

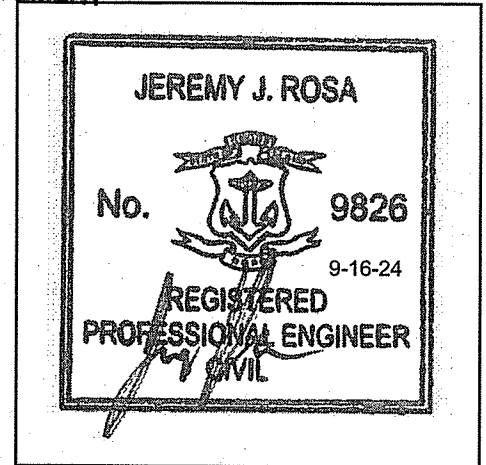
215 JAMES P MURPHY HWY SOLAR PROJECT

ASSESSOR'S PLAT 12 LOT 2
215 JAMES P. MURPHY HIGHWAY
WEST WARWICK, RHODE ISLAND

RI Department of Environmental Management
Office of Water Resources
SEP 20 2024

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM

NOTE PER DEM:
Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site



ENGINEER CERTIFICATION

CIVIL ENGINEER: NORTHEAST ENGINEERS & CONSULTANTS, INC.

 SITE/CIVIL
 LAND PLANNING
 WATERFRONT SURVEYING
 GEOTECHNICAL
 ENVIRONMENTAL
 TRANSPORTATION
 STRUCTURAL
 MATERIALS TESTING
 A KNOWLEDGE CORPORATION
 6 VALLEY ROAD MIDDLETOWN RI 02842
 PHONE (401) 849-0810 FAX (401) 846-4169
 WWW.NORTHEASTENGINEERS.COM

OWNER: DPJ REALTY, LLC
99 JAMES P. MURPHY HIGHWAY
WEST WARWICK, RI 02893

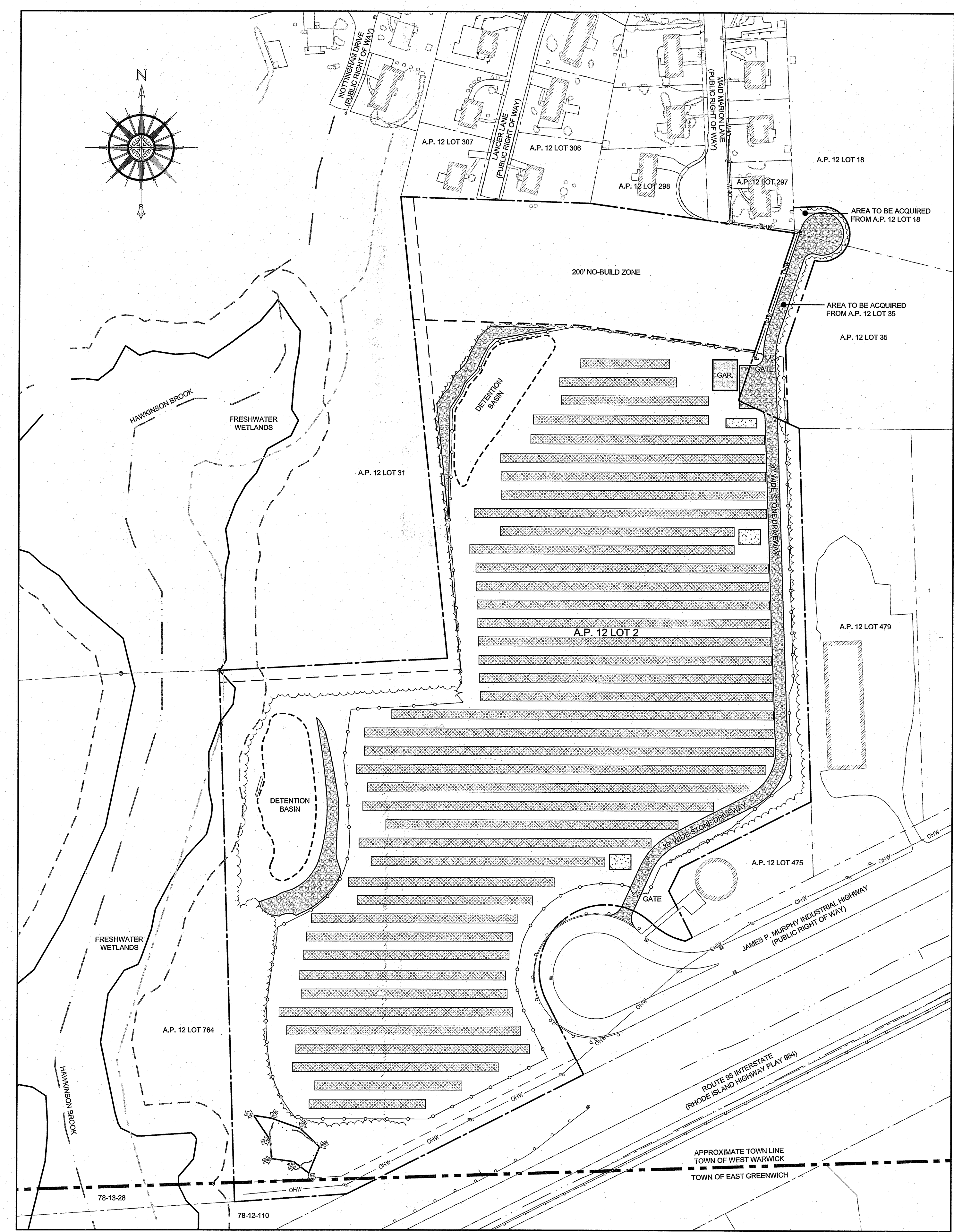
APPLICANT: NORTH BRIDGE DEVELOPMENT LLC
C/O ANDREW LABELL
60 WAMSUTTA WAY
WRENTHAM, MA 02903

SEPTEMBER 16, 2024 PERMIT SET PLAN INDEX

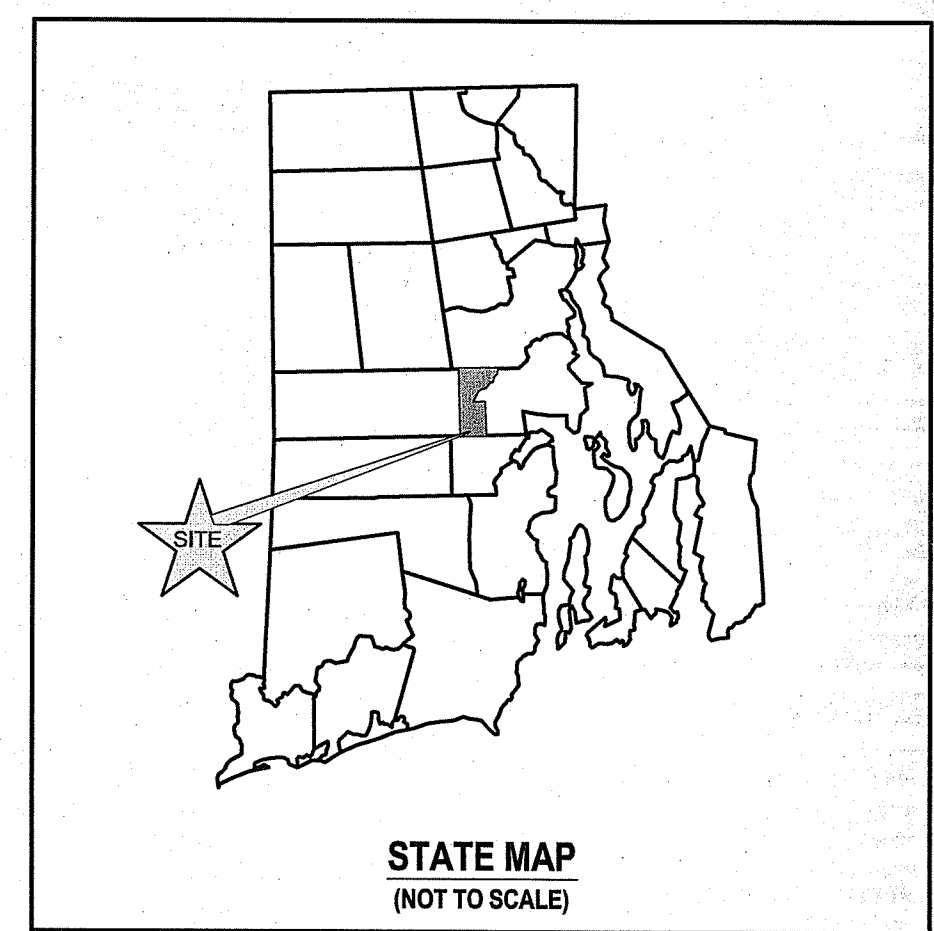
- SITE/CIVIL ENGINEERING PLANS**
- TITLE SHEET
- NOTES SHEET
- EXISTING CONDITIONS PLAN (SOUTH SIDE)
- EXISTING CONDITIONS PLAN (NORTH SIDE)
- PROPOSED CONDITIONS PLAN (SOUTH SIDE)
- PROPOSED CONDITIONS PLAN (NORTH SIDE)
- SOIL EROSION AND SEDIMENT CONTROL PLAN (SOUTH SIDE)
- SOIL EROSION AND SEDIMENT CONTROL PLAN (NORTH SIDE)
- PROPOSED DETAILS

- SHEET 1
- SHEET 2
- SHEET 3
- SHEET 4
- SHEET 5
- SHEET 6
- SHEET 7
- SHEET 8
- SHEETS 9-11

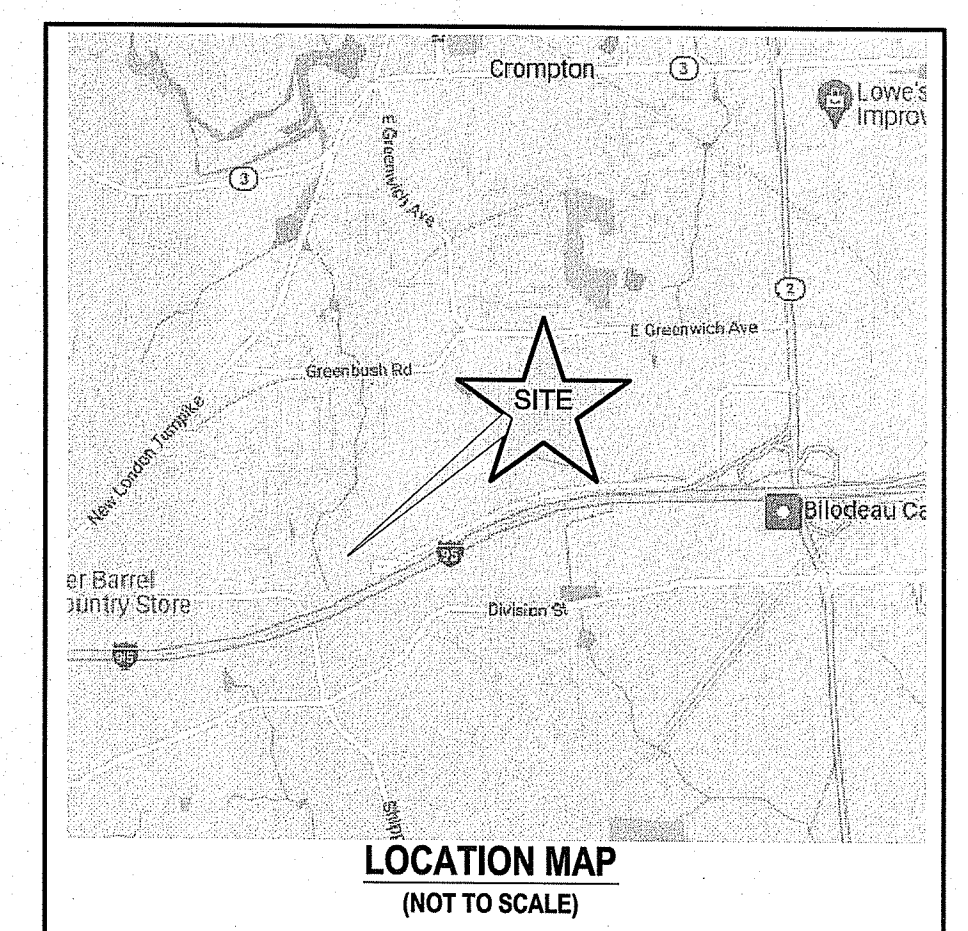
RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL
DATED: NOV 13 2024 FILE # 2024-019
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION



SITE PLAN
SCALE = 1"=100'

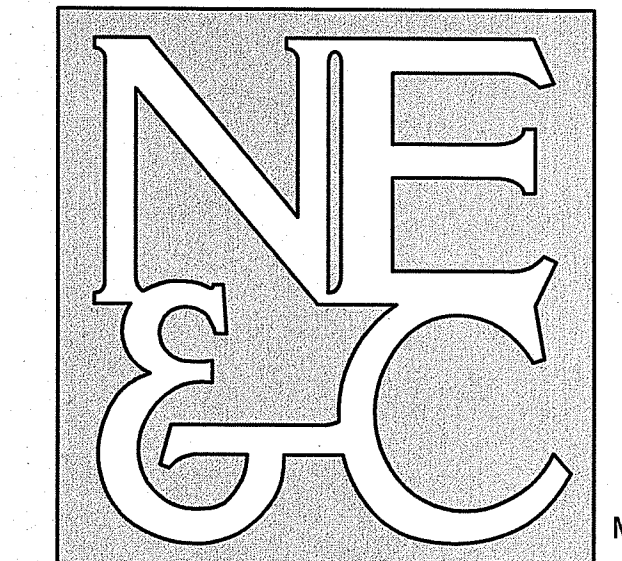


STATE MAP
(NOT TO SCALE)



LOCATION MAP
(NOT TO SCALE)

SUBMISSION AND REVISION SUMMARY		
AGENCY OR REVISION	DATE:	COMMENTS:
RIDEM	MAY 26, 2022	RIDEM FRESHWATER WETLANDS AND RIPDES PROGRAM
TOWN OF WEST WARWICK	OCT 6, 2022	RESPONSE TO COMMENTS
RIDEM	OCT 18, 2023	MODIFICATION APPLICATION
RIDEM	JUN 21, 2024	RIDEM REVISIONS
RIDEM	SEP 16, 2024	



A KNOWLEDGE CORPORATION®

6 VALLEY ROAD MIDDLETOWN RHODE ISLAND 02842
PHONE (401) 849-0810 FAX (401) 846-4169
WWW.NORTHEASTENGINEERS.COM

GENERAL NOTES

- PROPERTY LINE INFORMATION PROVIDED BY OTHERS AND SHOULD BE REGARDED AS APPROXIMATE.
- TOPOGRAPHY AND SITE FEATURES TAKEN FROM SURVEY BY OTHERS. ADDITIONAL ABUTTING FEATURES SCALED FROM AERIAL PHOTOGRAPHY, WETLAND AND STREAM LOCATIONS SCALED FROM AVAILABLE RIDEM GIS DATA.
- TOPOGRAPHY TAKEN FROM AVAILABLE LIDAR DATA. DATUM ELEVATION IS NAVD83.
- PROPERTY IS ZONED BP (BUSINESS PARK). ABUTTERS PROPERTIES ARE BP AND R10 (RESIDENTIAL).
- NORTH ARROW TAKEN FROM PLANS PROVIDED BY OTHERS.
- PROPERTY IS LOCATED WITHIN FEMA ZONE "X" PER CURRENT FIRM.
- SOIL TYPES IN THE DEVELOPMENT AREA ARE CLASSIFIED AS CH3 AND CH4 (CANTON AND CHARLTON FINE SANDY LOAMS) AND NcC (NARRAGANSETT STONY SILT LOAMS) PER THE USDA NCRS SOIL SURVEY. THESE ARE HYDROLOGIC TYPE "B" SOILS.
- THE CONTRACTOR SHALL VERIFY THE PROPOSED LAYOUT AND DETAILS WITH THEIR RELATIONSHIP TO THE EXISTING SITE SURVEY. CONTRACTOR SHALL ALSO VERIFY ALL DIMENSIONS, SITE CONDITIONS AND MATERIAL SPECIFICATIONS AND SHALL NOTIFY THE OWNER AND ENGINEER OF ANY ERRORS, OMISSIONS OR DISCREPANCIES BEFORE COMMENCING WORK.
- THE UNDERGROUND UTILITIES KNOWN TO EXIST BY THE ENGINEER FROM HIS SEARCH OF RECORDS ARE INDICATED ON THE PLANS. CONTRACTOR SHALL VERIFY THE LOCATIONS AND DEPTHS OF THE UTILITIES AND EXERCISE PROPER CARE IN EXCAVATING IN THE AREA. ALL DAMAGED PORTIONS SHALL BE REPLACED IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE AFFECTED UTILITY COMPANY AND SHALL BE THE CONTRACTORS RESPONSIBILITY. PERSONAL INJURY RESULTING FROM CONTACT WITH EXISTING UTILITIES SHALL BE THE CONTRACTORS RESPONSIBILITY. WHEREVER CONNECTION OF NEW UTILITIES TO EXISTING UTILITIES ARE SHOWN ON THE PLANS, THE CONTRACTOR SHALL EXPOSE THE EXISTING LINES AT THE PROPOSED CONNECTIONS TO VERIFY THEIR LOCATIONS AND DEPTHS PRIOR TO EXCAVATION FOR NEW LINES. (PLEASE CALL DIG SAFE PRIOR TO CONSTRUCTION AT 1-888-DIG-SAFE AND ALL LOCAL UTILITY COMPANIES.)
- THE CONTRACTOR SHALL NOTIFY ALL AGENCIES TO VERIFY THE ACTUAL LOCATIONS OF ALL UTILITIES IN THE PROJECT AREA PRIOR TO PERFORMING ANY WORK.
- THE CONTRACTOR SHALL RESTORE TO THEIR ORIGINAL CONDITION OR BETTER, ALL IMPROVEMENTS DAMAGED AS A RESULT OF THE CONSTRUCTION, INCLUDING PAVEMENTS, EMBANKMENTS, CURBS, SIGNS, LANDSCAPING, STRUCTURES, UTILITIES, WALLS, FENCES, ETC. UNLESS PROVIDED FOR SPECIFICALLY IN THE PROPOSAL.
- CONTRACTOR SHALL EXERCISE EXTREME CAUTION TO PRESERVE STREET MONUMENTS. STREET MONUMENTS THAT ARE DISTURBED SHALL BE RESTORED UNDER THE LICENSED LAND SURVEYORS DIRECTION.
- DEVIATIONS OR CHANGES FROM THESE PLANS WILL NOT BE ALLOWED UNLESS APPROVED BY THE PROJECT ENGINEER, APPROPRIATE AGENCY AND OWNER.
- RELOCATION OF ANY UTILITIES SHALL BE AT THE OWNERS EXPENSE AND BE COMPLETED WITH THE UTILITY WORK. THE OWNER SHALL BE NOTIFIED AS TO THE RELOCATION REQUIRED PRIOR TO THE START OF CONSTRUCTION.
- AN APPROVED SET OF PLANS AND ALL APPLICABLE PERMITS MUST BE AVAILABLE AT THE CONSTRUCTION SITE AT ALL TIMES.
- CONTRACTOR AGREES THAT HE/SHE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF THE CONSTRUCTION OF THIS PROJECT, INCLUDING SALES AND PROPERTY. THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT TO BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEERS HARMLESS FROM ANY AND ALL LIABILITY, REAL AND ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM "THE SOLE NEGLIGENCE OF THE OWNER OR PROJECT ENGINEER."
- ALL TRAFFIC CONTROL SHALL CONFORM TO THE MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES 2009, INCLUDING ALL REVISIONS.

GRADING NOTES

- ADEQUATE PROVISIONS SHALL BE MADE TO PREVENT SURFACE WATERS FROM DAMAGING THE CUT FACE OF AN EXCAVATION OR THE SLOPED SURFACES OF A FILL. FURTHERMORE, ADEQUATE PROVISIONS SHALL BE MADE TO PREVENT SEDIMENT RUNOFF FROM LEAVING THE SITE.
- ALL GRADED AREAS SHALL BE SODED OR PLANTED IMMEDIATELY AFTER THE GRUBBING WORK HAS BEEN COMPLETED OR TEMPORARILY STABILIZED WITH STRAW MULCH PER THE TEMPORARY VEGETATIVE PRACTICE NOTES.
- THE CITY SHALL BE INFORMED OF THE LOCATION OF THE DISPOSAL SITE, IF ANY, FOR THE PROJECT.
- THE LIMITS OF DISTURBANCE SHALL BE FLAGGED BEFORE THE COMMENCEMENT OF THE GRADING WORK.
- ALL GRADING OPERATIONS SHALL BE PERFORMED IN CONFORMANCE WITH THE APPLICABLE PROVISIONS OF THE DEPARTMENT OF ENVIRONMENTAL MANAGEMENT AND THE MUNICIPALITY.
- WHERE APPLICABLE AND FEASIBLE THE MEASURES TO CONTROL EROSION AND OTHER POLLUTANTS SHALL BE IN PLACE BEFORE GRADING WORK IS INITIATED.
- TEMPORARY EROSION CONTROLS SHALL NOT BE REMOVED BEFORE PERMANENT EROSION CONTROLS ARE IN-PLACE AND ESTABLISHED.
- IF THE GRADING WORK INVOLVES CONTAMINATED SOIL, THEN ALL GRADING WORK SHALL BE DONE IN CONFORMANCE WITH APPLICABLE STATE AND FEDERAL REQUIREMENTS.
- NONCOMPLIANCE TO ANY OF THE ABOVE REQUIREMENTS SHALL MEAN IMMEDIATE SUSPENSION OF ALL WORK, AND REMEDIAL WORK SHALL COMMENCE IMMEDIATELY. ALL COSTS INCURRED SHALL BE BILLED TO THE VIOLATOR. FURTHERMORE, VIOLATORS SHALL BE SUBJECT TO ADMINISTRATIVE, CIVIL AND/OR CRIMINAL PENALTIES.
- REFER TO EARTHWORK NOTES UNDER "SOIL EROSION AND SEDIMENT CONTROL NOTES" SHOWN ON THIS SHEET FOR ADDITIONAL CRITERIA.

UTILITY NOTES

- THE LOCATION OF PROPOSED ELECTRICAL SYSTEM TO THE EXISTING OVERHEAD LINES ADJACENT TO JAMES P. MURPHY HIGHWAY AND IN MAID MARION LANE IS PRELIMINARY. FINAL DESIGN OF THE ELECTRICAL SERVICE IS SUBJECT TO DESIGN REVIEW AND APPROVAL OF NATIONAL GRID.
- THE CONNECTION SHOWN TO THE MUNICIPAL WATER IN JAMES P. MURPHY HIGHWAY IS SUBJECT TO REVIEW AND APPROPRIATE SERVICE APPLICATION TO THE KENT COUNTY WATER AUTHORITY.
- THE CONNECTION SHOWN TO THE MUNICIPAL SEWER IN JAMES P. MURPHY HIGHWAY IS PRELIMINARY. LOCATION AND TYPE OF EXISTING MAIN IN THIS ROADWAY TO BE CONFIRMED AND THE FINAL CONNECTION DESIGN SHALL BE SUBJECT TO REVIEW AND APPROVAL BY WEST WARWICK WASTEWATER DEPARTMENT.
- REMOVAL OF ANY EXISTING UTILITY LINES SHALL BE COORDINATED WITH THE RESPECTIVE SERVICE PROVIDERS.
- THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL ASSUMPTIONS, DEDUCTIONS, OR CONCLUSIONS HE/SHE MAY MAKE OR DERIVE FROM THE SUBSURFACE INFORMATION OR DATA FURNISHED ON THE PLANS. THE CONTRACTOR MUST SATISFY HIMSELF/HERSELF THROUGH HIS/HER OWN INVESTIGATIONS AS TO WHAT SUBSURFACE CONDITIONS ARE TO BE ENCOUNTERED.
- IF THE CONTRACTOR ELECTS NOT TO EXPOSE AND VERIFY ALL EXISTING UNDERGROUND UTILITIES AND STRUCTURES AT CROSSINGS PRIOR TO PIPELINE EXCAVATION, HE/SHE FORFEITS HIS/HER RIGHTS FOR ANY CLAIMS FOR COMPENSATION CAUSED BY ANY CONFLICTS WITH EXISTING UTILITIES AND STRUCTURES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER DISPOSAL OF ALL EFFLUENT ASSOCIATED WITH THE CONSTRUCTION ACTIVITY AND THE DISINFECTION AND HYDROTASTING OPERATIONS TO SAFEGUARD PUBLIC HEALTH AND SAFETY IN ACCORDANCE WITH APPLICABLE DEPARTMENT OF HEALTH REQUIREMENTS. ALL PERMITS AND LICENSES FOR CONSTRUCTION WATER DISPOSAL, INCLUDING ALL APPLICATIONS, CHARGES, FEES, AND TAXES, ARE THE RESPONSIBILITY OF THE CONTRACTOR.

PUBLIC HEALTH SAFETY AND CONVENIENCE NOTES

- CONTRACTOR SHALL OBSERVE AND COMPLY WITH ALL FEDERAL, STATE, AND LOCAL LAWS REQUIRED FOR THE PROTECTION OF PUBLIC HEALTH, SAFETY AND ENVIRONMENTAL QUALITY.
- THE CONTRACTOR AT HIS/HER EXPENSE, SHALL KEEP THE PROJECT AREA AND SURROUNDING AREA FREE FROM RUBBISH, DUST, NOISE, EROSION, ETC. THE WORK SHALL BE DONE IN CONFORMANCE WITH THE AIR AND WATER POLLUTION CONTROL STANDARDS AND REGULATIONS OF ALL APPLICABLE FEDERAL, STATE AND LOCAL AGENCIES.
- NO CONTRACTOR SHALL PERFORM ANY CONSTRUCTION OPERATION SO AS TO CAUSE FALLING ROCKS, SILT OR DEBRIS IN ANY FORM TO FALL, SLIDE OR FLOW ONTO ADJOINING PROPERTIES, STREETS OR NATURAL WATERCOURSES. SHOULD SUCH VIOLATIONS OCCUR, THE CONTRACTOR MAY BE CITED AND THE CONTRACTOR SHALL IMMEDIATELY MAKE ALL REMEDIAL ACTIONS AS NECESSARY.
- THE CONTRACTOR SHALL PROVIDE, INSTALL AND MAINTAIN ALL NECESSARY SIGNS, LIGHTS, FLARES, BARRICADES, MARKERS, CONES, AND OTHER PROTECTIVE FACILITIES AND SHALL TAKE ALL NECESSARY PRECAUTIONS FOR THE PROTECTION, CONVENIENCE AND SAFETY OF THE PUBLIC.
- THE CONTRACTOR TO ADHERE TO ALL COMMUNITY NOISE STANDARDS PROVIDED IN THE MUNICIPALITY ORDINANCES.

SOIL EROSION AND SEDIMENT CONTROL NOTES

- GENERAL OBJECTIVES:
 - DAMAGE TO SURFACE WATERS RESULTING FROM EROSION AND SEDIMENTATION SHALL BE MINIMIZED BY STABILIZING DISTURBED AREAS AND BY REMOVING SEDIMENT FROM CONSTRUCTION SITE DISCHARGES.
 - TO THE EXTENT PRACTICABLE, EXISTING VEGETATION SHALL BE PRESERVED. FOLLOWING THE COMPLETION OF ACTIVITIES ON ANY PORTION OF THE SITE, PERMANENT VEGETATION SHALL BE ESTABLISHED ON EXPOSED SOILS.
 - SITE PREPARATION SHALL BE PLANNED TO MINIMIZE THE SCOPE AND DURATION OF SOIL DISRUPTION.
 - PERMANENT TRAFFIC CORRIDORS SHALL BE ESTABLISHED AND "ROUTES OF CONVENIENCE" SHALL BE AVOIDED. STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT ALL POINTS OF ENTRY ONTO THE PROJECT SITE AND SHALL BE USED EXCLUSIVELY.
- CONSTRUCTION SEQUENCE:
 - DO NOT BEGIN CONSTRUCTION UNTIL ALL LOCAL, STATE, AND FEDERAL PERMITS HAVE BEEN APPLIED FOR AND RECEIVED.
 - ALL CONSTRUCTION VEHICLES SHALL ENTER AND LEAVE THE SITE VIA THE PROPOSED CONSTRUCTION ENTRANCE ON JAMES P. MURPHY HIGHWAY. THIS ENTRANCE SHALL BE CONSTRUCTED PER THE DETAIL PROVIDED.
 - PRIOR TO ANY CLEARING, GRUBBING, OR EARTHWORK, OR ANY ACTIVITIES WHICH MAY REQUIRE EROSION CONTROL MEASURES, THE CONTRACTOR SHALL FLAG THE WORK LIMITS.
 - INSTALL SILT FENCES, SILT SACKS, STRAW WATTLE, AND STRAW BALES AS INDICATED ON THE DRAWINGS TO CONTROL EROSION AND PREVENT SEDIMENT CONTAMINATION OF DOWNSTREAM AREAS PRIOR TO ANY EARTH MOVING ACTIVITIES.
 - CLEARING PERMITTED ONLY IN WITHIN THE LIMITS AS SHOWN ON SITE PLANS. THE "200-FOOT NO BUILD ZONE" SHOWN ON THE PLANS SHALL NOT BE DISTURBED FOR ANY REASON. ANY STUMPS TO BE GROUND OR DISPOSED OF OFF SITE.
 - ROUGH GRADE SITE AS SHOWN ON SITE PLAN. AREAS OF DETENTION BASINS SHALL BE USED AS TEMPORARY SEDIMENT BASINS AS SHOWN ON SOIL EROSION AND SEDIMENT CONTROL PLANS.
 - CONSTRUCT EQUIPMENT CONCRETE PADS IN LOCATIONS SHOWN.
 - INSTALL DRAIN PIPING FROM MUNICIPAL ROADWAY TO DETENTION BASIN.
 - ENSURE THAT AREAS ADJACENT TO DRIVEWAY ARE STABILIZED AND INSTALL STONE PER DETAIL PROVIDED.
 - COMPLETE DETENTION BASIN EARTHWORK AND INSTALL PERMANENT OUTLET STRUCTURES.
 - GRADE AREA OF GARAGE AND BEGIN CONSTRUCTION. INSTALL SAND FILTER DOWNSTREAM OF GARAGE.
 - FINAL GRADE AREAS OF SOLAR PANELS. MULCHING OF THESE SURFACES SHALL BE COMPLETED PER THE NOTES BELOW AND PLANTED WITH MEADOW GRASSES.
 - INSTALL STONE TRENCHES.
 - CONSTRUCT PANELS ON GRADE IN LOCATIONS SHOWN. NO FURTHER GRADING OR EARTHWORK SHALL BE NECESSARY.
 - MAINTAIN SITE IN ACCORDANCE WITH THE MAINTENANCE NOTES.
- EARTHWORK NOTES:
 - DURING CONSTRUCTION AND THEREAFTER, EROSION CONTROL MEASURES ARE TO BE IMPLEMENTED AS SHOWN. ONLY THE SMALLEST PRACTICAL AREA OF LAND SHOULD BE EXPOSED AT ANY ONE TIME DURING DEVELOPMENT. WHEN LAND IS EXPOSED DURING DEVELOPMENT, THE EXPOSURE SHOULD BE KEPT TO THE SHORTEST PRACTICAL PERIOD OF TIME.
 - ANY DISTURBED AREAS WHICH ARE TO BE LEFT TEMPORARILY AND WHICH WILL BE REGRADED LATER DURING CONSTRUCTION SHALL BE STABILIZED WITHIN FOURTEEN DAYS IN ACCORDANCE WITH TEMPORARY MEASURES IN THE VEGETATIVE PRACTICE NOTES.
 - AREAS TO BE FILLED SHALL BE CLEARED, GRUBBED, AND STRIPPED OF TOP SOIL TO REMOVE VEGETATION, ROOTS, AND ANY OTHER OBJECTIONABLE MATERIAL.
 - ALL FILL SHALL BE COMPACTED TO 95% MAX. DENSITY TO REDUCE EROSION, SLIPPAGE, SETTLEMENT SUBSIDENCE, OR OTHER RELATED PROBLEMS.
 - FILL INTENDED TO SUPPORT CONCRETE EQUIPMENT PADS, STRUCTURES, AND CONDUITS, ETC., SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL CODES AND SPECIFICATIONS.
 - ANY FILLS SHALL BE PLACED AND COMPACTED TO 95% MAX. DENSITY IN LAYERS NOT TO EXCEED 12" IN THICKNESS FILLS.
 - FILL MATERIAL SHALL BE FREE OF BRUSH, RUBBISH, ROCKS, LOGS, STUMPS, BUILDING DEBRIS, AND OTHER OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS.
 - FROZEN, SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIAL SHALL NOT BE INCORPORATED INTO FILLS.
 - FILL SHALL NOT BE PLACED ON A FROZEN FOUNDATION SUBGRADE.
 - SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGN ENGINEER.
 - ALL DISTURBED AREAS SHALL BE STABILIZED WITHIN 14 DAYS OF FINISH GRADING IN ACCORDANCE WITH THE VEGETATIVE PRACTICE NOTES.
 - REMOVE TEMPORARY EROSION CONTROL MEASURES ONCE UPSLOPE AREAS HAVE BEEN PERMANENTLY STABILIZED.
- VEGETATIVE PRACTICE:

TEMPORARY MEASURES (FOR TEMPORARY PROTECTION OF DISTURBED AREAS)

 - LIMESTONE AND FERTILIZER SHALL BE APPLIED AT THE FOLLOWING RATE:
LIMESTONE: 2 TONS/ACRE
FERTILIZER: (10-10-10): 600 LBS/ACRE
 - SEED SHALL BE APPLIED AT THE FOLLOWING RATE:
WINTER RYE: 100 LBS/ACRE
 - STRAW MULCH SHALL BE APPLIED AT THE RATE OF 1.5 TONS/ACRE.

PERMANENT MEASURES:

 - SLOPES SHALL NOT BE STEEPER THAN 1 VERTICAL TO 3 HORIZONTAL UNLESS OTHERWISE SPECIFIED.
 - LOAM AND SEED REQUIREMENTS ARE SPECIFIED IN RIDOT L01 & L02.
 - A MINIMUM OF 4 INCHES OF LOAM SHALL BE INSTALLED. THE LOAM SHALL BE GRADED TO A SMOOTH CONDITION AND STONES AND OTHER OBJECTS LARGER THAN 2 INCHES SHALL BE REMOVED.
 - SEED MIXTURE SHALL CONFORM TO DOT ALL-PURPOSE SEED MIX OR MEADOW MIX.
 - OPTIMUM TIMING SHALL BE EARLY SPRING. SEEDING NOT PERFORMED DURING THIS TIME FRAME MAY REQUIRE RE-SEEDING DURING THE FOLLOWING SPRING.
- MAINTENANCE

DURING THE PERIOD OF CONSTRUCTION AND/OR UNTIL LONG TERM VEGETATION IS ESTABLISHED, THE EROSION CONTROL MEASURES SHALL BE INSPECTED.

 - AT A MINIMUM THE SILT FENCING, STRAW BALES AND FILTER SOCK BARRIERS SHALL BE INSPECTED AND REPAIRED ONCE A WEEK AND / OR IMMEDIATELY FOLLOWING A SIGNIFICANT RAINFALL OR SNOWMELT. SEDIMENT TRAPPED BEHIND THE BARRIERS SHALL BE EXCAVATED WHEN IT REACHES A DEPTH OF 6" AND REGRADED ON THE SITE.
 - DURING CONSTRUCTION THE ENTRANCE SHALL BE INSPECTED WEEKLY. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT SHALL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC ROADWAYS. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC ROADWAYS MUST BE REMOVED IMMEDIATELY. WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE. PERIODIC INSPECTIONS SHALL ALSO BE PERFORMED AFTER EACH RAINFALL EVENT.
 - EROSION CONTROL BLANKETS SHALL BE INSPECTED ON A WEEKLY BASIS.
 - SILT SACKS SHALL BE INSPECTED AND REPAIRED ONCE A WEEK AND / OR IMMEDIATELY FOLLOWING A SIGNIFICANT RAINFALL OR SNOWMELT. DURING HEAVY RAIN EVENT, IT MAY BE NECESSARY TO TEMPORARILY REMOVE SACKS IN ORDER TO PREVENT FLOODING. SEDIMENT TRAPPED WITHIN SACKS SHALL BE DISPOSED OF OFF SITE AT A LICENSED FACILITY OR REGRADED ON THE SITE.
 - THE STABILIZED CONSTRUCTION ENTRANCE SHALL BE REMOVED PRIOR TO FINAL SURFACING.
 - SEEDDED AREAS WILL BE FERTILIZED AND RESEEDED AS NECESSARY TO INSURE ESTABLISHMENT OF A VEGETATIVE GROWTH THAT MEETS THE APPROVAL OF THE CITY ENGINEER.

MULCHING NOTES (FOR PERMANENT VEGETATION)

- METHOD:**
- MULCHING SHALL BE REQUIRED ON ALL SEEDING. MULCH WILL REDUCE EROSION BEFORE GRASS OR MEADOW IS ESTABLISHED AND WILL PROMOTE MORE RAPID GROWTH AND ESTABLISHMENT. THE EXISTENCE OF VEGETATION SUFFICIENT TO CONTROL SOIL EROSION SHALL BE DEEMED IN COMPLIANCE WITH THIS MULCHING REQUIREMENT.
 - SPREAD STRAW MULCH BY HAND OR MECHANICALLY SUCH THAT APPROXIMATELY 75% TO 95% OF THE SOIL SURFACE IS COVERED. MINIMUM DISTRIBUTION SHALL BE 90 POUNDS PER 1,000 SQUARE FEET.
 - STRAW MULCH ANCHORING SHALL BE ACCOMPLISHED IMMEDIATELY AFTER PLACEMENT TO MINIMIZE LOSS BY WIND OR WATER. APPLICATIONS SHALL BE HEAVIER AT EDGES WHERE WIND CATCHES THE MULCH, IN VALLEYS, AND AT CRESTS OF BANKS. REMAINDER OF AREA SHALL BE UNIFORM IN APPEARANCE.
- PRODUCTS:**
- MULCH MATERIALS SHALL BE WOOD FIBER APPLIED WITH A HYDROMULCH AT 2000 LBS PER ACRE.

STORMWATER MAINTENANCE NOTES

- STONE DRIVEWAY MAINTENANCE:
 - THE OWNER TO ENSURE THAT THE STONE DRIVEWAY IS NOT TO BE PAVED AT ANY POINT DURING THE FUTURE WITHOUT ADDITIONAL STATE AND LOCAL PERMITTING.
 - AREAS WHERE STONE DRIVEWAYS ARE PROPOSED SHALL NOT SERVE AS A TEMPORARY SEDIMENT CONTROL DEVICE DURING SITE CONSTRUCTION PHASE.
 - KEEP ANY ADJACENT MEADOW AREAS WELL STABILIZED. ANY GULLYING OR EROSION COULD CREATE A SEDIMENT LOAD ON THE PVIOUS SURFACE AND SHOULD BE ADDRESSED IMMEDIATELY.
 - REGULARLY SEED ANY BARE AREAS OF DESIGNATED MEADOW. AREAS SUBJECT TO REGULAR EROSION SHALL BE EVALUATED BY THE DESIGN ENGINEER AND ADDRESSED ACCORDINGLY.
 - INSPECT THE SURFACE ANNUALLY FOR DETERIORATION OR SHIFTING OF STONE MATERIAL.
 - AVOID STOCKPILING SNOW ON DRIVEWAY SURFACE. SITE OPERATORS SHALL BE MADE AWARE OF THE PROPER LOCATION FOR RELOCATING SNOW.
- STONE TRENCHES:
 - THE STONE TRENCHES SHALL BE INSPECTED FOLLOWING AT LEAST THE FIRST TWO PRECIPITATION EVENTS OF AT LEAST 1.0 INCHES TO ENSURE THAT THE DEVICES ARE FUNCTIONING PROPERLY. THEREAFTER, THE DEVICES SHALL BE INSPECTED AT LEAST ANNUALLY AND AFTER MAJOR RAIN STORM EVENTS (2.8 INCHES OVER 24-HOURS). THE MAINTENANCE OBJECTIVES FOR THESE DEVICES ARE FOCUSED ON PRESERVING THE HYDRAULIC EFFICIENCY AND MAINTAINING STRUCTURAL INTEGRITY. MAINTENANCE SHOULD INCLUDE THE FOLLOWING:
 - THE SURFACE OF THE TRENCHES SHALL BE INSPECTED FOR EROSION AND STONE TRANSPORT. ANY AREAS WITHIN THE EXTENTS OF THE DEVICE THAT ARE SUBJECT TO EROSION OR TRANSPORT OF STONE SHALL BE REPLISHED WITH THE ORIGINAL DESIGN MATERIAL ACCORDING TO THE DESIGN DRAWINGS.
 - REINFORCE FLOW INLET AREAS IF STONE IS FOUND TO BE DEFICIENT OR IF EROSION IS PRESENT.
 - ALL MATERIAL, INCLUDING ANY TRASH AND/OR DEBRIS FROM ALL AREAS WITHIN THE EXTENTS OF THE DEVICE SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS.
 - UNWANTED VEGETATION SHALL BE REMOVED FROM THE SURFACE OF THE DEVICE WHICH COULD IMPEDE INFILTRATION INTO THE DEVICES SHALL BE REMOVED AND DISPOSED OF.
- CONVEYANCE STRUCTURE MAINTENANCE:
 - ALL INLET / OUTFLOW PIPES ARE TO BE INSPECTED AT LEAST THREE TIMES IN THE FIRST SIX MONTHS OF OPERATION. EVIDENCE OF CLOGGING, OR RAPID RELEASE OF FLOW SHALL BE REPORTED TO THE PROJECT ENGINEER AND REMEDIED IMMEDIATELY.
 - CONVEYANCE PIPES SHOULD BE INSPECTED BIANNIALLY. ANY STRUCTURAL FAULTS SHOULD BE REPAIRED AS NECESSARY FOR PROPER FUNCTION OF THE STRUCTURE.
 - STRUCTURES SHOULD BE CLEAN AND FREE OF OBSTRUCTIONS THAT REDUCE FLOW. A REGISTERED PROFESSIONAL ENGINEER SHOULD BE CONSULTED IF NECESSARY TO DETERMINE WHETHER A STRUCTURE HAS BEEN COMPROMISED.
- SAND FILTER MAINTENANCE:
 - GRASSES AND/OR SPECIFIED VEGETATION SHALL BE PLANTED AROUND AND WITHIN THE SAND FILTER IMMEDIATELY FOLLOWING CONSTRUCTION TO STABILIZE SLOPES AND PREVENT EROSION.
 - THE FILTER SHOULD BE INSPECTED FOLLOWING AT LEAST THE FIRST TWO PRECIPITATION EVENTS OF AT LEAST 1.0 INCH TO ENSURE THAT THE SYSTEM IS FUNCTIONING PROPERLY. THEREAFTER, THE FILTER SHOULD BE INSPECTED AT LEAST ANNUALLY AND AFTER STORM EVENTS OF GREATER THAN OR EQUAL, THE 1-YEAR, 24-HOUR TYPE III PRECIPITATION EVENT (2.8 INCHES). SEDIMENTS COLLECTED WITHIN THE TOP STRATA OF THE FILTER SHALL BE GRASSES AND/OR SPECIFIED VEGETATION SHALL BE PLANTED AROUND AND WITHIN THE SAND FILTER IMMEDIATELY FOLLOWING CONSTRUCTION TO STABILIZE SLOPES AND PREVENT EROSION.
 - THE FOLLOWING SHALL ALSO BE COMPLETED ON AN ANNUAL BASIS:
 - THE SLOPES OF THE FILTER SHOULD BE INSPECTED FOR EROSION AND GULLYING.
 - REINFORCE ANY EXISTING RIPRAP IF IT IS FOUND TO BE DEFICIENT, EROSION IS PRESENT AT THE OUTLET STRUCTURES, OR ANY EXISTING RIPRAP HAS BEEN COMPROMISED.
 - ANY AREAS WITHIN THE EXTENTS OF THE FILTER THAT ARE SUBJECT TO EROSION OR GULLYING SHOULD BE REPLISHED WITH THE ORIGINAL DESIGN MATERIAL AND RE-VEGETATED ACCORDING TO DESIGN DRAWINGS. SLOPE PROTECTION MATERIAL SHOULD BE PLACED IN AREAS PRONE TO EROSION. EMBANKMENT STABILITY SHOULD BE INSPECTED FOR SEEPAGE AND BURROWING ANIMALS.
 - MOW THE GRASS AROUND THE PERIMETER OF AND WITHIN THE FILTER. SEED BARE AREAS, AND REMOVE LITTER AND DEBRIS AT LEAST THREE TIMES PER GROWING SEASON TO MAINTAIN MAXIMUM GRASS HEIGHTS LESS THAN TWELVE INCHES. REMOVE ANY INVASIVE VEGETATION WITHIN THE EXTENTS OF THE FILTER. ANY INVASIVE VEGETATION ENCRACING UPON THE PERIMETER OF THE FILTER SHOULD BE PRUNED OR REMOVED IF IT IS PROHIBITING ACCESS TO THE FILTERS, COMPROMISING SIGHT VISIBILITY, AND/OR COMPROMISING THE ORIGINAL DESIGN INTENT: IF DEAD OR DYING GRASS ON THE BOTTOM IS OBSERVED, CHECK TO ENSURE THAT WATER INFILTRATES WITHIN TWO DAYS FOLLOWING STORMS.
 - SILT/SEDIMENT SHOULD BE REMOVED FROM THE FILTER BED ANNUALLY, WHEN ACCUMULATION EXCEEDS 1 INCH, OR WHEN THE FILTERING CAPACITY DIMINISHES SUBSTANTIALLY. IF STANDING WATER IS OBSERVED MORE THAN 48 HOURS AFTER A STORM EVENT, THEN THE TOP 6 INCHES OF SAND SHOULD BE REMOVED AND REPLACED. IF DISCOLORED OR CONTAMINATED MATERIAL IS FOUND BELOW THIS REMOVED SURFACE THEN THAT MATERIAL SHOULD ALSO BE REMOVED AND REPLACED UNTIL ALL CONTAMINATED SAND HAS BEEN REMOVED FROM THE FILTER MEDIA. THE SAND SHOULD BE DISPOSED OF IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS.
- RIPRAP SPILLWAY MAINTENANCE:
 - THE SPILLWAYS SHOULD BE INSPECTED ANNUALLY FOR EROSION AND DETERIORATION. RIPRAP SHOULD BE REPLACED IN KIND AS NECESSARY TO COMPLETELY COVER THE SPILLWAY IN THE DIMENSIONS DESIGNATED IN THE ORIGINAL DESIGN DOCUMENTS. SHOULD EXCESSIVE STONE WASHOUT BE OBSERVED, A REGISTERED PROFESSIONAL ENGINEER SHOULD BE CONSULTED.
 - MAINTENANCE OF THE STORMWATER SYSTEM DURING CONSTRUCTION OF THE PROJECT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
 - UPON COMPLETION OF THE CONSTRUCTION, MAINTENANCE OF THE STORMWATER SYSTEM SHALL BECOME THE RESPONSIBILITY OF THE OWNER.

