

SLOPE REPAIRS & SHORELINE PROTECTION

SOUTHERN SHORELINE

ROSE LARISA MEMORIAL PARK

701 BULLOCKS POINT AVENUE
EAST PROVIDENCE, RHODE ISLAND

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VICINITY MAP
(NOT TO SCALE)
(GENERATED FROM GOOGLE EARTH)

PREPARED FOR
CITY OF EAST PROVIDENCE
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EAST PROVIDENCE, RI 02914

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REVISION DESCRIPTION	DATE	BY
ISSUED FOR PERMIT	9/27/24	SMR

ROSE LARISA MEMORIAL PARK
SLOPE REPAIRS & SHORELINE PROTECTION
EAST PROVIDENCE, RHODE ISLAND

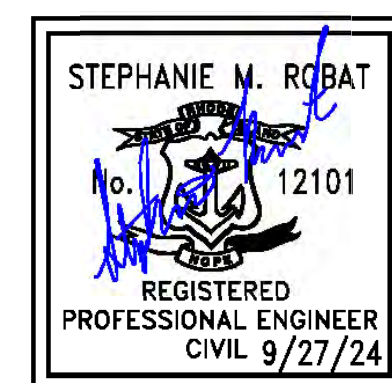
TITLE SHEET

PERMIT PLAN SET
NOT FOR CONSTRUCTION

DATE:
SEPTEMBER 27, 2024

DESIGN BY: SMR
DRAWN BY: SJR / CDD
CHECKED BY: SMR

PROJECT NUMBER:
22006.00



C-1

SHEET 1 OF 18



GENERAL NOTES	GENERAL NOTES (CONTINUED)	MAINTENANCE AND PROTECTION OF SITE	REVETMENT CONSTRUCTION NOTES (CONTINUED)	PLANTING NOTES (CONTINUED)						
<p>1. LANDSIDE TOPOGRAPHY AND EXISTING CONDITIONS PLAN INFORMATION FOR THE AREA WHERE THE WORK IS PROPOSED IS DEVELOPED FROM THE SURVEY PERFORMED, PREPARED AND PROVIDED BY CITY OF EAST PROVIDENCE (THE CITY). FR ENGINEERING GROUP HAS APPROXIMATED AREAS OF EROSION OBSERVED FROM THE DECEMBER 23, 2022 AND DECEMBER 18, 2023 STORMS. CURRENT EXISTING GRADING IN THESE AREAS MAY DIFFER FROM WHAT IS SHOWN. THE CONTRACTOR IS RESPONSIBLE FOR CONFIRMATION OF ACTUAL SITE GRADES AND LAYOUT CONDITIONS. FREG ACCEPTS NO RESPONSIBILITY FOR EXISTING TOPOGRAPHIC AND SITE INFORMATION.</p> <p>2. THERE IS LIMITED HYDROGRAPHIC SURVEY INFORMATION AVAILABLE FOR THIS SITE AS SHOWN ON THE CITY'S SURVEY PLAN. CHANGES TO ELEVATIONS ALONG THE SHORELINE SHOULD BE EXPECTED.</p> <p>3. SOUNDINGS AND UPLAND TOPOGRAPHY ARE REFERENCED TO NAVD88. BENCHMARKS ARE INDICATED ON THE CITY'S SURVEY PLAN.</p> <p>4. THE LOCATION OF EXISTING UNDERGROUND UTILITIES SHOWN IS APPROXIMATE AND HAS NOT BEEN VERIFIED. THE DRAWINGS MAKE NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN-SERVICE OR ABANDONED. THE DRAWINGS DO NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED.</p> <p>5. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE EXISTING CONDITIONS ARE NOT OBLITERATED BEFORE CONTROL POINTS ARE LOCATED AND CONSTRUCTION LAYOUT IS ESTABLISHED. THE CONSTRUCTION LAYOUT SHALL BE PROVIDED IN SUFFICIENT DETAIL, THEREBY ENABLING THEM TO CONSTRUCT THE PROJECT IN CONFORMITY WITH THE PLANS AND SPECIFICATIONS. SURVEY WILL BE PROVIDED BY THE CONTRACTOR. CONTRACTOR IS RESPONSIBLE FOR LAYOUT.</p> <p>6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL ROADWAYS FREE OF DEBRIS RESULTING FROM THEIR CONSTRUCTION OPERATIONS. ALL DEBRIS SHALL BE REMOVED TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE AT NO ADDITIONAL COST TO THE OWNER.</p> <p>7. THE SOIL MANAGEMENT, EROSION CONTROL, AND SOIL STABILIZATION PROGRAMS SHALL BE ADHERED TO DURING THE ENTIRE DURATION OF CONSTRUCTION.</p> <p>8. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ANY CONSTRUCTION OPERATIONS INCLUDING ALL ACTIONS OR OMISSION OF ANY SUBCONTRACTORS, AGENTS OR EMPLOYEES. THE CONTRACTOR MUST ENSURE THAT THE CONDITIONS OF ALL PERMITS, SPECIFICATIONS AND FEDERAL, STATE, AND LOCAL REGULATIONS ARE STRICTLY ENFORCED. THE CONTRACTOR IS ALSO RESPONSIBLE FOR ALL ASPECTS OF ON-SITE SAFETY INCLUDING ANY DAMAGE TO EXISTING STRUCTURES.</p> <p>9. THE BEACH IS TO REMAIN OPEN TO THE PUBLIC DURING CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE TO PROVIDING SIGNS WARNING THE PUBLIC OF CONSTRUCTION ACTIVITIES WHICH MAY LIMIT ACCESS TO PORTIONS OF THE BEACH. CONTRACTOR CANNOT BLOCK PUBLIC ACCESS TO THE BEACH.</p> <p>10. WORK SHOWN ON THE PLANS FOR WHICH THERE ARE NO PARTICULAR DETAILS OR SPECIFICATIONS DOES NOT RELIEVE THE CONTRACTOR FROM FURNISHING AND INSTALLING THE WORK. THE CONTRACTOR SHALL THOROUGHLY EXAMINE THE CONTRACT DOCUMENTS AND PLANS AND INSPECT THE SITE, AND THE BID PRICE SHALL INCLUDE ALL SERVICES AND MATERIALS NECESSARY TO COMPLETE THE PROJECT. ANY CHANGES TO THE PROJECT OR THE INSTALLATION OF AN ITEM FOR WHICH NO PARTICULAR DETAIL OR SPECIFICATION WAS PROVIDED MUST BE REVIEWED BY AND MUST BE ACCEPTED AND APPROVED BY THE OWNER'S REPRESENTATIVE.</p> <p>11. THE CONTRACTOR SHALL PROVIDE TREE PROTECTION DEVICES (RI STD. 51.1.0) AS DIRECTED BY THE OWNER'S REPRESENTATIVE.</p> <p>12. PROVIDE ALL MATERIAL, EQUIPMENT, AND TOOLS NECESSARY TO COMPLETE THE WORK. THE OWNER WILL NOT PROVIDE SECURITY AND ASSUMES NO RESPONSIBILITY OR LIABILITY FOR ANY MATERIALS, EQUIPMENT OR TOOLS STORED AT ITS PROPERTY.</p> <p>13. ALL TYPES OF WASTE GENERATED AT THE SITE SHALL BE DISPOSED OF IN A MANNER CONSISTENT WITH FEDERAL, STATE AND LOCAL REGULATIONS.</p> <p>14. EXCAVATIONS SHALL CONFORM TO CURRENT OSHA REGULATIONS.</p> <p>15. THE CONTRACTOR SHALL NOTIFY THE ENGINEER WHEN UNANTICIPATED OR APPARENTLY DANGEROUS CONDITIONS ARE UNCOVERED DURING CONSTRUCTION OR DEMOLITION.</p> <p>16. CONTRACTOR SHALL MAINTAIN ADEQUATE SURVEY CONTROL AT ALL TIMES TO ESTABLISH AND MAINTAIN ALL LINES AND ELEVATIONS.</p> <p>17. CONTRACTOR SHALL AT ALL TIMES BE SOLELY RESPONSIBLE FOR EXERCISING REASONABLE PRECAUTION TO PROTECT THE HEALTH, SAFETY AND WELFARE OF ALL ON-SITE PERSONNEL, THE PUBLIC AND THE ENVIRONMENT DURING PERFORMANCE OF THE WORK DESCRIBED WITHIN THE CONTRACT DOCUMENTS. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE PROVISIONS OF FEDERAL, STATE AND LOCAL HEALTH AND SAFETY AND OCCUPATIONAL HEALTH AND SAFETY STATUTES AND CODES.</p>	<p>18. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL NECESSARY PERMITS, LICENSES, CERTIFICATES OF INSPECTION AND PAY ALL LEGAL FEES IN CONNECTION WITH THE WORK OF THIS CONTRACT. THE OWNER HAS OBTAINED NECESSARY REGULATORY PERMITS REQUIRED FOR THE WORK IN REGULATED AREAS. THE CONTRACTOR SHALL REQUEST COPIES OF THOSE REGULATORY PERMITS AND MAKE PROVISION IN THIS WORK AND IN THE COST OF THE WORK FOR ALL APPLICABLE CONDITIONS OF THOSE PERMITS. FAILURE TO CONSIDER ANY CONDITION OF THE REGULATORY PERMITS AS A PART OF THE BID SHALL NOT RELIEVE THE CONTRACTOR FROM THEIR RESPONSIBILITY TO APPLY THOSE CONDITIONS TO THEIR WORK AT NO ADDITIONAL COST TO THE OWNER.</p> <p>19. THESE DRAWINGS SHALL BE USED IN CONJUNCTION WITH THE PROJECT REGULATORY PERMITS AND ALL CONDITIONS OF THOSE PERMITS. THE CONTRACTOR IS ADVISED THAT THE REGULATORY PERMITS FOR THIS PROJECT MAY CONTAIN ADDITIONAL REQUIREMENTS THAT, AFTER ANY ADDENDUM, SUPERSEDE THE DRAWING NOTES. THE CONTRACTOR IS FURTHER ADVISED THAT IN THE CASE OF ANY DISCREPANCIES WITHIN THE CONTRACT DOCUMENTS FOUND BEFORE CONSTRUCTION, THE FINAL DECISION AS TO WHAT INFORMATION TAKES PRECEDENCE WILL BE MADE BY THE ENGINEER OF RECORD ON THE BASIS OF THAT INTENT.</p> <p>20. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LAYING OUT & POSITIONING OF ALL PROPOSED STRUCTURES AS SHOWN ON THE PROJECT DRAWINGS.