PALMER POINTE NEIGHBORHOOD

ASSESSOR'S MAP 28, LOTS 72, 73, 246, 248, 249, & 263 SOWAMS ROAD · BARRINGTON · RHODE ISLAND

COMPREHENSIVE PERMIT PRELIMINARY PLAN

FEBRUARY 2016



150 FRANKLIN STREET BRISTOL, RHODE ISLAND 02809 401-253-2080



PROJECT TEAM

SHEET INDEX

SHEET No. SHEET TITLE **COVER SHEET** GI-001 CN-001 - CN-002 GENERAL NOTES & LEGEND CV-101 PRELIMINARY SUBDIVISION PLAN CP-101 SITE PREPARATION PLAN CS-101 SITE PLAN LAYOUT PLAN CS-102 CS-103 FIRE DEPARTMENT ACCESS PLAN CU-101 UTILITY PLAN CG-101 GRADING & DRAINAGE

CE-101 SOIL EROSION & SEDIMENT CONTROL PLAN
CG-201 ROADWAY PLAN & PROFILE

CD-501 - CD-507 DETAILS

LP-101 LANDSCAPE PLAN
LD-501 LANDSCAPE DETAILS

1 OF 1 EXISTING CONDITIONS BOUNDARY PLAN OF LAND



UNION STUDIO
ARCHITECTURE & COMMUNITY DESIGN

DEVELOPMENT CONSULTANT

FJS ASSOCIATES, LTD.

135 PELHAM STREET

NEWPORT, RI 02840

401-848-5471



LOCATION MAP

SCALE: 1" = 800'

APPROVED AND ENDORSED UNDER RHODE ISLAND GENERAL LAW TITLE 45, CHAPTER 53, THE RHODE ISLAND LOW AND MODERATE INCOME HOUSING ACT

BARRINGTON PLANNING BOARD

PROJ. No.: 20121033.A20
DATE: FEBRUARY 2016

GI-001

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GENERAL NOTES

1. EXISTING CONDITIONS

- SURVEY:
 PROPERTY BOUNDARY AND TOPOGRAPHICAL INFORMATION WERE OBTAINED FROM A PLAN ENTITLED "EXISTING CONDITIONS BOUNDARY PLAN OF LAND, SOWAMS ROAD - BARRINGTON, ASSESSORS MAP 28-1 LOTS 72, 73, 246, 248 & 263" PREPARED BY INSITE ENGINEERING SERVICES, LLC, DATED JULY 15, 2015, LAST REVISED
- PORTIONS OF THE SUBJECT SITE ARE LOCATED WITHIN FLOOD HAZARD ZONES AE (ELEVATION 13, NAVD 1988) ACCORDING TO FLOOD INSURANCE RATE MAP FM44001C007H. REVISED JULY 7, 2014.
- ALL WETLAND FLAGS SHOWN ADJACENT TO THE SUBJECT PROPERTY WERE FLAGGED BY NATURAL RESOURCE SERVICES INC. AND LOCATED BY INSITE ENGINEERING SERVICES, LLC.
- <u>UTILITIES:</u> THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES SHOWN ARE APPROXIMATE ONLY AND HAVE NOT YET BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES PRIOR TO COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MAY BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. THE CONTRACTOR IS TO CONTACT 'DIG SAFE' AT 1-888-344-7233, 72-HOURS PRIOR, EXCLUDING WEEKENDS AND HOLIDAYS, TO ANY EXCAVATION PERFORMED ON SITE.

2. MATERIALS:

- **CURBING:** CURBING SHALL BE CONCRETE (R.I. STD. 7.1.0) OR BITUMINOUS BERM (R.I. STD. 7.5.1) AT SITE ENTRANCES AND AT OFFSITE LOCATIONS.
- <u>BITUMINOUS CONCRETE PAVEMENT;</u> BITUMINOUS PAVEMENTS SHALL MEET REQUIREMENTS OF PART 400 OF THE STATE OF RHODE ISLAND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. 2013 EDITION. REVISIONS AND ALL CURRENT ADDENDA.
- CEMENT CONCRETE SIDEWALKS:
 ALL PORTLAND CEMENT CONCRETE USED IN THE CONSTRUCTION OF THE CEMENT CONCRETE SIDEWALKS SHALL BE CLASS A(AE) AND CONFORM TO THE REQUIREMENTS AS SET FORTH IN SUBSECTIONS 601.01.1 AND 601.03.1 OF THE LATEST EDITION OF THE RHODE ISLAND DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS
- LANDSCAPE AREAS:
 ALL SURFACED AREAS OR DISTURBED AREAS NOT SPECIFIED ON THE PLANS SHALL RECEIVE FOUR INCHES OF TOPSOIL, SEED, MULCH, AND BE WATERED UNTIL A HEALTHY STAND OF GRASS IS OBTAINED.
- 3. UTILITIES:

FOR ROAD AND BRIDGE CONSTRUCTION.

- LOCATION AND ELEVATIONS:
 THE LOCATION AND ELEVATIONS OF ALL EXISTING UTILITIES AS SHOWN ON THESE PLANS ARE BASED ON THE INFORMATION IN THE EXISTING CONDITIONS SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
- B. <u>STORM DRAINAGES:</u> STORM DRAIN PIPING SHALL BE SMOOTH LINED BE DOUBLE-WALL HIGH DENSITY POLYETHYLENE PIPE. (n=0.012) WITH WATER TIGHT JOINTS UNLESS OTHERWISE NOTED. THE SIZES OF ALL PIPES ARE NOTED ON THE PLAN. PIPES BETWEEN OUTFALLS AND THE NEAREST UP STREAM STRUCTURE SHALL BE REINFORCED CONCRETE PIPE WITH PRECAST CONCRETE FLARED END SECTIONS, R.I. STANDARD 2.3.0, OR APPROVED EQUAL.
- ALL CATCH BASINS SHALL BE PRECAST CONCRETE, AS SPECIFIED ON THE DETAIL SHEETS, WITH BICYCLE SAFE GRATES, R.I. STANDARD 6.3.2, OR APPROVED EQUAL.
- SEWER CONSTRUCTION SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE SPECIFICATIONS/REGULATIONS OF THE BARRINGTON DEPARTMENT OF PUBLIC WORKS
- ALL SEWER PIPE, UNLESS OTHERWISE SPECIFIED, SHALL BE POLYVINYL CHLORIDE (SDR 35).
- CLEAN OUTS SHALL BE INSTALLED FIVE FEET FROM THE BUILDINGS AND WHERE THE DISTANCE FROM THE BUILDING TO THE MAIN SEWER IS GREATER THAN 100 FEET OR WHERE BENDS GREATER THAN 45° ARE PROPOSED. CLEAN OUTS SHALL BE MADE BY INSTALLING 'Y' AND ONE-EIGTH BENDS OF THE SAME DIAMETER AS THE BUILDING SEWER, OR A MAXIMUM OF FOUR INCHES. THE CLEAN OUT SHALL BE BROUGHT UP FROM THE BUILDING SEWER TO FOUR INCHES BELOW GROUND LEVEL AND BE PROPERLY CAPPED.
- GAS AND ELECTRIC:
 THE CONTRACTOR SHALL COORDINATE AND INSTALL GAS, ELECTRIC, AND COMMUNICATIONS UTILITIES IN ACCORDANCE WITH THE RULES AND REGULATIONS OF THE APPROPRIATE UTILITY COMPANIES.
- WATER:
 THE WATER MAIN AND MATERIALS TO BE USED ARE TO BE IN ACCORDANCE WITH THE BRISTOL COUNTY WATER AUTHORITY (BCWA). ONCE A CONTRACTOR HAS BEEN SELECTED, THE DEVELOPER MUST ENTER INTO CONTRACT WITH THE BÈWA. THE SELECTED CONTRACTOR MUST BE FAMILIAR WITH AND PERFORM ALL WATER MAIN EXTENSION WORK UNDER THE TERMS AND CONDITIONS OF "SPECIFICATION NO. 100" OF THE BCWA STANDARD SPECIFICATIONS FOR WATER MAIN EXTENSIONS.
- MAINS, FITTINGS, AND VALVES: WATER MAIN SHALL BE CEMENT LINED DUCTILE IRON. DUCTILE IRON SHALL BE CLASS 52 AND CONFORM TO AWWA C151. CEMENT LINING SHALL CONFORM TO AWWA C104 AND HAVE DOUBLE THICKNESS. JOINTS AT FITTINGS, VALVES, AND HYDRANT LATERALS SHALL BE MECHANICAL JOINTS, AWWA C111, WITH NEOPRENE GASKETS. JOINTS AT OTHER LOCATIONS SHALL BE PUSH-ON TYPE, AWWA C111, WITH NEOPRENE OR SYNTHETIC RUBBER GASKETS. FITTINGS SHALL BE CEMENT-LINED, DUCTILE IRON, AWWA C110, WITH A 250 PSI MINIMUM.
- ALL WATER GATES AND VALVES SHALL BE NRS, MEET AWWA C500 AND C509 STANDARDS, AND OPEN TO THE RIGHT. ALL WATER LINES SHALL HAVE A MINIMUM OF 4.0 FEET OF GROUND COVER AND A MINIMUM OF 10 FOOT HORIZONTAL SEPARATION FROM THE SEWER SYSTEM. WHERE THE WATER MAIN CROSSES ANY UTILITY A VERTICAL CLEARANCE OF 18 INCHES MUST BE MAINTAINED. AT CROSSINGS BETWEEN WATER AND SEWER LINES, THE SEWER LINE SHALL BE SLEEVED AND ENCASED IN CONCRETE FOR A DISTANCE OF AT LEAST 10-FEET IN EACH DIRECTION OF THE CROSSING.
- HYDRANTS AND HYDRANT LATERALS: ALL HYRDRANTS SHALL BE MUELLER SUPER CENTURION 200 (AWWA C502), 5-1/4" MAIN VALVE, LEFT OPENING ROTATION, HYDRANT LATERALS AS SHOWN ON THE GRADING & UTILITY PLAN SHALL BE 6" CEMENT LINED DUCTILE IRON, CLASS 52. JOINTS AT FITTINGS AND VALVES, SHALL BE MECHANICAL JOINT WITH NEOPRENE GASKETS. GATE VALVE TO BE 3 PIECE WITH RISER BOX AND COVER.
- 4. PARKING STALLS SHALL HAVE THE FOLLOWING MINIMUM DIMENSIONS: STANDARD PARKING: 9' x 18' MINIMUM.

PARALLELL PARKING: 9' x 21' MINIMUM.

GENERAL CONSTRUCTION REQUIREMENTS

- THE CONTRACTOR SHALL VERIFY THE PROPOSED LAYOUT WITH ITS RELATIONSHIP TO THE EXISTING SITE SURVEY. THE 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 OR PROCEEDING WITH WORK.
- 2. THE OWNER AND/OR CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS, INSPECTIONS, BONDS, ETC. AND OTHER APPROVAL RELATED ITEMS WITH THE TOWN OF BARRINGTON. NO CONSTRUCTION SHALL COMMENCE UNTIL SUCH PERMITS HAVE BEEN SECURED.
- METHODS AND MATERIALS USED IN THE CONSTRUCTION OF IMPROVEMENTS FOR THIS PROJECT SHALL CONFORM TO THE CURRENT CONSTRUCTION STANDARDS AND SPECIFICATIONS OF THE TOWN OF BARRINGTON AND THE RHODE
- ISLAND DEPARTMENT OF TRANSPORTATION.

4. DEVIATIONS OR CHANGES FROM THESE PLANS WILL NOT BE ALLOWED UNLESS APPROVED BY THE ENGINEER/OWNER.

- 5. THE CONTRACTOR SHALL MAKE EXPLORATORY EXCAVATIONS AND LOCATE ANY EXISTING UTILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT REVISIONS TO PLANS IF NECESSARY. THE EXISTENCE AND/OR LOCATION OF UTILITIES SHOWN ON THESE PLANS MAY BE ONLY APPROXIMATELY CORRECT AND THE CONTRACTOR IS REQUIRED TO TAKE PRECAUTIONARY MEASURES TO PROTECT THE UTILITIES SHOWN HEREON AND ANY OTHER EXISTING UTILITIES NOT OF RECORD OR NOT SHOWN ON THESE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING, AT
- 6. THE CONTRACTOR SHALL NOTIFY OPERATORS WHO MAINTAIN UNDERGROUND UTILITY LINES IN THE AREA OF PROPOSED EXCAVATION OR BLASTING AT LEAST TWO WORKING DAYS, BUT NOT MORE THAN TEN WORKING DAYS, PRIOR TO COMMENCEMENT OF EXCAVATION OR DEMOLITION. ALL WATER, GAS, SEWER AND OTHER UTILITY SERVICES SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION.

HIS/HER EXPENSE, ANY EXISTING UTILITIES DAMAGED DURING CONSTRUCTION.

- RELOCATION OF ANY UTILITIES SHALL BE AT THE OWNER'S EXPENSE AND COMPLETED WITH THE UTILITY WORK. THE OWNER SHALL BE NOTIFIED AS TO THE RELOCATIONS REQUIRED PRIOR TO THE START OF CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING, WITH MATCHING MATERIALS, ANY PAVEMENT, WALKS,
- CURBS, ETC. THAT MUST BE CUT OR THAT ARE DAMAGED DURING CONSTRUCTION. AN APPROVED SET OF PLANS AND ALL APPLICABLE PERMITS MUST BE AVAILABLE AT THE CONSTRUCTION SITE.
- 10. CONTRACTOR AGREES THAT HE/SHE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERT. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY DURING THE CONTRACT PERIOD AND SHALL NOT BE LIMITED TO NORMAL
- THE STATE OF RHODE ISLAND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2013 EDITION, REVISIONS AND ALL CURRENT ADDENDA, AND THE RHODE ISLAND STANDARD DETAILS ARE MADE A PART HEREOF, AS IF ATTACHED HERETO
- 12. CONTRACTOR SHALL IDENTIFY TREES TO BE REMOVED PRIOR TO CONSTRUCTION AND MARK THEM WITH CONSTRUCTION TAPE FOR REVIEW BY THE OWNER AND ARCHITECT. CONTRACTOR SHALL NOT REMOVE TREES UNTIL REVIEWED AND APPROVED BY THE OWNER.
- 13. THE CONTRACTOR SHALL RESTORE DISTURBED AREAS TO ORIGINAL CONDITION. AREAS DAMAGED DURING CONSTRUCTION SHALL BE RESODDED, RESEEDED, OR OTHERWISE RESTORED TO THEIR ORIGINAL STATE. TREES AND
- 14. ALL EXCESS EXCAVATED MATERIALS, EXCESS FILL, EXCESS CONSTRUCTION MATERIALS, AND DEBRIS SHALL BE REMOVED FROM THE SITE AND SHALL BE DISPOSED OF IN ACCORDANCE WITH APPLICABLE LAWS.
- 15. A RELEASE OF HAZARDOUS SUBSTANCES HAS BEEN DOCUMENTED ON THE SUBJECT PROPERTIES AND THE CONTRACTOR SHALL PERFORM ALL WORK IN FULL COMPLIANCE WITH FINAL REMEDIAL ACTION WORK PLAN (RAWP) APPROVED BY THE RIDEM OFFICE OF WASTE MANAGEMENT.

LIST OF REQUIRED STATE APPROVALS/PERMITS

- 1. RIDEM WATER QUALITY CERTIFICATION
- 2. RIDEM RIPDES GENERAL PERMIT FOR STORMWATER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITY
- 3. RIDEM REMEDIAL ACTION WORK PLAN (RAWP)
- 4. RICRMC ASSENT
- 5. RIDOT PHYSICAL ALTERATION PERMIT

SUBDIVISION/LAND DEVELOPMENT WAIVERS

200-44.F. STREETS IN MAJOR DEVELOPMENTS OR SUBDIVISIONS SHALL HAVE A RIGHT-OF-WAY WIDTH BETWEEN PROPERTY LINES OF NO LESS THAN FORTY (40) FEET, AND A PAVED SURFACE OF NO LESS THAN TWENTY-SIX (26) FEET. TWENTY-TWO FEET MINIMUM IS PROPÒSÉD.

200-44.H. A CENTER-LINE CURVE HAVING A MINIMUM RADIUS OF ONE HUNDRED TWENTY-FIVE (125) FEET SHALL BE REQUIRED WHERE A DEFLECTION ANGLE OF TEN DEGREES (10°) OR MORE OCCURS IN THE CENTER LINE OF A STREET. THE MINIMUM RADIUS PROPOSED IS THIRTY SIX (36) FEET.

200-44.K. INTERSECTING STREET LINES SHALL BE ROUNDED BY AN ARC HAVING A RADIUS OF NOT LESS THAN FIFTEEN (15) FEET AT THE PROPERTY LINE, AND TWENTY-FIVE (25) FEET AT THE EDGE OF THE PAVED SURFACE. EXISTING

200-47.B. IN GENERAL, LOTS SHALL NOT EXTEND THROUGH A BLOCK TO ANOTHER EXISTING OR PROPOSED STREET. LOT 1 IS A THROUGH-LOT AND IS SURROUNDED ON ALL SIDES BY PROPOSED STREETS.

200-52.B. GRANITE CURBING IS REQUIRED. ALTERNATIVE CURBING, SUCH AS BITUMINOUS CAPE COD AND CONCRETE, ARE

200-52.J(1). SANITARY SEWER SHALL BE PLACED GENERALLY ALONG THE CENTERLINE OF THE STREET. SEWER OFFSETS ARE PROPOSED.

ZONING VARIANCES/SPECIAL PERMIT

185-8. MULTI-FAMILY HOUSING IS NOT PERMITTED IN R-25 ZONE.

185-17. MINIMUM LOT AREA IS 25,000 SQUARE FEET. LOTS 4 AND 5 DO NOT HAVE THE MINIMUM LOT AREA.

185-17. MINIMUM LOT FRONTAGE IS 140 FEET. TWENTY(20) FEET OF FRONTAGE IS PROVIDED FOR LOT 3, AN OPEN SPACE LOT THAT WILL BE DESIGNATED FOR PUBLIC USE.

185-17. MINIMUM DEPTH FRONT YARD IS 30 FEET. LOT 1 MINIMUM FRONT YARD IS NINE (9) FEET, LOT 2 MINIMUM FRONT YARD TEN (10) FEET, LOT 3 MINIMUM FRONT YARD SIX (6) FEET, LOT 5 MINIMUM FRONT YARD SEVENTEEN (17)

185-17. MAXIMUM BUILDING LOT COVERAGE IS 20%. LOT 1 BUILDING LOT COVERAGE OF 22%.

185-17. MINIMUM SETBACK OF ACCESSORY STRUCTURE IS 14 FEET. LOT 2 ACCESSORY STRUCTURE SETBACK IS FIVE (5)

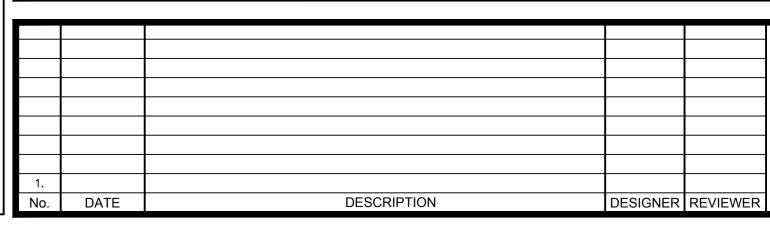
185-13. MULTI-FAMILY LAUNDRY FACILITY IS NOT A PERMITTED ACCESSORY USE.

185-79.A(3) AND (4). PARKING MUST BE PLACED AT THE SIDE OR REAR OF THE LOT AND IS PROHIBITED FROM THE FRONT YARD. UNIT NUMBERS 1 & 11 HAVE PARKING WITHIN FRONT YARD AREAS.

185-95.A. MINIMUM "HOUSE LOT" AREAS MAY BE REDUCED BY 25% FROM 25,000 SQUARE FEET TO 18,750 SQUARE FEET. THE MAXIMUM DENSITY ALLOWED UNDER THIS ORDINANCE IS ONE (1) UNIT ON LOT 1 (FOUR UNITS PROPOSED), THREE (3) UNITS ON LOT 2 (14 PROPOSED), AND THREE (3) UNITS ON LOT 3 (22 PROPOSED). THE REDUCED LOT SIZES DENOTED IN THE ORDINANCE DO NOT REFLECT REDUCTIONS OF 25% FROM THE MINIMUM LOT AREAS OF THE UNDERLYING ZONES.

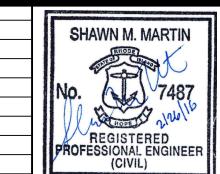
185-95.B. MINIMUM YARD REQUIREMENTS MAY BE REDUCED BY 20%. THE MINIMUM FRONT YARD REQUIREMENT OF 30 FEET MAY BE REDUCED BY 20% TO 24 FEET. LOT 1 MINIMUM FRONT YARD IS NINE (9) FEET, LOT 2 MINIMUM FRONT YARD TEN (10) FEET, LOT 3 MINIMUM FRONT YARD SIX (6) FEET, LOT 5 MINIMUM FRONT YARD SEVENTEEN (17) FEET

185-174.A. CONSTRUCTION IS NOT PERMITTED WITHIN 100 FEET OF A WETLAND EXCEPT BY SPECIAL PERMIT. LAND DISTURBANCES WILL OCCUR WITHIN 100 FEET OF A WETLAND TO CONSTRUCT A SEWER CONNECTION, RESTORE WETLAND



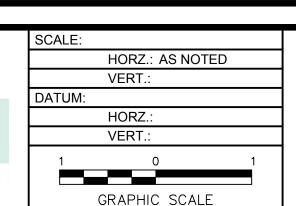
MAIL BOX

CONTROL POINT



EAST BAY COMMUNITY DEVELOPMENT CORPORATION









317 IRON HORSE WAY, SUITE 204 PROVIDENCE, RI 02908

EAST BAY COMMUNITY DEVELOPMENT CORPORATION COMPREHENSIVE PERMIT GENERAL NOTES & LEGEND

PALMER POINTE NEIGHBORHOOD

BARRINGTON RHODE ISLAND CN-001

PROJ. No.: 20121033.A20

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- THE CONTRACTOR SHALL INSPECT EROSION AND SEDIMENT CONTROL DEVICES AT THE END OF EACH WORKING DAY, AFTER EACH STORM EVENT, AND AT LEAST DAILY DURING PROLONGED RAINFALL. REPAIR OR REPLACEMENT SHOULD BE MADE PROMPTLY AS NEEDED. INSPECTION OF SILT FENCE EROSION CONTROL BARRIER, WATTLES AND HAY BALES (INCLUDING THOSE ENCOMPASSING SOIL STOCKPILE AREAS) SHOULD BE MADE AFTER EACH STORM EVENT AND REPAIR OR REPLACEMENT SHOULD BE MADE PROMPTLY AS NEEDED. CLEANOUT OF ACCUMULATED SEDIMENT BEHIND SILT FENCE AND/OR HAY BALES IS NECESSARY IF ONE HALF OF THE ORIGINAL HEIGHT OF SILT FENCE BARRIER, WATTLES AND/OR HAYBALES BECOMES FILLED WITH SEDIMENT. SHOULD THE FABRIC DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USEFUL LIFE, THE FABRIC SHOULD BE REPLACED IMMEDIATELY.
- THE CONTRACTOR SHALL USE THE LATEST EDITION OF THE "STATE OF RHODE ISLAND SOIL EROSION AND SEDIMENT CONTROL HANDBOOK" IN CONSTRUCTING THE EROSION AND SEDIMENT CONTROLS INDICATED ON THE PLANS. ALL EROSION AND SEDIMENT CONTROL MEASURES OR WORKS AND REHABILITATION MEASURES MUST CONFORM TO OR EXCEED THE SPECIFICATIONS OR STANDARDS SET OUT IN THIS HANDBOOK.
- 5. THE CONTRACTOR IS RESPONSIBLE FOR THE TIMELY INSTALLATION, INSPECTION, MAINTENANCE, AND/OR REPLACEMENT OF ALL TEMPORARY AND PERMANENT EROSION CONTROL DEVICES TO ENSURE PROPER OPERATION THROUGHOUT THE LIFE OF THE PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE OF PERMANENT MEASURES UNTIL CONSTRUCTION OF THE PROJECT IS COMPLETED OR UNTIL IT IS ACCEPTED BY THE OWNER. THE OWNER IS RESPONSIBLE THEREAFTER.
- 6. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CLEAN ROADS, CONTROL DUST, AND TAKE ALL NECESSARY MEASURES TO ENSURE THAT THE SITE AND ALL ROADS BE MAINTAINED IN A MUD— AND DUST—FREE CONDITION AT ALL TIMES THROUGHOUT THE LIFE OF THE CONTRACT. DUST CONTROL SHALL INCLUDE, BUT IS NOT LIMITED TO, WATER AND/OR CRUSHED STONE OR COARSE GRAVEL, SUBJECT TO THE APPROVAL OF THE ENGINEER.
- THE PROPOSED CONSTRUCTION ENTRANCE(S) SHALL BE CONSTRUCTED AS SHOWN ON THE PLANS AND DETAILS. ALL VEHICLE TRAFFIC ENTERING OR EXITING THE PROJECT SITE SHALL PASS OVER THE CONSTRUCTION ENTRANCE(S) TO REDUCE THE TRACKING OR FLOWING OF SEDIMENT ONTO THE SURROUNDING ROADWAYS. THE CONSTRUCTION ENTRANCE(S) SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO THE SURROUNDING ROADWAYS. THIS WILL REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE OR ADDITIONAL LENGTH AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO THE SURROUNDING ROADWAYS MUST BE REMOVED IMMEDIATELY. ADDITIONAL ENTRANCES FOR CONSTRUCTION PHASING SHALL BE INSTALLED AS REQUIRED TO PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO ROADWAYS.
- 8. THE CONTRACTOR SHALL INSTALL ALL PERIMETER SEDIMENT CONTROL BARRIERS AS SHOWN ON THE SITE PLANS OR AS MAY BE REQUIRED TO PREVENT SEDIMENT FLOW TO STORM DRAINS OR SURFACE WATERS. A ROW OF STAKED HAYBALES OR A SILT FENCE SHALL ALSO BE INSTALLED AROUND ANY SOIL STOCKPILE AREAS. CLEANOUT OF ACCUMATED SEDIMENT BEHIND PERIMETER SEDIMENT CONTROL BARRIER IS NECESSARY IF ONE-HALF THE ORIGINAL HEIGHT OF THE BARRIER BECOMES FILLED WITH SEDIMENT. REPLACE BARRIER IMMEDIATELY IF BARRIER DECOMPOSED OR BECOMES INEFFECTIVE.
- TEMPORARY VEGETATIVE COVER SHALL BE APPLIED TO ANY DISTURBED AREAS (INCLUDING SOIL STOCKPILE AREAS) THAT HAVE NOT YET REACHED FINISHED GRADE AS SOON AS POSSIBLE, BUT NOT MORE THAN FOURTEEN (14) DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT AREA HAS TEMPORARILY CEASED, UNLESS THE ACTIVITY IS TO RESUME WITHIN TWENTY-ONE (21) DAYS. TEMPORARY SEEDING MAY BE APPLIED ANYTIME BETWEEN MARCH 1 THROUGH JUNE 15 AND AUGUST 15 THROUGH OCTOBER 1.