SEEDING NOTES (FOR PROPOSED MEADOW AREAS)

- THE SUGGESTED SEED MIX TO BE UTILIZED SHALL BE SIMILAR TO 'LOW-GROWING WILDFLOWER AND GRASS MIX', AS SUPPLIED BY ERNST SEEDS, OR APPROVED EQUAL.
- SEEDING RATE FOR THIS MIX SHALL BE 200-400 LBS PER ACRE.
- PRIOR TO CONSTRUCTION, THE SUGGESTED SEED MIX SHALL BE REVIEWED AND APPROVED BY A RI REGISTERED LANDSCAPE ARCHITECT.
- IF INSTALLING SEED UTILIZING HYDROSEEDER DEVICE, PROVIDE FIBER MULCH AND STARTER FERTILIZER MIX. IF BROADCASTING SEEDING, APPLY STARTER FERTILIZER PRIOR TO SEEDING AND TOP DRESS WITH 2-INCHES OF STRAW MULCH FOLLOWING SPREADING OF SEED.

PREPARATION OF INFILTRATION BASINS AFTER USE AS SEDIMENT TRAPS

- TEMPORARY SEDIMENT TRAPS SHALL BE GRADED AS SHOWN ON THE SOIL EROSION AND SEDIMENT CONTROL PLANS. BOTTOM OF EXCAVATION ELEVATIONS SHOWN ON THOSE PLANS SHALL NOT BE EXCEEDED.
- FOLLOWING THE COMPLETION AND STABILIZATION OF THE UPSTREAM AREAS AS SHOWN ON THE SESC PLANS, THE CONTRACTOR SHALL COMPLETE THE FOLLOWING STEPS TO PREPARE THE EXCAVATION FOR USE AS THE INFILTRATION BASINS INDICATED ON THE PROPOSED CONDITIONS PLANS.
 - ALL SEDIMENTS SHALL BE REMOVED FROM THE SEDIMENT TRAP. MATERIAL MAY USED IN GRADING OPERATIONS STILL ONGOING ELSEWHERE ON THE SITE OR MUST BE REMOVED FROM THE SITE TO A LICENSED FACILITY.
 - BASINS SHALL BE FURTHER EXCAVATED TO SIX (6) INCHES BELOW DESIGN DEPTH OF INFILTRATIONS BASINS SHOWN ON PROPOSED CONDITIONS PLANS. THIS SHALL BE APPROXIMATELY 18-30 INCHES DEPENDING ON BASIN. REFER TO DESIGN PLANS. MATERIAL MAY USED IN GRADING OPERATIONS STILL ONGOING ELSEWHERE ON THE SITE OR MUST BE REMOVED FROM THE SITE TO A LICENSED FACILITY.
 - BOTTOM OF EXCAVATIONS SHALL BE INSPECTED BY DESIGN ENGINEER TO DETERMINE IF FURTHER SURFACE PREPARATION (GROUND TILLING) IS REQUIRED.
 - ONCE THE BOTTOM OF THE EXCAVATIONS HAVE BEEN APPROVED BY THE DESIGN ENGINEER, SIX-INCHES OF LOAM SHALL BE SPREAD WITHIN THE EXCAVATION AND THE BASINS SHALL BE SEEDDED PER THE VEGETATIVE PRACTICE NOTES SHOWN ON THIS PAGE.
 - IF INSTALLING SEED UTILIZING HYDROSEEDER DEVICE, PROVIDE FIBER MULCH AND STARTER FERTILIZER MIX. IF BROADCASTING SEEDING, APPLY STARTER FERTILIZER PRIOR TO SEEDING AND TOP DRESS WITH 2-INCHES OF STRAW MULCH FOLLOWING SPREADING OF SEED.

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS AS
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DATED: NOV 13 2024 FILE # 22-0190
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APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Andy Cloutier

4	RIDEM COMMENTS	16SEP24	
3	MODIFICATION APPLICATION	21JUN24	
2	TOWN SUBMISSION	18OCT23	
1	RIDEM REVISIONS	06OCT22	
0	RIDEM SUBMISSION	26MAY22	
No.	Revision	Date	App.
Designed By:	JJR	Drawn by:	JJR
Scale:	N/A	Date:	REV. 21JUN24
Checked by:	JES		

Project Title:
**215 JAMES P MURPHY HWY
SOLAR PROJECT**
A.P. 12, LOT 2
215 JAMES P. MURPHY HIGHWAY
WEST WARWICK, RI 02893

Client/Owner:
DPJ REALTY, LLC
99 JAMES P. MURPHY HIGHWAY
WEST WARWICK, RI 02893

Issued for:
PERMITTING

Drawing Title:
PROJECT NOTES

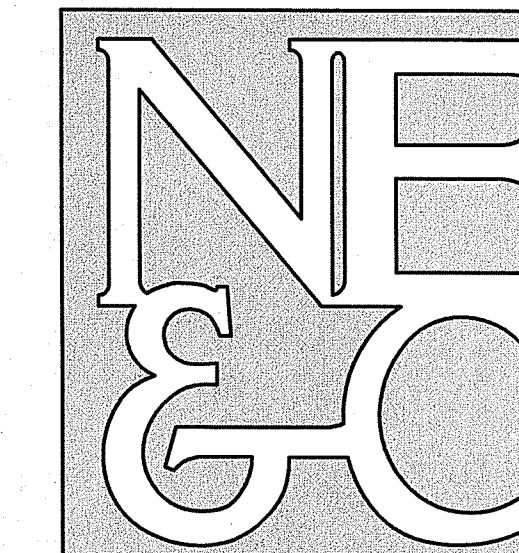
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C-2

Sheet **2** of **11**

Project Number:
21193.0

Survey Index:
-

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LEGEND:

- PROPERTY LINE
- ABUTTER PROPERTY LINE
- FRESHWATER WETLAND BOUNDARY (RIGIS)
- PERIMETER WETLAND BOUNDARY (RIGIS)
- APPROXIMATE STREAM (RIGIS)
- APPROXIMATE RIVERBANK WETLAND (RIGIS)
- ZONING BUILDING SETBACK
- EASEMENT LINE
- GUARD RAIL
- OHW
- OVERHEAD WIRES
- MUNICIPAL WATER LINE
- MUNICIPAL SEWER LINE
- MUNICIPAL DRAIN LINE
- 100' TOPOGRAPHIC CONTOUR
- FENCE LINE
- UTILITY POLE
- CATCH BASIN

NOTES:

1. PROPERTY LINE INFORMATION PROVIDED BY OTHERS AND SHOULD BE REGARDED AS APPROXIMATE.
2. TOPOGRAPHY AND SITE FEATURES TAKEN FROM SURVEY BY OTHERS. ADDITIONAL ABUTTING FEATURES SCALED FROM AERIAL PHOTOGRAPHY. WETLAND AND STREAM LOCATIONS SCALED FROM AVAILABLE RIDEM GIS DATA.
3. TOPOGRAPHY TAKEN FROM AVAILABLE LIDAR DATA. DATUM ELEVATION IS NAVD83.
4. PROPERTY IS ZONED BP (BUSINESS PARK). ABUTTERS PROPERTIES ARE BP AND R10 (RESIDENTIAL).
5. NORTH ARROW TAKEN FROM PLANS PROVIDED BY OTHERS.
6. REFER TO COMPLETE PROJECT NOTES ON SHEET C-2.

No.	Revision	Date	App.
3	MODIFICATION APPLICATION	21JUN24	
2	TOWN SUBMISSION	18OCT23	
1	RIDEM REVISIONS	06OCT22	
0	RIDEM SUBMISSION	26MAY22	

Designed by: JJR Drawn by: JJR Checked by: GES
Scale: 1"=50' Date: REV. 21JUN24

Project Title:
**215 JAMES P MURPHY HWY
SOLAR PROJECT**
A.P. 12, LOT 2
215 JAMES P. MURPHY HIGHWAY
WEST WARWICK, RI 02893

Client/Owner:
DPJ REALTY, LLC
99 JAMES P. MURPHY HIGHWAY
WEST WARWICK, RI 02893

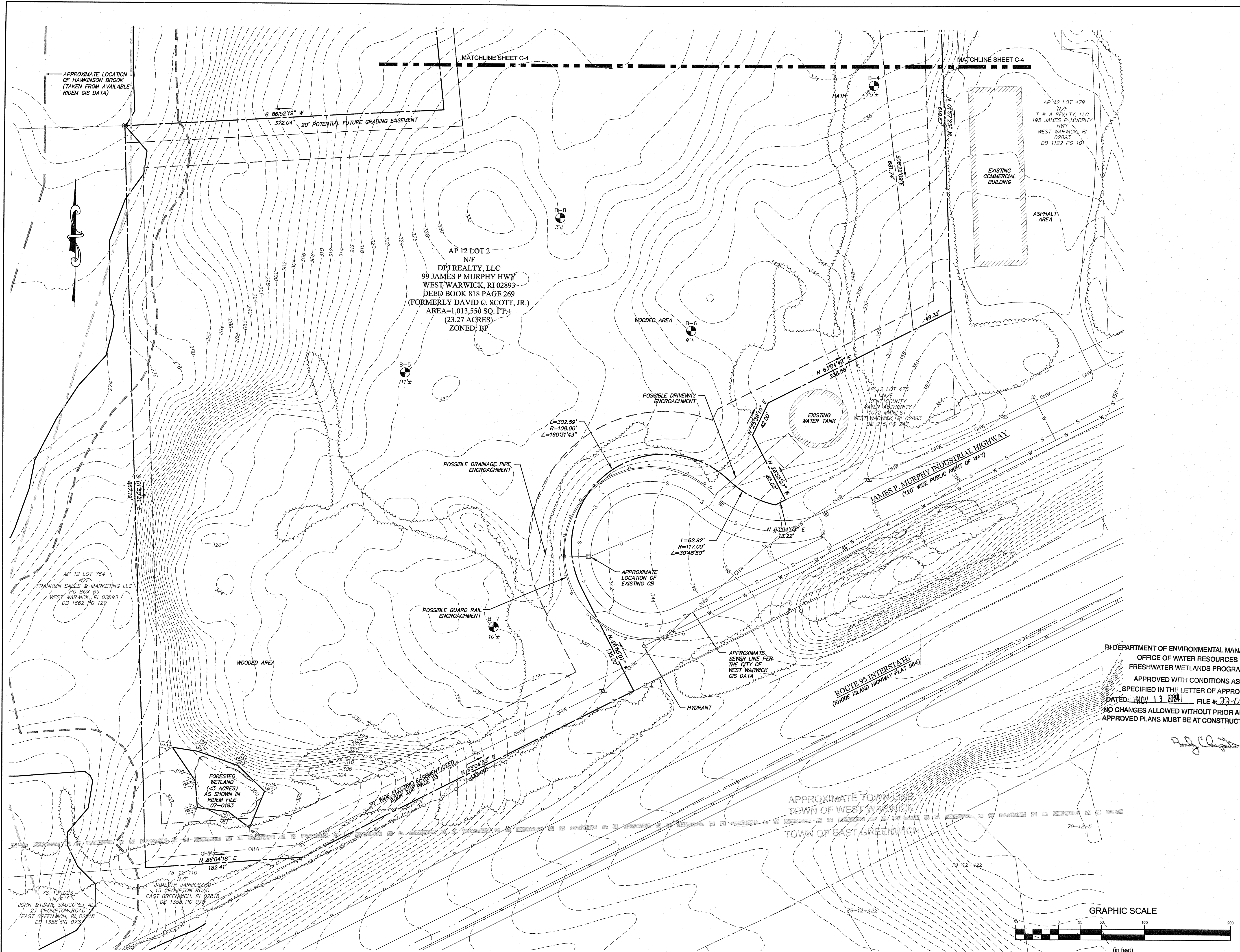
Issued for:
PERMITTING

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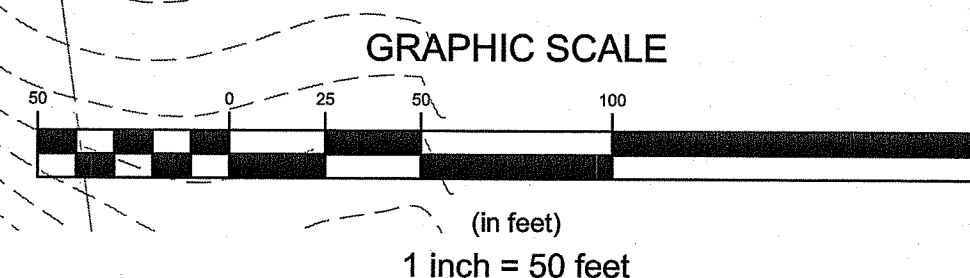
**EXISTING CONDITIONS PLAN
(SOUTH SIDE)**

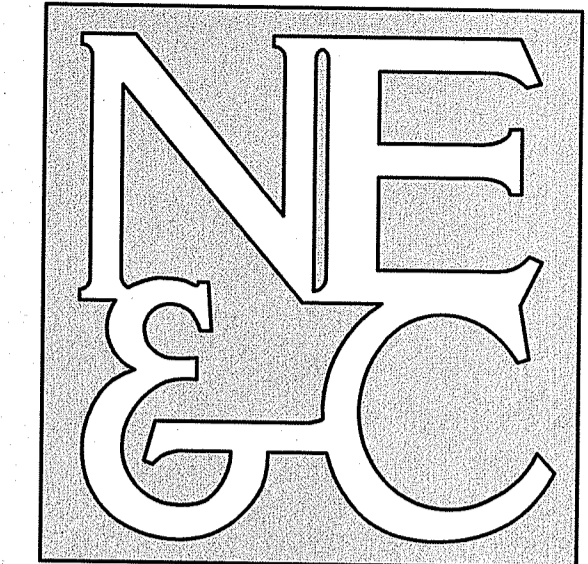
Drawing Number:
C-3
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Project Number:
21193.0
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RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
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DATED: **NOV 13 2024** FILE # **22-0190**
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LEGEND:

- PROPERTY LINE
- - - BUTTER PROPERTY LINE
- FRESHWATER WETLAND BOUNDARY (RIGIS)
- - - PERIMETER WETLAND BOUNDARY (RIGIS)
- - - APPROXIMATE STREAM (RIGIS)
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- - - TOPOGRAPHIC CONTOUR
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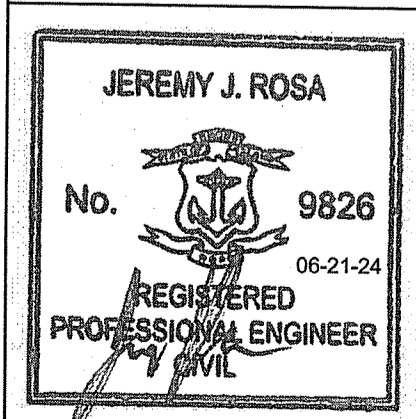
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2	TOWN SUBMISSION	18OCT23			
1	RIDEM REVISIONS	08OCT22			
0	RIDEM SUBMISSION	28MAY22			
No.	Revision	Date	App.		
Designed By:	JJR	Drawn by:	JJR	Checked by:	GES
Scale:	1"=50'	Date:	REV. 21JUN24		

Project Title:
**215 JAMES P MURPHY HWY
SOLAR PROJECT**
A.P. 12, LOT 2
215 JAMES P. MURPHY HIGHWAY
WEST WARWICK, RI 02893

Client/Owner:
DPJ REALTY, LLC
99 JAMES P. MURPHY HIGHWAY
WEST WARWICK, RI 02893

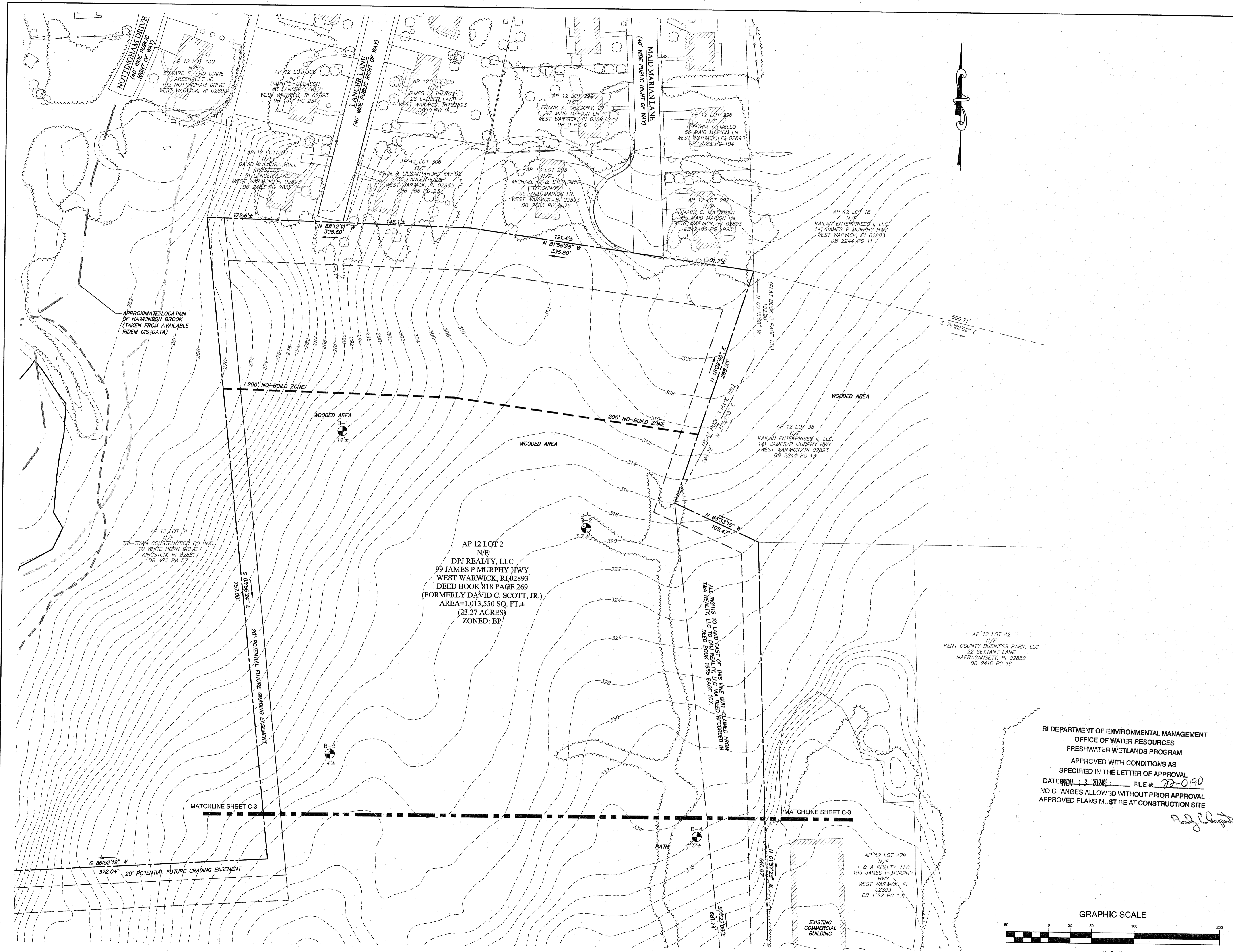
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Drawing Title:
**EXISTING CONDITIONS PLAN
(NORTH SIDE)**

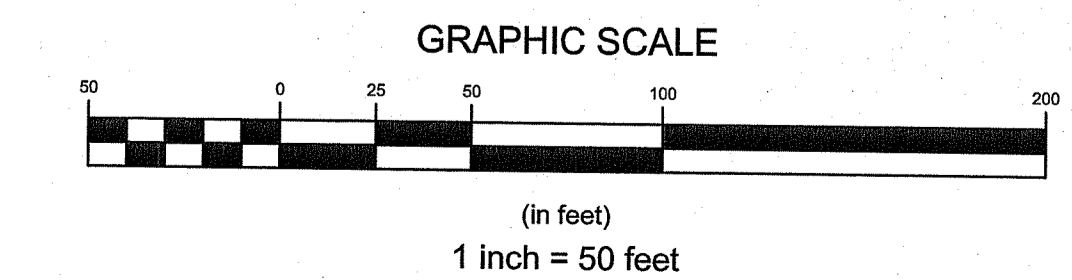


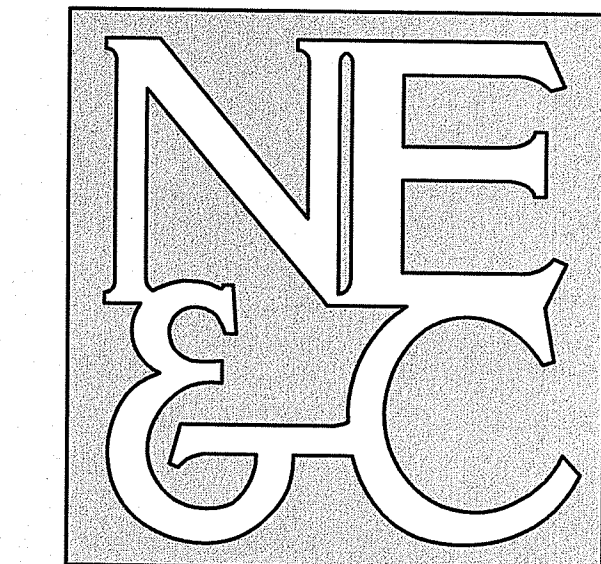
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21193.0
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RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
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DATED NOV 13 2024 FILE # 22-0190
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- REFER TO COMPLETE PROJECT NOTES ON SHEET C-2.

LEGEND:

---	PROPERTY LINE
---	ABUTTER PROPERTY LINE
---	FRESHWATER WETLAND BOUNDARY (RIGIS)
---	PERIMETER WETLAND BOUNDARY (RIGIS)
---	APPROXIMATE STREAM (RIGIS)
---	APPROXIMATE RIVERBANK WETLAND (RIGIS)
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---	EASEMENT LINE
---	GUARD RAIL
---	OVERHEAD WIRES
---	MUNICIPAL WATER LINE
---	MUNICIPAL SEWER LINE
---	MUNICIPAL DRAIN LINE
---	TOPOGRAPHIC CONTOUR
---	FENCE LINE
---	UTILITY POLE
---	CATCH BASIN
---	PROPOSED TOPOGRAPHIC CONTOUR
---	PROPOSED SPOT ELEVATION
---	PROPOSED FENCE LINE
---	PROPOSED DRAIN LINE
---	PROPOSED OVERHEAD WIRE
---	PROPOSED UTILITY POLE
---	PROPOSED DRAIN MANHOLE
---	PROPOSED CATCH BASIN

No.	Revision	Date	App.
3	MODIFICATION APPLICATION	21JUN24	
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1	RIDEM REVISIONS	06OCT22	
0	RIDEM SUBMISSION	28MAY22	

Designed By: JJR Drawn by: JJR Checked by: GES
Scale: 1"=50' Date: REV. 21JUN24

Project Title:
**215 JAMES P MURPHY HWY
SOLAR PROJECT**
A.P. 12, LOT 2
215 JAMES P. MURPHY HIGHWAY
WEST WARWICK, RI 02893

Client/Owner:
DPJ REALTY, LLC
99 JAMES P. MURPHY HIGHWAY
WEST WARWICK, RI 02893

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Drawing Title:
**PROPOSED CONDITIONS PLAN
(SOUTH SIDE)**

Drawing Number:
C-5

Sheet **5** of 11

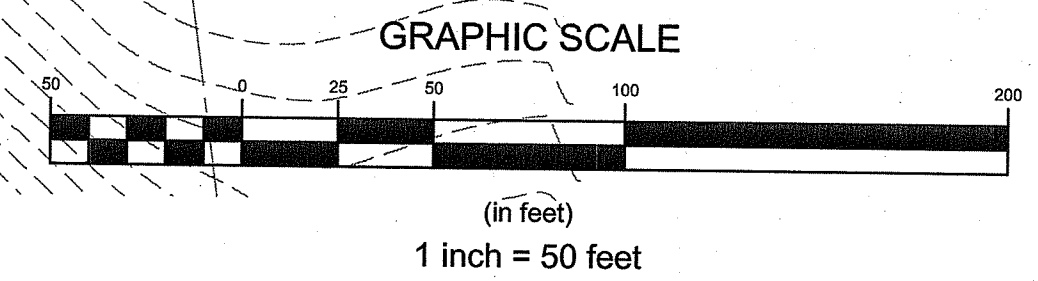
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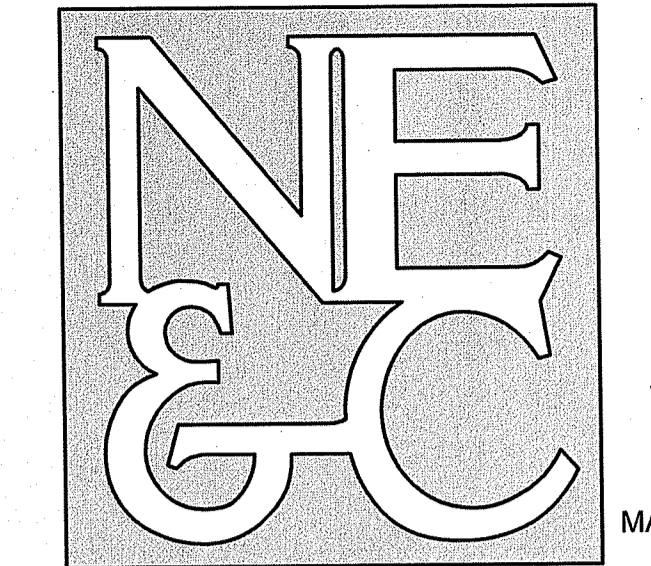
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No.	Revision	Date	App.
5	RIDEM COMMENTS	15SEP24	
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1	DESIGN CLARIFICATION FOR RIDEM	08JUN22	
0	RIDEM SUBMISSION	26MAY22	

Designed By: JJR Drawn by: JJR Checked by: GES
Scale: 1"=50' Date: REV. 21JUN24

Project Title:
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WEST WARWICK, RI 02893

Client/Owner:
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99 JAMES P. MURPHY HIGHWAY
WEST WARWICK, RI 02893

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Drawing Title:
**PROPOSED CONDITIONS PLAN
(NORTH SIDE)**

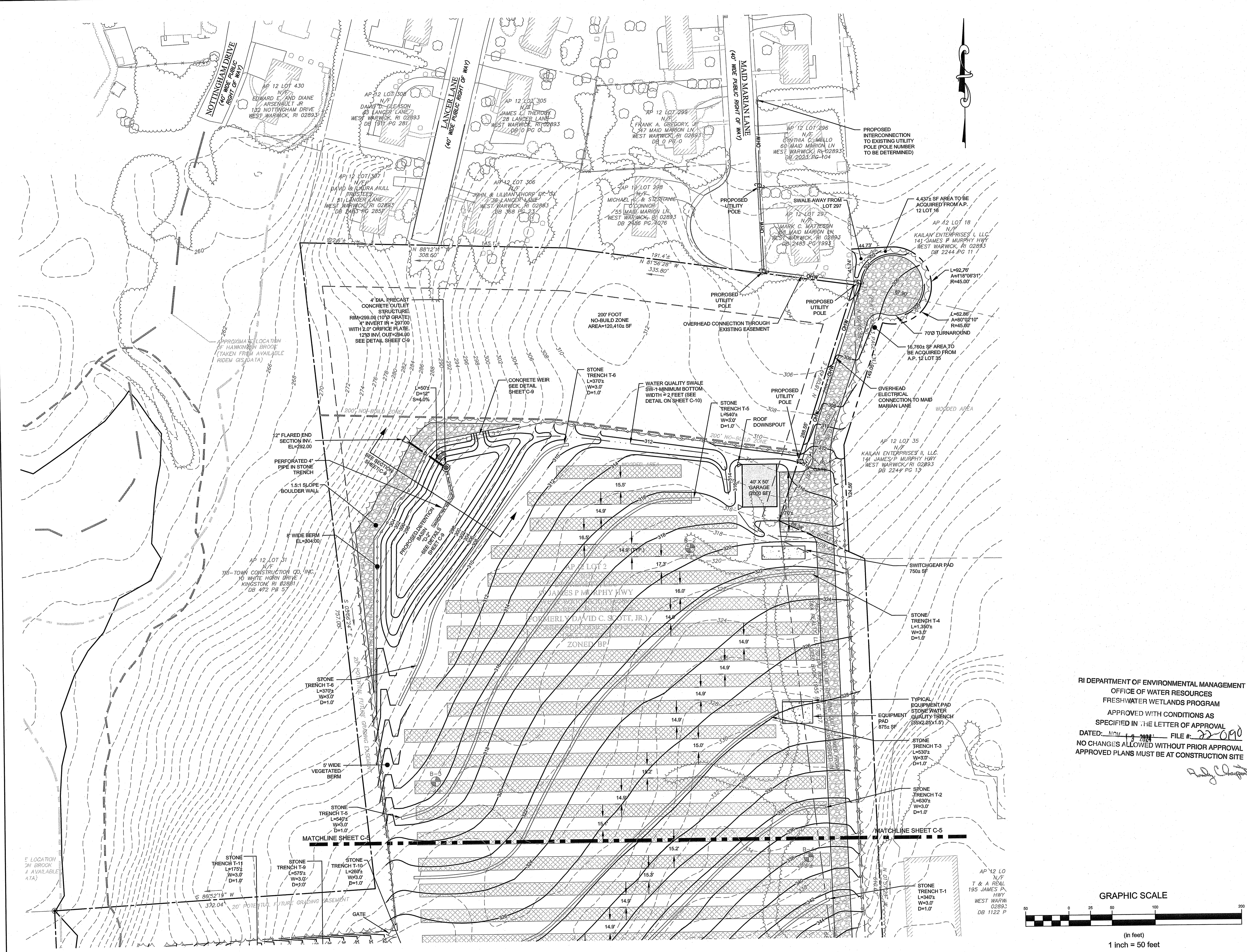
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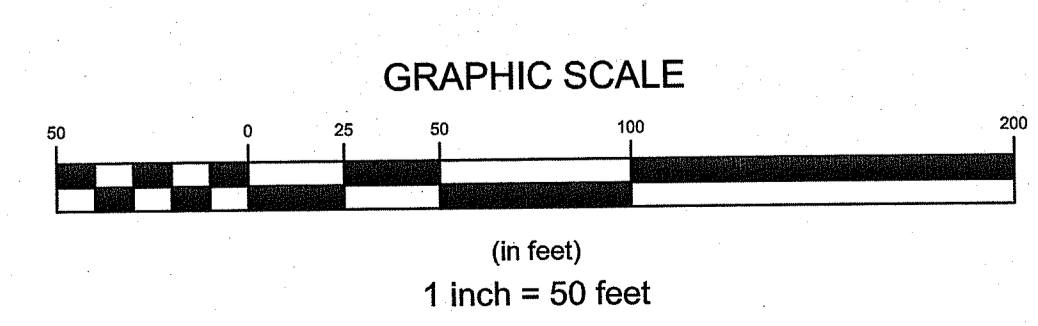
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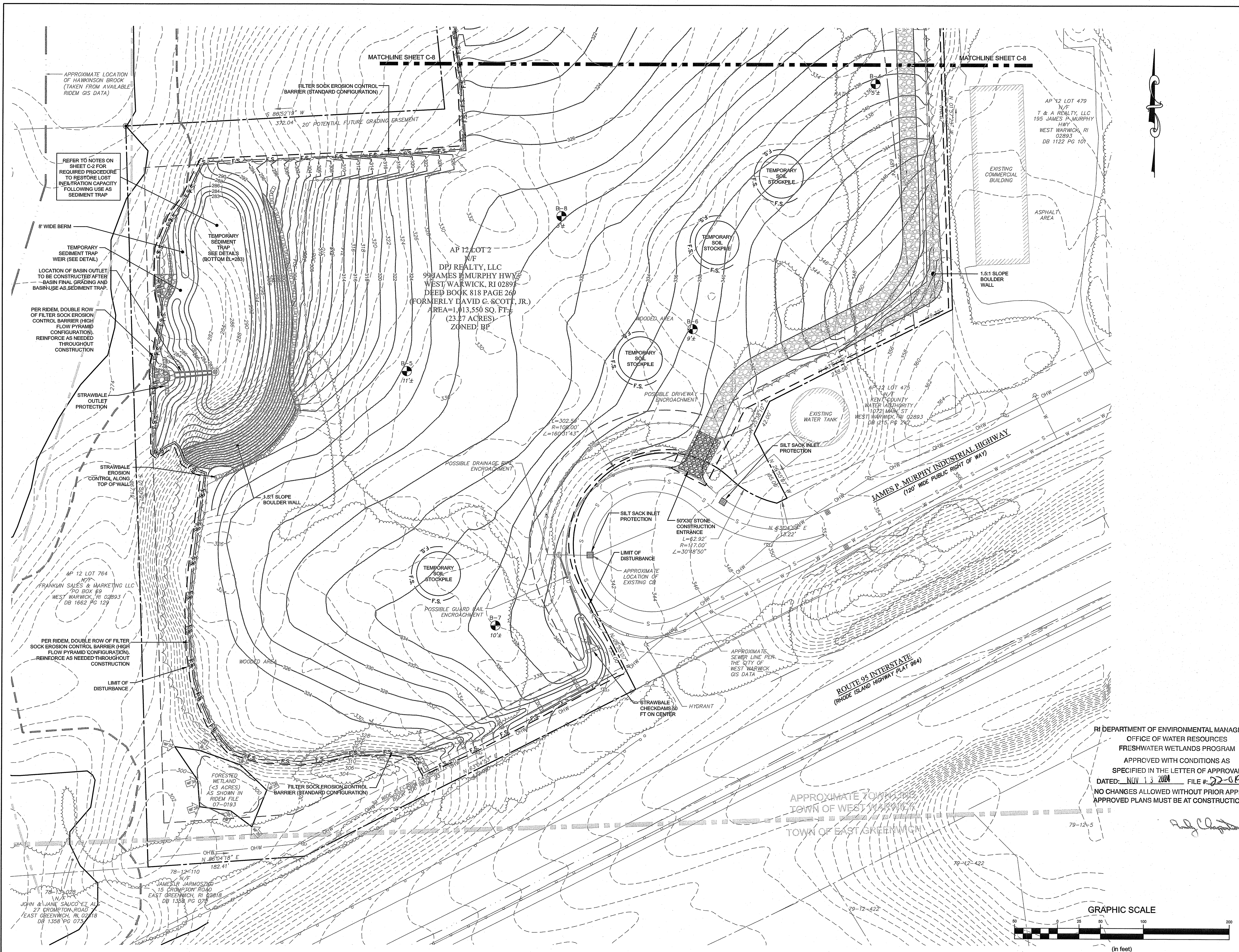
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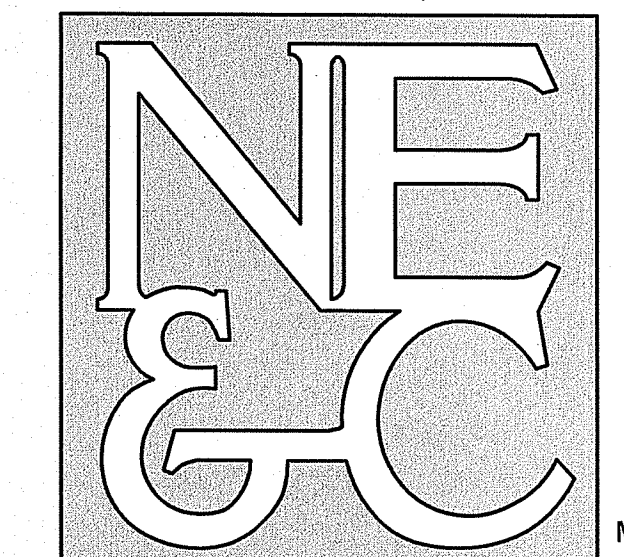


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NOTES:
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LEGEND:

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---	PROPOSED DRAIN MANHOLE
---	PROPOSED CATCH BASIN
---	PROPOSED STRAW BALES
---	PROPOSED FILTER SOCK EROSION CONTROL
---	PROPOSED LIMIT OF DISTURBANCE

3	RIDEM REVISIONS	16SEP24
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0	RIDEM SUBMISSION	26MAY22

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Scale:	1"=50'	Date:	REV. 21JUN24		

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A.P. 12, LOT 2
215 JAMES P. MURPHY HIGHWAY
WEST WARWICK, RI 02893

Client/Owner:
DPJ REALTY, LLC
99 JAMES P. MURPHY HIGHWAY
WEST WARWICK, RI 02893

Issued for:
PERMITTING

Drawing Title:
**SOIL EROSION & SEDIMENT CONTROL
(SOUTH SIDE)**

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS AS
SPECIFIED IN THE LETTER OF APPROVAL
DATED: NOV 13 2024 FILE #: 22-0190
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Drawing Number:
C-7

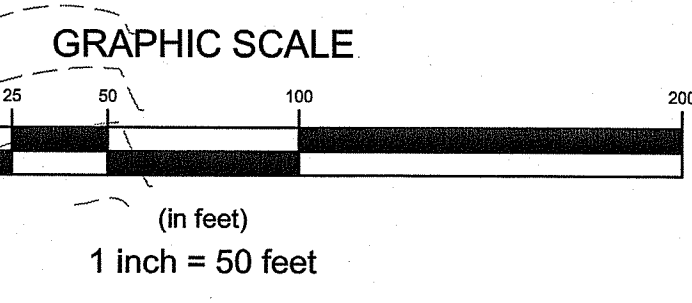
Sheet **7** of **11**

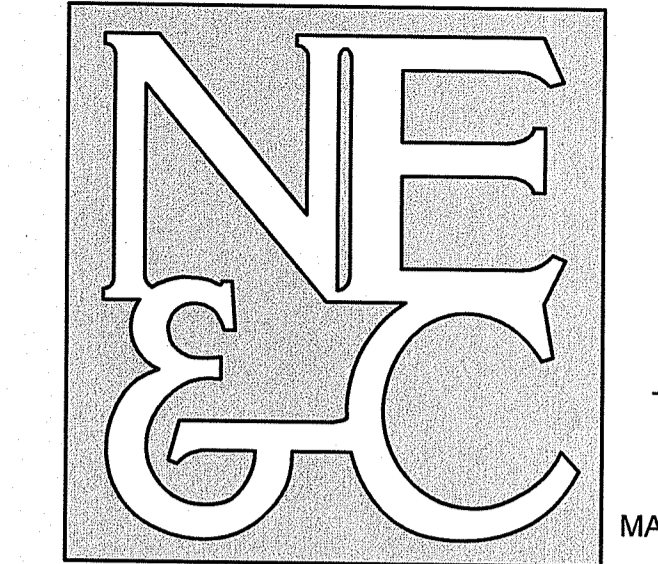
Project Number:
21193.0

Survey Index:

JEREMY J. ROSA
No. **9826**
REGISTERED PROFESSIONAL ENGINEER
CIVIL

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NOTES:

- REFER TO COMPLETE PROJECT NOTES ON SHEET C-2.

