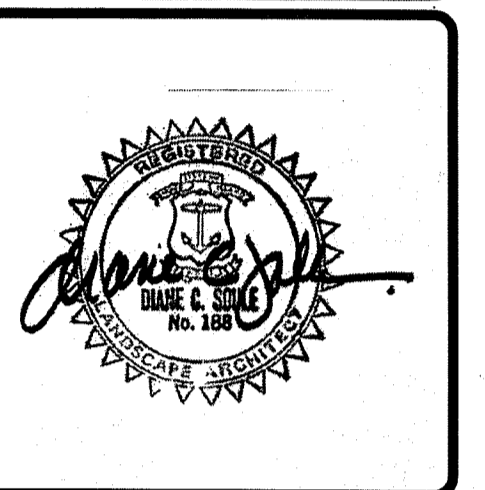
A & R ONE, L.L.C.
7 RIDGE ROAD
SMITHFIELD, RHODE ISLAND 02917

Waterman ENGINEERING COMPANY
Engineers & Surveyors - Est. 1994

46 Sutton Avenue
East Providence, RI
Phone: (401) - 438 - 5775
Fax: (401) - 438 - 5773
www.watermanengineering.net

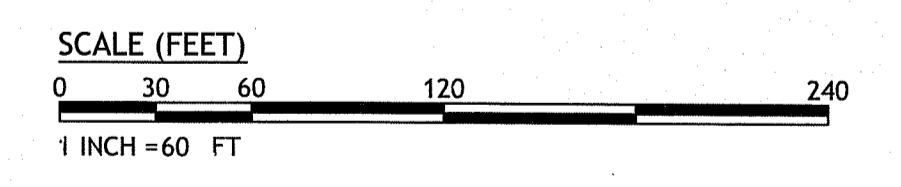


JCE
JOE CASALI ENGINEERING, INC.
DRAINAGE, WETLANDS, EROSION CONTROL, TRAFFIC, FLOODPLAIN
300 POST ROAD, WARWICK, RI 02888
(401) 946-1500 (601) 944-1313 FAX WWW.JCEONLINE.COM



THE RESIDENCE AT LIMEROCK
SMITHFIELD, RHODE ISLAND
AP 45, LOT 43A, 181, 182 & 183

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED JAN 22 2016 FILE # 14-077
Charles A. Hackett



JAN 11 2016

Diane C. Soule & Associates, ASLA
Landscape Architecture
422 Farnum Pike
Smithfield, Rhode Island 02917
www.dianesoulesandassociates.com
401.231.0736
email: diane@dcas.us

REVISIONS:

NO.	DATE	DESCRIPTION

DESIGNED BY: JWH
DRAWN BY: JMM
CHECKED BY: JAC
DATE: NOV. 2, 2015
PROJECT NO: 13-14b

PRELIMINARY, NOT FOR CONSTRUCTION

LANDSCAPE PLAN

SHEET 16 OF 17

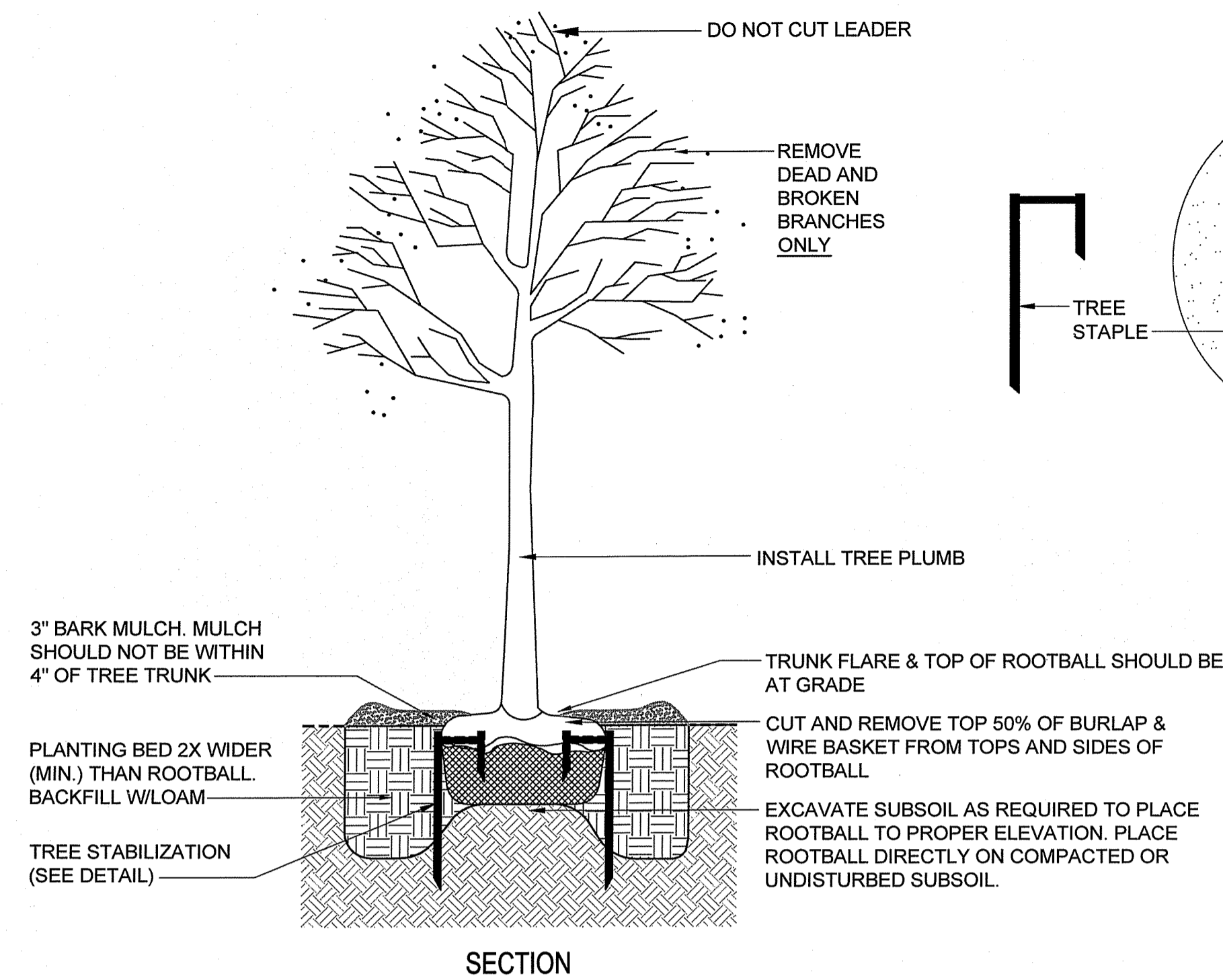
Q:\13-14 Anthony Rongione\13-14b Condo Development\Subcontractors\Diene Soule\Landscape PG 16 of 17.dwg Dec. 17, 2015 2:17pm

DRAINAGE STRUCTURE PLANTING NOTES
1. Seed Sediment Forebays with New England Erosion Control/Restoration Mix For Detention Basins and Moist Sites.
2. Seed side slopes of Sediment Forebays with New England Conservation/Wildlife Mix.
3. Seed Sand Filter bottoms with New England Wetmix.
4. Seed side slopes of Sand Filter bottoms with New England Conservation/Wildlife Mix.

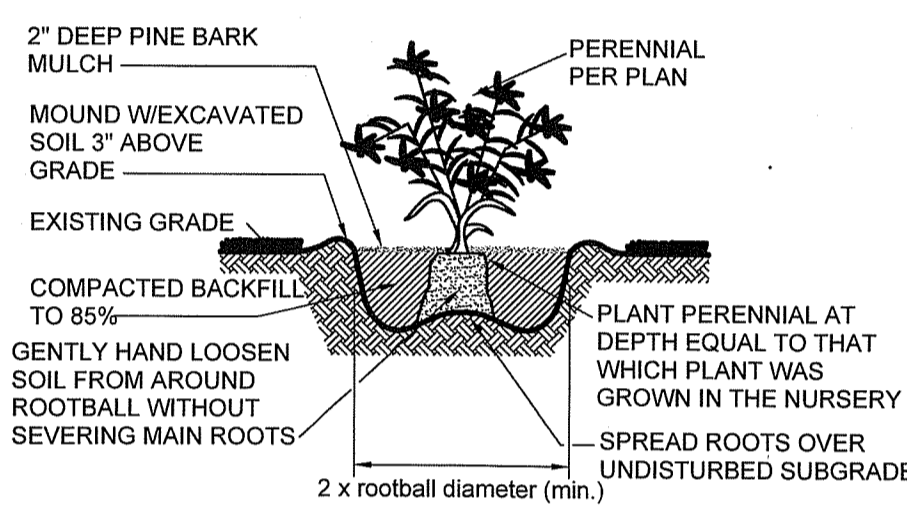
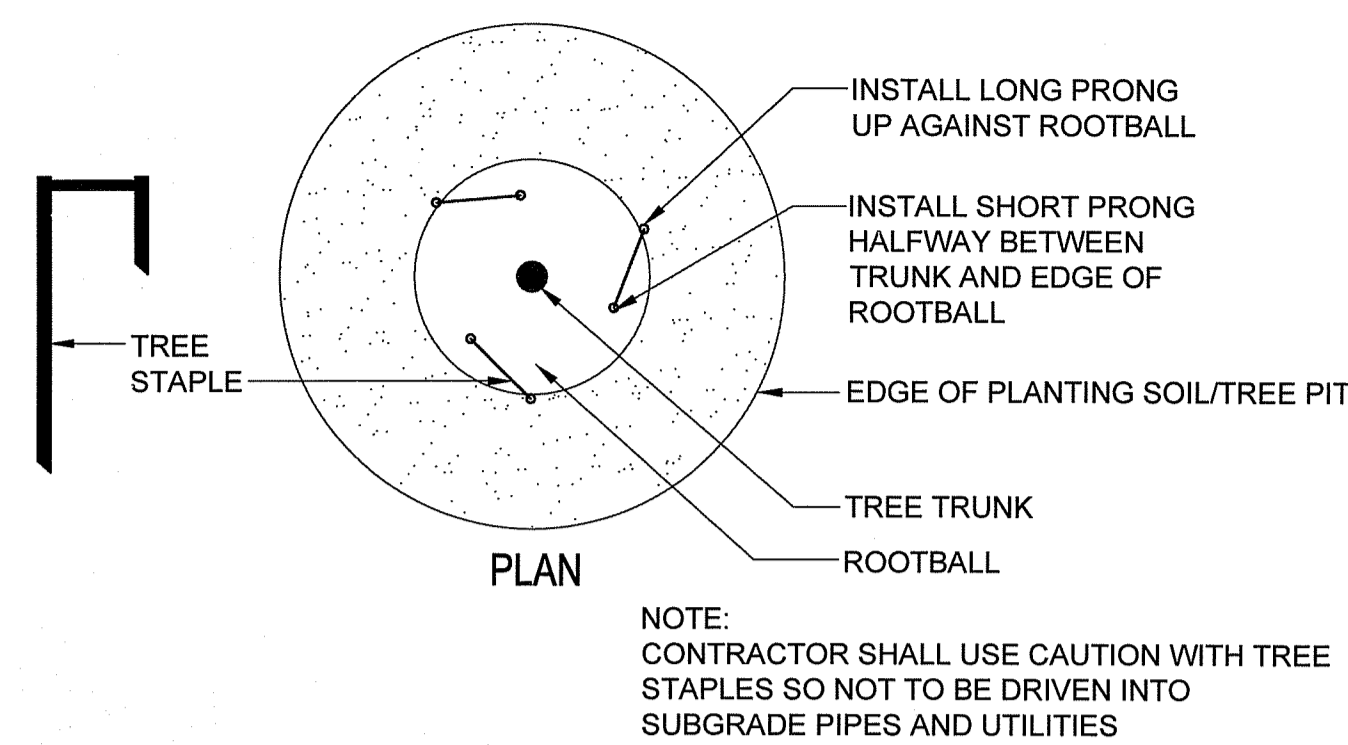
PLANT SCHEDULE

DECIDUOUS TREES	CODE	QTY	COMMON NAME / BOTANICAL NAME	CONT	CAL	SIZE
	QR3	13	Red Oak / Quercus rubra	B & B	2.5" - 3" Cal.	
EVERGREEN TREES	CODE	QTY	COMMON NAME / BOTANICAL NAME	CONT	CAL	SIZE
	PG2	43	White Spruce / Picea glauca	B & B		4' - 5' HT.
FLOWERING TREES	CODE	QTY	COMMON NAME / BOTANICAL NAME	CONT	CAL	SIZE
	MD	2	Magnolia / Magnolia x loebneri 'Dr. Merrill'	B & B	2.5" Cal	
SHRUBS	CODE	QTY	COMMON NAME / BOTANICAL NAME	CONT	CAL	SIZE
	HMNB	8	Nikko Blue Hydrangea / Hydrangea macrophylla 'Nikko Blue' Mature Height: '6"	5 gal		
PERENNIALS	CODE	QTY	COMMON NAME / BOTANICAL NAME	CONT	CAL	SPACING
	HEM4	32	Stella de Oro Daylily / Hemerocallis hybrid 'Stella de Oro'	1 gal		30" o.c.

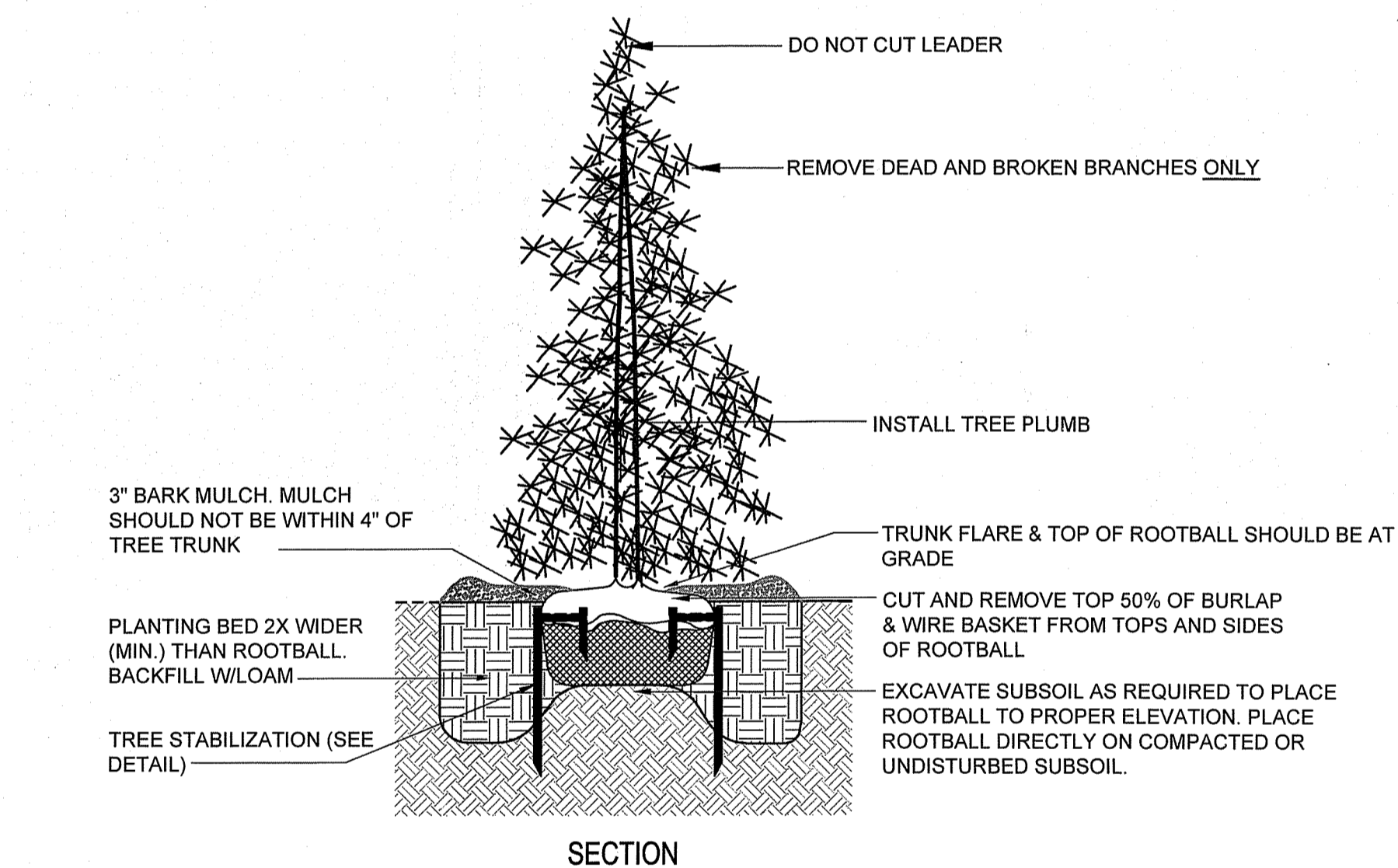




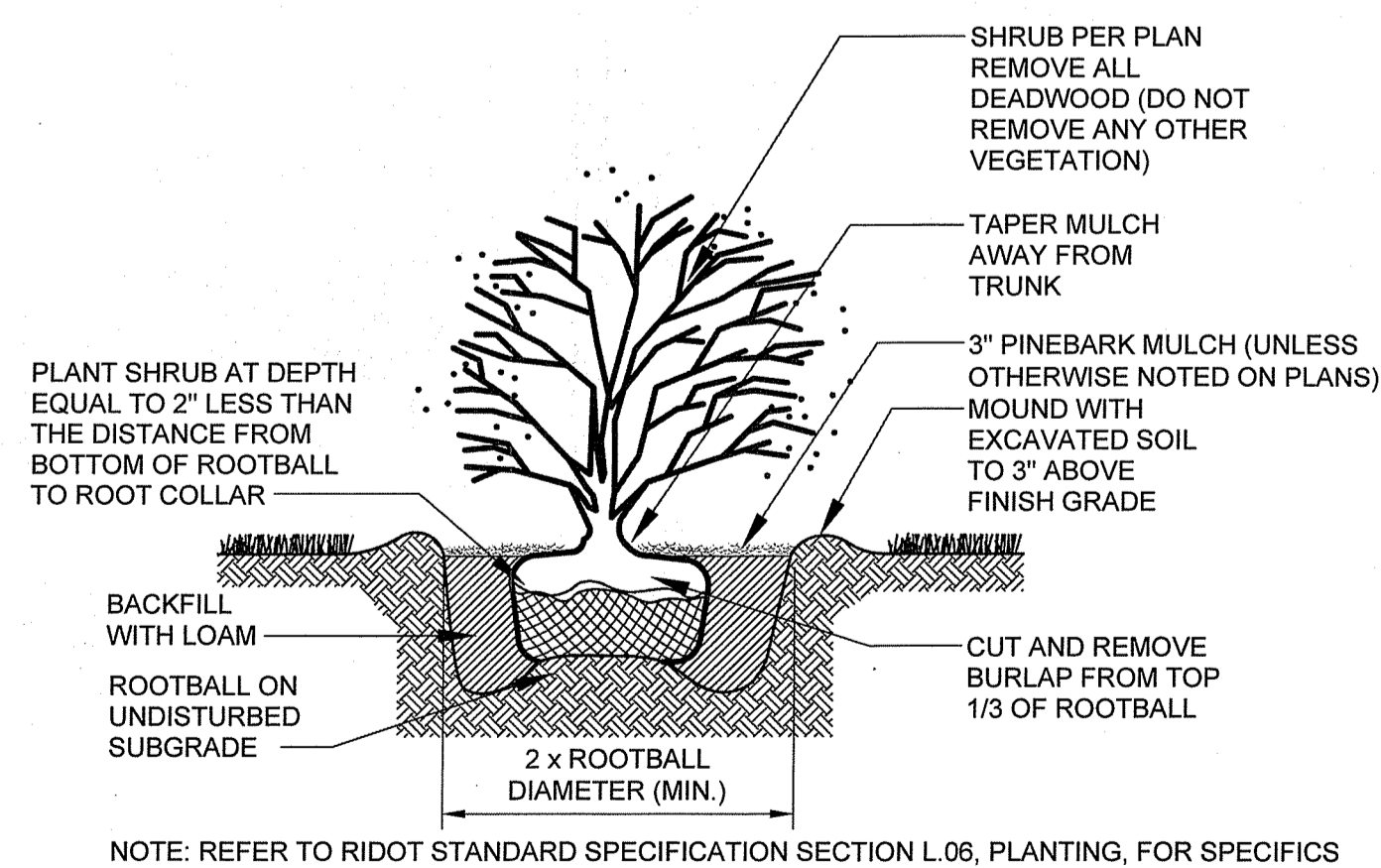
TREE PLANTING DETAIL
no scale



PERENNIAL PLANTING DETAIL
no scale



EVERGREEN TREE PLANTING DETAIL
no scale



SHRUB PLANTING DETAIL
no scale

LANDSCAPE NOTES:

1. GUARANTEE THAT, UPON COMPLETION AND FINAL ACCEPTANCE, LANDSCAPE PLANTINGS CONFORM TO REQUIREMENTS OF CONTRACT DOCUMENTS. PROVIDE A WARRANTY FOR TREE PLANTINGS FOR A MINIMUM OF TWO (2) YEARS, INCLUDING TWO (2) CONTINUOUS GROWING SEASONS. COMMENCE WARRANTY ON DATE IDENTIFIED IN THE 'CERTIFICATE OF FINAL COMPLETION'.
2. REPLACEMENTS: PLANTS OF SAME SIZE AND SPECIES AS SPECIFIED, PLANTED IN THE NEXT GROWING SEASON, WITH NEW WARRANTY AND EXTENDED MAINTENANCE SERVICE COMMENCING ON THE DATE OF REPLACEMENT.
3. PLANT MATERIALS SHALL BE OF SIZE AND CALIPER REQUIRED AND CONFORM TO THE REQUIREMENTS DESCRIBED IN THE LATEST EDITION OF AMERICAN STANDARD FOR NURSERY STOCK, PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN.
4. PLANTS OF OTHER KINDS THAN THOSE NAMED IN THE PLANT SCHEDULE SHALL NOT BE ACCEPTED WITHOUT APPROVAL. REPLACEMENT PLANTS LARGER IN SIZE THAN EXISTING MAY BE USED IF APPROVED BY THE A/E, PROVIDED USE OF LARGER PLANTS DOES NOT INCREASE CONTRACT PRICE.
5. A PROFESSIONAL HORTICULTURIST/NURSERYMAN SHALL BE CONSULTED TO DETERMINE THE PROPER TIME TO MOVE AND INSTALL PLANT MATERIAL SO THAT STRESS TO THE PLANT IS MINIMIZED. PLANTING OF DECIDUOUS MATERIAL MAY BE CONTINUED DURING WINTER MONTHS PROVIDED THERE IS NO FROST IN THE GROUND AND FROST-FREE TOPSOIL PLANTING MIXTURES ARE USED.
6. UNLESS OTHERWISE APPROVED BY THE A/E, ALL PLANTS SHALL BE NURSERY GROWN IN ACCORDANCE WITH GOOD HORTICULTURAL PRACTICES AND SHALL HAVE BEEN GROWN UNDER CLIMATIC CONDITIONS SIMILAR TO THOSE IN THE LOCALITY OF THE PROJECT FOR AT LEAST TWO (2) YEARS.
7. SET PLANTS PLUMB AND AT SUCH A LEVEL THAT AFTER SETTLEMENT THEY BEAR THE SAME RELATION TO THE SURROUNDING GROUND AS THEY BORE TO THE GROUND FROM WHICH THEY WERE DUG. SETTLE BACKFILL MATERIAL FOR PLANTS, THOROUGHLY & PROPERLY, BY FIRING OR TAMPING. ACCOMPANY BACKFILLING WITH THOROUGH WATERING UNLESS OTHERWISE APPROVED. FORM SAUCER CAPABLE OF HOLDING WATER AROUND INDIVIDUAL PLANTS.
8. FERTILIZE SHRUB BEDS WITH 10-6-4 FERTILIZER AT THE RATE OF 3 POUNDS PER 100 SQUARE FEET OF SURFACE AREA, BROAD CAST. APPLY THE FERTILIZER UNIFORMLY TO THE SURFACE BEDS AND WORK INTO THE UPPER TWO (2) INCHES OF SOIL. FERTILIZE INDIVIDUAL TREES AT THE RATE OF ONE (1) AGRIFORM PELLETT PER INCH OF TREE DIAMETER (FOLLOW MANUFACTURER'S WRITTEN INSTRUCTIONS). APPLY A SECOND APPLICATION OF FERTILIZER TO ALL PLANT ITEMS AT THE SAME SPECIFIED RATES OVER THE MULCH AT THE END OF AN EIGHT WEEK PERIOD.
9. CONTAINER GROWN MATERIALS: REMOVE PLANT FROM CONTAINER AND "BUTTERFLY" ROOT BALL OR OTHERWISE SPREAD OUT ROOTS ON SETTING MOUND. BACKFILL SHALL BE SIFTED THROUGH THEM AND SOLIDLY FIRMED.
10. AFTER PLANTING PRUNE ONLY BROKEN OR DEFORMED BRANCHES AND IN SUCH MANNER AS TO PRESERVE NATURAL CHARACTER OF PLANT.
11. IMMEDIATELY AFTER PLANTING, STAKE TREES OVER FIVE (5) FEET AS INDICATED ON DETAIL DRAWING INDICATED OR APPROVED BY THE OWNERS REPRESENTATIVE. MULCH SHALL BE APPLIED A MINIMUM OF THREE (3) INCHES IN DEPTH IN ALL PLANTING BEDS, AS INDICATED ON THE DRAWINGS.
12. THE PLANTS SHALL BE WATERED IMMEDIATELY FOLLOWING PLANTING, PREFERABLY WHEN TWO THIRDS OF THE BACKFILL HAS BEEN PLACED SO ALL AIR POCKETS ARE REMOVED AND THE PLANT PROPERLY SET. ADDITIONAL WATERING SHALL BE MADE AT LEAST ONCE EVERY THREE (3) WEEKS UNLESS OTHERWISE DIRECTED UNTIL FINAL ACCEPTANCE OF THE PLANT MATERIAL.
13. INSTALL 'JUTE MESH' EROSION CONTROL FABRIC WHERE FINAL GRADES ARE 3:1 (33%) OR GREATER PER MANUFACTURER'S INSTRUCTIONS.
14. UNLESS OTHERWISE SPECIFIED, CONTRACTOR TO LOAM AND SEED ALL DISTURBED AREAS. **SEEDING NOTE:** USE UNIVERSITY OF RHODE ISLAND NO. 2 IMPROVED SEED MIX OR EQUAL. **TREE PRUNING NOTE:** STREET TREES SHOULD BE PRUNED TO MAINTAIN A MINIMAL BRANCH HEIGHT OF 8' WITHIN TWO (2) YEARS OF INSTALLATION OF THE TREE.
15. **LANDSCAPE ESTABLISHMENT AND MAINTENANCE NOTE:** CONTRACTOR SHALL ENSURE THAT ALL LAWN AREAS AND PLANTINGS ARE FULLY ESTABLISHED AND ACCEPTABLE TO THE OWNER'S REPRESENTATIVE PRIOR TO RELINQUISHING THEIR RESPONSIBILITIES FOR MAINTENANCE OF THESE AREAS.
16. **TREE PROTECTION NOTE:** NO MATERIAL, TEMPORARY SOIL DEPOSIT OR EXCAVATION SHALL OCCUR WITHIN FOUR FEET OF SHRUBS OR WITHIN TWO FEET OF THE DRIP LINE OF ANY SHRUBS OR TREES TO REMAIN. ANY RETAINED EXISTING VEGETATION SHALL BE PROTECTED AS PER DETAIL ON PLAN.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED JAN 22 2016 FILE # 14-0774
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE
Charles H. Hester