</p> <p>21. CONTRACTOR SHALL CONTACT DIGSAFE (811 OR DIGSAFE.COM) TO NOTIFY MEMBER UTILITIES TO HAVE THE SITE MARKED PRIOR TO START OF CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR COORDINATING WORK WITH SUCH UTILITIES.</p> <p>DRAINAGE AND UTILITY NOTES</p> <p>1. LOCATION OF EXISTING UTILITIES ARE APPROXIMATE AND HAVE BEEN PLOTTED FROM THE BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL CHECK AND VERIFY LOCATIONS OF ALL EXISTING UTILITIES, BOTH UNDERGROUND AND OVERHEAD. ANY DAMAGE TO EXISTING UTILITIES SHALL BE BORN BY THE CONTRACTOR. NO EXCAVATION SHALL BE DONE UNTIL ALL INVOLVED UTILITY MEMBER COMPANIES ARE NOTIFIED.</p> <p>2. DURING CONSTRUCTION THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING DRAINAGE AND RUNOFF FLOW DURING PERIODS OF RAINFALL.</p> <p>EROSION CONTROL AND SOIL STABILIZATION</p> <p>1. EXTREME CARE SHALL BE EXERCISED SO AS TO PREVENT ANY UNSUITABLE MATERIAL FROM ENTERING THE PROVIDENCE RIVER AND ANY PORTION OF THE CITY DRAINAGE SYSTEM AND/OR ADJACENT PROPERTY.</p> <p>2. STAKED HAY BALES OR SILT FENCES SHALL BE INSTALLED AS REQUIRED TO PREVENT SEDIMENTATION INTO THE PROVIDENCE RIVER AND/OR ONTO ADJACENT PROPERTIES.</p> <p>3. DISTURBED SLOPES SHALL NOT BE EXPOSED FOR EXCESSIVE PERIODS OF TIME. THE ONSITE SOILS HAVE A HIGH EROSION POTENTIAL.</p> <p>4. STOCKPILES SHALL HAVE NO SLOPE STEEPER THAN 2:1 AND SHALL BE SURROUNDED BY STAKED HAY BALES. STOCKPILES ARE NOT TO BE LEFT ON THE BEACH.</p> <p>5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EROSION CONTROL MAINTENANCE DURING CONSTRUCTION AND SHALL INSPECT/REPLACE AS NEEDED.</p> <p>6. SANDBAGS SHALL BE USED TO DIVERT STORM WATER RUNOFF AWAY FROM EXPOSED SLOPES AND INTO A NEARBY CATCH BASIN.</p> <p>7. ADDITIONAL HAY BALES OR SANDBAGS SHALL BE LOCATED AS CONDITIONS WARRANT OR AS DIRECTED BY THE ENGINEER, OWNER, CITY REPRESENTATIVES OR REGULATORY AGENCY HAVING JURISDICTION.</p> <p>8. IT IS ANTICIPATED THAT ALL REVETMENT STONE WILL BE DELIVERED VIA BEACH ROAD AND TRANSPORTED FROM BEACH ROAD TO THE PROJECT SITE VIA THE BEACH.</p> <p>9. THE CONTRACTOR SHALL REGULARLY SWEEP AND MAINTAIN BEACH ROAD AND BULLOCKS POINT AVENUE, KEEPING THEM FREE OF TRACKED SEDIMENT AND DEBRIS.</p>	<p>1. ANY COST ASSOCIATED WITH ALL MAINTENANCE, POSITIONING AND PROTECTION OF THE SITE PROTECTION COMPONENTS SUCH AS FENCING AND EROSION CONTROL SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE CONTRACT.</p> <p>2. ALL MAINTENANCE, POSITIONING AND PROTECTION OF SITE PROTECTION COMPONENTS SHALL BE IMPLEMENTED IN ACCORDANCE WITH THE PLANS AND AS SITE CONDITIONS DICTATE. CONSULT THE OWNER'S REPRESENTATIVE IN REGARD TO RESTRICTING PUBLIC ACCESS TO THE BEACH FRONT PORTION OF THE WORK ZONE. ALL SIGNS AND TRAFFIC CONTROL DEVICES SHALL BE IN PLACE PRIOR TO PERFORMING ANY CONSTRUCTION OPERATIONS WHICH MAY POSE A HAZARD TO TRAFFIC.</p> <p>3. TEMPORARY CONSTRUCTION SIGNS SHALL NOT BE PLACED SO THEY ENCR OACH ON OPEN LANES OF TRAFFIC.</p> <p>4. ALL SIGNS AND BARRICADES ARE TO BE PLACED AND RELOCATED BY THE CONTRACTOR AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. THE COST FOR THE RELOCATIONS SHALL BE INCLUDED IN THE BASE BID.</p> <p>5. ANY SUBCONTRACTORS EMPLOYED BY THE CONTRACTOR OR THE CITY OF EAST PROVIDENCE ON THIS PROJECT SHALL WORK WITHIN THE SAME PROTECTED WORK AREAS AS THE CONTRACTOR.</p> <p>6. TEMPORARY CONSTRUCTION SIGNS AND DRUMS SHALL BE IN PLACE PRIOR TO THE START OF WORK.</p> <p>7. CARE SHALL BE TAKEN TO NOT TRACK EQUIPMENT OVER LANDSCAPE AREAS TO REMAIN. CONTRACTOR SHALL REPAIR ANY DAMAGE TO LANDSCAPING OR FLATWORK AT THEIR OWN EXPENSE.</p> <p>REVETMENT DESIGN CRITERIA</p> <p>1. ALL DIMENSIONS ARE IN DECIMAL FEET UNLESS OTHERWISE NOTED. ELEVATIONS ARE IN FEET REFERENCED TO NAVD88.</p> <p>2. TIDAL RANGE IS 4.41 FEET ACCORDING TO THE NOAA STATION IN PROVIDENCE, RHODE ISLAND.</p> <p>3. FEMA 100 YEAR (1%) SWL IS EL 12.6 FT NAVD88.</p> <p>4. BASE FLOOD ELEVATION (BFE) IS 20 FT NAVD88 ALONG THIS PORTION OF THE SHORELINE.</p> <p>5. THE APPROXIMATE 100 YEAR (1%) SIGNIFICANT WAVE HEIGHT IS 3.8 FT ALONG THIS PORTION OF THE SHORELINE. THE REVETMENT WAS DESIGNED FOR A SIGNIFICANT WAVE HEIGHT OF 7.6 FT IN ACCORDANCE WITH THE 2015 FIS TO MAINTAIN DESIGN CONSISTENCY WITH THE ADJACENT REVETMENT SYSTEMS.</p> <p>6. THE REVETMENT AREA IS DESIGNED FOR THE SIGNIFICANT WAVE HEIGHT OF 7.6 FT AND A MAXIMUM SLOPE OF 1.5:1.</p> <p>REVETMENT CONSTRUCTION NOTES</p> <p>1. THE REVETMENT IMPROVEMENTS FOR THIS PROJECT INCLUDE AN APPROXIMATE 810 FT LENGTH OF SHORELINE THAT IS TO BE PROTECTED WITH A NEW STONE REVETMENT SYSTEM. THE NEW REVETMENT WILL EXTEND FROM THE LIMITS OF THE PREVIOUSLY CONSTRUCTED REVETMENT AT THE NORTH END TO THE PROPERTY LINE AT THE SOUTH END.</p> <p>2. THE ARMOR STONES SHALL GENERALLY BE PLACED IN A TWO-LAYER THICKNESS UNDERLAIN BY A 12" BEDDING LAYER.</p> <p>3. ALL STONES USED IN THE CONSTRUCTION OF THE NEW REVETMENT SHALL BE HARD, DURABLE, AND CLEAN, WITHOUT CRACKS, CLEAVAGES OR LAMINATIONS. THEY SHOULD BE CHEMICALLY STABLE IN FRESH OR SALT WATER AND SHOULD NOT WEATHER DUE TO TEMPERATURE CHANGES OR WET/DRY CYCLES.</p> <p>4. ARMOR STONES SHALL BE GRADED SUCH THAT THE SMALLEST DIMENSION SHOULD NOT BE LESS THAN ONE-THIRD OF THE LARGEST DIMENSION.</p> <p>5. THE SIZE OF THE ARMOR STONES SHALL BE A MAXIMUM OF 1.25 W AND A MINIMUM OF 0.75 W (WHERE "W" IS THE AVERAGE WEIGHT SPECIFIED FOR THE PROJECT HEREIN). APPROXIMATELY 50 PERCENT OF THE STONES SUPPLIED FOR THIS PROJECT SHALL BE EQUAL TO, OR LARGER THAN, W.</p> <p>6. ALL STONES SHALL BE MARKED WITH THEIR WEIGHT AT THE QUARRY BEFORE LOADING. THIS SHALL BE SPRAY PAINTED ON THE INDIVIDUAL STONES. ANY STONE NOT MARKED WILL BE REJECTED AND MUST BE RETURNED TO THE QUARRY.</p> <p>7. ARMOR UNITS IN THE COVER LAYER SHALL BE PLACED IN AN ORDERLY MANNER TO OBTAIN GOOD WEDGING OR INTERLOCKING ACTION BETWEEN INDIVIDUAL UNITS. THE SAME IS REQUIRED FOR THE UNDERLAYER PLACEMENT, IF REQUIRED.</p> <p>8. ARMOR STONES IN THE TOP LAYER SHALL BE PLACED TO CREATE A ROUGHENED SURFACE AT THE TOP. THEY SHALL NOT BE PLACED TO CREATE A SMOOTH SURFACE. A SMOOTH SURFACE WOULD PROMOTE GREATER RUNUP FROM WAVES. THE SURFACE SHOULD BE IRREGULAR TO BETTER REDUCE WAVE ENERGY IN ORDER TO PROVIDE RUNUP CONTROL AND WAVE DISSIPATION.</p> <p>9. ARMOR UNITS SHALL BE PLACED IN A TIGHT MANNER TO ADJACENT STONES TO AVOID LARGE VOIDS. THIS SHALL REQUIRE THE OPERATOR PLACING THE STONES TO SELECT STONES WITH THE APPROPRIATE GEOMETRY PRIOR TO PLACEMENT. THE POROSITY OF THE NEW ARMOR LAYER SHALL NOT BE GREATER THAN 37% AFTER PLACEMENT. POROSITY IS DEFINED AS THE VOLUME OF THE VOIDS DIVIDED BY THE TOTAL VOLUME MULTIPLIED BY 100.