LEGEND:

- PROPERTY LINE
- ABUTTER PROPERTY LINE
- FRESHWATER WETLAND BOUNDARY (RIGIS)
- PERIMETER WETLAND BOUNDARY (RIGIS)
- APPROXIMATE STREAM (RIGIS)
- APPROXIMATE RIVERBANK WETLAND (RIGIS)
- ZONING BUILDING SETBACK
- EASEMENT LINE
- GUARD RAIL
- OVERHEAD WIRES
- CHW --- MUNICIPAL WATER LINE
- S --- MUNICIPAL SEWER LINE
- MUNICIPAL DRAIN LINE
- TOPOGRAPHIC CONTOUR
- FENCE LINE
- UTILITY POLE
- CATCH BASIN
- PROPOSED TOPOGRAPHIC CONTOUR
- +100.00 --- PROPOSED SPOT ELEVATION
- PROPOSED DRAIN LINE
- CHW --- PROPOSED OVERHEAD WIRE
- --- PROPOSED UTILITY POLE
- --- PROPOSED DRAIN MANHOLE
- --- PROPOSED CATCH BASIN
- PROPOSED STRAW BALES
- F.S. --- PROPOSED FILTER SOCK EROSION CONTROL
- PROPOSED LIMIT OF DISTURBANCE

No.	Revision	Date	App.
3	RIDEM REVISIONS	16SEP24	
2	MODIFICATION APPLICATION	21JUN24	
1	TOWN SUBMISSION	18OCT23	
0	RIDEM SUBMISSION	28MAY22	

Designed By: JJR Drawn by: JJR Checked by: GES
Scale: 1"=50' Date: REV. 21JUN24

Project Title:
**215 JAMES P MURPHY HWY
SOLAR PROJECT**
A.P. 12, LOT 2
215 JAMES P. MURPHY HIGHWAY
WEST WARWICK, RI 02893

Client/Owner:
DPJ REALTY, LLC
99 JAMES P. MURPHY HIGHWAY
WEST WARWICK, RI 02893

Issued for:
PERMITTING

Drawing Title:
**SOIL EROSION & SEDIMENT CONTROL
(NORTH SIDE)**

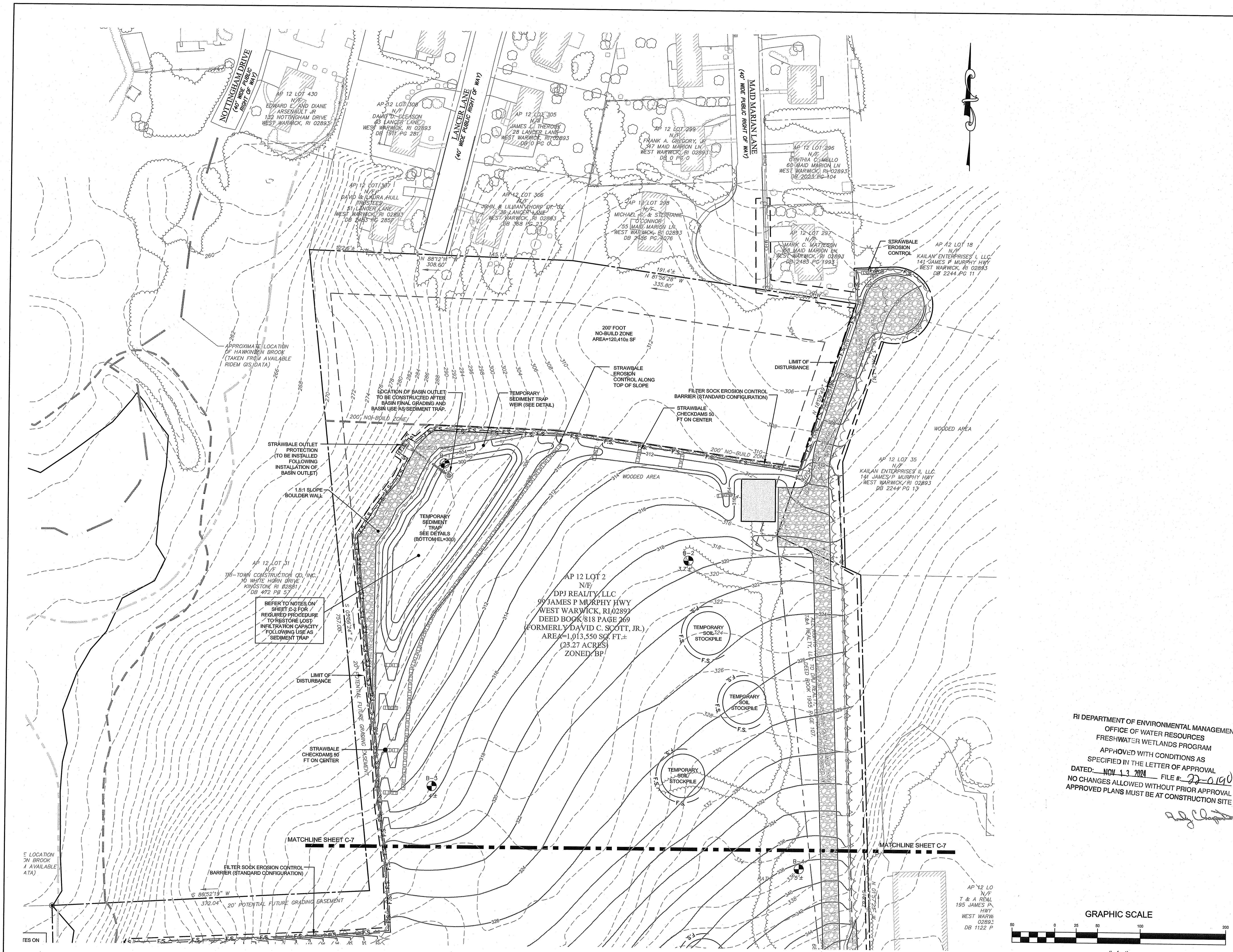
Drawing Number:
C-8

Sheet **8** of **11**

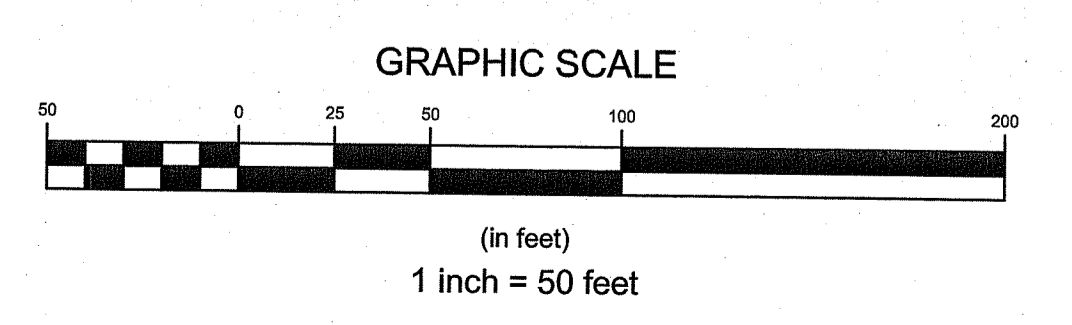
Project Number:
21193.0

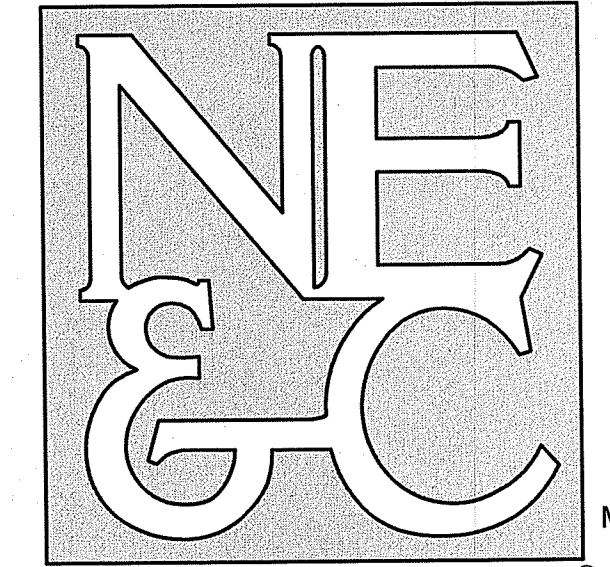
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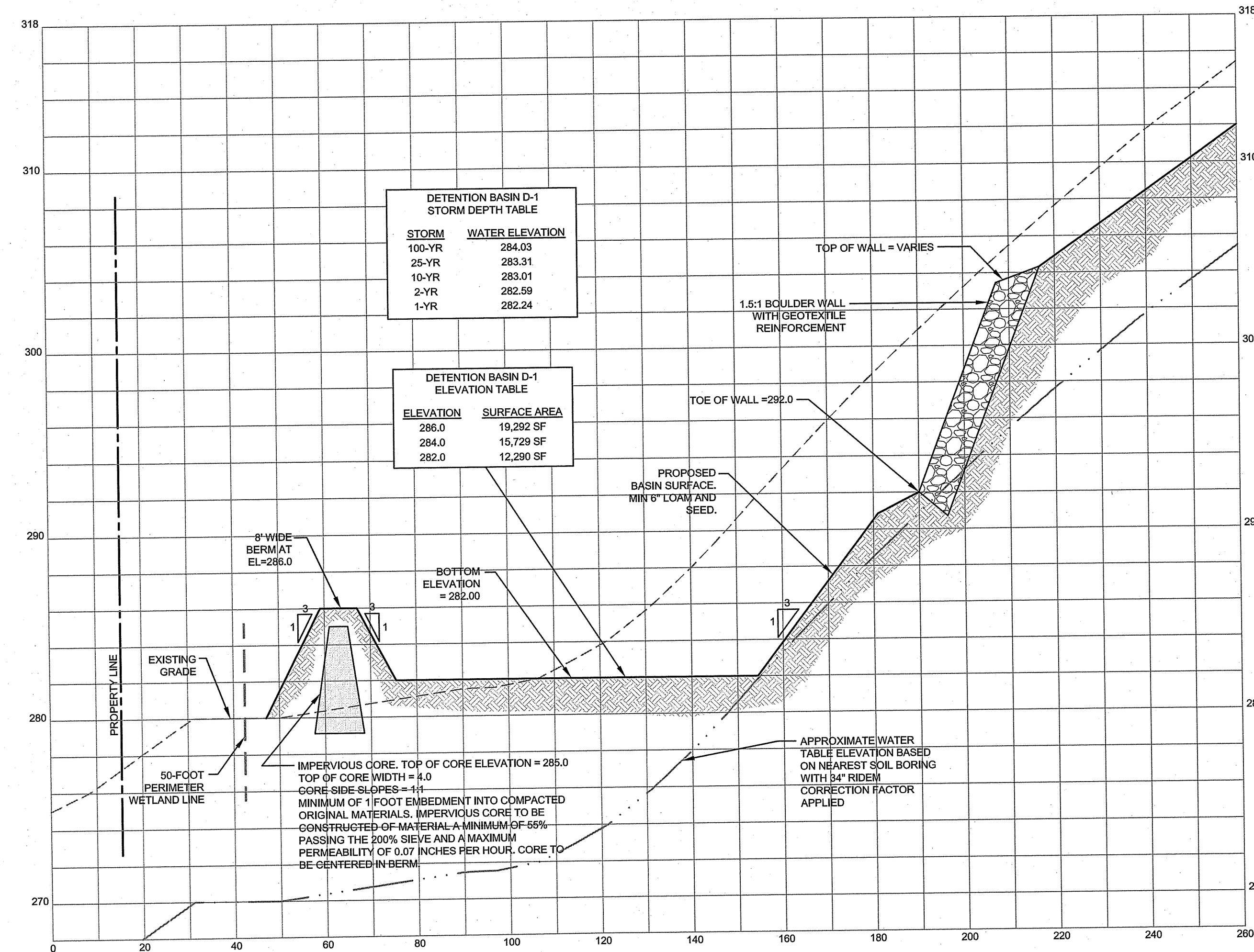
RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS AS
SPECIFIED IN THE LETTER OF APPROVAL
DATED: NOV 13 2024 FILE # 22-0190
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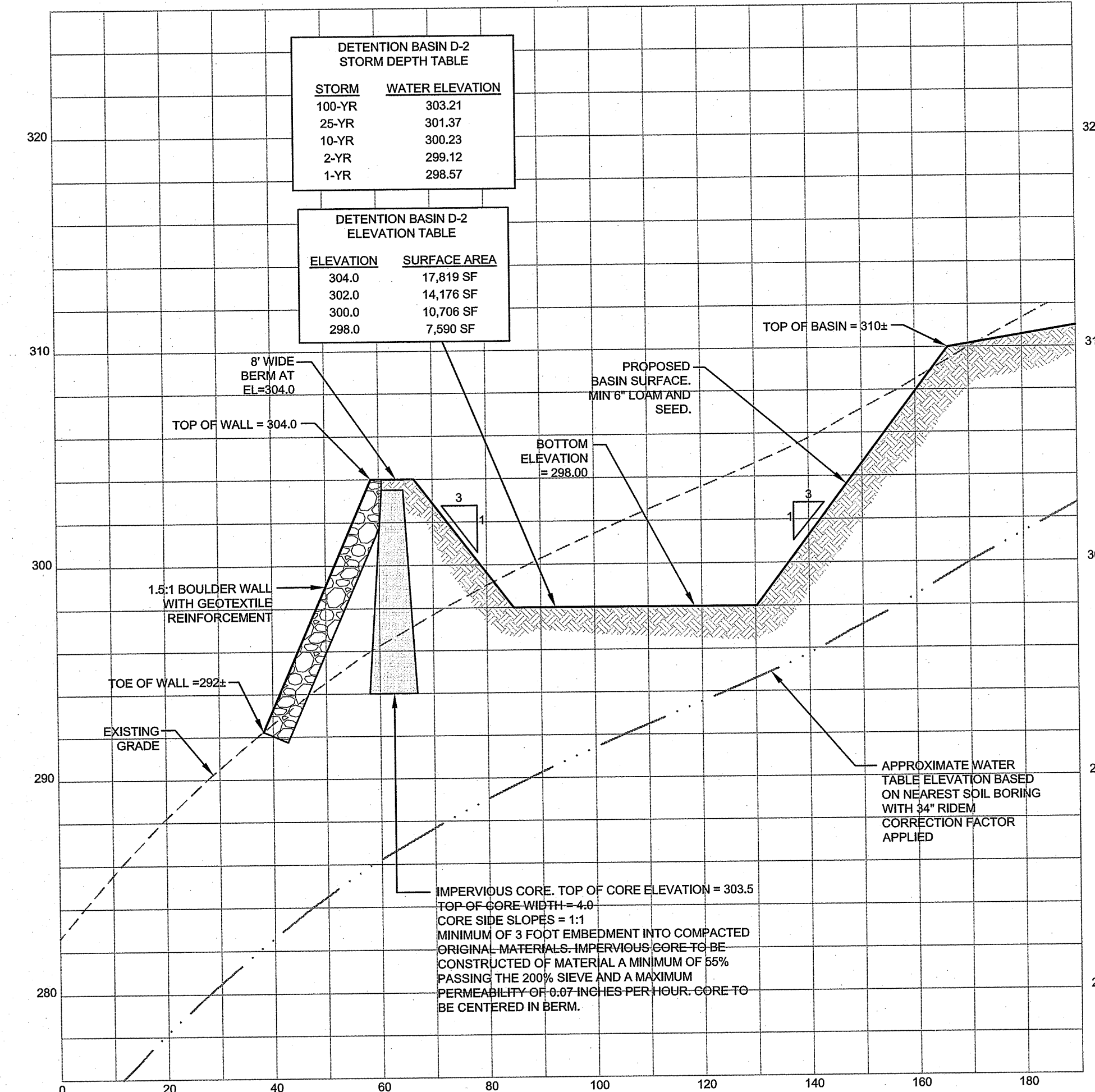


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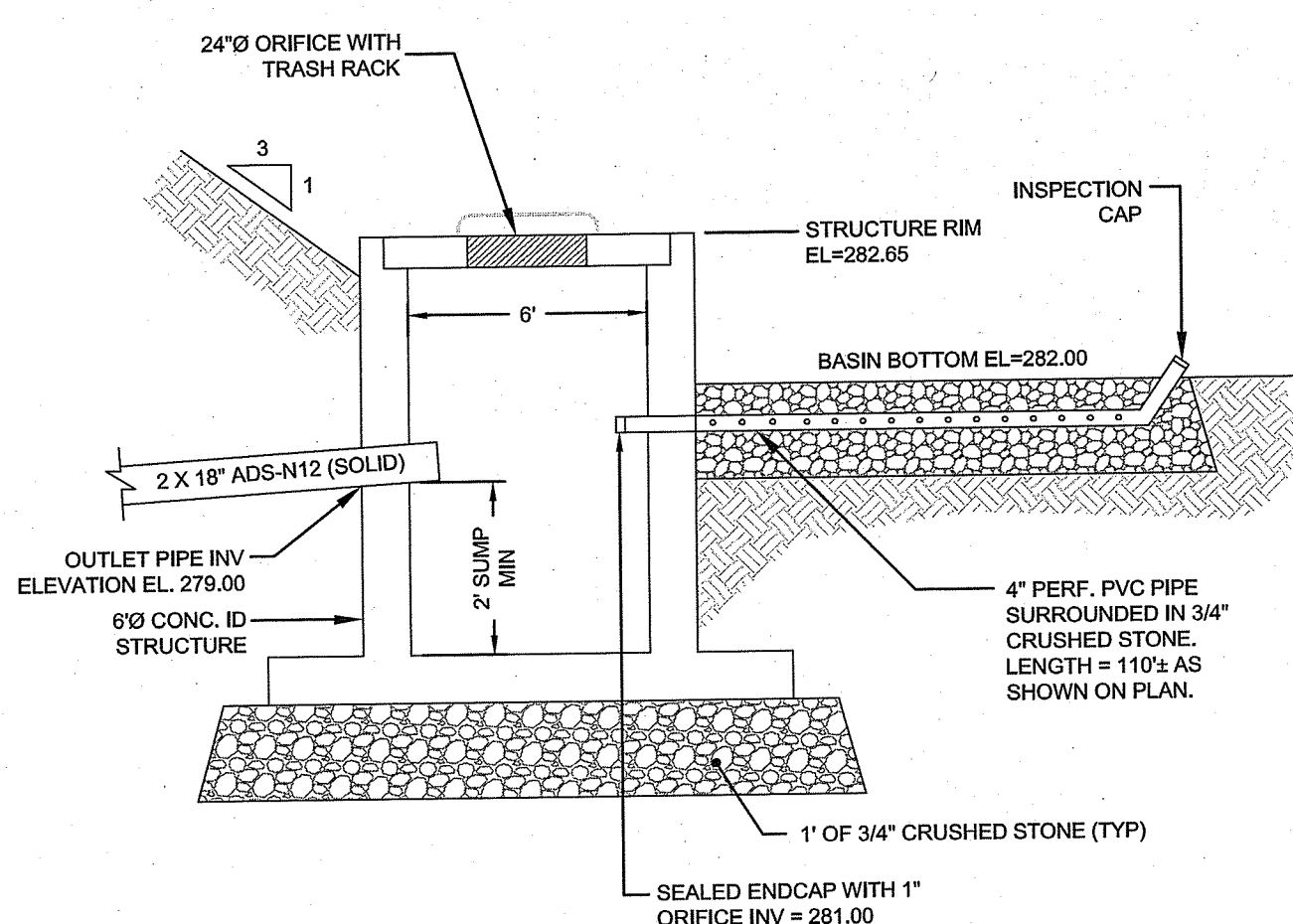
6 VALLEY ROAD MIDDLETOWN RHODE ISLAND 02842
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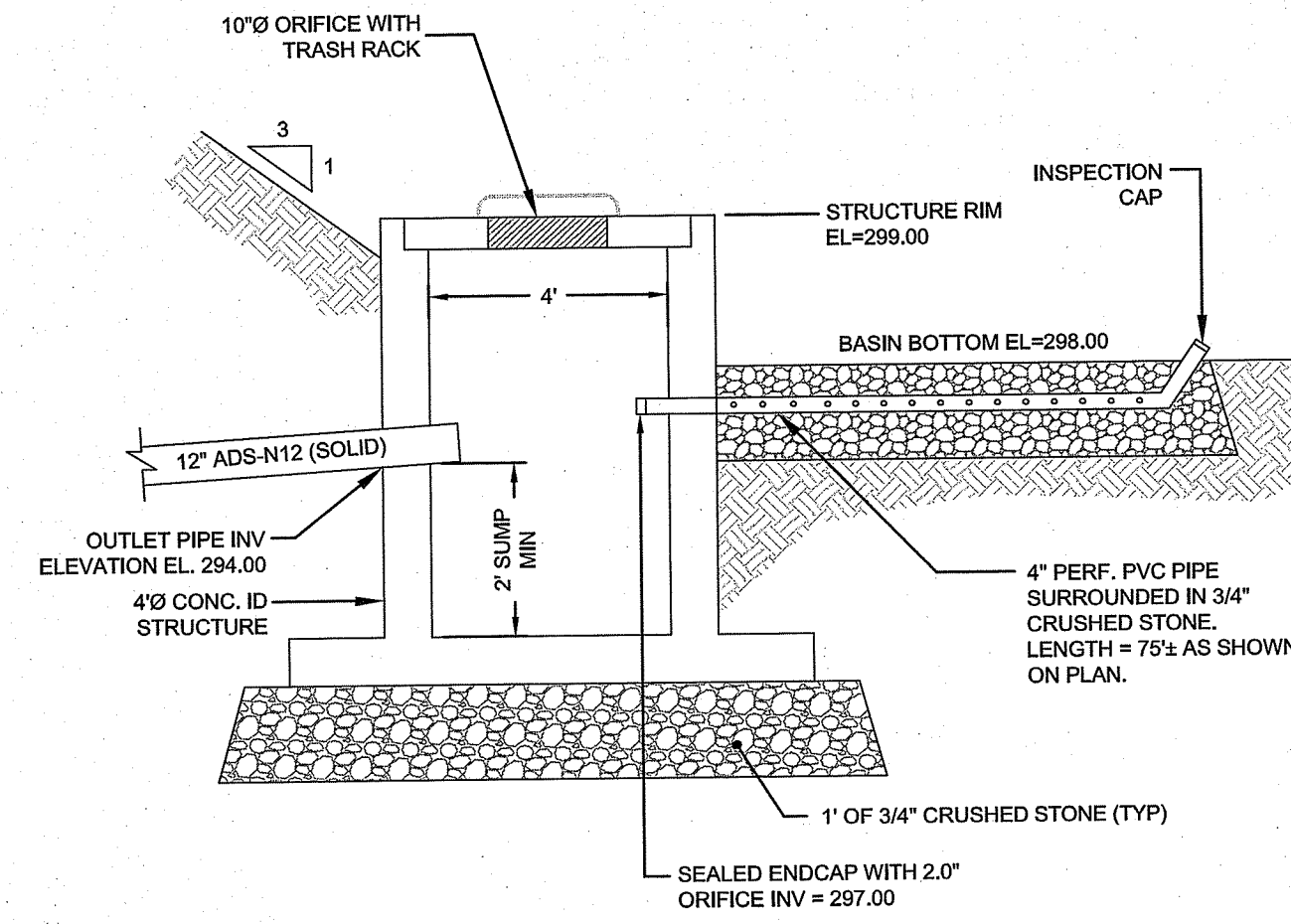
BASIN D-1 CROSS SECTION
HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 5'



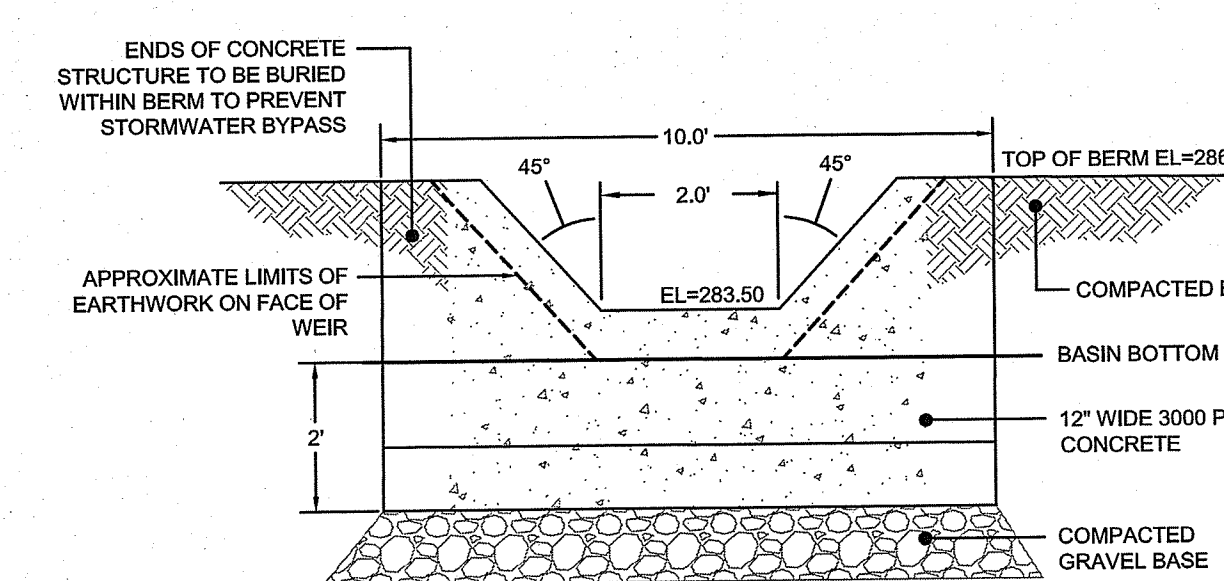
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HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 5'



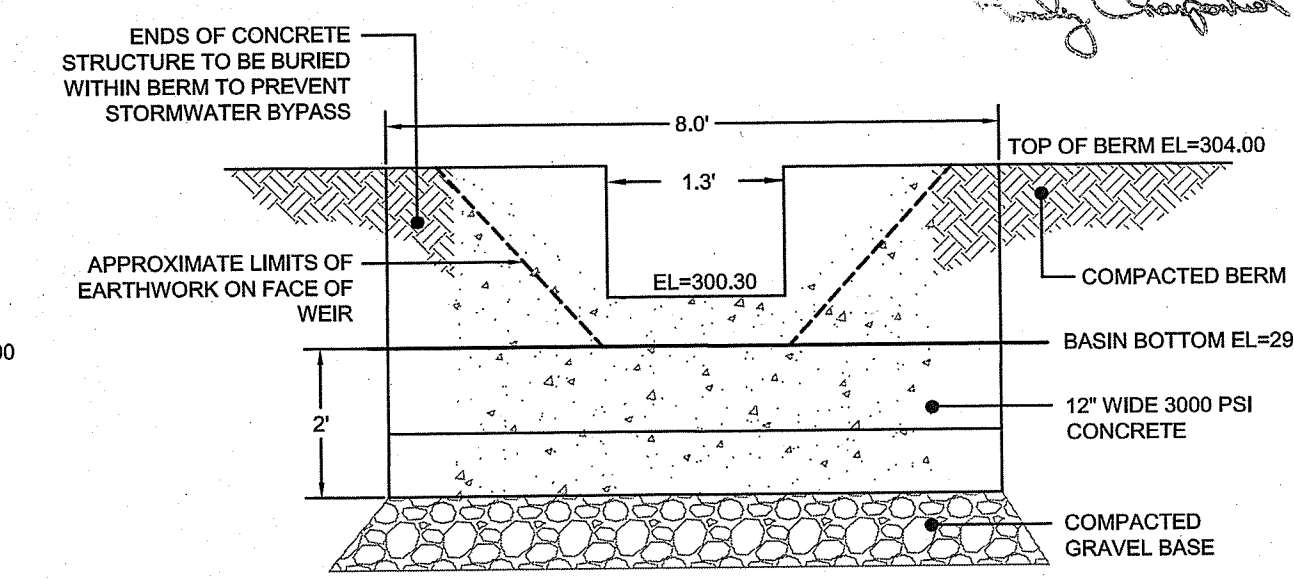
BASIN D-1 OUTLET STRUCTURE
SCALE: NOT TO SCALE



BASIN D-2 OUTLET STRUCTURE
SCALE: NOT TO SCALE



BASIN D-1 CONCRETE V-TRAP WEIR DETAIL
SCALE: NOT TO SCALE



BASIN D-2 CONCRETE NOTCH WEIR DETAIL
SCALE: NOT TO SCALE

No.	Revision	Date	App.
4	RIDEM REVISIONS	16SEP24	
3	MODIFICATION APPLICATION	21JUN24	
2	TOWN SUBMISSION	18OCT23	
1	RIDEM REVISIONS	06OCT22	
0	RIDEM SUBMISSION	28MAY22	

Designed By: JJR Drawn by: JJR Checked by: GES
Scale: AS SHOWN Date: REV. 21JUN24

Project Title:
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A.P. 12, LOT 2
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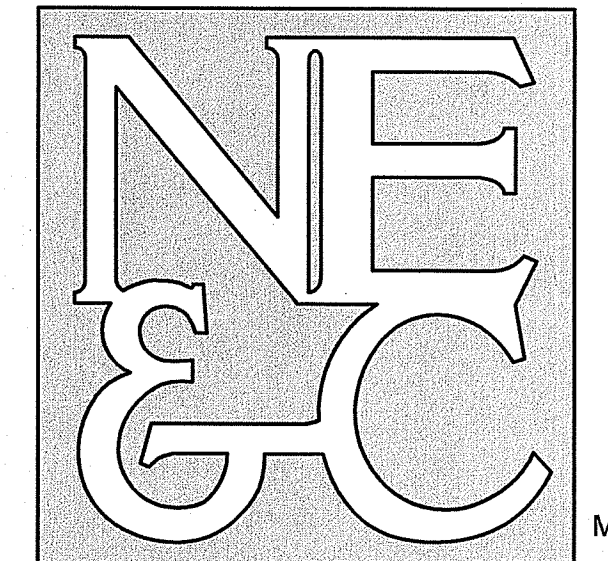
Issued for:
PERMITTING

Drawing Title:
SITE DETAILS 1

Drawing Number: **C-9**
Sheet **9** of **11**
Project Number: **21193.0**
Survey Index: -

JEREMY J. ROSA
No. **9826**
REGISTERED PROFESSIONAL ENGINEER
09-16-24

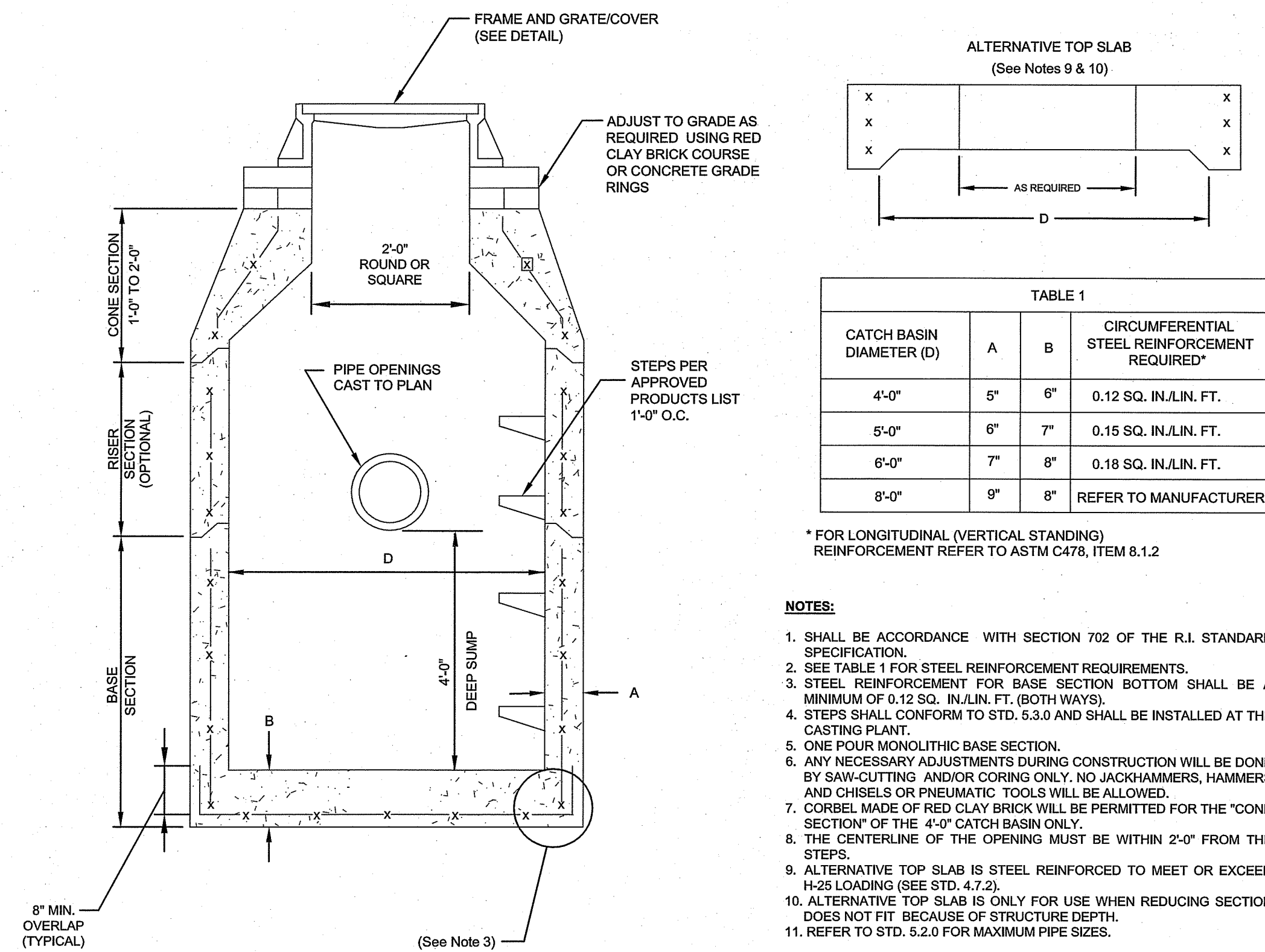
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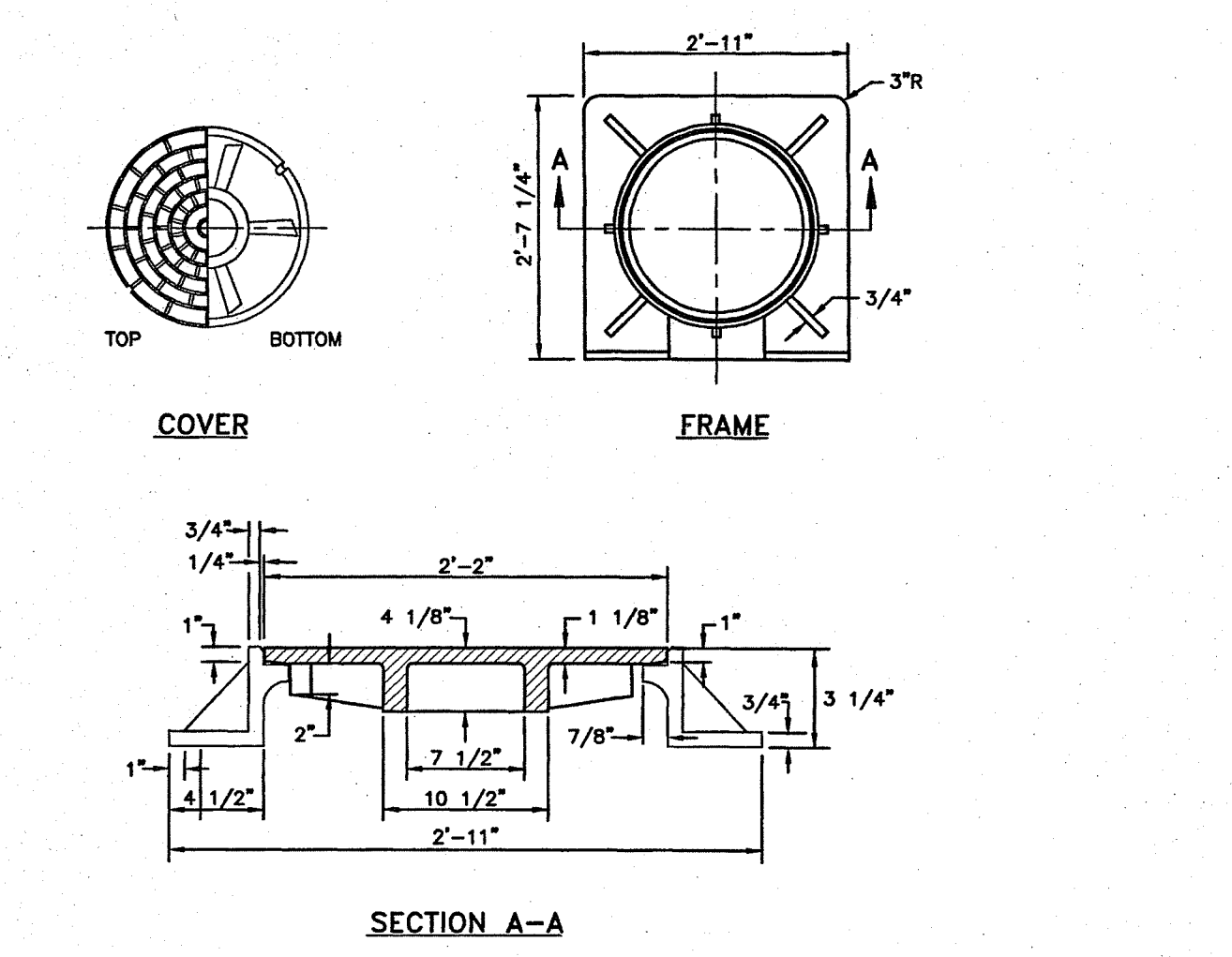
ALTERNATIVE TOP SLAB (See Notes 9 & 10)

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.
8'-0"	9"	8"	REFER TO MANUFACTURER

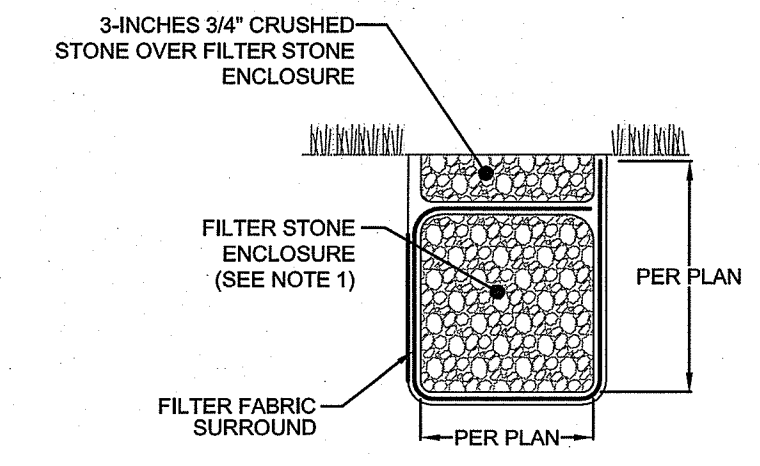
* FOR LONGITUDINAL (VERTICAL STANDING) REINFORCEMENT REFER TO ASTM C478, ITEM 8.1.2

- NOTES:
- SHALL BE ACCORDANCE WITH SECTION 702 OF THE R.I. STANDARD SPECIFICATION.
 - SEE TABLE 1 FOR STEEL REINFORCEMENT REQUIREMENTS.
 - STEEL REINFORCEMENT FOR BASE SECTION BOTTOM SHALL BE A MINIMUM OF 0.12 SQ. IN./LIN. FT. (BOTH WAYS).
 - STEPS SHALL CONFORM TO STD. 5.3.0 AND SHALL BE INSTALLED AT THE CASTING PLANT.
 - ONE FOUR MONOLITHIC BASE SECTION.
 - ANY NECESSARY ADJUSTMENTS DURING CONSTRUCTION WILL BE DONE BY SAW-CUTTING AND/OR CORING ONLY. NO JACK-HAMMERS, HAMMERS AND CHISELS OR PNEUMATIC TOOLS WILL BE ALLOWED.
 - CORREL MADE OF RED CLAY BRICK WILL BE PERMITTED FOR THE "CONE SECTION" OF THE 4'-0" CATCH BASIN ONLY.
 - THE CENTERLINE OF THE OPENING MUST BE WITHIN 2'-0" FROM THE STEPS.
 - ALTERNATIVE TOP SLAB IS STEEL REINFORCED TO MEET OR EXCEED H-25 LOADING (SEE STD. 4.7.2).
 - ALTERNATIVE TOP SLAB IS ONLY FOR USE WHEN REDUCING SECTION DOES NOT FIT BECAUSE OF STRUCTURE DEPTH.
 - REFER TO STD. 5.2.0 FOR MAXIMUM PIPE SIZES.

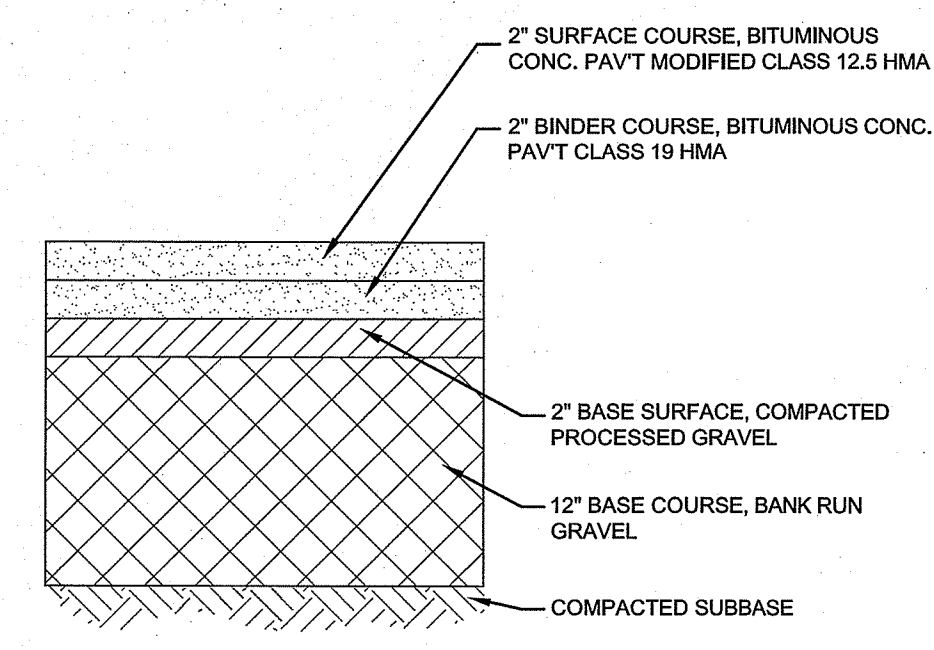
PRECAST ROUND CATCH BASIN & DRAIN MANHOLE (RIDOT 4.4.0)
 SCALE: NOT TO SCALE



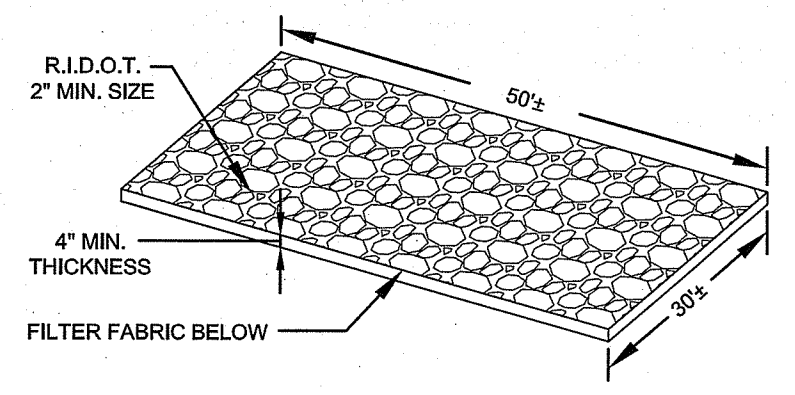
HEAVY DUTY SQUARE FRAME AND ROUND COVER (RIDOT 6.1.1)
 SCALE: NOT TO SCALE



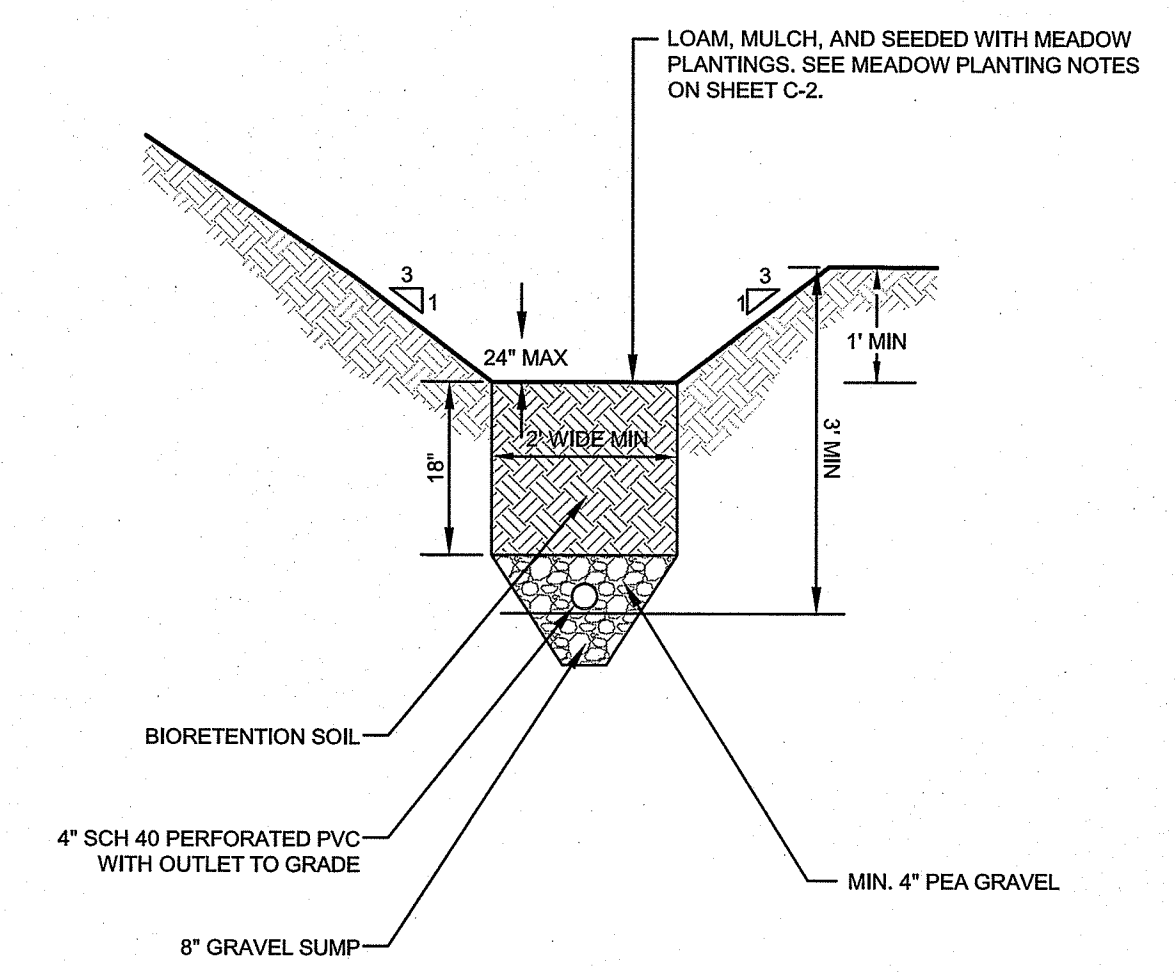
TYPICAL WATER QUALITY TRENCH / LEVEL SPREADER SECTION
 SCALE: NOT TO SCALE



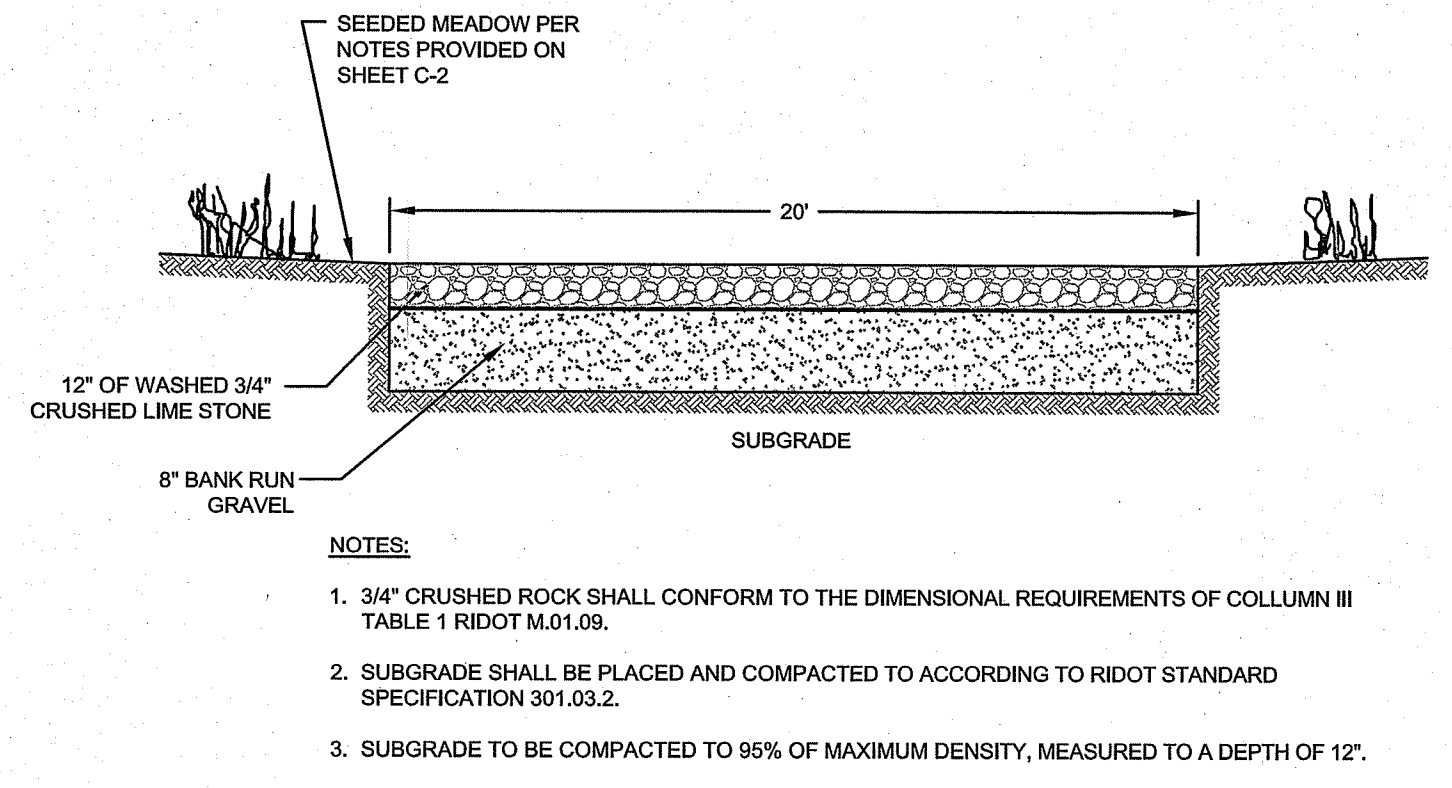
TYPICAL BITUMINOUS PAVEMENT SECTION
 SCALE: NOT TO SCALE