JAN 11 2016



THE RESIDENCE AT LIMEROCK
SMITHFIELD, RHODE ISLAND
AP 45, LOT 43A, 181, 182 & 183

REVISIONS:

NO.	DATE	DESCRIPTION

DESIGNED BY: JWH
DRAWN BY: JMM
CHECKED BY: JAC
DATE: NOV. 2, 2015
PROJECT NO: 13-14b

PRELIMINARY, NOT FOR CONSTRUCTION

LANDSCAPE DETAILS & NOTES

SHEET 17 OF 17

Q:\13-14 Anthony Rongione\13-14b Condo Development\Subconsultants\Diagrams\Landscaping PG 16 of 17 AND 17 of 17.dwg Dec. 17, 2015 3:06pm

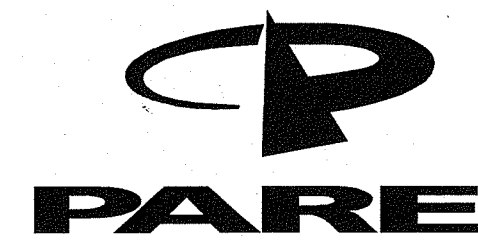
Diane C. Soule & Associates, ASLA
Landscape Architecture
422 Farrum Pike
Smithfield, Rhode Island 02917
www.dianesouleandassociates.com
401.231.0736
email: diane@dcasla.com

Commercial Development

RIDEM File No. 14-0174

Assessor's Plat 45, Lots 181, 182, & 43A
Smithfield, Rhode Island

CIVIL ENGINEER:



PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

OWNER/APPLICANT:

ARR RETAIL DEVELOPMENT LLC
7 RIDGE ROAD
SMITHFIELD, RI 02917

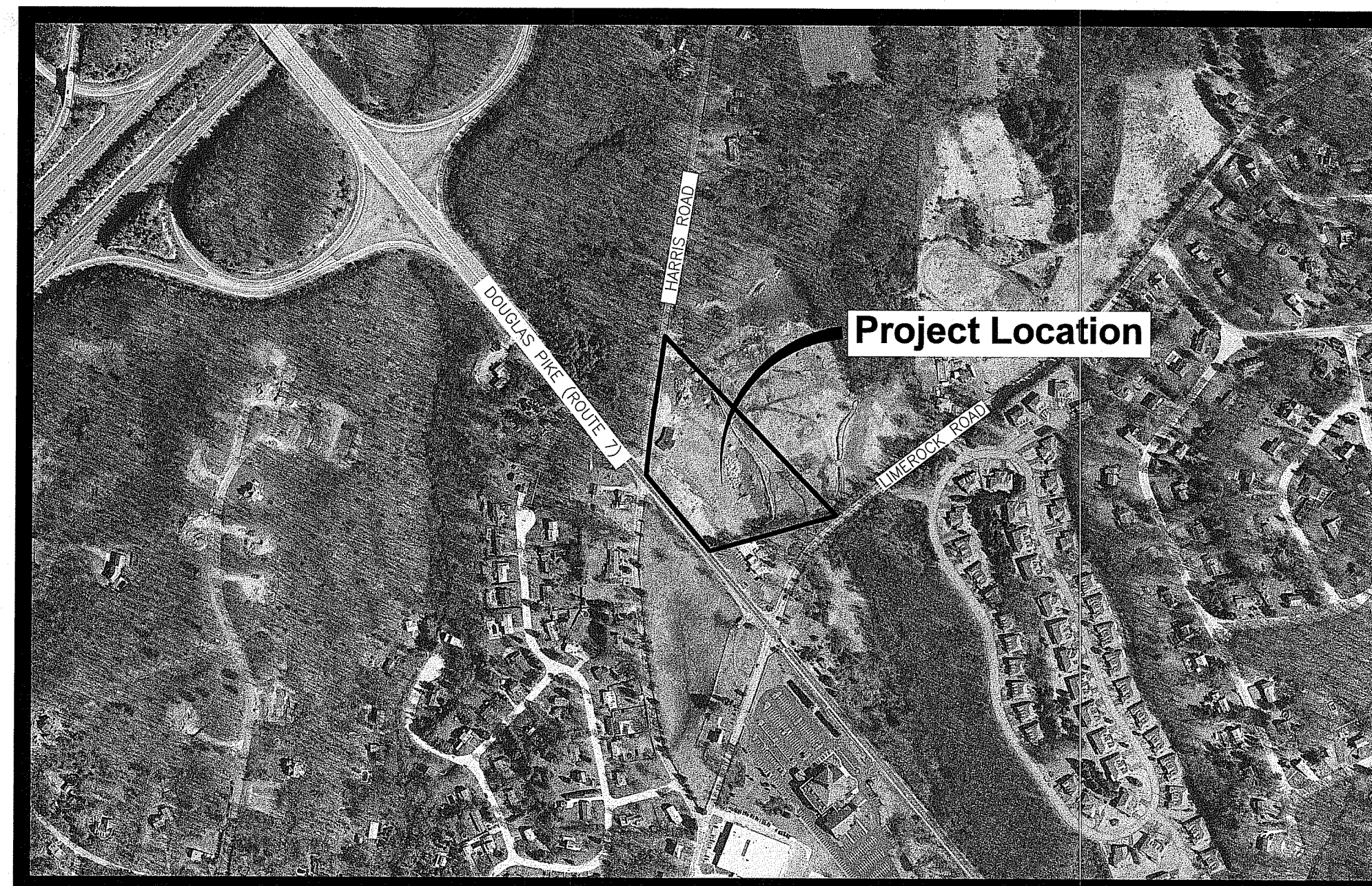
SURVEYOR:

WATERMAN ENGINEERING COMPANY
46 SUTTON AVENUE
EAST PROVIDENCE, RI 02914

LANDSCAPE ARCHITECT:

Diane C. Soule & Associates, ASLA
Landscape Architecture

422 Farnum Pike
Smithfield, Rhode Island 02917
www.dianesouleandassociates.com



Scale : N.T.S.

INDEX OF DRAWINGS

SHEET No.	DRAWING No.	DESCRIPTION
1	C0.0	COVER SHEET
2	-	TOPOGRAPHIC SURVEY
3	-	SUBDIVISION RECORD SURVEY
4	C1.1	NOTES & LEGEND
5	C2.1	DEMOLITION, EROSION & SEDIMENT CONTROL PLAN
6	C3.1	GENERAL PLAN
7	C4.1	GRADING PLAN
8	C5.1	DRAINAGE & UTILITY PLAN
9 - 14	C6.1 - 6.6	DETAILS
15	L1.0	LANDSCAPE PLAN
16	L1.1	LANDSCAPE DETAILS

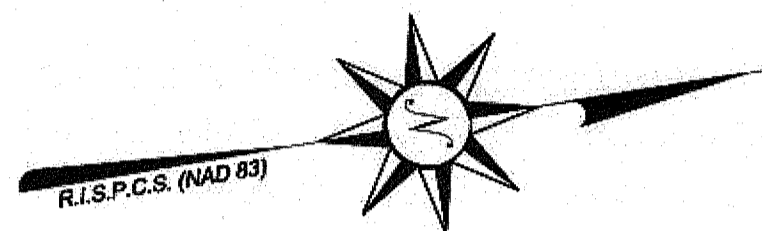
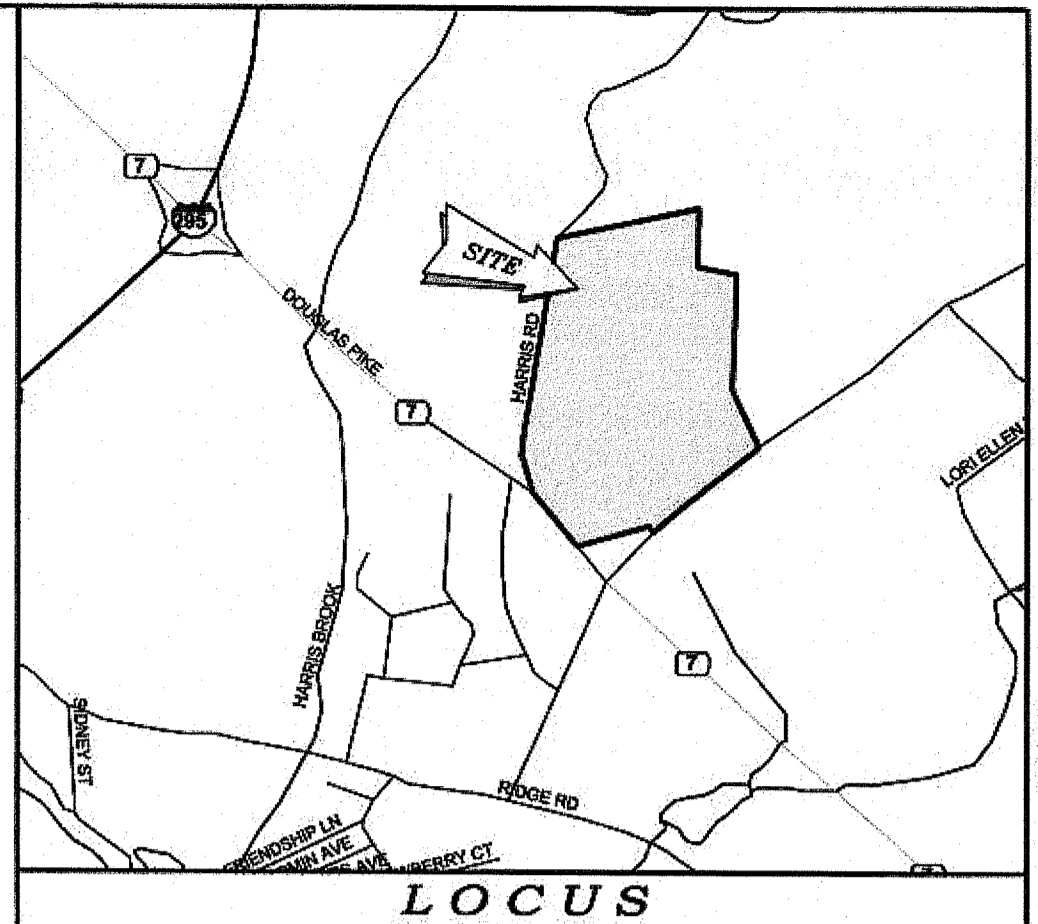
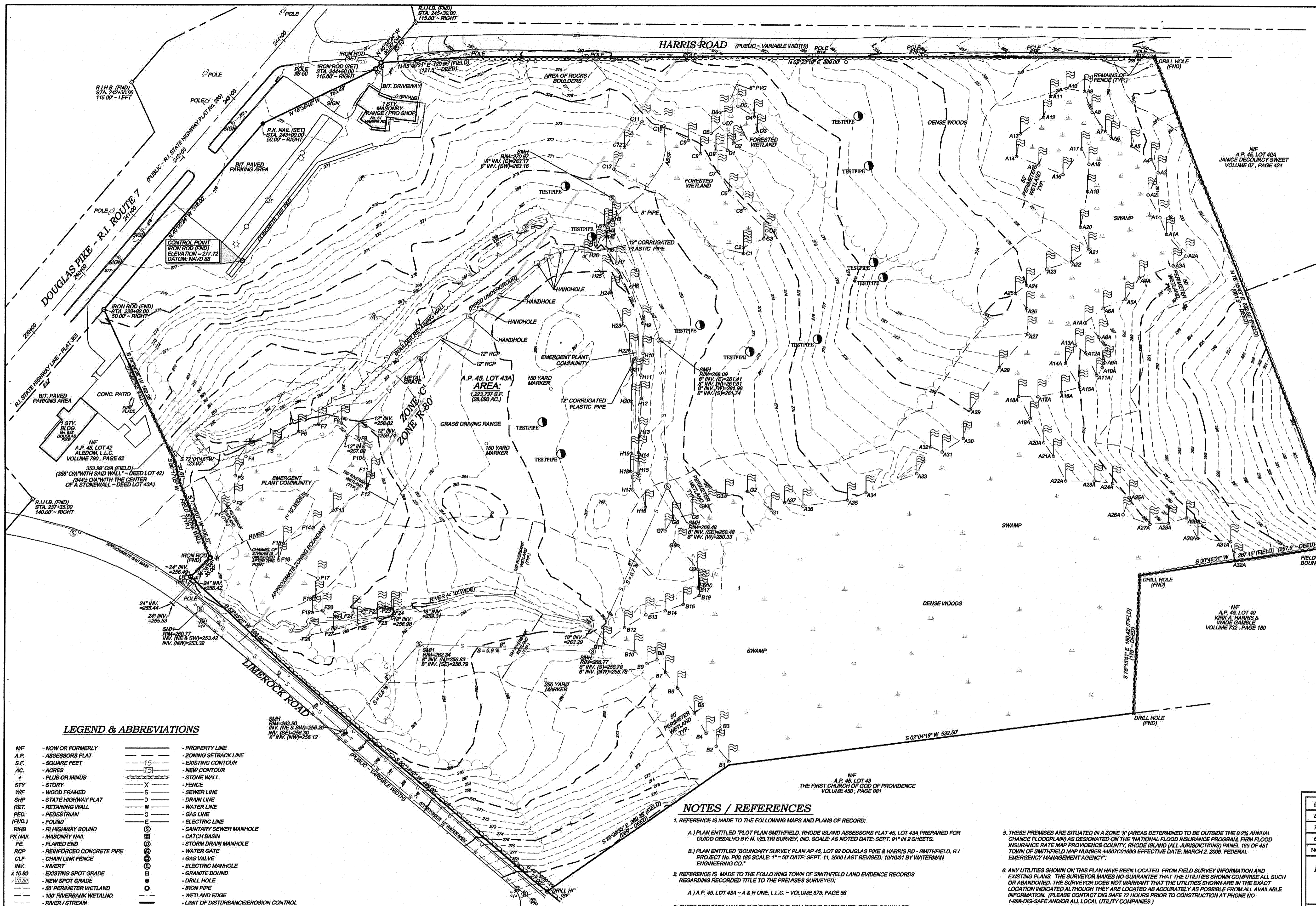
RIDEM PERMIT MODIFICATION
February 10, 2020

Environmental Management

FEB 13 2020

Office of Water Resources

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED JUL 14 2020 FILE # 14-0174
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[Signature]

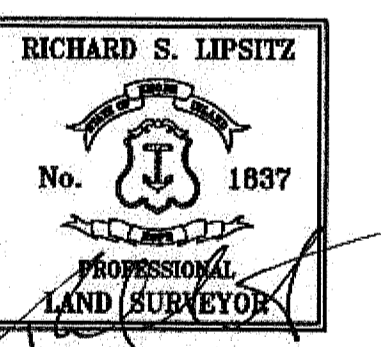


DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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NF A.P. 45, LOT 400
CYNTHIA A. MARTONE
VOLUME 536, PAGE 20

NF A.P. 45, LOT 404
JANICE DECOURCY SWEET
VOLUME 87, PAGE 424

FEB 13 2020



CERTIFICATION
THIS SURVEY AND PLAN CONFORM TO THE FOLLOWING CLASS STANDARDS AS ADOPTED BY THE RHODE ISLAND BOARD OF REGISTRATION FOR PROFESSIONAL LAND SURVEYORS, EFFECTIVE APRIL 1, 1984.

BOUNDARY SURVEY - CLASS I
TOPOGRAPHIC SURVEY - CLASS III

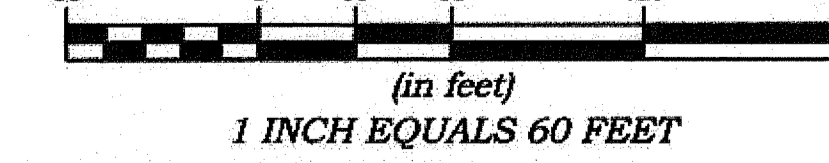
Richard S. Lipsitz
RICHARD S. LIPSITZ
WATERMAN ENGINEERING COMPANY

REG. NO. 1837
DATE 8-26-15

LEGEND & ABBREVIATIONS

- | | |
|--------------------------------|--------------------------------------|
| NF - NOW OR FORMERLY | PROPERTY LINE |
| A.P. - ASSESSORS PLAT | ZONING SETBACK LINE |
| S.F. - SQUARE FEET | EXISTING CONTOUR |
| AC. - ACRES | NEW CONTOUR |
| + - PLUS OR MINUS | STONE WALL |
| STY. - STORY | FENCE |
| WF - WOOD FRAMED | SEWER LINE |
| SH - STATE HIGHWAY PLAT | DRAIN LINE |
| RET. - RETAINING WALL | WATER LINE |
| PED. - PEDESTRIAN | GAS LINE |
| FOUN. - FOUNDATION | ELECTRIC LINE |
| RIB - RIVER BOUNDARY | SANITARY SEWER MANHOLE |
| PK NAIL - MASONRY NAIL | CATCH BASIN |
| FE - FLARED END | STORM DRAIN MANHOLE |
| RCP - REINFORCED CONCRETE PIPE | WATER GATE |
| CLF - CHAIN LINK FENCE | GAS VALVE |
| INV. - INVERT | ELECTRIC MANHOLE |
| 16.80 - EXISTING SPOT GRADE | GRANITE BOUND |
| 100' - NEW SPOT GRADE | DRILL HOLE |
| 50' PERIMETER WETLAND | IRON PIPE |
| 100' RIVERBANK WETLAND | WETLAND EDGE |
| RIVER / STREAM | LIMIT OF DISTURBANCE/EROSION CONTROL |

GRAPHIC SCALE



NOTES / REFERENCES

- REFERENCE IS MADE TO THE FOLLOWING MAPS AND PLANS OF RECORD:
 - PLAN ENTITLED "PLOT PLAN SMITHFIELD, RHODE ISLAND ASSESSORS PLAT 45, LOT 43A PREPARED FOR GUIDO DESALVO BY: N. VELTRI SURVEY, INC. SCALE: AS NOTED DATE: SEPT. 91" IN 2 SHEETS.
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DIMENSIONAL REQUIREMENTS	C ZONE	R-80 ZONE	C ZONE R-80 ZONE
MIN. LOT AREA	= 40,000 SQ. FT.	= 60,000 SQ. FT.	MIN. S/8 SIDE YARD = 40 FT. = 25 FT.
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MIN. S/8 REAR YARD	= 80 FT.	= 75 FT.	
- WETLAND FLAGS DELINEATED BY: NATURAL RESOURCE SERVICES, INC. P.O. BOX 311 - 180 TINKHAM LANE HARRISVILLE, RHODE ISLAND 02830
- CONSTRUCTION ACTIVITIES WERE OBSERVED / IN PROGRESS ON 08/03/15 THAT ARE NOT SHOWN ON THIS PLAN.

NO.	DATE	REVISION	CHECKED BY
9	8/20/15	SMH RIMS/INVERTS ASBUILTS ONLY	RSL
8	01/09/15	SURVEY UPDATE	RSL
7	11/28/14	SMH RIM / INVERT ASBUILTS ONLY	RSL
6	02/11/14	ASBUILT NEW SMHS	RSL

BOUNDARY & TOPOGRAPHIC SURVEY PLAN
A.P. 45, LOT 43A
DOUGLAS PIKE, HARRIS ROAD & LIMEROCK ROAD
SMITHFIELD, RHODE ISLAND

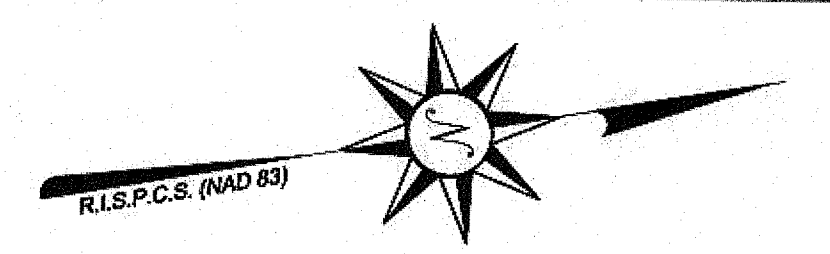
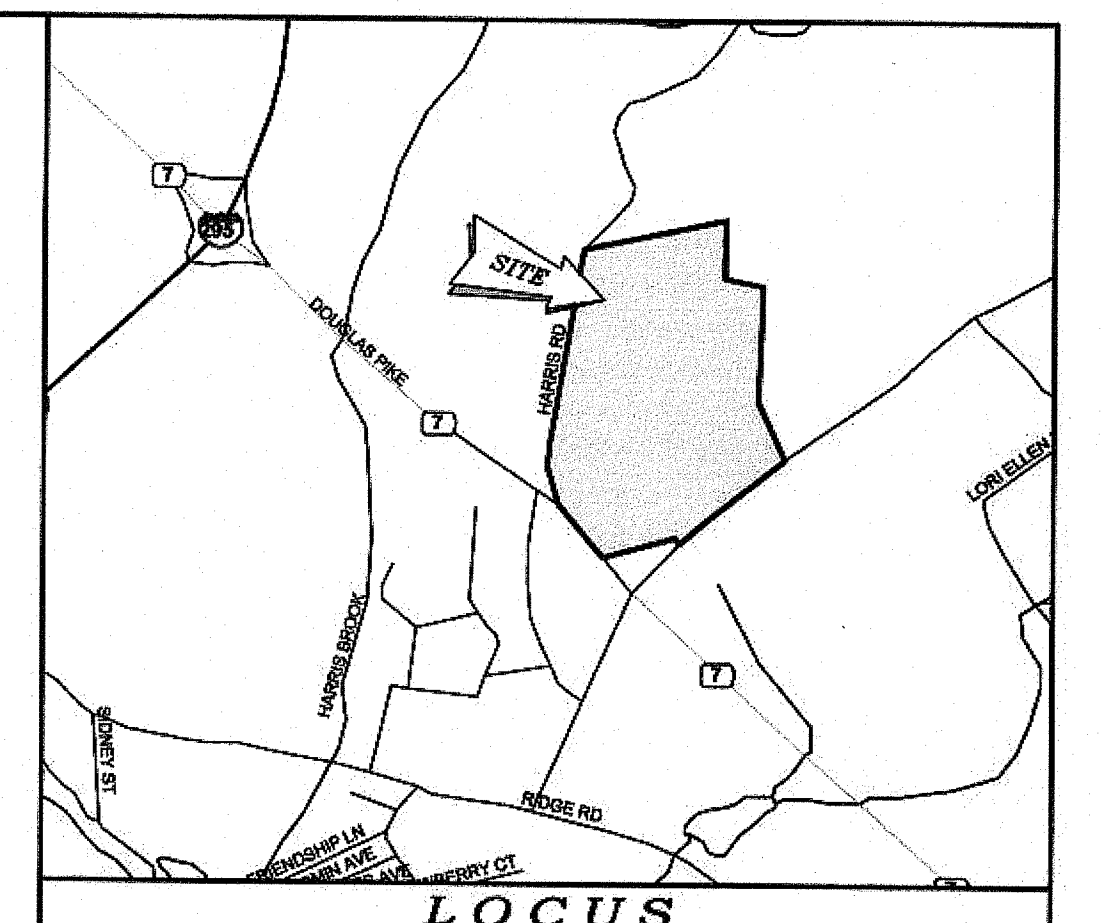
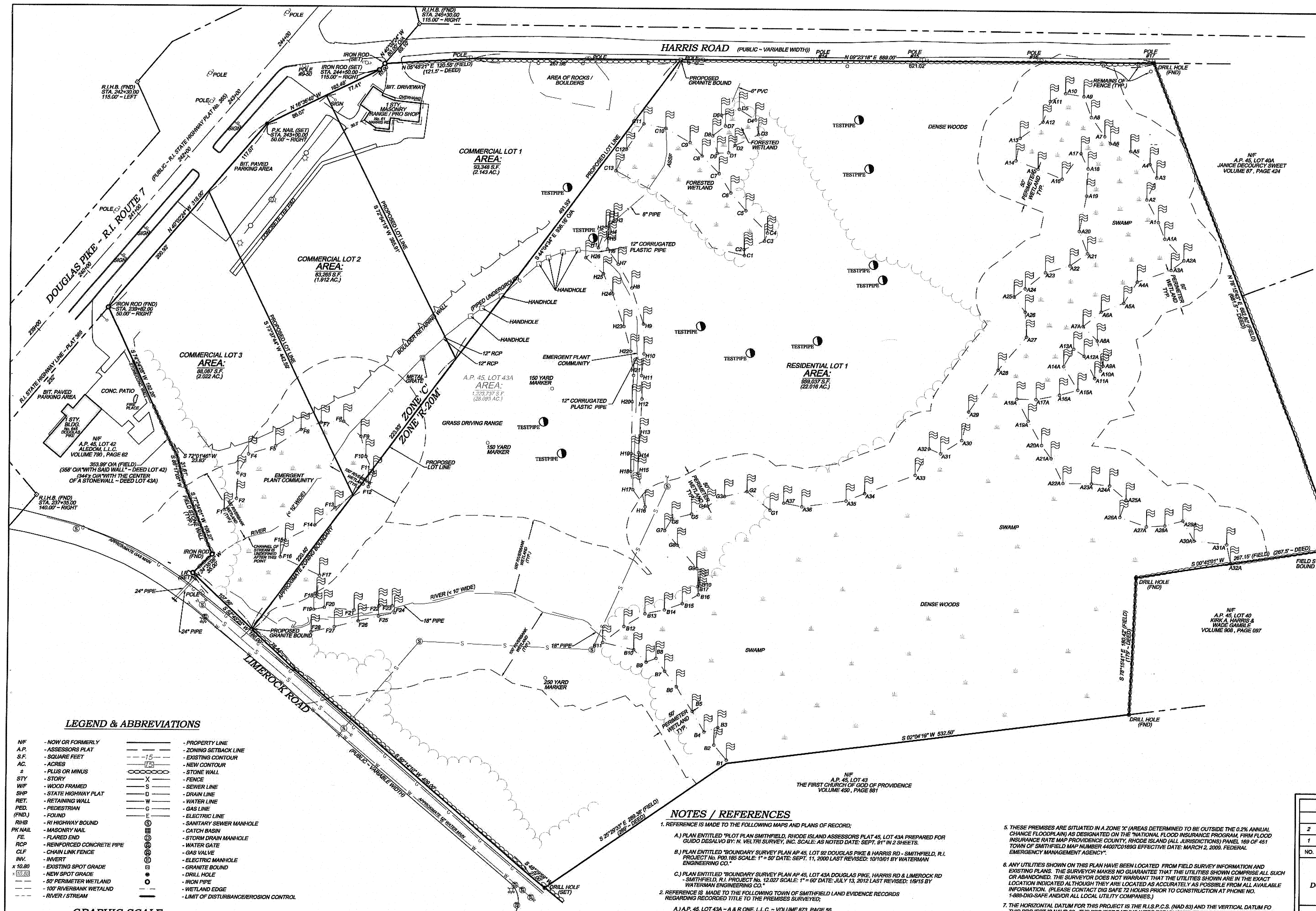
A & R ONE, L.L.C.
7 RIDGE ROAD
SMITHFIELD, RHODE ISLAND 02917

SCALE: 1" = 60'
DATE: 07/13/12
DRAWN BY: BJT
CHECKED BY: RSL
FILENAME: 12-027_SURV_REVS
1 of 2 SHEETS
DRAWING #: SU1

Waterman ENGINEERING COMPANY
Engineers & Surveyors - Est. 1894

46 Sutton Avenue
East Providence, RI
Phone: (401) - 438 - 5775
Fax: (401) - 438 - 5773
www.watermanengineering.net

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THESE DRAWINGS ARE THE PROPERTY OF THE ENGINEER/SURVEYOR AND HAVE BEEN PREPARED FOR THE OWNER, FOR THIS PROJECT AT THIS SITE AND ARE NOT TO BE USED FOR ANY OTHER PURPOSE, LOCATION OR OWNER WITHOUT WRITTEN CONSENT OF THIS OWNER OR ONE OF ITS DIRECTORS.



DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
 FRESHWATER WETLANDS PROGRAM
 APPROVED WITH CONDITIONS
 AS SPECIFIED IN THE LETTER OF APPROVAL
 DATED JUL 14, 2020 FILE # 14-074
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE

FEB 13 2020

City of Water Resources

** SIGNATURES MUST BE IN BLUE INK TO CONSTITUTE AN ORIGINAL PLAN



CERTIFICATION
 THIS SURVEY AND PLAN CONFORM TO THE FOLLOWING CLASS STANDARDS AS ADOPTED BY THE RHODE ISLAND BOARD OF REGISTRATION FOR PROFESSIONAL LAND SURVEYORS, EFFECTIVE APRIL 1, 1984.

BOUNDARY SURVEY - CLASS 1
 TOPOGRAPHIC SURVEY - CLASS N/A
 RICHARD S. LIPSITZ
 WATERMAN ENGINEERING COMPANY
 REG. NO. 1837 DATE 7-8-15

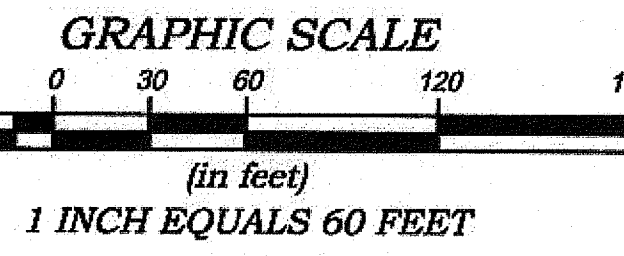
LEGEND & ABBREVIATIONS

NF - NOW OR FORMERLY	— — — — —	PROPERTY LINE
A.P. - ASSESSORS PLAT	- - - - -	ZONING SETBACK LINE
S.F. - SQUARE FEET	- - - - -	EXISTING CONTOUR
AC. - ACRES	- - - - -	NEW CONTOUR
+ - PLUS OR MINUS	— — — — —	STONE WALL
STY - STORY	X	FENCE
WF - WOOD FRAMED	S	SEWER LINE
SHF - STATE HIGHWAY PLAT	D	DRAIN LINE
RET. - RETAINING WALL	W	WATER LINE
PED. - PEDESTRIAN	G	GAS LINE
(FND.) - FOUND	E	ELECTRIC LINE
RHB - RI HIGHWAY BOUND	⊙	SANITARY SEWER MANHOLE
PK NAIL - MASONRY NAIL	⊙	CATCH BASIN
FE. - FLARED END	⊙	STORM DRAIN MANHOLE
RCP - REINFORCED CONCRETE PIPE	⊙	WATER GATE
CLF - CHAIN LINK FENCE	⊙	GAS VALVE
INV. - INVERT	⊙	ELECTRIC MANHOLE
x 10.80 - EXISTING SPOT GRADE	⊙	GRANITE BOUND
10.80 - NEW SPOT GRADE	⊙	DRILL HOLE
10.80 - 80' PERIMETER WETLAND	⊙	IRON PIPE
10.80 - 100' RIVERBANK WETLAND	⊙	WETLAND EDGE
10.80 - RIVER / STREAM	⊙	LIMIT OF DISTURBANCE/EROSION CONTROL

NOTES / REFERENCES

- REFERENCE IS MADE TO THE FOLLOWING MAPS AND PLANS OF RECORD:
 - PLAN ENTITLED "PLOT PLAN SMITHFIELD, RHODE ISLAND ASSESSORS PLAT 45, LOT 43A PREPARED FOR GUIDO DESALVO BY N. VELTRI SURVEY, INC. SCALE: AS NOTED DATE: SEPT. 01" IN 2 SHEETS.
 - PLAN ENTITLED "BOUNDARY SURVEY PLAN AP 45, LOT 82 DOUGLAS PIKE & HARRIS RD. - SMITHFIELD, R.I. PROJECT NO. P00.185 SCALE: 1" = 60' DATE: SEPT. 11, 2000 LAST REVISED: 10/10/11 BY WATERMAN ENGINEERING CO."
 - PLAN ENTITLED "BOUNDARY SURVEY PLAN AP 45, LOT 43A DOUGLAS PIKE, HARRIS RD & LIMEROCK RD - SMITHFIELD, R.I. PROJECT NO. 12-027 SCALE: 1" = 60' DATE: JULY 13, 2012 LAST REVISED: 10/15/15 BY WATERMAN ENGINEERING CO."
- REFERENCE IS MADE TO THE FOLLOWING TOWN OF SMITHFIELD LAND EVIDENCE RECORDS REGARDING RECORDED TITLE TO THE PREMISES SURVEYED:
 - A.P. 45, LOT 43A - A & R ONE, L.L.C. - VOLUME 873, PAGE 56
- THESE PREMISES MAY BE SUBJECT TO THE FOLLOWING EASEMENTS, RIGHTS OF WAY OR AGREEMENTS OF RECORD:
 - NONE FOUND RECORDED
- THESE PREMISES ARE SITUATED IN A 'C' ZONE & 'R-20M' ZONE:

DIMENSIONAL REQUIREMENTS	C ZONE	R-20M ZONE	C ZONE R-20M ZONE
MIN. LOT AREA	= 40,000 SQ. FT.	= 20,000 SQ. FT. / 1/2" = 40,000 SQ. FT. / 2"	MIN. S/B SIDE YARD = 40 FT. = 15 FT.
MIN. FRONTAGE WIDTH	= 200 FT.	= 125 FT. / 150 FT. / 2"	MAX. STRUCTURE HEIGHT = 48 FT. = 39 FT.
MIN. S/B FRONT YARD	= 60 FT.	= 30 FT.	MAX. LOT COVERAGE = 30% = 25%
MIN. S/B REAR YARD	= 50 FT.	= 30 FT.	
- EXISTING NUMBER OF LOTS: 1
PROPOSED NUMBER OF LOTS: 4
- THE HORIZONTAL DATUM FOR THIS PROJECT IS THE R.I.S.P.C.S. (NAD 83) AND THE VERTICAL DATUM FOR THIS PROJECT IS NAVD 83. THE PROJECT DATUMS WERE ESTABLISHED FROM DATA TRANSMITTED FROM MTS REFERENCE STATIONS USING THE MTS RTK NETWORK VIA LEICA GPS1200 SERIES ANTENNAS / RECEIVERS.
- WETLAND FLAGS DELINEATED BY: NATURAL RESOURCE SERVICES, INC. P.O. BOX 511 - 180 TINKHAM LANE, HARRISVILLE, RHODE ISLAND 02830
- THE EXISTING BUILDING ON "COMMERCIAL LOT 1" IS TO BE RAISED OR A SIDE YARD SETBACK VARIANCE MUST BE REQUESTED DUE TO ITS ENCRoACHMENT INTO THE SIDE YARD SETBACK.
- THE PROPOSED COMMERCIAL LOTS SHOWN WILL HAVE NO MORE THAN TWO POINTS OF EGRESS, ONE VIA DOUGLAS PIKE AND THE OTHER VIA HARRIS ROAD.



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RIGL 34-13-1
ABUTTING STREET INDEX
 1. DOUGLAS PIKE (ROUTE 7)
 2. HARRIS ROAD
 3. LIMEROCK ROAD

2	08/04/15	ADDED NOTES PER TOWN COMMENTS	RSL
1	08/15/15	ZONE CHANGE & TOWN COMMENTS	RSL
NO.	DATE	REVISION	CHECKED BY:
MINOR SUBDIVISION RECORD PLAN			
DOUGLAS PIKE, HARRIS ROAD & LIMEROCK ROAD SMITHFIELD, RHODE ISLAND			
A & R ONE, L.L.C. 7 RIDGE ROAD SMITHFIELD, RHODE ISLAND 02917			
Waterman ENGINEERING COMPANY Engineers & Surveyors - Est. 1894		PROJECT NO. 12-027 SCALE: 1" = 60' DATE: 01/09/15 DRAWN BY: BJT/MSJ CHECKED BY: RSL FILENAME: 12-027.MS1 DRAWING # 1 of 1 SHEETS MSJ	
46 Sutton Avenue East Providence, RI Phone: (401) 438-5775 Fax: (401) 438-5773 www.watermanengineering.net			

REFERENCE

- 1. PROJECT LOCATION: 61 Harris Road, 655 & 665 DOUGLAS PIKE, SMITHFIELD, RI 02974. ASSESSOR'S MAP 45, LOT 181, 182, 43A.
2. EXISTING CONDITIONS INFORMATION TAKEN FROM PLAN ENTITLED "BOUNDARY & TOPOGRAPHY SURVEY PLAN" PREPARED BY WATERMAN ENGINEERING COMPANY, DATED JULY 13, 2012 REVISED AUGUST 26, 2015.
3. EXISTING CONDITION INFORMATION TAKEN FROM PLAN ENTITLED, "MINOR SUBDIVISION RECORD PLAN" PREPARED BY WATERMAN ENGINEERING COMPANY, DATED JANUARY 9, 2015 AND REVISED SEPTEMBER 4, 2015.
4. WETLAND FLAGS IDENTIFYING WETLAND RESOURCE AREAS WERE PLACED BY NATURAL RESOURCE SERVICES, INC. ON JULY 13, 2012 AND LOCATED BY WATERMAN ENGINEERING COMPANY.
5. PERMITTED BY RIDEM AS AN INSIGNIFICANT ALTERATION TO FRESHWATER WETLANDS UNDER APPLICATION NO. 14-0174.

GENERAL NOTES

- 1. PER AVAILABLE RIDEM MAPPING, THE PROJECT SITE IS LOCATED OUTSIDE OF A NATURAL HERITAGE AREA.
2. THE STATE OF RHODE ISLAND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AMENDED AUGUST 2013 WITH ALL REVISIONS AND ADDENDA, AND THE RHODE ISLAND STANDARD DETAILS ARE MADE A PART HEREOF AS FULLY AND COMPLETELY AS IF ATTACHED HERETO. ALL WORK SHALL MEET OR EXCEED THE RHODE ISLAND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, WITH LATEST REVISIONS. THE LATEST REVISION OF THE STANDARD SPECIFICATIONS MAY BE OBTAINED AT THE RHODE ISLAND DEPARTMENT OF TRANSPORTATION OR ON THE RIDOT WEBSITE (WWW.DOT.RI.GOV).
3. THE CONTRACTOR SHALL MAKE ALL NECESSARY CONSTRUCTION NOTIFICATIONS AND APPLY FOR AND OBTAIN ALL NECESSARY CONSTRUCTION PERMITS, PAY ALL FEES AND POST ALL BONDS ASSOCIATED WITH THE SAME, AND COORDINATE WITH THE ENGINEER AND OWNER'S REPRESENTATIVE AS REQUIRED.
4. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR JOB SITE SAFETY. THE CONTRACTOR SHALL PROVIDE TEMPORARY FENCING AND/OR BARRIERS AROUND ALL OPEN EXCAVATED AREAS IN ACCORDANCE WITH OSHA FEDERAL, STATE, AND LOCAL REQUIREMENTS.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THAT THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS DO NOT CONFLICT WITH ANY KNOWN EXISTING OR OTHER PROPOSED IMPROVEMENTS. IF ANY CONFLICTS ARE DISCOVERED, THE CONTRACTOR SHALL NOTIFY THE OWNER AND THE ENGINEER PRIOR TO INSTALLATION OF ANY PORTION OF THE SITE WORK WHICH WOULD BE AFFECTED. NO FIELD ADJUSTMENTS IN THE LOCATION OF SITE ELEMENTS SHALL BE MADE WITHOUT THE ENGINEER'S APPROVAL.
6. IF ANY DEVIATION OR ALTERATION OF THE WORK PROPOSED ON THESE DRAWINGS IS REQUIRED, THE CONTRACTOR SHALL IMMEDIATELY CONTACT AND COORDINATE ANY DEVIATIONS WITH THE ENGINEER AND OWNER.
7. ANY AREA OUTSIDE OF THE LIMIT OF WORK THAT IS DISTURBED SHALL BE RESTORED TO ITS ORIGINAL CONDITION AT NO ADDITIONAL COST TO THE OWNER.
8. ALL SITE WORK SHALL MEET OR EXCEED THE SITE WORK SPECIFICATIONS PREPARED FOR THIS PROJECT.
9. ALL SIGNS SHALL BE REFLECTORIZED TYPE III SHEETING AND CONFORM WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, LATEST REVISION.
10. ALL UTILITIES (LOCATION AND ELEVATION) DEPICTED SHALL BE CONSIDERED APPROXIMATE ONLY. BEFORE COMMENCING SITE WORK IN ANY AREA, CONTACT "DIG SAFE" AT 1-888-DIG-SAFE (1-888-344-7235) TO ACCURATELY LOCATE UNDERGROUND UTILITIES. ALL DAMAGE TO EXISTING UTILITIES OR STRUCTURES, AND THE COST TO REPAIR THE DAMAGES TO INITIAL CONDITIONS, AS SHOWN ON THE PLANS SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
11. NO EXCAVATION SHALL BE DONE UNTIL COMPANIES ARE PROPERLY NOTIFIED IN ADVANCE. NOTE THAT NOT ALL EXISTING UNDERGROUND UTILITIES ARE SHOWN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT ALL RESPECTIVE UTILITY COMPANIES TO VERIFY AND LOCATE EXISTING UTILITIES.

LAYOUT NOTES

- 1. ALL LINES ARE PERPENDICULAR OR PARALLEL TO THE LINES FROM WHICH THEY ARE MEASURED UNLESS OTHERWISE INDICATED.
2. ACCESSIBLE RAMPS SHALL BE PER THE AMERICAN WITH DISABILITIES ACT (ADA) ACCESSIBILITY GUIDELINES.
3. PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL PERFORM BENCHMARK FIELD LEVEL VERIFICATION AND COORDINATE LAYOUT CHECK. THE CONTRACTOR SHALL CONTACT PARE CORPORATION IF ANY DISCREPANCIES ARE FOUND.
4. DIMENSIONS OF PARKING SPACES AND DRIVEWAYS ARE FROM FACE OF CURB TO FACE OF CURB. DIMENSIONS FROM BUILDING ARE FROM FACE OF BUILDING TO FACE OF CURB.
5. ALIGN WALKWAYS ON DOORWAYS THEY SERVE TO PROVIDE MINIMUM REQUIRED MANEUVERING CLEARANCE IN ACCORDANCE WITH THE AMERICAN WITH DISABILITIES ACT (ADA) ACCESSIBILITY GUIDELINES.

DEMOLITION NOTES

- 1. THE CONTRACTOR SHALL COORDINATE ALL DEMOLITION OF STRUCTURES, PAVEMENT AND CONCRETE MATERIALS, AND UTILITIES WITH APPROPRIATE PROPOSED SITE GENERAL, GRADING, UTILITY, AND LANDSCAPING DRAWINGS.
2. WATER, SEWER, DRAINAGE, GAS, AND OTHER SITE UTILITIES SERVICING THE EXISTING FACILITIES ARE TO REMAIN ACTIVE THROUGHOUT CONSTRUCTION.
3. THERE SHALL BE NO INTERRUPTION OF UTILITY SERVICES DURING THE CONSTRUCTION OPERATION WITHOUT APPROVAL OF THE OWNER.

GRADING AND UTILITY NOTES

- 1. UNDERGROUND UTILITIES DEPICTED WERE COMPILED FROM AVAILABLE RECORD PLANS AND SHALL BE CONSIDERED APPROXIMATE ONLY. BEFORE COMMENCING SITE WORK IN ANY AREA, CONTACT "DIG SAFE" AT 1-888-DIG-SAFE (1-888-344-7235) TO ACCURATELY LOCATE UNDERGROUND UTILITIES. ANY DAMAGE TO EXISTING UTILITIES OR STRUCTURES DEPICTED OR NOT DEPICTED ON THE PLANS SHALL BE THE CONTRACTOR'S RESPONSIBILITY. COSTS TO REPAIR SUCH DAMAGES SHALL BE THE CONTRACTOR'S RESPONSIBILITY. NO EXCAVATION SHALL BE DONE UNTIL UTILITY COMPANIES ARE PROPERLY NOTIFIED.
2. ALL WORK PERFORMED AND ALL MATERIALS FURNISHED SHALL CONFORM WITH THE LINES AND GRADES ON THE PLANS AND SITE WORK SPECIFICATIONS.
3. AT ALL LOCATIONS WHERE EXISTING CURBING OR PAVEMENT ABUT NEW CONSTRUCTION, THE EDGE OF THE EXISTING CURB OR PAVEMENT SHALL BE SAW CUT TO A CLEAN, SMOOTH EDGE. BLEND NEW PAVEMENT AND CURBS SMOOTHLY INTO EXISTING BY MATCHING LINES, GRADES AND JOINTS.
4. ALL UTILITY COVERS, GRATES, ETC. SHALL BE ADJUSTED TO BE FLUSH WITH THE SURROUNDING SURFACE OR PAVEMENT FINISH GRADE. RIM ELEVATIONS OF STRUCTURES AND MANHOLES ARE APPROXIMATE. FINAL ELEVATIONS ARE TO BE SET FLUSH AND CONSISTENT WITH THE GRADING PLANS.
5. THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS FOR THE ALTERATION OF PRIVATE UTILITIES BY THE UTILITY COMPANIES, AS REQUIRED.
6. WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATION AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR AND THE INFORMATION SHALL BE PROVIDED ON A SKETCH TO SCALE OF THE EXISTING UTILITY WITH TIES TO KNOWN POINTS, PHOTOS AND FURNISHED TO THE ENGINEER FOR RESOLUTION.
7. THE CONTRACTOR SHALL PROTECT ALL UNDERGROUND DRAINAGE, SEWER AND UTILITY FACILITIES FROM EXCESSIVE VEHICULAR LOADS DURING CONSTRUCTION. ANY DAMAGE TO THESE FACILITIES RESULTING FROM CONSTRUCTION LOADS SHALL BE RESTORED TO ORIGINAL CONDITION.
8. GAS, ELECTRIC, AND COMMUNICATIONS ROUTING ARE SUBJECT TO REVIEW AND APPROVAL BY APPROPRIATE UTILITY COMPANIES.
9. DURING CONSTRUCTION OPERATIONS, THE CONTRACTOR SHALL PROTECT EXISTING UTILITIES BY PROVIDING TEMPORARY SUPPORTS OR SHEETING AS REQUIRED AT NO ADDITIONAL COST TO THE OWNER.
10. ALL GRAVITY SANITARY PIPING SHALL BE SDR-35 PVC. ALL SEWER CONSTRUCTION SHALL CONFORM TO THE SMITHFIELD SEWER JURISDICTION REGULATIONS.
11. ALL WATER LINE BENDS AND TEES SHALL BE REINFORCED WITH THRUST BLOCKS. ALL WATER DISTRIBUTION PIPING AND FITTINGS MUST ADHERE TO THE SMITHFIELD WATER SUPPLY BOARD SPECIFICATIONS AND SHALL BE INSPECTED BEFORE, DURING, AND AFTER CONSTRUCTION PRIOR TO TAPPING THE SERVICE MAIN. THE CONTRACTOR SHALL COORDINATE AND CONFIRM ALL WATER DISTRIBUTION MATERIAL PRODUCTS WITH THE SMITHFIELD WATER SUPPLY BOARD PRIOR TO ORDERING OR PURCHASING PRODUCTS.
12. EXCAVATION REQUIRED WITHIN THE PROXIMITY OF EXISTING UTILITY LINES SHALL BE DONE BY HAND. CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING UTILITY LINES OR STRUCTURES INCURRED DURING CONSTRUCTION OPERATIONS AT NO COST TO THE OWNER.
13. PITCH EVENLY BETWEEN SPOT GRADES. ALL PAVED AREAS MUST PITCH TO DRAIN AT A MIN. OF 1/8" PER FOOT UNLESS SPECIFIED.
14. THE PROPOSED WALKWAYS SHALL HAVE A MAXIMUM CROSS SLOPE OF 2% AND A MAXIMUM RUNNING SLOPE OF 5% AS SHOWN ON CONSTRUCTION DETAILS AND GRADING PLAN.

STATE RIGHT-OF-WAY NOTES

- 1. ALL WORK TO BE PERFORMED WITHIN THE STATE RIGHT-OF-WAY (ROW) SHALL CONFORM TO THE RIDOT "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" AMENDED AUGUST 2013, WITH ALL REVISIONS AND ADDENDA. STANDARD DETAILS FOR THIS WORK ARE RIDOT STANDARD DETAILS 1998 EDITION WITH ALL REVISIONS.
2. THE CONTRACTOR SHALL APPLY FOR AND OBTAIN A UTILITY PERMIT FROM THE RIDOT FOR UTILITY WORK WITHIN THE STATE'S ROW AND MAKE ALL NECESSARY CONSTRUCTION NOTIFICATIONS, PAY ALL FEES AND POST ALL BONDS ASSOCIATED WITH THE SAME, AND COORDINATE WITH THE ENGINEER AND OWNER'S REPRESENTATIVE AS REQUIRED.
3. THE CONTRACTOR SHALL PREPARE A TRANSPORTATION MANAGEMENT PLAN INCLUDING A TEMPORARY TRAFFIC CONTROL PLAN AS REQUIRED FOR THE RIDOT UTILITY PERMIT APPLICATION AT NO ADDITIONAL EXPENSE TO THE OWNER.
4. ALL TEMPORARY TRAFFIC CONTROLS SHALL BE IN ACCORDANCE WITH THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD), LATEST REVISION.