</p>	<p>10. THE SOIL SUBGRADE REQUIRES THE USE OF GEOTEXTILE FABRICS AND BEDDING STONE BEFORE ARMOR STONE PLACEMENT. THREE LAYERS OF GEOTEXTILE FABRIC ARE REQUIRED AGAINST ALL SOIL/COBBLE INTERFACES ABOVE 0.0' MLW. THIS SHALL BE COMPRISED OF 2 LAYERS OF MIRAFI 140N OR EQUIVALENT PLACED ON THE SOIL WITH A LAYER OF MIRAFI 600X OR EQUIVALENT PLACED ABOVE. THE 140N IS REQUIRED TO ACT AS A FILTER TO STOP THE MIGRATION OF FINE SOIL INTO/THROUGH THE REVETMENT STONE. THE 600X IS REQUIRED TO PROTECT THE 140N FROM BEING DAMAGED BY THE LARGE STONES AND CONSTRUCTION ACTIVITY. ADDITIONAL LAYERS OF GEOTEXTILE FABRIC SHALL BE REQUIRED IF IT IS DETERMINED THAT THE 3 LAYER FABRIC SYSTEM IS BEING DAMAGED DURING CONSTRUCTION. CONTRACTOR SHALL NOT PUSH OR DRAG ARMOR STONE ON FILTER FABRIC AFTER PLACEMENT. A MINIMUM 12" OVERLAP AT SEAMS IS REQUIRED AFTER ALL STONE IS IN PLACE. THIS WILL REQUIRE AN INITIAL OVERLAP OF MORE THAN 12" PRIOR TO PLACEMENT OF STONE. FABRIC SHALL BE INSTALLED LOOSELY.</p> <p>11. IN ORDER TO MAINTAIN THE GEOTEXTILE FABRIC ON THE SLOPE PRIOR TO ARMOR STONE PLACEMENT, A 12" LAYER OF 4" RIP RAP BEDDING STONE SHALL BE INSTALLED ON TOP OF THE MIRAFI 600X FABRIC.</p> <p>DEMOLITION NOTES</p> <p>1. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND LEGALLY DISPOSING (R&D) OF ALL MATERIALS INDICATED FOR DEMOLITION ON THE PLANS, UNLESS OTHERWISE NOTED HEREIN. R&D MATERIALS TO INCLUDE BUT NOT LIMITED TO: PAVEMENT, EXCESS SOIL, VEGETATION/TREES, TIMBER STAIRS AND ASSOCIATED FOUNDATIONS, COIR LOGS/EROSION MATS, AND DEBRIS ON BEACH ALONG THE ALIGNMENT OF THE REVETMENT. THE EXISTING CONDITIONS SHOWN ON THE PLAN ARE ASSUMED BASED ON THE SURVEY PLAN PROVIDED TO FREG. CONTRACTOR SHOULD CARRY CONTINGENCY IN PRICING FOR DIFFERENCES IN CONDITIONS SHOWN, INCLUDING BUT NOT LIMITED TO:</p> <p>1.1. DISCOVERY OF ABANDONED STRUCTURES OR FOOTINGS, 1.2. PAVEMENT, CURBING, OR CONCRETE AREAS WITH ATYPICAL DEPTHS OR FOOTINGS 1.3. DISCOVERY OF ABANDONED OR ACTIVE UTILITIES</p> <p>2. HOURS OF CONSTRUCTION OPERATIONS ARE TO BE PER LOCAL ORDINANCES. WEEKEND WORK MAY BE LIMITED BY THE CITY. CITY TO PROVIDE WRITTEN APPROVAL FOR ALL WEEKEND WORK.</p> <p>3. CLEARING AND GRUBBING IS NOT TO EXTEND BEYOND THE LIMIT OF WORK.</p> <p>4. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING AND PROTECTING ALL EXISTING SITE FEATURES TO REMAIN. ANY DAMAGE TO SAID FEATURES SHALL BE REPAIRED OR REPLACED AT THE OWNER'S DISCRETION AND AT THE CONTRACTOR'S EXPENSE.</p> <p>5. CONTRACTOR SHALL INSTALL TEMPORARY PROTECTION MEASURES WHILE WORKING NEAR THE NEW TIMBER STAIRCASE. ANY DAMAGE TO THE STAIRS WILL BE REPAIRED BY THE CONTRACTOR AT NO COST TO THE CITY.</p> <p>6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL DUMPED MATERIALS FROM THE PROJECT, INCLUDING BUT NOT LIMITED TO GARBAGE, TRASH AND LIKE MATERIAL. THE PROPER DISPOSAL OF MATERIAL SHALL BE IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL REGULATIONS.</p> <p>7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING EXISTING UTILITIES TO REMAIN AND PROTECTING THE SAME FROM DAMAGE DURING DEMOLITION OPERATIONS. THE SITE CONTRACTOR IS RESPONSIBLE FOR ALL REPLACEMENT AND COORDINATION COSTS ASSOCIATED WITH ANY DAMAGE TO EXISTING ACTIVE UTILITIES.</p> <p>8. CONTRACTOR SHALL COORDINATE WITH THE CITY TO LOCATE AND REPAIR IRRIGATION LINES WHICH BECOME DAMAGED DURING DEMOLITION.</p> <p>9. ALL INACTIVE UTILITY LINES, PIPES, AND STRUCTURES DISCOVERED TO BE IN CONFLICT WITH THE PROPOSED CONSTRUCTION SHALL BE REMOVED AND DISPOSED OF UNLESS OTHERWISE NOTED.</p> <p>10. INACTIVE UTILITIES NOT IN CONFLICT WITH THE PROPOSED CONSTRUCTION OR ANY UNDERGROUND STRUCTURES MAY BE ABANDONED IN PLACE UNLESS OTHERWISE NOTED ON THE PLANS.</p> <p>11. ACTIVE UTILITY LINES AND STRUCTURES ENCOUNTERED BUT NOT SPECIFICALLY NOTED ON THE PLANS SHALL BE LOCATED, AND THIS INFORMATION SHALL BE PROVIDED TO THE ENGINEER AND OWNER. NO WORK TO RELOCATE, REMOVE OR ABANDON THESE UTILITIES SHALL BE PERFORMED UNLESS WRITTEN APPROVAL FROM THE UTILITY COMPANIES AND ENGINEER IS OBTAINED.</p> <p>12. CONTRACTOR SHALL COORDINATE THE CUTTING AND CAPPING OF ALL EXISTING UTILITY CONNECTIONS WITH ALL APPLICABLE COMPANIES HAVING JURISDICTION.</p> <p>PLANTING NOTES</p> <p>1. DELIVER SHRUBS WHICH ARE BALLED AND BURLAPPED OR IN NURSERY CONTAINERS. ALL PLANTS ARE TO BE HEALTHY, VIGOROUS AND FREE OF INSECTS AND DISEASE.</p> <p>2. ALL PLANTINGS ARE TO BE COVERED WITH 2" OF SHREDDED HARDWOOD BARK MULCH, PER DETAILS HEREIN.</p> <p>3. RECOMMENDED PLANTING DATES ARE MARCH 15 TO JUNE 15 AND SEPTEMBER 15 TO NOVEMBER 15.</p>	<p>4. THE CONTRACTOR SHALL WARRANTY ALL PLANTS FOR A PERIOD OF ONE YEAR AFTER THE DATE OF SUBSTANTIAL COMPLETION AGAINST DEFECTS INCLUDING DEPTH AND UNSATISFACTORY GROWTH. DURING THIS TIME, THE CONTRACTOR SHALL EMPLOY CURRENTLY ACCEPTED HORTICULTURAL PRACTICES TO KEEP ALL INSTALLED PLANT MATERIAL IN A LIVING, HEALTHY CONDITION UP TO THE DATE OF FINAL ACCEPTANCE, WHICH SHALL BE ONE CALENDAR YEAR FOLLOWING THE SATISFACTORY COMPLETION OF THE PLANTING ACTIVITIES.</p> <p>5. DURING THE WARRANTY PERIOD, THE CONTRACTOR SHALL WATER; WEED; CULTIVATE; PRUNE; MULCH; AND REPAIR, REPLACE, OR READJUST GUY WEBBING AND STAKES, AS MAY BE REQUIRED OR AS DIRECTED BY THE ENGINEER OR OWNER. THE CONTRACTOR SHALL RESHAPE PLANT SAUCERS, REPAIR WASHOUTS AND GULLIES, REPLACE LOST MULCH, KEEP ALL PLANTING SITES FREE FROM WEEDS, AND DO OTHER WORK NECESSARY TO MAINTAIN THE PLANT MATERIAL IN A HEALTHY, GROWING CONDITION.</p> <p>6. ANY PLANT WHICH IS NOT HEALTHY AND GROWING VIGOROUSLY AFTER ONE YEAR, AS DETERMINED BY THE ENGINEER, SHALL BE REPLACED BY THE CONTRACTOR IN KIND, AT NO COST TO THE CITY IN ACCORDANCE WITH THE REQUIREMENTS OUTLINED HEREIN.</p>						
				<p>ABBREVIATIONS</p> <p>N.I.C. NOT IN CONTRACT U.O.N. UNLESS OTHERWISE NOTED N.T.S. NOT TO SCALE I.A.W. IN ACCORDANCE WITH TYP. TYPICAL R&D REMOVE AND DISPOSE F&I FURNISH AND INSTALL BIT. BITUMINOUS CONCRETE N/F NOW OR FORMERLY F.F. FINISH FLOOR FT. FEET T.O.F. TOP OF FOUNDATION M.P.L. MARINA PERIMETER LINE FREG FR ENGINEERING GROUP, INC. S.F. SQUARE FOOT A.P. ASSESSORS PLAT EXTG EXISTING SMH SEWER MANHOLE DMH WATER MANHOLE MIN. MINIMUM MHW MEAN HIGH WATER MHHW MEAN HIGHER HIGH WATER MTL MEAN TIDE LEVEL MSL MEAN SEA LEVEL MLW MEAN LOW WATER MLLW MEAN LOWER LOW WATER SWL STILL WATER LEVEL</p> <p>DATUM INFORMATION INFORMATION FOR NOAA TIDAL ELEVATION STATION 8454000 LOCATED IN PROVIDENCE, RHODE ISLAND - VERTICAL DATUM IS NAVD88</p>						
				<p>REVISION DESCRIPTION</p> <table border="1"> <tr> <th>DATE</th> <th>BY</th> <th>SMR</th> </tr> <tr> <td>9/27/24</td> <td></td> <td></td> </tr> </table> <p>ISSUED FOR PERMIT</p>	DATE	BY	SMR	9/27/24		
DATE	BY	SMR								
9/27/24										
				<p># 1</p>						
				<p>ROSE LARISA MEMORIAL PARK SLOPE REPAIRS & SHORELINE PROTECTION EAST PROVIDENCE, RHODE ISLAND</p> <p>GENERAL NOTES 1 OF 2</p> <p>RECEIVED 10/1/2024 COASTAL RESOURCES MANAGEMENT COUNCIL</p> <p>PERMIT PLAN SET NOT FOR CONSTRUCTION</p> <p>DATE: SEPTEMBER 27, 2024 DESIGN BY: SMR DRAWN BY: SJR / CDD CHECKED BY: SMR PROJECT NUMBER: 22006.00</p> <p>C-2 SHEET 2 OF 18</p>						