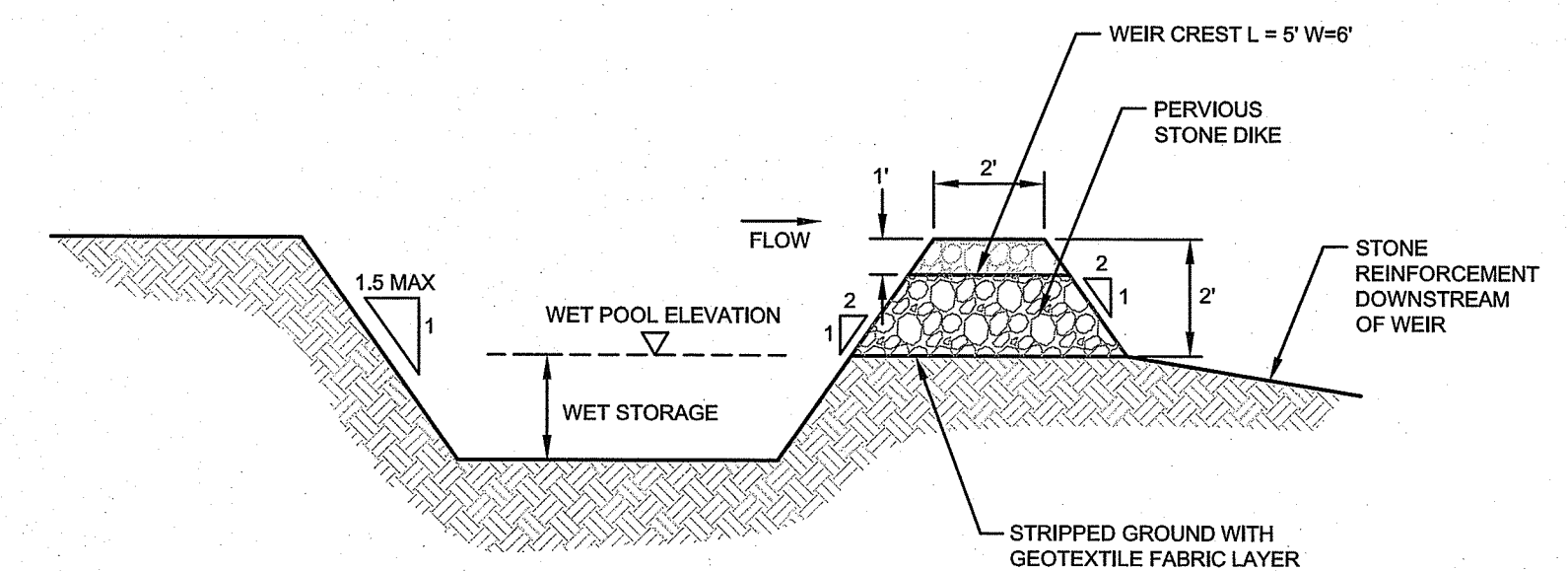
CONSTRUCTION ENTRANCE
 SCALE: NOT TO SCALE



GRASSED (DRY) SWALE (SW-1) CROSS SECTION (MINIMUM BOTTOM WIDTH OF 2-FEET)
 SCALE: NOT TO SCALE



PERVIOUS CRUSHED STONE DRIVEWAY
 SCALE: NOT TO SCALE



TYPICAL SEDIMENT TRAP DETAILS
 SCALE: NOT TO SCALE

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
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No.	Revision	Date	App.
4	RIDEM REVISIONS	18SEP24	
3	MODIFICATION APPLICATION	21JUN24	
2	TOWN SUBMISSION	18OCT23	
1	RIDEM REVISIONS	08OCT22	
0	RIDEM SUBMISSION	28MAY22	

Designed By: JJR Drawn by: JJR Checked by: GES
 Scale: AS SHOWN Date: REV. 21JUN24

Project Title:
**215 JAMES P MURPHY HWY
 SOLAR PROJECT**
 A.P. 12, LOT 2
 215 JAMES P. MURPHY HIGHWAY
 WEST WARWICK, RI 02893

Client/Owner:
 DPJ REALTY, LLC
 99 JAMES P. MURPHY HIGHWAY
 WEST WARWICK, RI 02893

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Drawing Title:
SITE DETAILS 2

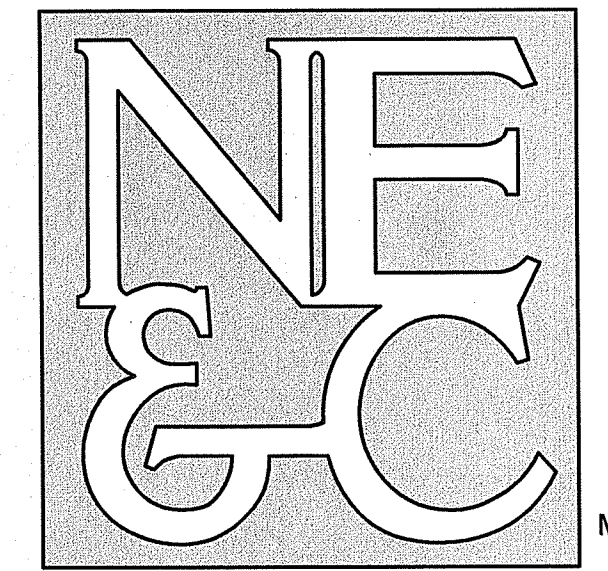
Drawing Number:
C-10

Sheet **10** of **11**

Project Number:
21193.0

Survey Index:
 -

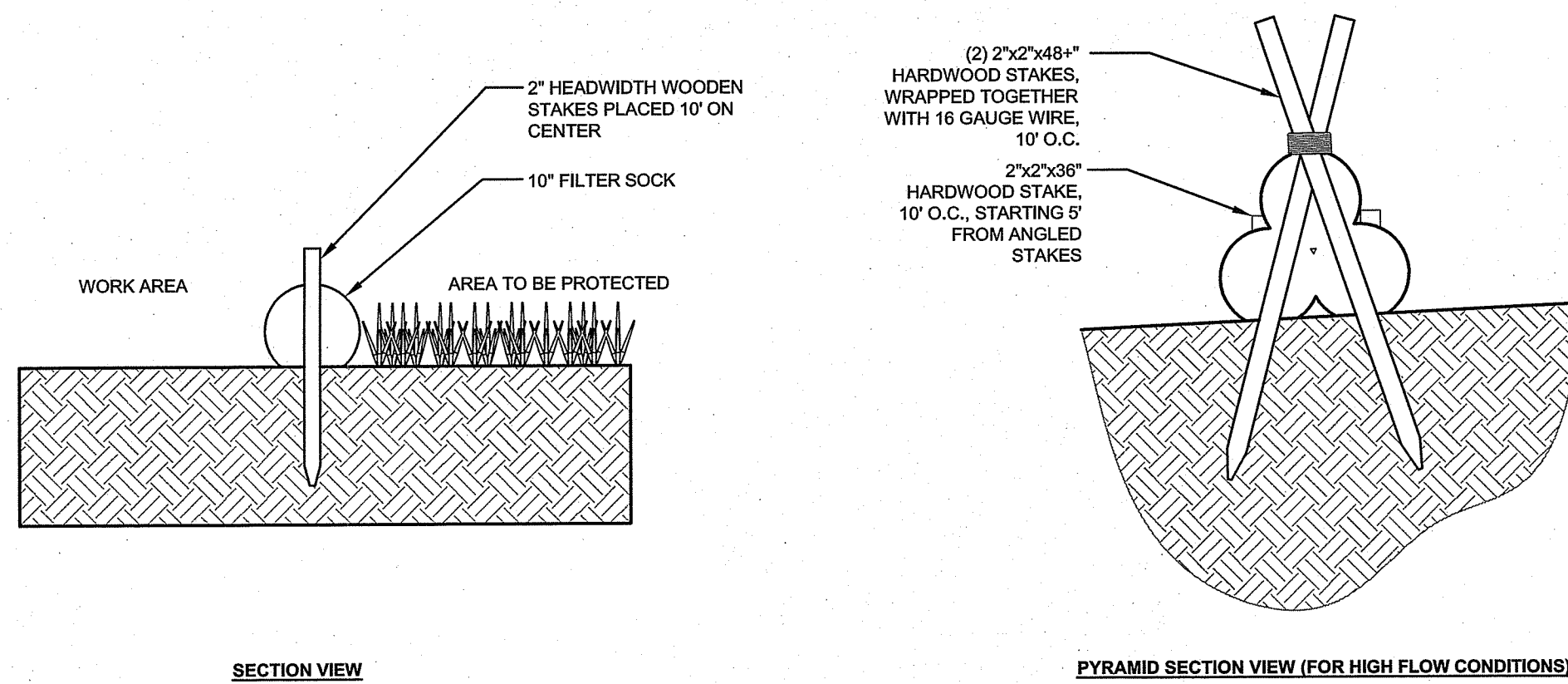
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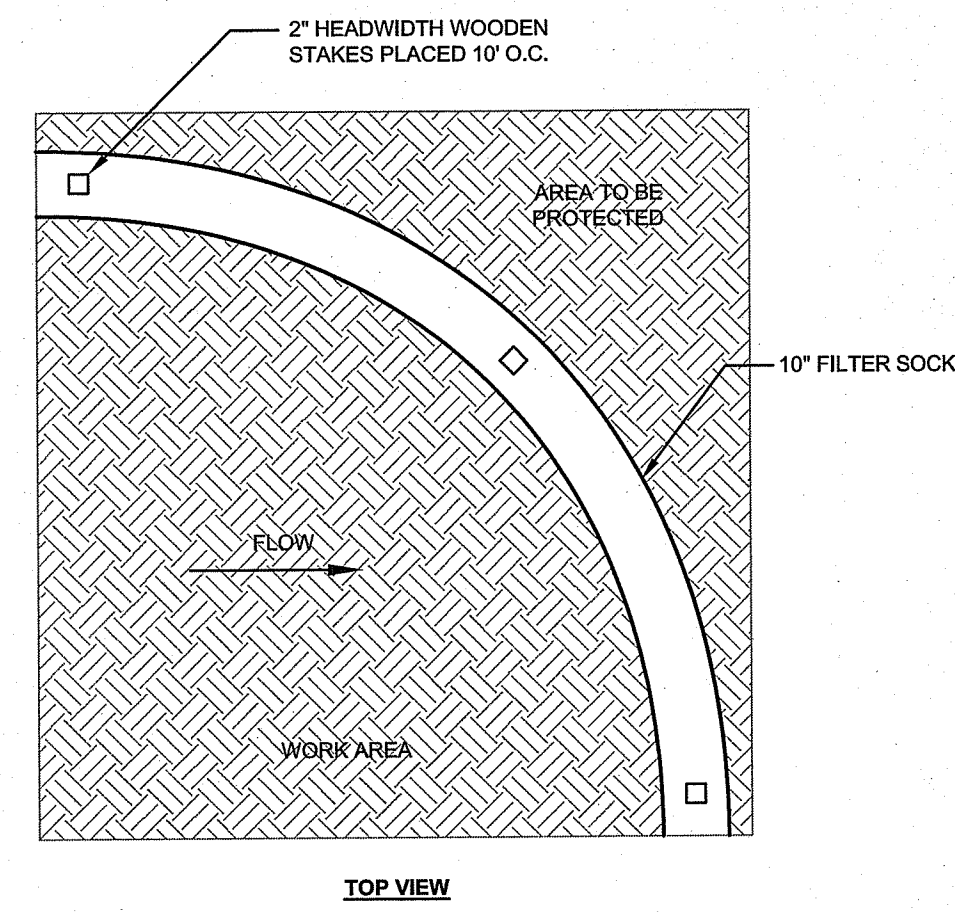
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 MATERIALS TESTING

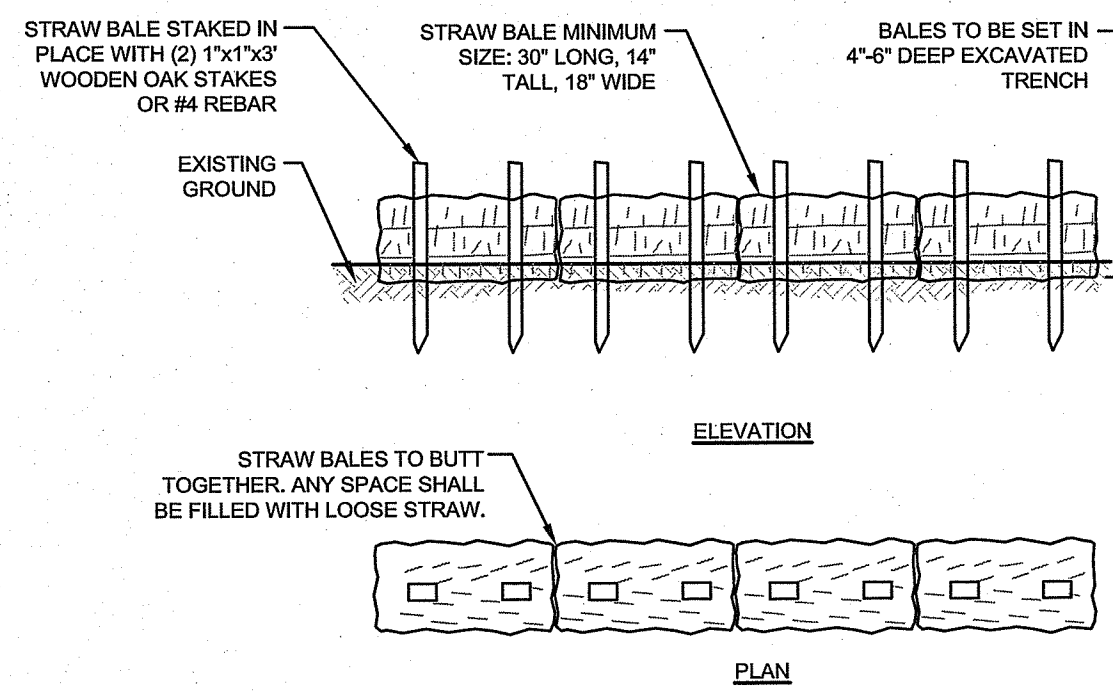


SECTION VIEW

PYRAMID SECTION VIEW (FOR HIGH FLOW CONDITIONS)



10" FILTER SOCK DETAIL
 SCALE: NOT TO SCALE



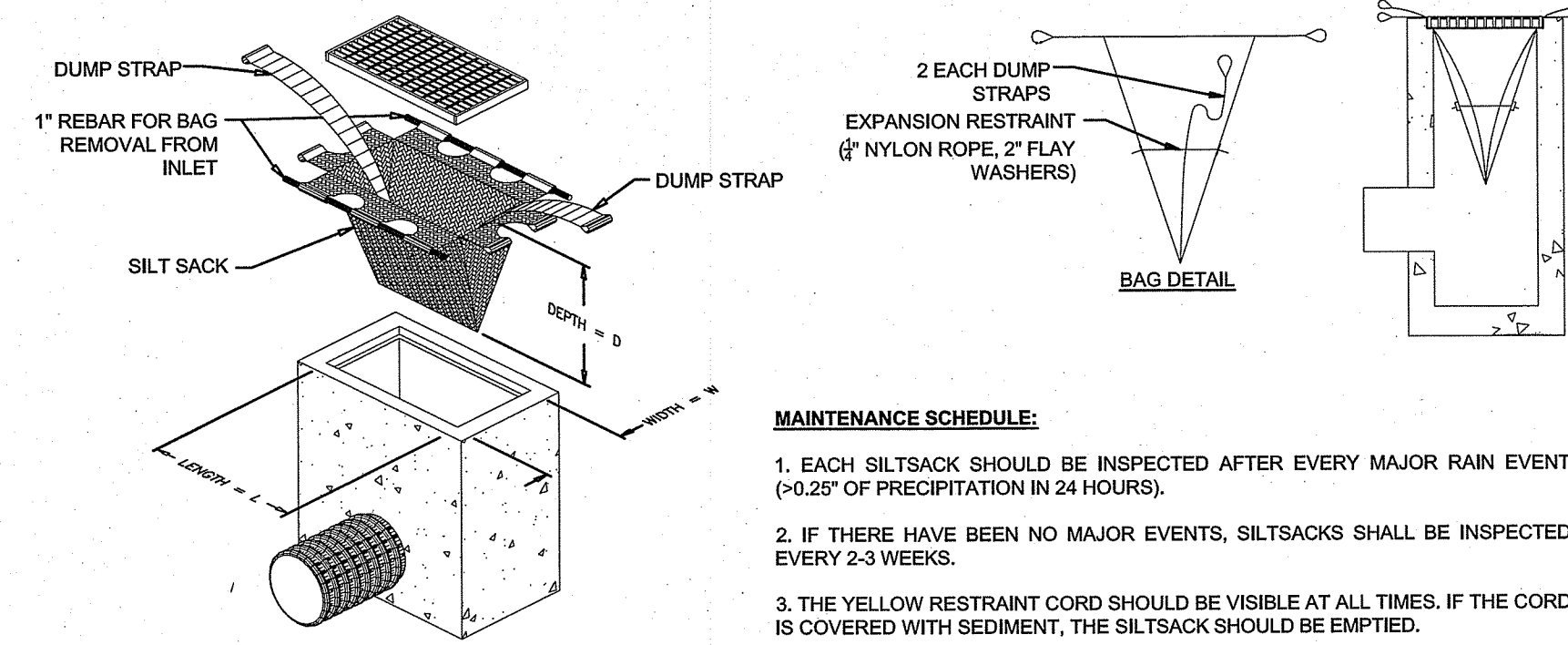
ELEVATION

PLAN

NOTES:

1. BALE WEIGHT SHALL NOT BE LESS THAN 50 LBS AND SHALL BE BOUND WITH NO LESS THAN TWO STRINGS OR WIRES CONTAINING A MINIMUM OF FIVE (5) CUBIC FEET OF MATERIAL. MINIMUM DIMENSIONS SHOWN IN DETAIL.
2. STRAW BALES SHALL BE CERTIFIED AS BEING NOXIOUS WEED-FREE BALES. TO BE "CERTIFIED" MEANS THAT THE PRODUCT IS FREE OF ANY NOXIOUS WEEDS.
3. STAKES SHALL BE DRIVEN THROUGH STAKES AT A SLIGHT UPSTREAM ANGLE TO PREVENT BALE FROM OVERTURNING.
4. LOOSE STRAW SHALL BE WEDGED BETWEEN BALES AFTER INSTALLATION.
5. MATERIAL EXCAVATED FROM TRENCH SHALL BE BACKFILLED, COMPACTED, AND STABILIZED.

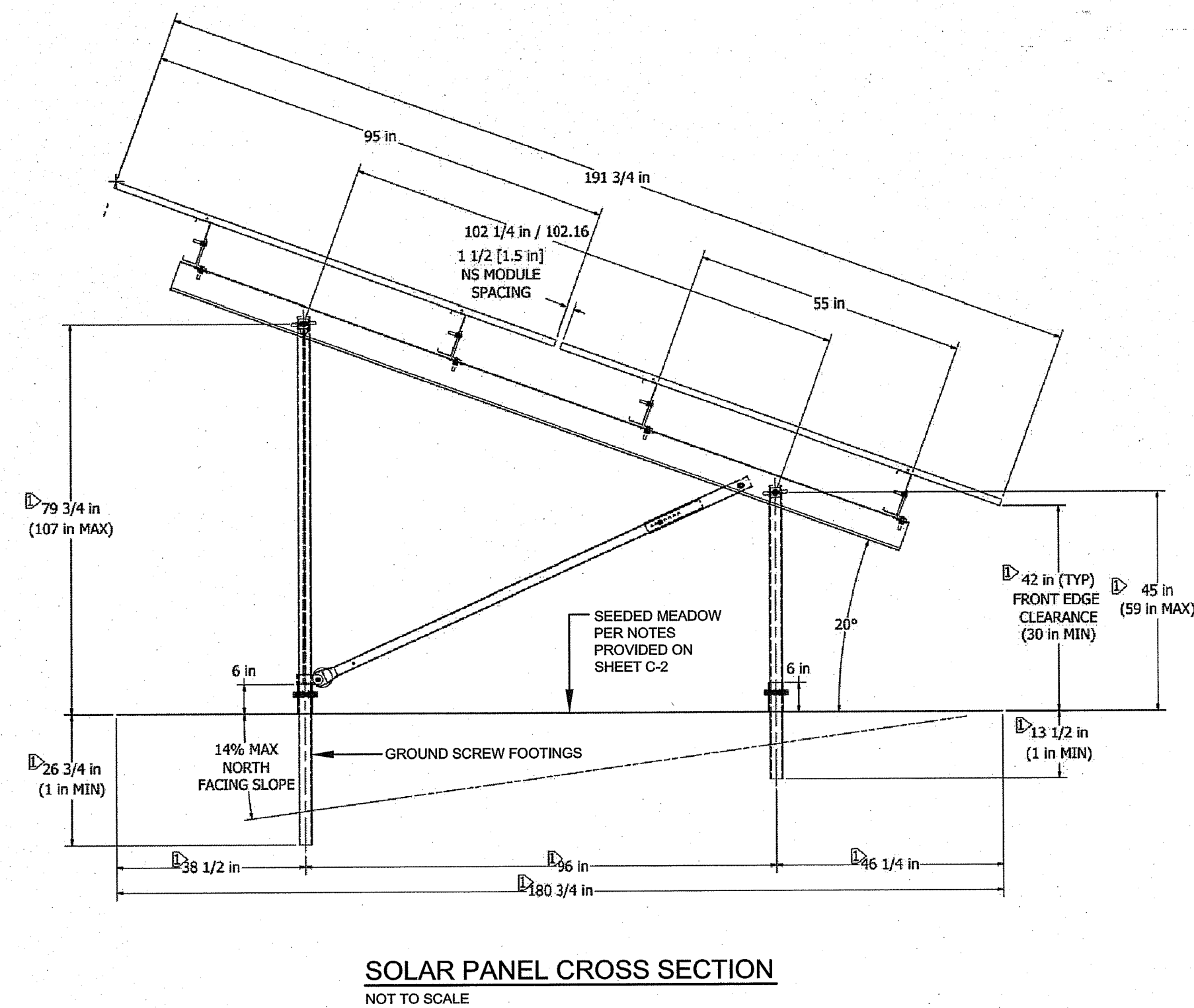
BALED STRAW EROSION CONTROL BARRIER
 SCALE: NOT TO SCALE



MAINTENANCE SCHEDULE:

1. EACH SILTSACK SHOULD BE INSPECTED AFTER EVERY MAJOR RAIN EVENT (>0.25" OF PRECIPITATION IN 24 HOURS).
2. IF THERE HAVE BEEN NO MAJOR EVENTS, SILTSACKS SHALL BE INSPECTED EVERY 2-3 WEEKS.
3. THE YELLOW RESTRAINT CORD SHOULD BE VISIBLE AT ALL TIMES. IF THE CORD IS COVERED WITH SEDIMENT, THE SILTSACK SHOULD BE EMPTIED.

SILT SACK DETAIL
 SCALE: NOT TO SCALE



SOLAR PANEL CROSS SECTION
 NOT TO SCALE

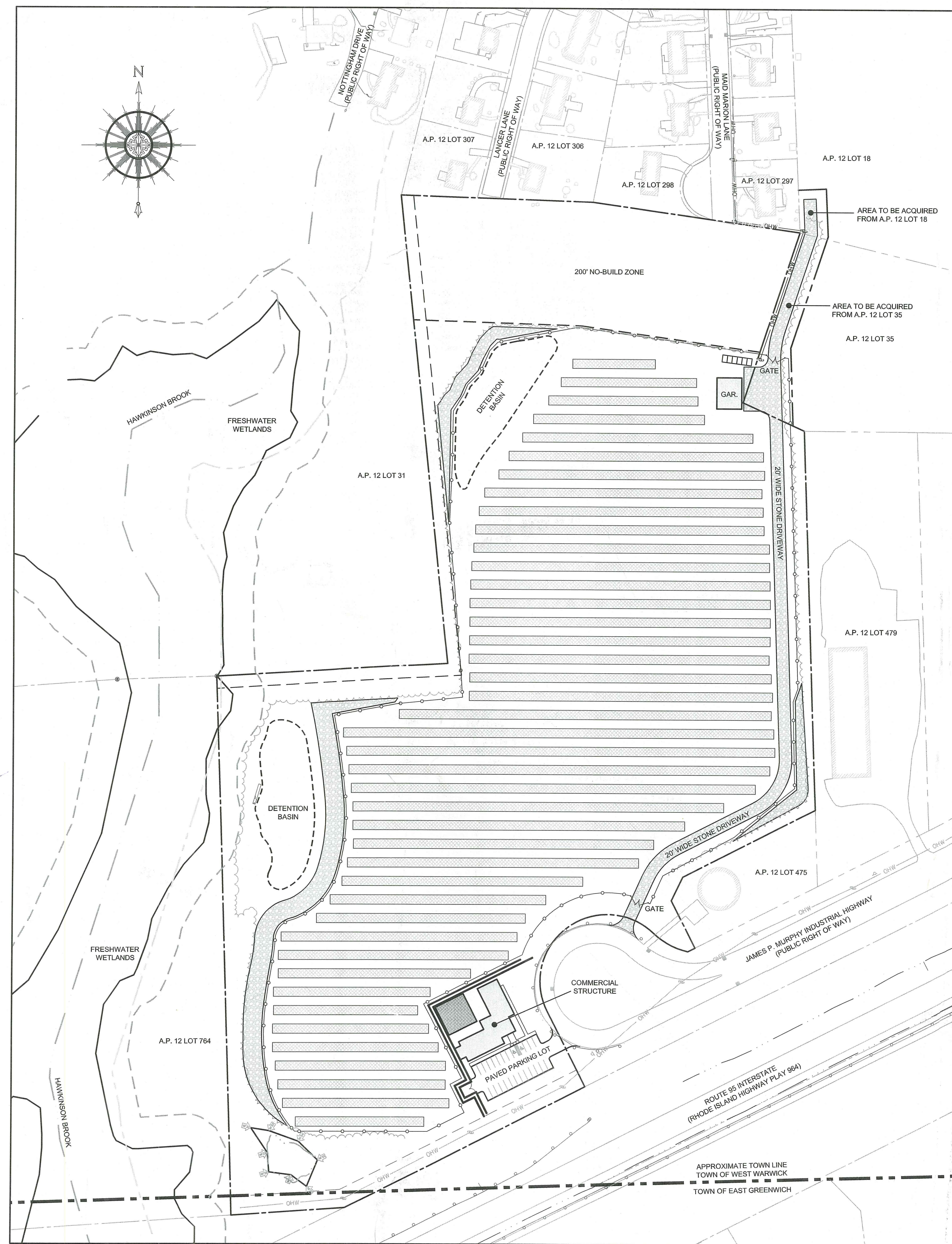
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Handwritten signature

2	MODIFICATION APPLICATION	21JUN24
1	TOWN SUBMISSION	18OCT23
No.	Revision	Date App.
Designed By:	JJR	Drawn by: JJR
Checked by:	GES	
Scale:	AS SHOWN	Date: REV. 21JUN24
Project Title:		
215 JAMES P MURPHY HWY SOLAR PROJECT A.P. 12, LOT 2 215 JAMES P. MURPHY HIGHWAY WEST WARWICK, RI 02893		
Client/Owner:		
DPJ REALTY, LLC 99 JAMES P. MURPHY HIGHWAY WEST WARWICK, RI 02893		
Issued for:		
PERMITTING		
Drawing Title:		
SITE DETAILS 3		
Drawing Number:		
C-11		
Sheet 11 of 11		
Project Number:		
21193.0		
Survey Index:		
-		
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NORTHBRIDGE WEST WARWICK SOLAR

PROPOSED SOLAR FACILITY & COMMERCIAL STRUCTURE
ASSESSOR'S PLAT 12 LOT 2
215 JAMES P. MURPHY HIGHWAY
WEST WARWICK, RHODE ISLAND

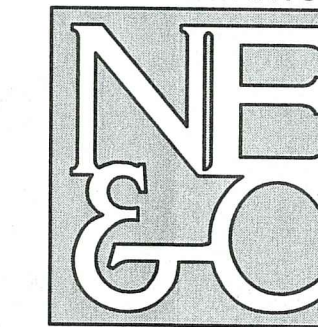


SITE PLAN

SCALE = 1"=100'

CIVIL ENGINEER:

NORTHEAST ENGINEERS & CONSULTANTS, INC.



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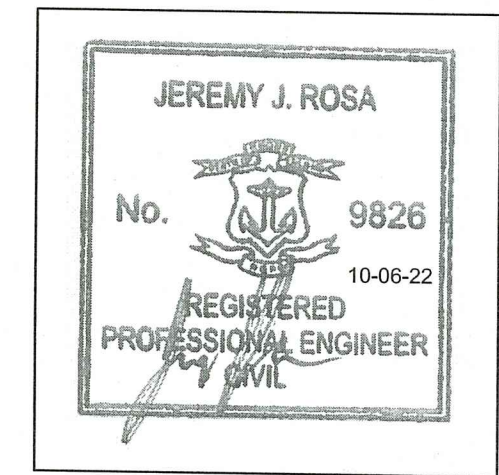
SITE/CIVIL
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 TRANSPORTATION
 STRUCTURAL
 MATERIALS TESTING

OWNER:

DPJ REALTY, LLC
 99 JAMES P. MURPHY HIGHWAY
 WEST WARWICK, RI 02893

APPLICANT:

NORTHBRIDGE DEVELOPMENT LLC
 C/O ANDREW LABELL
 60 WAMSUTTA WAY
 WRENTHAM, MA 02903



ENGINEER CERTIFICATION

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
 FRESHWATER WETLANDS PROGRAM
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- SHEET 1
- SHEET 2
- SHEET 3
- SHEET 4
- SHEET 5
- SHEET 6
- SHEET 7
- SHEET 8
- SHEET 9
- SHEETS 10-13

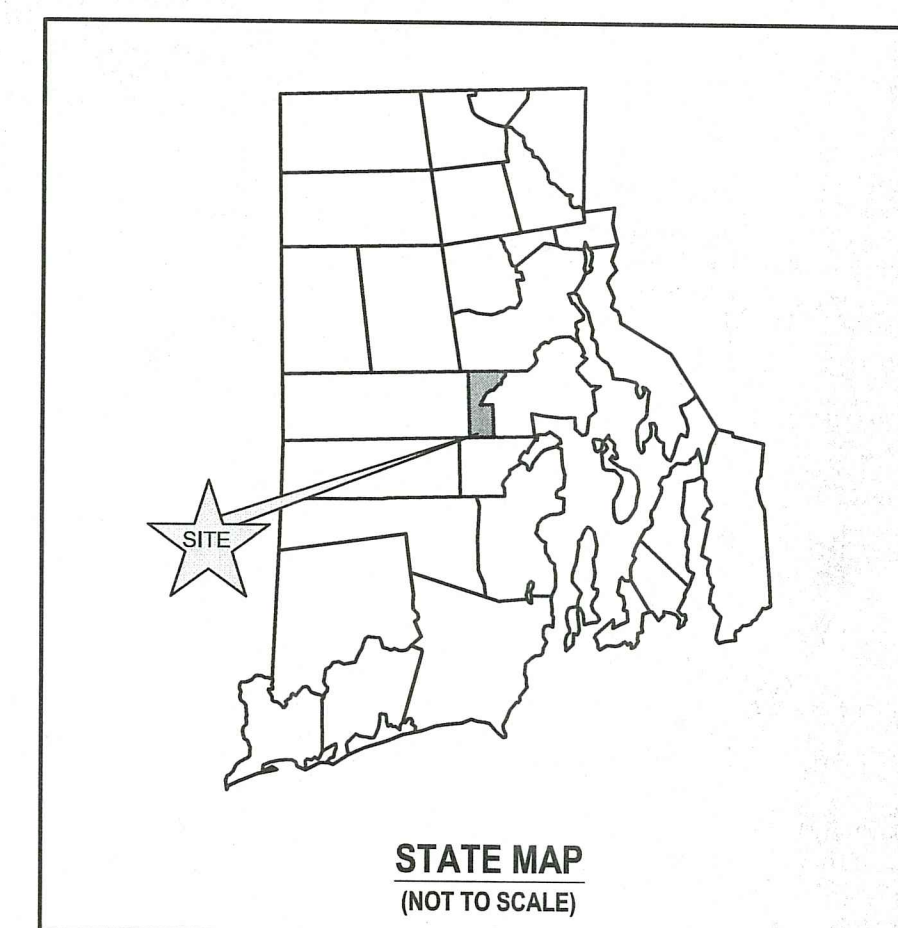
Nancy L. Freeman

OCTOBER 6, 2022 PERMIT SET

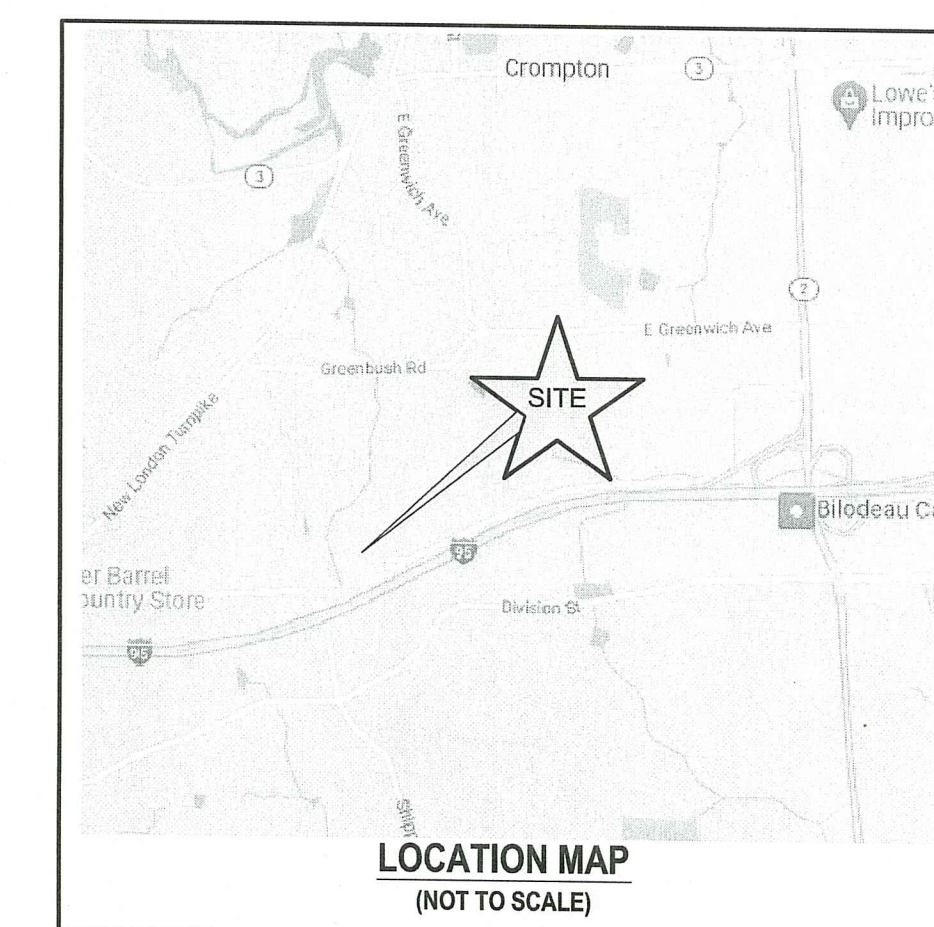
PLAN INDEX

SITE/CIVIL ENGINEERING PLANS

- TITLE SHEET
- NOTES SHEET
- EXISTING CONDITIONS PLAN (SOUTH SIDE)
- EXISTING CONDITIONS PLAN (NORTH SIDE)
- PROPOSED CONDITIONS PLAN (SOUTH SIDE)
- PROPOSED CONDITIONS PLAN (NORTH SIDE)
- PROPOSED CONDITIONS PLAN (COMMERCIAL DEVELOPMENT DETAIL)
- SOIL EROSION AND SEDIMENT CONTROL PLAN (SOUTH SIDE)
- SOIL EROSION AND SEDIMENT CONTROL PLAN (NORTH SIDE)
- PROPOSED DETAILS



STATE MAP
 (NOT TO SCALE)



LOCATION MAP
 (NOT TO SCALE)

SUBMISSION AND REVISION SUMMARY

AGENCY OR REVISION	DATE:	COMMENTS:
RIDEM RIDEM	MAY 26, 2022 OCT 6, 2022	RIDEM FRESHWATER WETLANDS AND RIPDES PROGRAM RESPONSE TO COMMENTS

RI Department of Environmental Management
 OCT 11 2022
 Office of Water Resources

RIDEM COPY

GENERAL NOTES

- PROPERTY LINE INFORMATION PROVIDED BY OTHERS AND SHOULD BE REGARDED AS APPROXIMATE.
- TOPOGRAPHY AND SITE FEATURES TAKEN FROM SURVEY BY OTHERS. ADDITIONAL ABUTTING FEATURES SCALED FROM AERIAL PHOTOGRAPHY, WETLAND AND STREAM LOCATIONS SCALED FROM AVAILABLE RIDEM GIS DATA.
- TOPOGRAPHY TAKEN FROM AVAILABLE LIDAR DATA. DATUM ELEVATION IS NAVD88.
- PROPERTY IS ZONED BP (BUSINESS PARK). ABUTTERS PROPERTIES ARE BP AND R10 (RESIDENTIAL).
- NORTH ARROW TAKEN FROM PLANS PROVIDED BY OTHERS.
- PROPERTY IS LOCATED WITHIN FEMA ZONE "X" PER CURRENT FIRM.
- SOIL TYPES IN THE DEVELOPMENT AREA ARE CLASSIFIED AS CH8 AND CHd (CANTON AND CHARLTON FINE SANDY LOAMS) AND NcC (NARRAGANSETT STONY SILT LOAMS) PER THE USDA NCRS SOIL SURVEY. THESE ARE HYDROLOGIC TYPE "B" SOILS.
- THE CONTRACTOR SHALL VERIFY THE PROPOSED LAYOUT AND DETAILS WITH THEIR RELATIONSHIP TO THE EXISTING SITE SURVEY. CONTRACTOR SHALL ALSO VERIFY ALL DIMENSIONS, SITE CONDITIONS AND MATERIAL SPECIFICATIONS AND SHALL NOTIFY THE OWNER AND ENGINEER OF ANY ERRORS, OMISSIONS OR DISCREPANCIES BEFORE COMMENCING WORK.
- THE UNDERGROUND UTILITIES KNOWN TO EXIST BY THE ENGINEER FROM HIS SEARCH OF RECORDS ARE INDICATED ON THE PLANS. CONTRACTOR SHALL VERIFY THE LOCATIONS AND DEPTHS OF THE FACILITIES AND EXERCISE PROPER CARE IN EXCAVATING IN THE AREA. ALL DAMAGED PORTIONS SHALL BE REPLACED IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE AFFECTED UTILITY COMPANY AND SHALL BE THE CONTRACTOR'S RESPONSIBILITY. PERSONAL INJURY RESULTING FROM CONTACT WITH EXISTING UTILITIES SHALL BE THE CONTRACTOR'S RESPONSIBILITY. WHEREVER CONNECTION OF NEW UTILITIES TO EXISTING UTILITIES ARE SHOWN ON THE PLANS, THE CONTRACTOR SHALL EXPOSE THE EXISTING LINES AT THE PROPOSED CONNECTIONS TO VERIFY THEIR LOCATIONS AND DEPTHS PRIOR TO EXCAVATION FOR NEW LINES. (PLEASE CALL DIG SAFE PRIOR TO CONSTRUCTION AT 1-888-DIG-SAFE AND ALL LOCAL UTILITY COMPANIES.)
- THE CONTRACTOR SHALL NOTIFY ALL AGENCIES TO VERIFY THE ACTUAL LOCATIONS OF ALL UTILITIES IN THE PROJECT AREA PRIOR TO PERFORMING ANY WORK.
- THE CONTRACTOR SHALL RESTORE TO THEIR ORIGINAL CONDITION OR BETTER, ALL IMPROVEMENTS DAMAGED AS A RESULT OF THE CONSTRUCTION, INCLUDING PAVEMENTS, EMBANKMENTS, CURBS, SIGNS, LANDSCAPING, STRUCTURES, UTILITIES, WALLS, FENCES, ETC. UNLESS PROVIDED FOR SPECIFICALLY IN THE PROPOSAL.
- CONTRACTOR SHALL EXERCISE EXTREME CAUTION TO PRESERVE STREET MONUMENTS. STREET MONUMENTS THAT ARE DISTURBED SHALL BE RESTORED UNDER THE LICENSED LAND SURVEYOR'S DIRECTION.
- DEVIATIONS OR CHANGES FROM THESE PLANS WILL NOT BE ALLOWED UNLESS APPROVED BY THE PROJECT ENGINEER, APPROPRIATE AGENCY AND OWNER.
- RELOCATION OF ANY UTILITIES SHALL BE AT THE OWNERS EXPENSE AND BE COMPLETED WITH THE UTILITY WORK. THE OWNER SHALL BE NOTIFIED AS TO THE RELOCATION REQUIRED PRIOR TO THE START OF CONSTRUCTION.
- AN APPROVED SET OF PLANS AND ALL APPLICABLE PERMITS MUST BE AVAILABLE AT THE CONSTRUCTION SITE AT ALL TIMES.
- CONTRACTOR AGREES THAT HE/SHE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF THE CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT TO BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEERS HARMLESS FROM ANY AND ALL LIABILITY, REAL AND ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM "THE SOLE NEGLIGENCE OF THE OWNER OR PROJECT ENGINEER."
- ALL TRAFFIC CONTROL SHALL CONFORM TO THE MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES 2009, INCLUDING ALL REVISIONS.

GRADING NOTES

- ADEQUATE PROVISIONS SHALL BE MADE TO PREVENT SURFACE WATERS FROM DAMAGING THE CUT FACE OF AN EXCAVATION OR THE SLOPED SURFACES OF A FILL. FURTHERMORE, ADEQUATE PROVISIONS SHALL BE MADE TO PREVENT SEDIMENT RUNOFF FROM LEAVING THE SITE.
- ALL GRADED AREAS SHALL BE SODDED OR PLANTED IMMEDIATELY AFTER THE GRUBBING WORK HAS BEEN COMPLETED OR TEMPORARILY STABILIZED WITH STRAW MULCH PER THE TEMPORARY VEGETATIVE PRACTICE NOTES.
- THE CITY SHALL BE INFORMED OF THE LOCATION OF THE DISPOSAL SITE, IF ANY, FOR THE PROJECT.
- THE LIMITS OF DISTURBANCE SHALL BE FLAGGED BEFORE THE COMMENCEMENT OF THE GRADING WORK.
- ALL GRADING OPERATIONS SHALL BE PERFORMED IN CONFORMANCE WITH THE APPLICABLE PROVISIONS OF THE DEPARTMENT OF ENVIRONMENTAL MANAGEMENT AND THE MUNICIPALITY.
- WHERE APPLICABLE AND FEASIBLE THE MEASURES TO CONTROL EROSION AND OTHER POLLUTANTS SHALL BE IN PLACE BEFORE GRADING WORK IS INITIATED.
- TEMPORARY EROSION CONTROLS SHALL NOT BE REMOVED BEFORE PERMANENT EROSION CONTROLS ARE IN-PLACE AND ESTABLISHED.
- IF THE GRADING WORK INVOLVES CONTAMINATED SOIL, THEN ALL GRADING WORK SHALL BE DONE IN CONFORMANCE WITH APPLICABLE STATE AND FEDERAL REQUIREMENTS.
- NONCOMPLIANCE TO ANY OF THE ABOVE REQUIREMENTS SHALL MEAN IMMEDIATE SUSPENSION OF ALL WORK, AND REMEDIAL WORK SHALL COMMENCE IMMEDIATELY. ALL COSTS INCURRED SHALL BE BILLED TO THE VIOLATOR. FURTHERMORE, VIOLATORS SHALL BE SUBJECT TO ADMINISTRATIVE, CIVIL AND/OR CRIMINAL PENALTIES.
- REFER TO EARTHWORK NOTES UNDER "SOIL EROSION AND SEDIMENT CONTROL NOTES" SHOWN ON THIS SHEET FOR ADDITIONAL CRITERIA.