EROSION AND SEDIMENTATION CONTROL NOTES - RHODE ISLAND

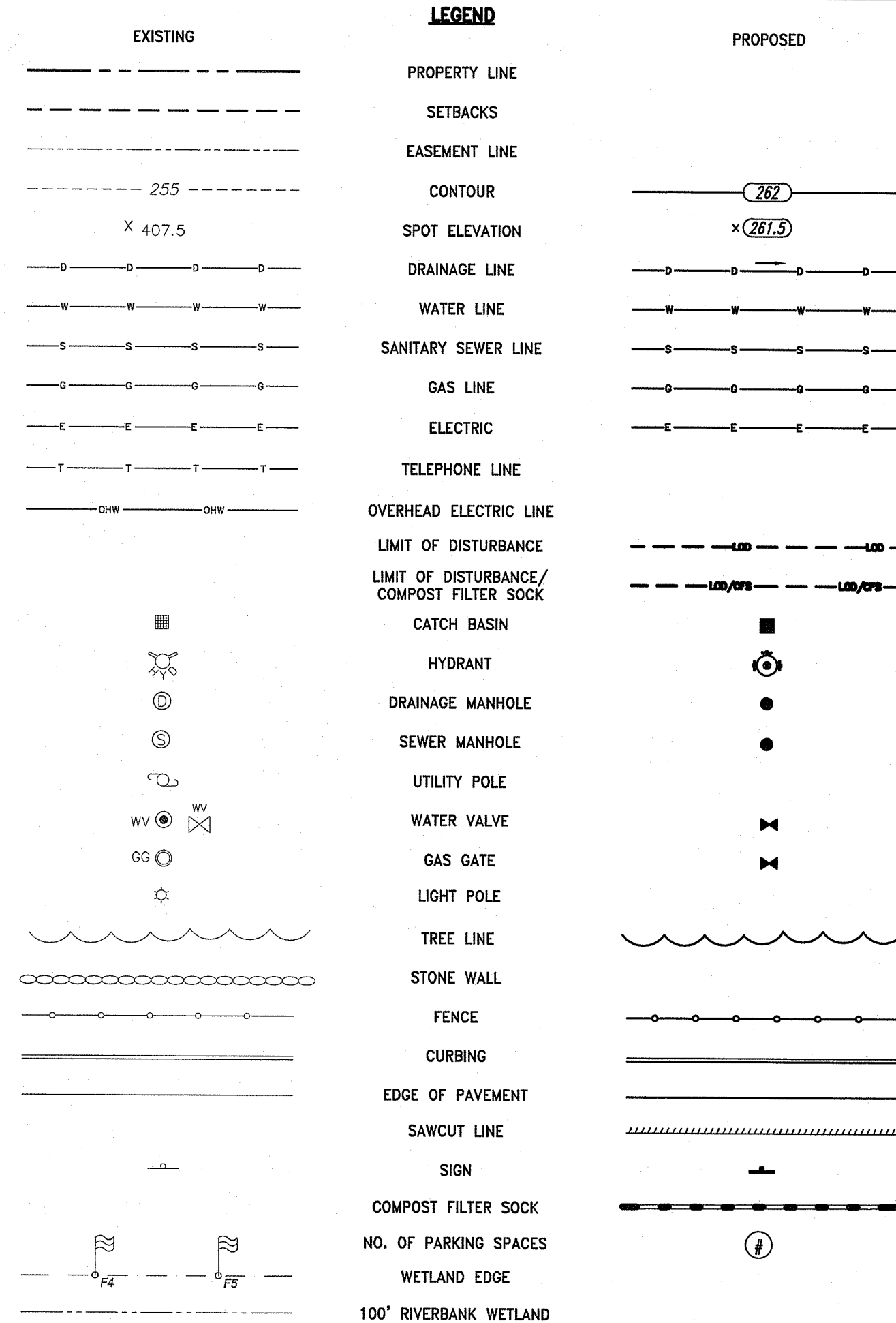
- 1. THE CONTRACTOR AND RELEVANT SUBCONTRACTORS SHALL READ AND UNDERSTAND THE RIDEM GENERAL PERMIT FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY (GENERAL PERMIT) AND THE SITE SPECIFIC SOIL EROSION AND SEDIMENT CONTROL PLAN (SESC) PREPARED FOR THE PROJECT. ALL EROSION CONTROL SHALL BE IN ACCORDANCE WITH THE RHODE ISLAND SOIL EROSION AND SEDIMENT CONTROL HANDBOOK, LATEST REVISION.
2. THE CONTRACTOR SHALL BECOME FAMILIAR WITH THE CONDITIONS ISSUED FOR THE PROJECT BY RIDEM AND BE RESPONSIBLE FOR CONFORMANCE WITH ALL PERMIT REQUIREMENTS AND CONSTRUCTION DOCUMENTS.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING OR INSTALLING ALL TEMPORARY SEDIMENT AND EROSION CONTROLS AS SHOWN ON THESE PLANS AND SHALL MAINTAIN ALL EROSION CONTROL MEASURES AS NECESSARY DURING THE ENTIRE CONSTRUCTION PERIOD.
4. ANTI-TRACKING PADS (R.I. STD. DETAIL 9.9.0) SHALL BE PROVIDED AT ALL POINTS OF EGRESS OR INGRESS AND SHALL BE MAINTAINED TO LIMIT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC ROADS.
5. EROSION CONTROL BARRIERS SHALL BE INSTALLED AS SHOWN ON THE EROSION CONTROL PLAN PRIOR TO COMMENCEMENT OF CONSTRUCTION OPERATIONS.
6. SOIL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSPECTED AND MAINTAINED ON A WEEKLY BASIS AND AFTER EACH STORM EVENT OF 0.25 INCH OR GREATER DURING CONSTRUCTION TO INSURE THAT CHANNELS, DITCHES AND PIPES ARE CLEAR OF DEBRIS AND THAT THE EROSION CONTROL BARRIERS ARE INTACT. IDENTIFIED DEFICIENCIES SHALL BE CORRECTED IMMEDIATELY.
7. DUST SHALL BE CONTROLLED BY WATERING OR OTHER APPROVED METHODS AS NECESSARY, OR AS DIRECTED BY THE OWNER OR OWNER'S REPRESENTATIVE.
8. THE CONTRACTOR SHALL CLEAN AND MAINTAIN EROSION CONTROL BARRIER WHEN SEDIMENT ACCUMULATES TO ONE HALF THE HEIGHT OF THE BARRIER. MATERIAL COLLECTED FROM THE SEDIMENTATION BARRIERS SHALL BE REMOVED AS NECESSARY AND DISPOSED IN AN UPLAND AREA.
9. THE CONTRACTOR SHALL SCHEDULE HIS WORK TO ALLOW THE FINISHED SUB GRADE ELEVATIONS TO DRAIN PROPERLY WITHOUT PONDING. SPECIFICALLY, ALLOW WATER TO ESCAPE WHERE PROPOSED CURB MAY RETAIN RUNOFF PRIOR TO APPLICATION OF SURFACE PAVING. PROVIDE TEMPORARY POSITIVE DRAINAGE, AS REQUIRED, TO STABILIZED DISCHARGE POINTS.
10. INSTALLATION OF THE EROSION CONTROL BARRIERS AS ILLUSTRATED IS INTENDED TO REPRESENT THE MINIMUM SEDIMENTATION CONTROL FACILITIES NECESSARY TO MEET ANTICIPATED SITE CONDITIONS. ADDITIONAL EROSION CONTROL MEASURES SHALL BE IMPLEMENTED AS CONDITIONS WARRANT OR AS DIRECTED BY THE OWNER OR OWNER'S REPRESENTATIVE.
11. REQUIRED SEDIMENTATION CONTROL FACILITIES MUST BE PROPERLY ESTABLISHED, CLEARLY VISIBLE AND IN OPERATION PRIOR TO INITIATING ANY LAND CLEARING ACTIVITY AND/OR OTHER CONSTRUCTION RELATED WORK. SUCH FACILITIES SHALL REPRESENT THE LIMIT OF WORK. WORKERS SHALL BE INFORMED THAT NO CONSTRUCTION ACTIVITY IS TO OCCUR BEYOND THE LIMIT OF WORK AT ANY TIME THROUGHOUT THE CONSTRUCTION PERIOD.
12. THE CONTRACTOR SHALL MAINTAIN A SUFFICIENT RESERVE OF VARIOUS EROSION CONTROL MATERIALS ONSITE AT ALL TIMES FOR EMERGENCY PURPOSES OR ROUTINE MAINTENANCE.
13. EXISTING AND NEWLY INSTALLED CATCH BASINS AND STORM DRAIN INLETS SHALL BE PROTECTED WITH APPROPRIATE TEMPORARY INLET PROTECTION IN ACCORDANCE WITH THE RHODE ISLAND SOIL EROSION AND SEDIMENT CONTROL HANDBOOK.
14. DEWATERING WASTE WATERS PUMPED FROM EXCAVATIONS SHALL BE CONVEYED BY HOSE TO AN UPLAND AREA AND DISCHARGED INTO STRAW BALE CORRALS OR SEDIMENTATION BASINS.
15. THE CONTRACTOR SHALL NOT REMOVE ANY TEMPORARY SEDIMENT CONTROL BARRIERS UNTIL THE CONTRIBUTING DRAINAGE AREA HAS BEEN PERMANENTLY STABILIZED.
16. CONSTRUCTION SITE WASTE MATERIALS SHALL BE PROPERLY CONTAINED ONSITE AND DISPOSED OFF SITE AT A LOCATION IN ACCORDANCE WITH THE LOCAL AND STATE REGULATIONS.
17. RIP-RAP OR OTHER ENERGY DISSIPATORS SHALL BE USED WHERE NECESSARY TO PREVENT SCOUR.
18. ALL DISTURBED AREAS SHALL BE STABILIZED WITHIN 14 DAYS UPON COMPLETION OF WORK IN THAT AREA.
19. ALL DRAINAGE STRUCTURES SHALL BE CLEARED OF ACCUMULATED SEDIMENT PRIOR TO ACCEPTANCE OF FINAL PROJECT.
20. NEWLY VEGETATED AREAS SHALL BE MAINTAINED REGULARLY TO ENSURE STABLE VEGETATED SURFACES.
21. EROSION AND SEDIMENTATION CONTROLS SHALL BE UTILIZED AS SHOWN ON THE PLANS. POTENTIAL EROSION AND SEDIMENTATION PROBLEMS ASSOCIATED WITH THE CONSTRUCTION OF THE PROJECT SHALL BE AVOIDED THROUGH THE PROJECT SCHEDULING AND THE USE OF APPROPRIATE STANDARD CONTROLS (RHODE ISLAND SOIL EROSION AND SEDIMENTATION CONTROL HANDBOOK) AS ILLUSTRATED ON THE PROJECT PLANS.
22. WHERE EROSION CONTROLS ARE NEEDED ON IMPERVIOUS SURFACES, THE CONTRACTOR SHALL PROVIDE SAND BAG EROSION CONTROL BARRIER.
23. TEMPORARY DIVERSION (TD) MAY CONSIST OF A DITCH OR SWALE, OR MAY BE ACHIEVED USING WOOD CHIPS, COIR LOGS, OR SIMILAR MATERIALS.
24. TEMPORARY SEDIMENT TRAPS (TST) AND TEMPORARY SWALES (TSW) SHALL BE SIZED BY THE CONTRACTOR USING THE PARAMETERS CONTAINED IN THE RHODE ISLAND SOIL EROSION AND SEDIMENT CONTROL HANDBOOK.

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 OWNER 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.
ROOF DRAIN LEADERS
• PERFORM ROUTINE ROOF INSPECTIONS QUARTERLY
• KEEP ROOFS CLEAN AND FREE OF DEBRIS
• KEEP ROOF DRAINAGE SYSTEMS CLEAR
SAND FILTER SYSTEM
• DURING THE SIX MONTHS IMMEDIATELY AFTER CONSTRUCTION, THE SAND FILTER 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 AN ANNUAL BASIS AND AFTER STORM EVENTS OF GREATER THAN OR EQUAL TO 2 INCHES.
• SILT/SEDIMENT SHALL BE REMOVED FROM THE FILTER BED WHEN THE ACCUMULATION EXCEEDS ONE INCH. WHEN THE FILTERING CAPACITY OF THE SAND FILTER DIMINISHES SUBSTANTIALLY (I.E. WHEN WATER PONDS ON THE SURFACE OF THE FILTER BED FOR MORE THAN 48 HOURS), THE TOP FEW INCHES OF DISCOLORED MATERIAL SHALL BE REMOVED AND SHALL BE REPLACED WITH FRESH MATERIAL. THE REMOVED SEDIMENTS SHALL BE DISPOSED IN AN ACCEPTANCE MANNER AT AN APPROVED AND PERMITTED LOCATION.

BMP MAINTENANCE SCHEDULE

- UPON PROJECT COMPLETION, THE PROPERTY OWNER SHALL ADHERE TO THE FOLLOWING MAINTENANCE PLAN AND SCHEDULE:
1. MANHOLES AND DRAIN LINES: AN INSPECTION MUST OCCUR ON AN ANNUAL BASIS BY QUALIFIED PERSONAL TO ENSURE PROPER OPERATION. THE INSPECTION SHOULD, AS A MINIMUM, CONCENTRATE ON THE FOLLOWING:
• DAMAGE TO GRATE/COVERS
• EVIDENCE OF STANDING WATER
• DEBRIS REMOVAL
• STRUCTURAL ALIGNMENT/INTEGRITY
ANY DEFICIENCY NOTED DURING THE INSPECTION WILL BE IMMEDIATELY REPAIRED OR REPLACED.



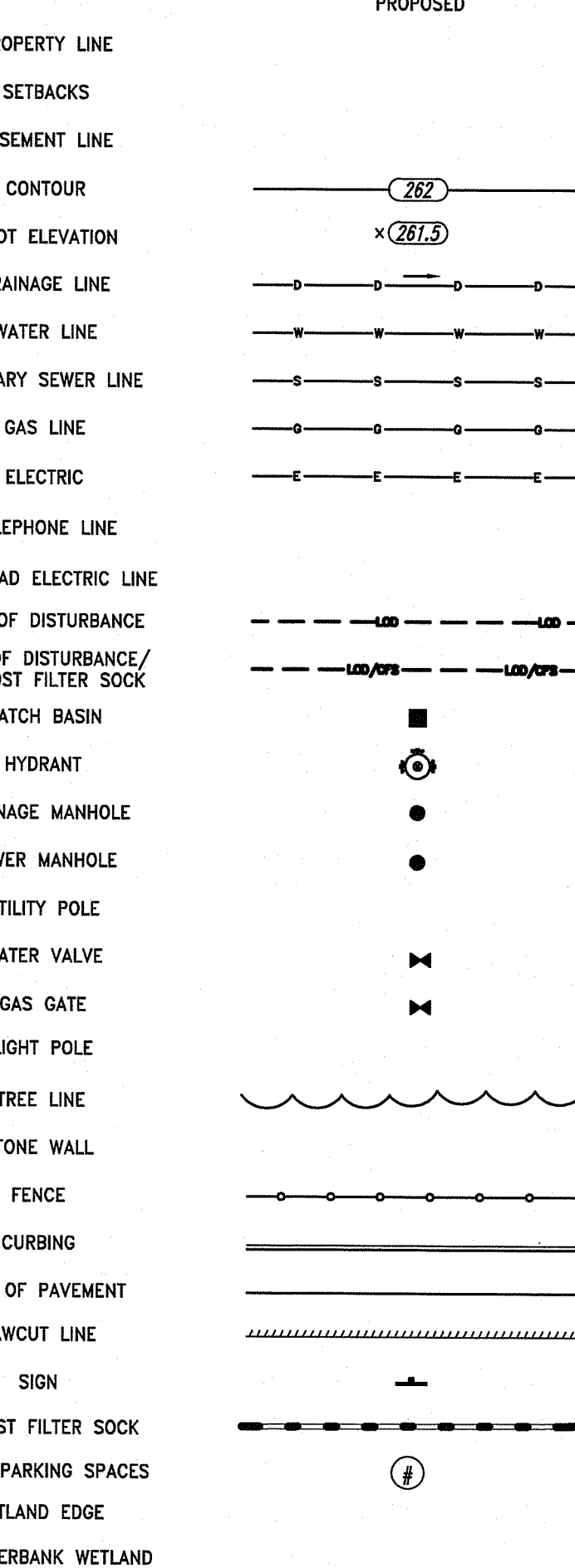
LEGENDS

- (4DY) = 4" DOUBLE YELLOW EPOXY RESIN PAVEMENT MARKING
(4W) = 4" SOLID WHITE EPOXY RESIN PAVEMENT MARKING
(6W) = 6" SOLID WHITE EPOXY RESIN PAVEMENT MARKING
(8Y) = 8" SOLID YELLOW EPOXY RESIN PAVEMENT MARKING
(12W) = 12" SOLID WHITE EPOXY RESIN PAVEMENT MARKING
(BOL) = BOLLARD
(CG) = CLEAR AND GRUB VEGETATION
(CFS) = COMPOST FILTER SOCK (SEE DETAIL)
(CP) = CONCRETE PAD
(CTE) = CONNECT TO EXISTING
(CM) = SAWCUT AND MATCH
(CW) = CROSS WALK (SEE DETAIL)
(DWP) = DETECTABLE WARNING PAVEMENT (SEE DETAIL)
(DTP) = DRIPLINE TREE PROTECTION
(ETR) = EXISTING TO REMAIN. PROTECT DURING CONSTRUCTION.
(GV) = GATE VALVE
(SHP) = HANDICAP PARKING PAVEMENT MARKING (SEE DETAIL)
(HYD) = HYDRANT
(LS) = LOAM AND SEED (SEE DETAIL)
(MEPM) = MATCH EXISTING PAVEMENT MARKINGS
(R&D) = REMOVE AND DISPOSE
(DAC) = REMOVE AND DISPOSE ASPHALT CURB
(DBLDC) = REMOVE AND DISPOSE BUILDING
(DCP) = REMOVE AND DISPOSE CONCRETE PAD
(DCW) = REMOVE AND DISPOSE CONCRETE WALK
(DC) = REMOVE AND DISPOSE CURB
(DF) = REMOVE AND DISPOSE FENCE
(DFP) = REMOVE AND DISPOSE FLEXIBLE PAVEMENT
(DLP) = REMOVE AND DISPOSE LIGHT POLE
(DS) = REMOVE AND DISPOSE SIGN
(R&R) = REMOVE AND RESET
(R&S) = REMOVE AND STOCKPILE
(RSB) = REMOVE AND STOCKPILE BOULDERS
(RLS) = RIPRAP LEVEL SPREADER (SEE DETAIL)
(RS) = RIPRAP SPILLWAY (SEE DETAIL)
(SB) = SAND BAG EROSION CONTROL BARRIER (SEE DETAIL)
(SFCD) = SEDIMENT FOREBAY CHECK DAM (SEE DETAIL)
(SM) = SEDIMENT MARKER
(TDS) = TEMPORARY DIVERSION SWALE
(TIP) = TEMPORARY INLET PROTECTION (SEE DETAIL)
(TST) = TEMPORARY SEDIMENT TRAP

LEGENDS CONTINUED

- (BCD) = BITUMINOUS CONCRETE DRIVEWAY
3" BITUMINOUS CONCRETE TYPE I-1
8" GRAVEL BORROW SUBBASE COURSE
(MMO) = MICRO-MILL 2" OF EXISTING PAVEMENT
2" MODIFIED CLASS 9.5 HMA SURFACE COURSE
ASPHALT EMULSION TACK COAT BETWEEN HMA LAYER AND MILLED SURFACE
(P1) = 2" MODIFIED CLASS 9.5 HMA
8" CLASS 19.0 HMA (PLACED IN 2 LAYERS)
TACK COAT BETWEEN HMA LAYERS
12" GRAVEL BORROW SUBBASE COURSE
(P2) = 1 1/2" MODIFIED CLASS 9.5 HMA
2 1/2" CLASS 12.5 HMA
TACK COAT BETWEEN HMA LAYERS
12" GRAVEL BORROW SUBBASE COURSE
(2.3.0) = PRECAST CONCRETE FLARED END SECTION - R.I. STD. 2.3.0
(4.2.0) = PRECAST 4'-0" ROUND MANHOLE - R.I. STD. 4.2.0
(4.2.2) = PRECAST 6'-0" ROUND MANHOLE - R.I. STD. 4.2.2
(4.4.0M) = PRECAST 4'-0", 5'-0", OR 6'-0" ROUND CATCH BASIN - R.I. STD. 4.4.0M
(4.7.2) = ALTERNATE TOP COVER FOR ROUND PRECAST MANHOLES AND CATCH BASINS - R.I. STD. 4.7.2
(7.1.0) = PRECAST CONCRETE CURB - R.I. STD. 7.1.0
(7.1.2) = 6'-0" PRECAST CONCRETE TRANSITION CURB - R.I. STD. 7.1.2
(7.2.4) = PRECAST CONCRETE CAR STOPS - R.I. STD. 7.2.4
(7.5.0) = BITUMINOUS CONCRETE LIP CURB- R.I. STD. 7.5.0
(7.6.0M) = CURB SETTING DETAIL (MODIFIED) - R.I. STD. 7.6.0M
(9.7.0) = DEWATERING BASIN - R.I. STD. 9.7.0
(9.9.0) = CONSTRUCTION ACCESS - R.I. STD. 9.9.0
(20.1.0) = PAVEMENT MARKINGS ARROWS AND ONLY - R.I. STD. 20.1.0
(43.1.0M) = WHEELCHAIR RAMP (MODIFIED) - R.I. STD. 43.1.0M
(43.3.0M) = WHEELCHAIR RAMP (MODIFIED) - R.I. STD. 43.3.0M
(48.1.0M) = DETECTABLE WARNING SYSTEM (MODIFIED) - R.I. STD. 48.1.0M

LEGEND



ABBREVIATIONS

- ADA = AMERICANS WITH DISABILITIES ACT
ASSJ = AREA SUBJECT TO STORM FLOWAGE
BM = BENCHMARK
BMP = BEST MANAGEMENT PRACTICE
BIT = BITUMINOUS
BOT = BOTTOM
BC = BOTTOM OF CURB (FINISHED GRADE ON LOW SIDE OF CURB)
BS = BOTTOM OF STAIR (FINISHED GRADE AT BOTTOM STAIR)
BW = BOTTOM OF WALL (FINISHED GRADE ON LOW SIDE OF WALL)
CI = CAST IRON
CB = CATCH BASIN, 4' DIA. UNLESS OTHERWISE NOTED
CLD = CEMENT-LINED DUCTILE IRON
CL = CLASS
C = CLEANOUT
CONC. = CONCRETE
CO = CONCRETE CURB, VERTICAL
DEMO = DEMOLITION
DIA = DIAMETER
DIV = DIVERSION
DYL = DOUBLE YELLOW LINE
DMH = DRAIN MANHOLE
EDP = EDGE OF PAVEMENT
ELEV. = ELEVATION
EX. EXIST. = EXISTING
EXCB = EXISTING CATCH BASIN
EXDMH = EXISTING DRAIN MANHOLE
FFE = FINISH FLOOR ELEVATION
FT = FOOT
FND. = FOUND
GTD = GRADE TO DRAIN
GRAN. = GRANITE
HDPE = HIGH DENSITY POLYETHYLENE PIPE
HMA = HOT MIX ASPHALT
HYD. = HYDRANT
I.D. = INNER DIAMETER
INV. = INVERT
LOD = LIMIT OF DISTURBANCE
LP = LOW POINT
MUTCD = MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION
MAX. = MAXIMUM
MIN. = MINIMUM
MON. = MONITORING
N.T.S. = NOT TO SCALE
OWS = OIL WATER SEPARATOR
OCS = OUTLET CONTROL STRUCTURE
PERF. = PERFORATED
PE = POLYETHYLENE
PVC = POLYVINYL CHLORIDE
R-X' = RADIUS
RCP = REINFORCED CONCRETE PIPE
RIDEM = RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
RIDOT = RHODE ISLAND DEPARTMENT OF TRANSPORTATION
RHP = RHODE ISLAND HIGHWAY PLAT
R.I. STD. = RHODE ISLAND STANDARD
SMH = SEWER MANHOLE
SWL = SINGLE SOLID WHITE LINE
SESC = SOIL EROSION AND SEDIMENT CONTROL
SDR = STANDARD DIMENSIONAL RATIO
TD = TEMPORARY DIVERSION
TST = TEMPORARY SEDIMENT TRAP
TSW = TEMPORARY SWALE
TP = TEST PIT
TC = TOP OF CURB
TS = TOP OF STAIR (FINISHED GRADE OF TOP STAIR)
TW = TOP OF WALL
TYP. = TYPICAL
UP = UTILITY POLE
VGC = VERTICAL GRANITE CURB
VC = VITRIFIED CLAY
WPM = WATER PAINT MARK
W/ = WITH
YD = YARD DRAIN



OWNER/APPLICANT: ARR RETAIL DEVELOPMENT LLC, 7 RIDGE ROAD, SMITHFIELD, RI 02817

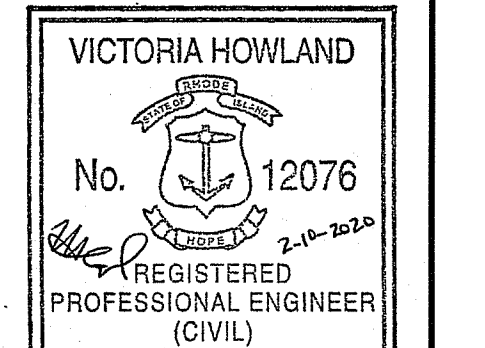
SCALE ADJUSTMENT GUIDE: 0" = 1", BAR IS ONE INCH ON ORIGINAL DRAWING

Commercial Development, ASSESSOR'S PLAT 45, LOTS 181, 182, & 43A, Smithfield, Rhode Island

Environmental Management

FEB 13 2020

Chris of Water Resources



REVISIONS:

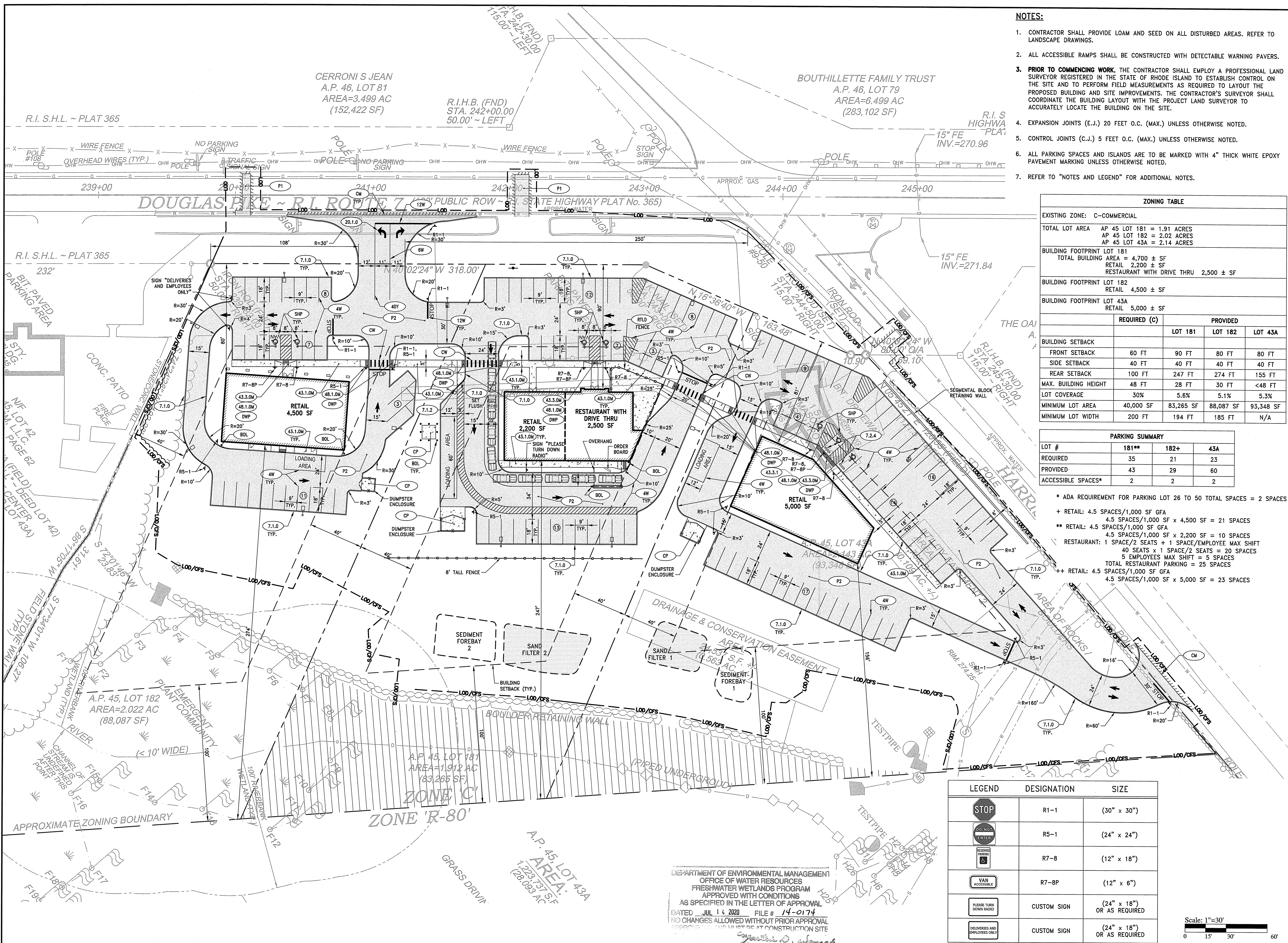
Table with 2 columns: Description, Date. Contains revision entries for the drawing.

PROJECT NO.: 19109.00, DATE: FEBRUARY 10, 2020, SCALE: NOT TO SCALE, DESIGNED BY: VAH, CHECKED BY: DLP, DRAWN BY: AKL, APPROVED BY: VAH, DRAWING TITLE:

NOTES & LEGEND

DRAWING NO.: C1.1, SHEET NO.: 4 OF 16

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT, OFFICE OF WATER RESOURCES, FRESHWATER WETLANDS PROGRAM, APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL DATED JUL 14 2020, FILE # 14-0174, NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL, APPROVED PLANS MUST BE AT CONSTRUCTION SITE.



NOTES:

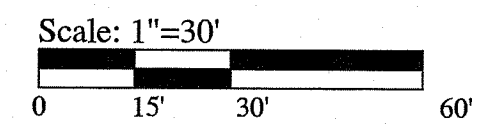
- CONTRACTOR SHALL PROVIDE LOAM AND SEED ON ALL DISTURBED AREAS. REFER TO LANDSCAPE DRAWINGS.
- ALL ACCESSIBLE RAMPS SHALL BE CONSTRUCTED WITH DETECTABLE WARNING PAVERS.
- PRIOR TO COMMENCING WORK,** THE CONTRACTOR SHALL EMPLOY A PROFESSIONAL LAND SURVEYOR REGISTERED IN THE STATE OF RHODE ISLAND TO ESTABLISH CONTROL ON THE SITE AND TO PERFORM FIELD MEASUREMENTS AS REQUIRED TO LAYOUT THE PROPOSED BUILDING AND SITE IMPROVEMENTS. THE CONTRACTOR'S SURVEYOR SHALL COORDINATE THE BUILDING LAYOUT WITH THE PROJECT LAND SURVEYOR TO ACCURATELY LOCATE THE BUILDING ON THE SITE.
- EXPANSION JOINTS (E.J.) 20 FEET O.C. (MAX.) UNLESS OTHERWISE NOTED.
- CONTROL JOINTS (C.J.) 5 FEET O.C. (MAX.) UNLESS OTHERWISE NOTED.
- ALL PARKING SPACES AND ISLANDS ARE TO BE MARKED WITH 4" THICK WHITE EPOXY PAVEMENT MARKING UNLESS OTHERWISE NOTED.
- REFER TO "NOTES AND LEGEND" FOR ADDITIONAL NOTES.