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LOADING AND SEEDING

- 1. AFTER ROUGH GRADING IS COMPLETED, ALL DISTURBED AREAS WHICH ARE LABELED AS GRASS OR WHICH WERE PREVIOUSLY GRASS COVERED, ARE TO BE BROUGHT TO AN ELEVATION OF 4" BELOW FINISHED GRADE. IF COMPACTED, THE SUBGRADE IS TO BE SCARIFIED TO A DEPTH OF 12" WITH THE TEETH OF A BACKHOE TO RESULT IN UNCOMPACTED SUBSOIL. THEN 6" OF GOOD QUALITY TOPSOIL IS TO BE APPLIED AND RAKED TO FINISHED GRADE.
2. THE TOPSOIL IS TO BE GOOD QUALITY LOAM, FERTILE AND FREE OF WEEDS, STICKS, AND STONES OVER 3/4" IN SIZE AND OTHERWISE COMPLYING WITH SECTION M.18.01 OF THE RI DOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
3. PRIOR TO HYDROSEEDING, FERTILIZE WITH 10-10-10 OR EQUIVALENT ANALYSIS. AT LEAST 75% OF THE FERTILIZER'S NITROGEN SHALL BE SLOW-RELEASE FORM. INCORPORATE THE FERTILIZER INTO THE TOP 2" OF THE PLANTING SOILS.
4. APPLY FERTILIZER AT A RATE OF 5 LBS. OF NITROGEN PER 1,000 SQUARE FEET FOR TREES AND SHRUBS AND AT A RATE OF 2.5 LBS. OF NITROGEN PER 1,000 SQUARE FEET FOR HYDROSEEDED AREAS.
5. LIME IS TO BE APPLIED AT A RATE OF ONE (1) TON PER ACRE AND UNIFORMLY INCORPORATED INTO THE TOP 2" OF TOPSOIL.
6. SEED SHALL BE SLOPE MIX COMPLYING WITH SECTION M.18.10.3 OF THE RI DOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, OR APPROVED EQUAL. APPLY AT A RATE OF 5 TO 7 LBS. PER 1,000 SQUARE FEET.
7. RECOMMENDED SEEDING DATES ARE MARCH 15 TO JUNE 15 AND SEPTEMBER 15 TO NOVEMBER 15.
8. THE PROPOSED VEGETATED SLOPE ABOVE THE REVETMENT REQUIRES THE USE OF AN EROSION BLANKET WHICH IS TO BE THE ERONET SC150 EROSION CONTROL BLANKET, OR EQUIVALENT, AND SHOULD BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS. THE USE OF TWO ROWS OF COIR LOGS IS ALSO REQUIRED DIRECTLY BEHIND THE REVETMENT.
9. THE FINAL CONDITION OF THE VEGETATED SLOPE REQUIRES INSTALLATION OF 6" (MIN.) OF LOAM, HYDROSEED AND THE EROSION CONTROL BLANKET. THE LOAM SHOULD BE INSTALLED ON THE SLOPE AFTER IT HAS BEEN GRADED TO FINAL CONDITIONS. ONCE THE LOAM IS IN PLACE, THE ENTIRE SLOPE SHOULD BE HYDROSEED. AFTER PLACEMENT OF THE HYDROSEED, THE EROSION CONTROL BLANKET SHOULD BE INSTALLED AND SECURED WITH 18" REBAR STAPLES, IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS AND THE SPACING REQUIREMENTS OUTLINED HEREIN.

CAST-IN-PLACE NOTES - MONUMENT FOUNDATION

- 1. CONCRETE WORK SHALL BE IN ACCORDANCE WITH ACI 301 AND ACI 350/350R, LATEST EDITION.
2. PORTLAND CEMENT:ASTM C150, TYPE II
3. AIR ENTRAIN ALL CONCRETE 5 TO 7%.
4. NO CHLORIDES SHOULD INTENTIONALLY BE ADDED. TOTAL WATER SOLUBLE CHLORIDE ION (CI) OF CONCRETE PRIOR TO EXPOSURE SHOULD NOT EXCEED 0.10% BY WEIGHT OF THE CEMENT FOR NORMAL REINFORCED CONCRETE AND 0.06 PERCENT BY WEIGHT FOR PRESTRESSED CONCRETE.
5. WATER-CEMENT RATIOS AND COMPRESSIVE STRENGTHS FOR STRUCTURAL CONCRETE SHALL BE AS FOLLOWS:

Table with 3 columns: ZONE, W/C RATIO, 28-DAY COMPRESSIVE STRENGTH. Rows include NON-SPLASH (0.40, 4000 PSI) and SPLASH (0.40, 5000 PSI).

- 6. MAXIMUM SLUMP SHALL BE 4".
7. REINFORCING STEEL SHALL BE ASTM A615 GR. 60 AND SHALL BE EPOXY COATED. RECOMMENDED NOMINAL CONCRETE COVER OVER REINFORCEMENT SHALL BE 3-INCHES.
8. CONSTRUCTION JOINTS SHALL BE PREPARED WITH EXTRA CARE.
8.1. CAREFUL PREPARATION OF THE SURFACE BY HEAVY WET ABRASIVE BLASTING OR HIGH PRESSURE WATER JET TO REMOVE LAITANCE AND AND TO EXPOSE COARSE AGGREGATE. THE MAXIMUM SIZE AGGREGATE SHOULD BE EXPOSED TO ABOUT 25 PERCENT OF ITS NOMINAL DIAMETER.
8.2. USE OF AN EPOXY-RESIN BONDING COMPOUND SPRAYED ON JUST BEFORE CONCRETING.
8.3. INCREASING THE CEMENT CONCRETE AT THE START OF THE NEXT PLACEMENT.
9. REINFORCING BAR SPLICES SHALL OVERLAP A MINIMUM OF 50 BAR DIAMETERS.
10. IN HOT WEATHER CONCRETE SHALL BE PROTECTED IN ACCORDANCE WITH ACI 305R. IN COLD WEATHER CONCRETE SHALL BE PLACED AND CURED IN ACCORDANCE WITH ACI 306.
11. THE REPAIRING OF DAMAGED OR ABRADED SURFACES OF THE EPOXY COATING SHALL BE DONE WITH THE EXPOXY MATERIAL OF THE SAME TYPE USED FOR THE INITIAL APPLICATION OR OTHER MATERIAL RECOMMENDED FOR THIS PURPOSE BY THE MANUFACTURER OF THE COATING MATERIALS AND APPROVED BY THE OWNER. REPAIR COATINGS SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND DIRECTIONS.

STAIR GENERAL NOTES

- 1. THE MATERIAL, INCLUDING PILES, STRUCTURAL TIMBER FRAMING, DECKING, RAILINGS, HARDWARE AND FASTENERS SHALL BE NEW AND MAY BE SUBJECT TO INSPECTION AT ANY TIME BY THE ENGINEER OR TOWN BUILDING OFFICIAL.

STAIRS - TIMBER FRAMING NOTES

- 1. ALL TIMBER WORK SHALL BE IN ACCORDANCE WITH THE NATIONAL FOREST PRODUCTS ASSOCIATION NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION.
2. UNLESS OTHERWISE APPROVED BY THE CITY'S ENGINEER ALL TIMBER FRAMING SHALL BE STRESS GRADED LUMBER HAVE THE FOLLOWING STRUCTURAL PROPERTIES (U.O.N.):
- SOUTHERN YELLOW PINE (S.Y.P.): (#1 OR SELECT STRUCTURAL) Fb = 1,400 PSI Fv = 110 PSI
- COLUMNS SHALL BE S.Y.P. - SELECT STRUCTURAL
3. ALL ABOVE GRADE FRAMING MEMBERS AND DECKING SHALL BE TREATED WITH WOOD PRESERVATIVE (PRESSURE TREATMENT): FS TT-W-571 AWWA TREATMENT C2 USING CHROMATED COPPER ARSENATE (0.6 CCA MINIMUM RETENTION). ALL HOLES AND CUTS SHALL BE DRESSED WITH CCA. ALL POSTS SUPPORTING THE STRUCTURE SHALL BE TREATED USING A CCA WITH A MINIMUM RETENTION ASSOCIATED WITH DIRECT BURIAL.
4. ALL THREADED FASTENERS AND ANCHORS SHALL BE HOT DIPPED GALVANIZED STEEL FOR EXTERIOR, HIGH HUMIDITY (4 MILS FOR MARINE ENVIRONMENT) TO ASTM A123 AND TREATED WOOD LOCATIONS. BOLTS SHALL CONFORM TO A307 GRADE A WITH HEAVY HEX NUTS AND HOT DIPPED GALVANIZED (HDG) OGEE OR DOCK STEEL WASHERS AS SPECIFIED ON DRAWINGS. BOLT HOLES SHALL BE A MAXIMUM OF 1/16" LARGER THAN BOLT DIAMETER SPECIFIED.
5. ALL NAILS & SCREWS SHALL BE AS SPECIFIED ON DRAWINGS (STAINLESS STEEL GRADE 316 UNLESS OTHERWISE SPECIFIED). PRE-DRILL UNDERSIZE HOLES FOR NAILS THROUGH TOP PLY ONLY.
6. ALL TIMBER SIZES ARE NOMINAL UNLESS OTHERWISE NOTED.
7. ALL TIMBER FRAMING USED IN THE PROJECT SHALL BE STRAIGHT IN BOTH LONGITUDINAL PLANES WITH NO OR MINIMAL TWIST. TIMBER SHALL BE INSPECTED FOR CROWN PRIOR TO INSTALLATION BY THE CONTRACTOR AND INSTALLED CROWN UP WHERE SLIGHT CROWN EXISTS. JOINTS SHALL BE SAW CUT AND ACCURATELY AND TIGHTLY FITTED. THE ENGINEER RESERVES THE RIGHT TO REJECT TIMBER MEMBERS AND FINISH CONSTRUCTION OF TIMBER ASSEMBLIES WHERE IN THE OPINION OF THE ENGINEER THE DESIGN INTENT OF THE STRUCTURE WOULD BE COMPROMISED DUE TO THE FAULTY TIMBER, JOINTING, AND OR CONSTRUCTION PRACTICES.

STAIRS - TIMBER PILE NOTES

- 1. ALL NEW PILES SHALL CONFORM WITH THE FOLLOWING :
- TIMBER, TREATED WITH CHROMATED COPPER ARSENATE (MINIMUM RETENTION OF 2.5 CCA)
- ALL HOLES OR CUTS MADE IN PILES SHALL BE DRESSED WITH CCA.
- SOUTHERN YELLOW PINE CONFORMING TO THE FOLLOWING MINIMUM ALLOWABLE STRESSES AS DETERMINED IN ACCORDANCE WITH ASTM D-2899
COMPRESSION PARALLEL TO THE GRAIN, Fc - 1,250 PSI
EXTREME FIBER STRESS IN BENDING Fb - 2,450 PSI
HORIZONTAL SHEAR Fv - 115 PSI
COMPRESSION PERPENDICULAR TO THE GRAIN Fc - 230 PSI
2. PILES SHALL CONFORM TO THE PHYSICAL CHARACTERISTICS OF ROUND TIMBER PILES AS DESCRIBED IN ASTM D-25. MINIMUM BUTT DIAMETER SHALL BE 12" (8" TIP MIN.), SPECIES SHALL BE SOUTHERN YELLOW PINE .
3. SEE PLANS FOR CUT OFF ELEVATIONS.
4. BUTT MUST BE WITHIN 2" OF LOCATION SHOWN ON THE PLANS.
5. CONTRACTOR SHALL NOTIFY THE ENGINEER A MINIMUM OF 48 HOURS IN ADVANCE PRIOR TO DRIVING PILES. CONTRACTOR SHALL STOP DRIVING PILE IF A LOSS OF DRIVING RESISTANCE IS NOTED WITHIN THE LAST 4 FEET OF DRIVING AND NOTIFY THE ENGINEER PRIOR TO PROCEEDING WITH THE WORK ON THE PILE BEING DRIVEN.
6. ALL THE HARDWARE BEING USED SHALL BE HOT DIPPED GALVANIZED (HDG) FOR EXTERIOR, HIGH HUMIDITY (MIN. 4 MIL THICKNESS FOR MARINE ENVIRONMENT), AND TREATED WOOD LOCATIONS. CLIPS, HANGERS, ANGLES AND OTHER HARDWARE REQUIRING FABRICATION SHALL BE FABRICATED COMPLETE WITH HOLES AND WELDING PRIOR TO HOT DIP GALVANIZING. HOT DIPPED GALVANIZING SHALL BE IN ACCORDANCE WITH ASTM A123 FOR PLATES AND FABRICATIONS AND ASTM A153 FOR BOLTS AND BOLTING HARDWARE. SEE PLANS FOR ADDITIONAL INFORMATION.
7. PILES SHALL BE INSTALLED AS VERTICALLY PLUMB AS POSSIBLE. PILES SHALL NOT DEVIATE MORE THAN 2 DEGREES FROM VERTICAL.