THIS TEMPORARY VEGETATIVE COVER SHALL CONSIST OF 60% OF ANNUAL OR PERENNIAL RYEGRASS AND 40% OF MILLET OR SUDANGRASS OR 100% OF WINTER RYE. ANNUAL OR PERENNIAL RYEGRASS SHALL BE PLANTED AT A RATE OF 1.5 POUNDS PER 1,000 SQUARE FEET, WINTER RYE SHALL BE PLANTED AT A RATE OF 2.5 POUNDS PER 1,000 SQUARE FEET, AND MILLET OR SUDANGRASS SHALL BE PLANTED AT A RATE OF 1.0 POUND PER 1,000 SQUARE FEET.

LIMESTONE AND FERTILIZER SHALL BE APPLIED ACCORDING TO SOIL TEST RECOMMENDATIONS OFFERED BY THE UNIVERSITY OF MASSACHUSETTS SOIL TESTING LABORATORY. IF SOIL TESTING IS NOT FEASIBLE ON SMALL OR VARIABLE SITES, OR WHERE TIMING IS CRITICAL, FERTILIZER MAY BE APPLIED AT THE RATE OF 300 POUNDS PER ACRE OR 7.5 POUNDS PER 1,000 SQUARE FEET OF 10-10-10 OR EQUIVALENT. APPLY LIMESTONE (EQUIVALENT TO 50 PERCENT CALCIUM PLUS MAGNESIUM OXIDE) AS FOLLOWS: (1) 3 TONS PER ACRE (OR 135 POUNDS PER 1,000 SQUARE FEET) FOR CLAY, CLAY LOAM AND HIGH ORGANIC SOIL, (2) 2 TONS PER ACRE (OR 90 POUNDS PER 1,000 SQUARE FEET) FOR SANDY LOAM, LOAM, OR SILT LOAM, AND (3) 1 TON PER ACRE (OR 45 POUNDS PER 1,000 SQUARE FEET) LOAMY SAND OR SAND. TEMPORARY VEGETATIVE COVER SHALL BE INSTALLED AS OUTLINED IN THE RHODE ISLAND SOIL EROSION AND SEDIMENT

10. PERMANENT VEGETATIVE COVER SHALL BE APPLIED TO ALL DISTURBED AREAS THAT HAVE REACHED FINISHED GRADE AS SOON AS POSSIBLE, BUT NOT MORE THAN FOURTEEN (14) DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT AREA HAS PERMANENTLY CEASED. THE RECOMMENDED PERMANENT SEEDING DATES ARE APRIL 1 TO JUNE15 AND AUGUST 15 TO SEPTEMBER 30. PERMANENT VEGETATIVE COVER NOT OTHERWISE SPECIFIED ON THE LANDSCAPE PLANS SHALL RECEIVE THE FOLLOWING SEED MIXTURE (ALSO KNOWN AS URI NUMBER 2 SEED):

40% OF RED FESCUE APPLICATION RATE: 0.90LBS/1,000SF 40% OF KENTUCKY BLUEGRASS APPLICATION RATE: 0.90LBS/1.000SF 20% OF PERENNIAL RYEGRASS APPLICATION RATE: 0.45LBS/1,000SF

LIMESTONE AND FERTILIZER SHALL BE APPLIED ACCORDING TO SOIL TEST RECOMMENDATIONS OFFERED BY THE UNIVERSITY OF MASSACHUSETTS SOIL TESTING LABORATORY. IF SOIL TESTING IS NOT FEASIBLE ON SMALL OR VARIABLE SITES. OR WHERE TIMING IS CRITICAL, FERTILIZER MAY BE APPLIED AT THE RATE OF 500 POUNDS PER ACRE OR 11.5 POUNDS PER 1,000 SQUARE FEET OF 10-20-20 OR EQUIVALENT. APPLY LIMESTONE (EQUIVALENT TO 50 PERCENT CALCIUM PLUS MAGNESIUM OXIDE) AS FOLLOWS: 4 TONS PER ACRE (OR 180 POUNDS PER 1,000 SQUARE FEET) FOR CLAY, CLAY LOAM AND HIGH ORGANIC SOIL; 3 TONS PER ACRE (OR 135 POUNDS PER 1,000 SQUARE FEET) FOR SANDY LOAM, LOAM, OR SILT LOAM; AND 2 TONS PER ACRE (OR 90 POUNDS PER 1,000 SQUARE FEET) LOAMY SAND OR SAND.

AREAS WHICH HAVE BEEN TEMPORARILY OR PERMANENTLY SEEDED SHALL BE MULCHED IMMEDIATELY FOLLOWING SEEDING IN ADDITION TO AREAS WHICH CANNOT BE SEEDED WITHIN THE RECOMMENDED SEEDING DATES AND ANY SOIL STOCKPILE AREAS. TEMPORARY MULCHING SHOULD BE PERFORMED AS SOON AS POSSIBLE, BUT NOT MORE THAN FOURTEEN (14) DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT AREA HAS TEMPORARILY CEASED UNLESS THE ACTIVITY IS TO RESUME

ALL MULCHES MUST BE INSPECTED PERIODICALLY, IN PARTICULAR AFTER RAINSTORMS, TO CHECK FOR RILL EROSION. WHERE EROSION IS OBSERVED, ADDITIONAL MULCH MUST BE APPLIED. IF NETTING IS USED, THE NET SHALL BE INSPECTED AFTER RAINSTORMS FOR DISLOCATION OR FAILURE. IF WASHOUTS OR BREAKAGE OCCUR, THE NET MUST BE REINSTALLED AS NECESSARY AFTER REPAIRING DAMAGE TO SLOPE. INSPECTIONS SHALL TAKE PLACE UNTIL GRASSES ARE FIRMLY ESTABLISHED. GRASS IS CONSIDERED TO BE FIRMLY ESTABLISHED AT A MINIMUM HEIGHT OF THREE (3) INCHES.

STRAW OR HAY MULCH, WOOD FIBER MULCH, AND HYDROMULCH ARE RECOMMENDED. STRAW OR HAY MULCH SHOULD BE APPLIED AT A RATE OF 2 TONS PER ACRE, WOOD FIBER MULCH SHOULD BE APPLIED AT A RATE OF 1,500-2,000 POUNDS PER ACRE, OR HYDROMULCH APPLIED AT A RATE OF 1,500 POUNDS PER ACRE. WOOD FIBER MULCH SHOULD NOT BE USED ALONE IN THE WINTER OR DURING HOT. DRY WEATHER. STRAW OR HAY MULCH MUST BE ANCHORED IMMEDIATELY AFTER SPREADING TO PREVENT WINDBLOWING. MULCH ANCHORING SHOULD ALSO BE USED ON SLOPES GREATER THAN THREE (3) PERCENT AND CONCENTRATED FLOW AREAS SUCH AS DIVERSION AND WATERWAY CHANNELS.

- IF PERMANENT OR TEMPORARY SEEDING CANNOT BE COMPLETED IMMEDIATELY OR WITHIN THE RECOMMENDED SEEDING DATES, USE THE TEMPORARY MULCHING MEASURE TO PROTECT THE SITE AND DELAY SEEDING UNTIL THE NEXT RECOMMENDED SEEDING PERIOD.
- 13. ANY EXISTING OR PROPOSED STORMWATER DRAINAGE STRUCTURES THAT MAY BE SUBJECT TO SEDIMENTATION SHALL BE PROTECTED WITH INLET PROTECTION OR OTHER APPROVED MEASURES THROUGHOUT THE ENTIRE CONSTRUCTION PERIOD.
- ALL EXCESS EXCAVATED MATERIALS, EXCESS FILL, EXCESS CONSTRUCTION MATERIALS, AND DEBRIS SHALL BE REMOVED FROM THE SITE AND SHALL BE DISPOSED OF IN ACCORDANCE WITH APPLICABLE LAWS.
- WASTE DISPOSAL: MATERIALS WHICH COULD BE A POTENTIAL SOURCE OF STORMWATER POLLUTION SUCH AS GASOLINE. DIESEL FUEL, HYDRAULIC OIL, ETC., SHALL BE STORED AT THE END OF EACH DAY IN A STORAGE TRAILER OR COVERED LOCATION AND TAKEN OFF-SITE AND PROPERLY DISPOSED OF. ALL TYPES OF WASTE GENERATED AT THIS SITE SHALL BE DISPOSED OF IN A MANNER CONSISTENT WITH STATE LAW AND/OR REGULATIONS.
- CONTROL OF ALLOWABLE NON-STORMWATER DISCHARGES: IF ALLOWABLE NON-STORM WATER DISCHARGES ARE OCCURRING AT THE SITE, SUCH DISCHARGES SHALL BE VISUALLY OBSERVED AND RECORDED AS OUTLINED BELOW AND IN ACCORDANCE WITH PART II OF THE RIPDES GENERAL PERMIT. THE LIST OF EXPECTED SOURCES OF ALLOWABLE NON-STORM WATER DISCHARGES FOR THIS PROJECT ARE AS FOLLOWS: (1) DISCHARGE FROM VEHICLE WASHDOWN WHERE NO DETERGENTS ARE USED, (2) EXTERNAL BUILDING WASHDOWN WHERE NO DETERGENTS ARE USED, (3) THE USE OF WATER TO CONTROL DUST, (4) FIRE HYDRANT FLUSHINGS, (5) LAWN WATERING, (6) POTABLE WATER SOURCES INCLUDING WATERLINE FLUSHINGS, (8) IRRIGATION DRAINAGE, (9) PAVEMENT WASHWATERS WHERE SPILLS OR LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE NOT OCCURRED (UNLESS ALL SPILLED MATERIALS HAVE BEEN REMOVED) AND WHERE NO DETERGENTS ARE USED, AND (10) FOUNDATION OR FOOTING DRAINS WHERE FLOWS ARE NOT CONTAMINATED WITH PROCESS SUCH AS SOLVENTS OR CONTAMINATED BY CONTACT WITH SOILS WHERE SPILLS OR LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAS OCCURRED.
- GOOD HOUSEKEEPING: THE PROJECT SITE SHALL PROVIDE FOR THE MINIMIZATION OF EXPOSURE OF CONSTRUCTION DEBRIS (INCLUDING, BUT NOT LIMITED TO, INSULATION, WIRING, PAINTS AND PAINT CANS, SOLVENTS, WALL BOARD, ETC.) TO PRECIPITATION BY MEANS OF DISPOSAL AND/OR PROPER SHELTER OR COVER. CONSTRUCTION WASTE MUST BE PROPERLY DISPOSED OF IN ORDER TO AVOID EXPOSURE TO PRECIPITATION AT THE END OF EACH WORKING DAY.

STORMWATER MAINTENANCE PROGRAM

- DISTURBANCE OF SOIL SURFACES IS REGULATED BY STATE LAW AND LOCAL ORDINANCE. ALL WORK SHALL COMPLY WITH 1. REPAIRS OR REPLACEMENT OF DRAINAGE STRUCTURES SHALL BE DONE WITHIN 30 DAYS OF DEFICIENCY REPORTS. IF AN EMERGENCY SITUATION IS IMMINENT THEN REPAIR/REPLACEMENT MUST BE DONE IMMEDIATELY TO AVERT FAILURE OR DANGER TO NEARBY RESIDENTS.
 - 2. THE OWNER SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF THE STORMWATER MANAGEMENT SYSTEM ONCE CONSTRUCTION IS COMPLETE AND ACCEPTED BY THE OWNER.

MAINTENANCE FOR SEDIMENT FOREBAYS: SEDIMENTS SHOULD BE REMOVED IMMEDIATELY FOLLOWING SITE STABILIZATION AND THEREAFTER ONCE EVERY TEN (10) YEARS PER THE RHODE ISLAND STORMWATER STANDARDS AND INSTALLATION MANUAL. DURING THE FIRST YEAR OF OPERATION, IT MAY BE NECESSARY TO REMOVE ACCUMULATED SEDIMENTS MORE OFTEN. ROUTINE INSPECTIONS OF THE FOREBASYS ARE REQUIRED AFTER SITE STABILIZATION TO ENSURE PROPER FUNCTIONING. ACCUMULATED SEDIMENT MAY HAVE TO BE REMOVED MORE FREQUENTLY IF THE STORAGE CAPACITY OF THE SEDIMENT FOREBAY IS WITHIN THE LAST TEN (10) PERCENT OF ITS AVAILABLE STORAGE CAPACITY.

THE GRASSED AREAS OF THE FOREBAYS SHOULD BE INSPECTED AT LEAST TWICE PER YEAR TO CHECK FOR EROSION PROBLEMS. PROBLEM AREAS MUST BE RESEEDED IMMEDIATELY TO STABILIZE EXPOSED SOILS,

SIDE SLOPES AND EMBANKMENTS SHOULD BE MOWED AT LEAST ONCE PER GROWING SEASON TO PREVENT UNWANTED WOODY GROWTH. MOWINGS CAN BE MORE FREQUENT IF A MORE GROOMED APPEARANCE IS DESIRED. ALL TRASH AND LITTER SHALL BE REMOVED FROM THE BASIN DURING MOWING OPERATIONS.

DISPOSAL OF THE ACCUMULATED SEDIMENT AND HYDROCARBONS MUST BE IN ACCORDANCE WITH APPLICABLE LOCAL, STATE, AND FEDERAL GUIDELINES AND REGULATIONS.

4. MAINTENANCE FOR BIORETENTION BASINS.

THE BIORETENTION BASIN SHALL BE INSPECTED AFTER EVERY MAJOR STORM IN THE FIRST FEW MONTHS FOLLOWING CONSTRUCTION. THE BIORETENTION BASIN SHALL BE INSPECTED SEMI-ANNUALLY THEREAFTER. INSPECTIONS

 CHECKING THE BIORETENTION BASIN FOR STANDING WATER OR OTHER EVIDENCE OF CLOGGING SUCH AS DISCOLORED CHECKING THE STONE DIAPHRAGM FOR SEDIMENT ACCUMULATION, TRASH, AND DEBRIS.

SEDIMENT SHALL BE REMOVED FROM THE BIORETENTION BASIN WHEN THE ACCUMULATION EXCEEDS ONE INCH OR WHEN THERE IS EVIDENCE THAT THE INFILTRATION CAPACITY OF THE BIORETENTION BASIN HAS BEEN SIGNIFICANTLY REDUCED. WHEN THE OBSERVED WATER LEVEL ABOVE THE FILTER EXCEEDS THE DESIGN LEVEL OR DRAW DOWN TIME EXCEEDS 36 HOURS. THE TOP SEVERAL INCHES OF THE BIORETENTION BASIN (TYPICALLY DISCOLORED MATERIAL) SHALL BE REMOVED AND REPLACED. THE MATERIAL SHALL BE REMOVED WITH RAKES WHERE POSSIBLE RATHER THAN HEAVY EQUIPMENT TO AVOID COMPACTING. REMOVED SEDIMENTS SHALL BE DEWATERED (IF NECESSARY) AND DISPOSED OF IN A LAWFUL

MULCHING SHALL BE ONE (1) TIME PER YEAR IN SPRING, AT MINIMUM.

MOWING SHALL BE TWO (2) TIMES PER YEAR, AT MINIMUM.

WATERING SHALL BE ONE (1) TIME EVERY TWO (2) TO THREE (3) DAYS FOR FIRST ONE (1) TO TWO (2) MONTHS, THEN AS NEEDED UNTIL VEGETATION IS FULLY ESTABLISHED. IF DROUGHTY, WATERING AFTER THE INITIAL YEAR MAY BE WARRANTED. SEMI-ANNUAL INSPECTIONS INCLUDING TRASH COLLECTION, SPOT WEEDING, REMOVING AND REPLACING DEAD VEGETATION,

5. MAINTENANCE FOR VEGETATED SWALES:

AND PRUNING

INSPECTIONS.

SWALES SHALL BE MOWED AT LEAST ONCE PER GROWING SEASON (OR TWO (2) TIMES PER YEAR AT A MINIMUM) TO PREVENT ESTABLISHMENT OF WOODY GROWTH AND OTHER UNDESIRABLE PLANTS THAT INHIBIT PROPER PERFORMANCE. GRASS VEGETATION SHOULD NOT BE CUT SHORTER THAN 4 INCHES.

BARE SPOTS AND ERODED AREAS WITHIN THE SWALE MUST BE RESEEDED IMMEDIATELY FOLLOWING OBSERVATIONS TO PREVENT SUBSEQUENT FAILURE OF THE SYSTEM.

SWALES SHALL BE INSPECTED ON A SEMI-ANNUAL BASIS. ALL TRASH AND OTHER LITTER MUST BE REMOVED DURING

SEDIMENTS SHALL BE REMOVED AT LEAST ONCE PER YEAR. RESEEDING MAY BE NECESSARY AFTER SEDIMENT REMOVAL OPERATIONS, ESPECIALLY IF EXCESSIVE DAMAGE IS DONE TO VEGETATION.

STONE DIAPHRAGMS UPGRADIENT OF SWALES SHALL BE REPLACED ONCE EVERY TWO (2) TO THREE (3) YEARS.

ONCE RIPRAP HAS BEEN INSTALLED, IT SHOULD REQUIRE VERY LITTLE MAINTENANCE. RIPRAP SHALL BE INSPECTED PERIODICALLY TO DETERMINE IF HIGH FLOWS HAVE CAUSED SCOUR BENEATH THE RIPRAP OR DISLODGED ANY OF THE

7. MAINTENANCE FOR CATCH BASINS:

STONE. REPAIRS SHOULD BE ACCOMPLISHED IMMEDIATELY.

SEAL

6. MAINTENANCE FOR RIPRAP:

ONCE CONSTRUCTION IS COMPLETE AND HAS BEEN ACCEPTED BY THE OWNER, INSPECTIONS OF ALL CATCH BASINS ON-SITE BY THE OWNER SHOULD OCCUR AT LEAST QUARTERLY TO CHECK FOR DEBRIS REMOVAL (SEDIMENT AND HYDROCARBONS) AND STRUCTURAL INTEGRITY OR DAMAGE, AND CLEANED TWICE A YEAR, AT MINIMUM. SUCH DEFICIENCIES MUST BE CORRECTED IMMEDIATELY. DISPOSAL OF THE ACCUMULATED SEDIMENT AND HYDROCARBONS MUST BE IN ACCORDANCE WITH APPLICABLE LOCAL, STATE, AND FEDERAL GUIDELINES AND REGULATIONS.

CONSTRUCTION RUNOFF INSPECTION

- 1. SITE DISCHARGES FROM CONSTRUCTION SITES ARE REGULATED BY THE RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT RHODE ISLAND POLLUTANT DISCHARGE SYSTEM ELIMINATION (RIPDES) PROGRAM, STORMWATER CONTROL MEASURES. DISTURBED AREAS. AREAS USED FOR THE STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION (INCLUDING SOIL STOCKPILES), DISCHARGE LOCATIONS, AND LOCATIONS WHERE VEHICLES ENTER AND EXIT THE SITE, MUST BE INSPECTED BY OR UNDER THE SUPERVISION OF THE PERMITTEE AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN TWENTY-FOUR (24) HOURS AFTER ANY STORM EVENT WHICH GENERATES AT LEAST 0.25 INCHES OF RAINFALL PER TWENTY-FOUR (24) HOUR PERIOD AND/OR AFTER A SIGNIFICANT AMOUNT OF RUNOFF. SUCH AREAS SHALL BE INSPECTED FOR EVIDENCE OF, OR THE POTENTIAL FOR, POLLUTANTS ENTERING THE WATERS OF THE STATE OR A SEPARATE STORM SEWER SYSTEM. $\,$ ALL BEST MANAGEMENT PRACTICES (BMPS) SHALL BE MAINTAINED TO PREVENT UNCONTROLLED RELEASES OF MEASURABLE AMOUNTS OF SEDIMENT OR SEDIMENT LADEN WATER FROM TRAVELING BEYOND THE LIMITS OF DISTURBANCE.
- IF AN INSPECTION REVEALS A DISCHARGE OF SEDIMENTS TO THE WATERS OF THE STATE OR A SEPARATE STORM SEWER SYSTEM, THE PERMITTEE MUST NOTIFY THIS OFFICE OF THE NATURE OF THE DISCHARGE, THE MEASURES TAKEN TO CLEAN UP THE DISCHARGE, AND THE MEASURES TAKEN TO PREVENT FUTURE RELEASES. BASED ON THE RESULTS OF THE INSPECTIONS, THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) MUST BE REVISED AS APPROPRIATE, BUT IN NO CASE LATER THAN SEVEN (7) CALENDAR DAYS FOLLOWING THE INSPECTION. SUCH MODIFICATIONS MUST PROVIDE FOR IMPLEMENTATION OF ANY CHANGES TO THE SWPPP WITHIN SEVEN (7) CALENDAR DAYS FOLLOWING THE INSPECTION.
- A REPORT SUMMARIZING THE SCOPE OF THE INSPECTION, NAME(S), AND TITLES OF PERSONNEL MAKING THE INSPECTION, THE DATE(S) OF THE INSPECTION, MAJOR OBSERVATIONS RELATING TO THE IMPLEMENTATION OF THE SWPPP, AND ACTIONS MUST BE MADE AND RETAINED AS PART OF THE SWPPP FOR AT LEAST FIVE (5) YEARS FROM THE DATE THAT THE SITE HAS UNDERGONE FINAL STABILIZATION. SUCH REPORTS MUST IDENTIFY ANY INCIDENTS OF NONCOMPLIANCE. WHERE A REPORT DOES NOT IDENTIFY ANY INCIDENTS OF NONCOMPLIANCE, THE REPORT MUST CONTAIN A CERTIFICATION THAT THE SITE IS IN COMPLIANCE WITH THE SWPPP AND THIS PERMIT. THE REPORT MUST BE SIGNED IN ACCORDANCE WITH PART V.G. OF THE RIPDES GENERAL PERMIT.