ZONING TABLE				
EXISTING ZONE: C-COMMERCIAL				
TOTAL LOT AREA	AP 45 LOT 181 = 1.91 ACRES	AP 45 LOT 182 = 2.02 ACRES	AP 45 LOT 43A = 2.14 ACRES	
BUILDING FOOTPRINT LOT 181	TOTAL BUILDING AREA = 4,700 ± SF			
	RETAIL 2,200 ± SF			
	RESTAURANT WITH DRIVE THRU 2,500 ± SF			
BUILDING FOOTPRINT LOT 182	RETAIL 4,500 ± SF			
BUILDING FOOTPRINT LOT 43A	RETAIL 5,000 ± SF			
	REQUIRED (C)	PROVIDED		
		LOT 181	LOT 182	LOT 43A
BUILDING SETBACK		60 FT	90 FT	80 FT
FRONT SETBACK		60 FT	40 FT	80 FT
SIDE SETBACK		40 FT	40 FT	40 FT
REAR SETBACK		100 FT	247 FT	155 FT
MAX. BUILDING HEIGHT		48 FT	28 FT	30 FT
LOT COVERAGE		30%	5.6%	5.1%
MINIMUM LOT AREA		40,000 SF	83,265 SF	88,087 SF
MINIMUM LOT WIDTH		200 FT	194 FT	185 FT
				N/A

PARKING SUMMARY			
LOT #	181**	182+	43A
REQUIRED	35	21	23
PROVIDED	43	29	60
ACCESSIBLE SPACES*	2	2	2

- * ADA REQUIREMENT FOR PARKING LOT 26 TO 50 TOTAL SPACES = 2 SPACES
- + RETAIL: 4.5 SPACES/1,000 SF GFA
4.5 SPACES/1,000 SF x 4,500 SF = 21 SPACES
- ** RETAIL: 4.5 SPACES/1,000 SF GFA
4.5 SPACES/1,000 SF x 2,200 SF = 10 SPACES
- RESTAURANT: 1 SPACE/2 SEATS + 1 SPACE/EMPLOYEE MAX SHIFT
40 SEATS x 1 SPACE/2 SEATS = 20 SPACES
5 EMPLOYEES MAX SHIFT = 5 SPACES
TOTAL RESTAURANT PARKING = 25 SPACES
- ++ RETAIL: 4.5 SPACES/1,000 SF GFA
4.5 SPACES/1,000 SF x 5,000 SF = 23 SPACES

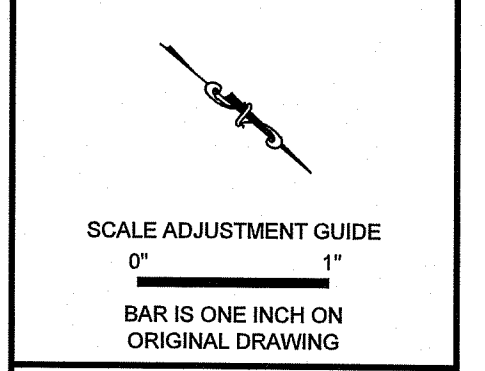
LEGEND	DESIGNATION	SIZE
	R1-1	(30" x 30")
	R5-1	(24" x 24")
	R7-8	(12" x 18")
	R7-8P	(12" x 6")
	CUSTOM SIGN	(24" x 18") OR AS REQUIRED
	CUSTOM SIGN	(24" x 18") OR AS REQUIRED



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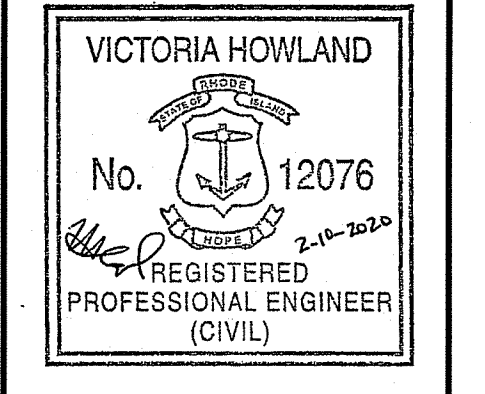


OWNER/APPLICANT:
ARR RETAIL DEVELOPMENT LLC
7 RIDGE ROAD
SMITHFIELD, RI 02817



Commercial Development
ASSESSOR'S PLAT 45, LOTS 181, 182, & 43A
Smithfield, Rhode Island

Environmental Management
FEB 13 2020
Office of Water Resources



REVISIONS:	

PROJECT NO.: 19109.00
DATE: FEBRUARY 10, 2020
SCALE: 1"=30'
DESIGNED BY: VAH
CHECKED BY: DLP
DRAWN BY: AKL
APPROVED BY: VAH
DRAWING TITLE:

GENERAL PLAN

DRAWING NO.:
C3.1
SHEET NO. 6 OF 16

NOTES:

1. ALL CATCH BASINS AND DRAIN MANHOLES SHALL BE 4' DIA. PRECAST CONCRETE UNLESS NOTED OTHERWISE.
2. ALL DRAIN PIPES SHALL BE SMOOTH INTERIOR CORRUGATED HIGH DENSITY POLYETHYLENE UNLESS NOTED OTHERWISE.
3. REINFORCED CONCRETE PIPE (RCP) SHALL BE CLASS III UNLESS NOTED OTHERWISE.
4. ALL SLOPES PROVIDED ARE FT/FT.
5. ALL CATCH BASINS AND AREA DRAINS SHALL BE INSTALLED WITH A SUMP AND OUTLET TEE PER THE DETAIL.
6. ALL SEWER MANHOLES SHALL BE 4' DIA. UNLESS NOTED OTHERWISE.
7. REFER TO ELECTRICAL DRAWINGS FOR INFORMATION ON ELECTRIC AND TEL/DATA DUCT BANKS AND STRUCTURES. ALL ELECTRICAL FACILITIES DISPLAYED FOR REFERENCE ONLY.
8. REFER TO "NOTES AND LEGEND" FOR ADDITIONAL NOTES.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
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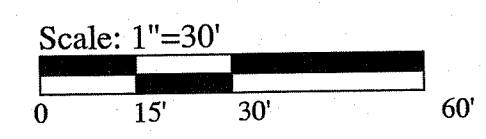
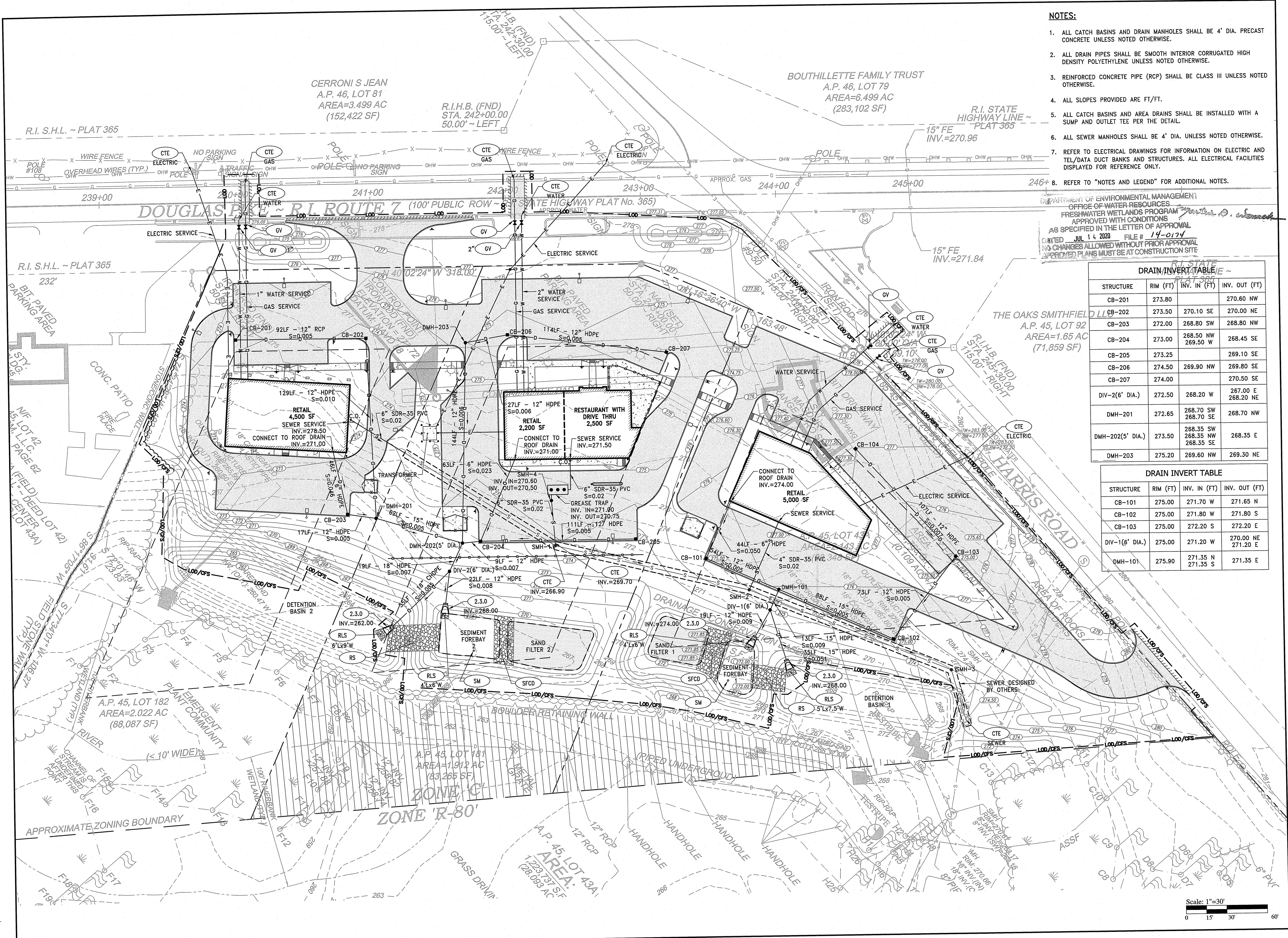
R.I. STATE HIGHWAY PLAT No. 365

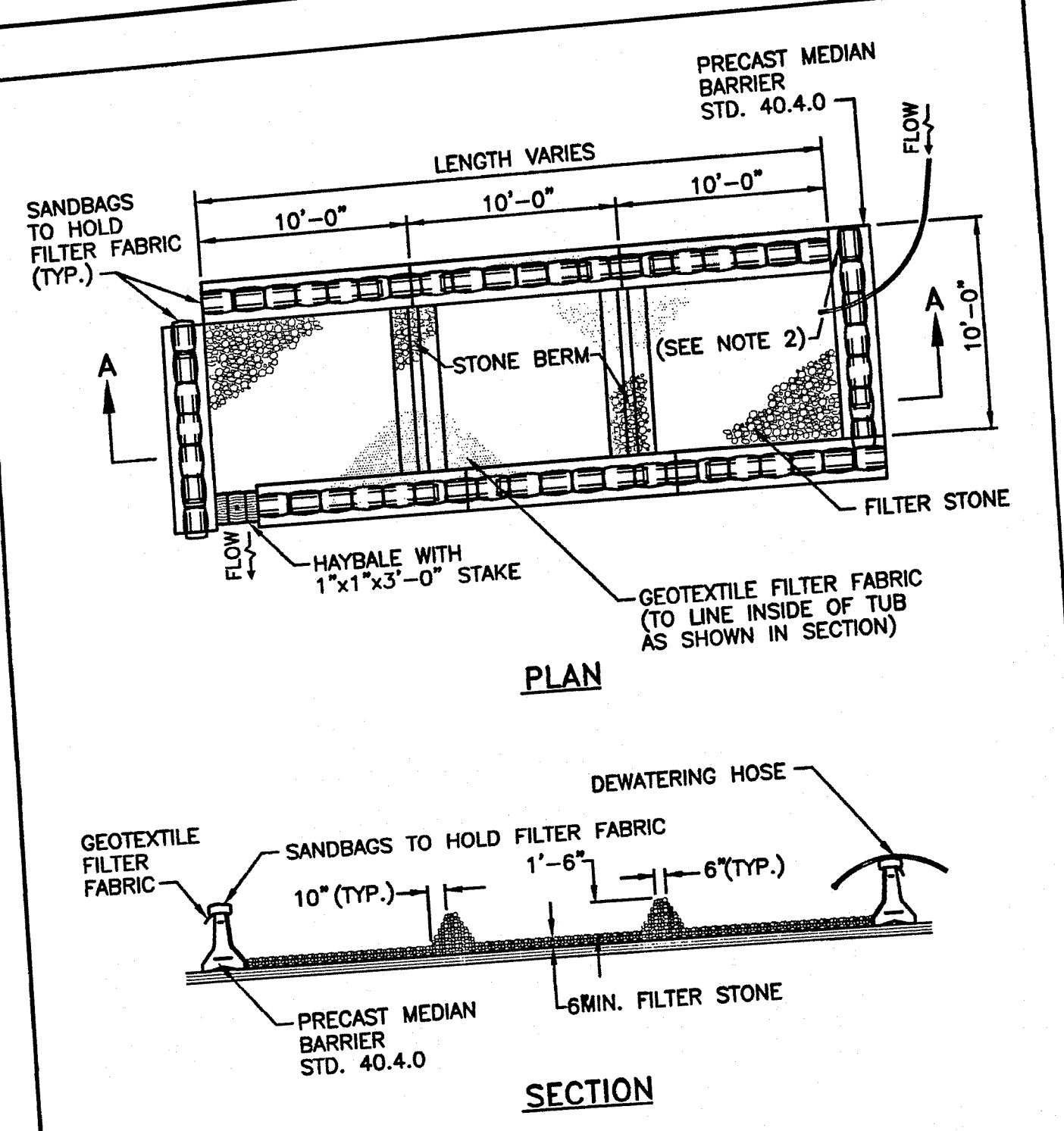
DRAIN INVERT TABLE

STRUCTURE	RIM (FT)	INV. IN (FT)	INV. OUT (FT)
CB-201	273.80	270.60	NW
CB-202	273.50	270.10	SE
CB-203	272.00	268.80	SW
CB-204	273.00	268.50	NW
CB-205	273.25	269.50	SE
CB-206	274.50	269.90	NW
CB-207	274.00	269.10	SE
DIV-2(6' DIA.)	272.50	268.20	W
DMH-201	272.65	268.70	SW
DMH-202(5' DIA.)	273.50	268.35	NW
DMH-203	275.20	269.60	SW

DRAIN INVERT TABLE

STRUCTURE	RIM (FT)	INV. IN (FT)	INV. OUT (FT)
CB-101	275.00	271.70	W
CB-102	275.00	271.80	W
CB-103	275.00	272.20	S
DIV-1(6' DIA.)	275.00	271.20	W
DMH-101	275.90	271.35	N





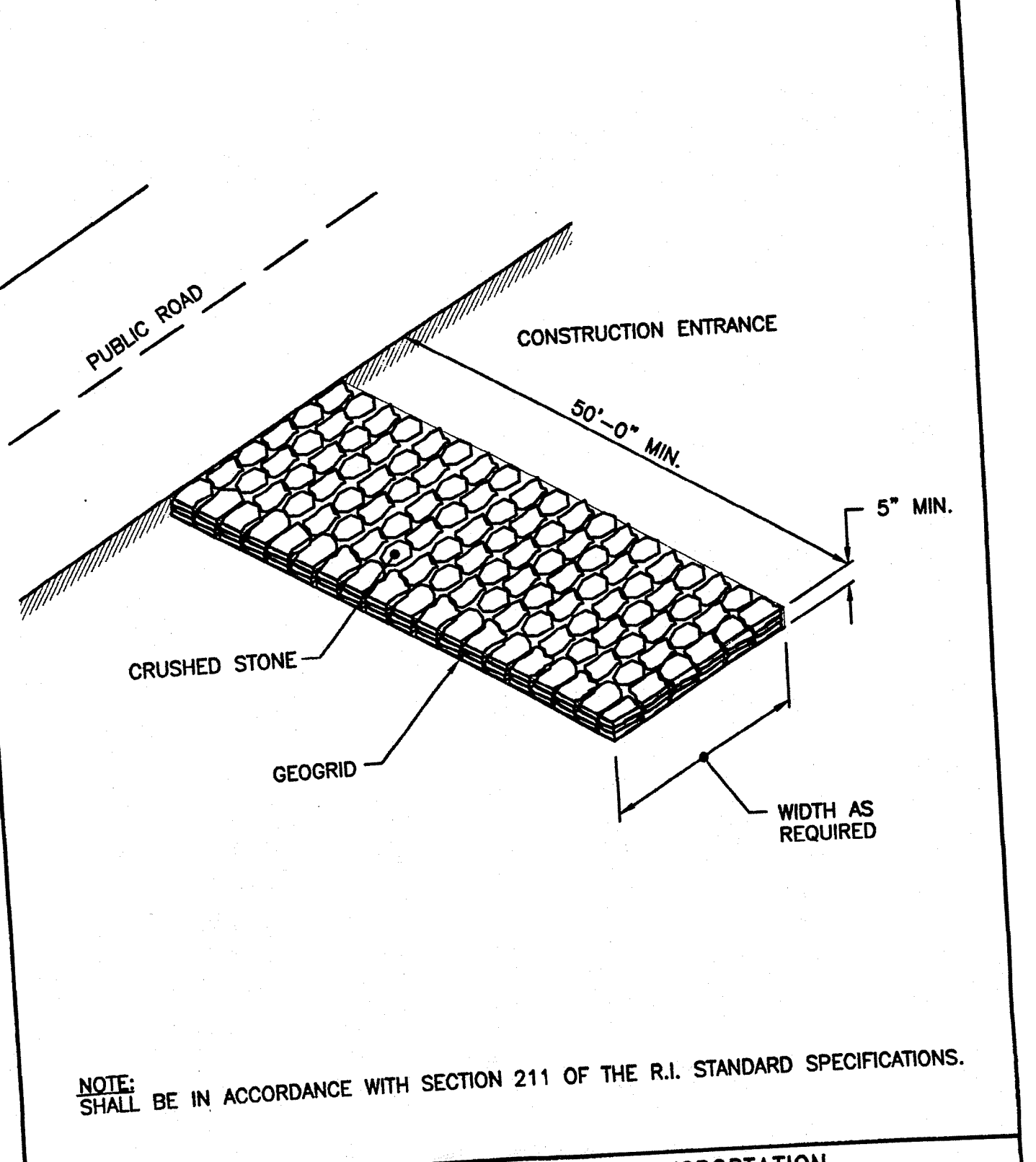
NOTES:
 1. SHALL BE IN ACCORDANCE WITH SECTION 208 OF THE R.I. STANDARD SPECIFICATIONS.
 2. PROVIDE ADDITIONAL SAND BAGS AS REQUIRED TO FILL SPACE BETWEEN ADJACENT BARRIERS.

RHODE ISLAND DEPARTMENT OF TRANSPORTATION

REVISIONS		
NO.	BY	DATE

DEWATERING BASIN

June 15, 1998
 [Signature] R.I. STANDARD 9.7.0



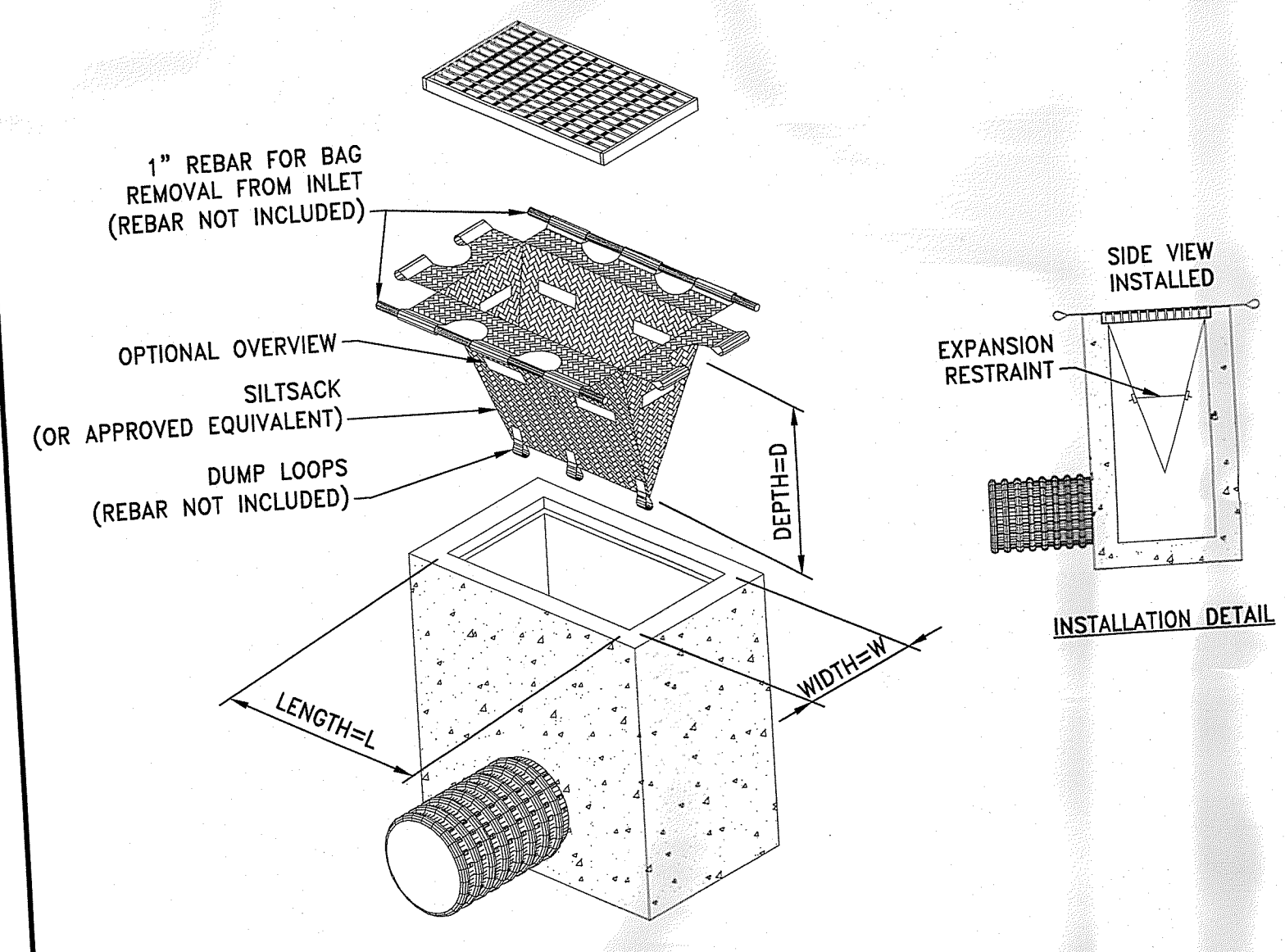
NOTE: SHALL BE IN ACCORDANCE WITH SECTION 211 OF THE R.I. STANDARD SPECIFICATIONS.

RHODE ISLAND DEPARTMENT OF TRANSPORTATION

REVISIONS		
NO.	BY	DATE

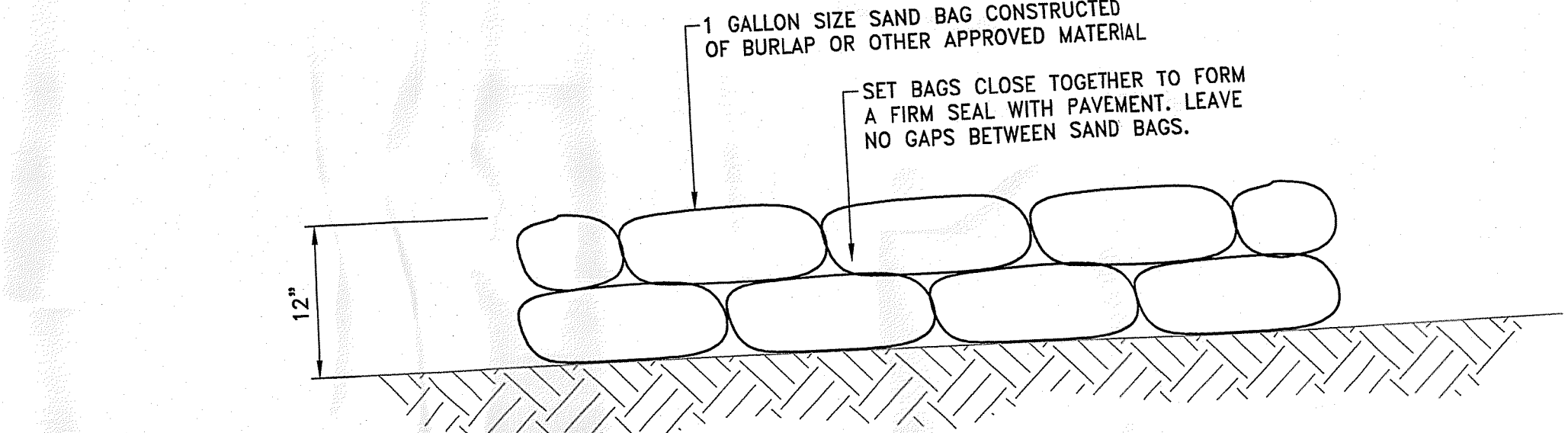
CONSTRUCTION ACCESS

June 15, 1998
 [Signature] R.I. STANDARD 9.9.0

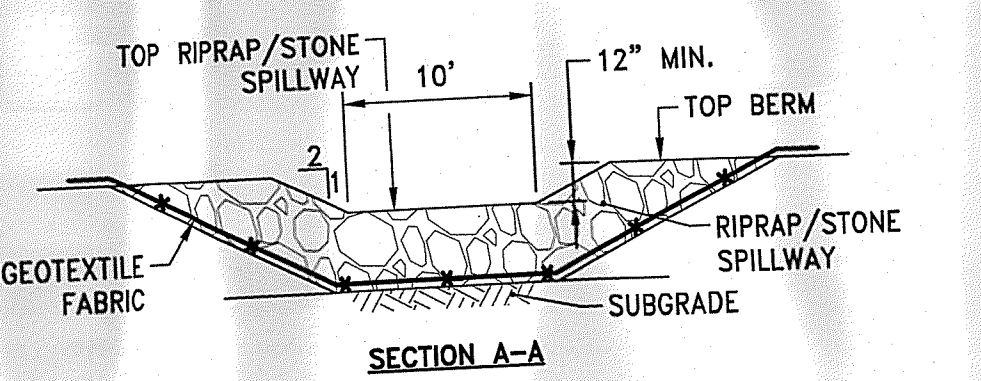
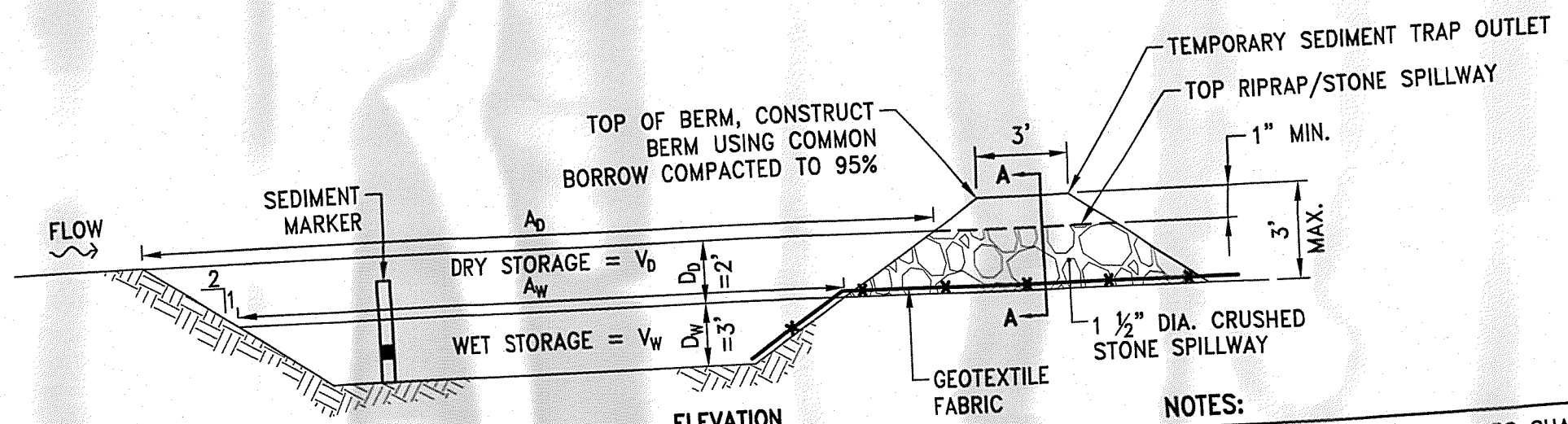


NOTES:
 1. INLET PROTECTION SHALL BE CLEANED OF SILT AND DEBRIS ON A REGULAR BASIS AS REQUIRED BY PROJECT SPECIFIC SESC.
 2. INSPECTIONS SHALL BE DONE AFTER EACH RAIN EVENT AND AT A MINIMUM EVERY TWO WEEKS AND AS REQUIRED BY PROJECT SPECIFIC SESC.