UTILITY NOTES

- THE LOCATION OF PROPOSED ELECTRICAL SYSTEM TO THE EXISTING OVERHEAD LINES ADJACENT TO JAMES P. MURPHY HIGHWAY AND IN MAID MARION LANE IS PRELIMINARY. FINAL DESIGN OF THE ELECTRICAL SERVICE IS SUBJECT TO DESIGN REVIEW AND APPROVAL OF NATIONAL GRID.
- THE CONNECTION SHOWN TO THE MUNICIPAL WATER IN JAMES P. MURPHY HIGHWAY IS SUBJECT TO REVIEW AND APPROPRIATE SERVICE APPLICATION TO THE KENT COUNTY WATER AUTHORITY.
- THE CONNECTION SHOWN TO THE MUNICIPAL SEWER IN JAMES P. MURPHY HIGHWAY IS PRELIMINARY. LOCATION AND TYPE OF EXISTING MAIN IN THIS ROADWAY TO BE CONFIRMED AND THE FINAL CONNECTION DESIGN SHALL BE SUBJECT TO REVIEW AND APPROVAL BY WEST WARWICK WASTEWATER DEPARTMENT.
- REMOVAL OF ANY EXISTING UTILITY LINES SHALL BE COORDINATED WITH THE RESPECTIVE SERVICE PROVIDERS.
- THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL ASSUMPTIONS, DEDUCTIONS, OR CONCLUSIONS HE/SHE MAY MAKE OR DERIVE FROM THE SUBSURFACE INFORMATION OR DATA FURNISHED ON THE PLANS. THE CONTRACTOR MUST SATISFY HIMSELF/HERSELF THROUGH HIS/HER OWN INVESTIGATIONS AS TO WHAT SUBSURFACE CONDITIONS ARE TO BE ENCOUNTERED.
- IF THE CONTRACTOR ELECTS NOT TO EXPOSE AND VERIFY ALL EXISTING UNDERGROUND UTILITIES AND STRUCTURES AT CROSSINGS PRIOR TO PIPELINE EXCAVATION, HE/SHE FORFEITS HIS/HER RIGHTS FOR ANY CLAIMS FOR COMPENSATION CAUSED BY ANY CONFLICTS WITH EXISTING UTILITIES AND STRUCTURES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER DISPOSAL OF ALL EFFLUENT ASSOCIATED WITH THE CONSTRUCTION ACTIVITY AND THE DISINFECTION AND HYDROTASTING OPERATIONS TO SAFEGUARD PUBLIC HEALTH AND SAFETY IN ACCORDANCE WITH APPLICABLE DEPARTMENT OF HEALTH REQUIREMENTS. ALL PERMITS AND LICENSES FOR CONSTRUCTION WATER DISPOSAL, INCLUDING ALL APPLICATIONS, CHARGES, FEES, AND TAXES, ARE THE RESPONSIBILITY OF THE CONTRACTOR.

PUBLIC HEALTH SAFETY AND CONVENIENCE NOTES

- CONTRACTOR SHALL OBSERVE AND COMPLY WITH ALL FEDERAL, STATE, AND LOCAL LAWS REQUIRED FOR THE PROTECTION OF PUBLIC HEALTH, SAFETY AND ENVIRONMENTAL QUALITY.
- THE CONTRACTOR AT HIS/HER EXPENSE, SHALL KEEP THE PROJECT AREA AND SURROUNDING AREA FREE FROM RUBBISH, DUST, NOISE, EROSION, ETC. THE WORK SHALL BE DONE IN CONFORMANCE WITH THE AIR AND WATER POLLUTION CONTROL STANDARDS AND REGULATIONS OF ALL APPLICABLE FEDERAL, STATE AND LOCAL AGENCIES.
- NO CONTRACTOR SHALL PERFORM ANY CONSTRUCTION OPERATION SO AS TO CAUSE FALLING ROCKS, SILT OR DEBRIS IN ANY FORM TO FALL, SLIDE OR FLOW ONTO ADJOINING PROPERTIES, STREETS OR NATURAL WATERCOURSES. SHOULD SUCH VIOLATIONS OCCUR, THE CONTRACTOR MAY BE CITED AND THE CONTRACTOR SHALL IMMEDIATELY MAKE ALL REMEDIAL ACTIONS AS NECESSARY.
- THE CONTRACTOR SHALL PROVIDE, INSTALL AND MAINTAIN ALL NECESSARY SIGNS, LIGHTS, FLARES, BARRICADES, MARKERS, CONES, AND OTHER PROTECTIVE FACILITIES AND SHALL TAKE ALL NECESSARY PRECAUTIONS FOR THE PROTECTION, CONVENIENCE AND SAFETY OF THE PUBLIC.
- THE CONTRACTOR TO ADHERE TO ALL COMMUNITY NOISE STANDARDS PROVIDED IN THE MUNICIPALITY ORDINANCES.

SOIL EROSION AND SEDIMENT CONTROL NOTES

- GENERAL OBJECTIVES:
 - DAMAGE TO SURFACE WATERS RESULTING FROM EROSION AND SEDIMENTATION SHALL BE MINIMIZED BY STABILIZING DISTURBED AREAS AND BY REMOVING SEDIMENT FROM CONSTRUCTION SITE DISCHARGES.
 - TO THE EXTENT PRACTICABLE, EXISTING VEGETATION SHALL BE PRESERVED. FOLLOWING THE COMPLETION OF ACTIVITIES ON ANY PORTION OF THE SITE, PERMANENT VEGETATION SHALL BE ESTABLISHED ON EXPOSED SOILS.
 - SITE PREPARATION SHALL BE PLANNED TO MINIMIZE THE SCOPE AND DURATION OF SOIL DISRUPTION.
 - PERMANENT TRAFFIC CORRIDORS SHALL BE ESTABLISHED AND "ROUTES OF CONVENIENCE" SHALL BE AVOIDED. STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT ALL POINTS OF ENTRY ONTO THE PROJECT SITE AND SHALL BE USED EXCLUSIVELY.
- CONSTRUCTION SEQUENCE:
 - DO NOT BEGIN CONSTRUCTION UNTIL ALL LOCAL, STATE, AND FEDERAL PERMITS HAVE BEEN APPLIED FOR AND RECEIVED.
 - ALL CONSTRUCTION VEHICLES SHALL ENTER AND LEAVE THE SITE VIA THE PROPOSED CONSTRUCTION ENTRANCE ON JAMES P. MURPHY HIGHWAY. THIS ENTRANCE SHALL BE CONSTRUCTED PER THE DETAIL PROVIDED.
 - PRIOR TO ANY CLEARING, GRUBBING, OR EARTHWORK, OR ANY ACTIVITIES WHICH MAY REQUIRE EROSION CONTROL MEASURES, THE CONTRACTOR SHALL FLAG THE WORK LIMITS.
 - INSTALL SILT FENCES, SILT SACKS, STRAW WATTLE, AND STRAW BALES AS INDICATED ON THE DRAWINGS TO CONTROL EROSION AND PREVENT SEDIMENT CONTAMINATION OF DOWNSTREAM AREAS PRIOR TO ANY EARTH MOVING ACTIVITIES.
 - CLEARING PERMITTED ONLY IN WITHIN THE LIMITS AS SHOWN ON SITE PLANS. THE "200-FOOT NO BUILD ZONE" SHOWN ON THE PLANS SHALL NOT BE DISTURBED FOR ANY REASON. ANY STUMPS TO BE GROUND OR DISPOSED OF OFF SITE.
 - ROUGH GRADE SITE AS SHOWN ON SITE PLAN. AREAS OF DETENTION BASINS SHALL BE USED AS TEMPORARY SEDIMENT BASINS AS SHOWN ON SOIL EROSION AND SEDIMENT CONTROL PLANS.
 - CONSTRUCT EQUIPMENT CONCRETE PADS IN LOCATION SHOWN.
 - BEGIN COMMERCIAL STRUCTURE CONSTRUCTION INCLUDING REQUIRED RETAINING WALLS. INSTALL STORMWATER PIPING FROM PROPOSED COMMERCIAL STRUCTURE AND FROM EXISTING PIPE ADJACENT TO HIGHWAY.
 - ENSURE THAT AREAS ADJACENT TO DRIVEWAY ARE STABILIZED AND INSTALL STONE PER DETAIL PROVIDED.
 - COMPLETE DETENTION BASIN EARTHWORK AND INSTALL PERMANENT OUTLET STRUCTURES.
 - FINAL GRADE AREAS OF SOLAR PANELS, MULCHING OF THESE SURFACES SHALL BE COMPLETED PER THE NOTES BELOW AND PLANTED WITH MEADOW GRASSES.
 - INSTALL STONE TRENCHES.
 - CONSTRUCT PANELS ON GRADE IN LOCATIONS SHOWN. NO FURTHER GRADING OR EARTHWORK SHALL BE NECESSARY.
 - MAINTAIN SITE IN ACCORDANCE WITH THE MAINTENANCE NOTES.
- EARTHWORK NOTES:
 - DURING CONSTRUCTION AND THEREAFTER, EROSION CONTROL MEASURES ARE TO BE IMPLEMENTED AS SHOWN. ONLY THE SMALLEST PRACTICAL AREA OF LAND SHOULD BE EXPOSED AT ANY ONE TIME DURING DEVELOPMENT. WHEN LAND IS EXPOSED DURING DEVELOPMENT, THE EXPOSURE SHOULD BE KEPT TO THE SHORTEST PRACTICAL PERIOD OF TIME.
 - ONLY AREAS OF EXISTING CONCRETE OR PAVEMENT SHALL BE USED FOR LONG TERM STOCKPILES OR STORAGE OF MATERIALS OR EQUIPMENT.
 - ANY DISTURBED AREAS WHICH ARE TO BE LEFT TEMPORARILY AND WHICH WILL BE REGRADED LATER DURING CONSTRUCTION SHALL BE STABILIZED WITHIN FOURTEEN DAYS IN ACCORDANCE WITH TEMPORARY MEASURES IN THE VEGETATIVE PRACTICE NOTES.
 - AREAS TO BE FILLED SHALL BE CLEARED, GRUBBED, AND STRIPPED OF TOP SOIL TO REMOVE VEGETATION, ROOTS, AND ANY OTHER OBJECTIONABLE MATERIAL.
 - ALL FILL SHALL BE COMPACTED TO 95% MAX. DENSITY TO REDUCE EROSION, SLIPPAGE, SETTLEMENT SUBSIDENCE, OR OTHER RELATED PROBLEMS.
 - FILL INTENDED TO SUPPORT CONCRETE EQUIPMENT PADS AND CONDUITS, ETC., SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL CODES AND SPECIFICATIONS.
 - ANY FILLS SHALL BE PLACED AND COMPACTED TO 95% MAX. DENSITY IN LAYERS NOT TO EXCEED 12" IN THICKNESS FILLS.
 - FILL MATERIAL SHALL BE FREE OF BRUSH, RUBBISH, ROCKS, LOGS, STUMPS, BUILDING DEBRIS, AND OTHER OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS.
 - FROZEN, SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIAL SHALL NOT BE INCORPORATED INTO FILLS.
 - FILL SHALL NOT BE PLACED ON A FROZEN FOUNDATION SUBGRADE.
 - SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGN ENGINEER.
 - ALL DISTURBED AREAS SHALL BE STABILIZED WITHIN 14 DAYS OF FINISH GRADING IN ACCORDANCE WITH THE VEGETATIVE PRACTICE NOTES.
 - REMOVE TEMPORARY EROSION CONTROL MEASURES ONCE UPSLOPE AREAS HAVE BEEN PERMANENTLY STABILIZED.
- VEGETATIVE PRACTICE:

TEMPORARY MEASURES (FOR TEMPORARY PROTECTION OF DISTURBED AREAS)

 - LIMESTONE AND FERTILIZER SHALL BE APPLIED AT THE FOLLOWING RATE:
LIMESTONE: 2 TONS/ACRE
FERTILIZER: (10-10-10): 600 LBS/ACRE
 - SEED SHALL BE APPLIED AT THE FOLLOWING RATE:
WINTER RYE: 100 LB/ACRE
 - STRAW MULCH SHALL BE APPLIED AT THE RATE OF 1.5 TONS/ACRE.

PERMANENT MEASURES:

 - SLOPES SHALL NOT BE STEEPER THAN 1 VERTICAL TO 3 HORIZONTAL UNLESS OTHERWISE SPECIFIED.
 - LOAM AND SEED REQUIREMENTS ARE SPECIFIED IN RIDOT L01 & L02.
 - A MINIMUM OF 4 INCHES OF LOAM SHALL BE INSTALLED. THE LOAM SHALL BE GRADED TO A SMOOTH CONDITION AND STONES AND OTHER OBJECTS LARGER THAN 2 INCHES SHALL BE REMOVED.
 - SEED MIXTURE SHALL CONFORM TO DOT ALL-PURPOSE SEED MIX OR MEADOW MIX.
 - OPTIMUM TIMING SHALL BE EARLY SPRING. SEEDING NOT PERFORMED DURING THIS TIME FRAME MAY REQUIRE RE-SEEDING DURING THE FOLLOWING SPRING.
- MAINTENANCE

DURING THE PERIOD OF CONSTRUCTION AND/OR UNTIL LONG TERM VEGETATION IS ESTABLISHED, THE EROSION CONTROL MEASURES SHALL BE INSPECTED.

 - AT A MINIMUM THE SILT FENCING, STRAW BALES AND FILTER SOCK BARRIERS SHALL BE INSPECTED AND REPAIRED ONCE A WEEK AND / OR IMMEDIATELY FOLLOWING A SIGNIFICANT RAINFALL OR SNOWMELT. SEDIMENT TRAPPED BEHIND THE BARRIERS SHALL BE EXCAVATED WHEN IT REACHES A DEPTH OF 6" AND REGRADED ON THE SITE.
 - DURING CONSTRUCTION THE ENTRANCE SHALL BE INSPECTED WEEKLY. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT SHALL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC ROADWAYS. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC ROADWAYS MUST BE REMOVED IMMEDIATELY. WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE. PERIODIC INSPECTIONS SHALL ALSO BE PERFORMED AFTER EACH RAINFALL EVENT.
 - EROSION CONTROL BLANKETS SHALL BE INSPECTED ON A WEEKLY BASIS.
 - SILT SACKS SHALL BE INSPECTED AND REPAIRED ONCE A WEEK AND / OR IMMEDIATELY FOLLOWING A SIGNIFICANT RAINFALL OR SNOWMELT. DURING HEAVY RAIN EVENT, IT MAY BE NECESSARY TO TEMPORARILY REMOVE SACKS IN ORDER TO PREVENT FLOODING. SEDIMENT TRAPPED WITHIN SACKS SHALL BE DISPOSED OF OFF SITE AT A LICENSED FACILITY OR REGRADED ON THE SITE.
 - THE STABILIZED CONSTRUCTION ENTRANCE SHALL BE REMOVED PRIOR TO FINAL SURFACING.
 - SEEDED AREAS WILL BE FERTILIZED AND RESEEDED AS NECESSARY TO INSURE ESTABLISHMENT OF A VEGETATIVE GROWTH THAT MEETS THE APPROVAL OF THE CITY ENGINEER.

MULCHING NOTES (FOR PERMANENT VEGETATION)

- METHOD:**
- MULCHING SHALL BE REQUIRED ON ALL SEEDING. MULCH WILL REDUCE EROSION BEFORE GRASS OR MEADOW IS ESTABLISHED AND WILL PROMOTE MORE RAPID GROWTH AND ESTABLISHMENT. THE EXISTENCE OF VEGETATION SUFFICIENT TO CONTROL SOIL EROSION SHALL BE DEEMED IN COMPLIANCE WITH THIS MULCHING REQUIREMENT.
 - SPREAD STRAW MULCH BY HAND OR MECHANICALLY SUCH THAT APPROXIMATELY 75% TO 95% OF THE SOIL SURFACE IS COVERED. MINIMUM DISTRIBUTION SHALL BE 90 POUNDS PER 1,000 SQUARE FEET.
 - STRAW MULCH ANCHORING SHALL BE ACCOMPLISHED IMMEDIATELY AFTER PLACEMENT TO MINIMIZE LOSS BY WIND OR WATER. APPLICATIONS SHALL BE HEAVIER AT EDGES WHERE WIND CATCHES THE MULCH, IN VALLEYS, AND AT CRESTS OF BANKS. REMAINDER OF AREA SHALL BE UNIFORM IN APPEARANCE.
- PRODUCTS:**
- MULCH MATERIALS SHALL BE WOOD FIBER APPLIED WITH A HYDROMULCH AT 2000 LBS PER ACRE.

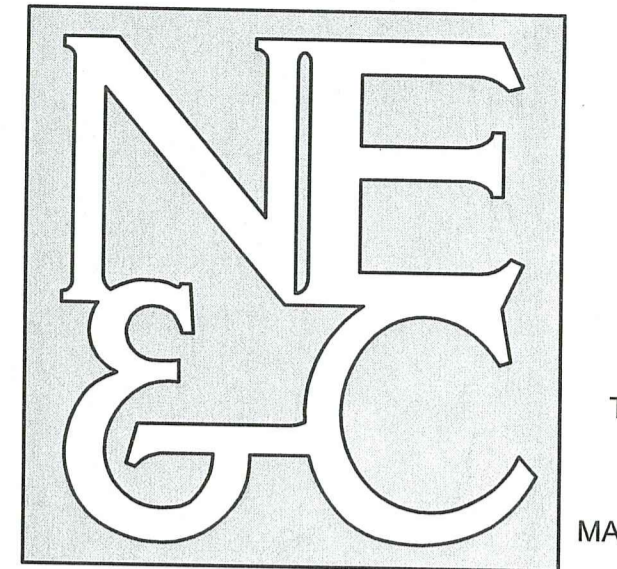
STORMWATER MAINTENANCE NOTES

- STONE DRIVEWAY MAINTENANCE:
 - THE OWNER TO ENSURE THAT THE STONE DRIVEWAY IS NOT TO BE PAVED AT ANY POINT DURING THE FUTURE WITHOUT ADDITIONAL STATE AND LOCAL PERMITTING.
 - AREAS WHERE STONE DRIVEWAYS ARE PROPOSED SHALL NOT SERVE AS A TEMPORARY SEDIMENT CONTROL DEVICE DURING SITE CONSTRUCTION PHASE.
 - KEEP ANY ADJACENT MEADOW AREAS WELL STABILIZED. ANY GULLING OR EROSION COULD CREATE A SEDIMENT LOAD ON THE PERVIOUS SURFACE AND SHOULD BE ADDRESSED IMMEDIATELY.
 - REGULARLY SEED ANY BARE AREAS OF DESIGNATED MEADOW. AREAS SUBJECT TO REGULAR EROSION SHALL BE EVALUATED BY THE DESIGN ENGINEER AND ADDRESSED ACCORDINGLY.
 - INSPECT THE SURFACE ANNUALLY FOR DETERIORATION OR SHIFTING OF STONE MATERIAL.
 - AVOID STOCKPILING SNOW ON DRIVEWAY SURFACE. SITE OPERATORS SHALL BE MADE AWARE OF THE PROPER LOCATION FOR RELOCATING SNOW.
- STONE TRENCHES:
 - THE STONE TRENCHES SHALL BE INSPECTED FOLLOWING AT LEAST THE FIRST TWO PRECIPITATION EVENTS OF AT LEAST 1.0 INCHES TO ENSURE THAT THE DEVICES ARE FUNCTIONING PROPERLY. THEREAFTER, THE DEVICES SHALL BE INSPECTED AT LEAST ANNUALLY AND AFTER MAJOR RAIN STORM EVENTS (2.0 INCHES OVER 24-HOURS). THE MAINTENANCE OBJECTIVES FOR THESE DEVICES ARE FOCUSED ON PRESERVING THE HYDRAULIC EFFICIENCY AND MAINTAINING STRUCTURAL INTEGRITY. MAINTENANCE SHOULD INCLUDE THE FOLLOWING.
 - SURFACE OF THE TRENCHES SHALL BE INSPECTED FOR EROSION AND STONE TRANSPORT. ANY AREAS WITHIN THE EXTENTS OF THE DEVICE THAT ARE SUBJECT TO EROSION OR TRANSPORT OF STONE SHALL BE REPLENISHED WITH THE ORIGINAL DESIGN MATERIAL ACCORDING TO THE DESIGN DRAWINGS.
 - REINFORCE FLOW INLET AREAS IF STONE IS FOUND TO BE DEFICIENT OR IF EROSION IS PRESENT.
 - ALL MATERIAL, INCLUDING ANY TRASH AND/OR DEBRIS FROM ALL AREAS WITHIN THE EXTENTS OF THE DEVICE SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS.
 - UNWANTED VEGETATION SHALL BE REMOVED FROM THE SURFACE OF THE DEVICE WHICH COULD IMPEDE INFILTRATION INTO THE DEVICES SHALL BE REMOVED AND DISPOSED OF.
- UNDERGROUND SAND FILTER MAINTENANCE:
 - GRASSES SHALL BE PLANTED OVER SYSTEMS NOT IN PAVED AREAS TO STABILIZE THE GROUND AND PREVENT EROSION.
 - EACH FILTER SHOULD BE INSPECTED FOLLOWING AT LEAST THE FIRST TWO PRECIPITATION EVENTS OF AT LEAST 1.0 INCH TO ENSURE THAT THE SYSTEM IS FUNCTIONING PROPERLY. THEREAFTER, THE FILTER SHOULD BE INSPECTED AT LEAST ANNUALLY AND AFTER STORM EVENTS OF GREATER THAN OR EQUAL THE 1-YEAR, 24-HOUR TYPE II PRECIPITATION EVENT (2.8 INCHES). SHOULD THE AVERAGE DEPTH OF SEDIMENT EXCEED 1 INCH AT THE BOTTOM OF THE CHAMBERS, THE SEDIMENT SHALL BE REMOVED AND DISPOSED OF IN A MANNER CONSTANT WITH THE MANDATES OF THE RIDEM. THE PRESENCE OF EXCESSIVE SEDIMENTS MAY INDICATE A FAILURE IN THE ROOF LEADER SYSTEM OR THE MANIFOLD PIPING. OWNER SHOULD CONSULT A REGISTERED PROFESSIONAL ENGINEER TO DETERMINE THE CAUSE OF THE FAILURE AND THE BEST COURSE OF ACTION TO CORRECT THE ISSUE.
 - THE FOLLOWING SHALL ALSO BE COMPLETED WHEN NECESSARY:
 - SILT/SEDIMENT SHOULD BE REMOVED FROM THE CHAMBERS ANNUALLY, WHEN ACCUMULATION EXCEEDS 1 INCH, OR WHEN THE FILTERING CAPACITY DIMINISHES SUBSTANTIALLY. IF STANDING WATER IS OBSERVED MORE THAN 48 HOURS AFTER A STORM EVENT, THEN THE TOP 6 INCHES OF SAND SHOULD BE EXCAVATED AND THE TOP 6 INCHES OF SAND SHOULD BE REMOVED AND REPLACED. IF DISCOLORED OR CONTAMINATED MATERIAL IS FOUND BELOW THIS REMOVED SURFACE THEN THAT MATERIAL SHOULD ALSO BE REMOVED AND REPLACED UNTIL ALL CONTAMINATED SAND HAS BEEN REMOVED FROM THE FILTER MEDIA. THE SAND SHOULD BE DISPOSED OF IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS. THE CHAMBERS SHALL BE RE-INSTALLED ACCORDING TO THE ORIGINAL DESIGN PLANS.
- CONVEYANCE STRUCTURE MAINTENANCE:
 - ALL INLET / OUTFLOW PIPES ARE TO BE INSPECTED AT LEAST THREE TIMES IN THE FIRST SIX MONTHS OF OPERATION. EVIDENCE OF CLOGGING, OR RAPID RELEASE OF FLOW SHALL BE REPORTED TO THE PROJECT ENGINEER AND REMEDIED IMMEDIATELY.
 - CONVEYANCE PIPES SHOULD BE INSPECTED BIANNUALLY. ANY STRUCTURAL FAILTS SHOULD BE REPAIRED AS NECESSARY FOR PROPER FUNCTION OF THE STRUCTURE.
 - STRUCTURES SHOULD BE CLEAN AND FREE OF OBSTRUCTIONS THAT REDUCE FLOW. A REGISTERED PROFESSIONAL ENGINEER SHOULD BE CONSULTED IF NECESSARY TO DETERMINE WHETHER A STRUCTURE HAS BEEN COMPROMISED.
- SAND FILTER MAINTENANCE:
 - GRASSES AND/OR SPECIFIED VEGETATION SHALL BE PLANTED AROUND AND WITHIN THE SAND FILTER IMMEDIATELY FOLLOWING CONSTRUCTION TO STABILIZE SLOPES AND PREVENT EROSION.
 - THE FILTER SHOULD BE INSPECTED FOLLOWING AT LEAST THE FIRST TWO PRECIPITATION EVENTS OF AT LEAST 1.0 INCH TO ENSURE THAT THE SYSTEM IS FUNCTIONING PROPERLY. THEREAFTER, THE FILTER SHOULD BE INSPECTED AT LEAST ANNUALLY AND AFTER STORM EVENTS OF GREATER THAN OR EQUAL THE 1-YEAR, 24-HOUR TYPE II PRECIPITATION EVENT (2.8 INCHES). SEDIMENTS COLLECTED WITHIN THE TOP STRATA OF THE FILTER SHALL BE GRASSES AND/OR SPECIFIED VEGETATION SHALL BE PLANTED AROUND AND WITHIN THE SAND FILTER IMMEDIATELY FOLLOWING CONSTRUCTION TO STABILIZE SLOPES AND PREVENT EROSION.
 - THE FOLLOWING SHALL ALSO BE COMPLETED ON AN ANNUAL BASIS:
 - THE SLOPES OF THE FILTER SHOULD BE INSPECTED FOR EROSION AND GULLING.
 - REINFORCE ANY EXISTING RIPRAP IF IT IS FOUND TO BE DEFICIENT, EROSION IS PRESENT AT THE OUTLET STRUCTURES, OR ANY EXISTING RIPRAP HAS BEEN COMPROMISED.
 - ANY AREAS WITHIN THE EXTENTS OF THE FILTER THAT ARE SUBJECT TO EROSION OR GULLING SHOULD BE REPLENISHED WITH THE ORIGINAL DESIGN MATERIAL AND RE-VEGETATED ACCORDING TO DESIGN DRAWINGS. SLOPE PROTECTION MATERIAL SHOULD BE PLACED IN AREAS PRONE TO EROSION. EMBANKMENT STABILITY SHOULD BE INSPECTED FOR SEEPAGE AND BURROWING ANIMALS.
 - MOW THE GRASS AROUND THE PERIMETER OF AND WITHIN THE FILTER. SEED BARE AREAS, AND REMOVE LITTER AND DEBRIS ANY INVASIVE VEGETATION WITHIN THE EXTENTS OF THE FILTER. ANY INVASIVE VEGETATION ENCROACHING UPON THE PERIMETER OF THE FILTER SHOULD BE PRUNED OR REMOVED IF IT IS PROHIBITING ACCESS TO THE FILTERS, COMPROMISING SIGHT VISIBILITY, AND/OR COMPROMISING THE ORIGINAL DESIGN INTENT. IF DEAD OR DYING GRASS ON THE BOTTOM IS OBSERVED, CHECK TO ENSURE THAT WATER INFILTRATES WITHIN TWO DAYS FOLLOWING STORMS.
 - SILT/SEDIMENT SHOULD BE REMOVED FROM THE FILTER BED ANNUALLY, WHEN ACCUMULATION EXCEEDS 1 INCH, OR WHEN THE FILTERING CAPACITY DIMINISHES SUBSTANTIALLY. IF STANDING WATER IS OBSERVED MORE THAN 48 HOURS AFTER A STORM EVENT, THEN THE TOP 6 INCHES OF SAND SHOULD BE REMOVED AND REPLACED. IF DISCOLORED OR CONTAMINATED MATERIAL IS FOUND BELOW THIS REMOVED SURFACE THEN THAT MATERIAL SHOULD ALSO BE REMOVED AND REPLACED UNTIL ALL CONTAMINATED SAND HAS BEEN REMOVED FROM THE FILTER MEDIA. THE SAND SHOULD BE DISPOSED OF IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS.
- RIPRAP SPILLWAY MAINTENANCE:
 - THE SPILLWAYS SHOULD BE INSPECTED ANNUALLY FOR EROSION AND DETERIORATION. RIPRAP SHOULD BE REPLACED IN KIND AS NECESSARY TO COMPLETELY COVER THE SPILLWAY IN THE DIMENSIONS DESIGNATED IN THE ORIGINAL DESIGN DOCUMENTS. SHOULD EXCESSIVE STONE WASHOUT BE OBSERVED, A REGISTERED PROFESSIONAL ENGINEER SHOULD BE CONSULTED.
- MAINTENANCE OF THE STORMWATER SYSTEM DURING CONSTRUCTION OF THE PROJECT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- UPON COMPLETION OF THE CONSTRUCTION, MAINTENANCE OF THE STORMWATER SYSTEM SHALL BECOME THE RESPONSIBILITY OF THE OWNER.

SEEDING NOTES (FOR PROPOSED MEADOW AREAS)

- THE SUGGESTED SEED MIX TO BE UTILIZED SHALL BE SIMILAR TO "LOW-GROWING WILDFLOWER AND GRASS MIX", AS SUPPLIED BY ERNST SEEDS, OR APPROVED EQUAL.
- SEEDING RATE FOR THIS MIX SHALL BE 20-40 LBS PER ACRE.
- PRIOR TO CONSTRUCTION, THE SUGGESTED SEED MIX SHALL BE REVIEWED AND APPROVED BY A RI REGISTERED LANDSCAPE ARCHITECT.
- IF INSTALLING SEED UTILIZING HYDROSEEDER DEVICE, PROVIDE FIBER MULCH AND STARTER FERTILIZER MIX. IF BROADCASTING SEEDING, APPLY STARTER FERTILIZER PRIOR TO SEEDING AND TOP DRESS WITH 2-INCHES OF STRAW MULCH FOLLOWING SPREADING OF SEED.

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RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL
DATE: MAR 03 2023 FILE #: 22-0190
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Nancy L. Freeman

1	RIDEM REVISIONS	08OCT22
0	RIDEM SUBMISSION	26MAY22
No.	Revision	Date App.
Designed By:	JJR	Drawn by: JJR Checked by: GES
Scale:	N/A	Date: REV. 06OCT22

NORTHBRIDGE WEST WARWICK SOLAR
A.P. 12, LOT 2
215 JAMES P. MURPHY HIGHWAY
WEST WARWICK, RI 02893

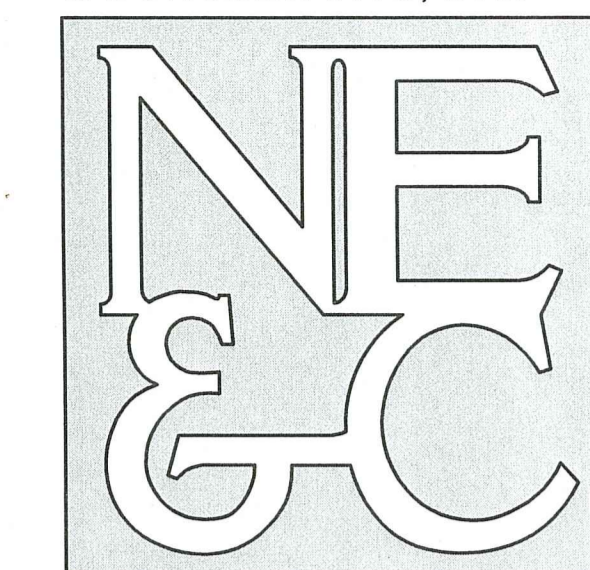
Client/Owner:
DPJ REALTY, LLC
99 JAMES P. MURPHY HIGHWAY
WEST WARWICK, RI 02893

Issued for:
PERMITTING

PROJECT NOTES

	Drawing Number:	C-2
	Sheet	2 of 13
	Project Number:	21193.0
	Survey Index:	-

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LEGEND:

- PROPERTY LINE
- ABUTTER PROPERTY LINE
- FRESHWATER WETLAND BOUNDARY (RIGIS)
- PERIMETER WETLAND BOUNDARY (RIGIS)
- APPROXIMATE STREAM (RIGIS)
- APPROXIMATE RIVERBANK WETLAND (RIGIS)
- ZONING BUILDING SETBACK
- EASEMENT LINE
- GUARD RAIL
- OHW OVERHEAD WIRES
- W MUNICIPAL WATER LINE
- S MUNICIPAL SEWER LINE
- D MUNICIPAL DRAIN LINE
- TOPOGRAPHIC CONTOUR
- FENCE LINE
- UTILITY POLE
- CATCH BASIN

NOTES:

1. PROPERTY LINE INFORMATION PROVIDED BY OTHERS AND SHOULD BE REGARDED AS APPROXIMATE.
2. TOPOGRAPHY AND SITE FEATURES TAKEN FROM SURVEY BY OTHERS. ADDITIONAL ABUTTING FEATURES SCALED FROM AERIAL PHOTOGRAPHY, WETLAND AND STREAM LOCATIONS SCALED FROM AVAILABLE RIDEM GIS DATA.
3. TOPOGRAPHY TAKEN FROM AVAILABLE LIDAR DATA. DATUM ELEVATION IS NAVD83.
4. PROPERTY IS ZONED BP (BUSINESS PARK), ABUTTERS PROPERTIES ARE BP AND R10 (RESIDENTIAL).
5. NORTH ARROW TAKEN FROM PLANS PROVIDED BY OTHERS.
6. REFER TO COMPLETE PROJECT NOTES ON SHEET C-2.

1	RIDEM REVISIONS	06OCT22	
0	RIDEM SUBMISSION	26MAY22	
No.	Revision	Date	App.
Designed By:	JJR	Drawn by:	JJR
Checked by:	GES	Date:	REV. 06OCT22

Project Title:
**NORTHBRIDGE
WEST WARWICK SOLAR**
A.P. 12, LOT 2
215 JAMES P. MURPHY HIGHWAY
WEST WARWICK, RI 02893

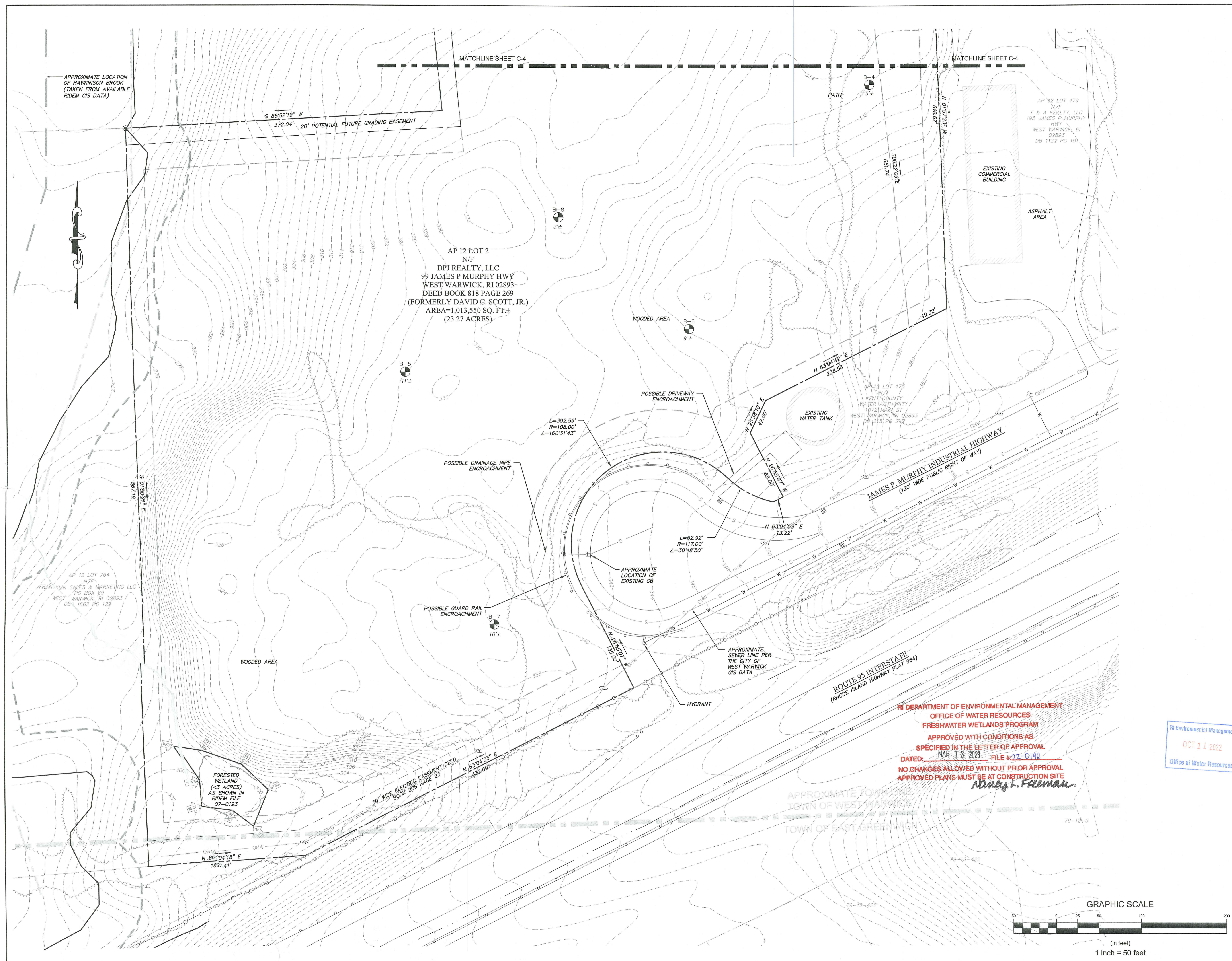
Client/Owner:
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WEST WARWICK, RI 02893

Issued for:
PERMITTING

Drawing Title:
**EXISTING CONDITIONS PLAN
(SOUTH SIDE)**

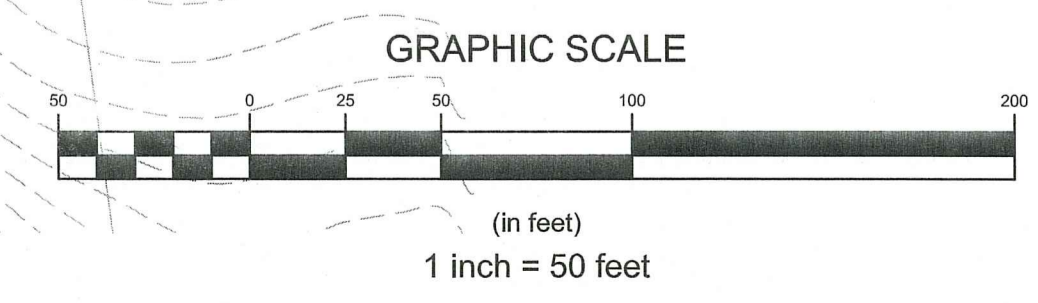
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	Sheet	3 of 13
	Project Number:	21193.0
	Survey Index:	

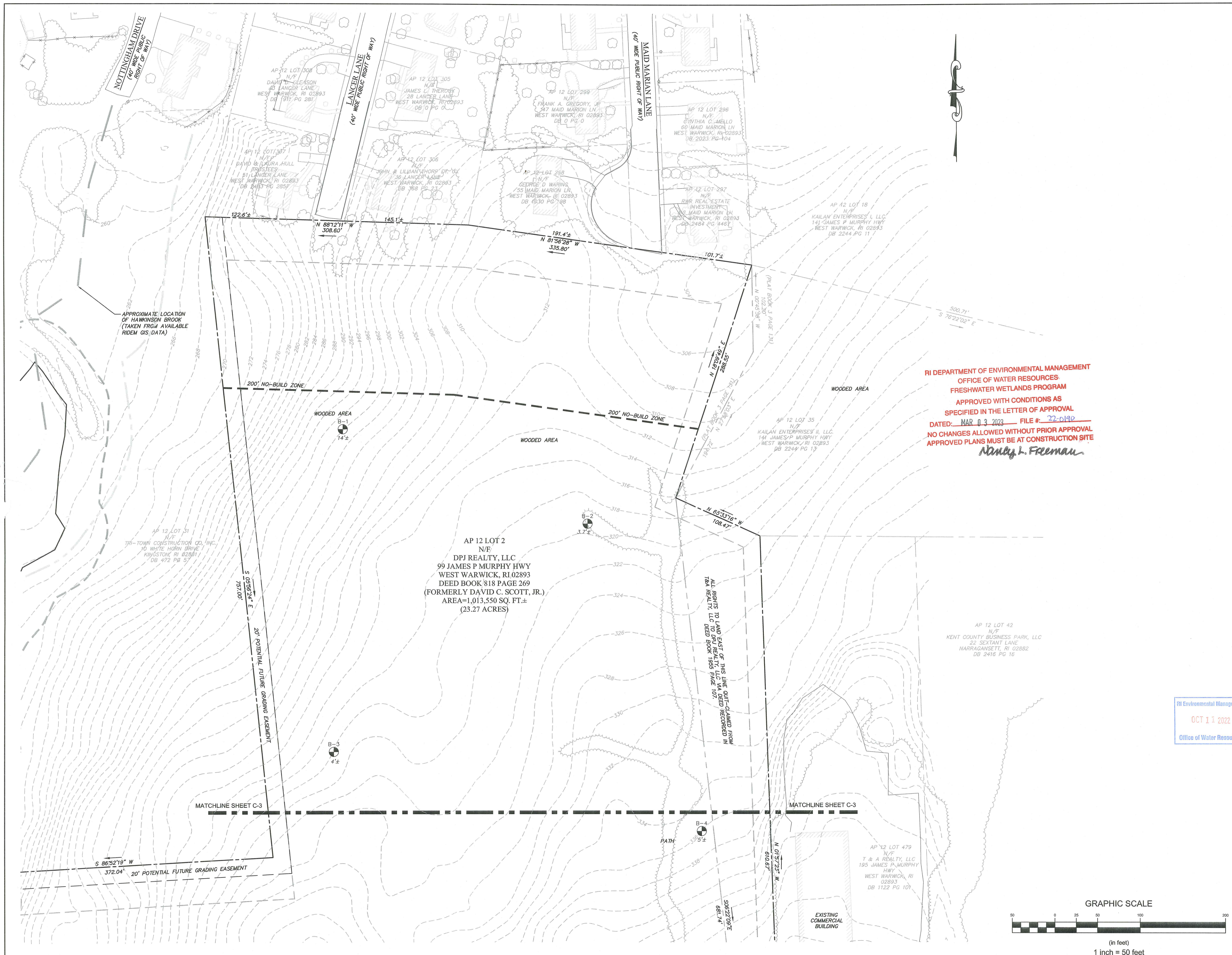
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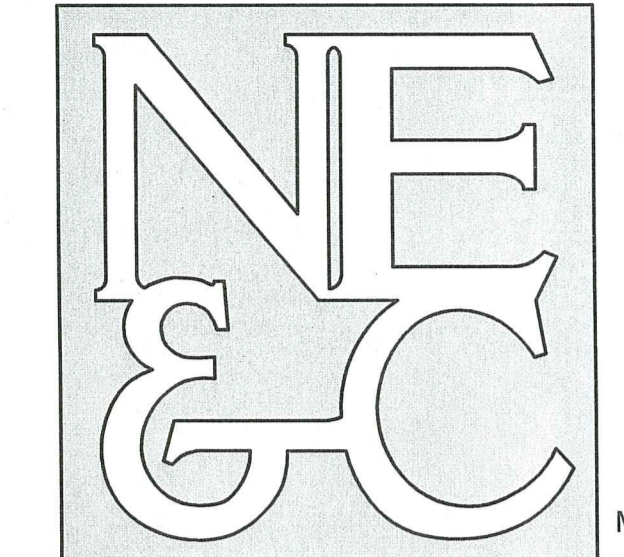
RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS AS
SPECIFIED IN THE LETTER OF APPROVAL
DATED: MAR 03 2023 FILE #22-C140
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE
Nancy L. Freeman

RI Environmental Management
OCT 11 2022
Office of Water Resources





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- WATERFRONT
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- STRUCTURAL
- MATERIALS TESTING

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LEGEND:

---	PROPERTY LINE
- - -	ABUTTER PROPERTY LINE
---	FRESHWATER WETLAND BOUNDARY (RIGIS)
---	PERIMETER WETLAND BOUNDARY (RIGIS)
---	APPROXIMATE STREAM (RIGIS)
---	APPROXIMATE RIVERBANK WETLAND (RIGIS)
---	ZONING BUILDING SETBACK
---	EASEMENT LINE
---	GUARD RAIL
---	OVERHEAD WIRES
W	MUNICIPAL WATER LINE
S	MUNICIPAL SEWER LINE
D	MUNICIPAL DRAIN LINE
---	TOPOGRAPHIC CONTOUR
---	FENCE LINE
---	UTILITY POLE
---	CATCH BASIN

- NOTES:**
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 - TOPOGRAPHY TAKEN FROM AVAILABLE LIDAR DATA. DATUM ELEVATION IS NAVD88.
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 - NORTH ARROW TAKEN FROM PLANS PROVIDED BY OTHERS.
 - REFER TO COMPLETE PROJECT NOTES ON SHEET C-2.

**RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
 FRESHWATER WETLANDS PROGRAM
 APPROVED WITH CONDITIONS AS
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 DATED: MAR 03 2023 FILE #: 22-0190
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Nancy L. Freeman

1	RIDEM REVISIONS	06OCT22			
0	RIDEM SUBMISSION	28MAY22			
No.	Revision	Date	App.		
Designed By:	JJR	Drawn by:	JJR	Checked by:	GES
Scale:	1"=50'	Date:	REV. 06OCT22		

Project Title:
**NORTHBRIDGE
 WEST WARWICK SOLAR**
 A.P. 12, LOT 2
 215 JAMES P. MURPHY HIGHWAY
 WEST WARWICK, RI 02893

Client/Owner:
DPJ REALTY, LLC
 99 JAMES P. MURPHY HIGHWAY
 WEST WARWICK, RI 02893

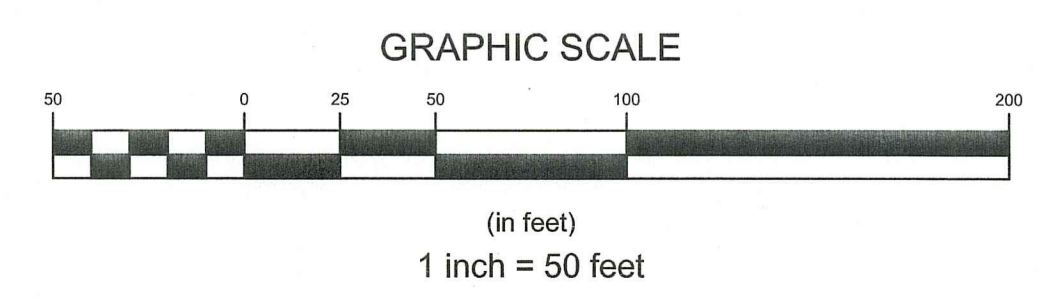
Issued for:
PERMITTING

Drawing Title:
**EXISTING CONDITIONS PLAN
 (NORTH SIDE)**

Drawing Number: C-4	
Sheet 4 of 13	
Project Number: 21193.0	
Survey Index:	

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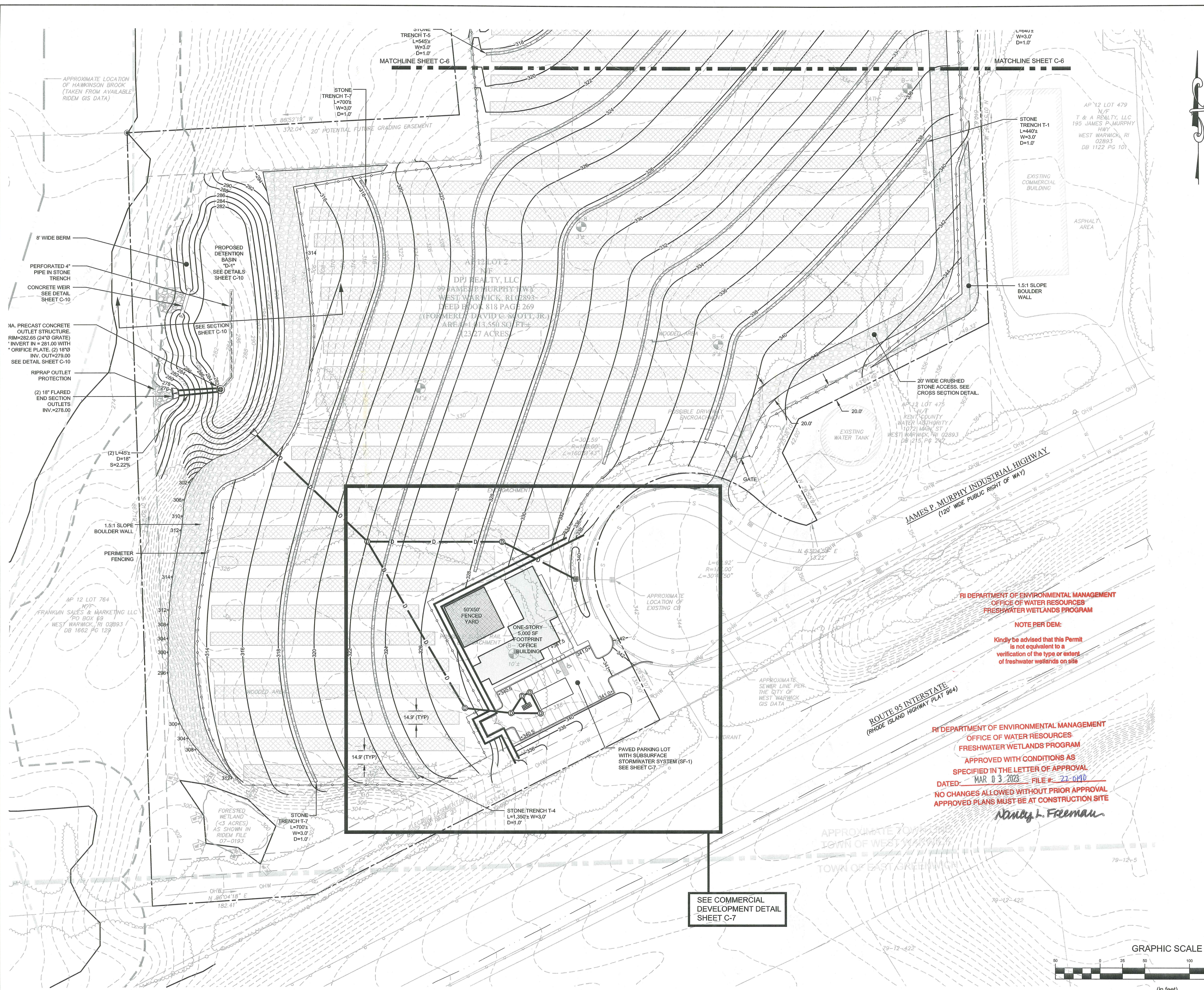
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- REFER TO COMPLETE PROJECT NOTES ON SHEET C-2.

LEGEND:

	PROPERTY LINE
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	FRESHWATER WETLAND BOUNDARY (RIGIS)
	PERIMETER WETLAND BOUNDARY (RIGIS)
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	APPROXIMATE RIVERBANK WETLAND (RIGIS)
	ZONING BUILDING SETBACK EASEMENT LINE
	GUARD RAIL
	OVERHEAD WIRES
	MUNICIPAL WATER LINE
	MUNICIPAL SEWER LINE
	MUNICIPAL DRAIN LINE
	TOPOGRAPHIC CONTOUR
	FENCE LINE
	UTILITY POLE
	CATCH BASIN
	PROPOSED TOPOGRAPHIC CONTOUR
	PROPOSED SPOT ELEVATION
	PROPOSED FENCE LINE
	PROPOSED DRAIN LINE
	PROPOSED OVERHEAD WIRE
	PROPOSED UTILITY POLE
	PROPOSED DRAIN MANHOLE
	PROPOSED CATCH BASIN



1	RIDEM REVISIONS	06OCT22	
0	RIDEM SUBMISSION	26MAY22	
No.	Revision	Date	App.
Designed By:	JJR	Drawn by:	JJR
Checked by:	GES	Date:	REV_06OCT22
Scale: 1"=50'			

Project Title:
NORTHBRIDGE WEST WARWICK SOLAR
A.P. 12, LOT 2
215 JAMES P. MURPHY HIGHWAY
WEST WARWICK, RI 02893

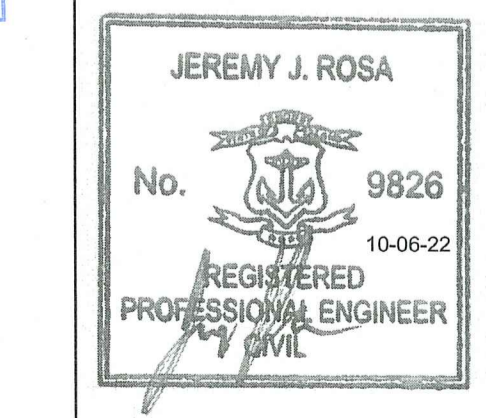
Client/Owner:
DPJ REALTY, LLC
99 JAMES P. MURPHY HIGHWAY
WEST WARWICK, RI 02893

Issued for:
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Drawing Title:
PROPOSED CONDITIONS PLAN (SOUTH SIDE)

Drawing Number: C-5
Sheet 5 of 13
Project Number: 21193.0
Survey Index:

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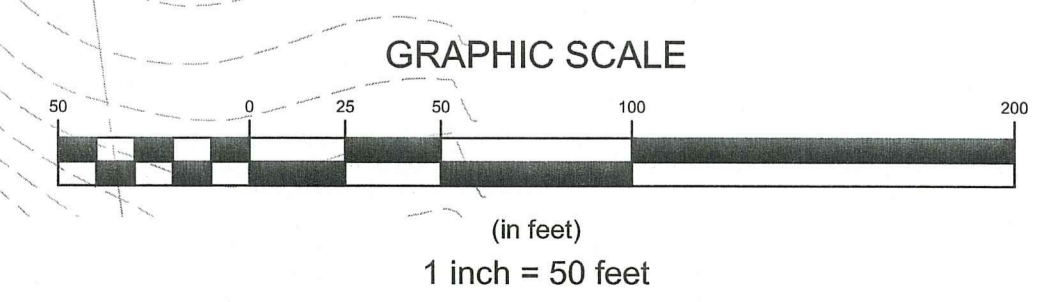


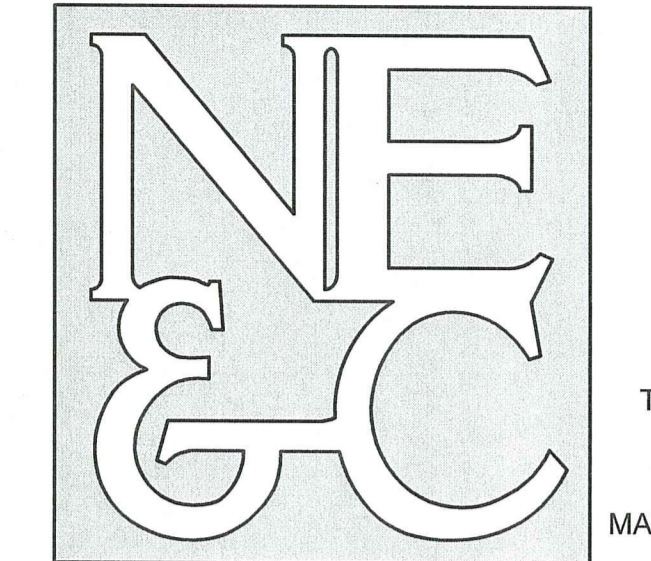
RI Department of Environmental Management
Office of Water Resources
OCT 11 2022

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
NOTE PER DEM:
Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site.

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL
DATED: MAR 03 2023 FILE #: 22-0490
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SEE COMMERCIAL DEVELOPMENT DETAIL SHEET C-7





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LEGEND:

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- ZONING BUILDING SETBACK
- EASEMENT LINE
- GUARD RAIL
- OHW OVERHEAD WIRES
- W MUNICIPAL WATER LINE
- S MUNICIPAL SEWER LINE
- MUNICIPAL DRAIN LINE
- TOPOGRAPHIC CONTOUR
- FENCE LINE
- UTILITY POLE
- CATCH BASIN
- PROPOSED TOPOGRAPHIC CONTOUR
- +100.00 PROPOSED SPOT ELEVATION
- PROPOSED FENCE LINE
- D PROPOSED DRAIN LINE
- OHW PROPOSED OVERHEAD WIRE
- °C° PROPOSED UTILITY POLE
- (M) PROPOSED DRAIN MANHOLE
- (C) PROPOSED CATCH BASIN

No.	Revision	Date	App.
2	RIDEM REVISIONS	06OCT22	
1	DESIGN CLARIFICATION FOR RIDEM	08JUN22	
0	RIDEM SUBMISSION	26MAY22	

Designed By: JJR Drawn by: JJR Checked by: GES
Scale: 1"=50' Date: REV. 06OCT22

Project Title:
**NORTHBRIDGE
WEST WARWICK SOLAR**
A.P. 12, LOT 2
215 JAMES P. MURPHY HIGHWAY
WEST WARWICK, RI 02893

Client/Owner:
DPJ REALTY, LLC
99 JAMES P. MURPHY HIGHWAY
WEST WARWICK, RI 02893

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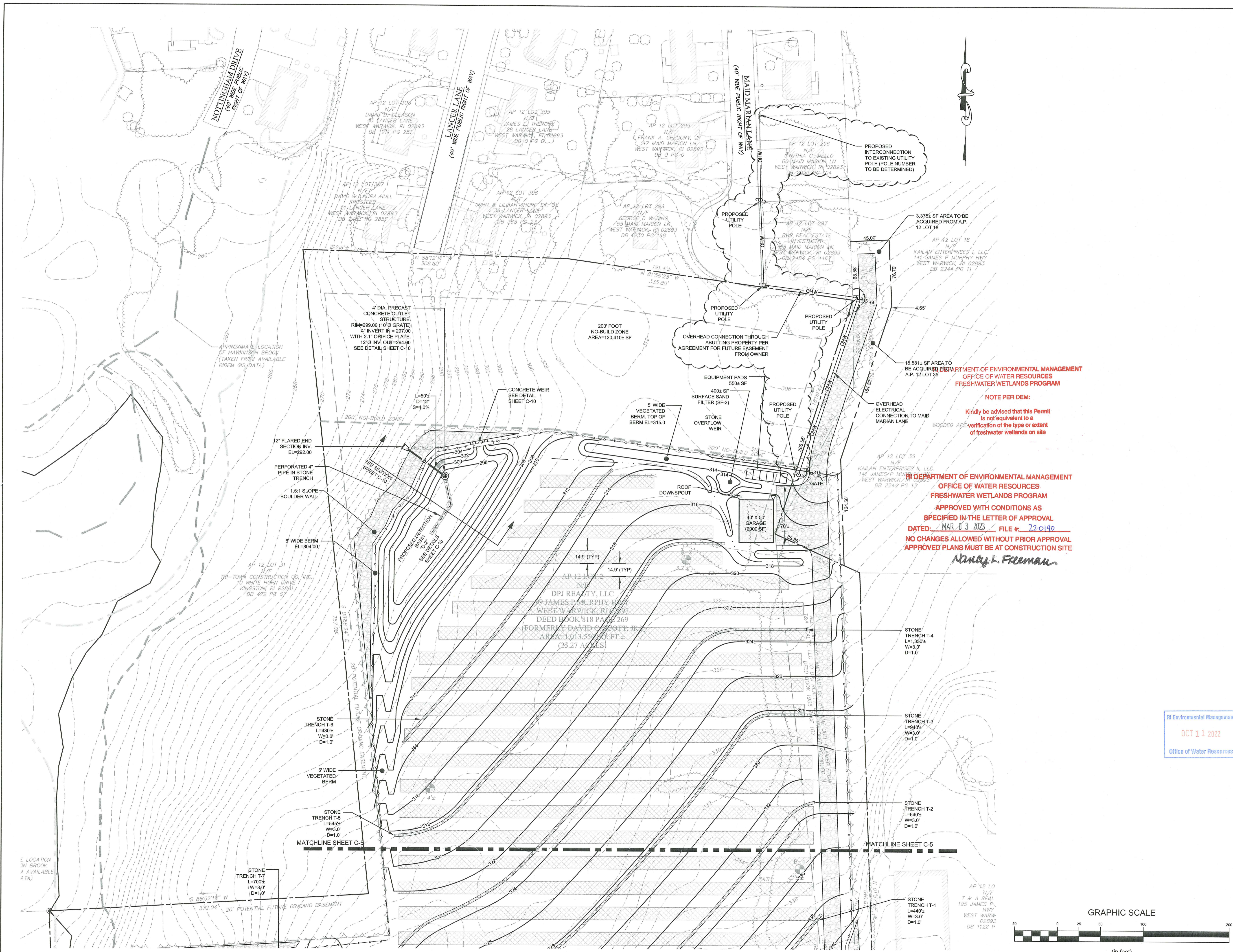
Drawing Title:
**PROPOSED CONDITIONS PLAN
(NORTH SIDE)**

Drawing Number:
C-6

JEREMY J. ROSA
No. 9826
REGISTERED PROFESSIONAL ENGINEER
10-06-22

Sheet **6** of **13**
Project Number:
21193.0
Survey Index:

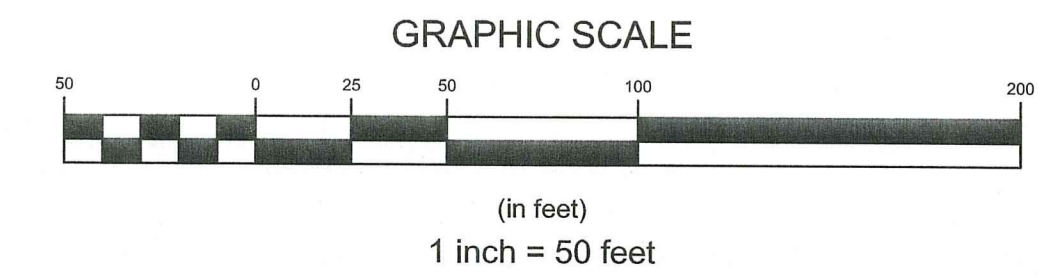
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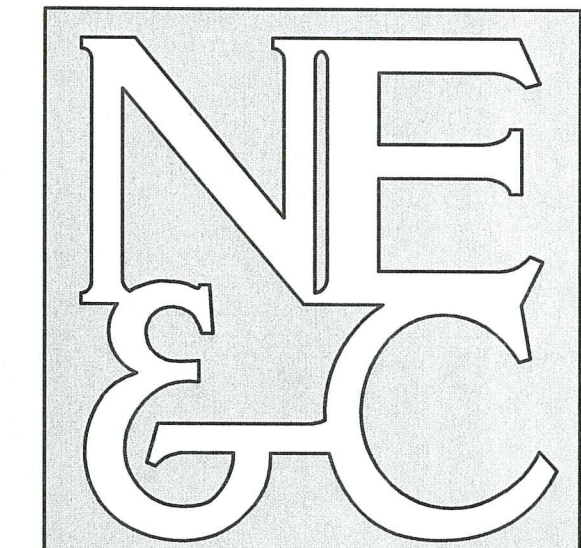


NOTE PER DEM:
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RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
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DATED: MAR 03 2023 FILE #: 22-0140
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RI Environmental Management
OCT 11 2022
Office of Water Resources





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- PROPOSED UTILITY POLE
- PROPOSED DRAIN MANHOLE
- PROPOSED CATCH BASIN
- PROPOSED WATER SERVICE
- PROPOSED SEWER SERVICE
- PROPOSED UG ELECTRICAL SERVICE

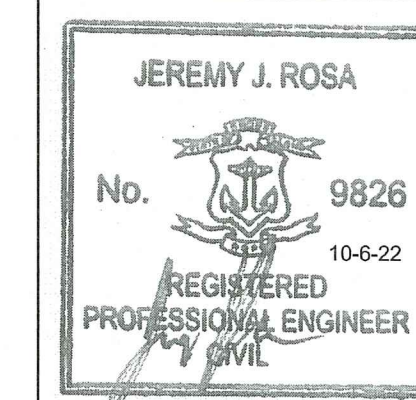
1	RIDEM REVISIONS	06OCT22	
0	RIDEM SUBMISSION	28MAY22	
No.	Revision	Date	App.
Designed By:	JJR	Drawn by:	JJR
Scale:	1"=20'	Checked by:	GES
		Date:	REV. 06OCT22

Project Title:
**NORTHBRIDGE
WEST WARWICK SOLAR**
A.P. 12, LOT 2
215 JAMES P. MURPHY HIGHWAY
WEST WARWICK, RI 02893

Client/Owner:
DPJ REALTY, LLC
99 JAMES P. MURPHY HIGHWAY
WEST WARWICK, RI 02893

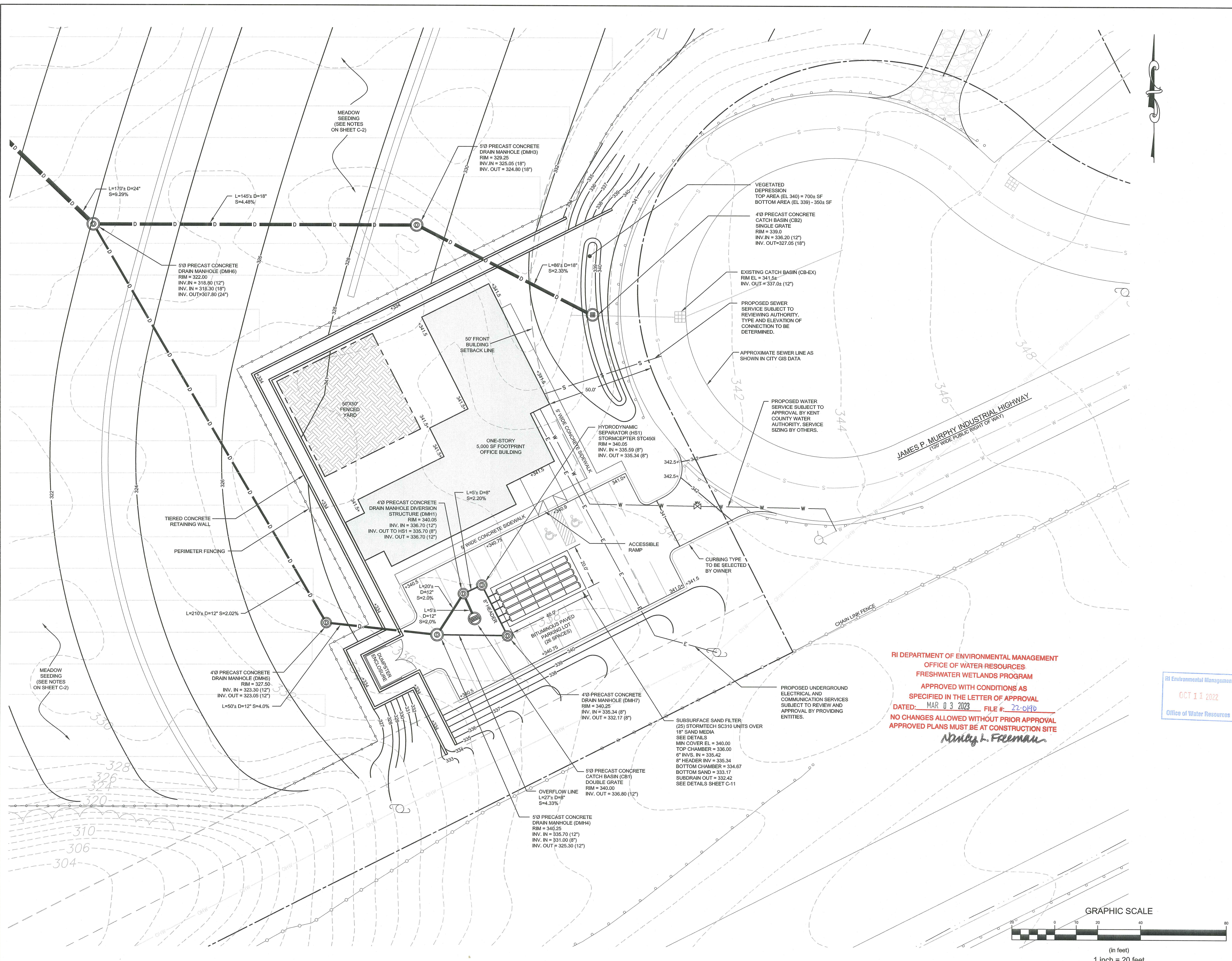
Issued for:
PERMITTING

Drawing Title:
**COMMERCIAL DEVELOPMENT
DETAIL PLAN**

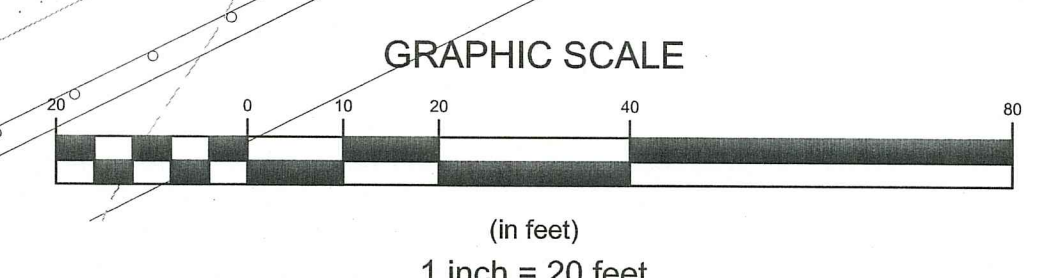
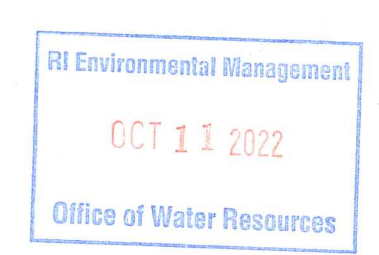


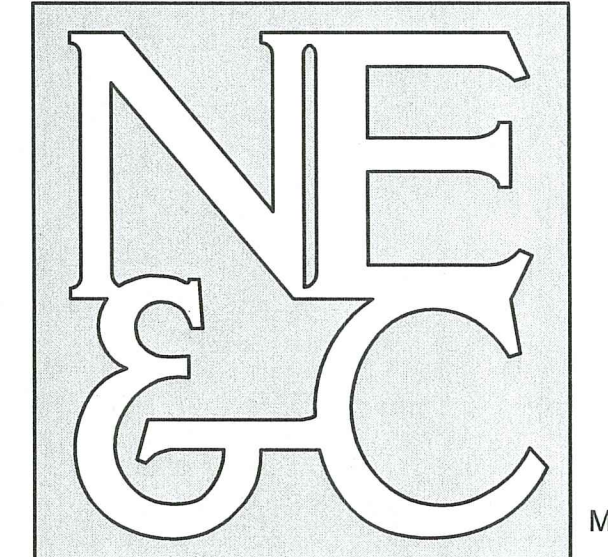
Drawing Number:
C-7
Sheet **7** of **13**
Project Number:
21193.0
Survey Index:

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OFFICE OF WATER RESOURCES
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Andily L. Freeman





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WWW.NORTHEASTENGINEERS.COM

NOTES:

- REFER TO COMPLETE PROJECT NOTES ON SHEET C-2.

LEGEND:

- PROPERTY LINE
- - - ABUTTER PROPERTY LINE
- - - FRESHWATER WETLAND BOUNDARY (RIGIS)
- - - PERIMETER WETLAND BOUNDARY (RIGIS)
- - - APPROXIMATE STREAM (RIGIS)
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- - - GUARD RAIL
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- - - FENCE LINE
- - - UTILITY POLE
- - - CATCH BASIN
- - - PROPOSED TOPOGRAPHIC CONTOUR
- - - PROPOSED SPOT ELEVATION
- - - PROPOSED FENCE LINE
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- - - PROPOSED UTILITY POLE
- - - PROPOSED DRAIN MANHOLE
- - - PROPOSED CATCH BASIN
- - - PROPOSED STRAW BALES
- - - PROPOSED FILTER SOCK EROSION CONTROL
- - - F.S.
- - - PROPOSED LIMIT OF DISTURBANCE

No.	Revision	Date	App.

Designed By: JJR Drawn by: JJR Checked by: GES
Scale: 1"=50' Date: 26MAY22

Project Title:
**NORTHBRIDGE
WEST WARWICK SOLAR**
A.P. 12, LOT 2
215 JAMES P. MURPHY HIGHWAY
WEST WARWICK, RI 02893

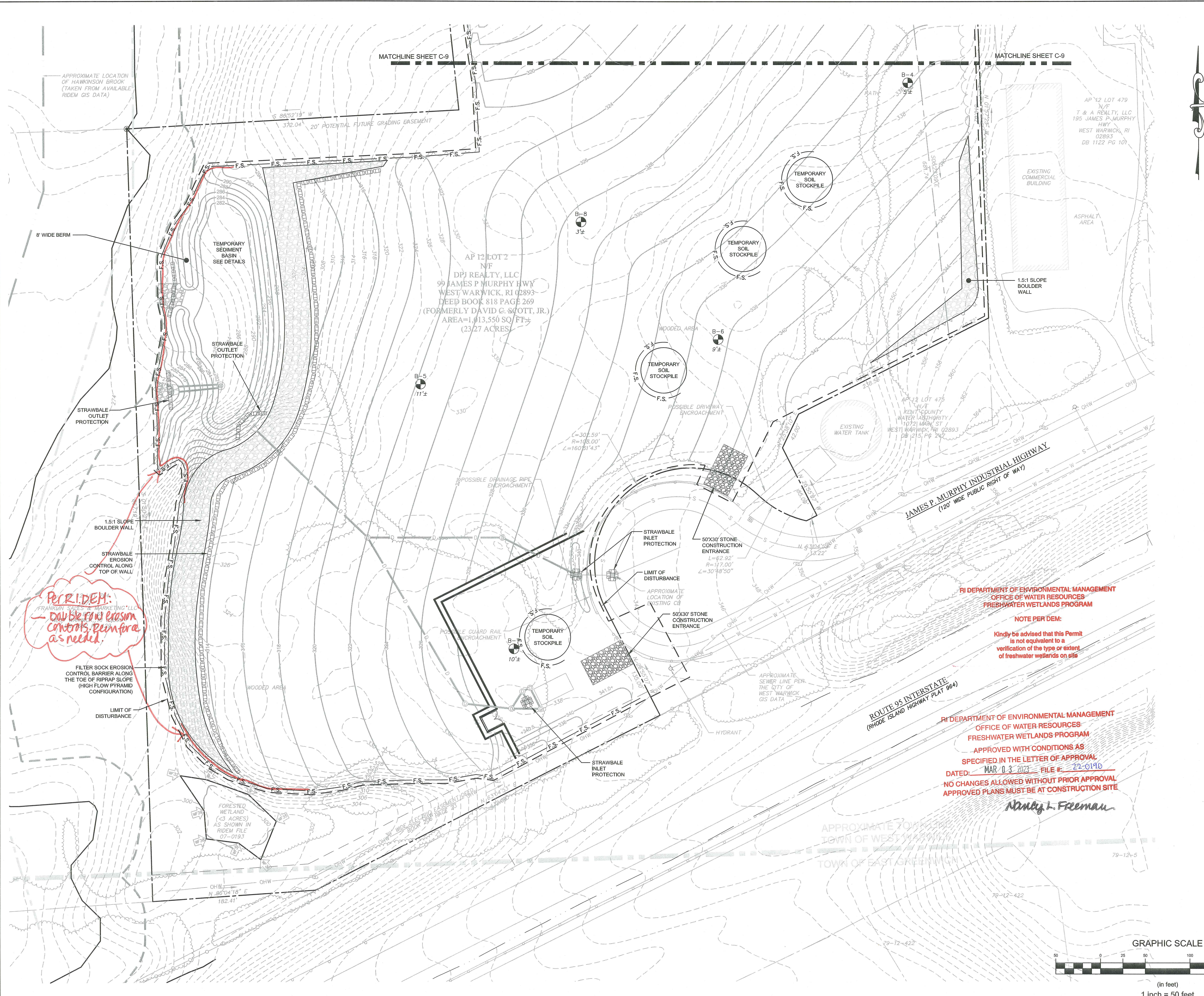
Client/Owner:
DPJ REALTY, LLC
99 JAMES P. MURPHY HIGHWAY
WEST WARWICK, RI 02893

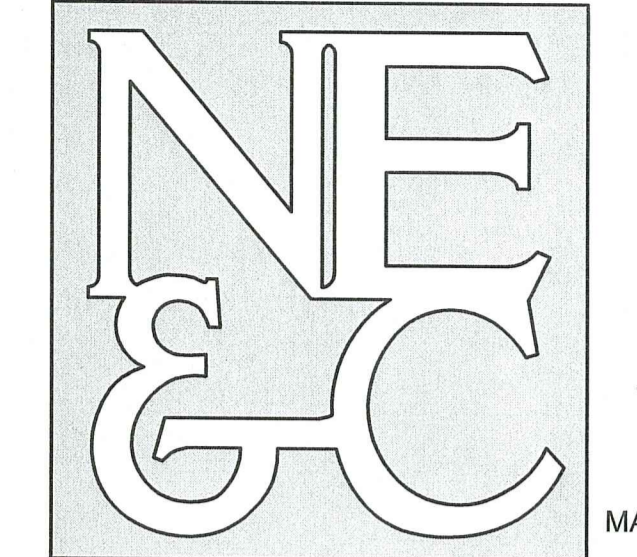
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Drawing Title:
**SOIL EROSION & SEDIMENT CONTROL
(SOUTH SIDE)**

Drawing Number:
C-8
Sheet **8** of **13**
Project Number:
21193.0
Survey Index:

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NOTES:

- REFER TO COMPLETE PROJECT NOTES ON SHEET C-2.

LEGEND:

- PROPERTY LINE
- - - BUTTER PROPERTY LINE
- - - FRESHWATER WETLAND BOUNDARY (RIGIS)
- - - PERIMETER WETLAND BOUNDARY (RIGIS)
- - - APPROXIMATE STREAM (RIGIS)
- - - APPROXIMATE RIVERBANK WETLAND (RIGIS)
- - - ZONING BUILDING SETBACK
- - - EASEMENT LINE
- - - GUARD RAIL
- - - OVERHEAD WIRES
- - - MUNICIPAL WATER LINE
- - - MUNICIPAL SEWER LINE
- - - MUNICIPAL DRAIN LINE
- - - TOPOGRAPHIC CONTOUR
- - - FENCE LINE
- - - UTILITY POLE
- - - CATCH BASIN
- - - PROPOSED TOPOGRAPHIC CONTOUR
- - - PROPOSED SPOT ELEVATION
- - - PROPOSED FENCE LINE
- - - PROPOSED DRAIN LINE
- - - PROPOSED UTILITY POLE
- - - PROPOSED DRAIN MANHOLE
- - - PROPOSED CATCH BASIN
- - - PROPOSED STRAW BALES
- - - PROPOSED FILTER SOCK EROSION CONTROL
- - - PROPOSED LIMIT OF DISTURBANCE

No.	Revision	Date	App.

Designed By: JJR Drawn by: JJR Checked by: GES
Scale: 1"=50' Date: 26MAY22

NORTHBRIDGE WEST WARWICK SOLAR
A.P. 12, LOT 2
215 JAMES P. MURPHY HIGHWAY
WEST WARWICK, RI 02893

Client/Owner:
DPJ REALTY, LLC
99 JAMES P. MURPHY HIGHWAY
WEST WARWICK, RI 02893

Issued for:
PERMITTING

Drawing Title:
SOIL EROSION & SEDIMENT CONTROL (NORTH SIDE)

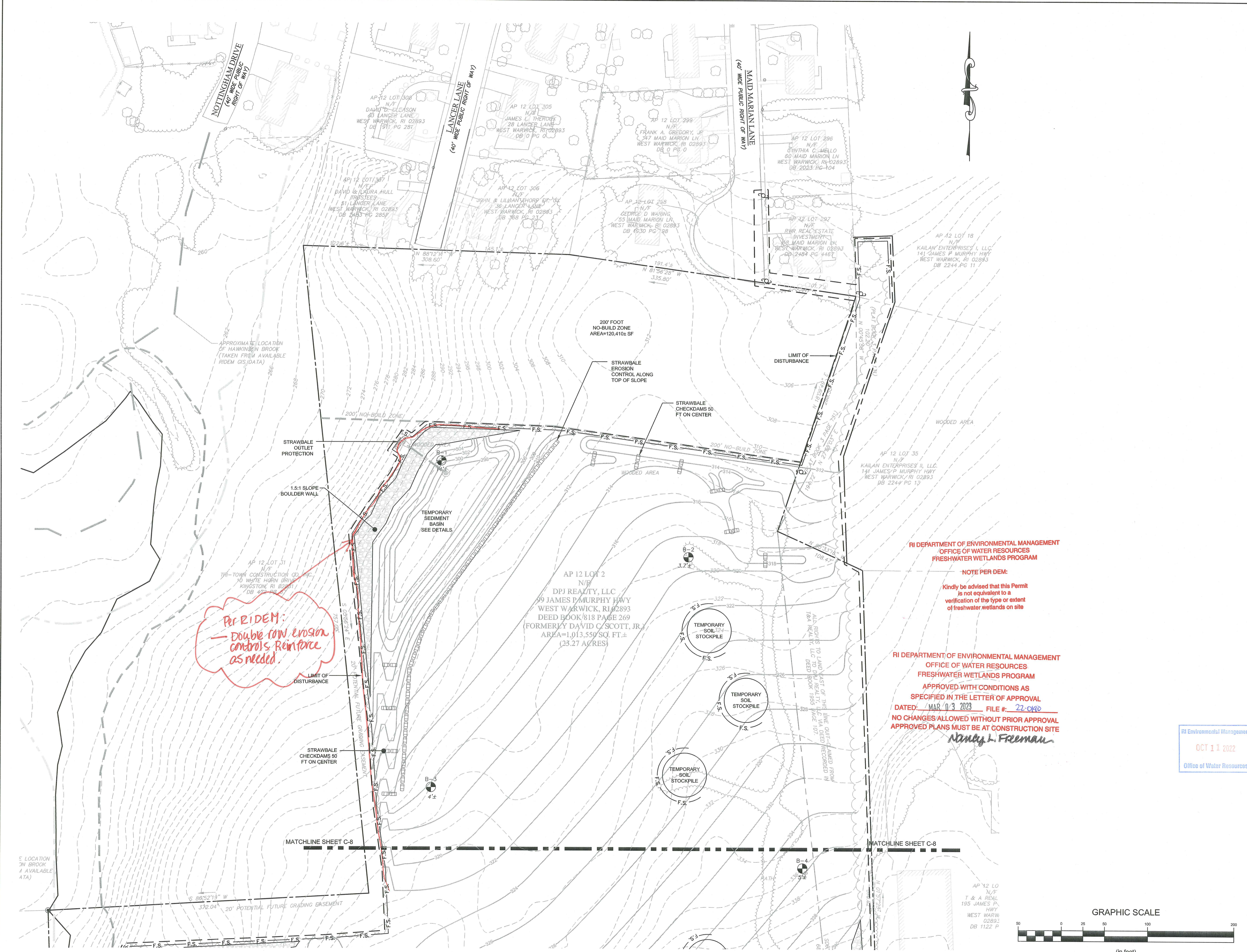
Drawing Number:
C-9

Sheet **9** of **13**

Project Number:
21193.0

Survey Index:
-

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*Per RIDEM:
Double row erosion controls Reinforce as needed.*

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OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM

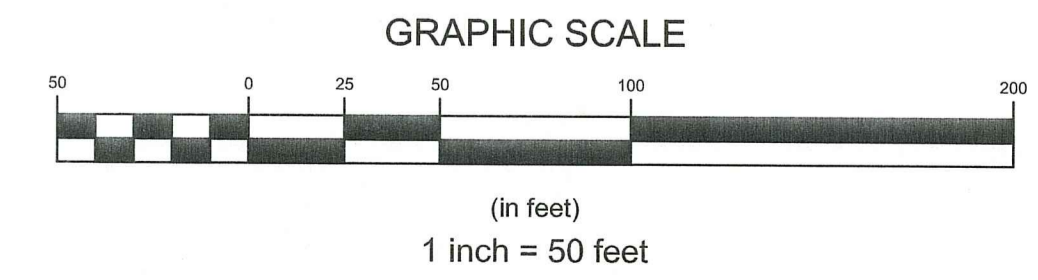
NOTE PER DEM:
Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site

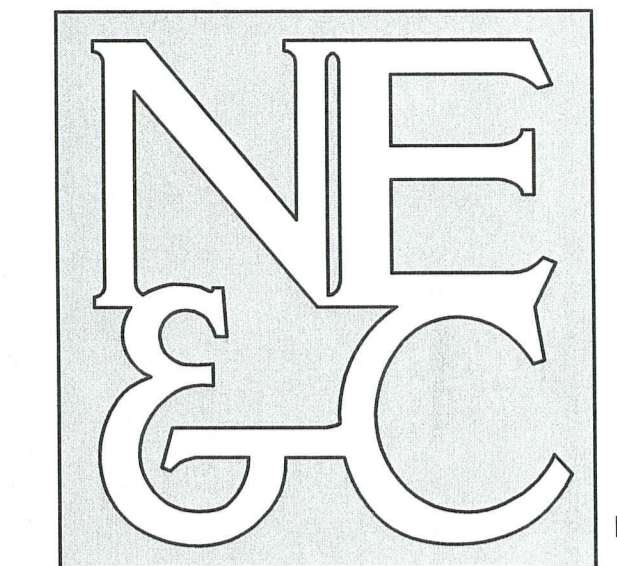
RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM

APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL
DATED: MAR 03 2023 FILE #: 22-0190
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Nancy L. Freeman

RI Environmental Management
OCT 11 2022
Office of Water Resources



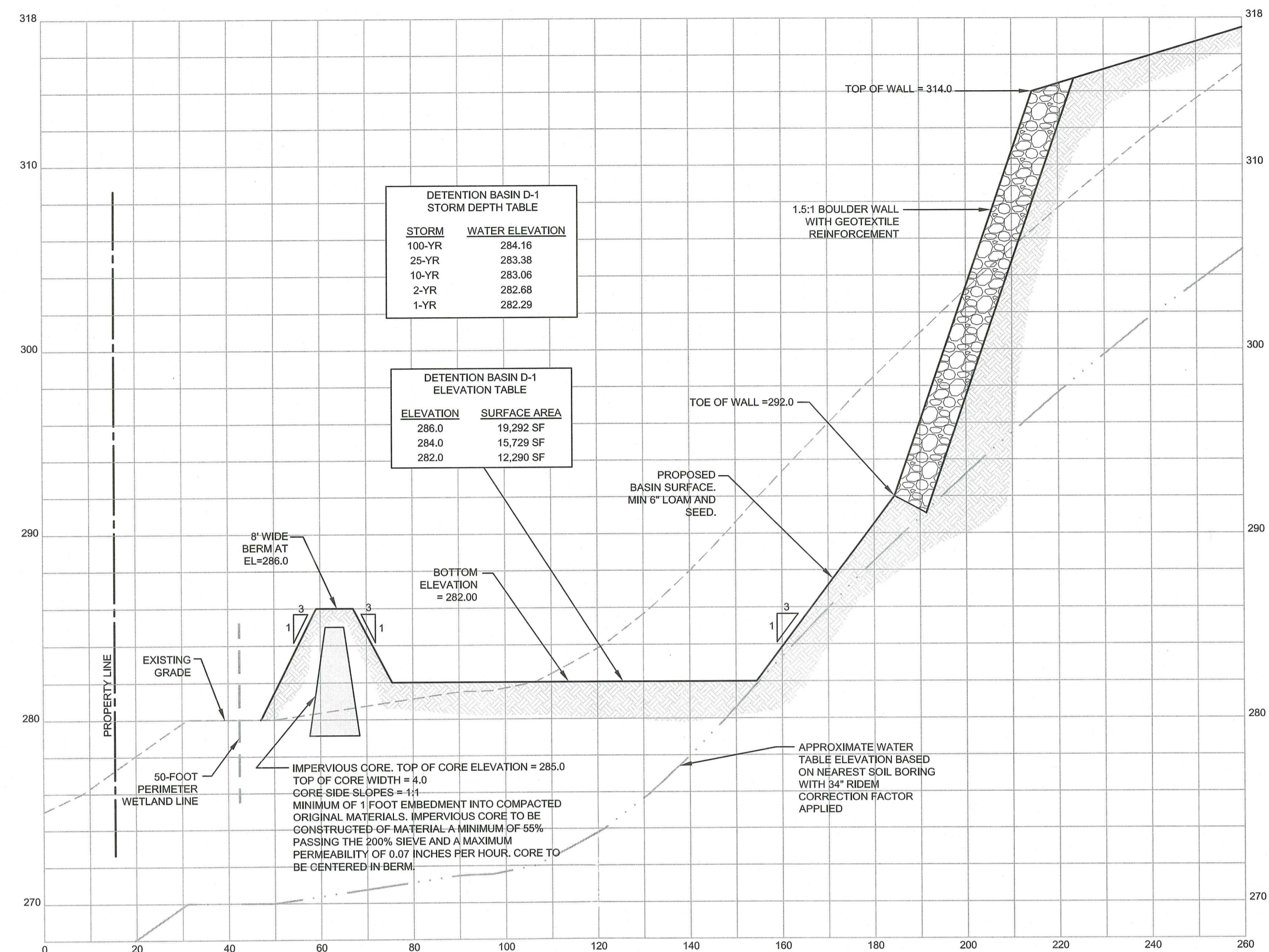


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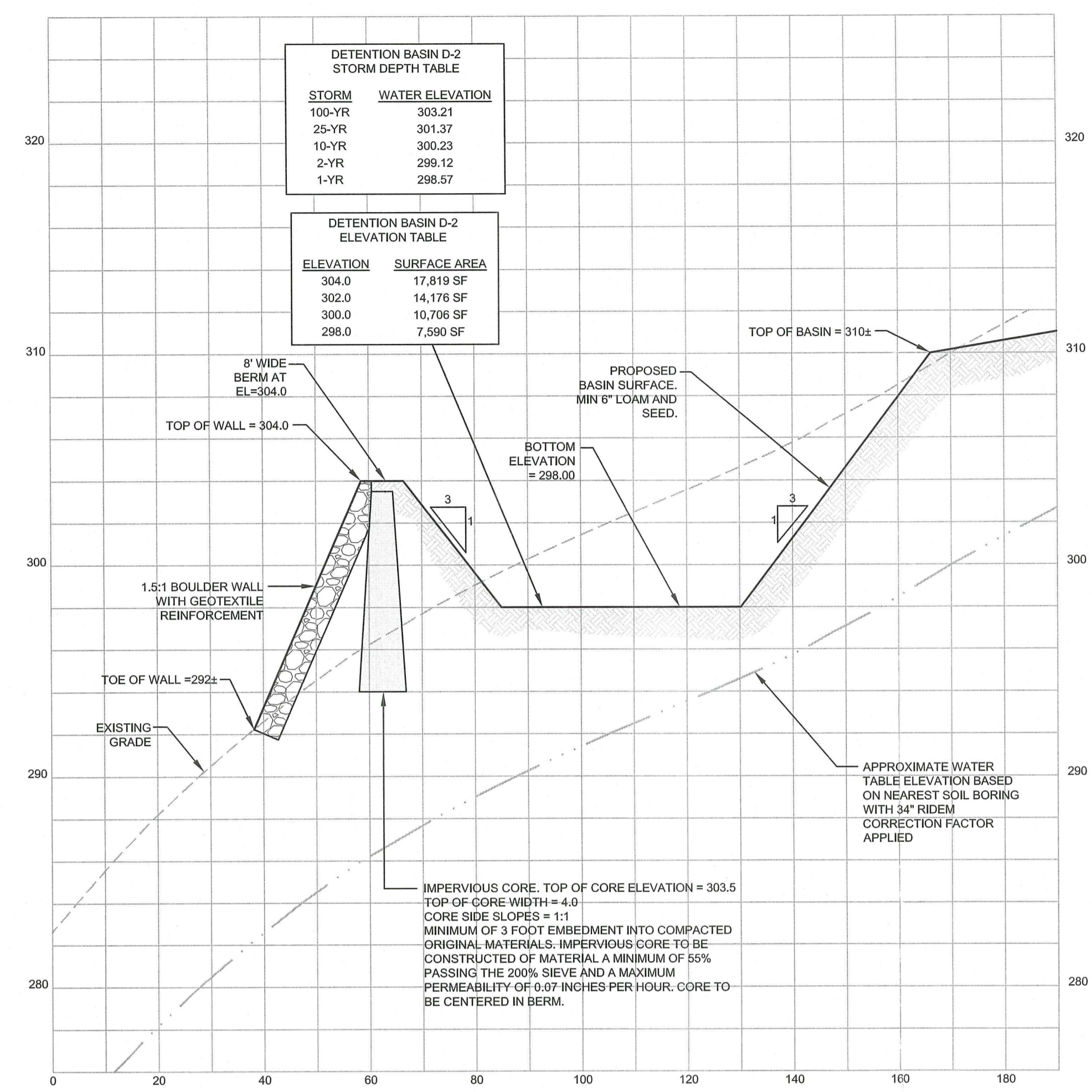
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OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS AS
SPECIFIED IN THE LETTER OF APPROVAL
DATED: MAR 03 2023 FILE #: 27-0190
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Nancy L. Freeman