CONSTRUCTION SEQUENCE

CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS PROJECT ARE EXPECTED TO COMMENCE IN MARCH, 2017. IT IS ANTICIPATED THAT CONSTRUCTION WILL BE COMPLETED BY DECEMBER, 2018. THE GENERAL SEQUENCE FOR EACH PHASE OF CONSTRUCTION IS AS FOLLOWS:

- INSTALL PERIMETER SEDIMENT CONTROL BARRIERS AND CONSTRUCTION ENTRANCES. AS SHOWN ON THE CONSTRUCTION PLANS. EROSION CONTROL MEASURES SHALL BE MAINTAINED OR REPLACED AS REQUIRED THROUGHOUT CONSTRUCTION PERIOD. ANY TEMPORARY SOIL STOCKPILE AREAS DURING CONSTRUCTION WILL ALSO BE ENCOMPASSED BY WATTLES OR HAYBALES.
- 2. CLEAR THE SITE AND REMOVE DEMOLISHED MATERIALS.
- 3. CONDUCT ROUGH GRADING AND STOCKPILE EXCESS SOILS FOR REMOVAL OR REUSE AS SPECIFIED.
- 4. INSTALL UTILITIES AND STORM DRAINS.
- 5. COMPACT SUBGRADE AND INSTALL GRAVEL BORROW IN ALL AREAS TO BE PAVED WITH BITUMINOUS OR CONCRETE
- 6. INSTALL BASE AND BINDER COURSES FOR ALL PAVED AREAS.
- 7. CONDUCT FINAL GRADING OF LANDSCAPED AREAS AND CONSTRUCT SIDEWALKS.
- 8. PERMANENTLY SEED ALL NON-PAVED AREAS AND INSTALL LANDSCAPING AS SPECIFIED.
- 9. INSTALL THE SURFACE COURSE FOR ROADWAYS AND PARKING AREAS.
- 10. REMOVE TEMPORARY EROSION CONTROLS MEASURES ONCE PERMANENT VEGETATION COVER HAS BEEN ESTABLISHED AND THE SITE IS STABILIZED, INSPECTED, AND APPROVED BY THE TOWN OF BARRINGTON AND THE ENGINEER.

SPILL PREVENTION AND RESPONSE PROCEDURE

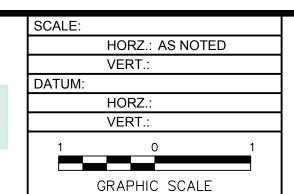
- ANY INADVERTENT OR DELIBERATE DISCHARGE OF WASTE OIL OR ANY OTHER POLLUTANT TO THE STORMWATER DISPOSAL SYSTEM REQUIRES IMMEDIATE NOTIFICATION TO THE RIDEM OIL POLLUTION CONTROL PROGRAM AT (401) 277-2284. AS PER THE OIL POLLUTION CONTROL REGULATIONS. DURING NON-WORKING HOURS, NOTIFICATION OF SPILLS CAN BE MADE TO THE RIDEM DIVISION OF ENFORCEMENT AT (401) 222-3070 (THE 24-HOUR EMERGENCY RESPONSE PHONE NUMBER).
- ANY INCIDENT OF GROUNDWATER CONTAMINATION RESULTING FROM THE IMPROPER DISCHARGE OF POLLUTANTS TO THE STORMWATER DISPOSAL SYSTEM SHALL BE THE RESPONSIBILITY OF THE PROPERTY OWNER AS WELL AS ANY OTHER PARTIES THAT THE RIDEM DETERMINES TO BE RESPONSIBLE FOR THE CONTAMINATION. PURSUANT TO STATE LAWS AND REGULATIONS. THE RIDEM MAY REQUIRE THE PROPERTY OWNER AND OTHER RESPONSIBLE PARTIES TO REMEDIATE ANY INCIDENTS THAT MAY ADVERSELY IMPACT GROUNDWATER QUALITY.
- UPON TRANSFER OF THE PROPERTY, THE NEW OWNER SHALL BE INFORMED AS TO THE LEGAL RESPONSIBILITIES ASSOCIATED WITH DISPOSAL SYSTEM. AS INDICATED ABOVE.
- THE OWNER WILL CREATE A MAINTENANCE LOG, SHOWING THE DATE, TIME, NAME OF INSPECTOR, INSPECTION COMMENTS, AND ANY ACTIONS TAKEN BASED ON THE ABOVE REFERENCE SCHEDULE.
- 5. THE PROPERTY OWNER SHALL BE RESPONSIBLE TO REMEDIATE INCIDENTS THAT ADVERSELY IMPACT GROUNDWATER QUALITY.

DATE DESCRIPTION DESIGNER REVIEWER

SHAWN M. MARTIN REGISTERED PROFESSIONAL ENGINEER (CIVIL)

EAST BAY **COMMUNITY DEVELOPMENT** CORPORATION







EAST BAY COMMUNITY DEVELOPMENT CORPORATION COMPREHENSIVE PERMIT GENERAL NOTES & LEGEND PALMER POINTE NEIGHBORHOOD

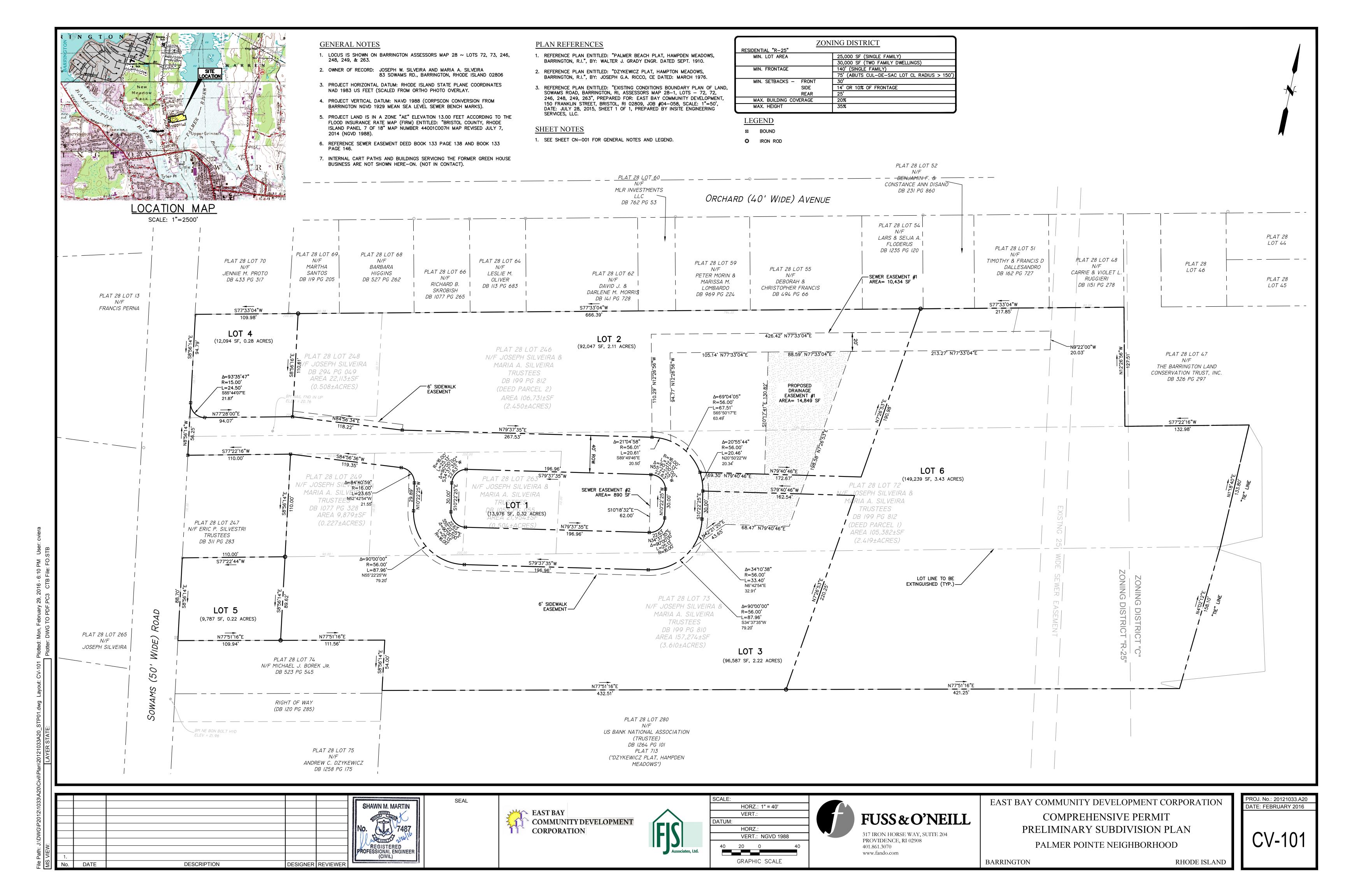
CN-002

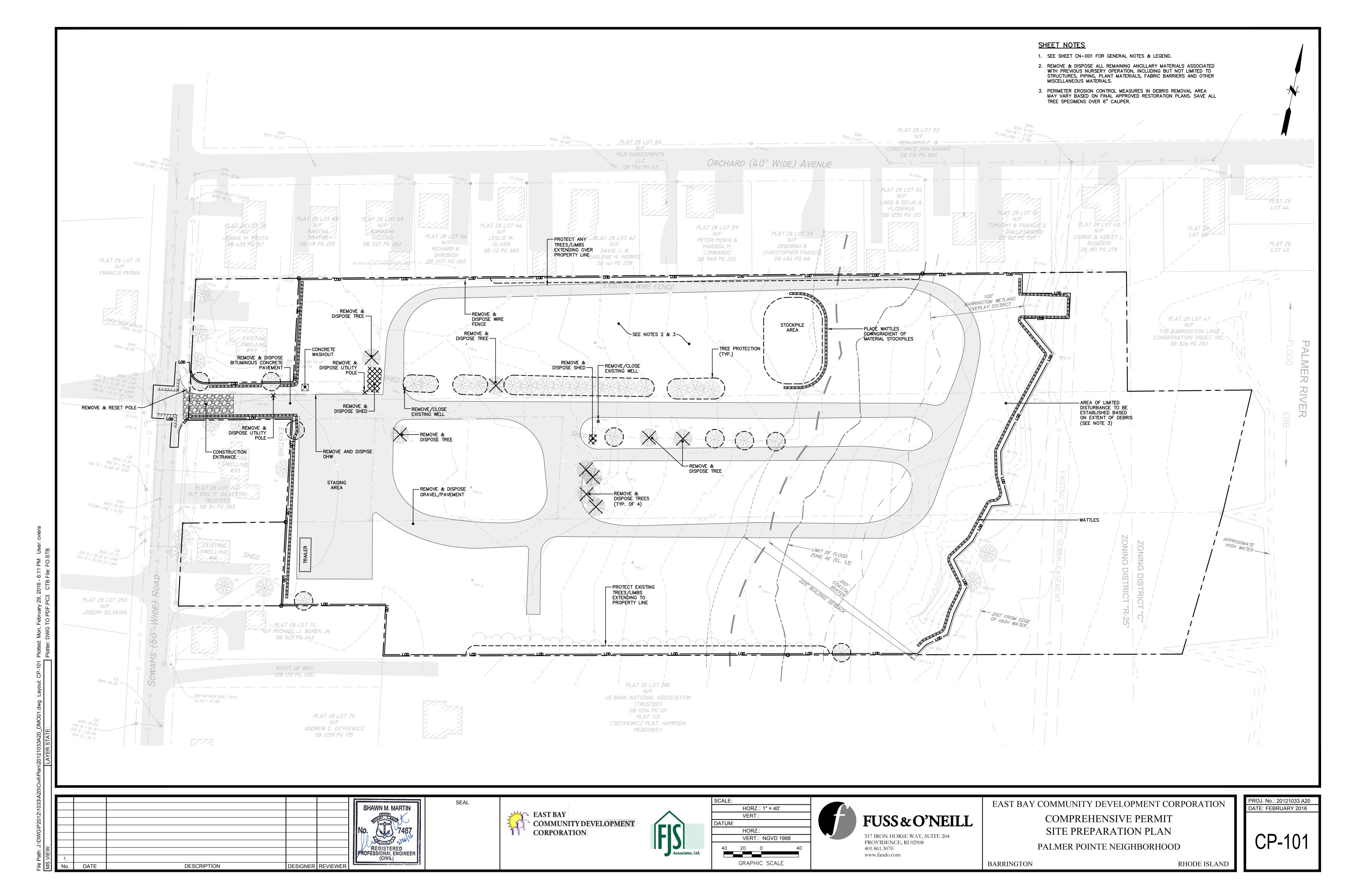
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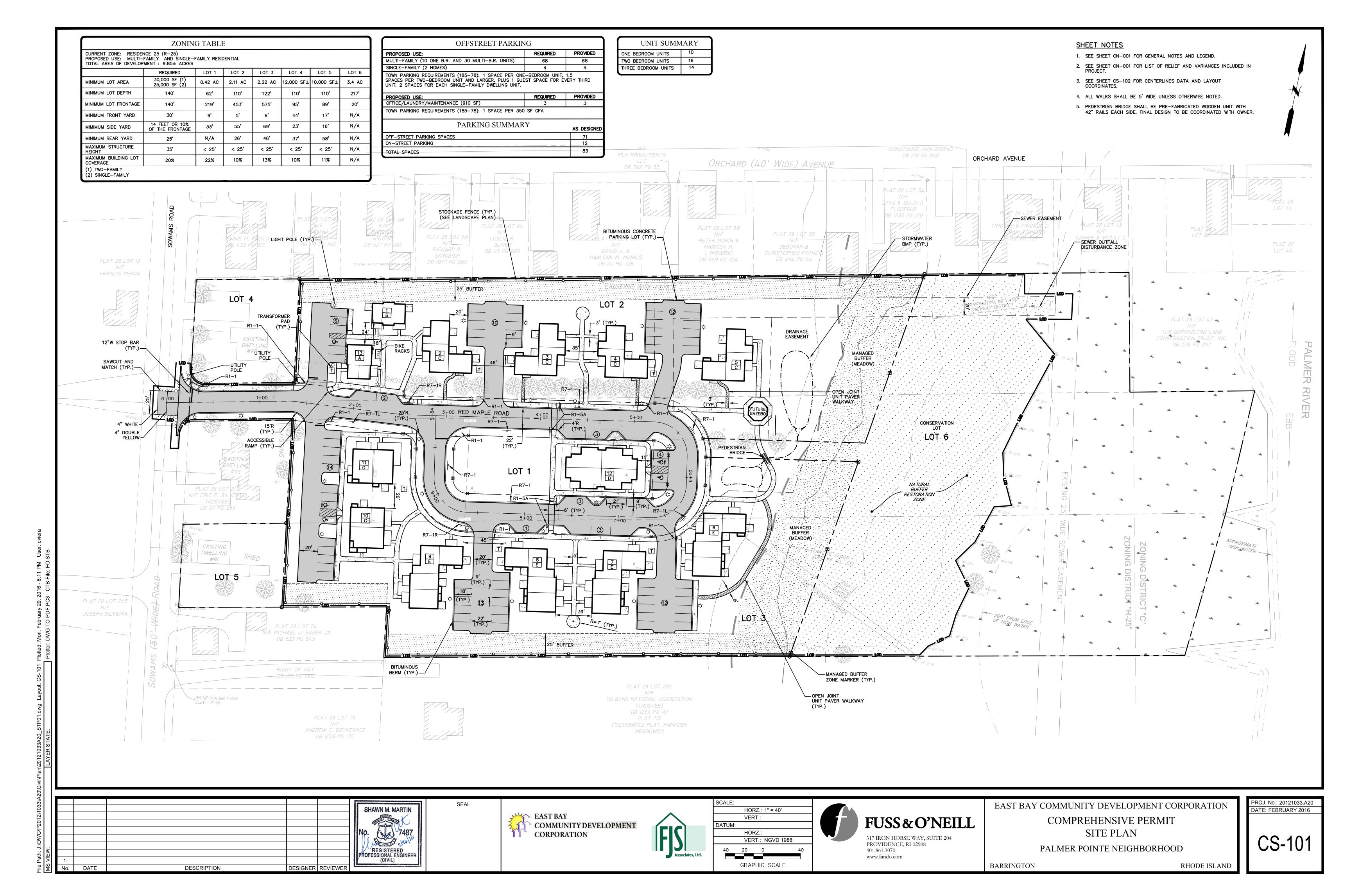
DATE: FEBRUARY 2016