TIP TEMPORARY INLET PROTECTION
 NOT TO SCALE



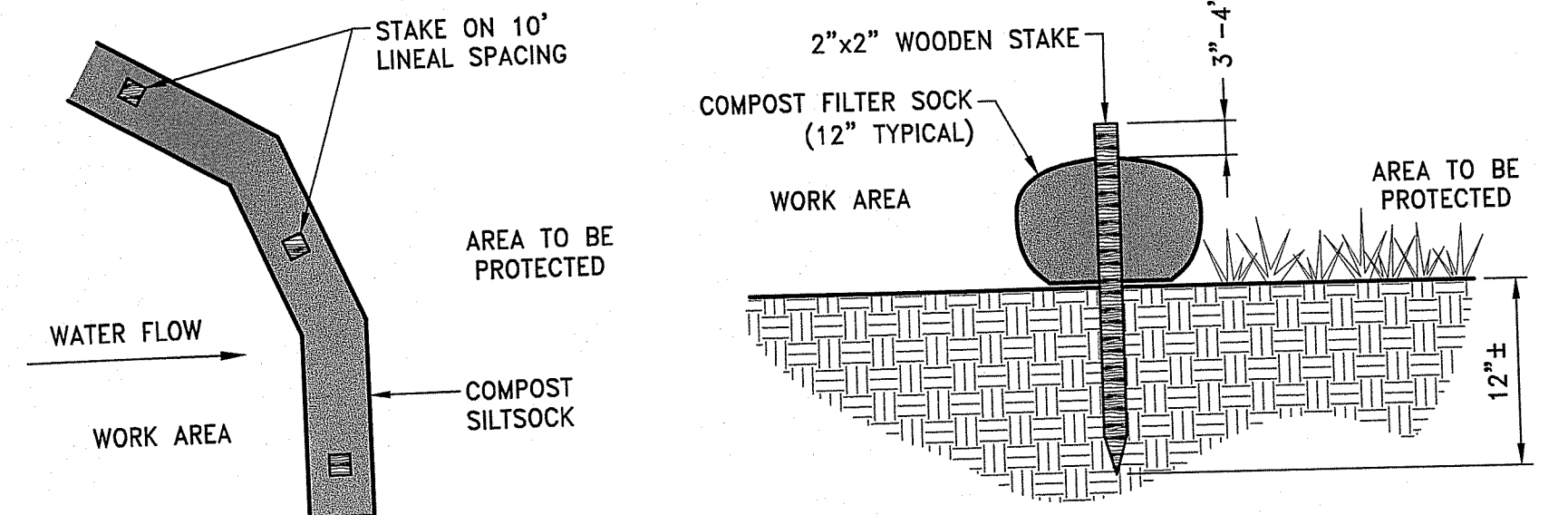
SB SAND BAG EROSION CONTROL BARRIER
 NOT TO SCALE



	L _w (FT)	W _w (FT)	A _w (SF)	V _w (CF)	V _b (CF)	TOTAL STORAGE V _w + V _b (CF)
TST 2	80	30	2,400	6,620	5,256	11,376

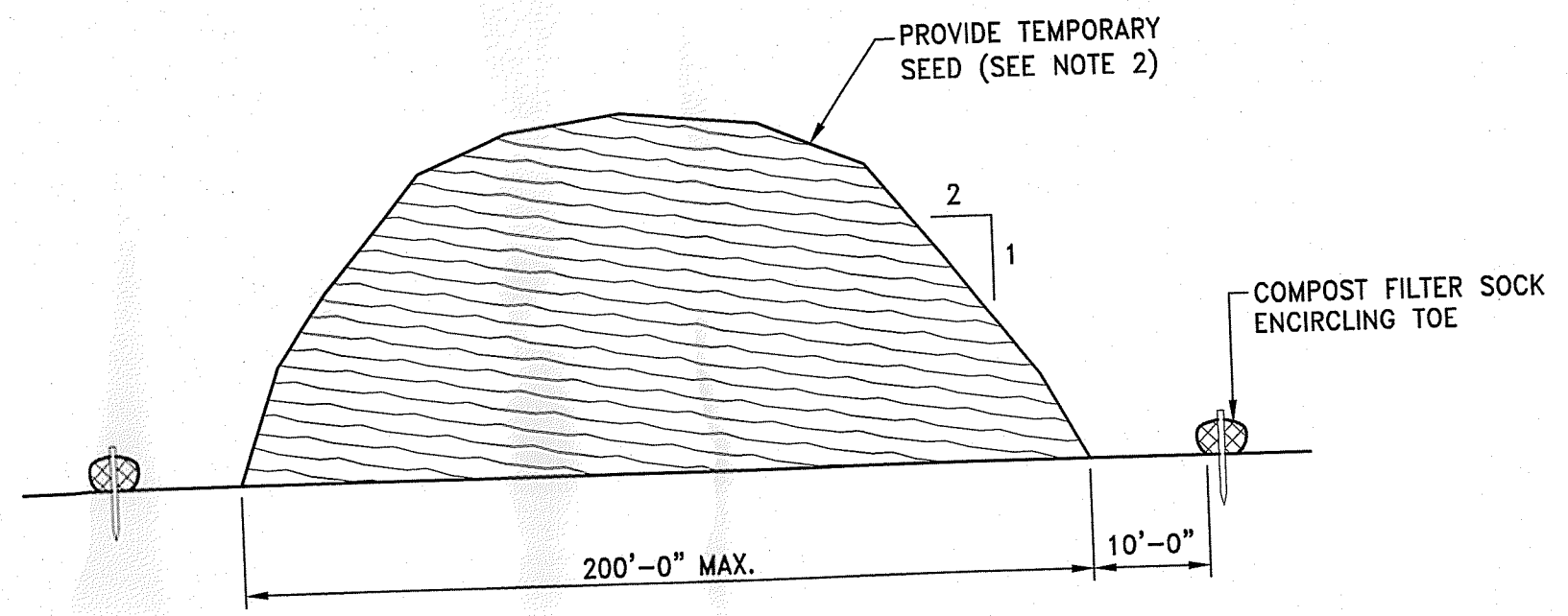
TST TEMPORARY SEDIMENT TRAP DETAIL
 NOT TO SCALE

NOTES:
 1. TEMPORARY SEDIMENT TRAPS SHALL BE CLEANED OR REMOVED EVERY 6 MONTHS.
 2. RIPRAP SHALL MEET RIDOT STANDARD SPECIFICATION M.10.03.2.
 3. STONE SHALL MEET RIDOT STANDARD SPECIFICATION M.01.09 TABLE I, COLUMN V (FILTER STONE).
 4. SEDIMENT MARKER SHALL BE INSTALLED SUCH THAT TOP OF BLACK ENAMEL BAND IS 1.5" FROM THE BOTTOM OF THE SEDIMENT TRAP.
 5. REFER TO SOIL EROSION AND SEDIMENT CONTROL PLANS FOR LIMITS OF A_b AND A_w.
 6. GEOTEXTILE FABRIC SHALL BE MIRAFI 140N OR APPROVED EQUIVALENT.



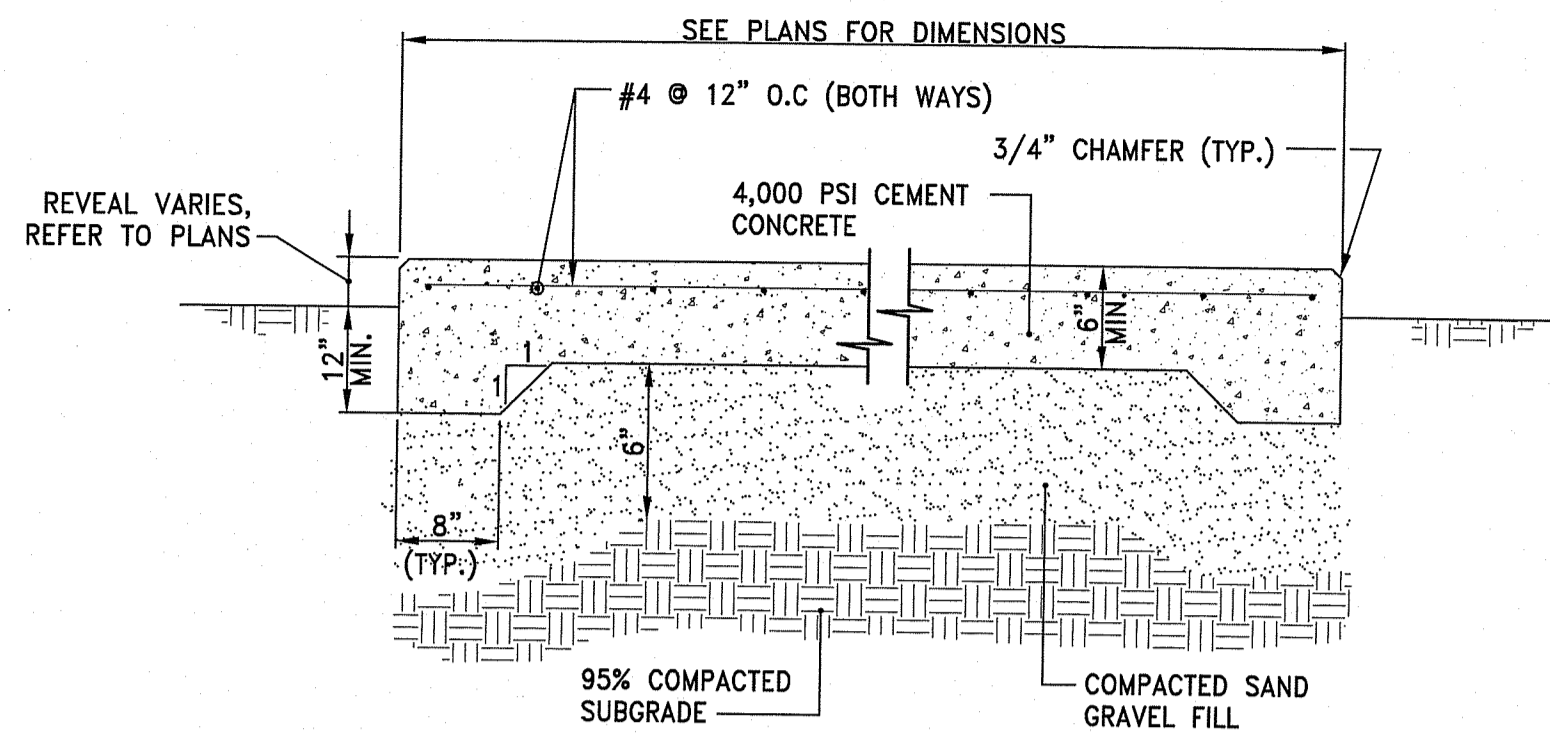
NOTES:
 1. COMPOST/ SOIL/ ROCK/ SEED FILL TO MEET APPLICATION REQUIREMENTS.
 2. COMPOST MATERIAL TO BE REMOVED OR DISPERSED ON SITE AS DETERMINED BY ENGINEER.

CFS COMPOST FILTER SOCK DETAIL
 NOT TO SCALE



NOTES:
 1. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL PREPARE A PLAN SHOWING THE PROPOSED LOCATION OF ALL STOCKPILE AREAS.
 2. STOCKPILED ERODIBLE MATERIAL THAT WILL NOT BE USED FOR GREATER THAN 14 DAYS SHALL BE STABILIZED WITH TEMPORARY SEED IMMEDIATELY FOLLOWING PLACEMENT. USE R.I. STD. L.02.01 TYPE 3 SEED.

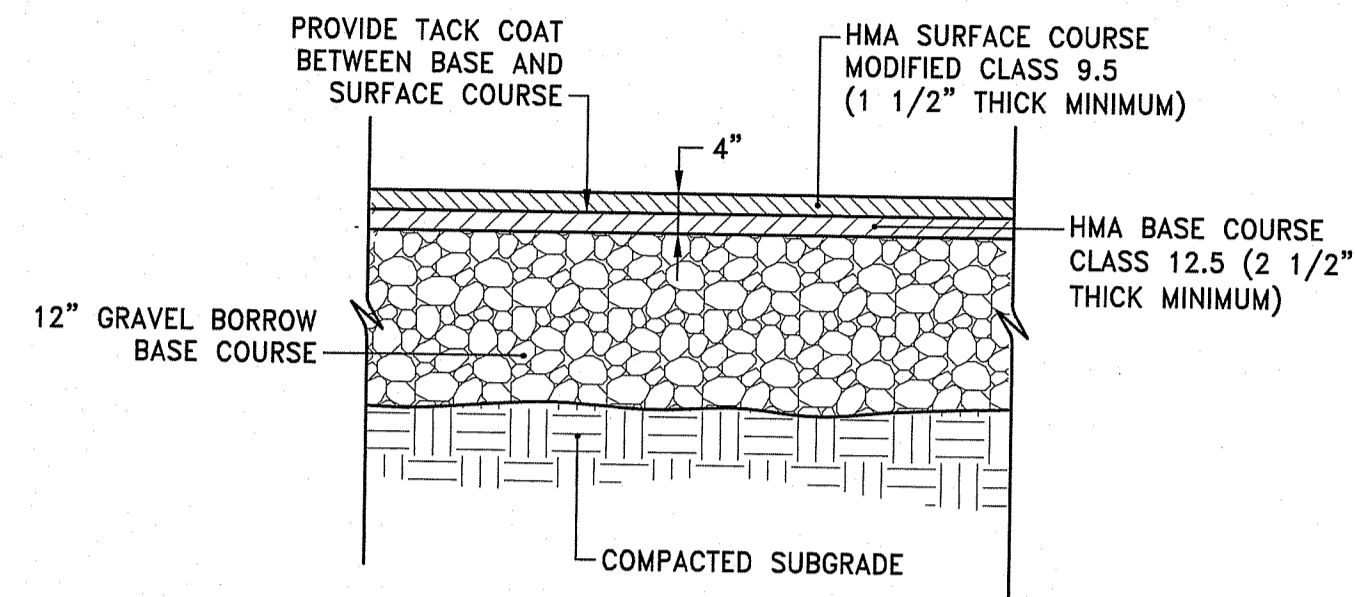
ERODIBLE MATERIAL STOCKPILE
 NOT TO SCALE



NOTES:

1. REINFORCING TO BE #4 GRADE 60 BARS AND SHALL CONFORM TO ASTM STANDARD A-615 OF THE LATEST DATA. REINFORCING RODS TO BE LOCATED IN THE CENTER OF THE SLAB, WITH A MINIMUM OF 2" CLEARANCE FROM FACE OF CONCRETE.
2. CONTRACTOR SHALL COORDINATE LOCATIONS OF OPENINGS, FENCE POSTS, OR OTHER FEATURES IN SLAB.

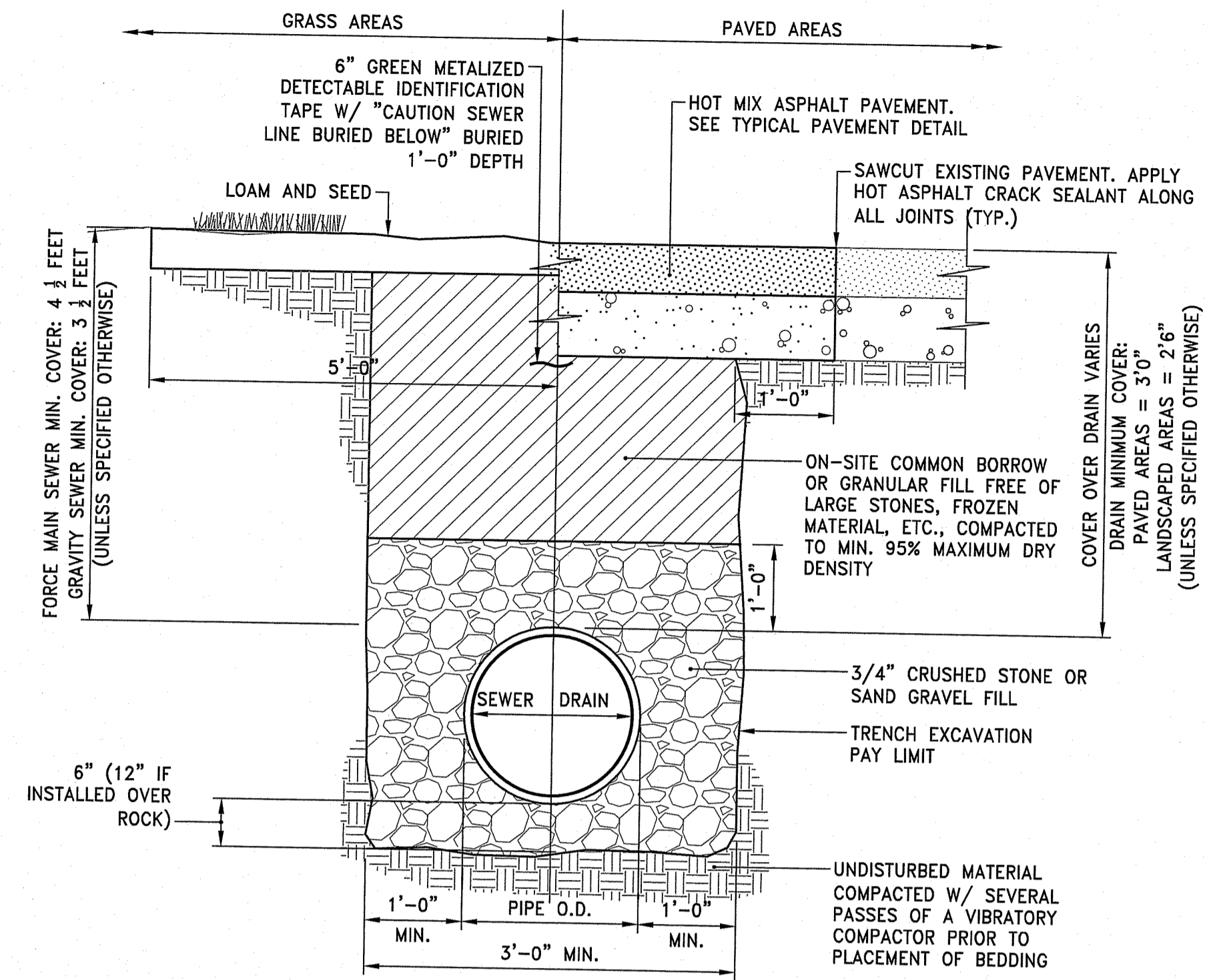
CP CEMENT CONCRETE PAD
NOT TO SCALE



NOTE:

1. SUBMIT JOB MIX FORMULAS TO ENGINEER FOR APPROVAL PRIOR TO PLACEMENT.

P2 HOT MIX ASPHALT PAVEMENT
NOT TO SCALE

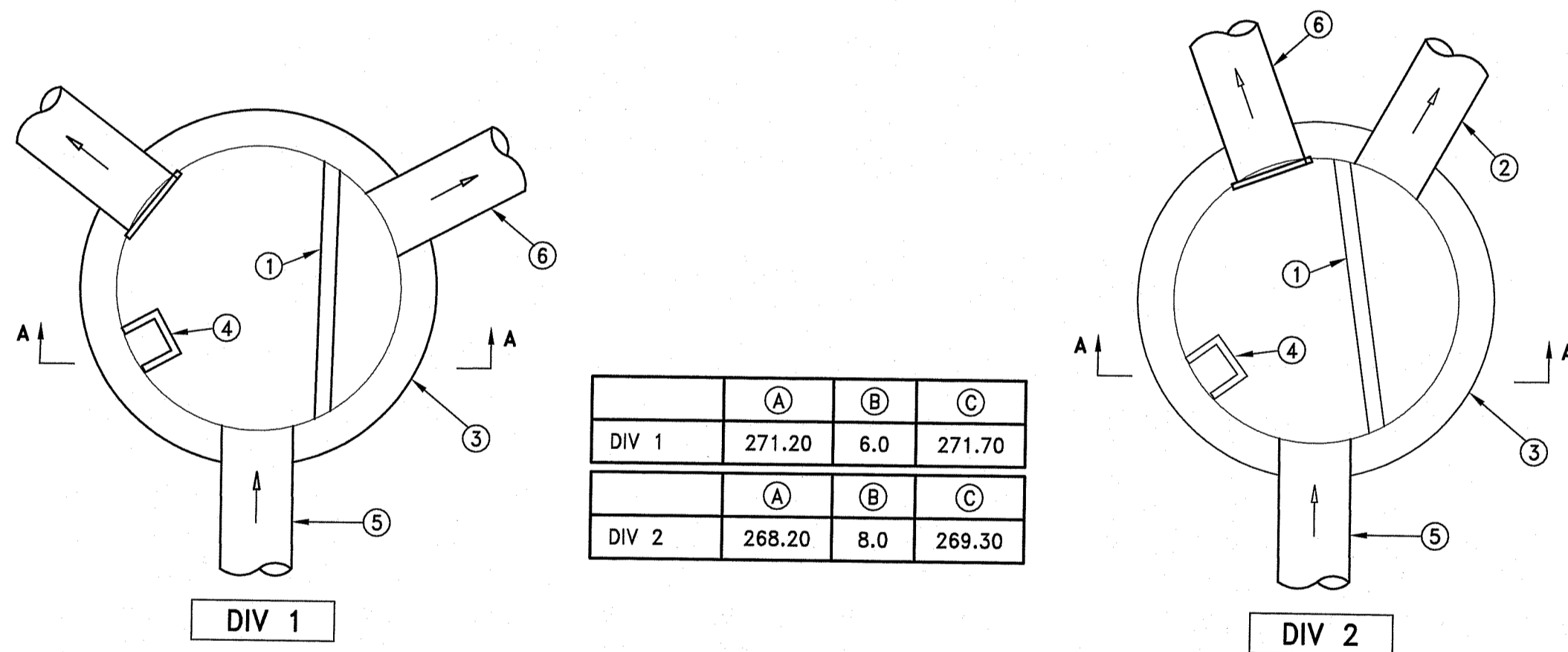


NOTES:

1. WHERE THE DISTANCE BETWEEN THE SAWCUT AND EDGE OF PAVEMENT IS 3' OR LESS, THE CONTRACTOR SHALL REPLACE THE PAVEMENT FROM THE TRENCH EDGE TO THE EXISTING EDGE OF PAVEMENT.
2. 3/4" DIA. CRUSHED STONE SHALL BE USED AS BEDDING WHERE TRENCH IS BELOW THE GROUND WATER TABLE.