STAIRS - STEEL FABRICATION NOTES

- 1. ALL WELDING SHALL CONFORM TO THE "STRUCTURAL WELDING CODE FOR STEEL" LATEST EDITION, AS ADOPTED BY THE AMERICAN WELDING SOCIETY (AWS). ALL WELDING SHALL BE PERFORMED BY A CERTIFIED WELDER IN ACCORDANCE WITH AWS STANDARDS.
STRUCTURAL STEEL MATERIALS SHALL MEET THE FOLLOWING REQUIREMENTS:
- STEEL SECTIONS AND MISC: ASTM A572 GRADE 50 UNLESS OTHERWISE NOTED
- BOLTS: ASTM A307 GRADE A WITH HEAVY HEXAGONAL HEADS, UNLESS OTHERWISE NOTED
- NUTS: ASTM A307 GRADE A WITH HEAVY HEXAGONAL HEADS, UNLESS OTHERWISE NOTED
- WASHERS: ASTM F436 OVERSIZED DOCK WASHERS OR OGEE WASHERS AS INDICATED ON THE PLANS, UNLESS OTHERWISE NOTED
- WELD RODS: ASTM A233, E70XX SERIES ELECTRODES AS REQ'D FOR CONDITIONS OF INTENDED USE, UNLESS OTHERWISE NOTED
- BOLTS, NUTS, & WASHERS: ALL BOLTS, NUTS, AND WASHERS SHALL BE HOT DIPPED GALVANIZED FOR EXTREME SERVICE (4 MILS THICKNESS) IN ACCORDANCE WITH ASTM A153 AND MEET MINIMUM TESTS OF ASTM A239, UNLES OTHERWISE NOTED.
CLIPS, HANGERS, ANGLES AND OTHER HARDWARE REQUIRING FABRICATION SHALL BE FABRICATED COMPLETE WITH HOLES AND WELDING PRIOR TO HOT DIP GALVANIZING. HOT DIPPED GALVANIZING (4 MIL MIN. THICKNESS) SHALL BE IN ACCORDANCE WITH ASTM A123 FOR PLATES AND FABRICATIONS AND ASTM A153 FOR BOLTS AND BOLTING HARDWARE. SEE PLANS FOR ADDITIONAL INFORMATION.

STAIRS - CONCRETE NOTES

- 1. CONCRETE SHALL BE PROPORTIONED, MIXED AND PLACED IN ACCORDANCE WITH ACI 318 "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" AND ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS". MINIMUM COMPRESSIVE STRENGTHS OF CONCRETE AT THE END OF 28 DAYS SHALL BE 3,000 PSI FOR ALL FOOTINGS.
2. CEMENT TO BE PORTLAND TYPE II OR APPROVED EQUAL WITH THE FOLLOWING PARAMETERS: MAXIMUM WATER CEMENT RATIO 0.45, MAXIMUM SLUMP 4", AIR ENTRAINED TO 4-6%.
3. CONCRETE SHALL BE CAST AGAINST FIRM SOIL OR COMPACTED CRUSHED STONE AS SHOWN ON THE PLANS.
4. CONCRETE SHALL NOT BE POURED IN WATER OR ON FROZEN GROUND AND SHALL BE PROTECTED FROM FROST DURING CONSTRUCTION.
5. ALL FOOTING EXCAVATIONS SHALL BE INSPECTED BY ENGINEER BEFORE ANY CONCRETE IS PLACED.

REFERENCE PLANS, DESIGN AND DETAIL/SPEC DOCUMENTS

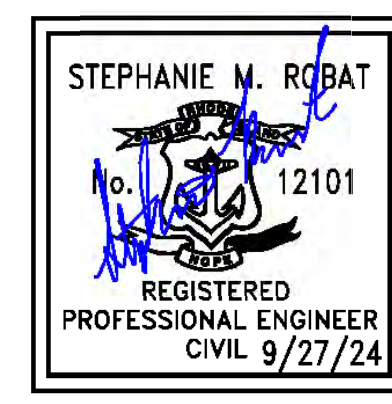
- 1. EXISTING TOPOGRAPHIC AND GENERAL CONDITIONS INFORMATION IN THE ANTICIPATED CONSTRUCTION AREA IS FROM THE AUTOCAD FILES TITLED "2020050.DWG," "SURVEY PLAN," AND "2023006-RLP-BANKEROSION" PROVIDED ELECTRONICALLY TO FREG ON MARCH 31, 2021, DECEMBER 15, 2021, AND JANUARY 10, 2023, RESPECTIVELY, BY THE CITY OF EAST PROVIDENCE. THE AUTOCAD FILES PROVIDED WERE USED TO CREATE THE BASE PLAN FOR THESE DRAWINGS. A LIMITED VISUAL SURVEY OF EROSION WITHIN THE REVETMENT AREA WAS CONDUCTED BY FREG ON DECEMBER 29, 2022 FOLLOWING THE DECEMBER 23, 2022 STORM AND PRIOR TO COMPLETION OF THE EMERGENCY WORK. AN ADDITIONAL SURVEY OF EROSION WITHIN THE REVETMENT AREA WAS CONDUCTED BY FREG ON JANUARY 30, 2024 FOLLOWING THE DECEMBER 18, 2023 STORM. EXISTING CONDITIONS SHOWN ARE APPROXIMATE.
2. HORIZONTAL CONDITIONS, PROPERTY LINES AND BUILDING LOCATIONS, ETC., ARE SHOWN ON THE SURVEY PLANS REFERENCED ABOVE.
3. EXISTING SITE GRADES MAY VARY FROM WHAT IS SHOWN DUE TO RECENT EROSION FROM THE DECEMBER 23, 2022 AND DECEMBER 18, 2023 STORMS. VARIATIONS MAY INCLUDE BUT ARE NOT LIMITED TO SITE GRADE, EXISTING STRUCTURE GEOMETRY AND STRUCTURE LOCATION.
4. FEMA FLOOD INSURANCE STUDY 44007CV001D, PROVIDENCE COUNTY, RHODE ISLAND, REVISED JULY 19, 2023.
5. US ARMY CORPS OF ENGINEERS SHORE PROTECTION MANUAL, 1984.
6. COASTAL CONSTRUCTION MANUAL, FEMA 55.

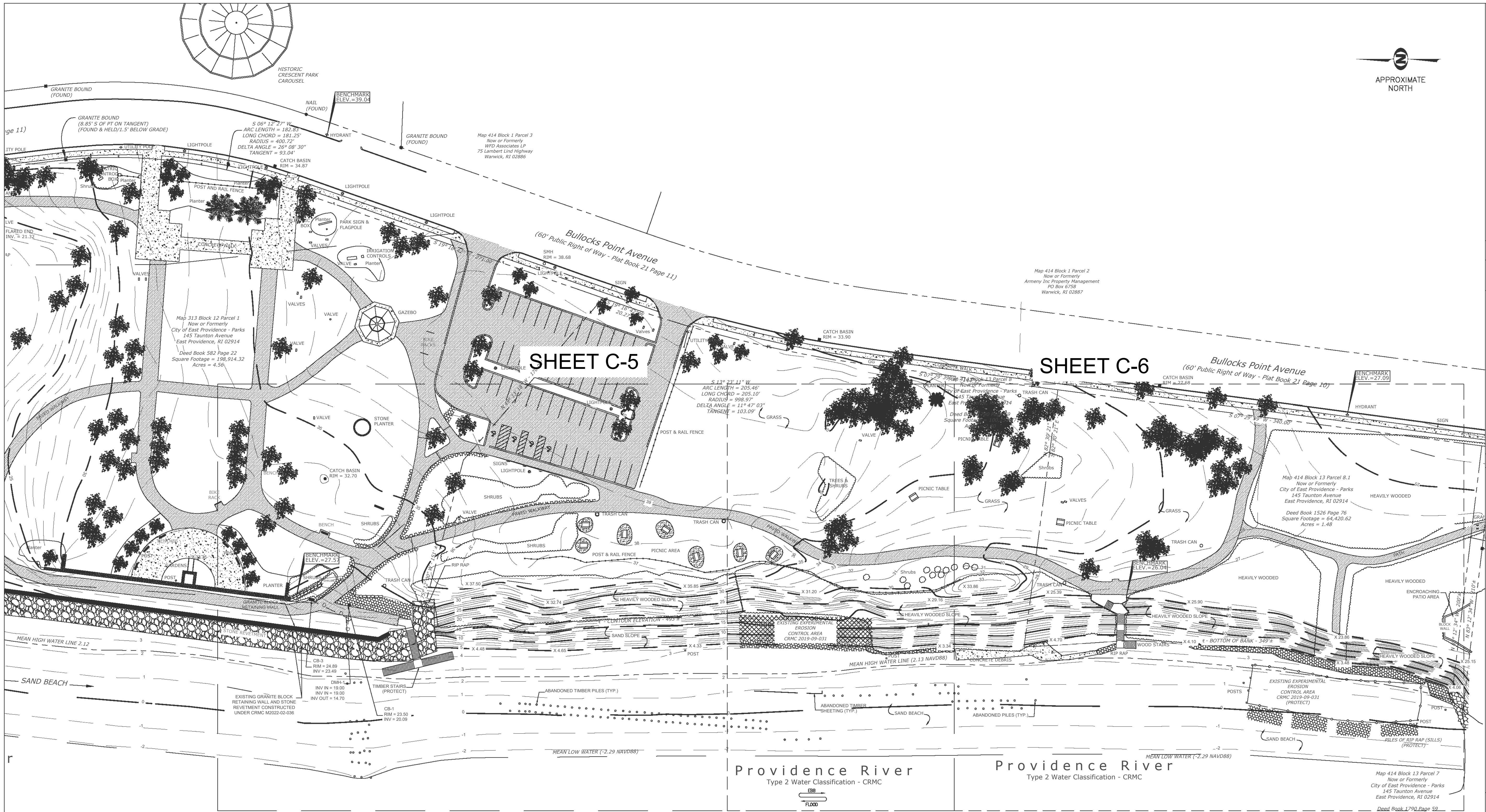
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ROSE LARISA MEMORIAL PARK
SLOPE REPAIRS & SHORELINE PROTECTION
EAST PROVIDENCE, RHODE ISLAND
GENERAL NOTES
2 OF 2