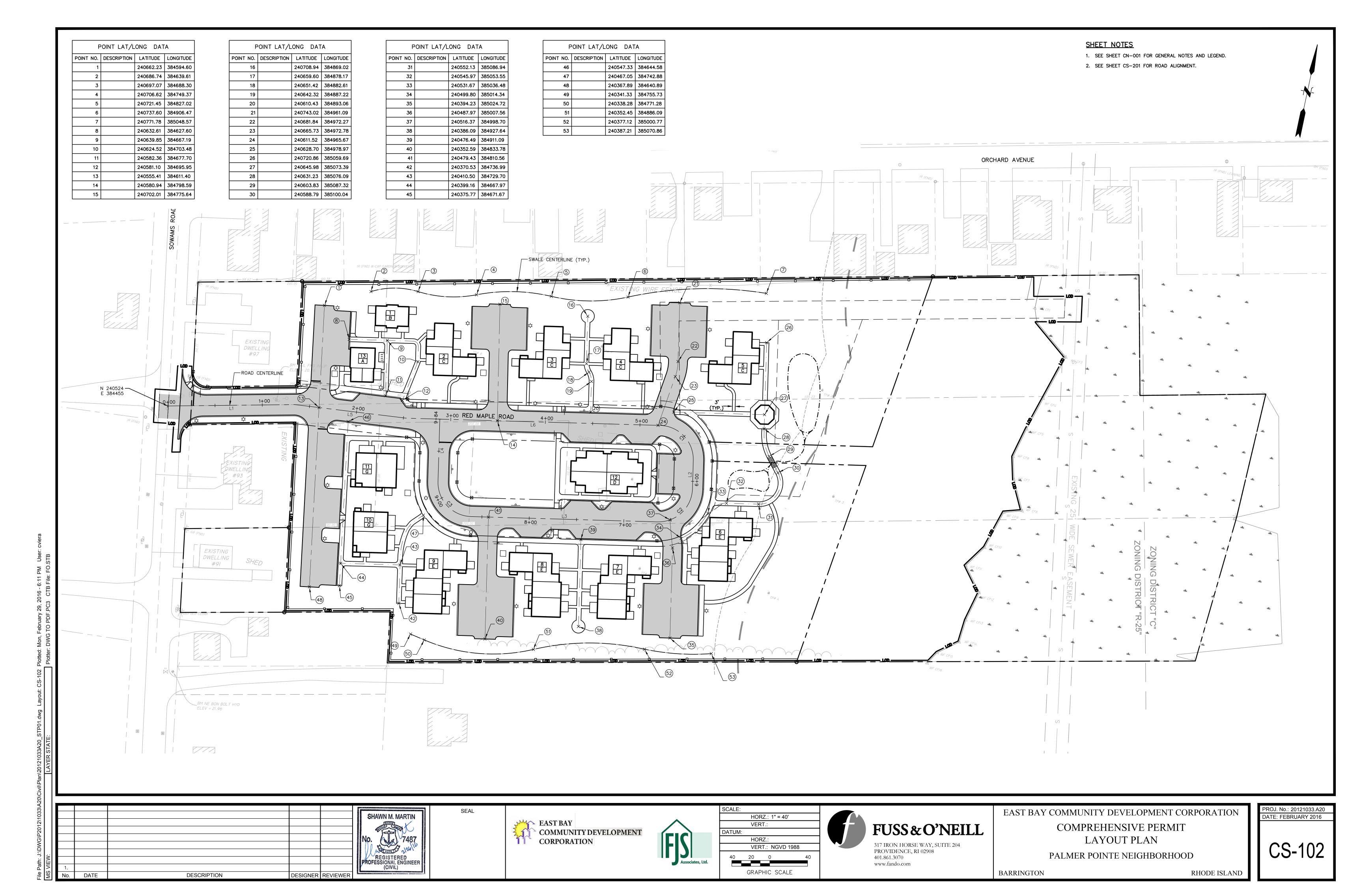
BARRINGTON

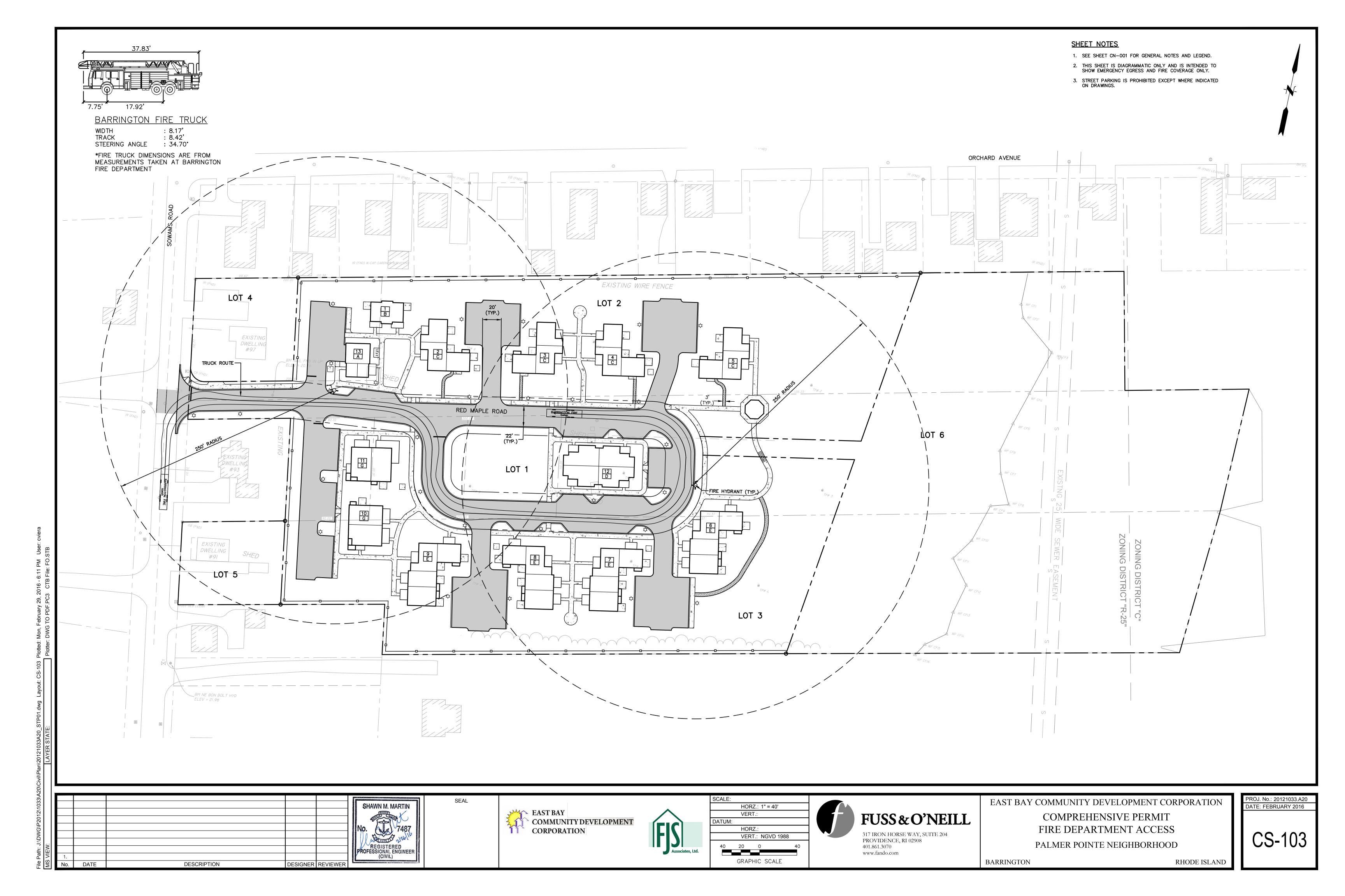
RHODE ISLAND

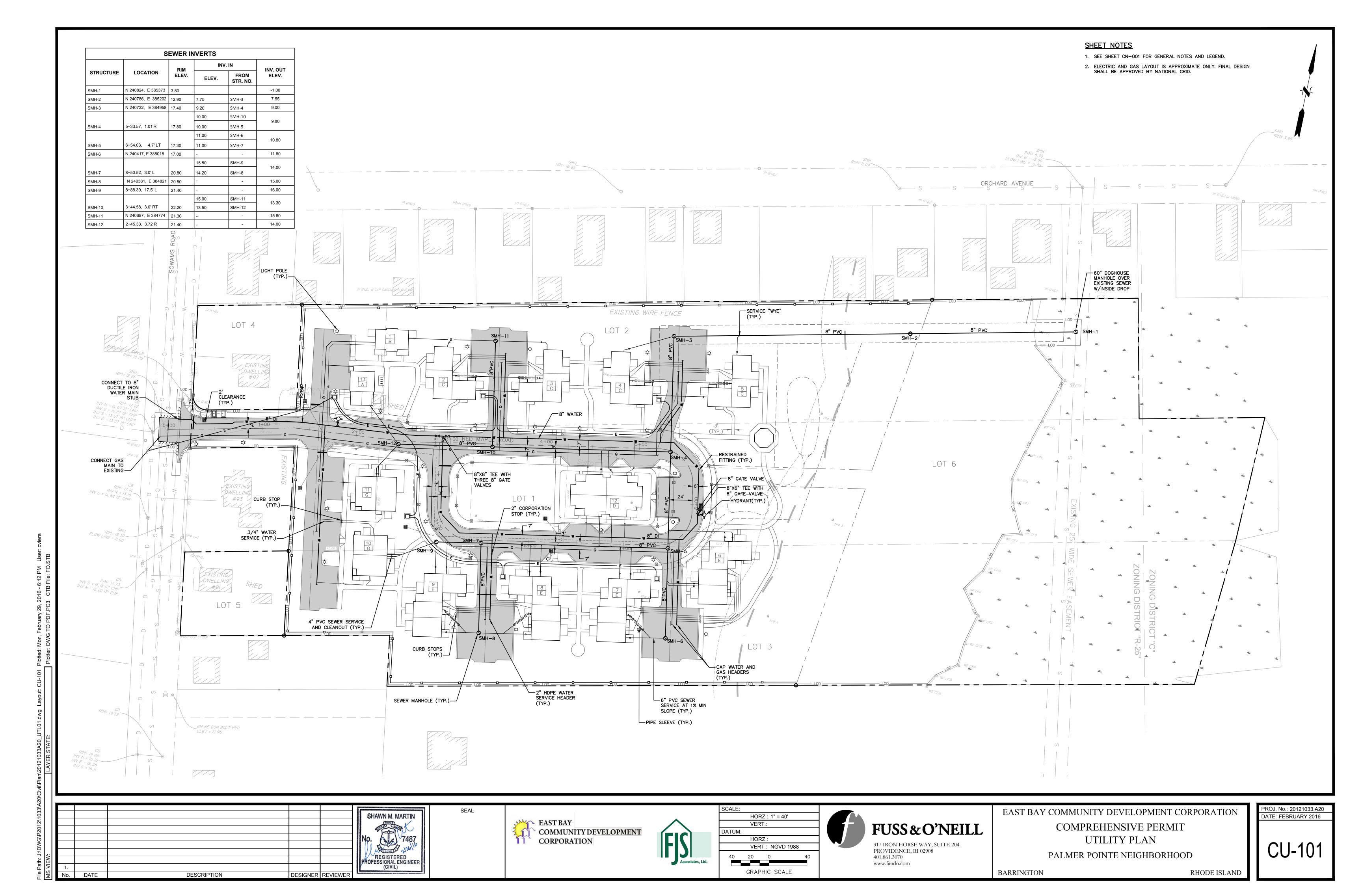


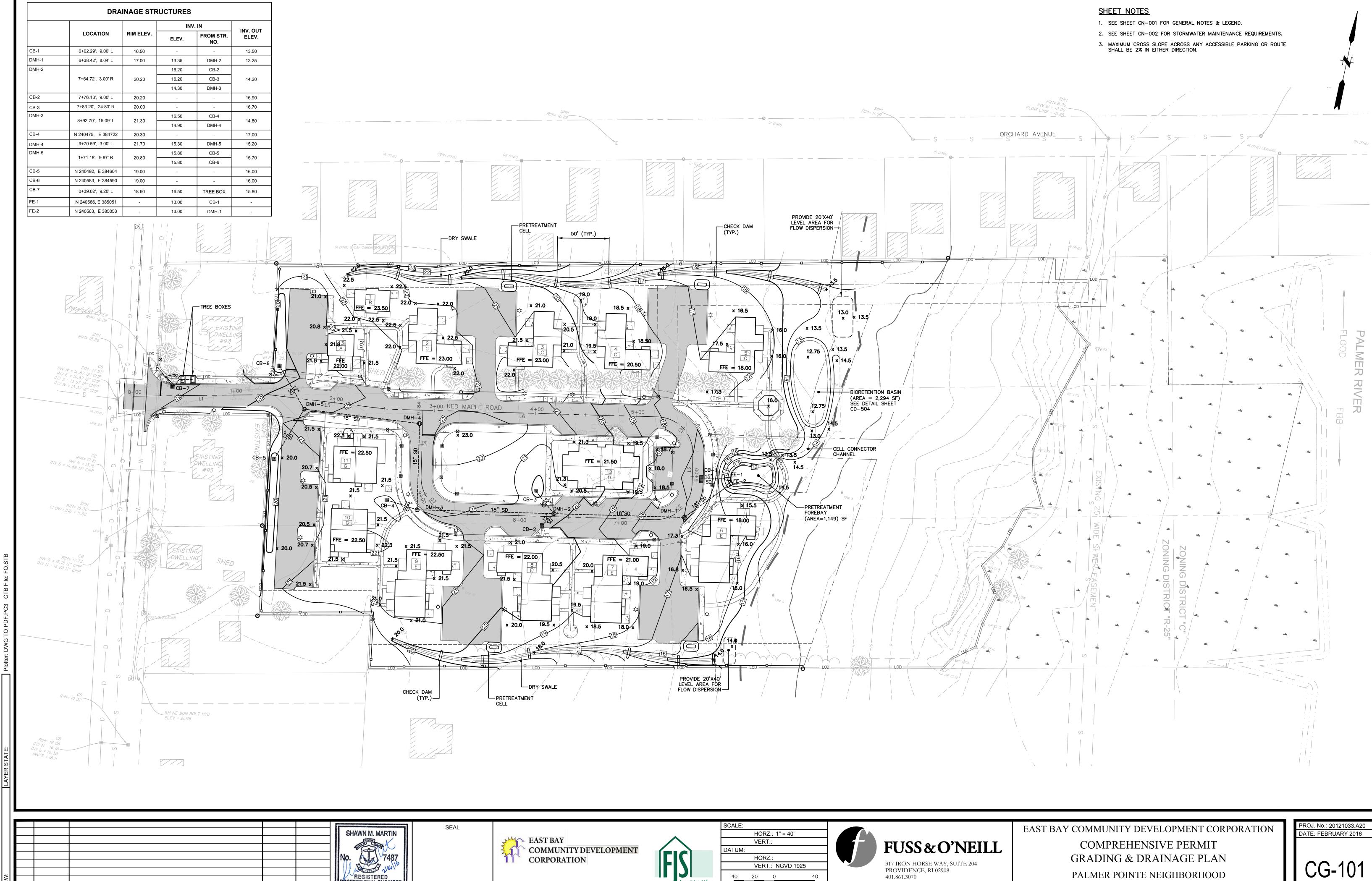












PALMER POINTE NEIGHBORHOOD RHODE ISLAND BARRINGTON

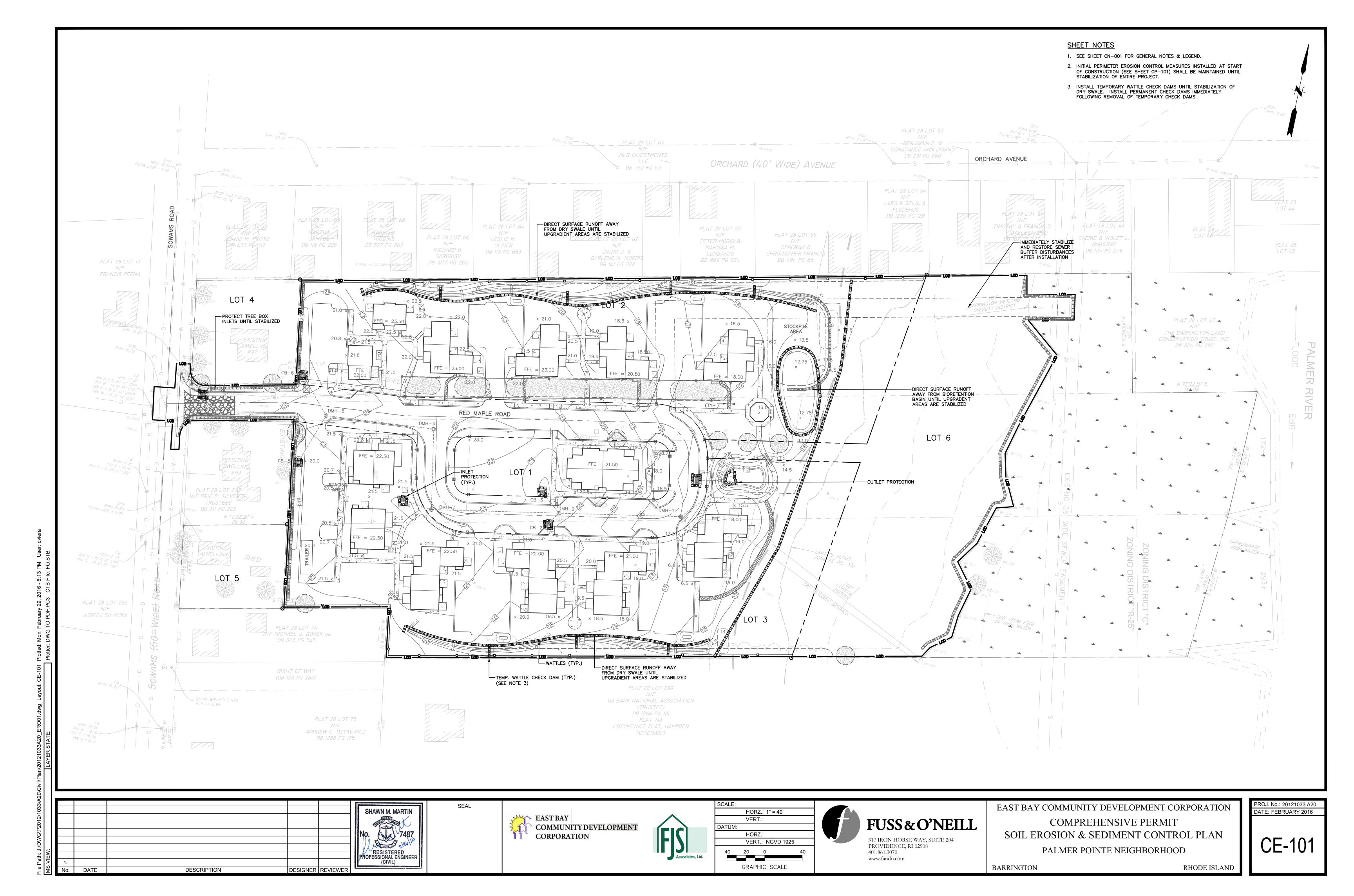
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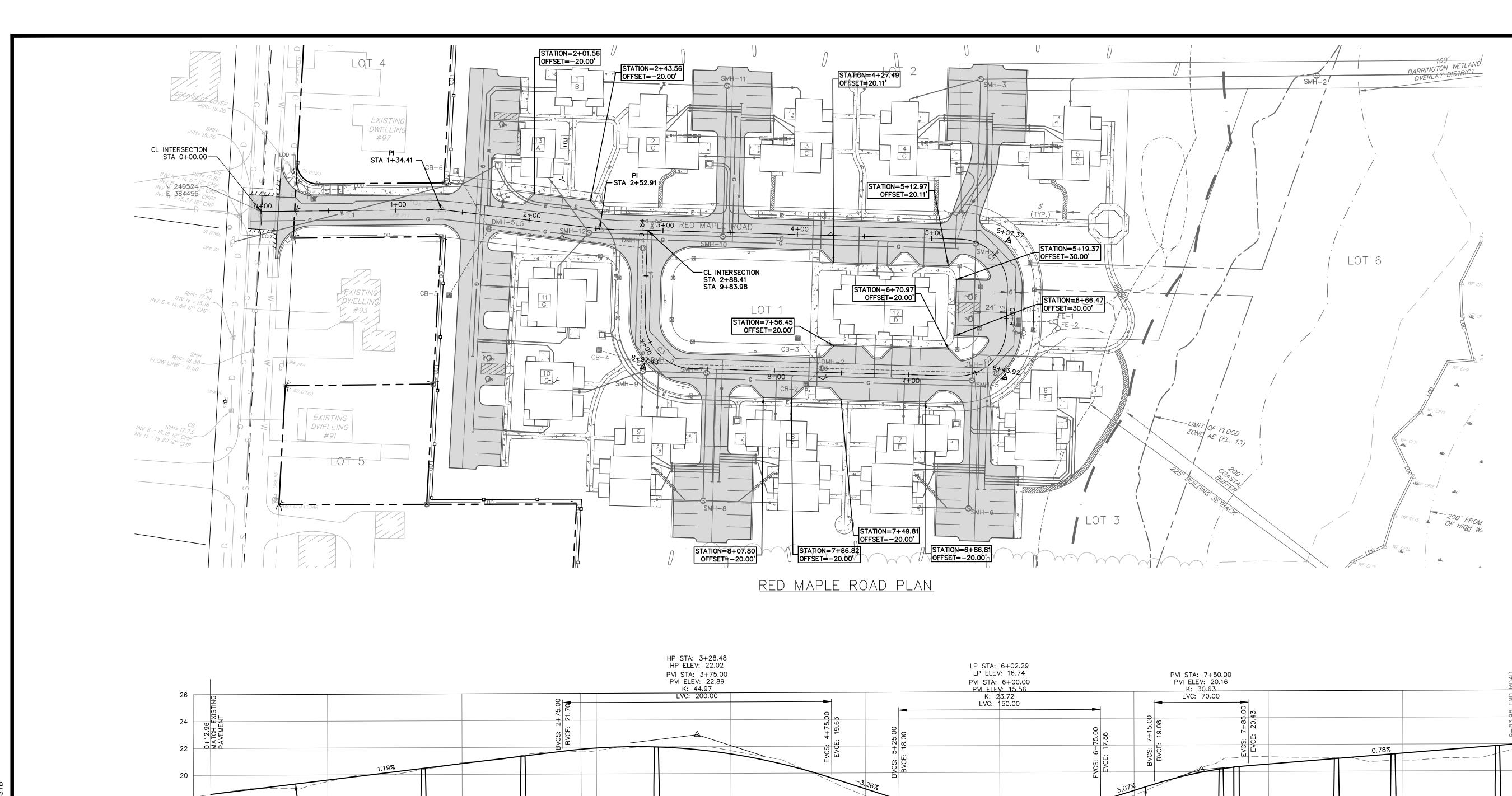
GRAPHIC SCALE

DESCRIPTION

DESIGNER REVIEWER

DATE



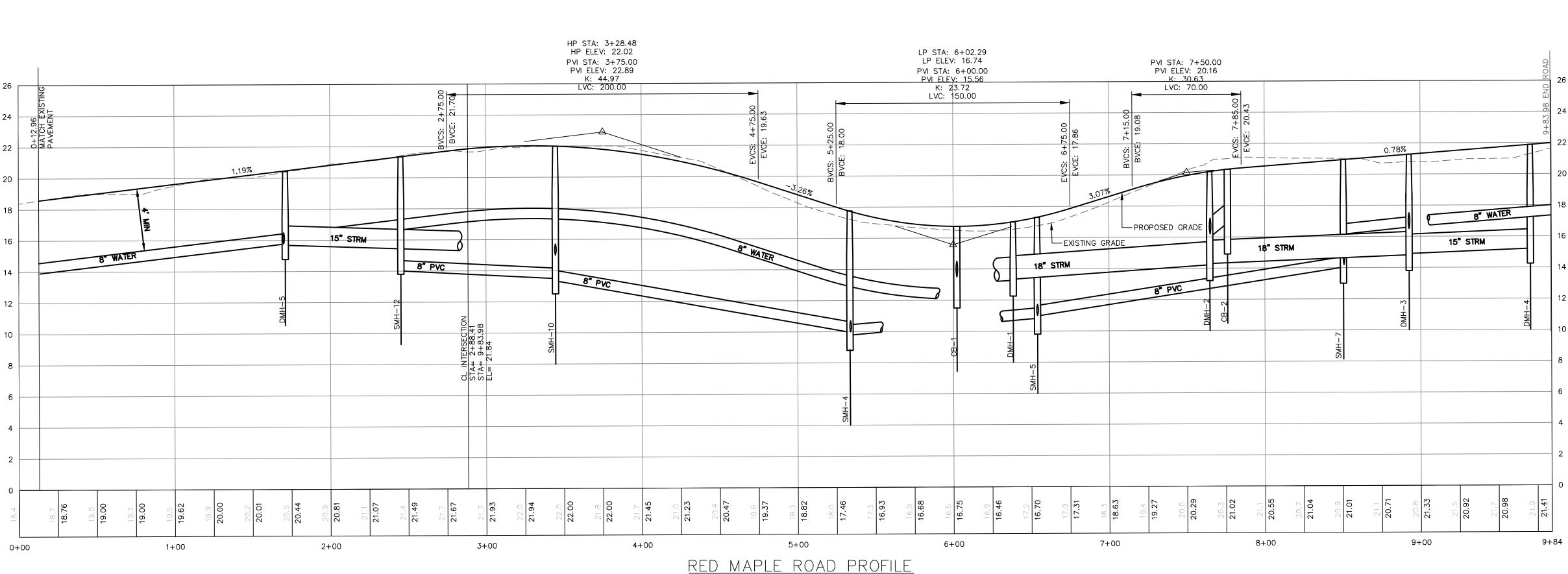


SHEET NOTES

- 1. SEE SHEET CN-001 FOR GENERAL NOTES AND LEGEND.
- 2. SEE SHEET CS-102 FOR CENTERLINES DATA AND LAYOUT COORDINATES.

ALIGNMENT CURVE DATA							
CURVE #	RADIUS	LENGTH	TANGENT	DELTA			
C1	36.00'	56.55	36.00'	90'00'00			
C2	36.00'	56.55	36.00'	90'00'00			
С3	36.00'	56.55	36.00'	90,00,00			

ALIGNMENT LINE DATA							
LINE #	LENGTH	BEARING					
L1	134.41'	N89°22'44"E					
L2	30.00'	S1°38'03"W					
L3	196.96'	N88°21'57"W					
L4	66.00'	N1°38'03"E					
L5	118.50'	S83°02'58"E					
L6	268.46'	S88°21'57"E					



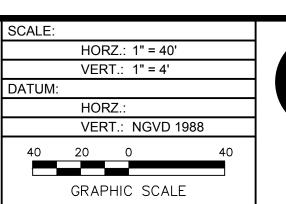
DESCRIPTION DATE DESIGNER REVIEWER

SHAWN M. MARTIN

SEAL

EAST BAY
COMMUNITY DEVELOPMENT CORPORATION







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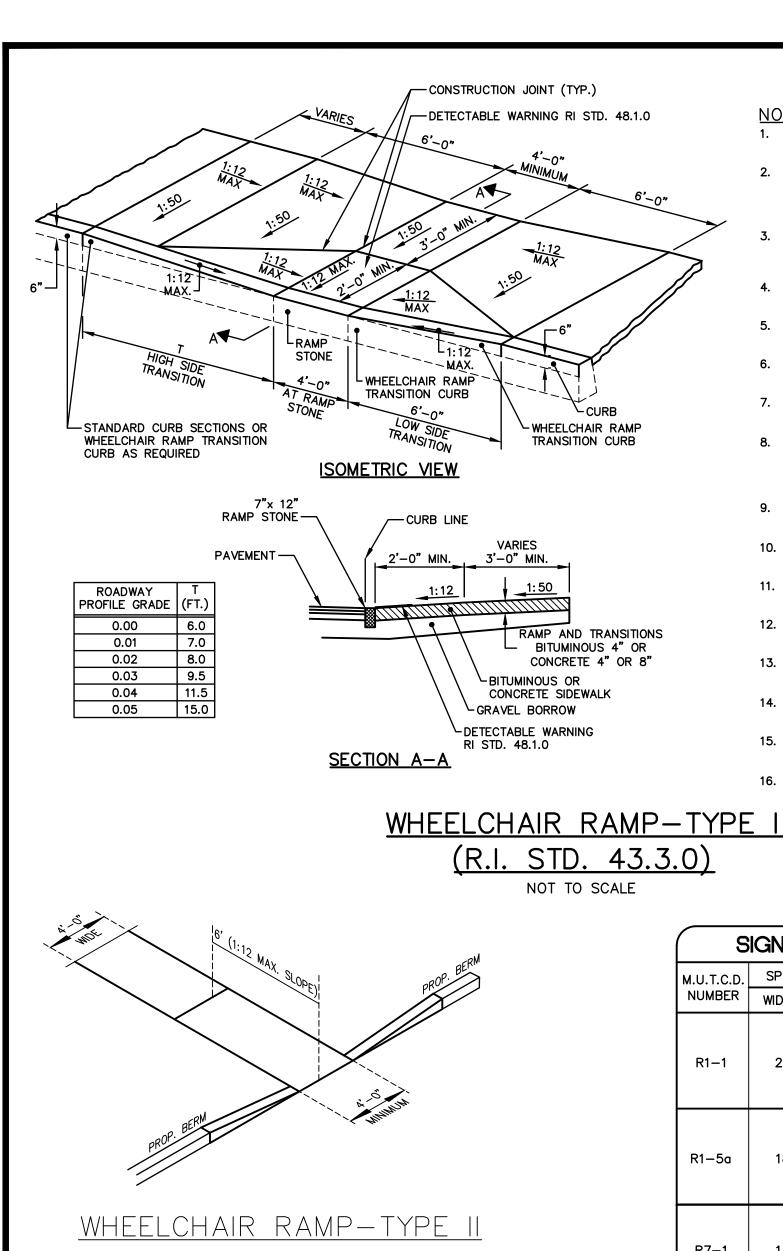
EAST BAY COMMUNITY DEVELOPMENT CORPORATION COMPREHENSIVE PERMIT ROADWAY PLAN & PROFILE

BARRINGTON

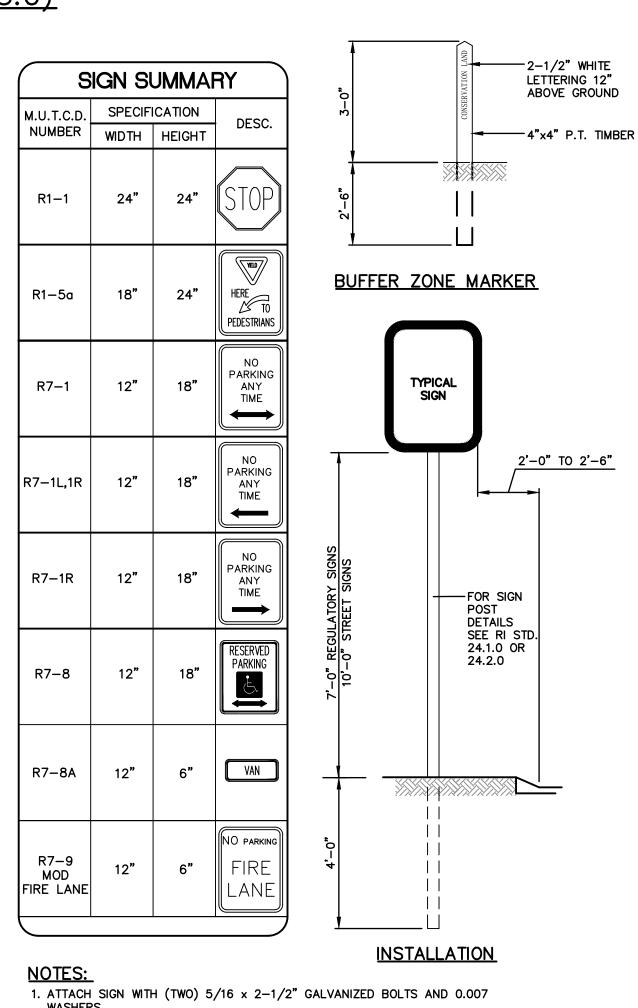
PALMER POINTE NEIGHBORHOOD

RHODE ISLAND

PROJ. No.: 20121033.A20 DATE: FEBRUARY 2016 CS-201



NOT TO SCALE



SHALL BE IN ACCORDANCE WITH SECTION 905 OF THE R.I.

WHEN ANY OBSTRUCTION LOCATED IN THE SIDEWALK FALLS WITHIN A CROSSWALK AREA, THE WHEELCHAIR RAMP WILL BE PLACED SUCH THAT THE OBSTRUCTION FALLS OUTSIDE OF

AT NO TIME IS ANY PART OF THE WHEELCHAIR RAMP TO BE LOCATED OUTSIDE OF THE CROSSWALK, AND IT IS TO BE

DRAINAGE FACILITIES ARE TO BE LOCATED UP-GRADE OF

6. IN NO INSTANCE SHALL THE SIDEWALK CROSS SLOPE EXCEED 1:50 EXCEPT WITHIN THE RAMP AREA.

7. AN UNOBSTRUCTED PATH OF TRAVEL WITH A MINIMUM WIDTH

(TRANSITIONS), MUST NOT EXCEED 1:12. HOWEVER, THESE

9. WHERE THE ROAD PROFILE EXCEEDS 5% THE HIGH SIDE

10. IN NO CASE, WHERE A STOP LINE IS WARRANTED, SHALL A RAMP BE PLACED BEHIND THE STOP LINE.

11. THE ENTRANCE OF THE WHEELCHAIR RAMP SHALL BE FLUSH

13. MINIMUM LENGTH OF STRAIGHT OR CIRCULAR FILLER PIECES

14. ALL REQUIRED CUTTING OF CURB PIECES TO BE PAID FOR

15. DETECTABLE WARNINGS TO BE PAID FOR UNDER SECTION

16. 8" CONCRETE DEPTH FOR RADIUS WHEELCHAIR RAMPS ONLY.