BASIN D-1 CROSS SECTION

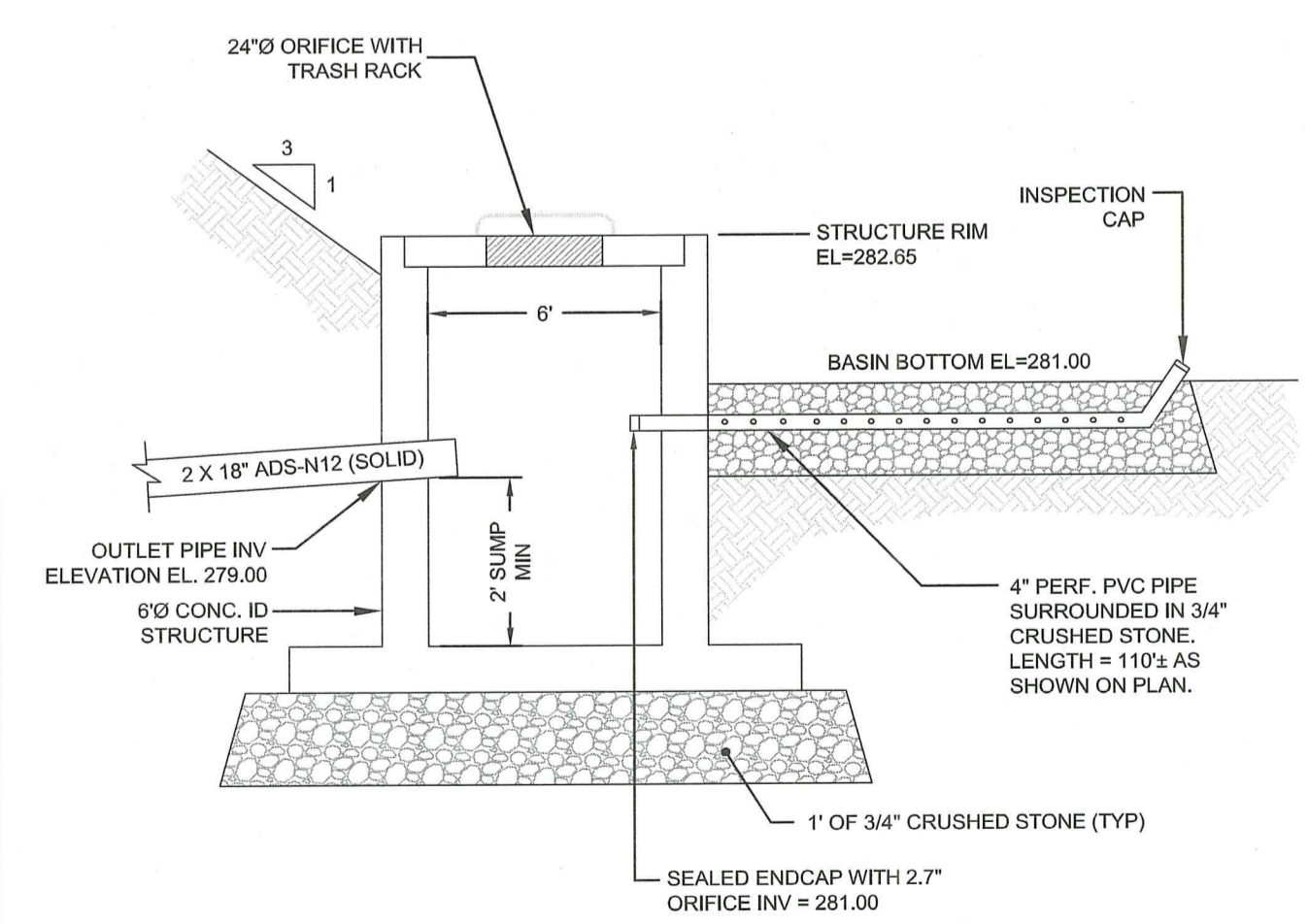
HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 5'



BASIN D-2 CROSS SECTION

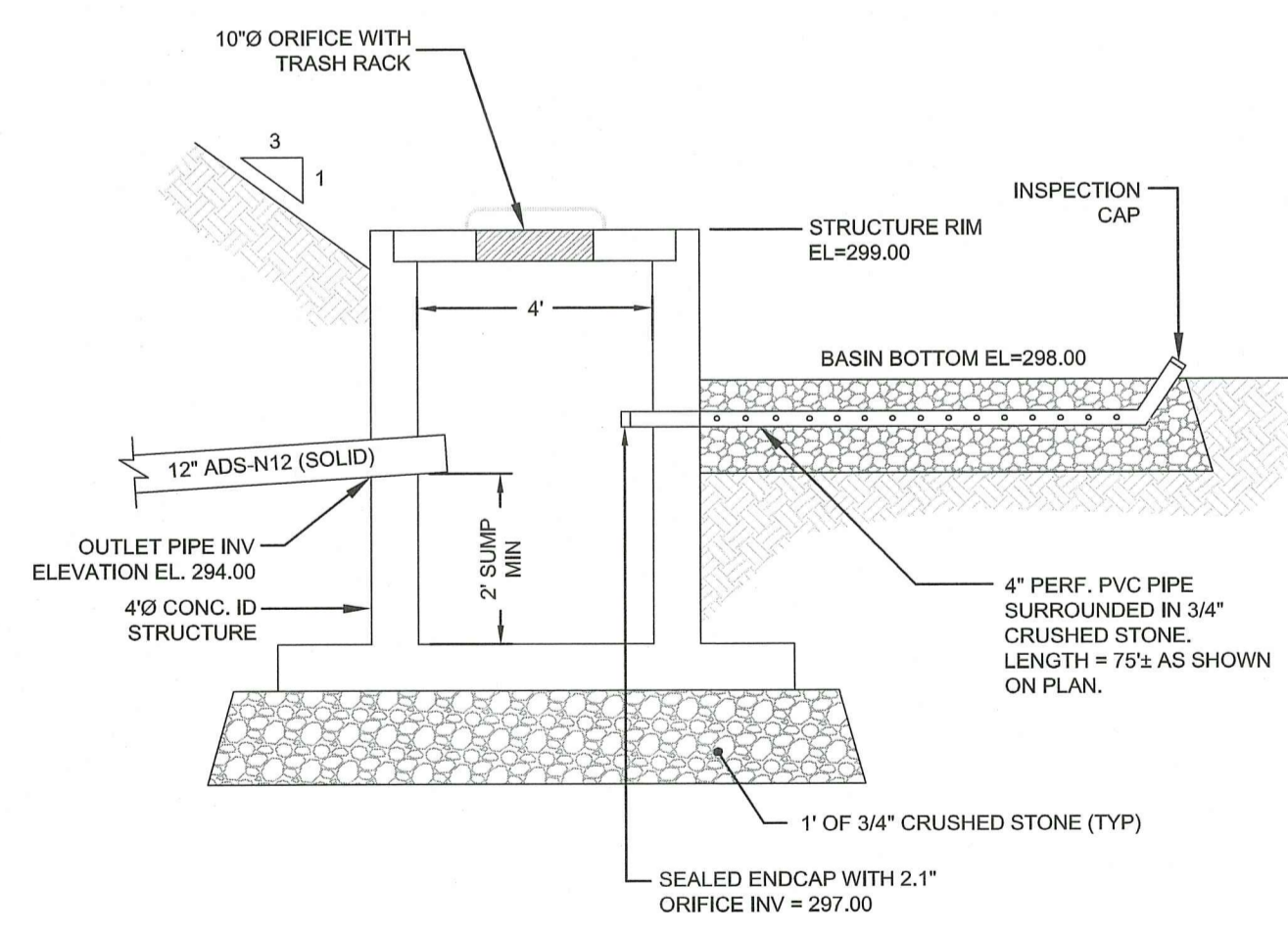
HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 5'

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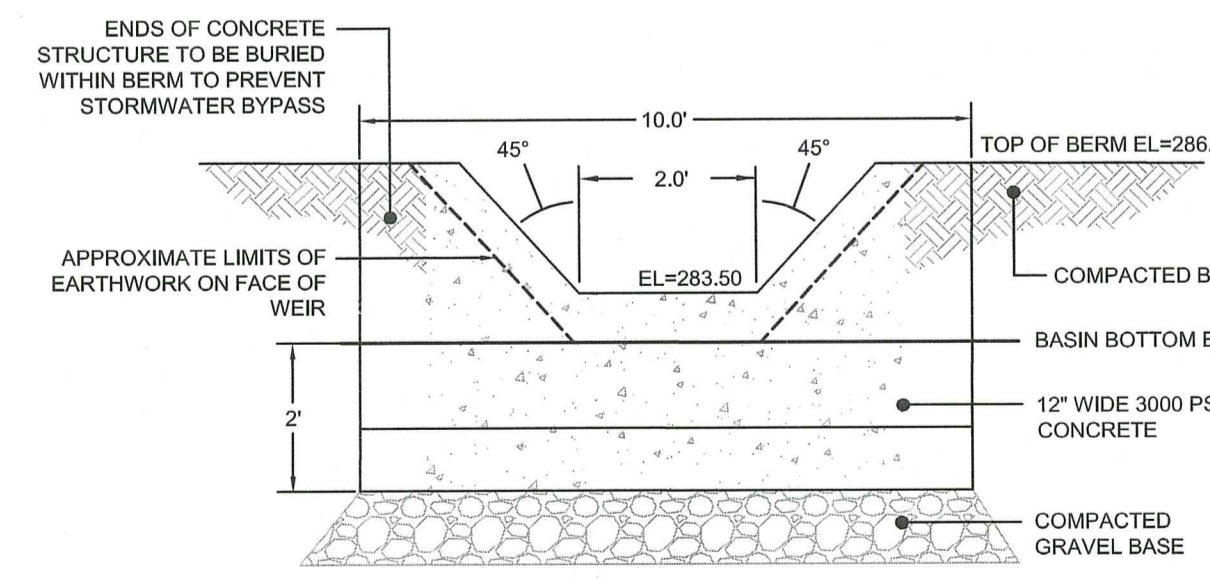
BASIN D-1 OUTLET STRUCTURE

SCALE: NOT TO SCALE



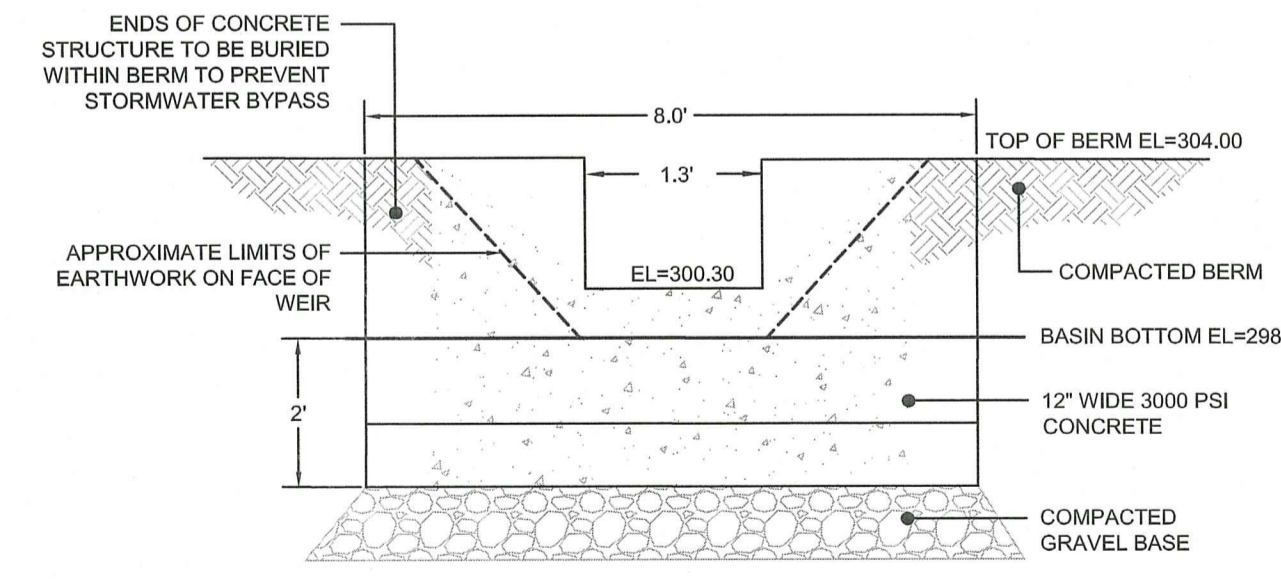
BASIN D-2 OUTLET STRUCTURE

SCALE: NOT TO SCALE



BASIN D-1 CONCRETE V-TRAP WEIR DETAIL

SCALE: NOT TO SCALE



BASIN D-2 CONCRETE NOTCH WEIR DETAIL

SCALE: NOT TO SCALE

1	RIDEM REVISIONS	06OCT22	
0	RIDEM SUBMISSION	28MAY22	
No.	Revision	Date	App.
Designed By:	JJR	Drawn by:	JJR
Checked by:	GES	Date:	REV. 06OCT22

Project Title:
**NORTHBRIDGE
WEST WARWICK SOLAR**
A.P. 12, LOT 2
215 JAMES P. MURPHY HIGHWAY
WEST WARWICK, RI 02893

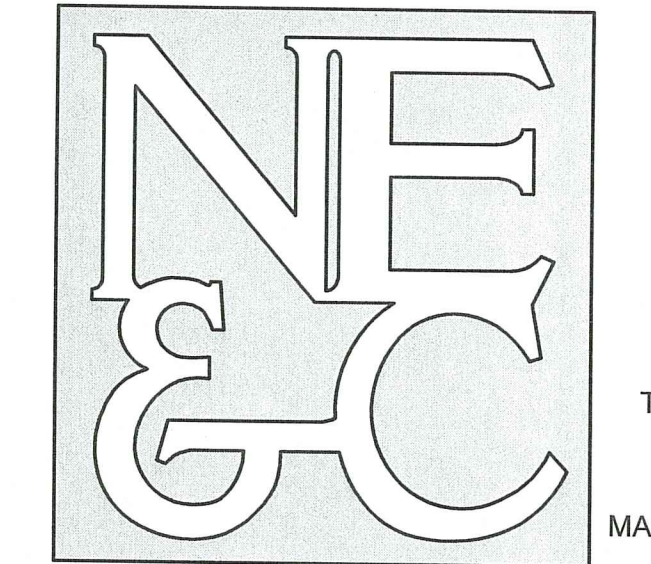
Client/Owner:
DPJ REALTY, LLC
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WEST WARWICK, RI 02893

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Drawing Title:
SITE DETAILS 1

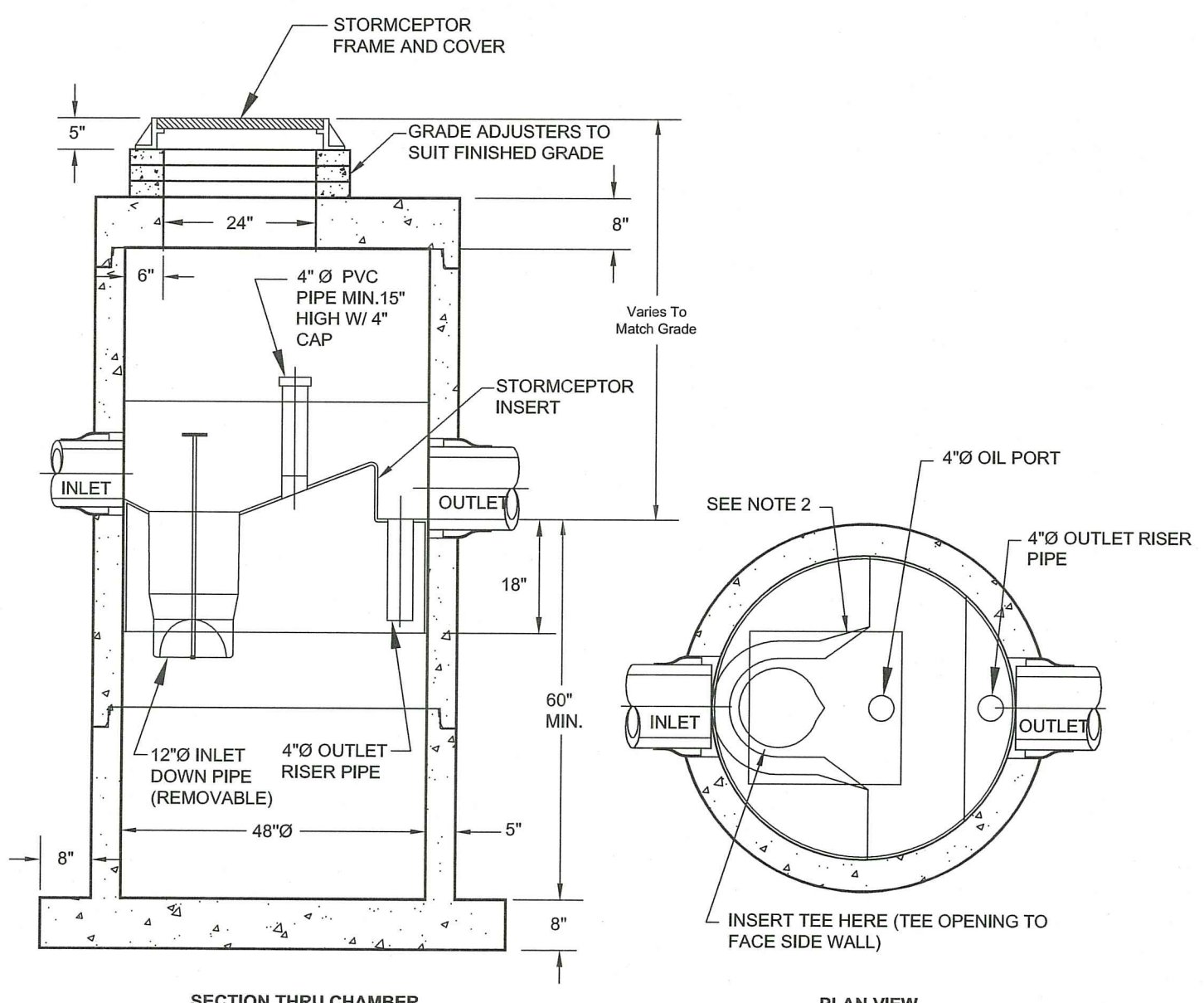
	Drawing Number: C-10
	Sheet 10 of 13
	Project Number: 21193.0
	Survey Index: -

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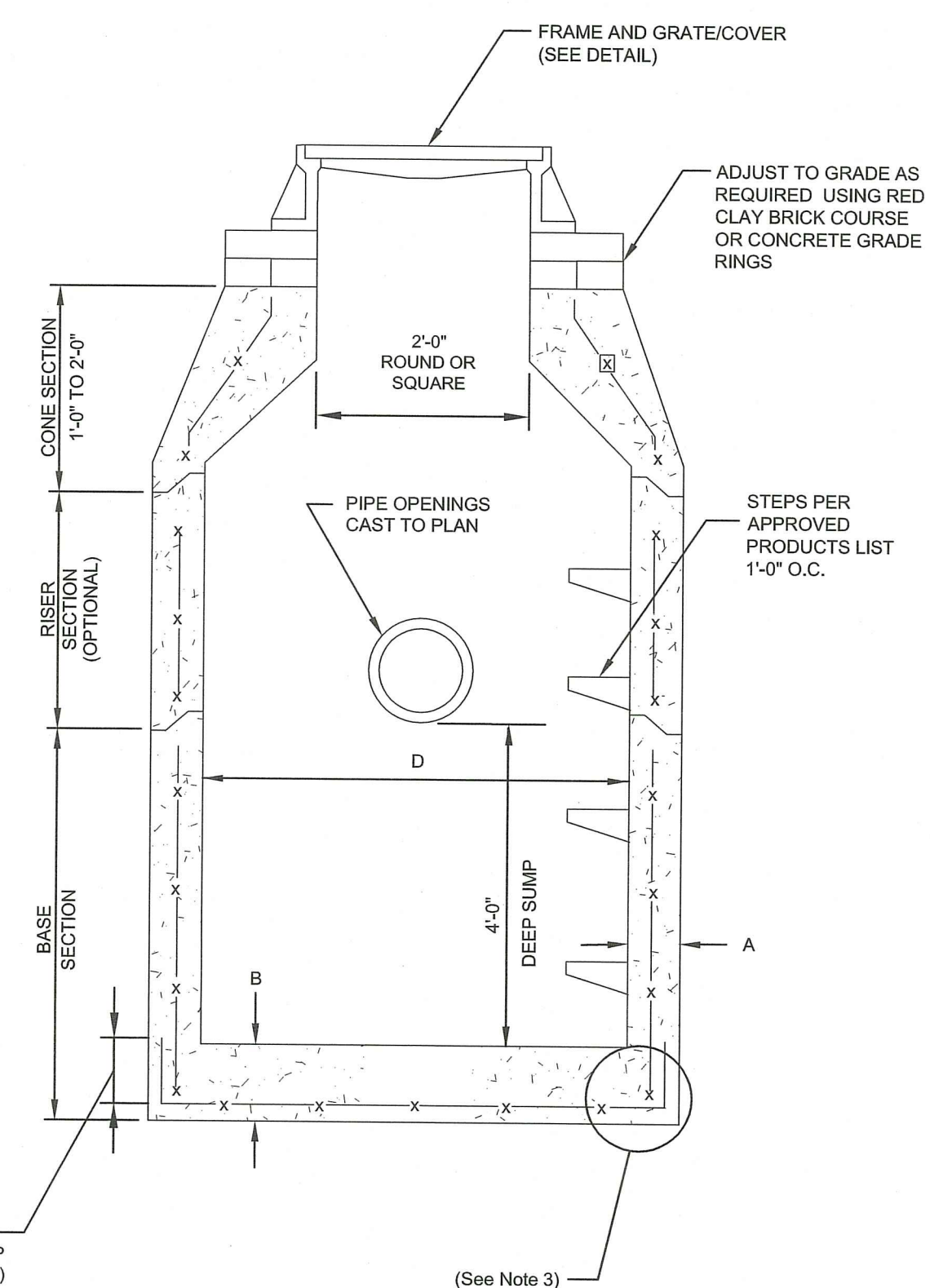
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SECTION THRU CHAMBER
PLAN VIEW

NOTES:
1. THE USE OF FLEXIBLE CONNECTION IS RECOMMENDED AT THE INLET AND OUTLET WHERE APPLICABLE.
2. THE COVER SHOULD BE POSITIONED OVER THE INLET DROP PIPE AND THE OIL PORT.
3. THE STORMCEPTOR SYSTEM IS PROTECTED BY ONE OR MORE OF THE FOLLOWING U.S. PATENTS: #4985148, #5498331, #5725760, #5753115, #5849181, #6068765, #6371690.



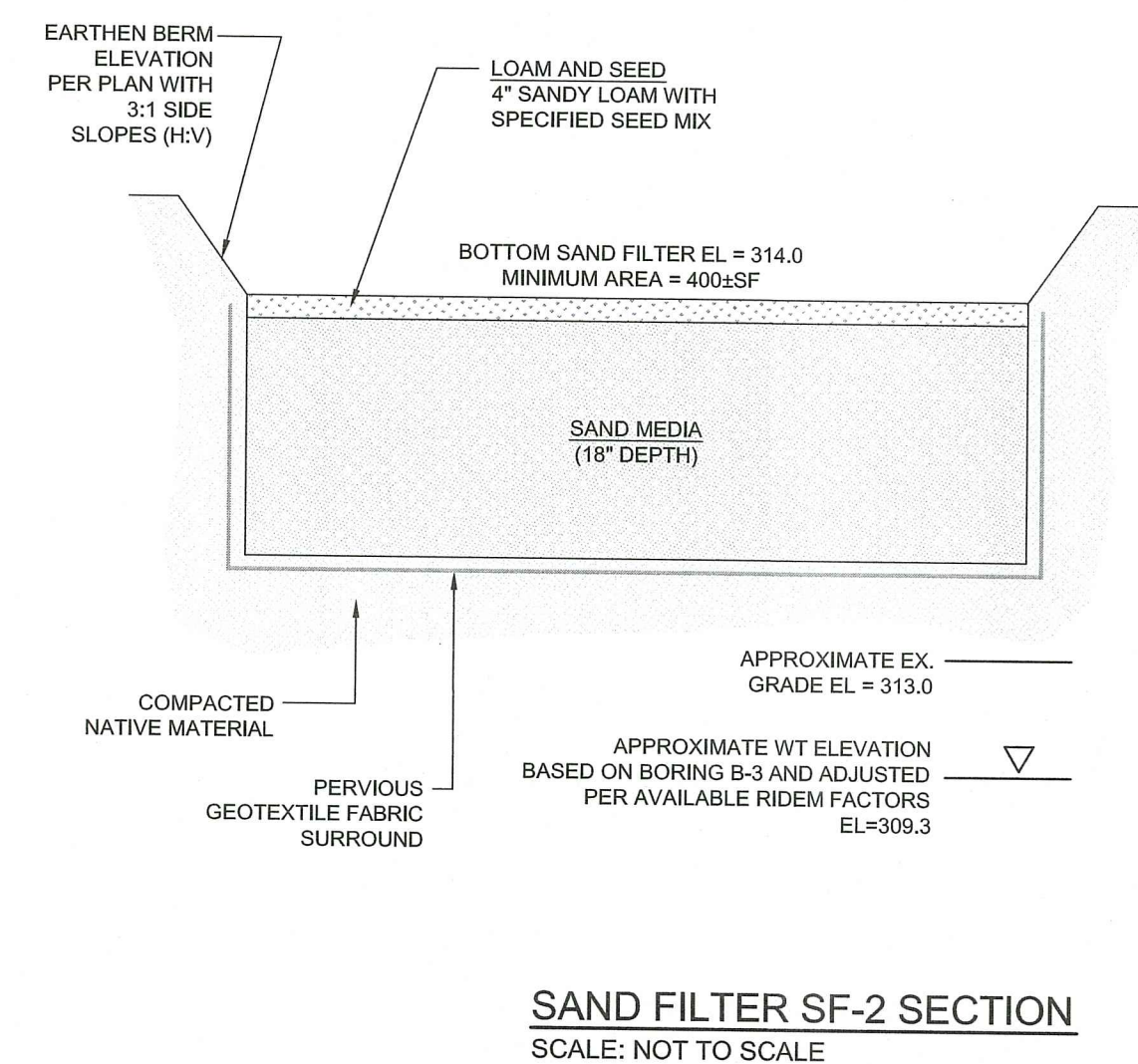
PRECAST ROUND CATCH BASIN & DRAIN MANHOLE (RIDOT 4.4.0)
SCALE: NOT TO SCALE

TABLE 1

CATCH BASIN DIAMETER (D)	A	B	CIRCUMFERENTIAL STEEL REINFORCEMENT REQUIRED*
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.
8'-0"	9"	8"	REFER TO MANUFACTURER

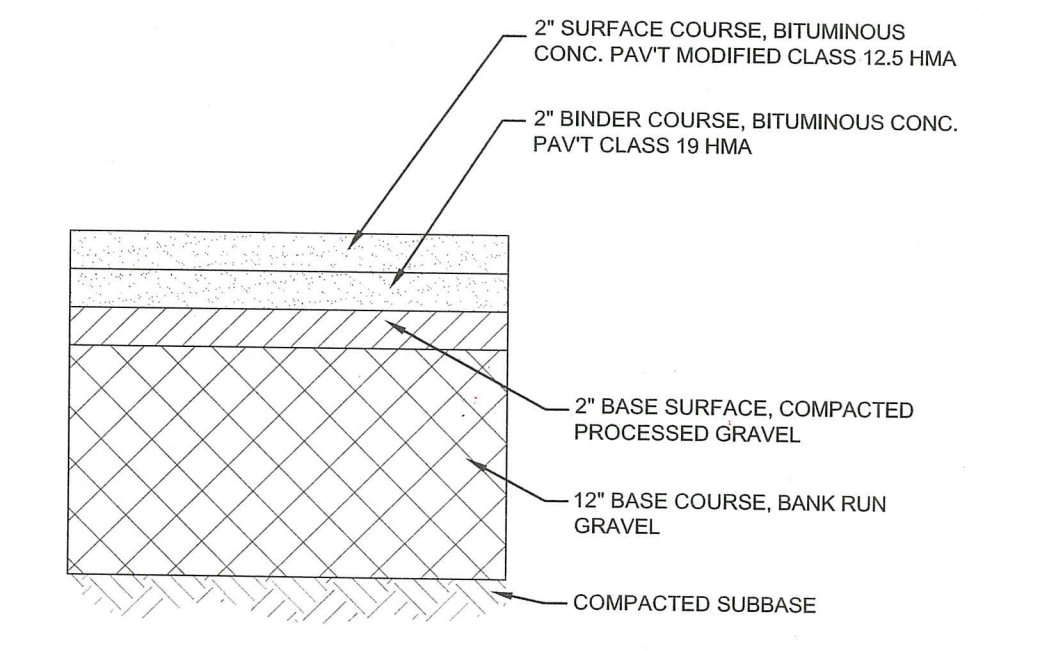
* FOR LONGITUDINAL (VERTICAL STANDING) REINFORCEMENT REFER TO ASTM C478, ITEM 8.1.2

- NOTES:
- SHALL BE ACCORDANCE WITH SECTION 702 OF THE R.I. STANDARD SPECIFICATION.
 - SEE TABLE 1 FOR STEEL REINFORCEMENT REQUIREMENTS.
 - STEEL REINFORCEMENT FOR BASE SECTION BOTTOM SHALL BE A MINIMUM OF 0.12 SQ. IN./LIN. FT. (BOTH WAYS).
 - STEPS SHALL CONFORM TO STD. 5.3.0 AND SHALL BE INSTALLED AT THE CASTING PLANT.
 - ONE FOUR MONOLITHIC BASE SECTION.
 - 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.
 - CORBEL MADE OF RED CLAY BRICK WILL BE PERMITTED FOR THE "CONE SECTION" OF THE 4'-0" CATCH BASIN ONLY.
 - THE CENTERLINE OF THE OPENING MUST BE WITHIN 2'-0" FROM THE STEPS.
 - ALTERNATIVE TOP SLAB IS ONLY FOR USE WHEN REDUCING SECTION DOES NOT FIT BECAUSE OF STRUCTURE DEPTH.
 - REFER TO STD. 5.2.0 FOR MAXIMUM PIPE SIZES.



SAND FILTER SF-2 SECTION
SCALE: NOT TO SCALE

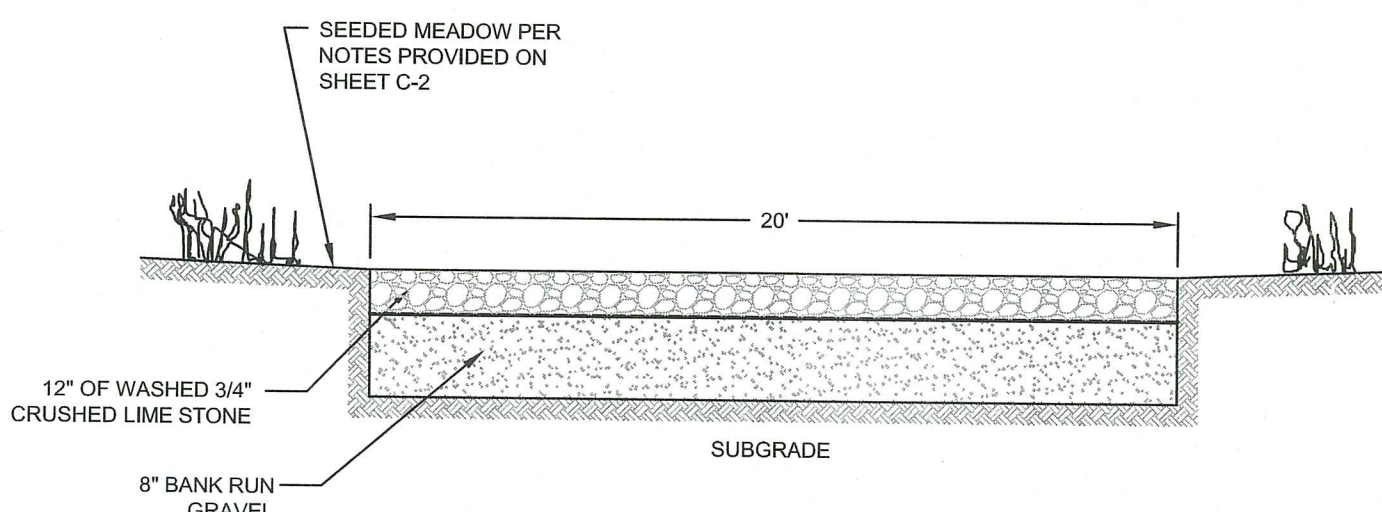
- NOTES:
- SAND FILTER SHALL BE PLANTED WITH NEW ENGLAND WETLIX WETLAND SEED MIX BY NEW ENGLAND WETLAND PLANTS, INC. OR APPROVED EQUAL.
 - PLANTINGS MUST BE DENSE AND COVER THE ENTIRETY OF THE FILTER SURFACE.
 - SAND FILTER SAND TO BE CLEAN AASHTO M-6 OR ASTM C-33 CONCRETE SAND (0.075 TO 0.04"). SAND SUBSTITUTIONS SUCH AS DIABASE AND GRAYSTONE #10 ARE NOT ACCEPTABLE. NO CALCIUM CARBONATE OR DOLOMITIC SAND SUBSTITUTIONS ARE ACCEPTABLE. NO ROCK DUST CAN BE USED AS SAND.
 - PERVIOUS GEOTEXTILE FABRIC SHALL HAVE A PUNCTURE STRENGTH OF 125 LBS, A BURST STRENGTH OF 400 PSF (ASTM D 1117) AND A TENSILE STRENGTH OF 300 LBS (ASTM D 1682). FABRIC SHALL BE MIN 0.08" THICK WITH AN EQUIVALENT OPENING SIZE OF #60 SIEVE AND A MINIMUM FLOW RATE OF 125 GPM PER SQUARE FOOT.



TYPICAL BITUMINOUS PAVEMENT SECTION
SCALE: NOT TO SCALE

STC 450i PRECAST CONCRETE STORMCEPTER (450 U.S. GALLON CAPACITY)
SCALE: NOT TO SCALE

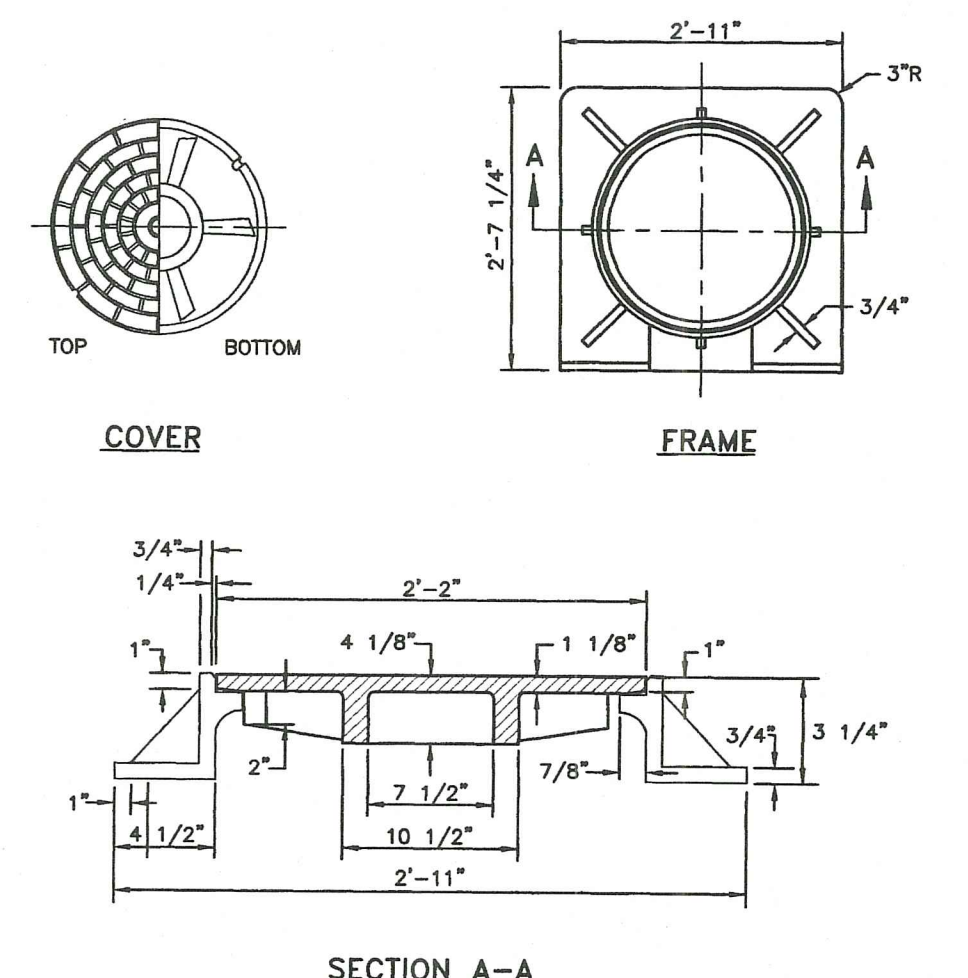
PRECAST ROUND CATCH BASIN & DRAIN MANHOLE (RIDOT 4.4.0)
SCALE: NOT TO SCALE



- NOTES:
- 3/4" CRUSHED ROCK SHALL CONFORM TO THE DIMENSIONAL REQUIREMENTS OF COLLUM III TABLE 1 RIDOT M.01.09.
 - SUBGRADE SHALL BE PLACED AND COMPACTED TO ACCORDING TO RIDOT STANDARD SPECIFICATION 301.03.2.
 - SUBGRADE TO BE COMPACTED TO 95% OF MAXIMUM DENSITY, MEASURED TO A DEPTH OF 12".

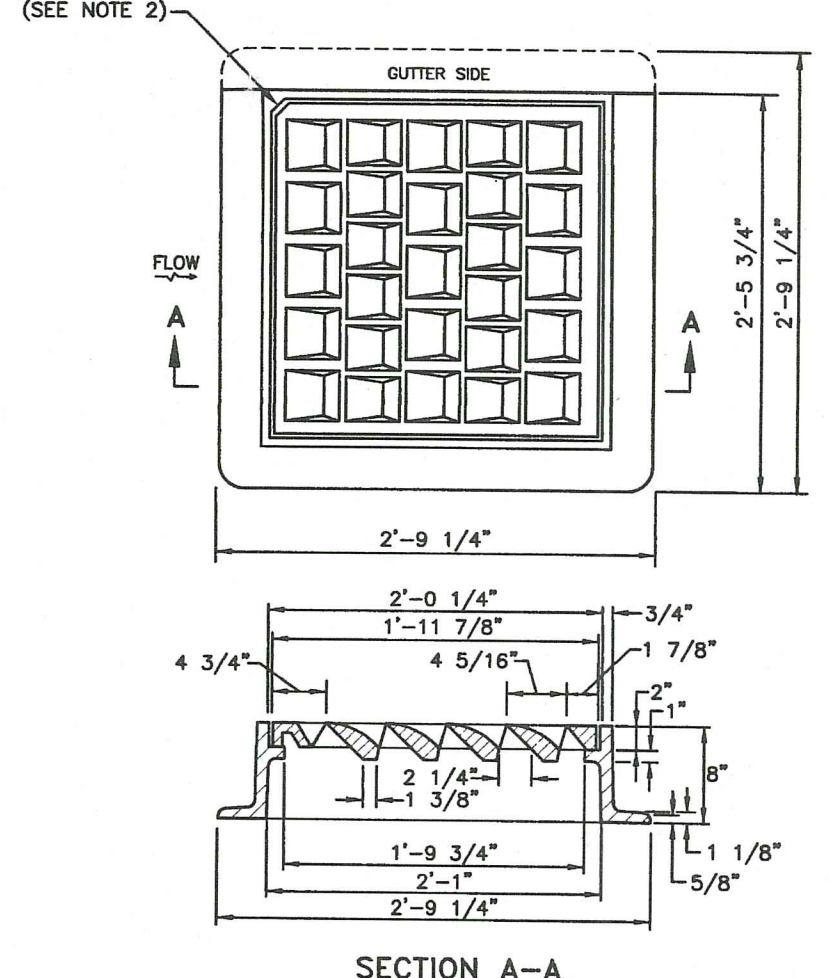
PERVIOUS CRUSHED STONE DRIVEWAY
SCALE: NOT TO SCALE

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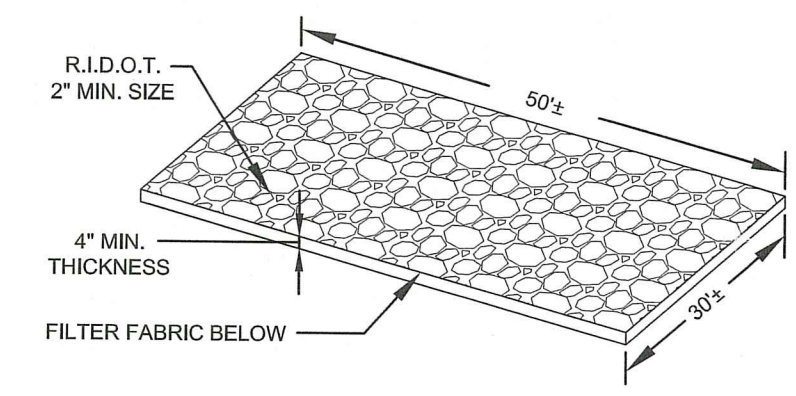
- NOTES:
- FRAME AND COVER SHALL CONFORM TO SECTION M.04 OF THE R.I. STANDARD SPECIFICATIONS.
 - FRAME AND COVER SEATS TO BE MACHINE FINISH.

HEAVY DUTY SQUARE FRAME AND ROUND COVER (RIDOT 6.1.1)
SCALE: NOT TO SCALE



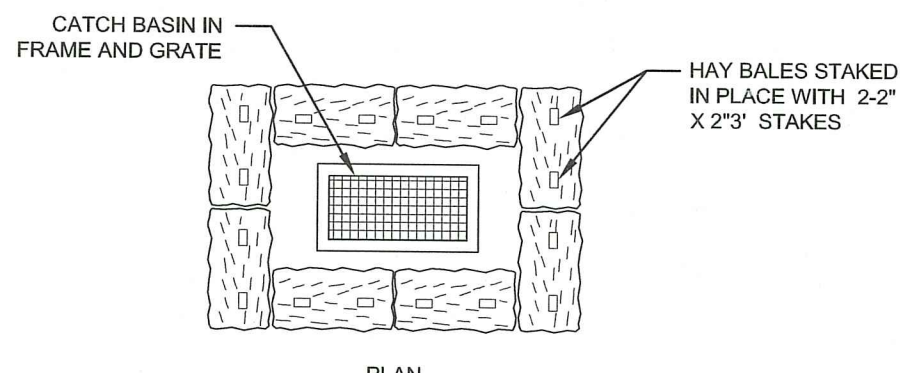
- NOTES:
- FRAME AND COVER SHALL CONFORM TO SECTION M.04 OF THE R.I. STANDARD SPECIFICATIONS.
 - THIS CORNER LEFT FOR "LEFT" GRATE, DIAGONALLY OPPOSITE CORNER FOR "RIGHT" GRATE TO FIT IN KEYS IN FRAME.