PERMIT PLAN SET
NOT FOR CONSTRUCTION

DATE: SEPTEMBER 27, 2024
DESIGN BY: SMR
DRAWN BY: SJR / CDD
CHECKED BY: SMR
PROJECT NUMBER: 22006.00





REVISION DESCRIPTION	DATE	BY
ISSUED FOR PERMIT	9/27/24	SMR

ROSE LARISA MEMORIAL PARK
 SLOPE REPAIRS & SHORELINE PROTECTION
 EAST PROVIDENCE, RHODE ISLAND
 EXISTING CONDITIONS PLAN
 PRE-STORM - OVERALL



PERMIT PLAN SET
NOT FOR CONSTRUCTION

DATE: SEPTEMBER 27, 2024
 DESIGN BY: SMR
 DRAWN BY: SJR / CDD
 CHECKED BY: SMR
 PROJECT NUMBER: 22006.00

C-4
 SHEET 4 OF 18

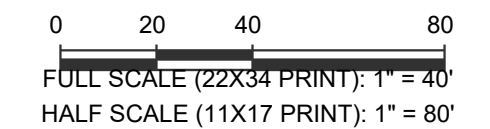
1 EXISTING CONDITIONS - PRE-STORM
 SCALE: 1" = 40'

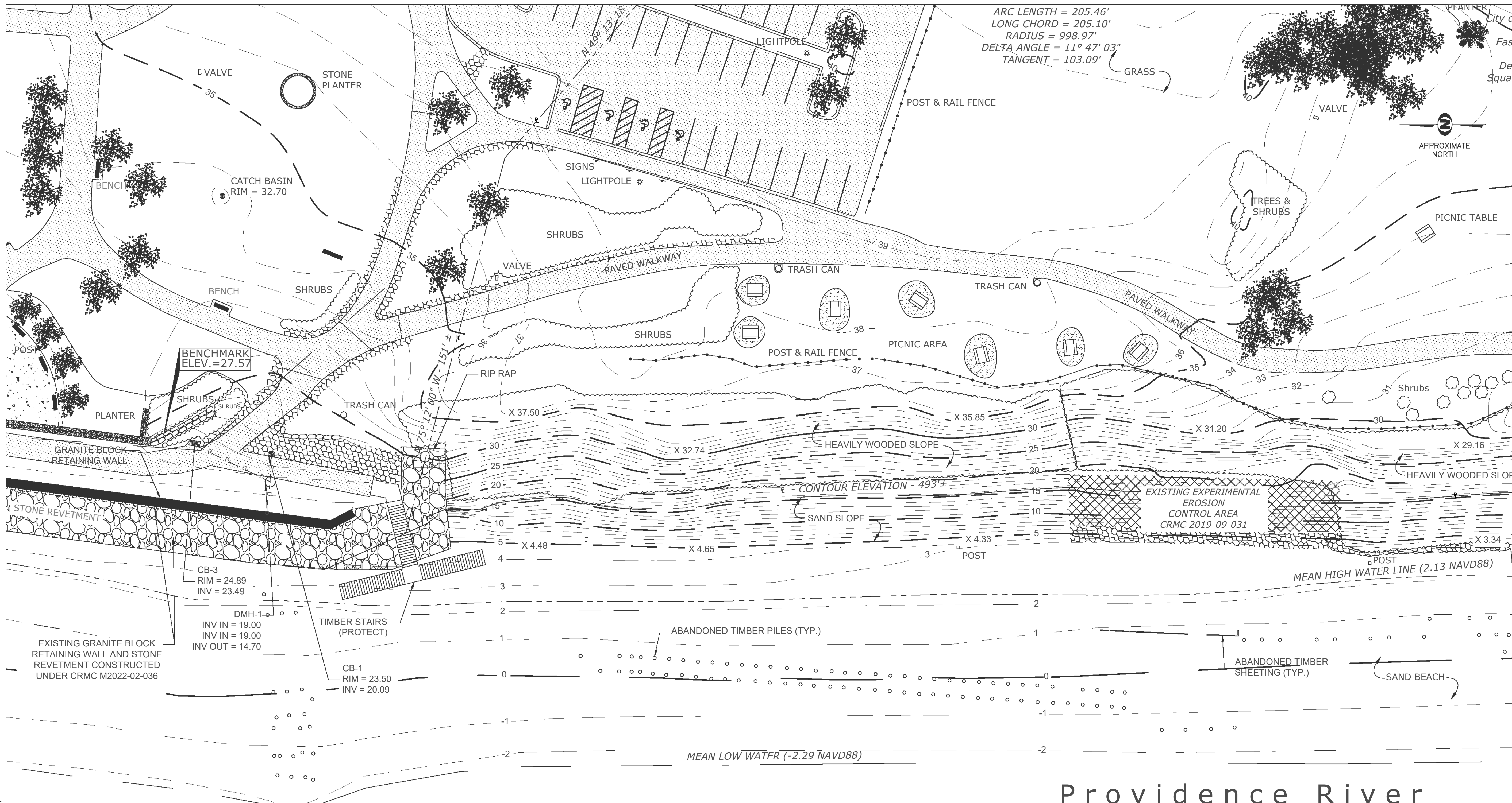
LEGEND

	EXISTING PRE-STORM 5' CONTOUR		EXISTING STONE WALL		PROPERTY LINE
	EXISTING PRE-STORM 1' CONTOUR		EXISTING UTILITY POLE		
	EXISTING OVERHEAD WIRES		EXISTING LIGHT POLE		
	EXISTING SEWER MANHOLE		EXISTING WATER GATE		
	EXISTING DRAINAGE MANHOLE		EXISTING HYDRANT		
	EXISTING CATCH BASIN		EXISTING RIP RAP		
	EXISTING BUILDING		EXISTING STONE REVETMENT		
	EXISTING SPOT GRADE				

- NOTES:**
- THIS BASE PLAN WAS DEVELOPED FROM THE FOLLOWING AUTOCAD DWG FILE:
 A. '2020050.DWG' BY THE CITY OF EAST PROVIDENCE DEPARTMENT OF PUBLIC WORKS - ENGINEERING DEPARTMENT.
 - THE FIELD SURVEY FOR THE BASE PLAN WAS COMPLETED BY THE DEPARTMENT OF PUBLIC WORKS ENGINEERING DIVISION ON AUGUST 7, 2020 AND DOES NOT REFLECT RECENT CHANGES TO SITE CONDITIONS. SEE C-7 FOR APPROXIMATE LIMITS OF AREAS WITH RECENT EROSION.

STEPHANIE N. ROBAT
 01012101
 REGISTERED PROFESSIONAL ENGINEER
 CIVIL 9/27/24





ARC LENGTH = 205.46'
 LONG CHORD = 205.10'
 RADIUS = 998.97'
 DELTA ANGLE = 11° 47' 03"
 TANGENT = 103.09'

FR ENGINEERING GROUP
 2346 Post Road, Suite 202
 Warwick, RI 02886
 401-575-1569
 stephanie.robata@fr-eng.com

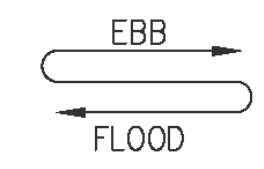
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ISSUED FOR PERMIT	9/27/24	SMR

ROSE LARISA MEMORIAL PARK
 SLOPE REPAIRS & SHORELINE PROTECTION
 EAST PROVIDENCE, RHODE ISLAND
 EXISTING CONDITIONS PLAN - PRE-STORM
 1 OF 2



Providence River

Type 2 Water Classification - CRMC



LEGEND	
	EXISTING PRE-STORM 5' CONTOUR
	EXISTING PRE-STORM 1' CONTOUR
	EXISTING OVERHEAD WIRES
	EXISTING SEWER MANHOLE
	EXISTING DRAINAGE MANHOLE
	EXISTING CATCH BASIN
	EXISTING BUILDING
	EXISTING SPOT GRADE
	PROPERTY LINE
	EXISTING STONE WALL
	EXISTING UTILITY POLE
	EXISTING LIGHT POLE
	EXISTING WATER GATE
	EXISTING HYDRANT
	EXISTING RIP RAP
	EXISTING STONE REVETMENT

1 EXISTING CONDITIONS - PRE-STORM
 SCALE: 1" = 20'

- NOTES:
- THIS BASE PLAN WAS DEVELOPED FROM THE FOLLOWING AUTOCAD DWG FILE:
 A. '2020050.DWG' BY THE CITY OF EAST PROVIDENCE DEPARTMENT OF PUBLIC WORKS - ENGINEERING DEPARTMENT.
 - THE FIELD SURVEY FOR THE BASE PLAN WAS COMPLETED BY THE DEPARTMENT OF PUBLIC WORKS ENGINEERING DIVISION ON AUGUST 7, 2020 AND DOES NOT REFLECT RECENT CHANGES TO SITE CONDITIONS. SEE C-7 FOR APPROXIMATE LIMITS OF AREAS WITH RECENT EROSION.