USE 4" DEPTH FOR TANGENT (MID-BLOCK) LOCATIONS.

12. THE WHEELCHAIR RAMP SHALL BE CENTERED RADIALLY,

OPPOSITE THE RADIUS POINT WHEN POSSIBLE.

TO BE 3'-0" (GREATER LENGTH PREFERRED).

942 OF THE RI STANDARD SPECIFICATIONS.

SLOPES MAY BE FLATTER THAN 1:12 WHEN WARRANTED BY

TRANSITION LENGTH (T) SHALL BE EIGHTEEN FEET (18'-0").

8. THE WHEELCHAIR RAMP SLOPE AND SIDE SLOPES

LOCATION OF WHEELCHAIR RAMPS IS AS SHOWN ON

STANDARD SPECIFICATIONS.

CENTERED WHENEVER POSSIBLE.

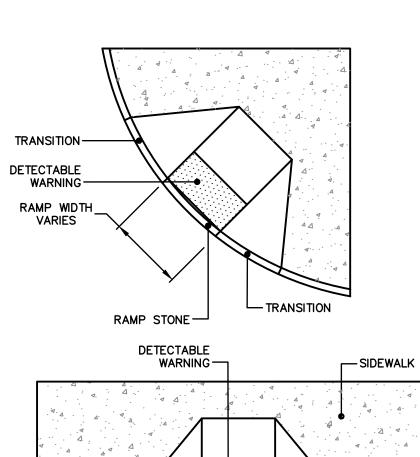
OF 3'-0" SHALL BE MAINTAINED.

SURROUNDING CONDITIONS.

UNDER COST OF CURB.

ALL WHEELCHAIR RAMPS.

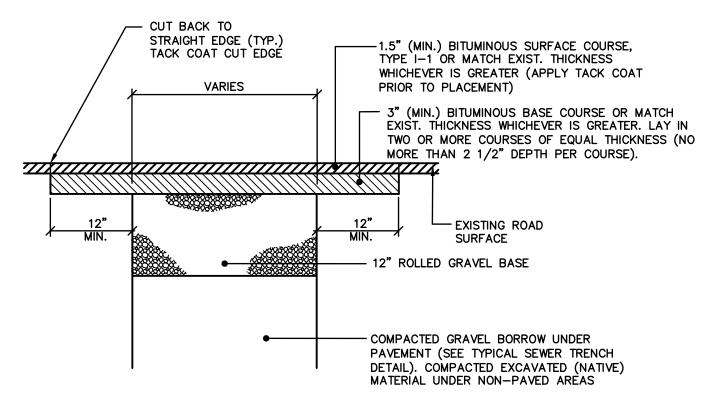
CONTRACT DRAWINGS.



WIDTH — TRANSITION TRANSITION— VARIES

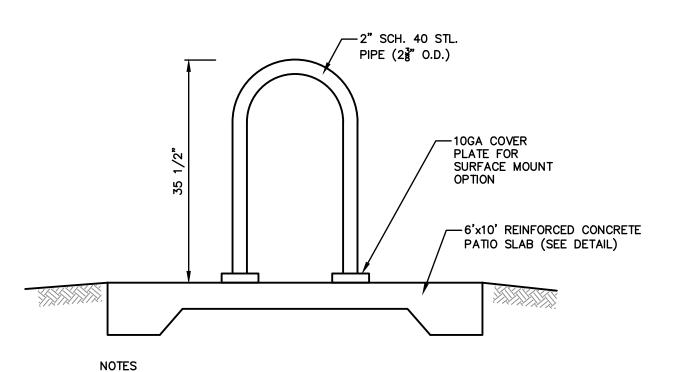
DETECTABLE WARNING SYSTEM (R.I. STD. 48.1.0)

DETECTABLE WARNING SYSTEM SHALL BE IN ACCORDANCE WITH SECTION 942 OF THE RI STANDARD SPECIFICATIONS.



UTILITY TRENCH PAVEMENT REPAIR

NOT TO SCALE

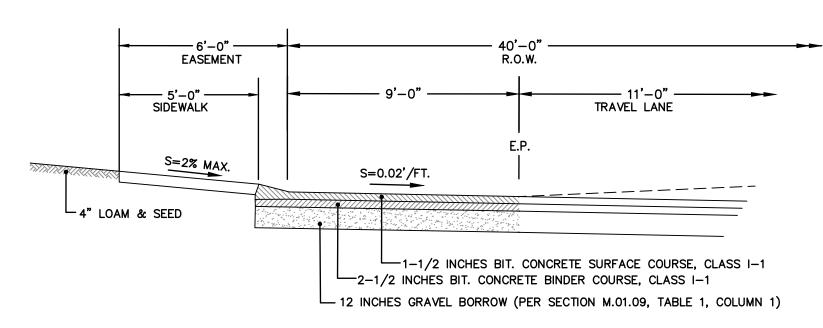


1.) BIKE RACK(S) SHALL BE BY DUMOR 83 SERIES, OR APPROVED EQUAL. 2.) SURFACE MOUNT INSTALLATION SHALL BE WITH 1/2" X 3-3/4" EXPANSION ANCHOR BOLTS. POST SET OPTION SHALL BE IN ACCORDANCE WITH MANUFACTURERS

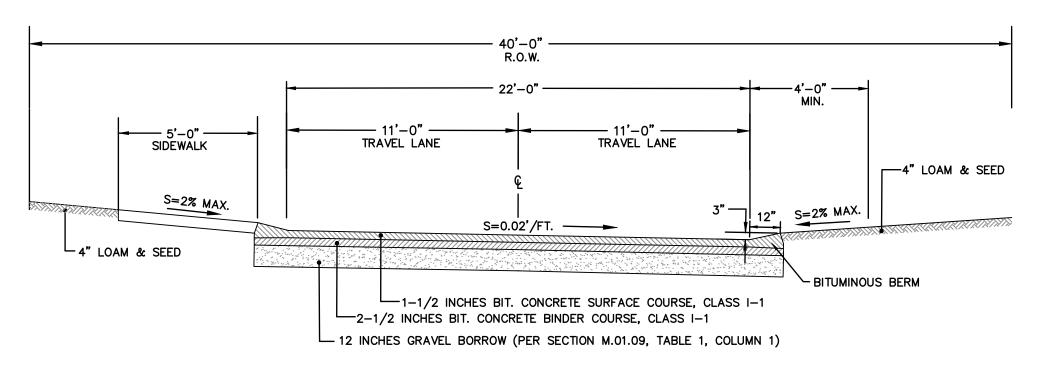
3.) BIKE RACK SHALL BE COATED WITH ZINC RICH EPOXY
THEN FINISHED WITH POLYESTER POWDER COATING, COLOR BLACK.

BIKE RACK

NOT TO SCALE



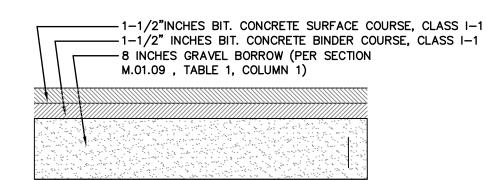
ON-STREET PARKING SECTION



SECTION

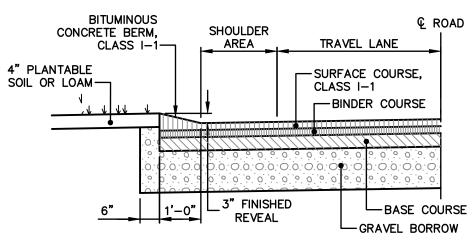
1. ALL TREE BRANCHES EXTENDING OVER TRAVEL LANES SHALL BE LIMBED TO A MINIMUM HEIGHT OF 14'-6.

RED MAPLE ROAD NOT TO SCALE



BITUMINOUS DRIVEWAY, OFF-STEET PARKING AND SIDEWALK

NOT TO SCALE



CONSTRUCTION METHOD A

BITUMINOUS BERM (R.I. STD. 7.5.1)

NOT TO SCALE

1/4"

SECTION A-A

DESCRIPTION

GRANITE BOUND

NOT TO SCALE



DESIGNER REVIEWER

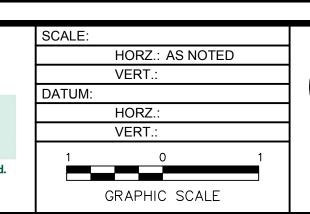
2. STREET SIGNAGE SHALL BE IN ACCORDANCE WITH TOWN STANDARDS.

SIGN

NOT TO SCALE









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EAST BAY COMMUNITY DEVELOPMENT CORPORATION COMPREHENSIVE PERMIT

DETAILS

PALMER POINTE NEIGHBORHOOD RHODE ISLAND BARRINGTON

CD-501

PROJ. No.: 20121033.A20

DATE: FEBRUARY 2016

NOTES:

1. SHALL BE IN ACCORDANCE WITH SECTION 915 OF THE R.I. STANDARD SPECIFICATIONS.

2. BOUND TO BE QUARRY SPLIT FROM FINE GRAIN GRANITE FREE FROM NATURAL FRACTURES, SEAMS, LAMINATIONS, CRACKS OR IMPURITIES.

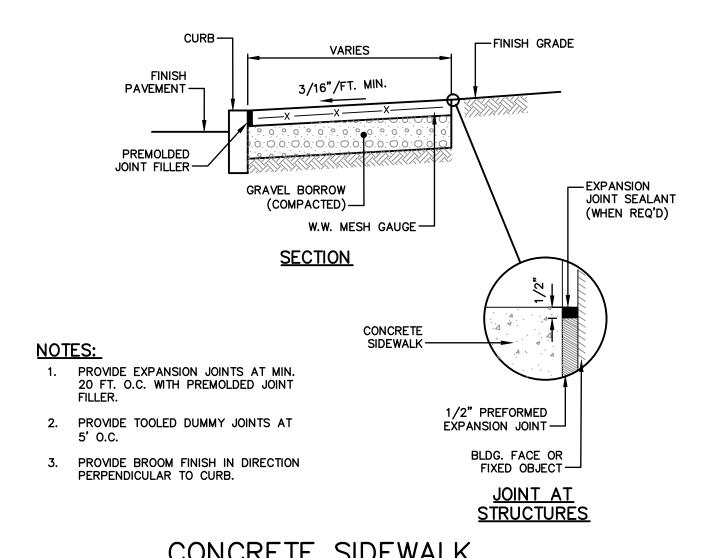
3. TOP SURFACE OF BOUND TO BE DRESSED OR SAWED.

4. CONICAL DRILL HOLE IN CENTER OF TOP TO BE 1/4" & AND 3/4" DEEP.

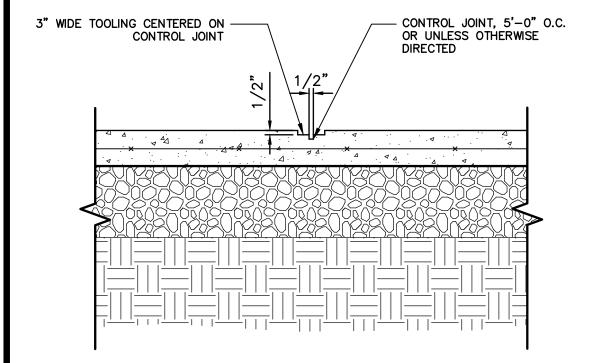
5. BOTTOM TO BE AT LEAST 6" SQUARE AND FLAT.

6. BOUNDS TO BE SET 6" ABOVE FINISHED GRADE, EXCEPT IN SIDEWALKS, LAWNS AND DRIVEWAYS WHERE THEY SHALL BE SET FLUSH WITH FINISHED GRADE.

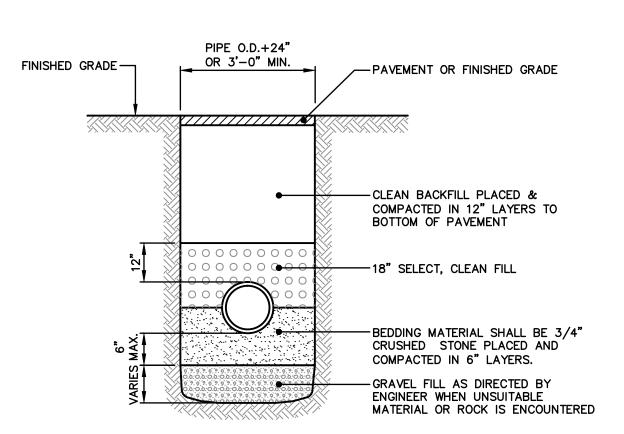
DATE



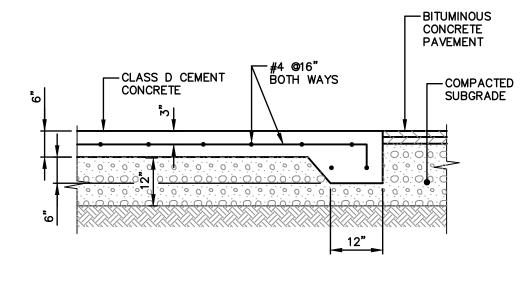
CONCRETE SIDEWALK NOT TO SCALE



CONTROL JOINT IN CONCRETE NOT TO SCALE

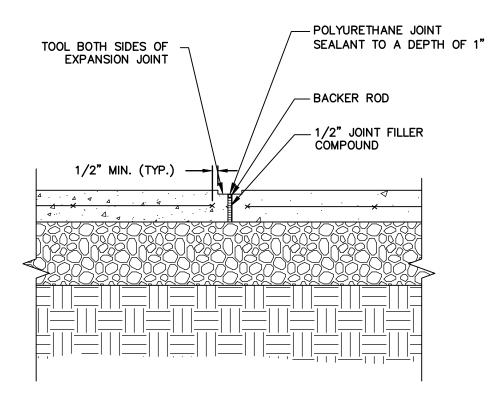


STORM DRAIN TRENCH NOT TO SCALE



- 1. PROVIDE TOOLED DUMMY JOINTS AT 5' O.C.
- 2. PROVIDE BROOM FINISH IN DIRECTION PERPENDICULAR TO CURB.

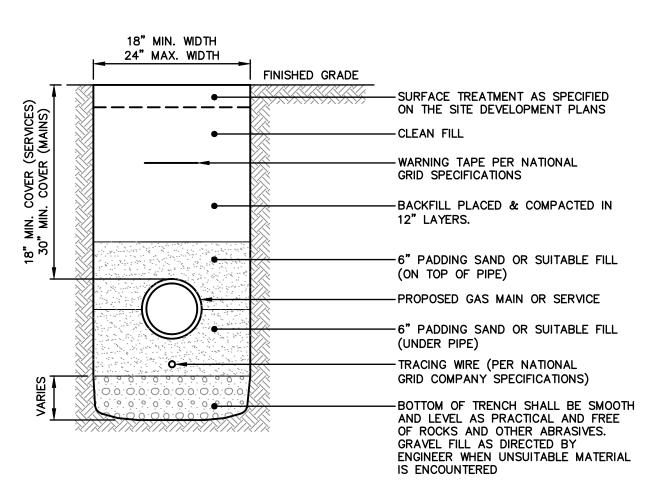
NOT TO SCALE



1. EXPANSION JOINTS SHALL BE 20' O.C.

EXPANSION JOINT

NOT TO SCALE



NOTES:

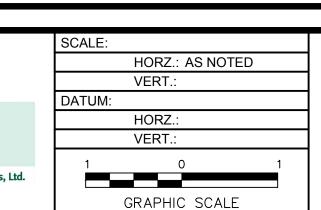
- 1. ALL BEDDING MATERIAL AND INITIAL BACKFILL SHALL BE CLEAN, FREE OF DEBRIS AND RUBBLE, AND FREE OF MATERIALS WHICH MAY CAUSE POLLUTION OF GROUNDWATER.
- 2. SPOIL SHOULD BE SET BACK A MINIMUM OF TWO (2) FEET IN ACCORDANCE WITH OSHA
- 3. GAS SERVICE MUST HAVE A MINIMUM HORIZONTAL SEPARATION OF THREE (3) FEET FROM PARALLEL UTILITIES. A ONE FOOT SEPARATION MUST BE MAINTAINED WHEN CROSSING OTHER
- 4. THE MAXIMUM TRENCH DEPTH FOR GAS MAINS IS 48—INCHES WHILE THE MAXIMUM TRENCH DEPTH FOR SERVICES IS 36—INCHES.

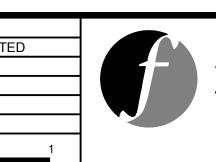
SEAL

GAS TRENCH NOT TO SCALE

EAST BAY







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317 IRON HORSE WAY, SUITE 204 PROVIDENCE, RI 02908 401.861.3070 www.fando.com

EAST BAY COMMUNITY DEVELOPMENT CORPORATION

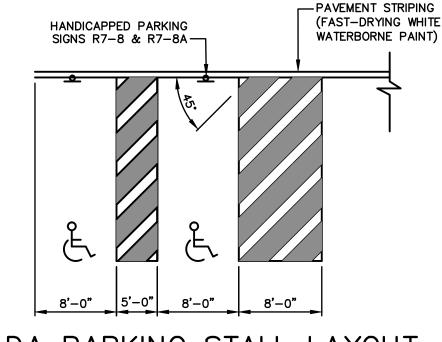
COMPREHENSIVE PERMIT **DETAILS**

PALMER POINTE NEIGHBORHOOD

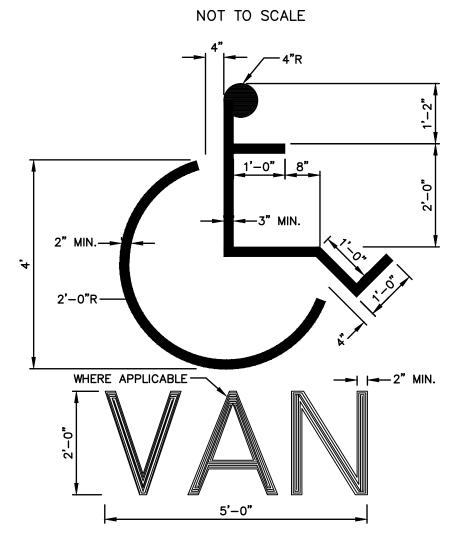
CD-502

PROJ. No.: 20121033.A20

DATE: FEBRUARY 2016



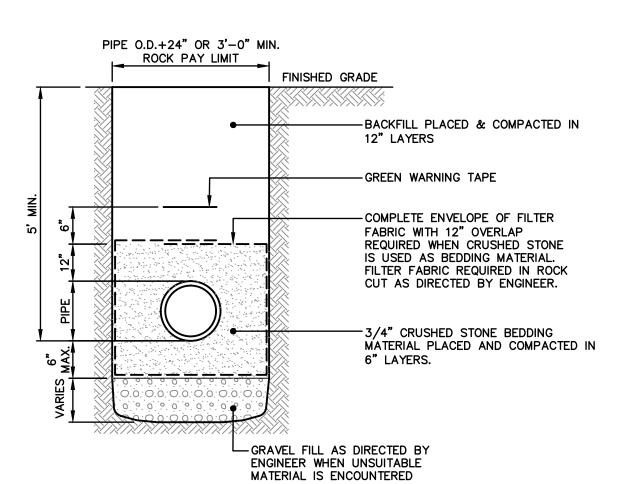
ADA PARKING STALL LAYOUT



- 1. SYMBOL SHALL BE CENTERED IN THE PARKING STALL.
- 2. SYMBOL SHALL BE SOLID WHITE FAST-DRYING WATERBORNE PAINT AND BE CENTERED IN THE PARKING STALL. FOR VAN ACCESSIBLE SPACES, THE WORD "VAN" SHALL BE PAINTED ADJACENT TO HANDICAPPED SYMBOL (AS SHOWN ON DETAIL ABOVE).

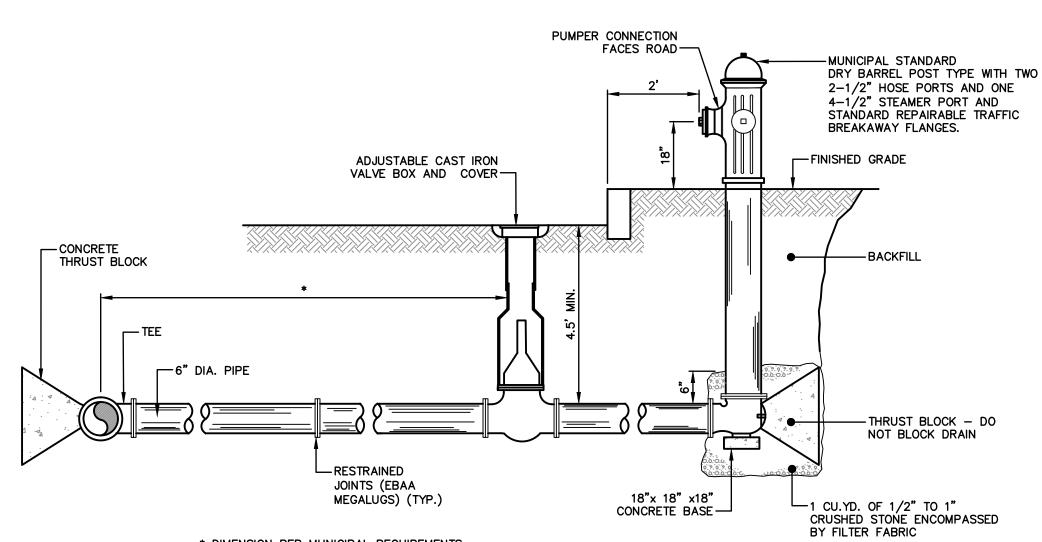
ADA PARKING STALL SYMBOL

NOT TO SCALE



- 1. SEWER TO BE INSULATED WITH 2" RIGID FOAM WHEN LESS THAN 4' COVER IS
- 2. IN AREAS OF WETLAND INSTALLATION, THE FOLLOWING IS REQUIRED TO MINIMIZE WETLAND DISTURBANCE:
 - ALL EQUIPMENT AND MATERIALS SHALL BE MAINTAINED WITHIN 10 FEET OF THE CENTERLINE OF PIPE DURING PIPE INSTALLATION.

EQUIPMENT STAGING AREAS, LAUNCH PITS, AND RECEIVING PITS SHALL BE LOCATED A MINIMUM OF 10 FEET OUTSIDE OF ALL WETLAND AREAS.



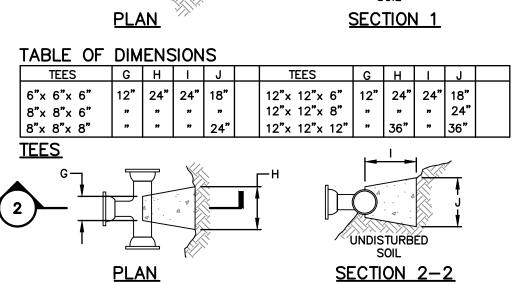
* DIMENSION PER MUNICIPAL REQUIREMENTS

HYDRANTS SHALL BE PAINTED WITH YELLOW BARREL, SILVER CAP ON THE STEAMER PORT, HOSE PORTS AND THE HEAD OF THE HYDRANT. ALL HYDRANTS SHALL BE PRIMED AND FULLY COATED WITH PHENOLIC URETHANE ENAMELS (2 COATS REQUIRED). SURFACE SHALL BE SAND BLASTED TO SSPC SP-6 PRIOR TO COATINGS. ALL INTERIOR SURFACES SHALL BE FACTORY EPOXY COATED.

HYDRANT CONNECTION DETAIL

NOT TO SCALE

TABLE OF DIMENSIONS 6" 111/4' 8" 15" 12" 24" 12" 6" 45' 6" 221/2' " 19" " " 13" 6" 90' 8" 111/4' " 20" " " 12" 8" 45' 8" 221/2' " 22" " " 17" 8" 90' 12" 111/4' " 30" " " 15" 12" 45' 12" 221/2' " 35" " 25" 12" 90' 8" 30" 12" 24" 14" " 30" " " 27" **BENDS UNDISTURBED** SOIL SECTION 1



NOTES:

- 1. PROVIDE BLOCKS FOR TAPPING SLEEVES, DEAD ENDS, GATE VALVES, AND VERTICAL BENDS (SAME SIZE AS REQUIRED FOR TEES). PROVIDE ANCHOR RODS AT VERTICAL BENDS AND GATE VALVES.
- 2. CONCRETE SHALL NOT BE PLACED AGAINST PIPE BEYOND FITTING.
- 3. CONCRETE SHALL HAVE 3,000 PSI MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS.