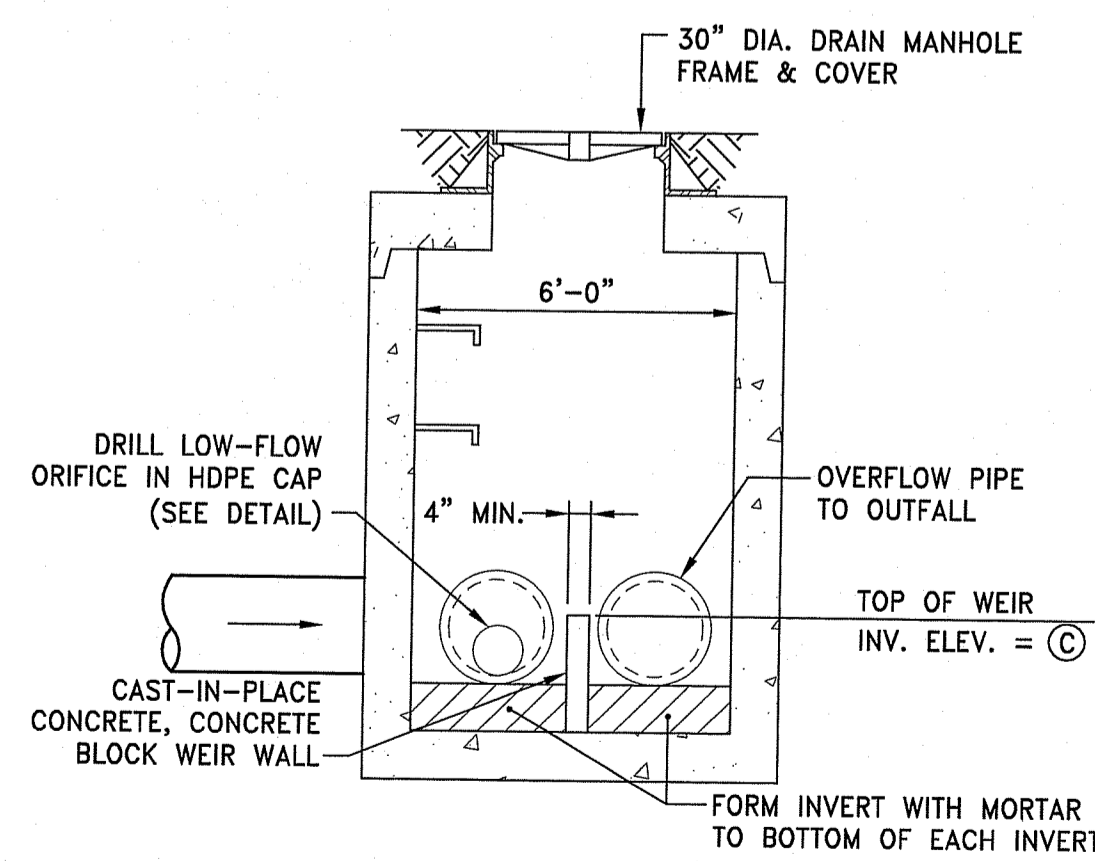
SEWER/DRAIN TRENCH DETAIL
NOT TO SCALE

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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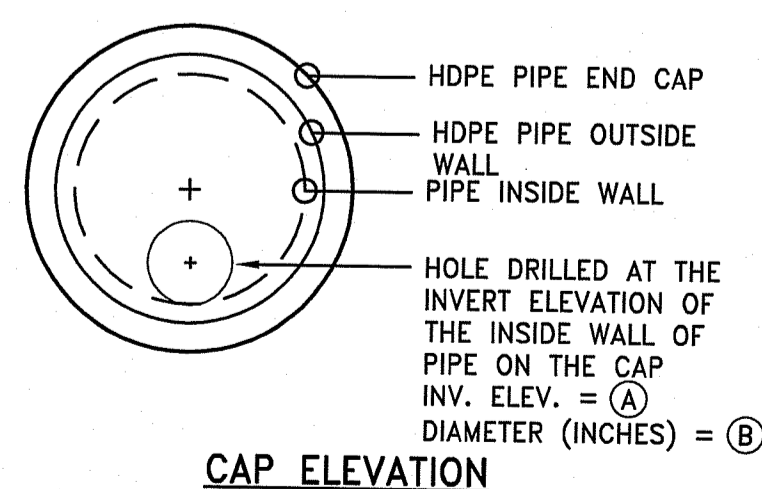
TYPICAL NOTES LEGEND

1. CAST IN PLACE CONCRETE DIVERSION WEIR WALL (4" WIDE)
2. OVERFLOW PIPE TO OUTFALL
3. PRECAST 6" DIAMETER MANHOLE (RIDOT STANDARD 4.2.2)
4. PROVIDE STEPS PER RIDOT STANDARD 4.2.1
5. PIPE IN
6. HDPE PIPE WITH CAP AND LOW FLOW WATER QUALITY ORIFICE (REFER TO CAP DETAIL) TO SAND FILTER AREA

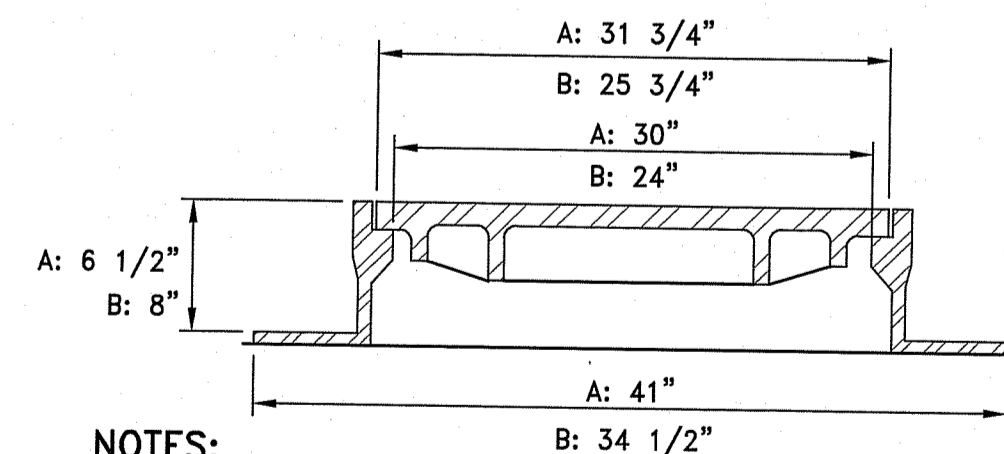
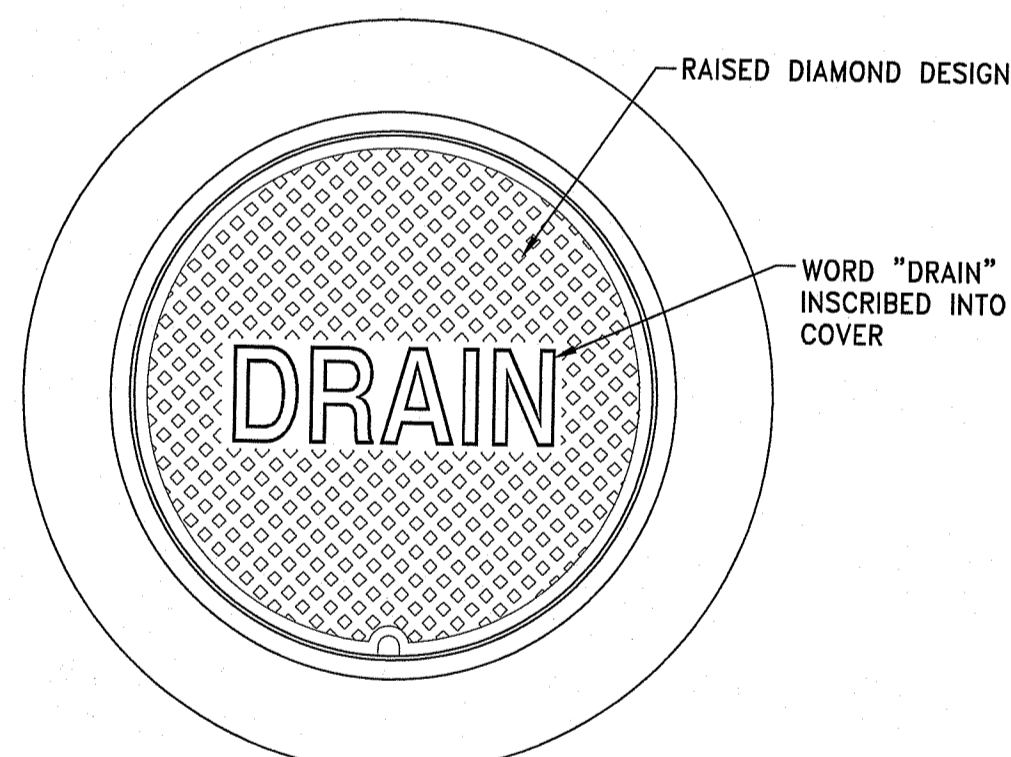


SECTION A-A DIVERSION WEIR WALL ELEVATION

TYPICAL DIVERSION MANHOLE DETAIL
NOT TO SCALE



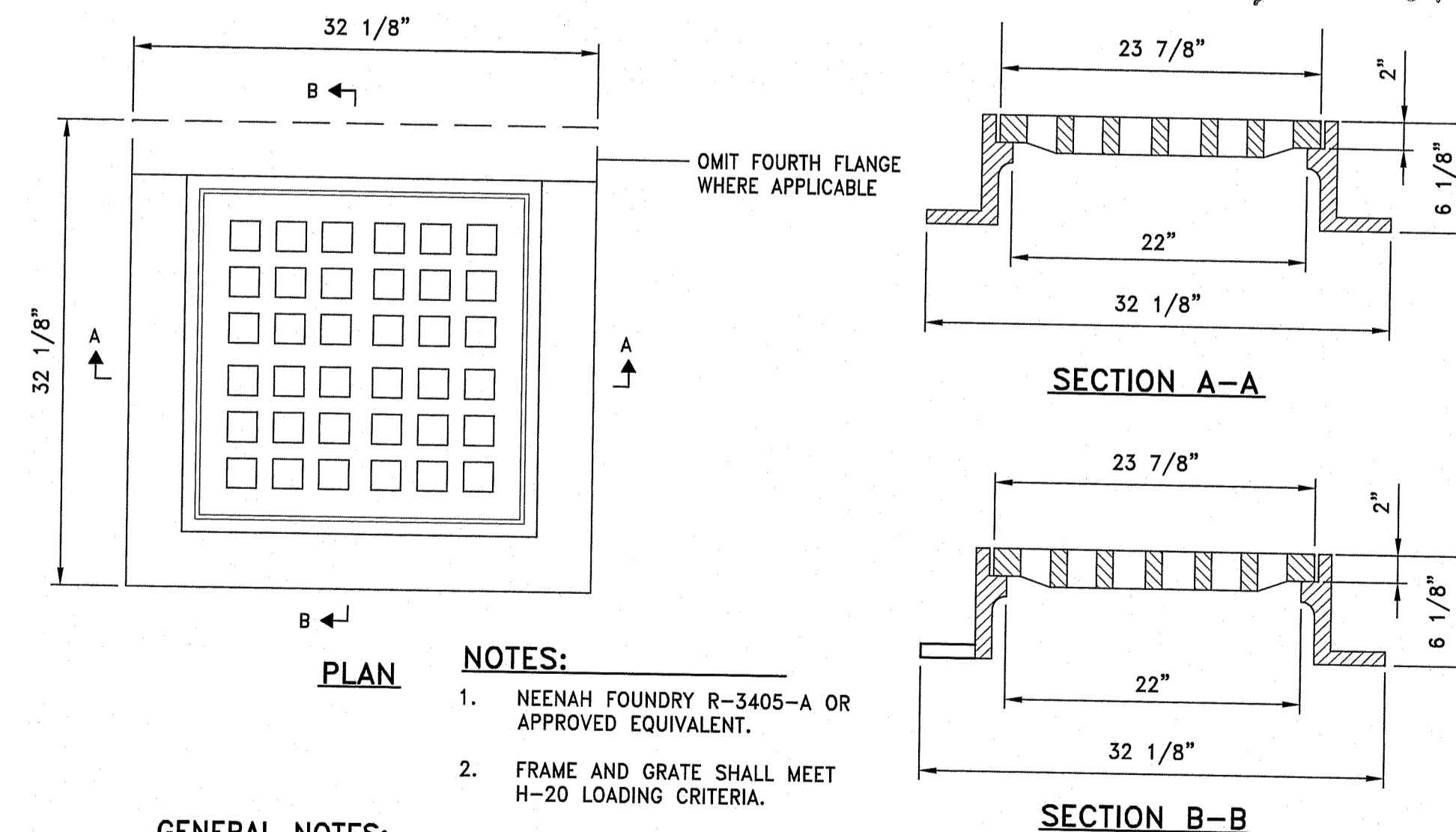
CAP ELEVATION



NOTES:

1. ALL FRAMES AND COVERS SHALL MEET H-20 LOADING CRITERIA.
2. PROVIDE:
 - A: 30" DIA. DRAIN MANHOLE FRAME AND COVER SHALL BE NEENAH FOUNDRY, INC. MODEL #R-1557 OR APPROVED EQUIVALENT.
 - B: 24" DIA. DRAIN MANHOLE FRAME AND COVER SHALL BE NEENAH FOUNDRY, INC. MODEL #R-1556 OR APPROVED EQUIVALENT.
3. ALL DRAIN MANHOLES SHALL HAVE 24" DIA. DRAIN MANHOLE COVER UNLESS NOTED OTHERWISE.

DRAIN MANHOLE FRAME & COVER
NOT TO SCALE



PLAN

NOTES:

1. NEENAH FOUNDRY R-3405-A OR APPROVED EQUIVALENT.
2. FRAME AND GRATE SHALL MEET H-20 LOADING CRITERIA.

GENERAL NOTES:

1. REINFORCING STEEL CONFORMS TO LATEST A.S.T.M. A 185 SPEC. 0.12 SQ. IN./LINEAL FT. AND 0.12 SQ. IN. (BOTH WAYS) BASE BOTTOM
2. CONC. MINIMUM COMPRESSIVE STRENGTH = 4000 PSI TYPE III CEMENT.
3. MANHOLE DESIGN SPECIFICATIONS CONFORM TO LATEST A.S.T.M. C 478 SPEC. FOR "PRECAST REINFORCED CONCRETE MANHOLE SECTIONS".
4. PROVIDE ONE POUR 6" THICK REINFORCED MONOLITHIC BASE SECTION.
5. MANHOLE SHALL MEET H-20 LOADING CRITERIA.
6. ALL LIFTING HOLES TO BE PLUGGED IN AND OUT WITH HYDRAULIC CEMENT
7. MANHOLES SHALL HAVE 6" THICK WALLS.

SQUARE CATCH BASIN FRAME & GRATE
NOT TO SCALE

REVISIONS:

NO.	DATE	DESCRIPTION

SECTION A-A
END ELEVATION

DIMENSIONS								REINFORCEMENT
DIA.	A	B	C	D	E	R	T	ONE LAYER REINFORCEMENT IN CENTER OF WALL MIN. AREA OF EACH WAY (SQ. IN./FT.)
1'-0"	4"	2'-0"	4'-0"	7/8"	6'-0"	7/8"	2'-0"	0.048
1'-3"	6"	2'-3"	3'-10"	6'-11"	2'-6"	11"	2 1/4"	0.054
1'-6"	9"	2'-6"	3'-10"	6'-11"	3'-0"	12"	2 1/2"	0.060
2'-0"	9 1/2"	3'-7 1/2"	2'-6"	6'-11"	4'-0"	1'-2"	3"	0.072
2'-6"	1'-0"	4'-6"	1'-7 3/4"	6'-1 3/4"	5'-0"	1'-3"	3 1/2"	0.084
3'-0"	1'-3"	5'-3"	2'-10 3/4"	6'-1 3/4"	6'-0"	1'-8"	4"	0.096
3'-6"	1'-6"	6'-0"	2'-11"	6'-2"	6'-0"	1'-10"	4 1/2"	0.108
4'-0"	2'-0"	6'-0"	2'-2"	5'-2"	7'-0"	1'-10"	5"	0.120
4'-6"	2'-3"	6'-5"	2'-11"	6'-4"	7'-6"	2'-0"	5 1/2"	0.132
5'-0"	2'-6"	6'-0"	3'-3"	6'-3"	8'-0"	2'-0"	6"	0.144

NOTE: SHALL BE IN ACCORDANCE WITH SECTION 701 OF THE R.I. STANDARD SPECIFICATIONS.

RHODE ISLAND DEPARTMENT OF TRANSPORTATION
 PRECAST CONCRETE FLARED END SECTION
 R.I. STANDARD 2.3.0
 JUNE 15, 1988
 ISSUE DATE

ALTERNATE TOP LOADING (SEE NOTES 7 AND 8)
 4'-0" DIA.
 FRAME AND COVER
 ADJUST TO GRADE AS REQUIRED USING RED CLAY BRICK COURSE
 STEPS PER APPROVED PRODUCTS LIST 1'-0" O.C.
 MORTAR ALL JOINTS TOTAL WIDTH OF WALL
 BRICK INVERT
 PIPE OPENINGS CAST TO PLAN
 1/2" # OF PIPE
 8" MIN. OVERLAP (TYP.)

NOTES:
 1. SHALL BE IN ACCORDANCE WITH SECTION 702 OF THE R.I. STANDARD SPECIFICATIONS.
 2. CIRCUMFERENTIAL STEEL REINFORCEMENT REQUIRED = 0.12 SQ. IN./LIN. FT. MINIMUM.
 3. STEEL REINFORCEMENT FOR BASE SECTION BOTTOM SHALL BE A MINIMUM OF 0.12 SQ. IN./LIN. FT. (BOTH WAYS).
 4. ONE POUR MONOLITHIC BASE SECTION.
 5. ANY NECESSARY ADJUSTMENTS DURING CONSTRUCTION WILL BE DONE BY SAW-CUTTING AND/OR CORING ONLY. NO JACKHAMMERS, HAMMERS AND CHISELS OR PNEUMATIC TOOLS WILL BE ALLOWED.
 6. STEPS SHALL CONFORM TO STD. 5.3.0 AND SHALL BE INSTALLED AT THE CASTING PLANT.
 7. ALTERNATE TOP SLAB IS STEEL REINFORCED TO MEET OR EXCEED H-25 LOADING (SEE STD. 4.7.2).
 8. ALTERNATE TOP SLAB IS ONLY FOR USE WHEN REDUCING SECTION DOES NOT FIT BECAUSE OF STRUCTURE DEPTH.
 9. REFER TO STD. 5.2.0 FOR MAXIMUM PIPE SIZES.

RHODE ISLAND DEPARTMENT OF TRANSPORTATION
 PRECAST 4'-0" ROUND MANHOLE
 R.I. STANDARD 4.2.0
 JUNE 15, 1988
 ISSUE DATE

ALTERNATE TOP LOADING (SEE NOTES 7 AND 8)
 4'-0" OR 6'-0" DIA.
 FRAME AND COVER
 ADJUST TO GRADE AS REQUIRED USING RED CLAY BRICK COURSE
 STEPS PER APPROVED PRODUCTS LIST 1'-0" O.C.
 MORTAR ALL JOINTS TOTAL WIDTH OF WALL
 BRICK INVERT
 PIPE OPENINGS CAST TO PLAN
 1/2" # OF PIPE
 8" MIN. OVERLAP (TYP.)

NOTES:
 1. SHALL BE IN ACCORDANCE WITH SECTION 702 OF THE R.I. STANDARD SPECIFICATIONS.
 2. CIRCUMFERENTIAL STEEL REINFORCEMENT REQUIRED = 0.15 SQ. IN./LIN. FT. MINIMUM.
 3. STEEL REINFORCEMENT FOR BASE SECTION BOTTOM SHALL BE A MINIMUM OF 0.12 SQ. IN./LIN. FT. (BOTH WAYS).
 4. ONE POUR MONOLITHIC BASE SECTION.
 5. ANY NECESSARY ADJUSTMENTS DURING CONSTRUCTION WILL BE DONE BY SAW-CUTTING AND/OR CORING ONLY. NO JACKHAMMERS, HAMMERS AND CHISELS OR PNEUMATIC TOOLS WILL BE ALLOWED.
 6. STEPS SHALL CONFORM TO STD. 5.3.0 AND SHALL BE INSTALLED AT THE CASTING PLANT.
 7. ALTERNATE TOP SLAB IS STEEL REINFORCED TO MEET OR EXCEED H-25 LOADING (SEE STD. 4.7.2).
 8. ALTERNATE TOP SLAB IS ONLY FOR USE WHEN REDUCING SECTION DOES NOT FIT BECAUSE OF STRUCTURE DEPTH.
 9. REFER TO STD. 5.2.0 FOR MAXIMUM PIPE SIZES.

RHODE ISLAND DEPARTMENT OF TRANSPORTATION
 PRECAST 6'-0" ROUND MANHOLE
 R.I. STANDARD 4.2.2
 JUNE 15, 1988
 ISSUE DATE

ALTERNATE TOP SLAB (SEE NOTES 10 AND 11)
 AS REQUIRED
 FRAME AND GRATE/COVER
 ADJUST TO GRADE AS REQUIRED USING RED CLAY BRICK COURSE
 STEPS PER APPROVED PRODUCTS LIST 1'-0" O.C.
 MORTAR ALL JOINTS TOTAL WIDTH OF WALL
 BRICK INVERT
 PIPE OPENINGS CAST TO PLAN
 1/2" # OF PIPE
 8" MIN. OVERLAP (TYP.)

TABLE 1			CIRCUMFERENTIAL STEEL REINFORCEMENT REQUIRED*
CATCH BASIN DIAMETER (D)	A	B	
4'-0"	5"	6"	0.12 SQ. IN./LIN. FT.
5'-0"	6"	7"	0.15 SQ. IN./LIN. FT.
6'-0"	7"	8"	0.18 SQ. IN./LIN. FT.

* FOR LONGITUDINAL (VERTICAL STANDING) REINFORCEMENT REFER TO ASTM C478, ITEM 8.1.2

NOTES:
 1. SHALL BE IN ACCORDANCE WITH SECTION 702 OF THE R.I. STANDARD SPECIFICATIONS.
 2. SEE TABLE 1 FOR STEEL REINFORCEMENT REQUIREMENTS.
 3. STEEL REINFORCEMENT FOR BASE SECTION BOTTOM SHALL BE A MINIMUM OF 0.12 SQ. IN./LIN. FT. (BOTH WAYS).
 4. STEPS SHALL CONFORM TO STD. 5.3.0 AND SHALL BE INSTALLED AT THE CASTING PLANT.
 5. ONE POUR MONOLITHIC BASE SECTION.
 6. ANY NECESSARY ADJUSTMENTS DURING CONSTRUCTION WILL BE DONE BY SAW-CUTTING AND/OR CORING ONLY. NO JACKHAMMERS, HAMMERS AND CHISELS OR PNEUMATIC TOOLS WILL BE ALLOWED.
 7. CORBEL MADE OF RED CLAY BRICK WILL BE PERMITTED FOR THE "CORNER SECTION" OF THE 4'-0" CATCH BASIN ONLY.
 8. FOR CATCH BASIN TYPES "D" AND "F" STEPS MUST BE INSTALLED ON THE CURB SIDE OF THE STRUCTURE.
 9. THE CENTERLINE OF THE OPENING MUST BE WITHIN 2'-0" FROM THE STEPS.
 10. ALTERNATE TOP SLAB IS STEEL REINFORCED TO MEET OR EXCEED H-25 LOADING (SEE STD. 4.7.2).
 11. ALTERNATE TOP SLAB IS ONLY FOR USE WHEN REDUCING SECTION DOES NOT FIT BECAUSE OF STRUCTURE DEPTH.
 12. REFER TO STD. 5.2.0 FOR MAXIMUM PIPE SIZES.
 13. PROVIDE SQUARE CATCH BASIN FRAME & GRATE ON ALL CATCH BASINS.

RHODE ISLAND DEPARTMENT OF TRANSPORTATION
 PRECAST 4'-0", 5'-0", OR 6'-0" ROUND CATCH BASIN
 R.I. STANDARD 4.4.0M
 JUNE 15, 1988
 ISSUE DATE

SEE ASTM SPECIFICATION C478, ITEM 8.1.3
 2" R (TYP.) ALL CORNERS
 9" MIN. COVER ON ALL BARS
 TONGUE AND GROOVE EDGE
 9" MIN. FOR SQUARE OPENING
 9" MIN. FOR CIRCULAR OPENING
 (2) #5 x 4'-0" LONG DIAGONAL (TYP. TOP AND BOTTOM)
 #5 @ 1'-0" E.W., TOP
 #5 @ 7" E.W., BOTTOM
 PLAN
 SECTION A-A
 T=WALL THICKNESS

NOTES:
 1. SHALL BE IN ACCORDANCE WITH SECTION 702 OF THE R.I. STANDARD SPECIFICATIONS.
 2. ANY NECESSARY ADJUSTMENTS DURING CONSTRUCTION WILL BE DONE BY SAW-CUTTING AND/OR CORING ONLY. NO JACKHAMMERS, HAMMERS AND CHISELS OR PNEUMATIC TOOLS WILL BE ALLOWED.
 3. THE CENTER LINE OF THE OPENING MUST BE WITHIN 2" FROM THE STEPS.
 4. ALTERNATE TOP COVER IS STEEL REINFORCED TO MEET OR EXCEED H-25 OR HS-25 LOADINGS WITH EARTH PRESSURES INCLUDED. THIS IMPLIES THAT THE TOP SLAB IS DESIGNED FOR AXLE LOADS OF NO MORE THAN 20 TONS.
 5. ALL REBAR SHALL HAVE A MINIMUM OF 2" CLEARANCE FROM OPENING.
 6. ALL REBARS IN THE BOTTOM MAT ARE #5 @ 2", BOTH WAYS, WITH 2" MINIMUM COVER, EXCEPT FOR REBARS ADJACENT TO THE OPENING. THESE BARS SHALL BE (3)-#6 SHOWN WITH A HEAVIER LINE FOR CLARITY. REBARS IN THE TOP MAT ARE #5 @ 1'-0", BOTH WAYS, WITH 2" MINIMUM COVER, EXCEPT FOR REBARS ADJACENT TO THE OPENING. THESE BARS SHALL BE (2)-#5 BARS.

RHODE ISLAND DEPARTMENT OF TRANSPORTATION
 ALTERNATE TOP COVER FOR ROUND PRECAST MANHOLES AND CATCH BASINS
 R.I. STANDARD 4.7.2
 JUNE 15, 1988
 ISSUE DATE

STEP DESIGN SHALL MEET A.S.T.M. C478 SECTION II SPECIFICATIONS
 30" FRAME & COVER
 ADJUST TO GRADE AS REQUIRED WITH RED CLAY BRICK COURSES
 PROVIDE HYDRAULIC CEMENT SEAL ON INTERIOR JOINTS
 WATERPROOFING COMPOUND ON EXTERIOR WALL
 JOINTS SEALED WITH RUBBER GASKETS CONFORMING TO LATEST A.S.T.M. C 443 SPECIFICATIONS
 KOR-N-SEAL PIPE SLEEVE OR APPROVED EQUIVALENT
 CONCRETE INVERT
 1 1/2" CRUSHED STONE
 CONSTRUCT INVERT CHANNEL AT ALL INLETS
 1/2" PIPE DIAMETER

GENERAL NOTES:
 1. REINFORCING STEEL CONFORMS TO LATEST A.S.T.M. A 185 SPEC. 0.12 SQ. IN./LINEAL FT. AND 0.12 SQ. IN. (BOTH WAYS) BASE BOTTOM.
 2. CONC. MINIMUM COMPRESSIVE STRENGTH = 4000 PSI TYPE III CEMENT.
 3. MANHOLE DESIGN SPECIFICATIONS CONFORM TO LATEST A.S.T.M. C 478 SPEC. FOR "PRECAST REINFORCED CONCRETE MANHOLE SECTIONS".
 4. ONE POUR MONOLITHIC BASE SECTION.
 5. MANHOLE SHALL MEET H-20 LOADING CRITERIA.
 6. IF OPENINGS MUST BE CAST LESS THAN 8" FROM JOINT OR THROUGH JOINT, SHOP DWGS WILL BE REQUIRED

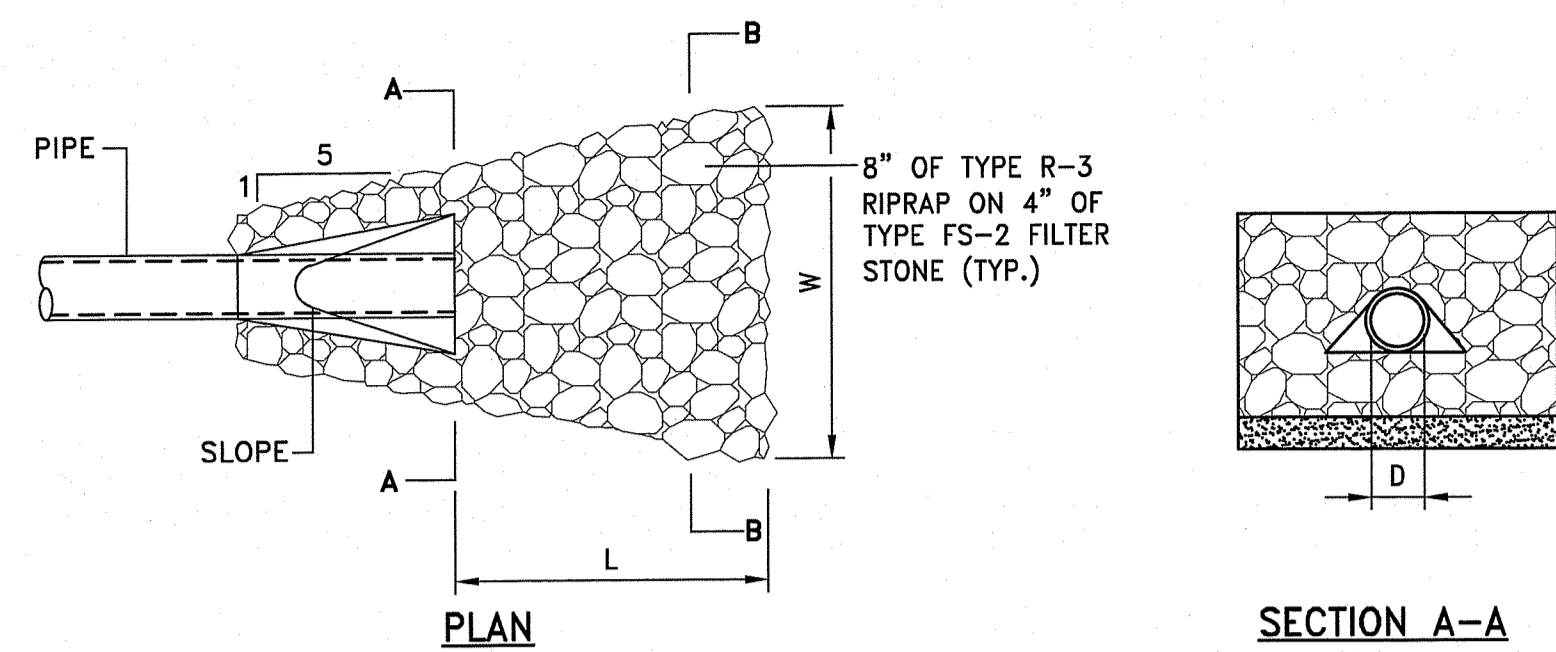
RHODE ISLAND DEPARTMENT OF TRANSPORTATION
 TYPICAL SEWER MANHOLE DETAIL
 NOT TO SCALE

RAISED DIAMOND DESIGN
 WORD "SEWER" INSCRIBED INTO COVER
 31 3/4" DIA.
 30" DIA.
 6 1/2" DIA.
 41" DIA.