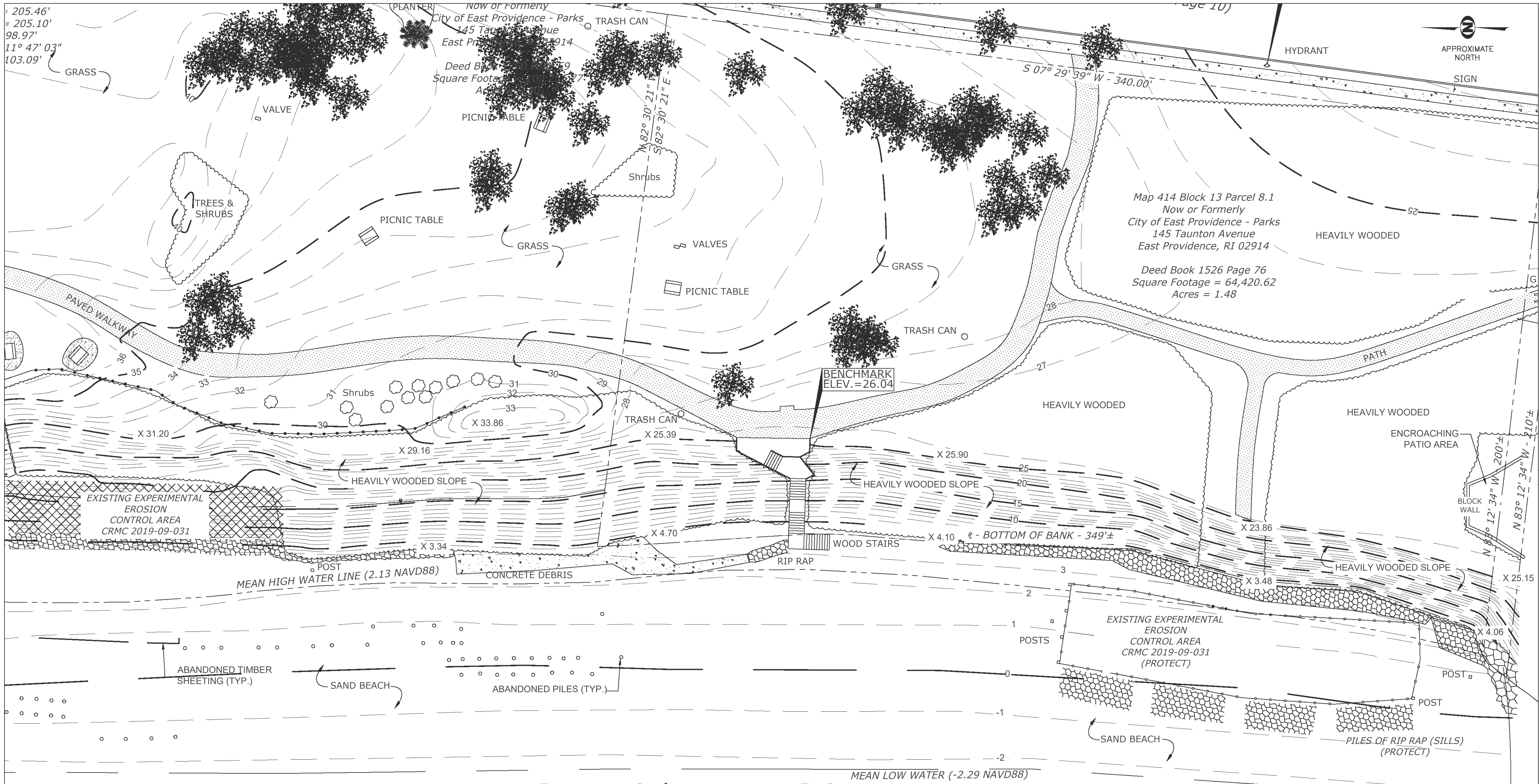
0 10 20 40
 FULL SCALE (22X34 PRINT): 1" = 20'
 HALF SCALE (11X17 PRINT): 1" = 40'

PERMIT PLAN SET
NOT FOR CONSTRUCTION

DATE:
 SEPTEMBER 27, 2024
 DESIGN BY: SMR
 DRAWN BY: SJR / CDD
 CHECKED BY: SMR

PROJECT NUMBER:
 22006.00
C-5
 SHEET 5 OF 18

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LEGEND

	EXISTING PRE-STORM 5' CONTOUR		EXISTING STONE WALL
	EXISTING PRE-STORM 1' CONTOUR		EXISTING UTILITY POLE
	EXISTING OVERHEAD WIRES		EXISTING LIGHT POLE
	EXISTING SEWER MANHOLE		EXISTING WATER GATE
	EXISTING DRAINAGE MANHOLE		EXISTING HYDRANT
	EXISTING CATCH BASIN		EXISTING RIP RAP
	EXISTING BUILDING		EXISTING STONE REVETMENT
	EXISTING SPOT GRADE		
	PROPERTY LINE		

1 EXISTING CONDITIONS - PRE-STORM
SCALE: 1" = 20'

- NOTES:**
- THIS BASE PLAN WAS DEVELOPED FROM THE FOLLOWING AUTOCAD DWG FILE:
A. '2020050.DWG' BY THE CITY OF EAST PROVIDENCE DEPARTMENT OF PUBLIC WORKS - ENGINEERING DEPARTMENT.
 - THE FIELD SURVEY FOR THE BASE PLAN WAS COMPLETED BY THE DEPARTMENT OF PUBLIC WORKS ENGINEERING DIVISION ON AUGUST 7, 2020 AND DOES NOT REFLECT RECENT CHANGES TO SITE CONDITIONS. SEE C-7 FOR APPROXIMATE LIMITS OF AREAS WITH RECENT EROSION.

0 10 20 40
FULL SCALE (22X34 PRINT): 1" = 20'
HALF SCALE (11X17 PRINT): 1" = 40'



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REVISION DESCRIPTION	DATE	BY
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ROSE LARISA MEMORIAL PARK
SLOPE REPAIRS & SHORELINE PROTECTION
EAST PROVIDENCE, RHODE ISLAND

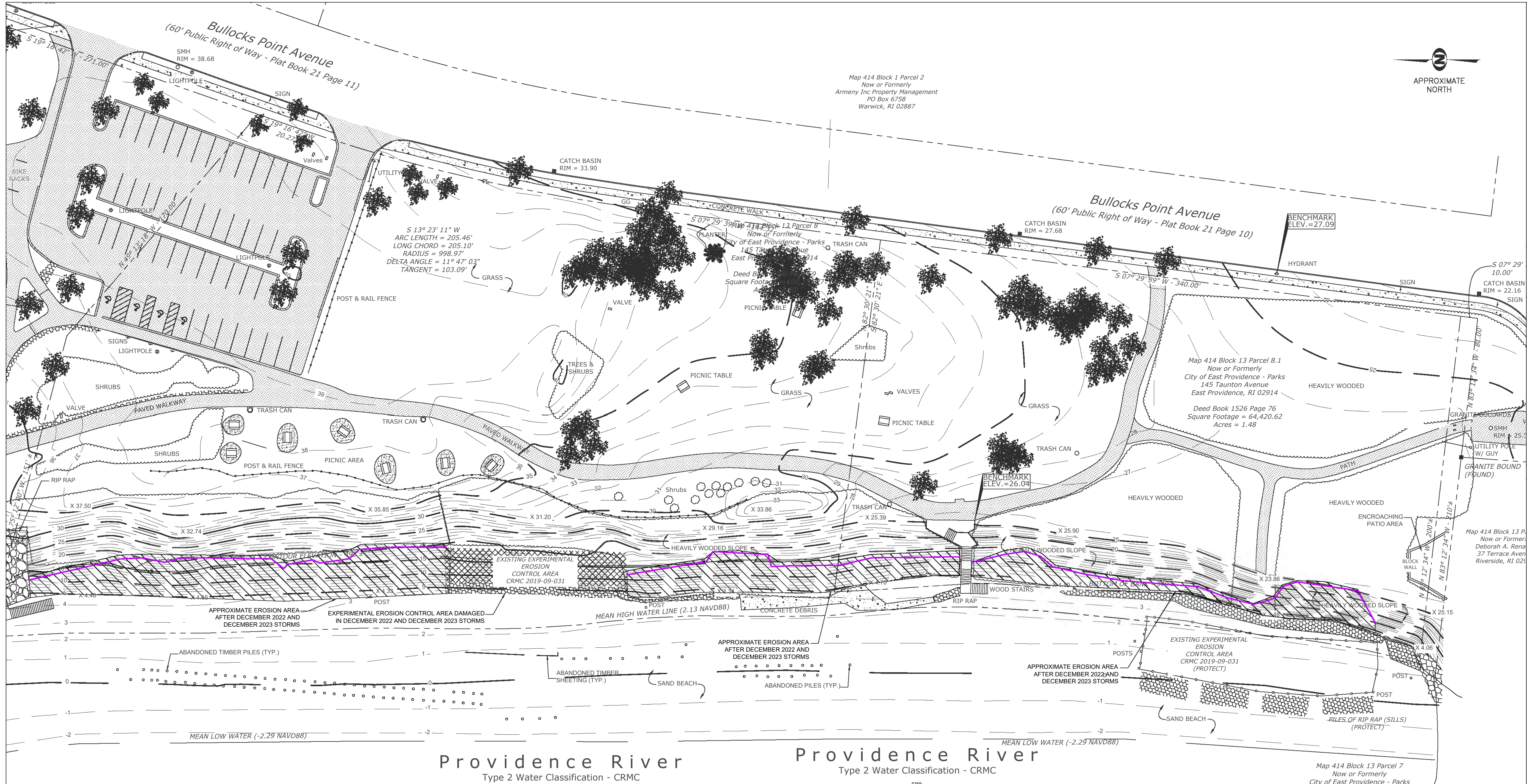
EXISTING CONDITIONS PLAN - PRE-STORM
2 OF 2

PERMIT PLAN SET
NOT FOR CONSTRUCTION

DATE: SEPTEMBER 27, 2024
DESIGN BY: SMR
DRAWN BY: SJR / CDD
CHECKED BY: SMR
PROJECT NUMBER: 22006.00

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SHEET 6 OF 18





REVISION DESCRIPTION	DATE	BY
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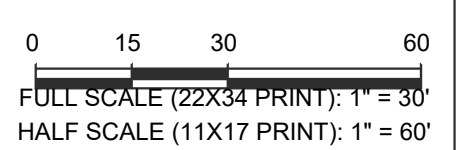
ROSE LARISA MEMORIAL PARK
SLOPE REPAIRS & SHORELINE PROTECTION
EAST PROVIDENCE, RHODE ISLAND

SLOPE EROSION LOCATIONS
POST-STORM



PERMIT PLAN SET
NOT FOR CONSTRUCTION

DATE: SEPTEMBER 27, 2024
DESIGN BY: SMR
DRAWN BY: ADR/SJR/CDD
CHECKED BY: SMR
PROJECT NUMBER: 22006.00



LEGEND

- | | | | |
|--|-------------------------------|--|--|
| | EXISTING PRE-STORM 5' CONTOUR | | EXISTING STONE WALL |
| | EXISTING PRE-STORM 1' CONTOUR | | EXISTING UTILITY POLE |
| | EXISTING OVERHEAD WIRES | | EXISTING LIGHT POLE |
| | EXISTING SEWER MANHOLE | | EXISTING WATER GATE |
| | EXISTING DRAINAGE MANHOLE | | EXISTING HYDRANT |
| | EXISTING CATCH BASIN | | EXISTING RIP RAP |
| | EXISTING BUILDING | | EXISTING STONE REVETMENT |
| | EXISTING SPOT GRADE | | INDICATES APPROXIMATE AREAS OF EROSION FOLLOWING THE 12/18/23 STORM |
| | PROPERTY LINE | | INDICATES APPROXIMATE LIMITS OF EROSION FOLLOWING THE 12/23/22 STORM |