CONCRETE THRUST BLOCK NOT TO SCALE

SEWER TRENCH NOT TO SCALE

SHAWN M. MARTIN REGISTERED PROFESSIONAL ENGINEER

(CIVIL)

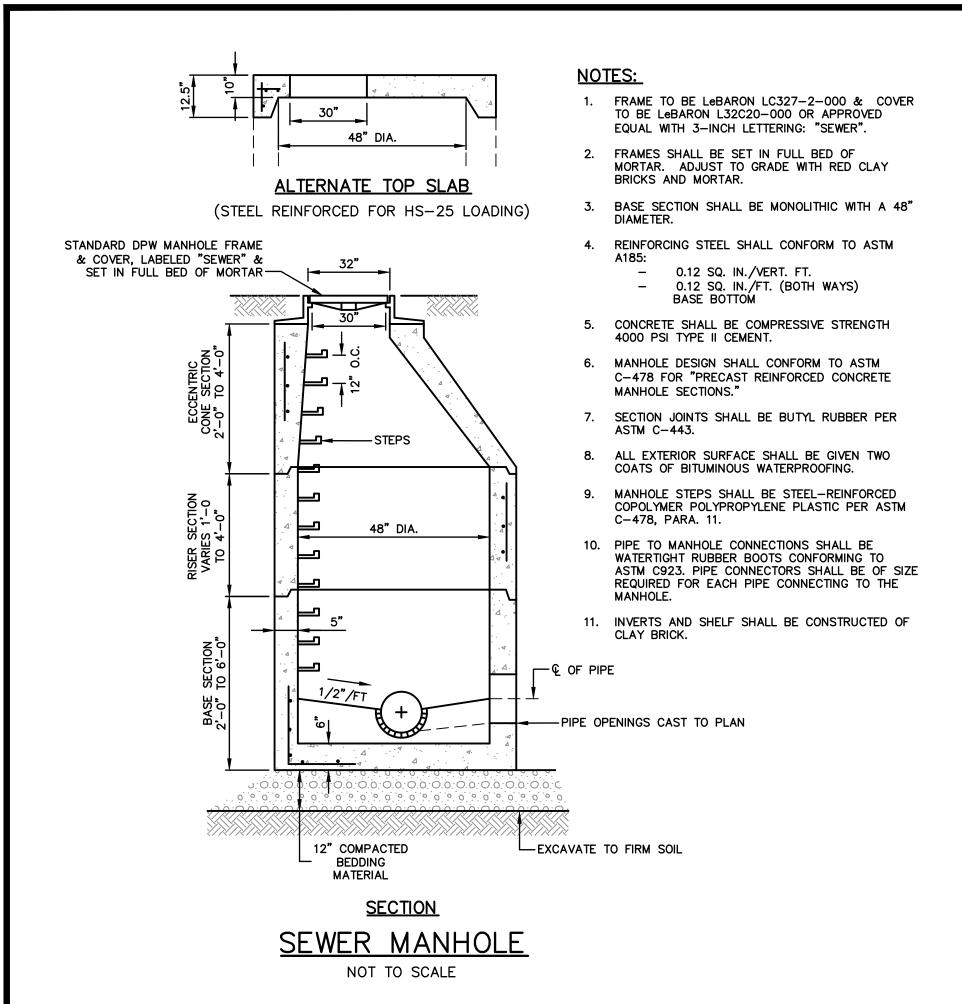
COMMUNITY DEVELOPMENT

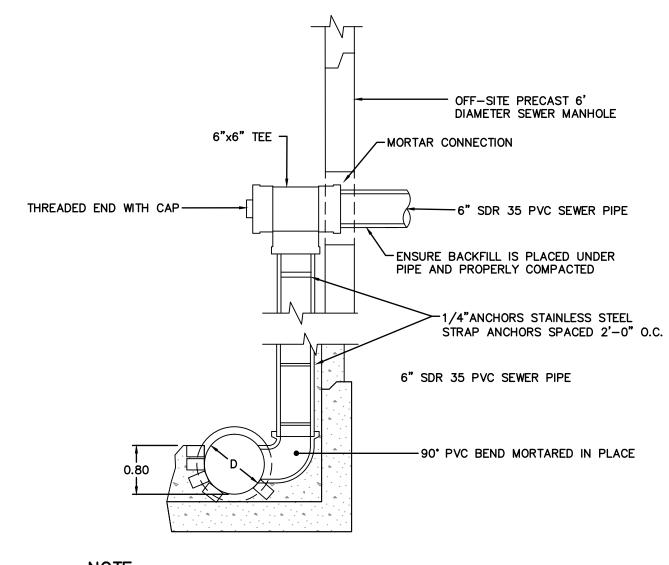
BARRINGTON

RHODE ISLAND

DATE DESCRIPTION DESIGNER REVIEWER

CORPORATION

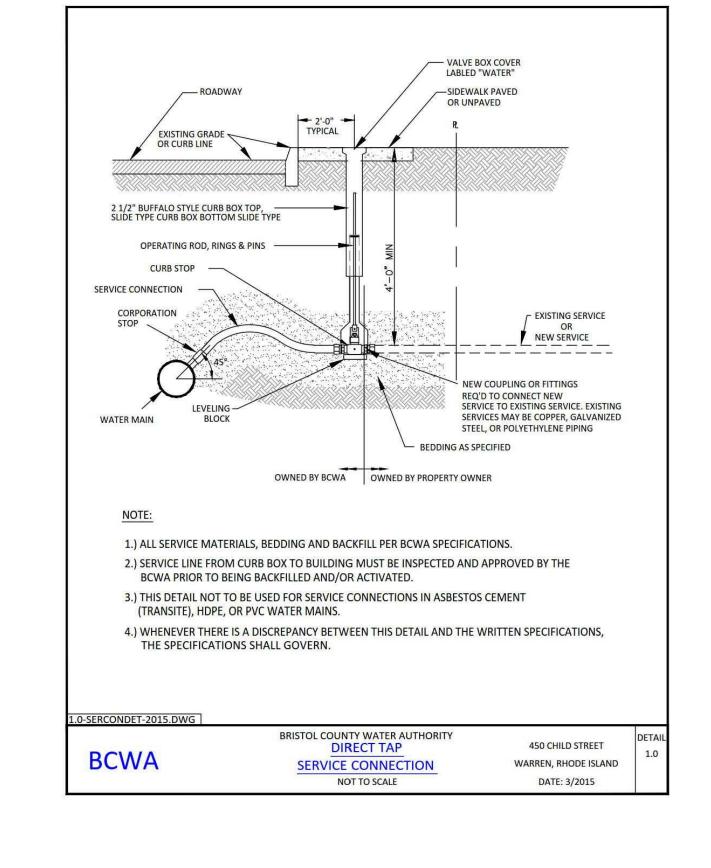


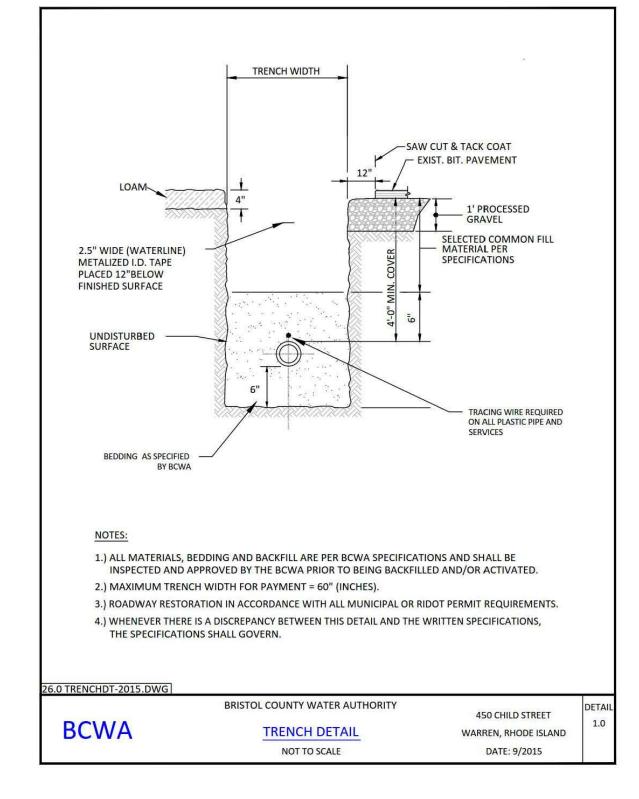


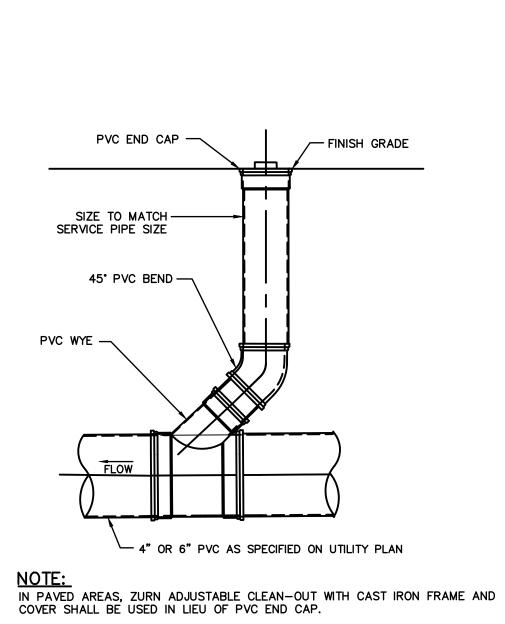
DROP MANHOLE CONNECTION NOT TO SCALE

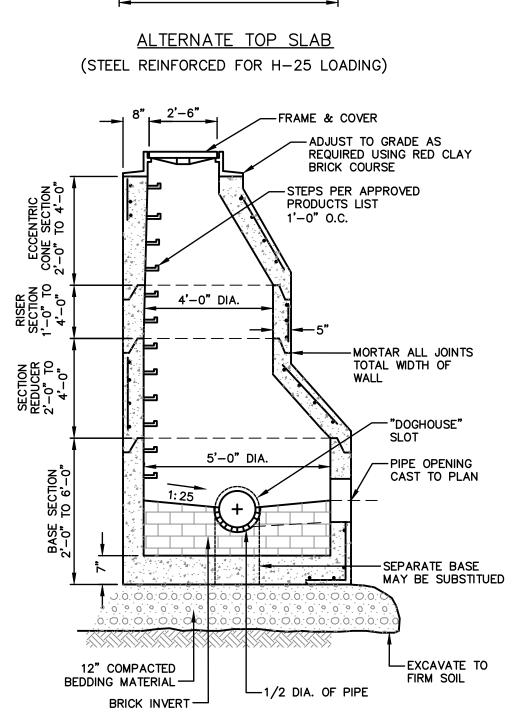
DIMENSIONS AND CONSTRUCTION OF DROP MANHOLE SHALL BE IN ACCORDANCE WITH

OFF-SITE PRECAST 6' DIAMETER SEWER MANHOLE EXCEPT AS SHOWN.



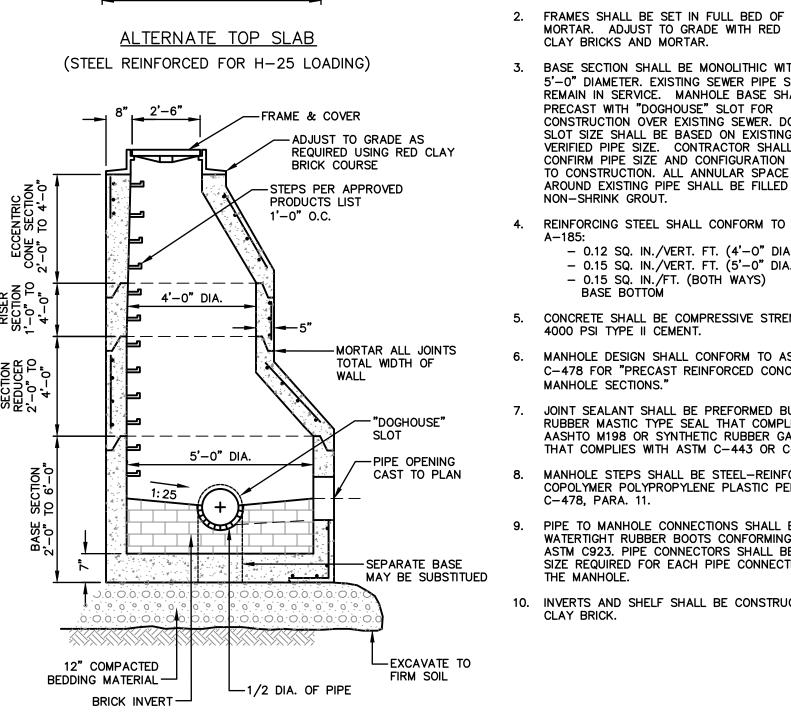






AS REQ'D

4'-0" OR 5'-0" DIA.



<u>SECTION</u> **DOGHOUSE MANHOLE**

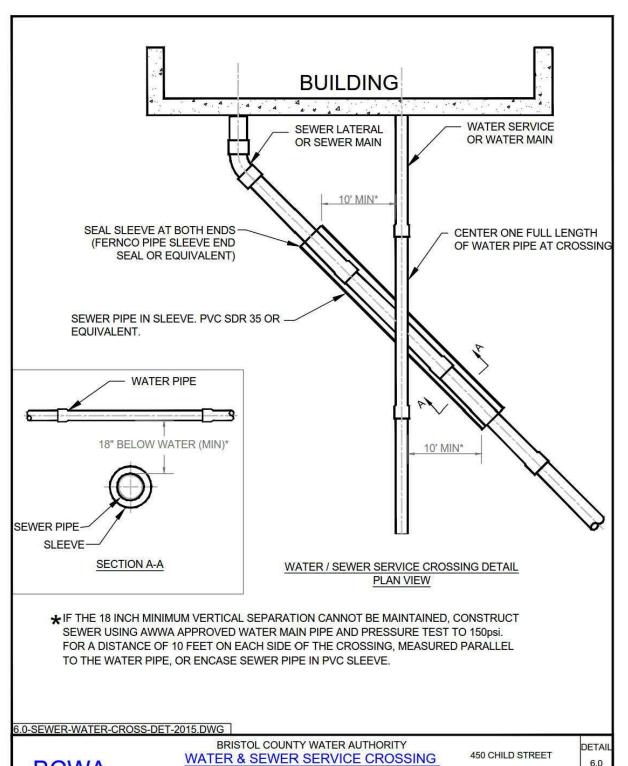
SEAL

NOTES:

- FRAME TO BE LeBARON LC327-2-000 & COVER TO BE LeBARON L32C20-2-000 OR APPROVED EQUAL WITH 3-INCH LETTERING: "SEWER".
- MORTAR. ADJUST TO GRADE WITH RED CLAY BRICKS AND MORTAR.
- 3. BASE SECTION SHALL BE MONOLITHIC WITH A 5'-0" DIAMETER. EXISTING SEWER PIPE SHALL REMAIN IN SERVICE. MANHOLE BASE SHALL BE PRECAST WITH "DOGHOUSE" SLOT FOR CONSTRUCTION OVER EXISTING SEWER. DOGHOUSE SLOT SIZE SHALL BE BASED ON EXISTING FIELD VERIFIED PIPE SIZE. CONTRACTOR SHALL CONFIRM PIPE SIZE AND CONFIGURATION PRIOR TO CONSTRUCTION. ALL ANNULAR SPACE AROUND EXISTING PIPE SHALL BE FILLED WITH NON-SHRINK GROUT.
- 4. REINFORCING STEEL SHALL CONFORM TO ASTM - 0.12 SQ. IN./VERT. FT. (4'-0" DIA. - 0.15 SQ. IN./VERT. FT. (5'-0" DIA.)
- 5. CONCRETE SHALL BE COMPRESSIVE STRENGTH 4000 PSI TYPE II CEMENT.

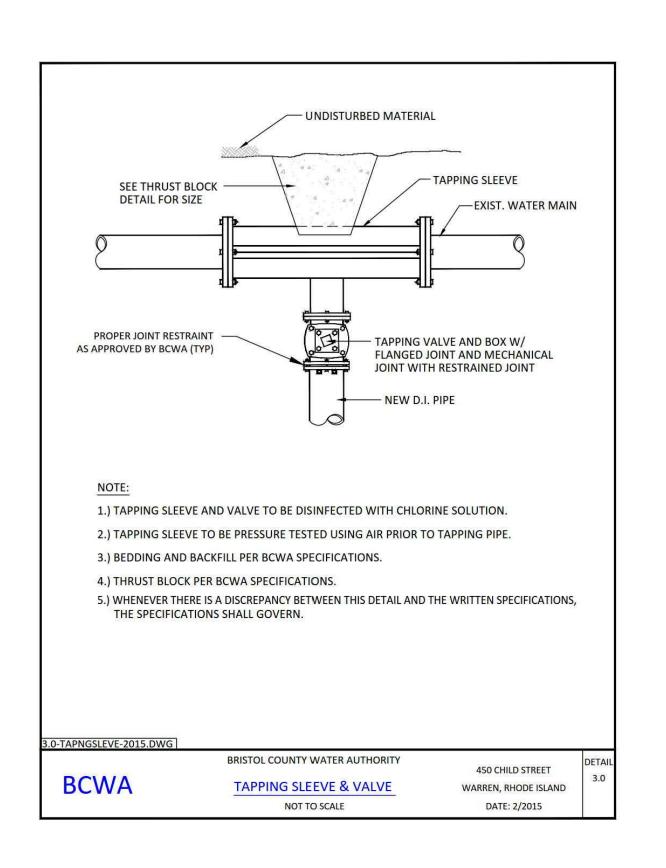
0.15 SQ. IN./FT. (BOTH WAYS)BASE BOTTOM

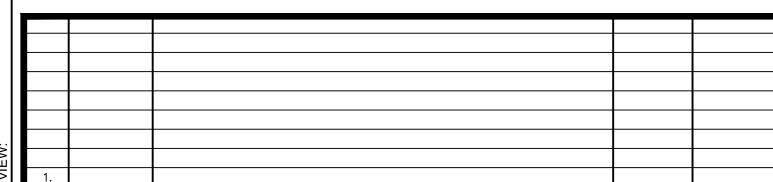
- 6. MANHOLE DESIGN SHALL CONFORM TO ASTM C-478 FOR "PRECAST REINFORCED CONCRETE MANHOLE SECTIONS."
- 7. JOINT SEALANT SHALL BE PREFORMED BUTYL RUBBER MASTIC TYPE SEAL THAT COMPLIES WITH AASHTO M198 OR SYNTHETIC RUBBER GASKET THAT COMPLIES WITH ASTM C-443 OR C-361.
- MANHOLE STEPS SHALL BE STEEL-REINFORCED COPOLYMER POLYPROPYLENE PLASTIC PER ASTM C-478, PARA. 11.
- PIPE TO MANHOLE CONNECTIONS SHALL BE WATERTIGHT RUBBER BOOTS CONFORMING TO ASTM C923. PIPE CONNECTORS SHALL BE OF SIZE REQUIRED FOR EACH PIPE CONNECTING TO THE MANHOLE.
- 10. INVERTS AND SHELF SHALL BE CONSTRUCTED OF CLAY BRICK.



DETAIL NEW CONSTRUCTION

NOT TO SCALE





DESCRIPTION

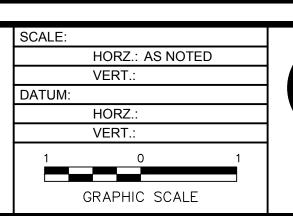
SEWER CLEANOUT

NOT TO SCALE









BCWA



EAST BAY COMMUNITY DEVELOPMENT CORPORATION COMPREHENSIVE PERMIT

DETAILS PALMER POINTE NEIGHBORHOOD

BARRINGTON RHODE ISLAND CD-503

PROJ. No.: 20121033.A20

DATE: FEBRUARY 2016

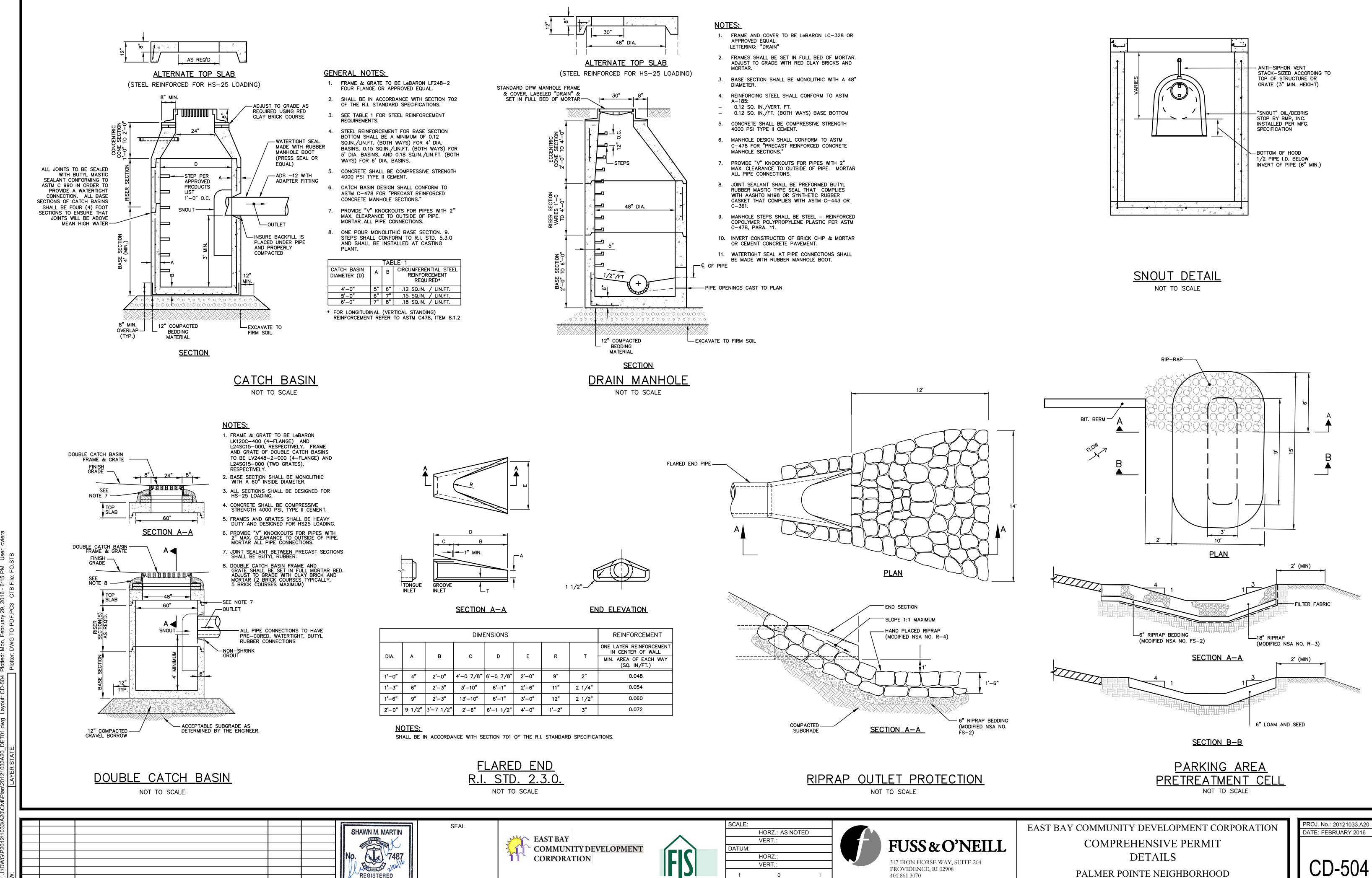
DATE

DESIGNER REVIEWER

PROVIDENCE, RI 02908 401.861.3070 www.fando.com

WARREN, RHODE ISLAND

DATE: 4/2015



(CIVIL)

DESIGNER REVIEWER

www.fando.com

BARRINGTON

RHODE ISLAND

GRAPHIC SCALE

File Path: J:\DWG\P2012\1033\A20\Civil\Plan\20121033A20_DET01.dwg Layout: CD-504 Plotted: Mon, February 29, 2016 - 6:15 PM

DATE

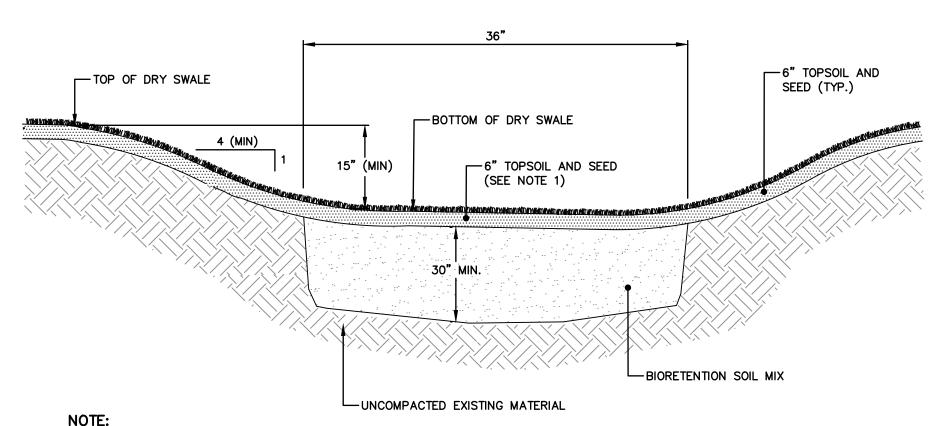
DESCRIPTION

NOTES:

BIORETENTION SOIL MIX SHALL HAVE A LOAMY SAND TEXTURE PER USDA TEXTURAL TRIANGLE WITH A MAXIMUM CLAY CONTENT OF LESS THAN 2%. SOIL MIXTURE SHALL BE 85-88% SAND, 8-12% SOIL FINES, AND 3-5% ORGANIC MATTER. THE SOIL SHALL BE A UNIFORM MIX, FREE OF STONES, STUMPS, ROOTS, OR OTHER SIMILAR OBJECTS LARGER THAN TWO INCHES. SOIL SHALL BE FREE OF BERMUDA GRASS,

PRIOR TO INSTALLATION, SOIL SHALL BE TESTED AND CONFORM TO THE FOLLOWING CRITERIA:

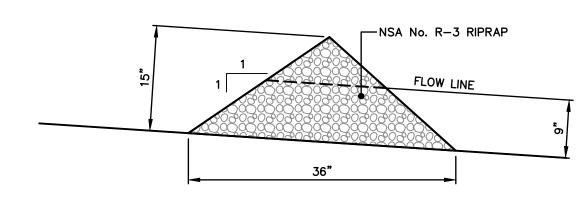
PH RANGE: 5.7 - 7.0 MAGNESIUM: 32 PPM MIN. PHOSPHORUS P205: NOT TO EXCEED 69 PPM POTASSIUM K20: 78 PPM MIN. SOLUBLE SALTS: NOT TO EXCEED 500 PPM



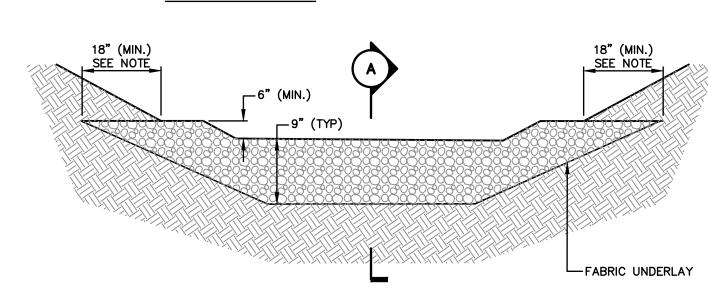
1. TOPSOIL WITHIN FILTER SHALL CONSIST OF LOAMY SAND WITH 20% BY VOLUME OF WELL-AGED, WELL-AERATED, LEAF COMPOST (OR APPROVED EQUIVALENT).