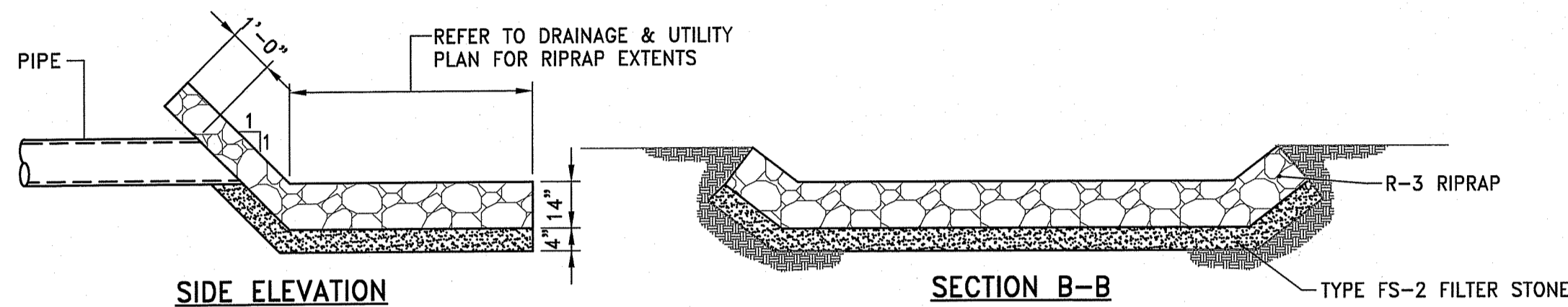
NOTE:
 1. NEEHAH FOUNDRY, INC. MODEL #R-1557 OR APPROVED EQUIVALENT
 2. COVER SHALL MEET H-20 LOADING CRITERIA

RHODE ISLAND DEPARTMENT OF TRANSPORTATION
 SANITARY MANHOLE FRAME & COVER
 NOT TO SCALE

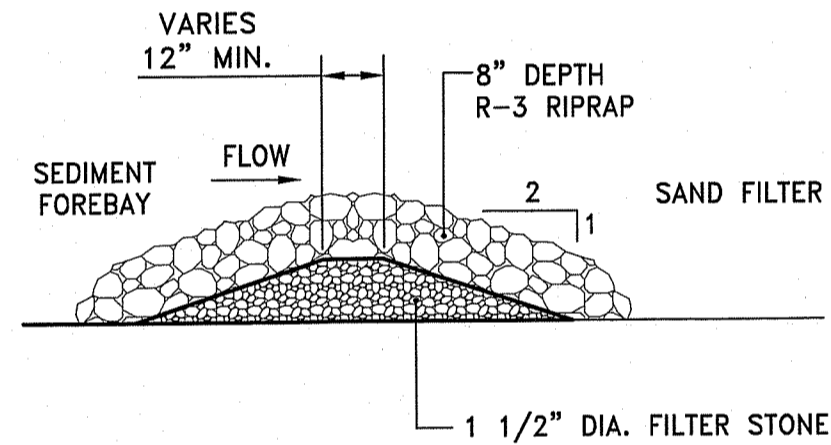
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
 FRESHWATER WETLANDS PROGRAM
 APPROVED WITH CONDITIONS
 AS SPECIFIED IN THE LETTER OF APPROVAL
 DATED JUL 14, 2020 FILE # 14-0174
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE



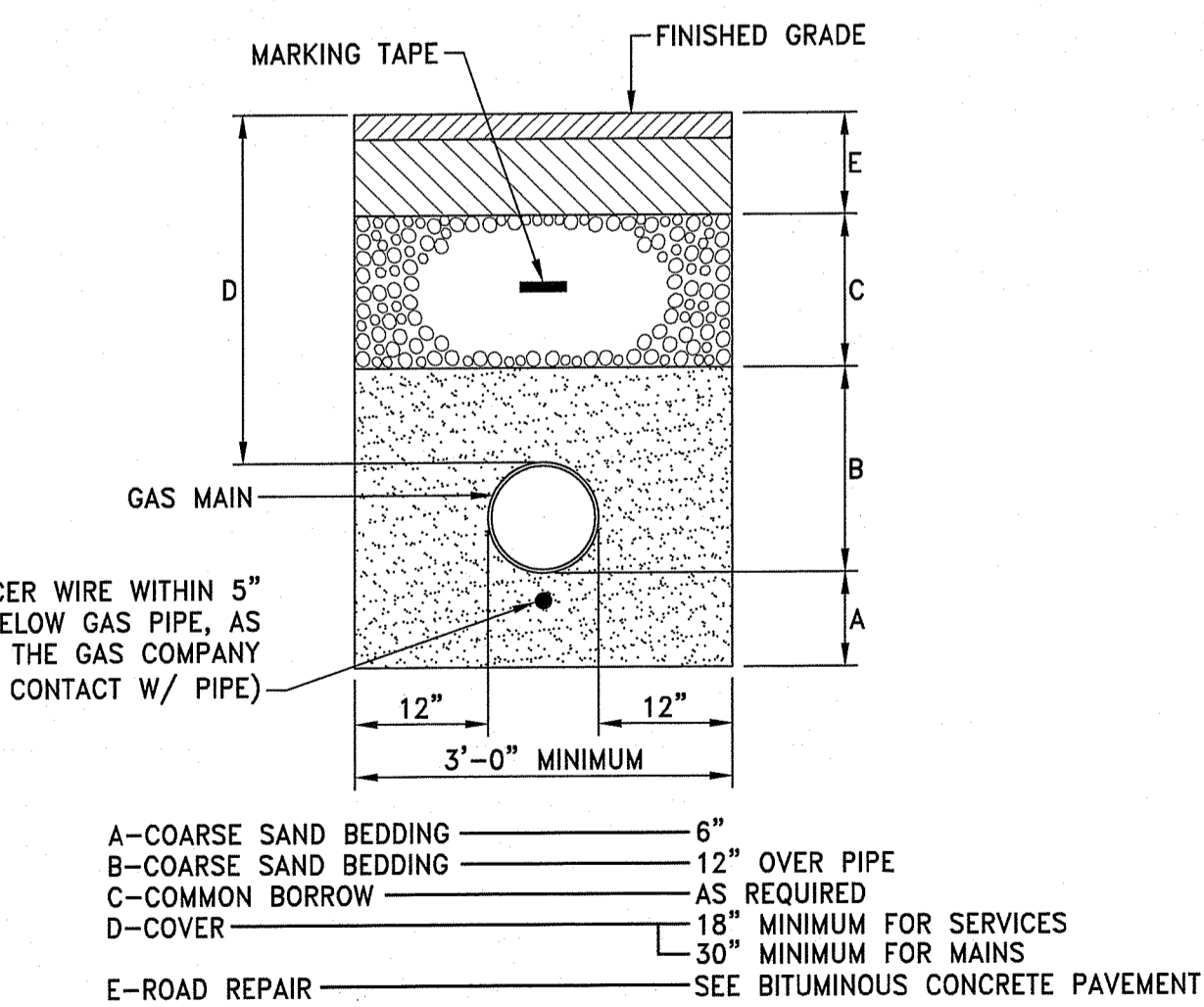
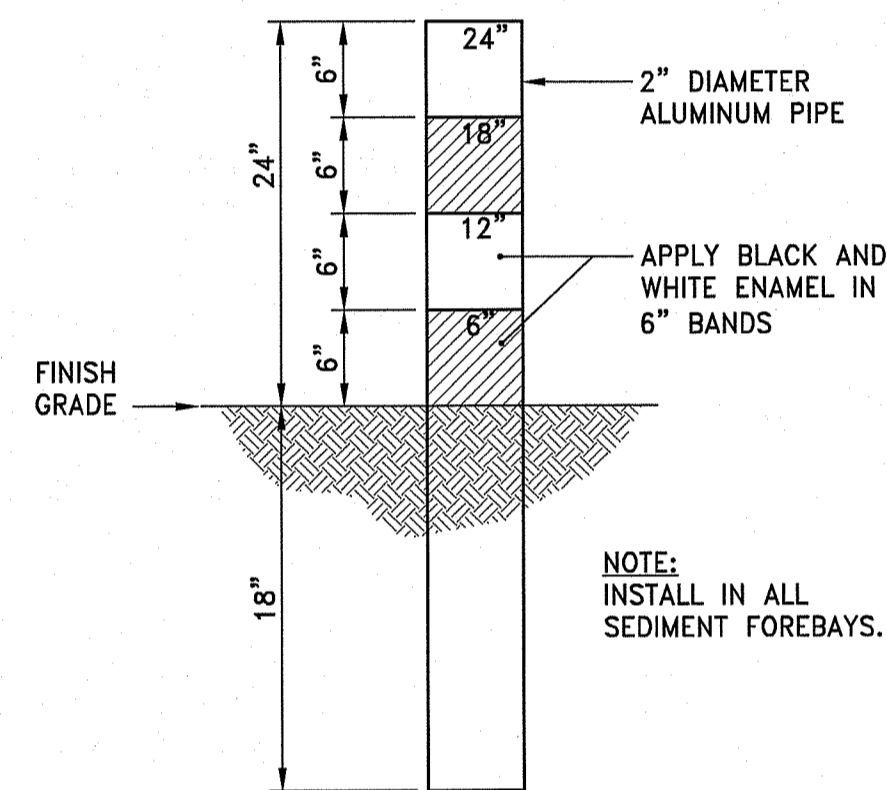
RLS RIPRAP LEVEL SPREADER
NOT TO SCALE



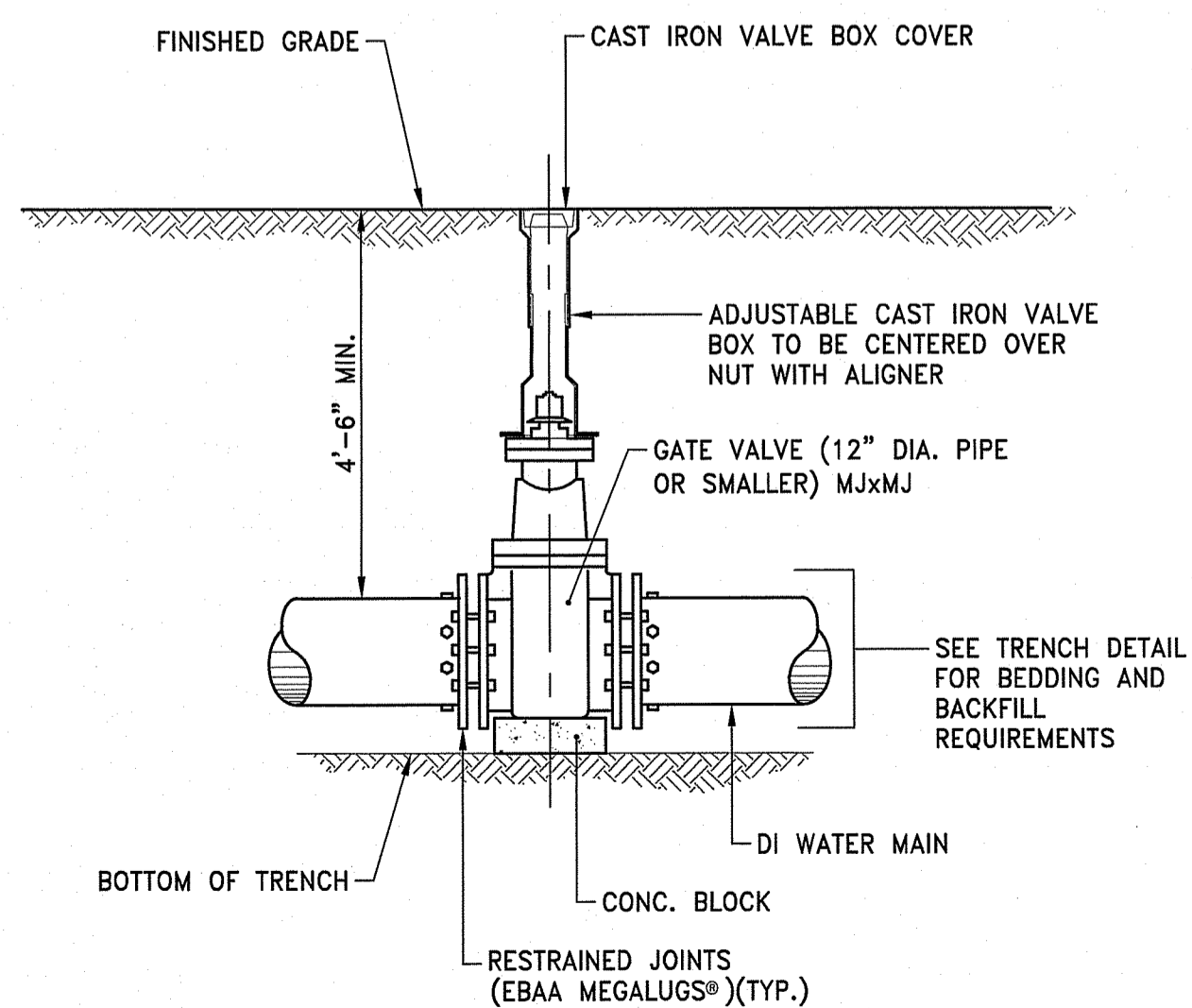
SFCD SEDIMENT FOREBAY CHECK DAM
NOT TO SCALE



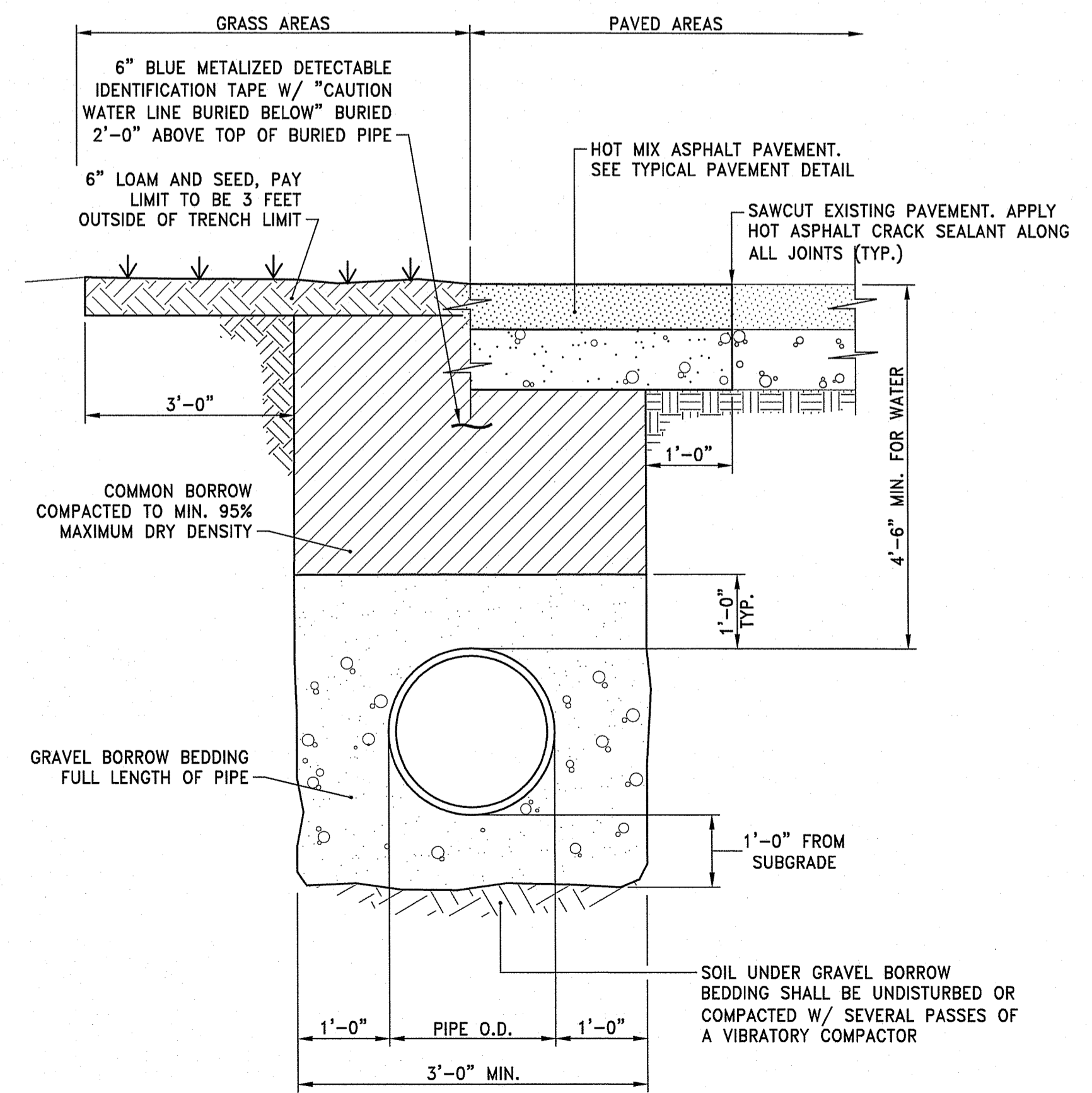
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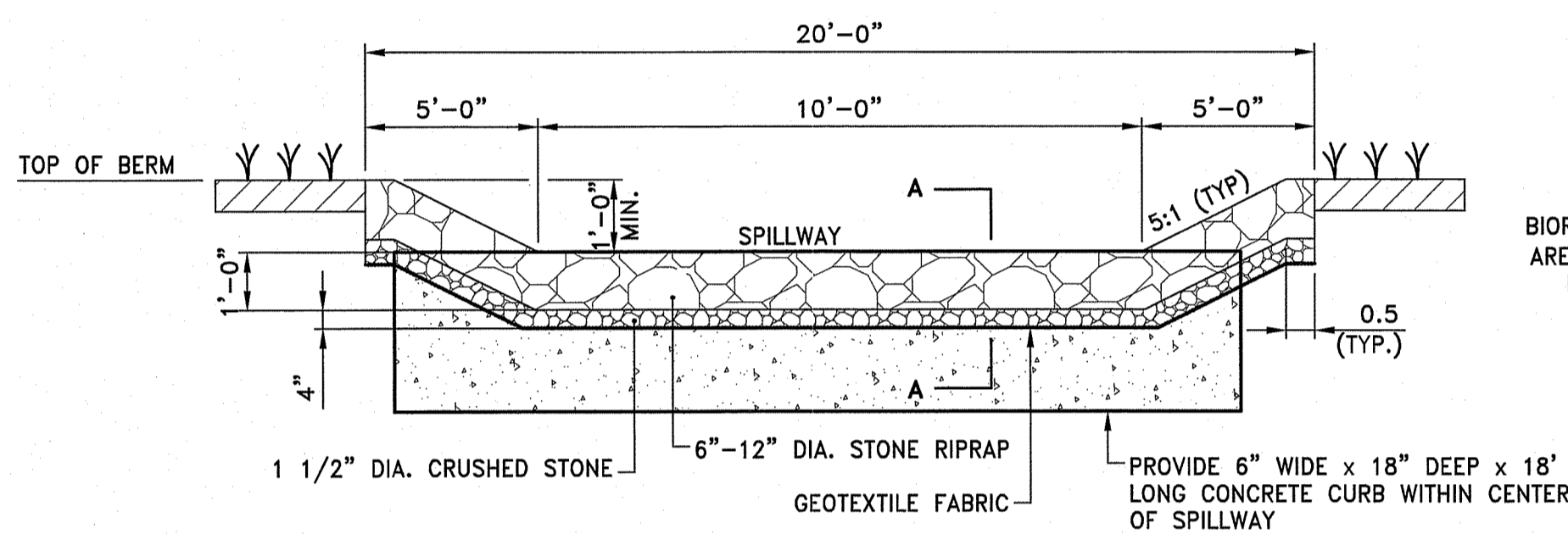
TYPICAL GAS MAIN TRENCH DETAIL
NOT TO SCALE



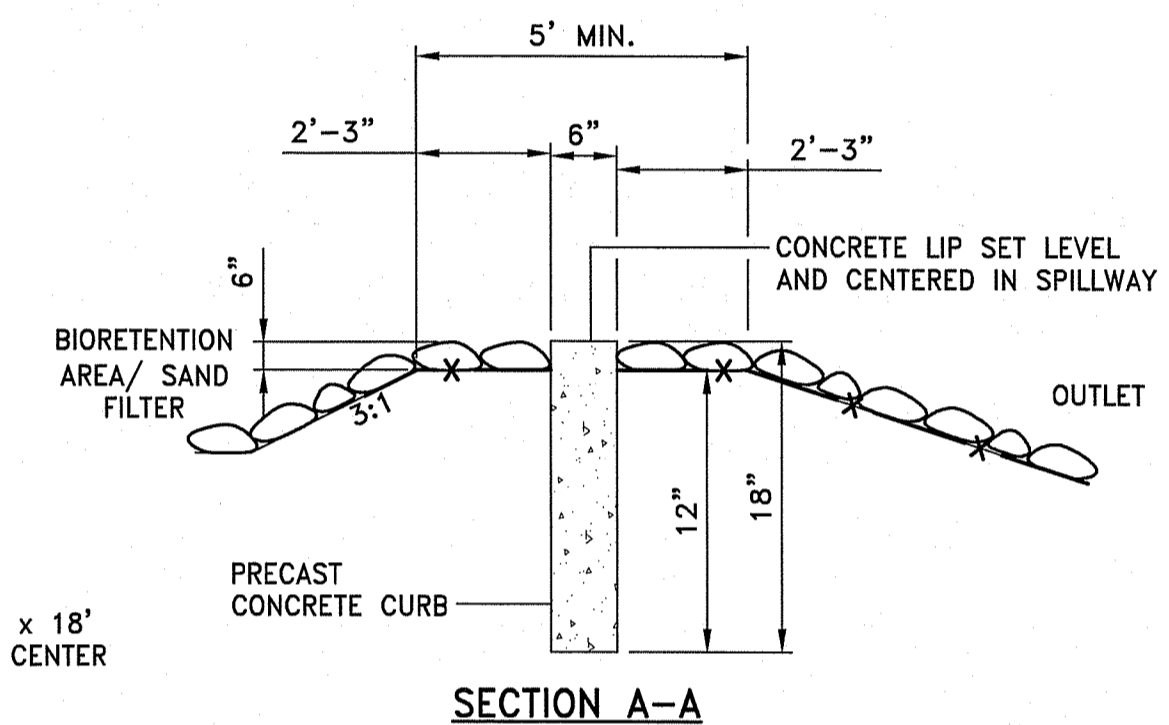
VALVE BOX DETAIL
NOT TO SCALE



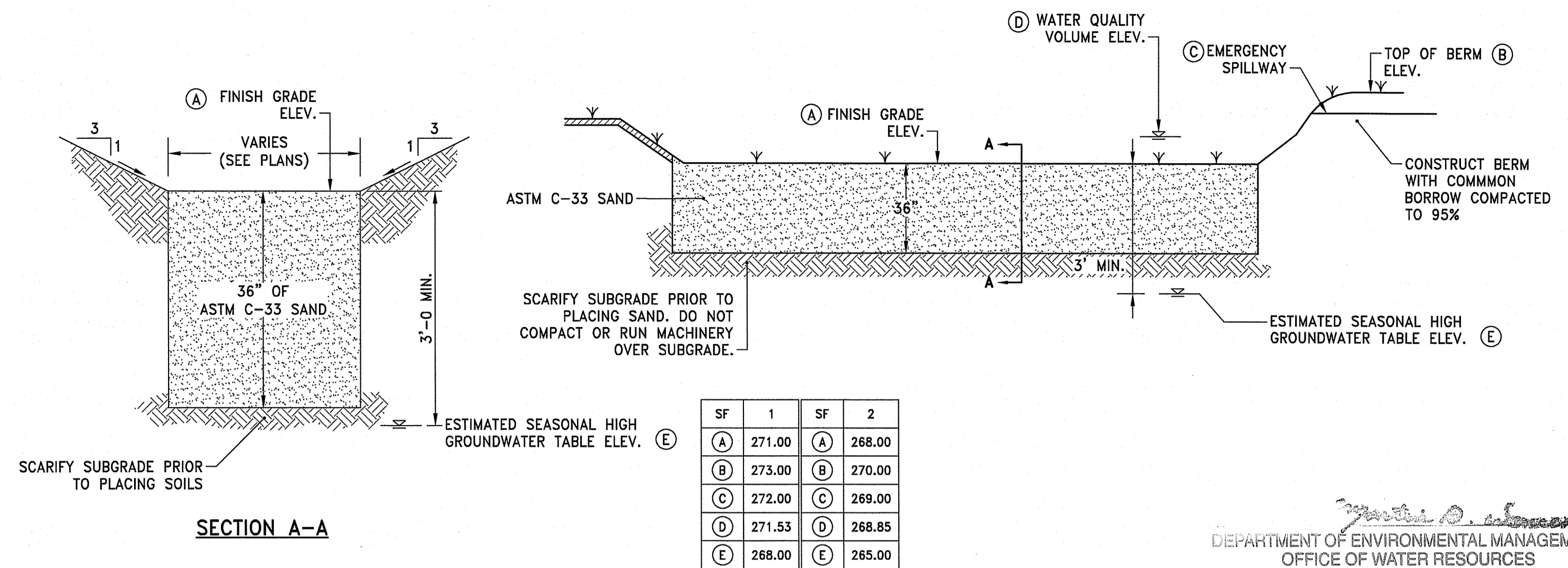
WATER MAIN TRENCH DETAIL
NOT TO SCALE



RS RIPRAP SPILLWAY DETAIL
NOT TO SCALE



SECTION A-A
NOTE: CONTRACTOR SHALL FILL VOIDS BETWEEN CURB SECTIONS WITH MORTAR



SAND FILTER DETAIL
NOT TO SCALE

SF	1	SF	2
(A)	271.00	(A)	268.00
(B)	273.00	(B)	270.00
(C)	272.00	(C)	269.00
(D)	271.53	(D)	268.85
(E)	268.00	(E)	265.00

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
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1	1-29-20	RIDOT COMMENTS