HIGH CAPACITY BICYCLE SAFE FRAME AND GRATE (RIDOT 6.3.4)
SCALE: NOT TO SCALE

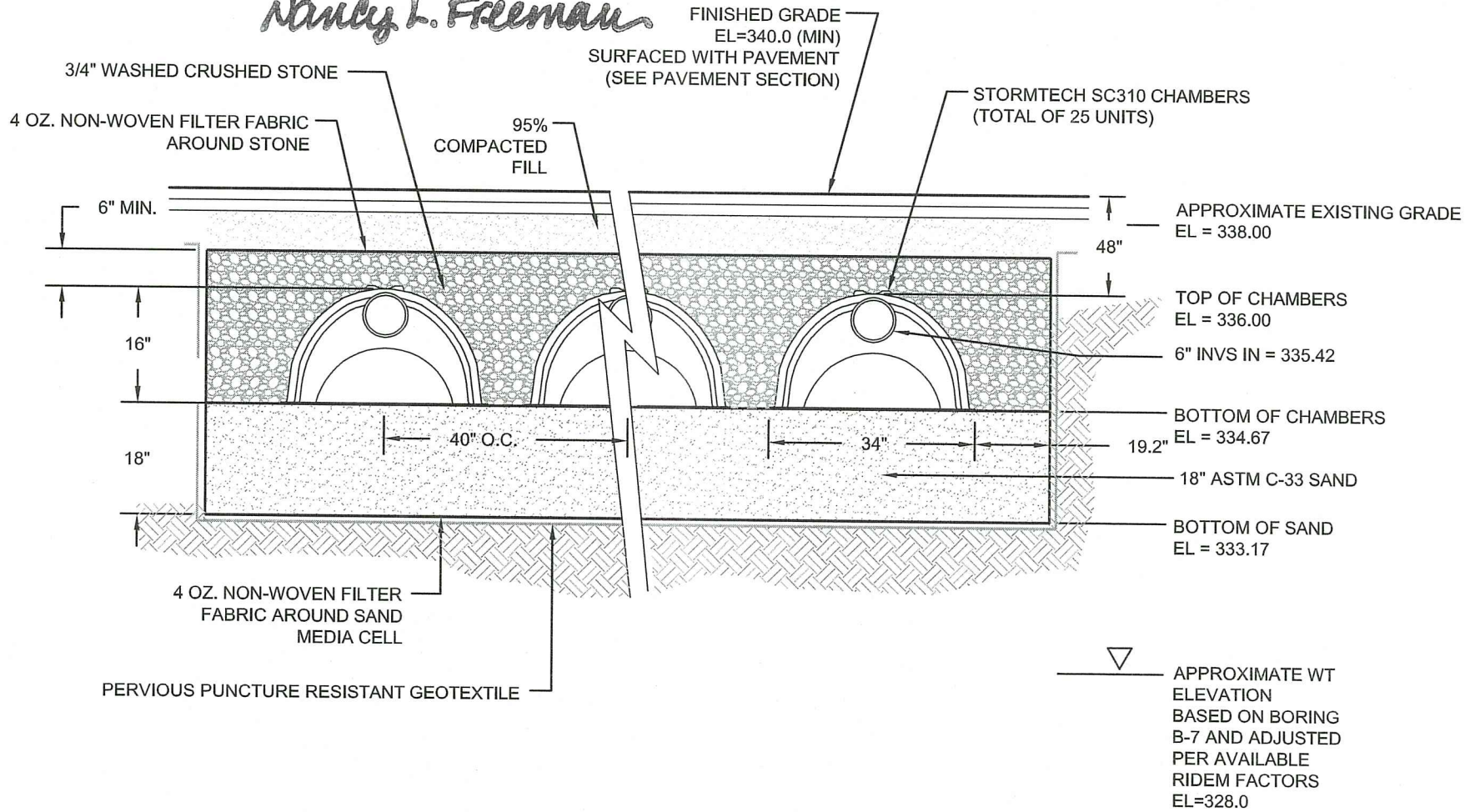


NOTE: CONSTRUCTION ENTRANCES SHALL BE REMOVED BEFORE FINAL SURFACING.

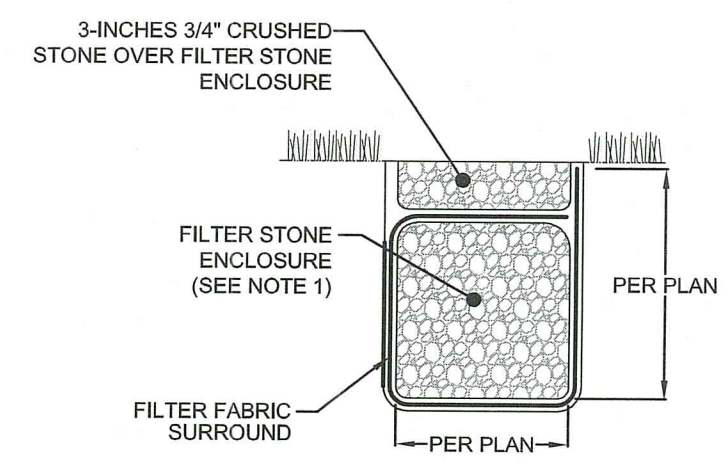
CONSTRUCTION ENTRANCE
SCALE: NOT TO SCALE



STRAW BALE INLET PROTECTION
SCALE: NOT TO SCALE



SUBSURFACE SAND FILTER SF-1 SECTION
SCALE: NOT TO SCALE



TYPICAL WATER QUALITY TRENCH / LEVEL SPREADER SECTION
SCALE: NOT TO SCALE

RI Environmental Management
OCT 11 2022
Office of Water Resources

No.	Revision	Date	App.
1	RIDEM REVISIONS	06OCT22	
0	RIDEM SUBMISSION	26MAY22	

Designed By: JJR | Drawn by: JJR | Checked by: GES
Scale: AS SHOWN | Date: REV. 06OCT22

Project Title:
NORTHBRIDGE WEST WARWICK SOLAR
A.P. 12, LOT 2
215 JAMES P. MURPHY HIGHWAY
WEST WARWICK, RI 02893

Client/Owner:
DPJ REALTY, LLC
99 JAMES P. MURPHY HIGHWAY
WEST WARWICK, RI 02893

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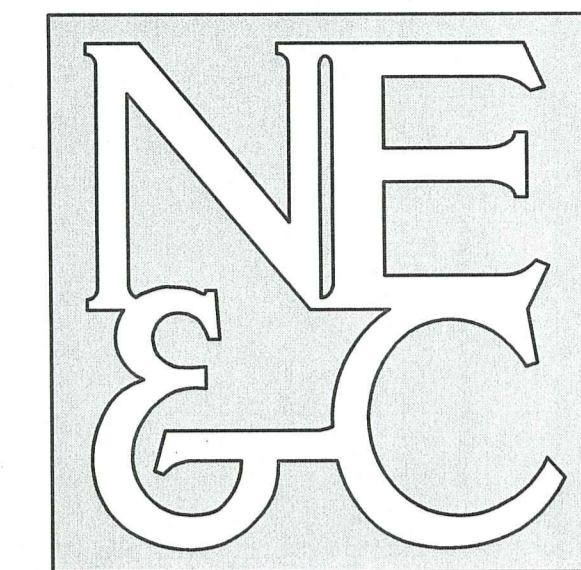
Drawing Title:
SITE DETAILS 2

Drawing Number:
C-11

Sheet 11 of 13
Project Number:
21193.0
Survey Index:

JEREMY J. ROSA
No. 9826
REGISTERED PROFESSIONAL ENGINEER
10-06-22

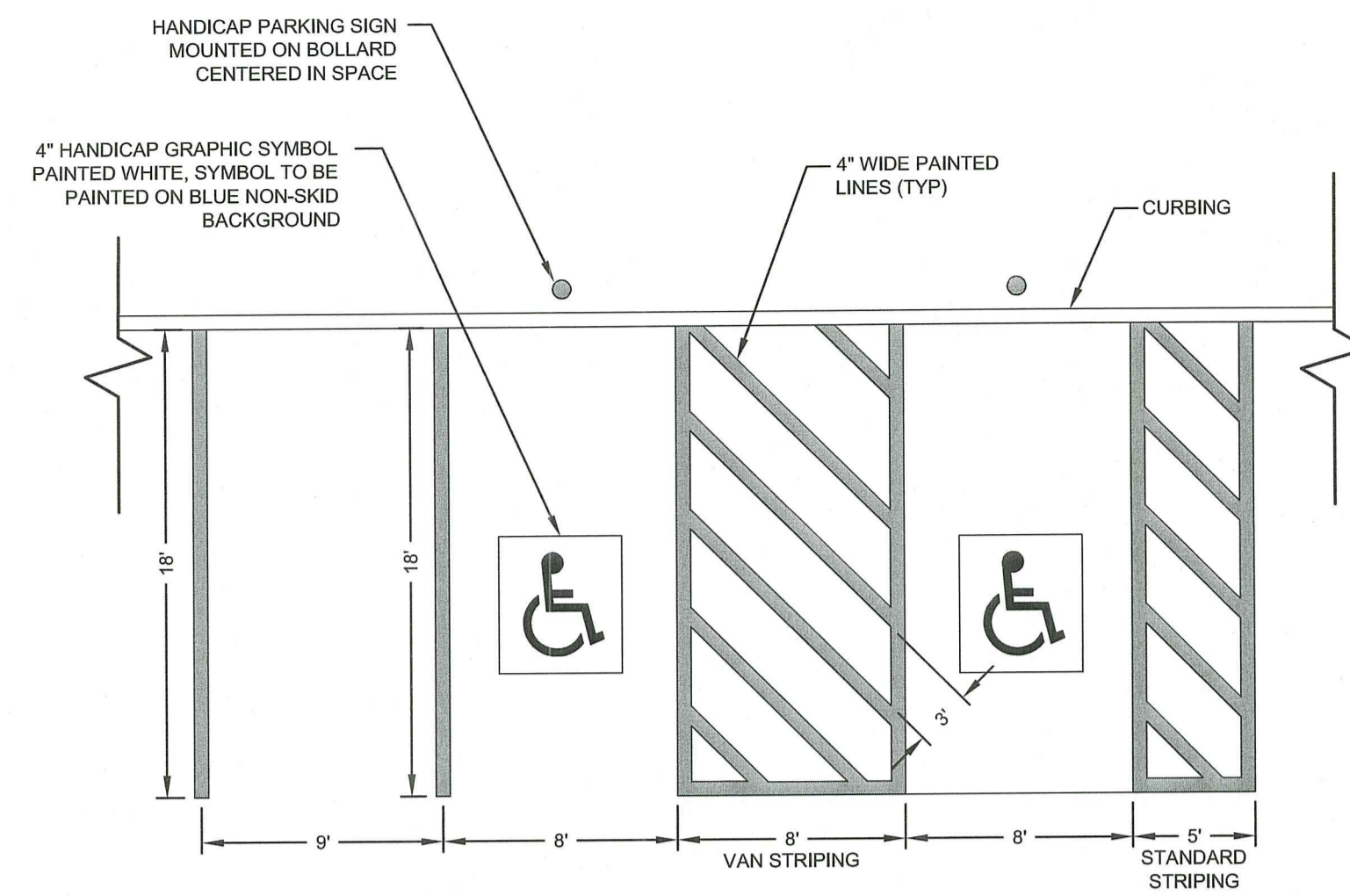
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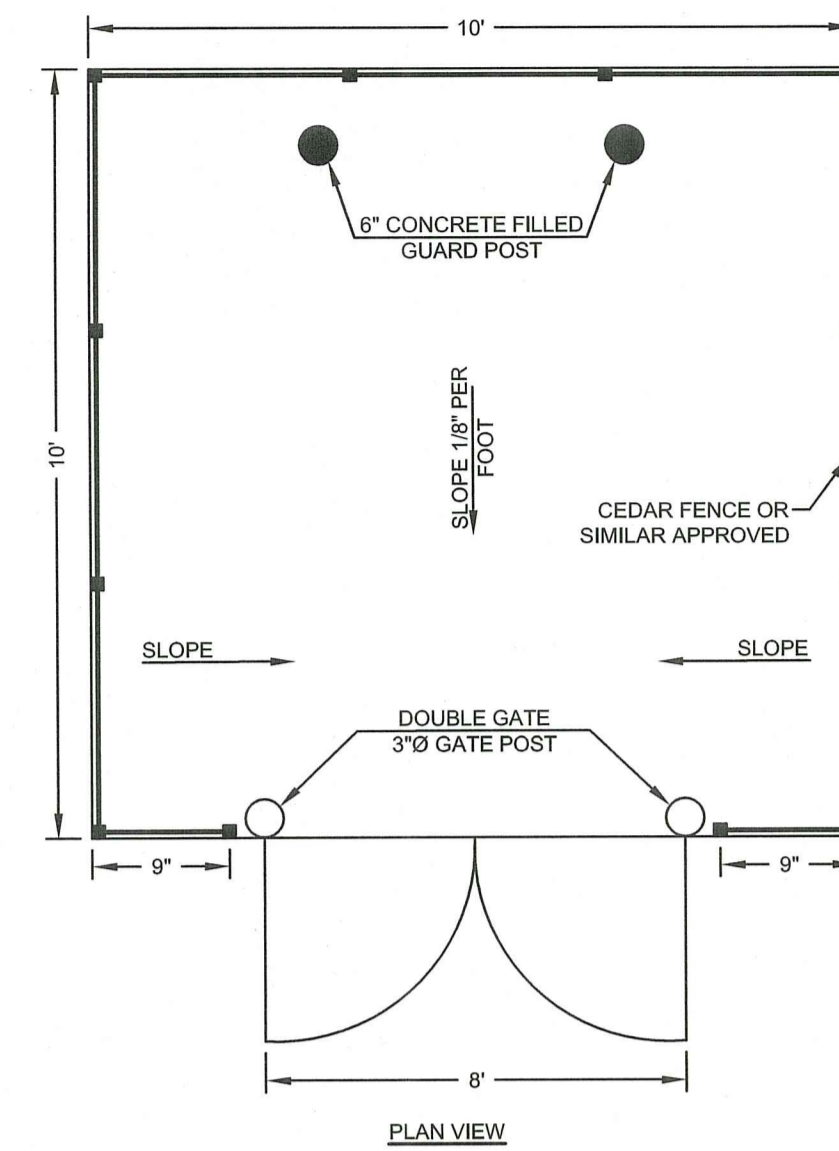
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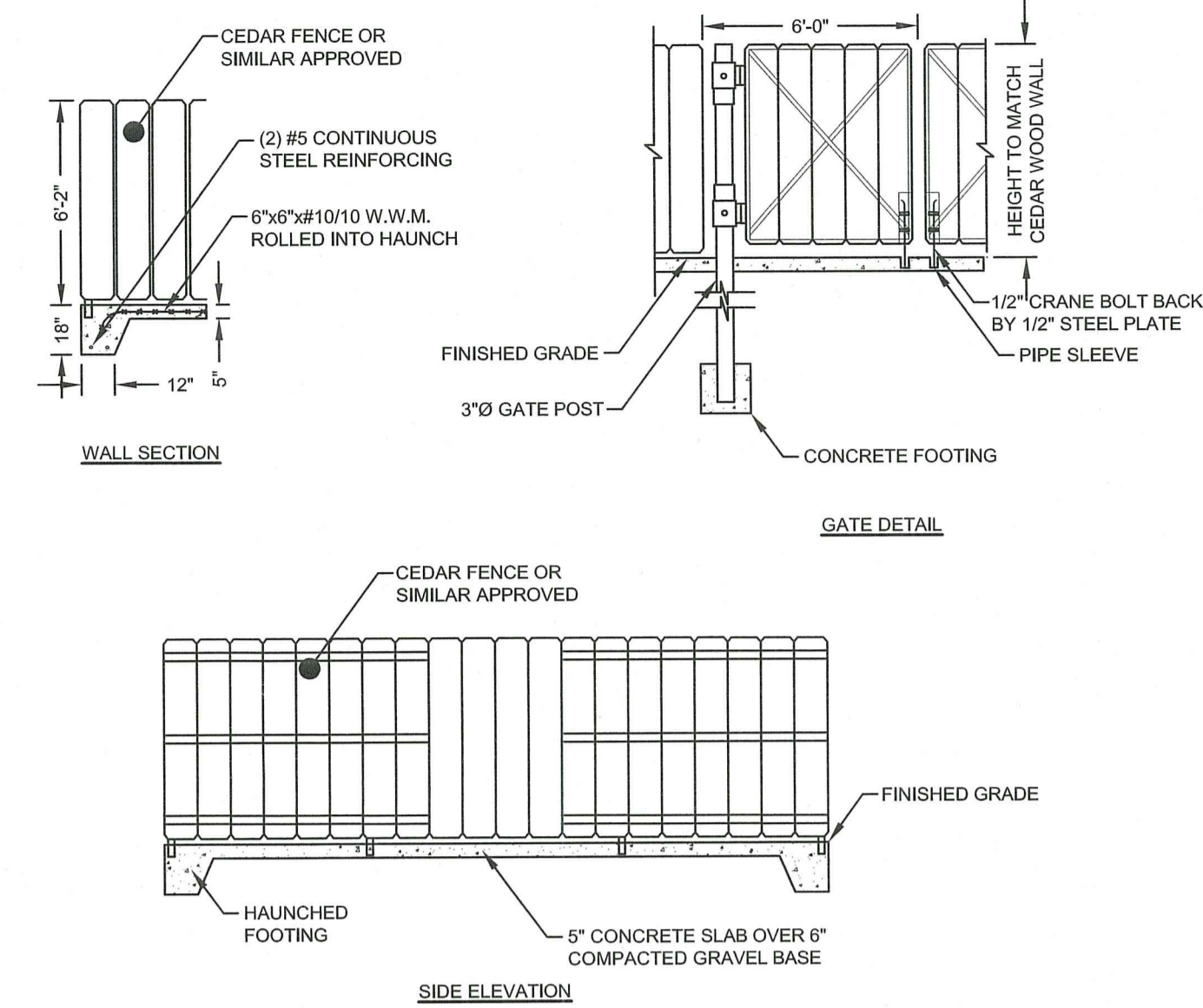
SITE/CIVIL
LAND PLANNING
WATERFRONT
SURVEYING
GEOTECHNICAL
ENVIRONMENTAL
TRANSPORTATION
STRUCTURAL
MATERIALS TESTING



PARKING STALL STRIPING
SCALE: NOT TO SCALE

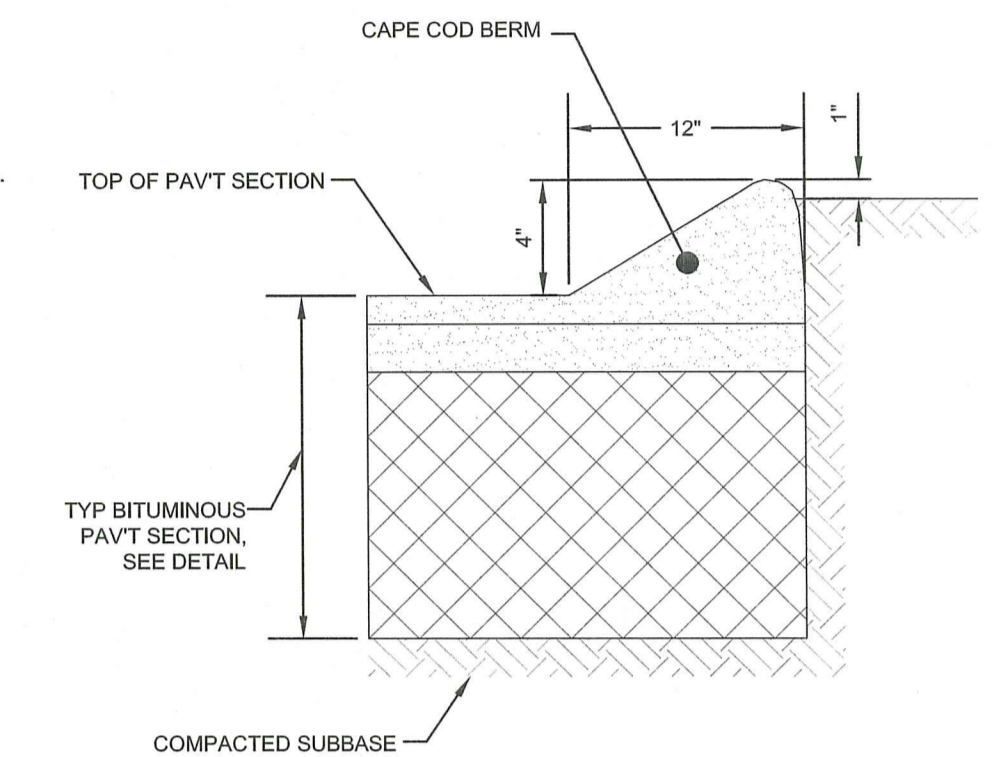


TYPICAL TRASH ENCLOSURE
ARCHITECT MAY PROVIDE ALTERNATE DESIGN
SCALE: NOT TO SCALE



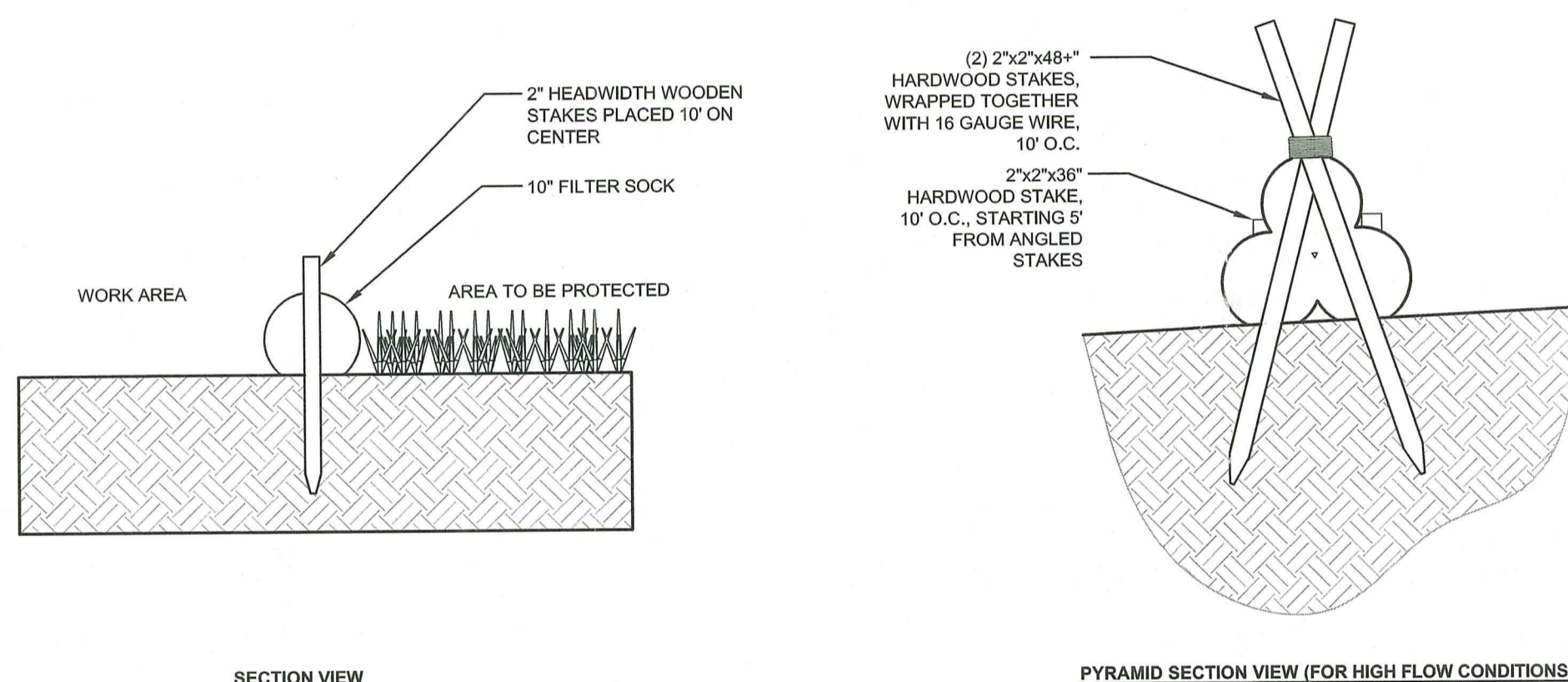
CEMENT CONCRETE SIDEWALK (RIDOT 43.1.0)
SCALE: NOT TO SCALE

NOTES:
1. SHALL BE IN ACCORDANCE WITH SECTION 805 OF THE R.I. STANDARD SPECIFICATIONS.
2. FOR CURB SETTING DETAIL REFERENCE STD. 7.6.0.



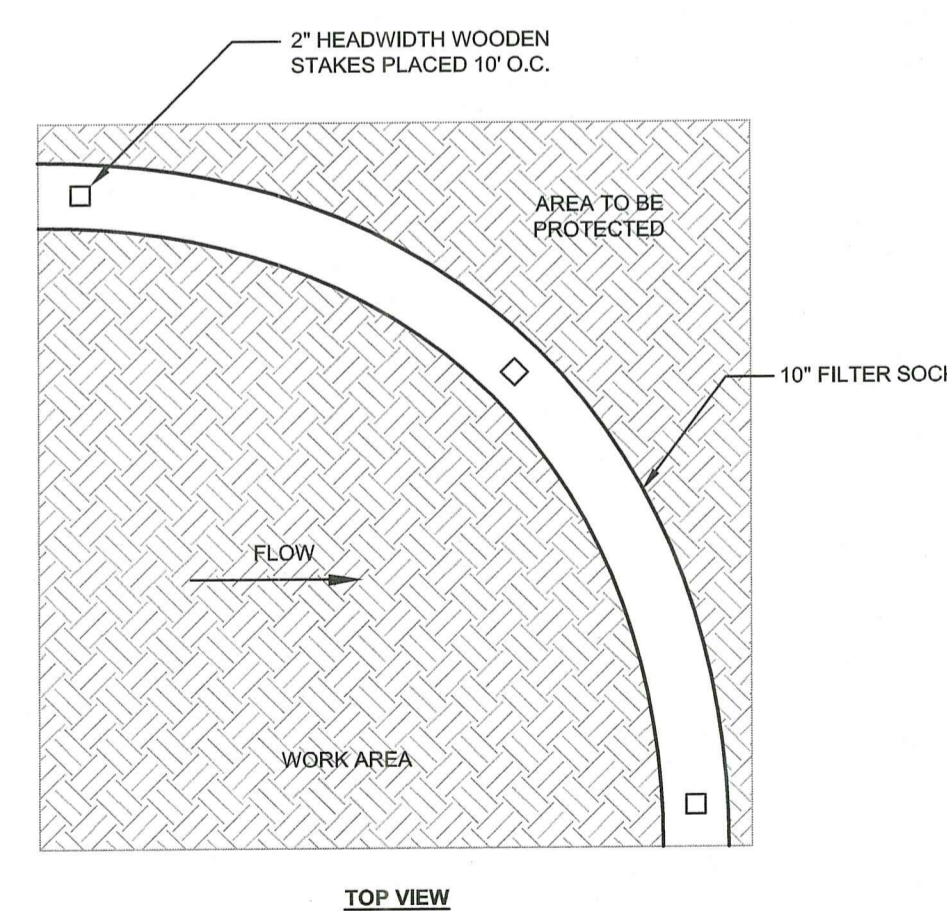
TYPICAL CAPE COD BERM
SCALE: NOT TO SCALE

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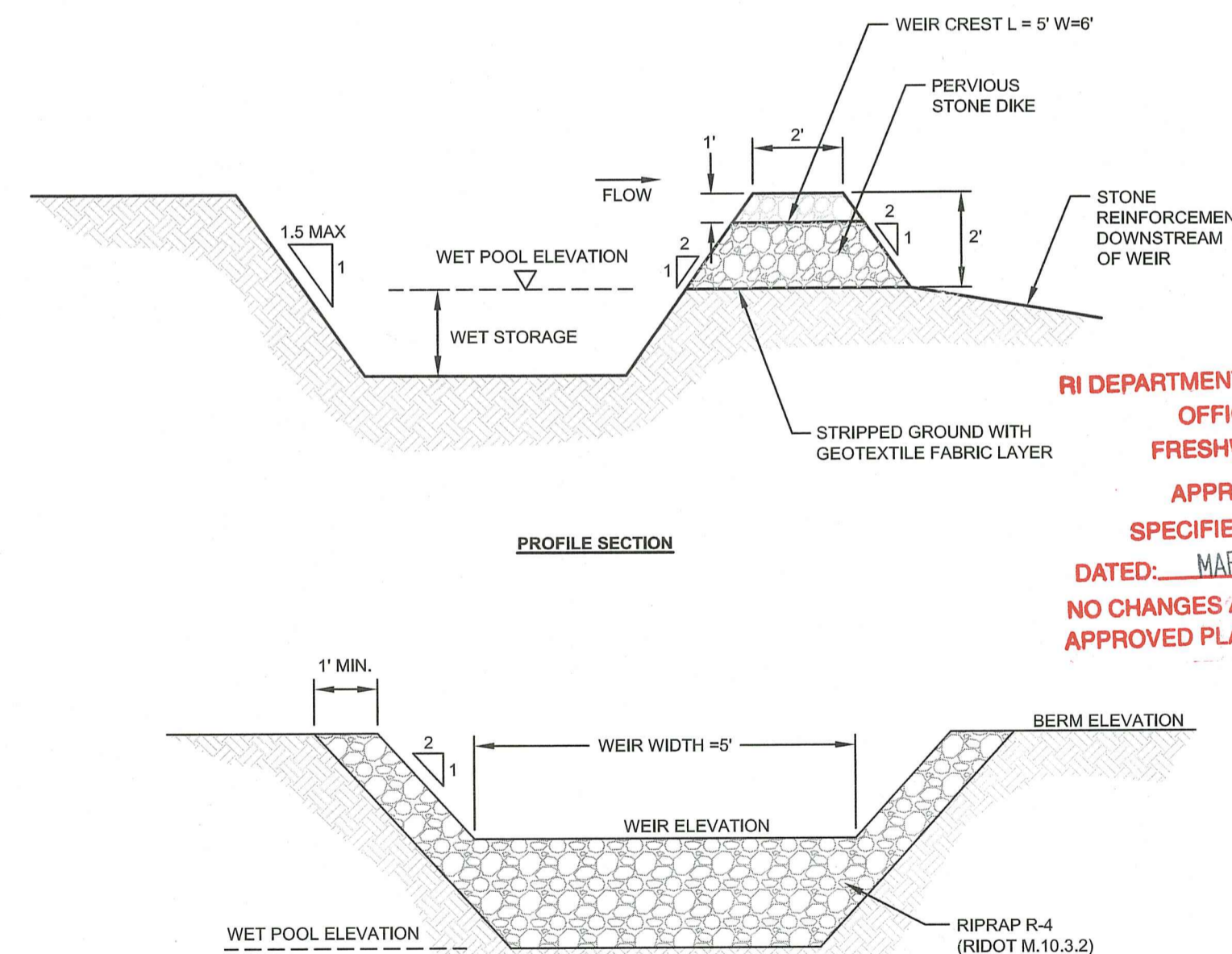


SECTION VIEW

PYRAMID SECTION VIEW (FOR HIGH FLOW CONDITIONS)

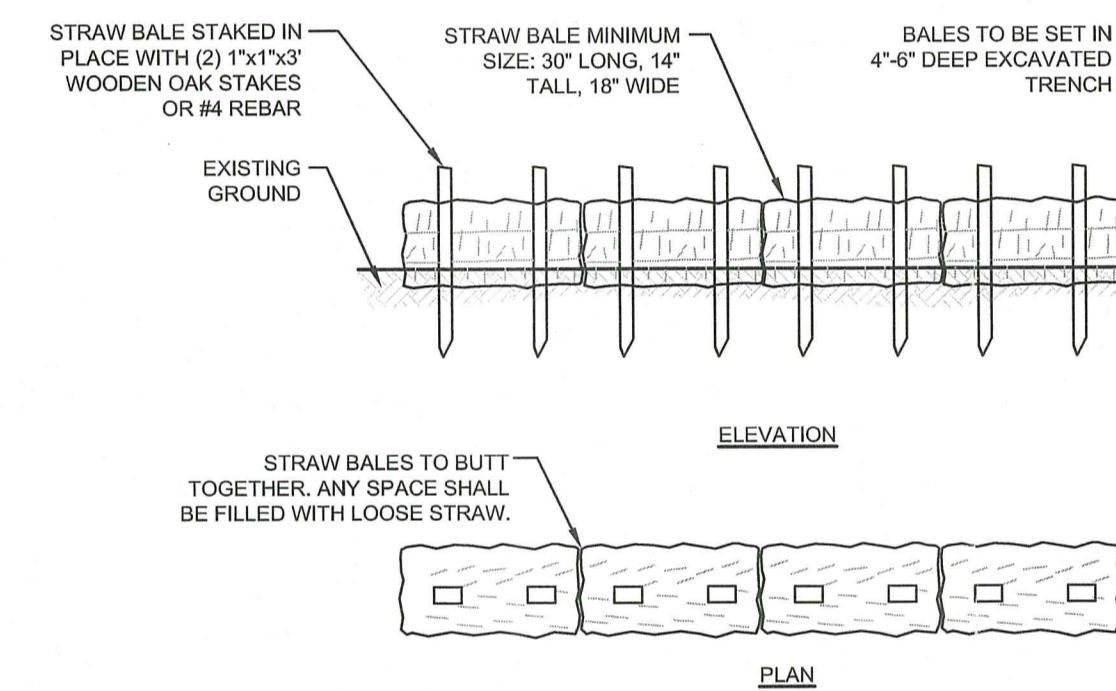


10" FILTER SOCK DETAIL
SCALE: NOT TO SCALE



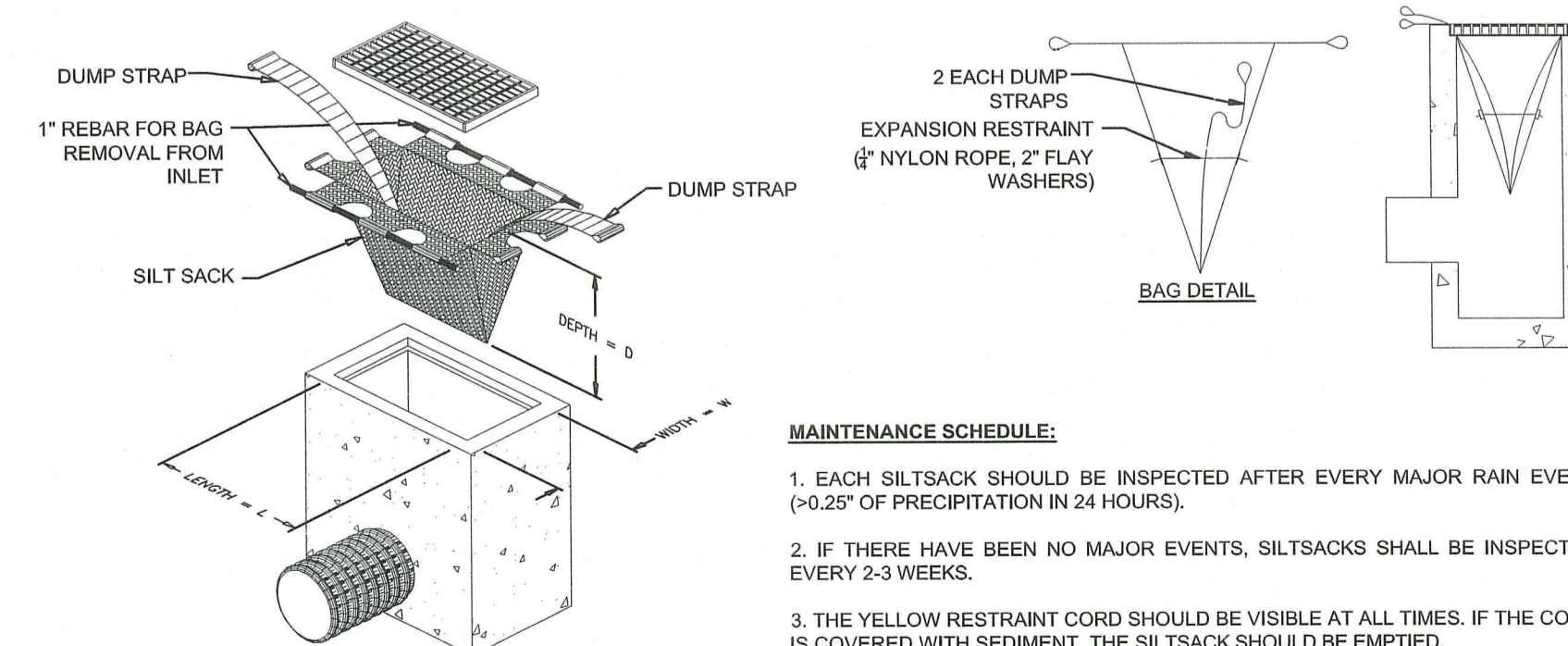
TYPICAL SEDIMENT TRAP DETAILS
SCALE: NOT TO SCALE

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NOTES:
1. BALE WEIGHT SHALL NOT BE LESS THAN 50 LBS AND SHALL BE BOUND WITH NO LESS THAN TWO STRINGS OR WIRES CONTAINING A MINIMUM OF FIVE (5) CUBIC FEET OF MATERIAL. MINIMUM DIMENSIONS SHOWN IN DETAIL.
2. STRAW BALES SHALL BE CERTIFIED AS BEING NOXIOUS WEED-FREE BALES. TO BE "CERTIFIED" MEANS THAT THE PRODUCT IS FREE OF ANY NOXIOUS WEEDS.
3. STAKES SHALL BE DRIVEN THROUGH STAKES AT A SLIGHT UPSTREAM ANGLE TO PREVENT BALE FROM OVERTURNING.
4. LOOSE STRAW SHALL BE WEDGED BETWEEN BALES AFTER INSTALLATION.
5. MATERIAL EXCAVATED FROM TRENCH SHALL BE BACKFILLED, COMPACTED, AND STABILIZED.

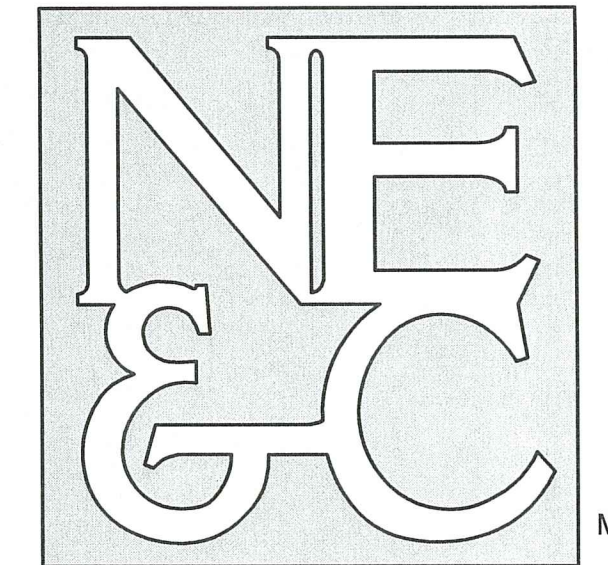
BALED STRAW EROSION CONTROL BARRIER
SCALE: NOT TO SCALE



MAINTENANCE SCHEDULE:
1. EACH SILTSACK SHOULD BE INSPECTED AFTER EVERY MAJOR RAIN EVENT (>0.25" OF PRECIPITATION IN 24 HOURS).
2. IF THERE HAVE BEEN NO MAJOR EVENTS, SILTSACKS SHALL BE INSPECTED EVERY 2-3 WEEKS.
3. THE YELLOW RESTRAINT CORD SHOULD BE VISIBLE AT ALL TIMES. IF THE CORD IS COVERED WITH SEDIMENT, THE SILTSACK SHOULD BE EMPTIED.

SILT SACK DETAIL
SCALE: NOT TO SCALE

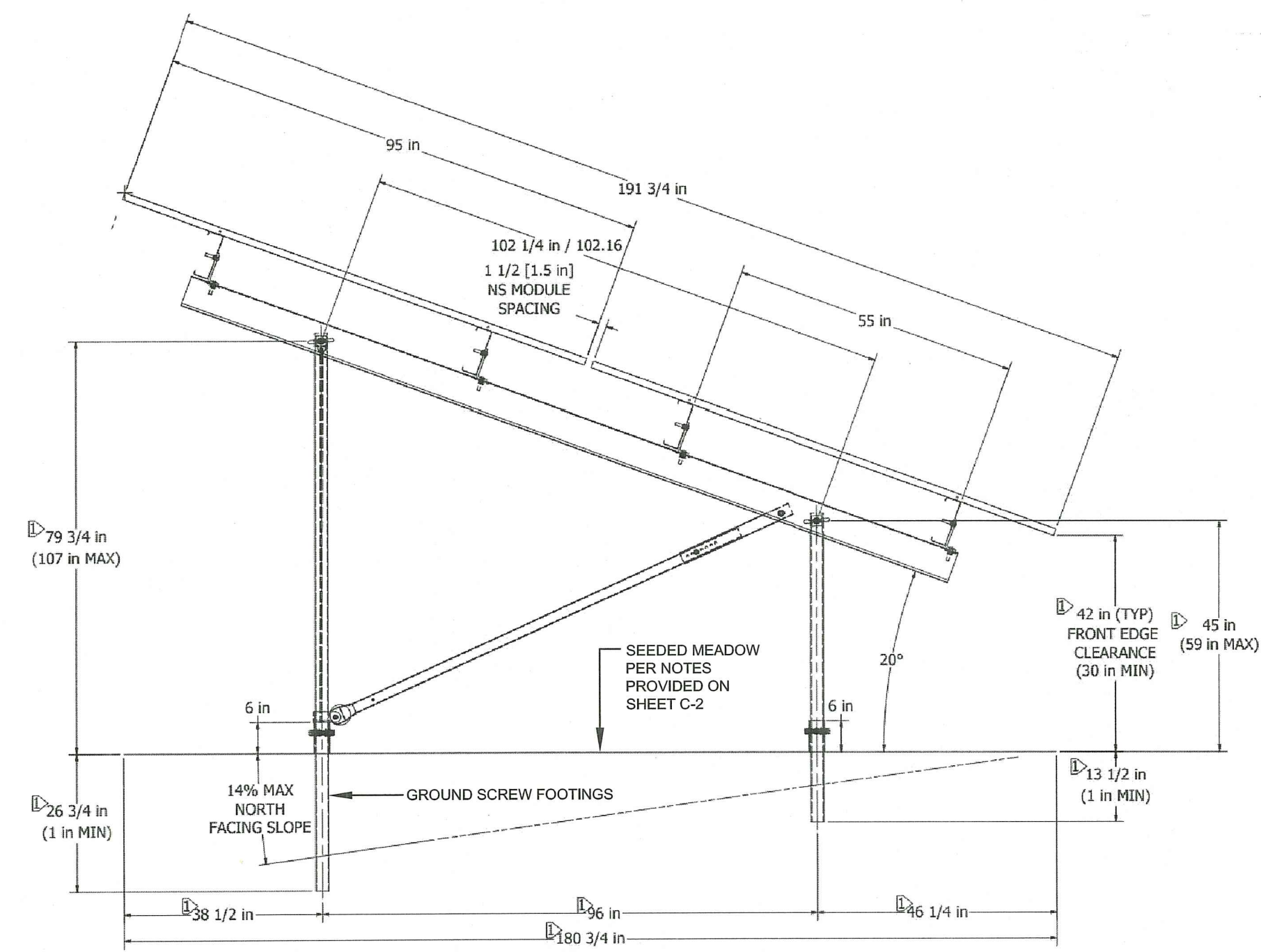
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SITE DETAILS 3					
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C-12					
Sheet					
12 of 13					
Project Number:					
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SOLAR PANEL CROSS SECTION
NOT TO SCALE

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS AS
SPECIFIED IN THE LETTER OF APPROVAL
DATED: MAR 03 2023 FILE #: 22-0410
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE
Nancy L. Freeman

No.	Revision	Date	App.
Designed By: JJR	Drawn by: JJR	Checked by: GES	
Scale: AS SHOWN	Date: 06OCT22		
Project Title:			
NORTHBRIDGE WEST WARWICK SOLAR A.P. 12, LOT 2 215 JAMES P. MURPHY HIGHWAY WEST WARWICK, RI 02893			
Client/Owner:			
DPJ REALTY, LLC 99 JAMES P. MURPHY HIGHWAY WEST WARWICK, RI 02893			
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PERMITTING			
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SITE DETAILS 4			
Drawing Number:		C-13	
Sheet		13 of 13	
Project Number:		21193.0	
Survey Index:		-	
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