DRY SWALE

NOT TO SCALE



SECTION A-A



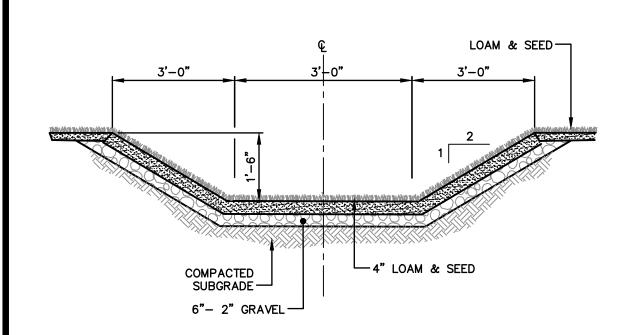
KEY STONE INTO THE DITCH BANKS AND EXTEND INTO THE ABUTMENTS A MINIMUM OF 10" TO PREVENT FLOW FROM FLANKING THE CHECK DAM.

STONE CHECK DAM

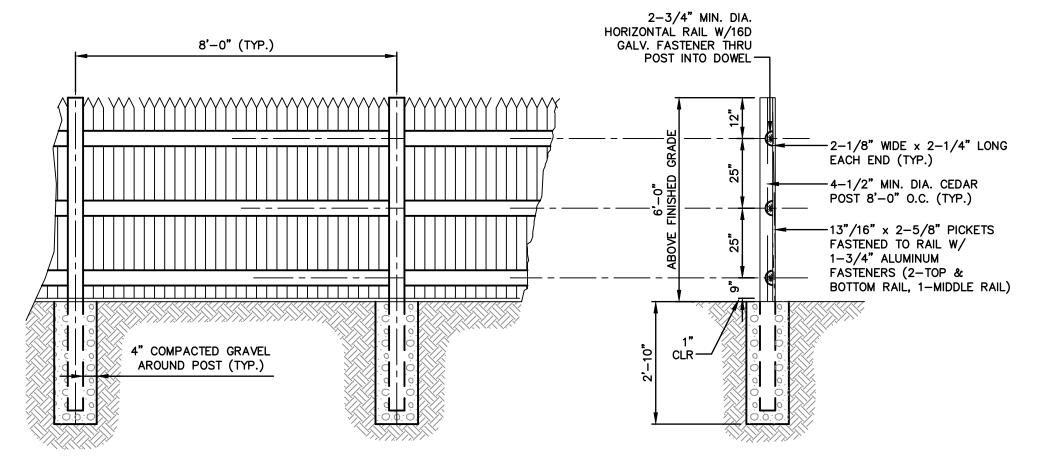
BIORETENTION BASIN

QUACKGRASS, JOHNSON GRASS, MUGWORT, NUTSEDGE, POISON IVY, CANADIAN THISTLE, TEARTHUB, OR OTHER NOXIOUS WEEDS.

NOT TO SCALE



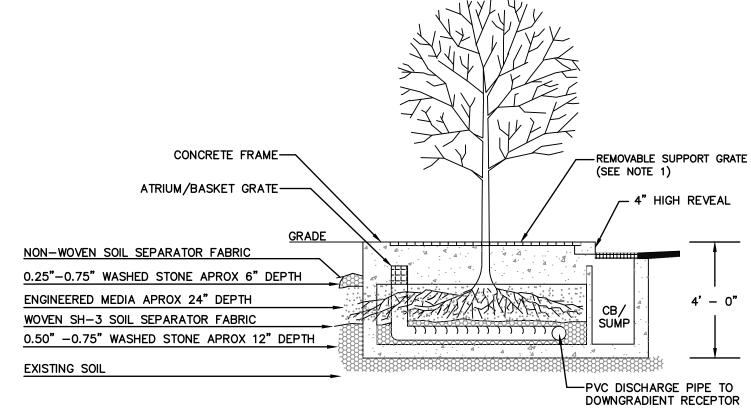
BIORETENTION CELL CONNECTOR CHANNEL NOT TO SCALE



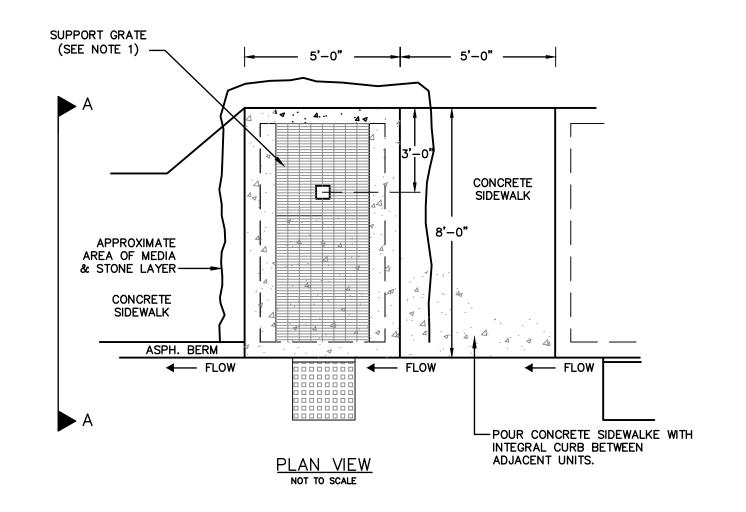
NOTES:

- 1. ALL FENCING MATERIAL SHALL BE PVC TO THE DIMENSIONS SHOWN ON THE DRAWING,
- 2. POSTS SHALL MAINTAIN A DEPTH OF 2'-10" IN GROUND AND SHALL BE RACKED TO ACCOMMODATE ANY CHANGES IN GRADE.
- 2. LINE OF FENCE TOP AND BOTTOM SHALL BE INSTALLED STRAIGHT AND TRUE. ALL POSTS AND FACING BOARDS OR SLATS SHALL BE INSTALLED PARALLEL AND PLUMB. ALL RAILS SHALL BE INSTALLED
- 3. ALL GATE HARDWARE SHALL BE DOUBLE DIP HOT GALVANIZED.
- 4. FENCE SHALL TAPER FROM 6' TO 4' HEIGHT IN SINGLE 8'-0" PANEL WHERE INDICATED ON PLANS.

SEAL



SECTION A-A
NOT TO SCALE



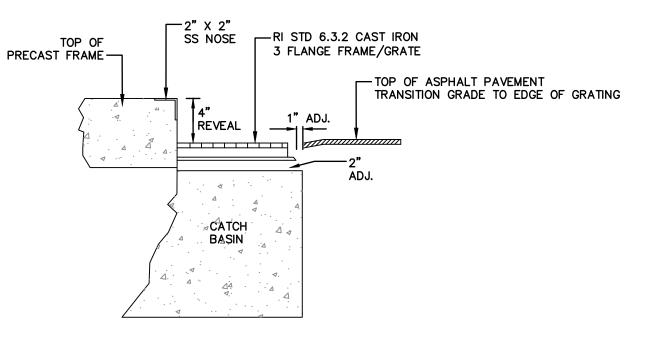
CONTRACTOR NOTES:

USE OF THIS INFORMATION IS WITH THE PERMISSION OF STORMTREE WITH THE UNDERSTANDING THAT NO CHANGES OR ALTERNATIONS ARE TO BE MADE TO THE DESIGN, FABRICATION, OR UTILITY OF THIS STORMTREE TREE FILTER SYSTEM (US PATENT NO. 8333885 AND OTHER PATENTS PENDING) WITHOUT THE EXPRESSED PERMISSION OF STORMTREE, LLC; 401-626-8999; WWW.STORM-TREE.COM.

- 1. STORMTREE TO PROVIDE AND DELIVER TO THE SITE STORMTREE SYSTEM COMPONENTS TO INCLUDE ALL OF THE FOLLOWING (UNLESS PREVIOUSLY DISCUSSED), PRECAST TREE FRAME, FIBERGLASS SUPPORT GRATE, ENGINEERED MEDIA, AND ALL RELATED HARDWARE NECESSARY FOR INSTALLATION;
- 2. CONTRACTOR TO PROVIDE ALL PIPING AND FITTINGS (OVERLOW, UNDERDRAIN, DISCHARGE) TO BE 6" OR 8" (ID) DIAMETER PVC (UNLESS OTHERWISE DETERMINED). ALTERNATE PIPING DIAMETERS MAY BE SUBSTITUTED WITH THE PRE-APPROVAL OF THE ENGINEER, CONTRACTOR,
- 3. CONTRACTOR TO PROVIDE ALL PIPING AND FITTINGS INTERIOR/EXTERIOR OF STORMTREE SYSTEM TO BE CONNECTED TO EXISTING CATCH BASIN AND/OR OTHER RECEIVING FACILITY;
- CONTRACTOR TO PROVIDE 0.25" TO 0.75" WASHED STONE (UNLESS OTHERWISE DETERMINED). QUANTITY TBD BY STORMTREE IN DISCUSSION WITH THE CONTRACTOR;
- 5. DEPTH OF ALL FILTER MEDIA BED SHALL CONFORM TO BIORETENTION SOIL MIX AND BE A MINIMUM OF 24" DEEP AND NO MORE THAN A MAXIMUM OF 36" DEEP TO BE DETERMINED BY STORMTREE. AREAL DIMENSIONS OF FILTER MEDIA BED TO BE SPECIFIED BY STORMTREE, THE ENGINEER AND/OR DETERMINED AT THE TIME OF EXCAVATION AND INSTALLATION BY STORMTREE AND THE
- 6. ALL TREE FILTER SYSTEMS TO BE LOCATED UPGRADIENT OF AN EXISTING CATCH BASIN OR OTHER RECEIVING FACILITY;
- 7. THE INTEGRATION OF ADJOINING FEATURES AND LAND SURFACES CONTIGUOUS TO THE STORMTREE SYSTEMS (E.G., LANDSCAPING, SIDEWALKS, CURBING, PAVEMENT, PAVERS, ETC.) ARE TO BE DISCUSSED IN ADVANCE WITH STORMTREE, THE ENGINEER AND ALL SITE SPECIFIC CONTRACTORS.

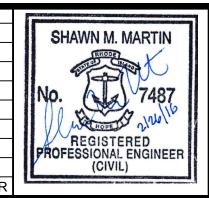
DESIGN NOTES:

- 1. CONCRETE 5,000 PSI @ 28 DAYS DESIGNED FOR HS-20 LOADING REBAR ASTM A-615 GRADE 60 1" MIN COVER.
- 2. SUPPORT SHALL BE ADA COMPLIANT STEEL GRATE.



TREE BOX NOT TO SCALE

REGISTERED (CIVIL) DATE DESCRIPTION DESIGNER REVIEWER

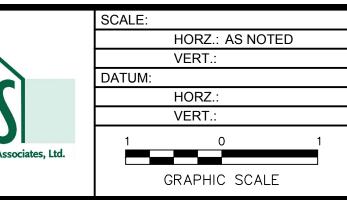




STOCKADE FENCE

NOT TO SCALE







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EAST BAY COMMUNITY DEVELOPMENT CORPORATION

COMPREHENSIVE PERMIT **DETAILS**

PALMER POINTE NEIGHBORHOOD

CD-505

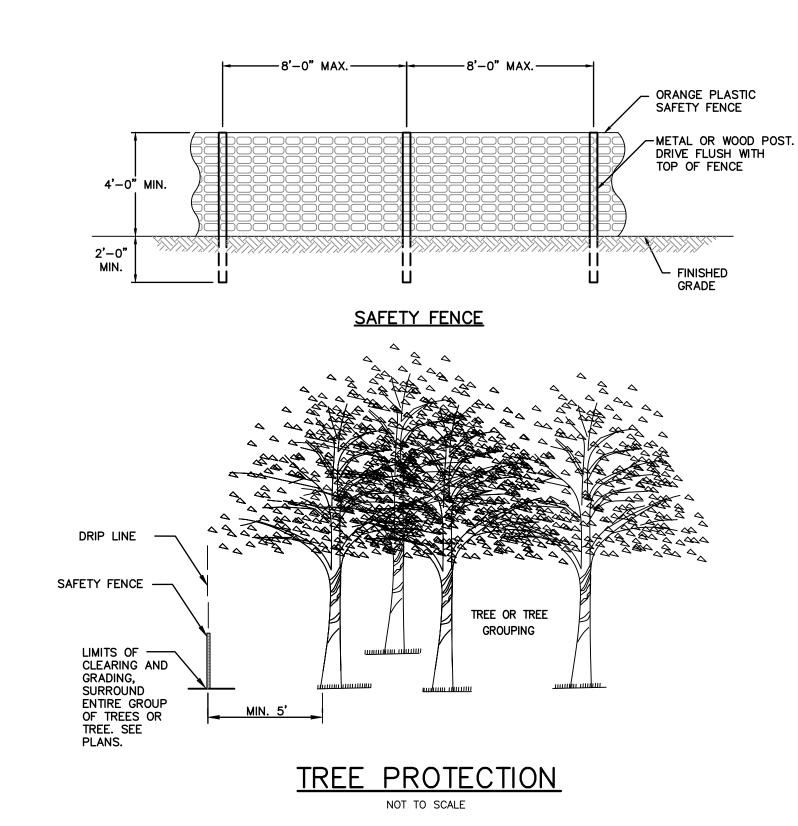
PROJ. No.: 20121033.A20

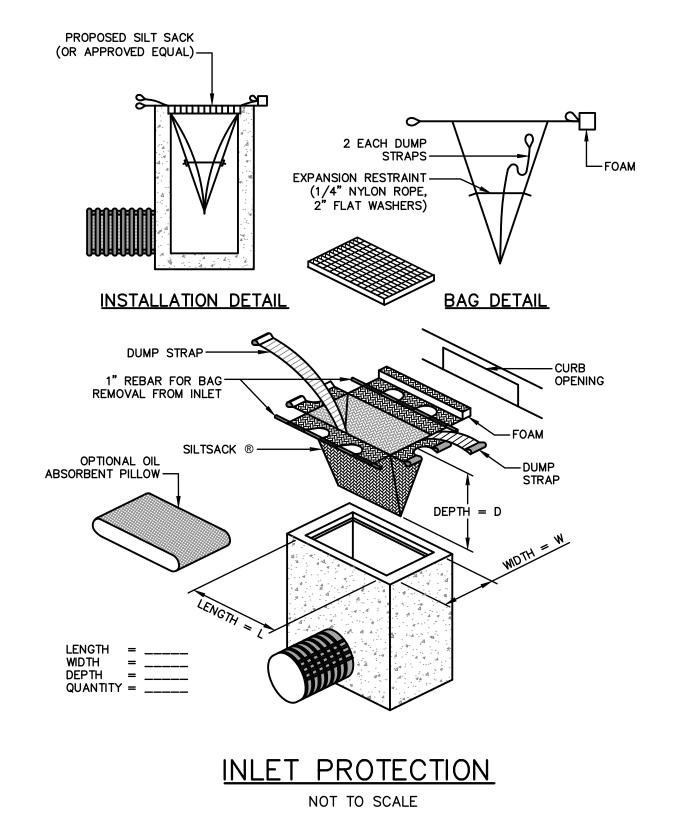
DATE: FEBRUARY 2016

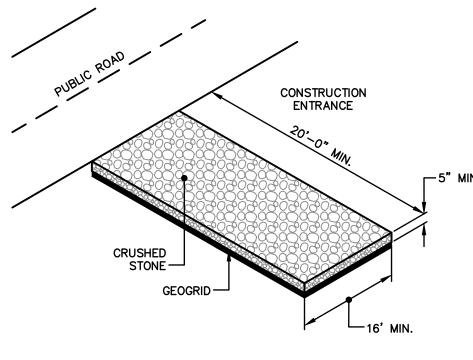
RHODE ISLAND

- 2. WATTLES SHALL BE TRENCHED APPROXIMATE 2-3 INCHES AND STAKED SUCH
- THAT WATTLES DIRECTLY CONTACT SOIL AND PRECLUDE UNDERMINING OR BLOWOUTS. THE TRENCH SHALL BE APPROXIMATELY 9 INCHES WIDE. STAKES SHALL BE DRIVEN THROUGH THE CENTER OF THE WATTLE AT A SPACING OF 3—4 FEET ON CENTER AND NO GREATER THAN 6"FROM THE EACH END OF THE WATTLE. STAKES SHALL BE 1-INCH BY 1-INCH WOODEN STAKES WITH A LENGTH OF 18-24 INCHES. COMPACT SOIL EXCAVATED TO CREATE TRENCH ON UPHILL SIDE SIDE.
- 3. ENDS OF ADJACENT WATTLES SHALL BE TIGHTLY BUTTED OR OVERLAPPED SO THAT NO OPENING EXISTS FOR WATER TO PASS THROUGH. WATTLES SHALL BE FREE OF DAMAGE OR DEFECTS WHEN DELIVERED TO THE SHIPPER. NO VEHICLES SHALL BE DRIVEN OVER WATTLES.
- 4. WATTLES SHALL BE 12-INCH WS1210 MANUFACTURED BY NORTH AMERICAN GREEN, OR APPROVED EQUAL.

WATTLE NOT TO SCALE

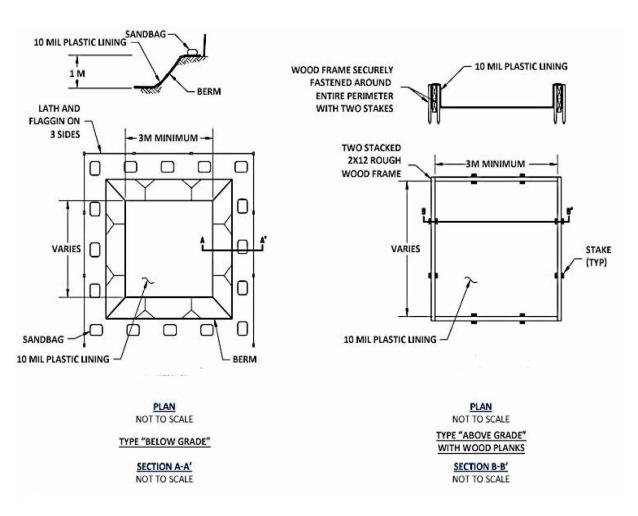






SHALL BE IN ACCORDANCE WITH SECTION 211 OF THE R.I. STANDARD SPECIFICATIONS.

CONSTRUCTION ACCESS (R.I. STD. 9.9.0) NOT TO SCALE



1. ACTUAL LAYOUT DETERMINED IN THE FIELD.

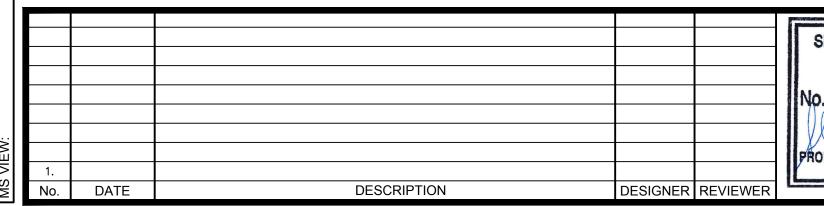
2. FOR REFERENCE PURPOSES ONLY. NOT FOR CONSTRUCTION PURPOSES.

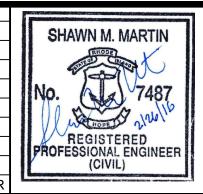
REFERENCE:

RHODE ISLAND SOIL EROSION AND SEDIMENT CONTROL HANDBOOK, ISSUED 1989 (REVISED 2014)

TEMPORARY CONCRETE WASHOUT FACILITY

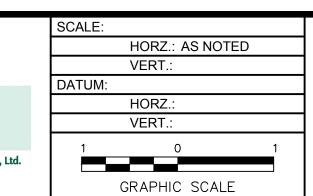
NOT TO SCALE

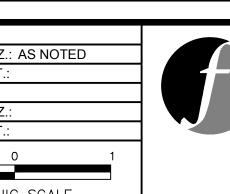














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EAST BAY COMMUNITY DEVELOPMENT CORPORATION COMPREHENSIVE PERMIT **DETAILS**

PALMER POINTE NEIGHBORHOOD

BARRINGTON RHODE ISLAND

PROJ. No.: 20121033.A20 DATE: FEBRUARY 2016 CD-506

COMMUNITY DEVELOPMENT

SHOULDER CLOSURE FOR ROADWAY APRON INSTALLATION

NOT TO SCALE

WHERE SPEEDS AND VOLUMES ARE MODERATELY LOW, A MINIMUM SIZE OF 36 INCHES SQUARE MAY BE USED FOR ADVANCE WARNING SIGNS, IF THEY HAVE A MINIMUM LETTER SIZE OF 5 INCHES.

> W20-4 (36"x36") W20-1(36"x36") BUFFER 100-150FT (30-45m) (30m) MAX. CHANNELIZING DEVICE SPACING ROAD WORK AHEAD ONE LANE ROAD AHEAD TAPER 20 FEET
> TANGENT (WORK ZONE) 10 FEET
> DOWNSTREAM TAPER 20 FEET W20-4 (36"x36") W20-1

LANE CLOSURE (ONE LANE, TWO WAY TRAFFIC CONTROL WITH FLAGGER) FOR UTILITY WORK NOT TO SCALE NOT TO SCALE

> CONSTRUCTION WORK ZONE TRAFFIC CONTROL STANDARDS

THE IDEAL CAPACITY OF A MAJOR HIGHWAY IS GENERALLY CONSIDERED TO BE 1900 PASSENGER CARS PER HOUR PER LANE (PCPHPL). IN WORK ZONES ON A MULTI-LANE DIVIDED HIGHWAY, THE FOLLOWING VOLUME GUIDELINES

MEASURED AVERAGE WORK ZONE CAPACITIES

Number	of Lanes	Number			
NORMAL OPEN		of	Average Capacity		
(existing)	(to traffic)	Studies	VPH	VPHPL	
3	1	7	1,170	1,170	
2	1	8	1,340	1,340	
5	2	8	2,740	1,370	
4	2	4	2,960	1,480	
3	2	9	2,980	1,490	
4	3	4	4,560	1,520	

Source: Dudek, C., <u>Notes on Work Zone Capacity and Level of Service</u>. Texas Transportation Institute, Texas A&M University, College Station, Texas (1984)

BY OBTAINING HOURLY TRAFFIC COUNTS FOR A PARTICULAR ROADWAY (WITH A MINIMUM OF A 48-HOUR AUTOMATIC TRAFFIC RECORDER (ATR) COUNT), THIS WILL HELP TO DETERMINE AT WHAT TIMES OF THE DAY OR NIGHT A CERTAIN NUMBER OF LANES MAY BE CLOSED.

STOPPING SIGHT DISTANCE AS A FUNCTION OF SPEED

SPEED*	DISTANCE
(mph)	(ft)
20	115
25	155
30 35	200 250
40	305
45	360
50	425
55	495
60 65	570 645
70	730
75	820

*POSTED SPEED, OFF-PEAK 85TH-PERCENTILE SPEED PRIOR TO WORK STARTING, OR THE ANTICIPATED OPERATING SPEED

THESE VALUES MAY BE USED TO DETERMINE THE LENGTH OF LONGITUDINAL BUFFER SPACES.

THE DISTANCES IN THE ABOVE CHART REPRESENT THE MINIMAL VALUES FOR

Source: Table 6C-2 2003 MUTCD

CONVENTIONAL ROADWAY - A STREET OR HIGHWAY OTHER THAN A LOW-VOLUME ROAD, EXPRESSWAY, OR FREEWAY.

EXPRESSWAY— A DIVIDED HIGHWAY WITH PARTIAL CONTROL OF ACCESS.

FREEWAY- A DIVIDED HIGHWAY WITH FULL CONTROL OF ACCESS.

<u>LOW-VOLUME ROAD</u>— A FACILITY LYING OUTSIDE OF BUILT-UP AREAS OF CITIES, TOWNS, AND COMMUNITIES, AND IT SHALL HAVE A TRAFFIC VOLUME OF LESS THAN 400 AADT. IT SHALL NOT BE A FREEWAY, EXPRESSWAY, INTERCHANGE RAMP, FREEWAY SERVICE ROAD, OR A ROAD ON A DESIGNATED STATE HIGHWAY SYSTEM.

TAPER LENGTH L (FEET)

		W (OFFSET DISTANCE, FT.)										
(MPH)	1	2	3	4	5	6	7	8	9	10	11	12
25	11	22	33	44	55	66	77	88	99	110	121	132
30	15	30	45	60	75	90	105	120	135	150	165	180
35	20	41	61	82	102	123	143	163	184	204	225	245
40	27	53	80	107	133	160	187	213	240	267	293	320

- 1. ALL WORK WITHIN THE ELMWOOD AVENUE STATE HIGHWAY RIGHT-OF-WAY SHALL CONFORM TO RIDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (2004 EDITION) INCLUDING ALL REVISIONS AND RHODE ISLAND
- 2. ALL TRAFFIC CONTROL SHALL CONFORM TO THE MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES (2003 EDITION)
- 3. ALL SIGN LEGENDS, BORDERS, AND MOUNTING SHALL BE IN ACCORDANCE WITH THE MUTCD.
- 4. TEMPORARY CONSTRUCTION SIGNING AND ALL OTHER TRAFFIC CONTROL DEVICES SHALL BE IN PLACE PRIOR TO THE
- 5. TEMPORARY CONSTRUCTION SIGNING, BARRICADES AND ALL OTHER NECESSARY WORK ZONE TRAFFIC CONTROL DEVICES SHALL BE REMOVED FROM THE HIGHWAY OR COVERED WHEN THEY ARE NOT REQUIRED FOR CONTROL OF TRAFFIC.
- 6. SIGNS AND SIGN SUPPORTS LOCATED ON OR NEAR THE TRAVELED WAY, AND REFLECTORIZED PLASTIC DRUMS WITH LIGHTING DEVICES MOUNTED ON THEM, MUST PASS THE CRITERIA SET FORTH IN NCHRP REPORT 350, "RECOMMENDED PROCEDURES FOR THE SAFETY PERFORMANCE EVALUATION OF HIGHWAY FEATURES."
- 7. CONTRACTORS SHALL NOTIFY EACH ABUTTER AT LEAST 24 HOURS IN ADVANCE OF THE START OF ANY WORK THAT WILL REQUIRE THE TEMPORARY CLOSURE OF ACCESS, SUCH AS CONDUIT INSTALLATION, EXISTING PAVEMENT EXCAVATION, TEMPORARY DRIVEWAY PAVEMENT PLACEMENT AND SIMILAR OPERATIONS.
- 8. THE FIRST THREE PLASTIC DRUMS OF A TAPER MAY BE MOUNTED WITH TYPE A LIGHTS.
- 9. THE ADVISORY SPEED LIMIT, IF REQUIRED, SHALL BE DETERMINED BY THE ENGINEER.
- 10. DISTANCES ARE A GUIDE AND MAY BE ADJUSTED IN THE FIELD BY THE ENGINEER.
- 11. MAXIMUM SPACING OF TRAFFIC DEVICES IN A TAPER (DRUMS OR CONES) IS EQUAL IN FEET TO THE SPEED LIMIT IN MPH OR AS INDICATED OTHERWISE IN THE CLOSURE DETAILS.
- 12. MINIMUM LANE WIDTH IS TO BE 11 FEET (3.3m) UNLESS OTHERWISE SHOWN. MINIMUM LANE WIDTH TO BE MEASURED FROM THE EDGE OF DRUMS OR MEDIAN BARRIER.
- 13. ALL SIGNS SHALL BE MOUNTED ON THEIR OWN STANDARD SIGN SUPPORTS.

Based on: Table 6C-1 2003 MUTCD

SUGGESTED WORK ZONE WARNING SIGN SPACING

Road Type	Distance Between Signs**					
	Α	В	С			
URBAN LOW SPEED* URBAN HIGH SPEED*	100 (30) 350 (100)	100 (30) 350 (100)	100 (30) 350 (100)			
MOST OTHER ROADWAYS*	500 (150)	500 (150)	500 (150)			
FREEWAYS AND EXPRESSWAYS*	1,000 (300)	1,500 (450)	2,640 (800)			

** SPEED CATEGORY TO BE DETERMINED BY HIGHWAY AGENCY

DISTANCES ARE SHOWN IN FEET (METERS). THE COLUMN HEADINGS A, B, AND C ARE THE DIMENSIONS SHOWN IN THE DETAIL/ TYPICAL SETUP FIGURES. THE A DIMENSION IS THE DISTANCE FROM THE TRANSITION OR POINT OF RESTRICTION TO THE FIRST SIGN. THE B DIMENSION IS THE DISTANCE BETWEEN THE FIRST AND SECOND SIGNS. THE C DIMENSION IS THE DISTANCE BETWEEN THE SECOND AND THIRD SIGNS. (THE "THIRD" SIGN IS THE FIRST ONE TYPICALLY ENCOUNTERED BY A DRIVER APPROACHING A TEMPORARY TRAFFIC CONTROL

THE "THIRD" SIGN ABOVE IS TYPICALLY REFERRED TO AS AN "ADVANCE WARNING" SIGN ON THE TMP SETUPS. IT IS THE ONE WHICH MAY OFTEN HAVE THE "STANDARD RED OR RED-ORANGE FLAGS (16 in. X 16 in.)" MOUNTED ON IT. THESE ADVANCE WARNING SIGNS ARE LOCATED AT THE PROJECT LIMITS ON ALL APPROACHES (i.e. THE W20-1 SERIES (ROAD WORK XX FT) SIGNS), AND USUALLY REMAIN FOR THE DURATION OF THE

THE FIRST AND SECOND WARNING SIGNS ABOVE ARE REFERRED TO AS THE OPERATIONAL (DAY-TO-DAY) WORK ZONE SIGNS AND MAY BE MOVED DEPENDING ON WHERE THE SPECIFIC ROADWAY WORK FOR THAT DAY IS

R2-10 SIGNS SHALL BE PLACED BETWEEN THE FIRST AND SECOND SIGNS.

R2-10 AND W20-1 SERIES SIGNS ARE TO BE INCLUDED ON ALL DETAILS/TYPICAL SETUPS.

Source: Table 6C-3 2003 MUTCD

TAPER LENGTH CRITERIA FOR TEMPORARY TRAFFIC CONTROL ZONES

Type of Taper	Taper Length (L)*		
MERGING TAPER	AT LEAST L		
SHIFTING TAPER	AT LEAST 0.5L		
SHOULDER TAPER	AT LEAST 0.33L		
ONE-LANE, TWO-WAY TRAFFIC TAPER	100 FT (30 m) MAXIMUM		
DOWNSTREAM TAPER	100 FT (30 m) PER LANE		

DATE DESCRIPTION DESIGNER REVIEWER





- WORK VEHICLE

TRUCK MOUNTED ATTENUATOR

TRAFFIC OR PEDESTRIAN SIGNAL

REFLECTORIZED PLASTIC DRUM WORK ZONE

DIRECTION OF TRAFFIC

IIII IMPACT ATTENUATOR

MEDIAN BARRIER WITH WARNING LIGHTS

MEDIAN BARRIER

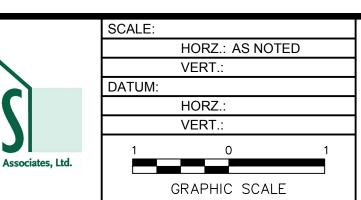
P POLICE DETAIL

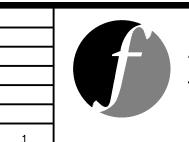
TYPE III BARRICADE

FLASHING ARROW PANEL

FLASHING ARROW PANEL









PROVIDENCE, RI 02908 401.861.3070 www.fando.com

EAST BAY COMMUNITY DEVELOPMENT CORPORATION

COMPREHENSIVE PERMIT **DETAILS**

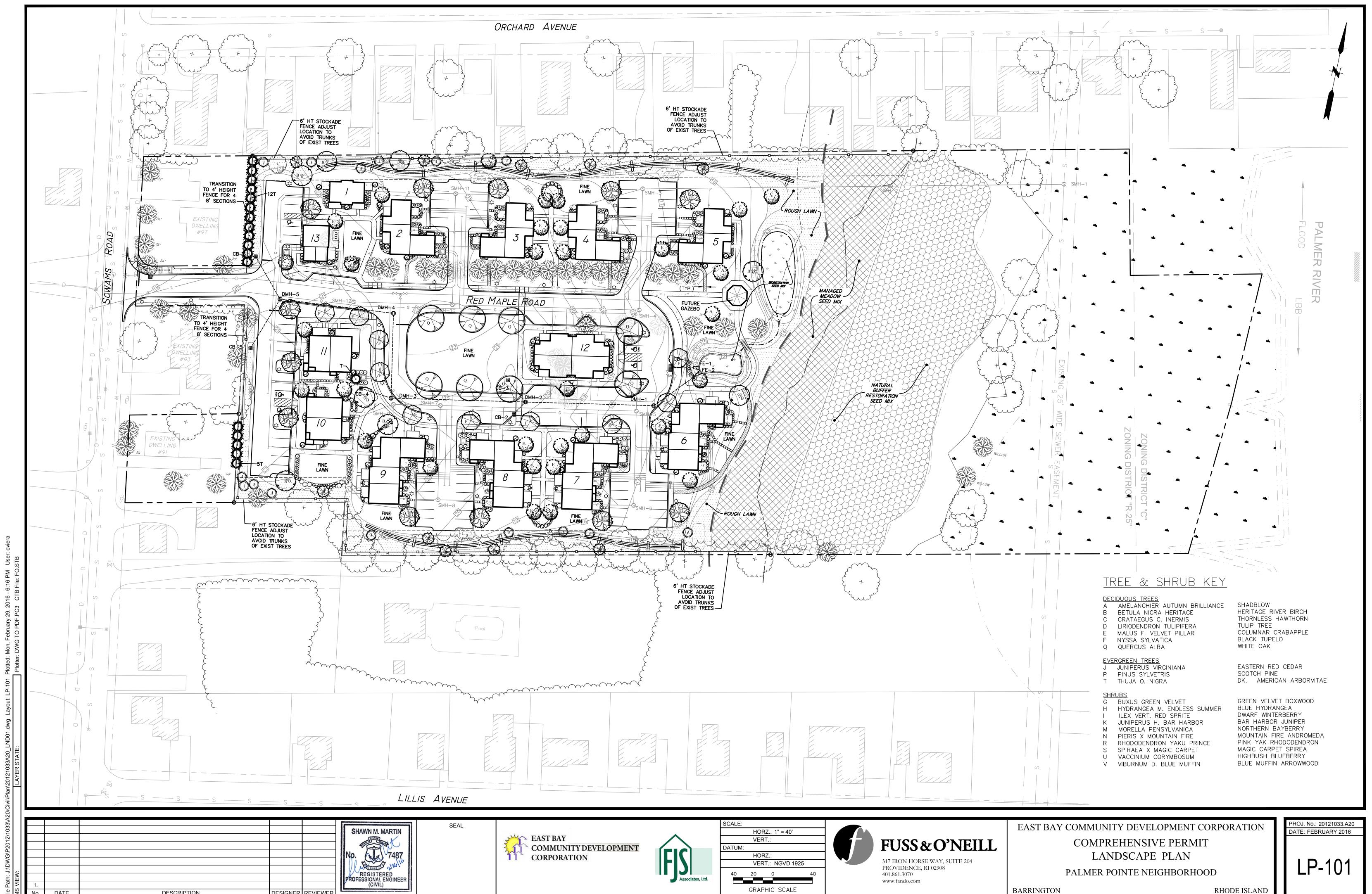
PALMER POINTE NEIGHBORHOOD

CD-507

PROJ. No.: 20121033.A20

DATE: FEBRUARY 2016

RHODE ISLAND BARRINGTON

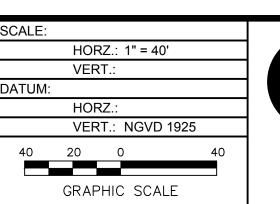




DESCRIPTION

DESIGNER REVIEWER

DATE



GENERAL PLANTING NOTES

- 1. ALL PLANTING MATERIAL TO BE NURSERY GROWN STOCK SUBJECT TO A.A.N. STANDARDS
- 2. THE CONTRACTOR SHALL SUPPLY ALL PLANTS IN QUANTITIES SUFFICIENT TO COMPLETE THE WORK SHOWN ON THE DRAWINGS AND LISTED IN THE PLANT LIST. IN THE EVENT OF A DISCREPANCY BETWEEN QUANTITIES SHOWN IN THE PLANT LIST AND THOSE REQUIRED BY THE DRAWINGS, THE LARGER NUMBER SHALL APPLY.
- 3. ALL PLANTS SHALL BE APPROVED PRIOR TO INSTALLATION AND SHALL BE LOCATED ON SITE BY THE CONTRACTOR FOR THE APPROVAL OF THE LANDSCAPE ARCHITECT. ANY INSTALLATIONS WHICH WERE NOT APPROVED BY THE LANDSCAPE ARCHITECT AND WHICH ARE SUBSEQUENTLY REQUESTED TO BE MOVED WILL BE DONE AT THE CONTRACTORS EXPENSE.
- 4. PRECISE LOCATION OF ITEMS NOT DIMENSIONED ON THE PLAN ARE TO BE FIELD STAKED BY THE CONTRACTOR AND SHALL BE SUBJECT TO THE REQUIREMENTS SPECIFIED IN THE PREVIOUS NOTE.
- 5. ALL SHRUB MASSINGS AND TREE PITS SHALL BE MULCHED TO A DEPTH OF 3" WITH SHREDDED PINE BARK MULCH.
- 6. TREES SHALL NOT BE STAKED UNLESS OTHERWISE NOTED.
- 7. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGED VEGETATION AND SHALL REPLACE OR REPAIR ANY DAMAGED MATERIAL, AT HIS OWN EXPENSE. THE CONTRACTOR SHALL CONTACT "CALL BEFORE YOU DIG" AT 1-800-922-4455 PRIOR TO CONSTRUCTION.
- 8. ALL SHRUB AND GROUNDCOVER PLANTING AREAS SHALL HAVE CONTINUOUS BEDS OF TOPSOIL 12" DEEP. ALL SOD AND HYDROSEED AREAS SHALL HAVE A MINIMUM TOPSOIL BED OF 6".
- 9. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UTILITIES IN THE FIELD. WHERE PLANT MATERIAL MAY INTERFERE WITH UTILITIES, THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT TO COORDINATE THEIR INSTALLATION.
- 10. FOR PLANTING SOIL MIX, SEE SPECIFICATIONS OR PLANTING DETAILS.
- 11. ALL EXISTING RILL, GULLY OR CHANNEL EROSION SHALL BE FILLED WITH APPROPRIATE BACKFILL MATERIAL, FINE RAKED, SCARIFIED AND STABILIZED WITH APPROPRIATE VEGETATIVE MATERIAL AND / OR APPROPRIATE SEDIMENTATION AND EROSION CONTROL MEASURES.
- 12. ADJUSTMENTS IN THE LOCATION OF THE PROPOSED PLANT MATERIAL AS A RESULT OF EXISTING VEGETATION TO REMAIN SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.

13. THE CONTRACTOR IS RESPONSIBLE FOR ALL MAINTENANCE REPAIR AND REPLACEMENT OF PLANT MATERIAL, AS REQUIRED,

- FOR THE DURATION OF THE PROJECT AND SUBSEQUENT WARRANTY PERIOD.WARRANTY PERIOD SHALL BE FOR A MINIMUM OF ONE YEAR.
- 14. PLANTINGS INSTALLED IN THE DRY SUMMER MONTHS AND / OR LAWN SEEDED OUT OF SPRING OR FALL PERIODS, IF ALLOWED BY OWNER, WILL REQUIRE AGGRESSIVE IRRIGATION PROGRAMS AT THE CONTRACTOR'S EXPENSE, UNLESS OTHERWISE DIRECTED BY THE OWNER.
- 15. UPON COMPLETION OF PLANTING, REMOVE FROM SITE ALL EXCESS SOIL, MULCH, AND MATERIALS AND DEBRIS RESULTING FROM WORK OPERATIONS. CLEAN UP SHOULD BE COMPLETED AT THE END OF EACH WORKING DAY. RESTORE TO ORIGINAL CONDITIONS ALL DAMAGED PAVEMENTS, PLANTING AREAS, STRUCTURES AND LAWN AREAS RESULTING FROM LANDSCAPING OPERATIONS.
- 16. CONTRACTOR SHALL SURVEY, LOCATE, AND PROTECT ALL TREES WITHIN AREAS SHOWN AS "EXISTING VEGETATION TO REMAIN" WITHIN THE DEVELOPMENT ENVELOPE FOR REVIEW BY L.A. PRIOR TO CLEARING OPERATIONS.
- 17. CONTRACTOR TO RESEED ALL DISTURBED AREAS.

SEED MIXES

FINE LAWN MIX
250 POUNDS PER ACRE
AROUND UNITS & PARKING
TALL FESCUE (Festuca arundinacea) 50%
CREEPING RED FESCUE (Festuca rubra) 30%
KENTUCKY BLUEGRASS (Poa patensis) 15%
PERENNIAL RYEGRASS (Lolium perenne) 5%

ROUGH LAWN MIX 20 POUNDS PER ACRE

MOW TWICE ANNUALLY
SHEEP FESCUE (Festuca ovina) 70%
HARD FESCUE (Festuca brevipila) 10%
WEEPING LOVEGRASS (Eragrostis curvula) 10%
BUFFALO GRASS (Buchloe dactyloides) 10%

BIORETENTION AREA MIX

MOW ONCE ANNUALLY WHEN SOIL CONDITIONS PERMIT

Virginia Wild Rye (Elymus virginicus), Creeping Red Fescu, (Festuca rubra), Little Bluestem (Schizachyrium scoparium), Big Bluestem (Andropogon gerardii), Fox Sedge (Carex vulpinoidea), Switch Grass (Panicum virgatum), Rough Bentgrass (Agrostis scabra), New England Aster (Aster novae—angliae), Boneset (Eupatorium perfoliatum), Grass Leaved Goldenrod (Euthamia graminifolia), Green Bulrush (Scirpus atrovirens), Blue Vervain (Verbena hastata), Soft Rush (Juncus effusus), Wool Grass (Scirpus cyperinus)

MANAGED MEADOW MIX 20 POUNDS PER ACRE

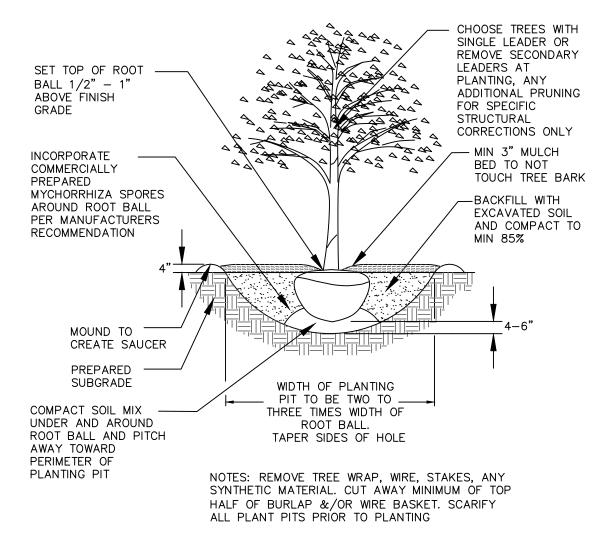
20 POUNDS PER ACRE MOW ONCE ANNUALLY

Creeping Red Fescue (Festuca rubra), Little Bluestem (Schizachyrium scoparium), Big Bluestem (Andropogon gerardii), Deertongue (Panicum clandestinum), Indian Grass (Sorghastrum nutans), Partridge Pea (Chamaecrista fasciculata), Swamp Milkweed (Asclepias incarnata), Soft Rush (Juncus effusus), Silky Smooth Aster (Aster laevis), Flat Top Aster (Aster umbellatus), Showy Tick—Trefoil (Desmodium canadense)

NATURAL BUFFER RESTORATION MIX 35 POUND PER ACRE

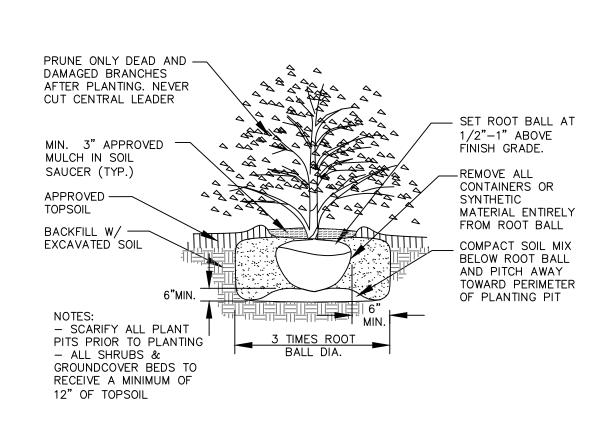
MOW ONCE ANNUALLY
Canada Wild Rye (Flymus canadensis)

Canada Wild Rye, (Elymus canadensis), Creeping Red Fescue, (Festuca rubra), Big Blue— stem, (Andropogon gerardii), Little Bluestem, (Schizachyrium scoparium), Indian Grass, (Sorghastrum nutans), Side Oats Grama, (Bouteloua curtipendula), Switch Grass, (Panicum virgatum), Sand Dropseed, (Sporobolus cryptandrus).

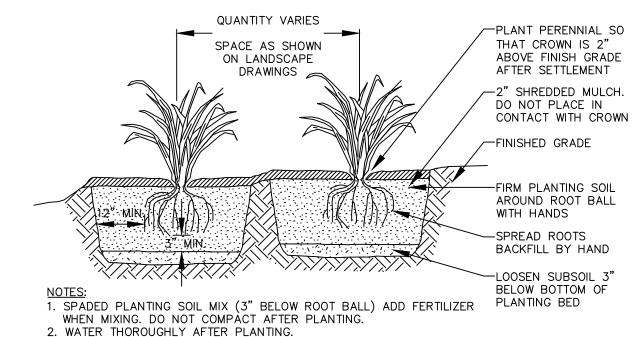


TREE PLANTING

NOT TO SCALE



SHRUB PLANTING
NOT TO SCALE



PROVIDE WELL DRAINING SUBSOIL WHEN SOIL IS HEAVY OR COMPACTED.
 FOR CONTAINER GROWN PLANTS, USE FINGERS OR SMALL HAND TOOLS TO PULL THE ROOTS OUT OF THE OUTER LAYER OF POTTING SOIL; THEN CUT OR PULL APART ANY ROOTS CIRCLING THE PERIMETER OF THE CONTAINER.

GROUNDCOVER PLANTING

Jwg Layout: LP-102 Plotted: Mon, February 29, 2016 - 6:16 PM User: cviera Plotter: DWG TO PDF.PC3 CTB File: FO.STB

LAYER STATE:

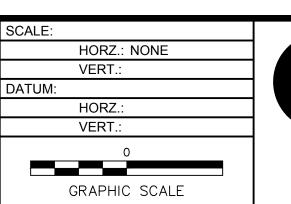
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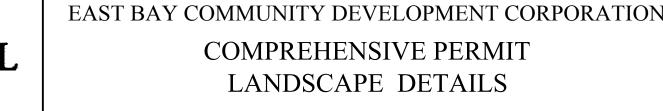












BARRINGTON

PALMER POINTE NEIGHBORHOOD

RHODE ISLAND

LD-501

PROJ. No.: 20121033.A20

DATE: FEBRUARY 2016