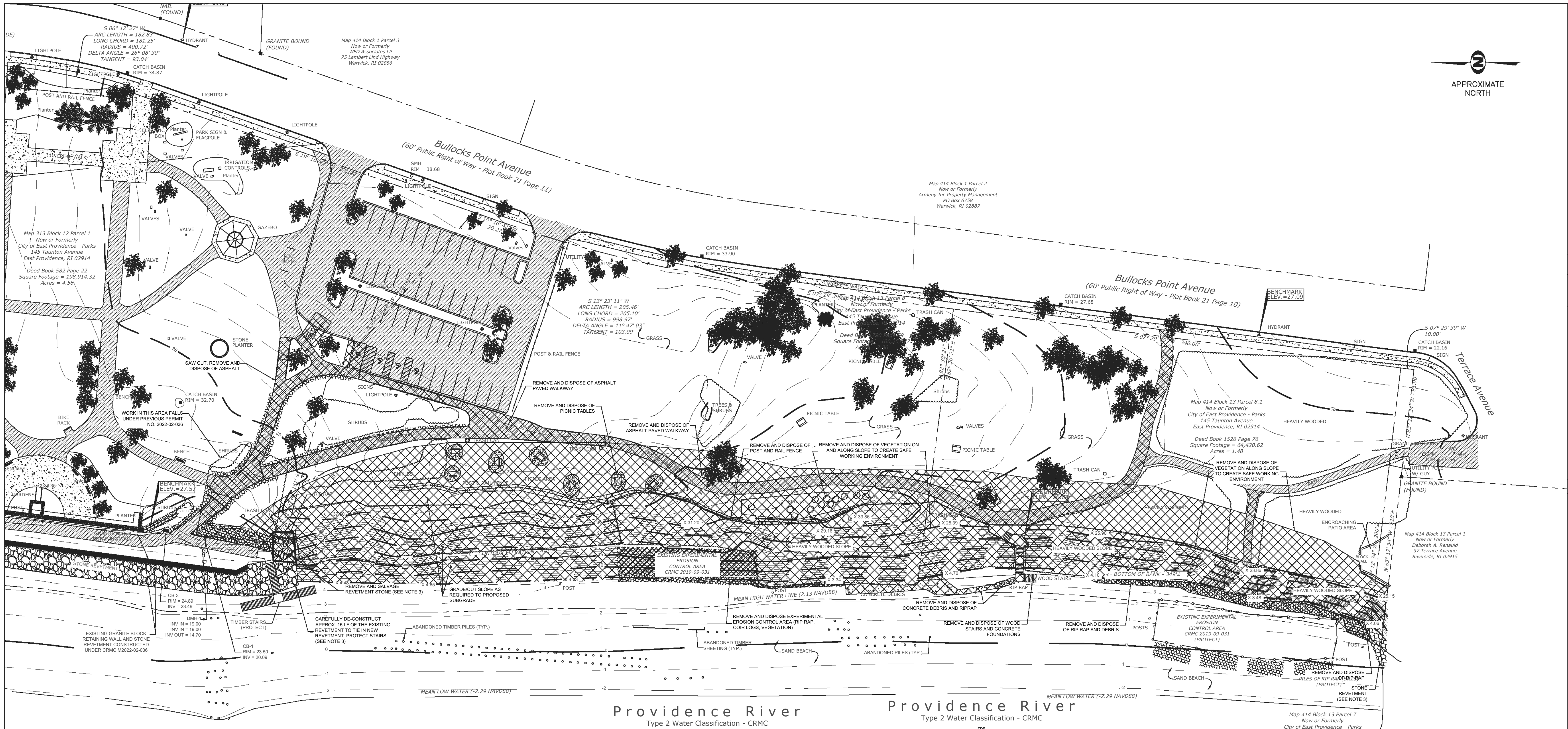
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C-7 C-7

EXISTING CONDITIONS WITH APPROXIMATE AREAS OF EROSION

SCALE: 1" = 30'

NOTE:

- APPROXIMATE AREAS OF 2022 EROSION FROM VISUAL OBSERVATIONS ON DECEMBER 29, 2022.
- APPROXIMATE AREAS OF 2023 EROSION FROM VISUAL OBSERVATIONS ON JANUARY 30, 2024.



1 DEMOLITION PLAN
SCALE: 1" = 40'

LEGEND:
XXXXX INDICATES AREA IS INCLUDED IN DEMOLITION PLAN

- NOTES:
- THIS BASE PLAN WAS DEVELOPED FROM THE FOLLOWING AUTOCAD DWG FILE:
A. '2020050.DWG' BY THE CITY OF EAST PROVIDENCE DEPARTMENT OF PUBLIC WORKS - ENGINEERING DEPARTMENT.
 - THE SURVEY FOR THE BASE PLAN WAS CONDUCTED PRIOR TO THE COMPLETION OF THE NORTHERN REVETMENT. THE LOCATION OF THE NORTHERN REVETMENT IS APPROXIMATE.
 - CONTRACTOR SHALL CAREFULLY REMOVE ARMOR STONES AT ABUTTING REVETMENT AS NEEDED TO CONSTRUCT NEW REVETMENT WITHOUT DAMAGING THE EXISTING FILTER FABRIC. A CRANE OR SPECIALTY EXCAVATOR IS REQUIRED TO PICK UP THE STONES. USE OF AN EXCAVATOR WITHOUT A THUMB WILL NOT BE ALLOWED. DAMAGE TO ANY EXISTING STRUCTURE WILL BE REPAIRED BY THE CONTRACTOR TO THE SATISFACTION OF THE CITY AND CITY'S ENGINEER AT NO COSTS TO THE CITY.



0 20 40 80
FULL SCALE (22X34 PRINT): 1" = 40'
HALF SCALE (11X17 PRINT): 1" = 80'

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REVISION DESCRIPTION	DATE	BY
ISSUED FOR PERMIT	9/27/24	SMR

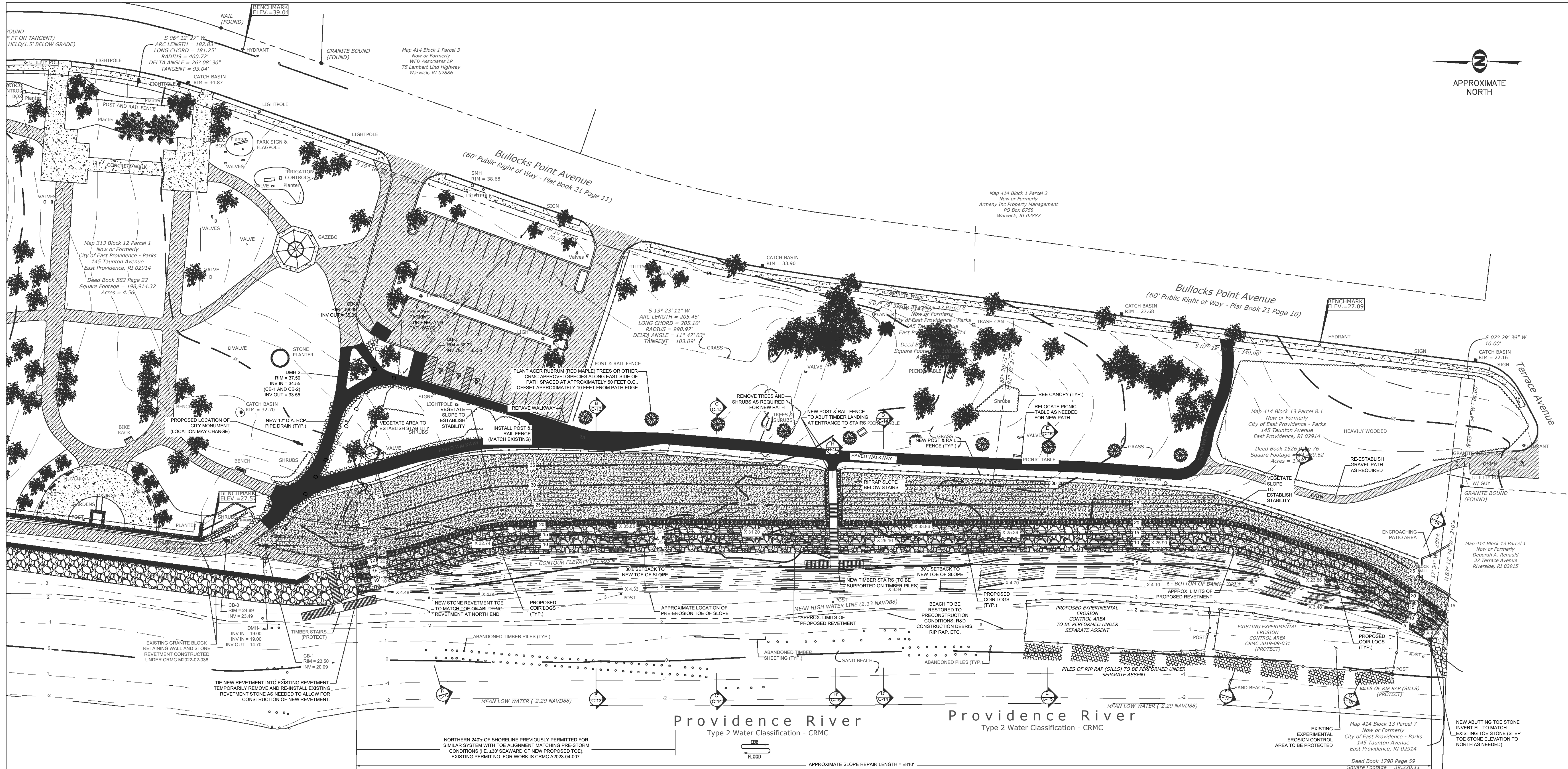
ROSE LARISA MEMORIAL PARK
SLOPE REPAIRS & SHORELINE PROTECTION
EAST PROVIDENCE, RHODE ISLAND
DEMOLITION PLAN

PERMIT PLAN SET
NOT FOR CONSTRUCTION

DATE: SEPTEMBER 27, 2024
DESIGN BY: SMR
DRAWN BY: SJR / CDD
CHECKED BY: SMR
PROJECT NUMBER: 22006.00

C-8
SHEET 8 OF 18





LEGEND

- | | | | |
|--|---------------------------|--|------------------------------|
| | EXISTING CONTOUR (MAJOR) | | EXISTING STONE WALL |
| | EXISTING CONTOUR (MINOR) | | EXISTING UTILITY POLE |
| | PROPOSED CONTOUR (MAJOR) | | EXISTING LIGHT POLE |
| | PROPOSED CONTOUR (MINOR) | | EXISTING WATER GATE |
| | EXISTING OVERHEAD WIRES | | EXISTING HYDRANT |
| | EXISTING SEWER MANHOLE | | EXISTING RIP RAP |
| | EXISTING DRAINAGE MANHOLE | | EXISTING STONE REVETMENT |
| | EXISTING CATCH BASIN | | PROPOSED NEW STONE REVETMENT |
| | EXISTING BUILDING | | PROPOSED VEGETATED SLOPE |
| | EXISTING SPOT GRADE | | PROPOSED COIR LOGS |

1 PROPOSED CONDITIONS

SCALE: 1" = 40'

NOTE:

- EXCESS SAND GENERATED DURING CONSTRUCTION TO BE EVENLY DISTRIBUTED ALONG BEACH, AS NEEDED. REMAINDER OF EXCESS SAND TO BE TRANSPORTED TO THE CITY'S YARD ON FORBES STREET FOR FUTURE BEACH REPLENISHMENT NEEDS.
- CLEAN BEACH AT COMPLETION OF WORK TO ALLOW FOR RAKING.



0 20 40 80
FULL SCALE (22X34 PRINT): 1" = 40'
HALF SCALE (11X17 PRINT): 1" = 80'

REVISION DESCRIPTION	DATE	BY
ISSUED FOR PERMIT	9/27/24	SMR

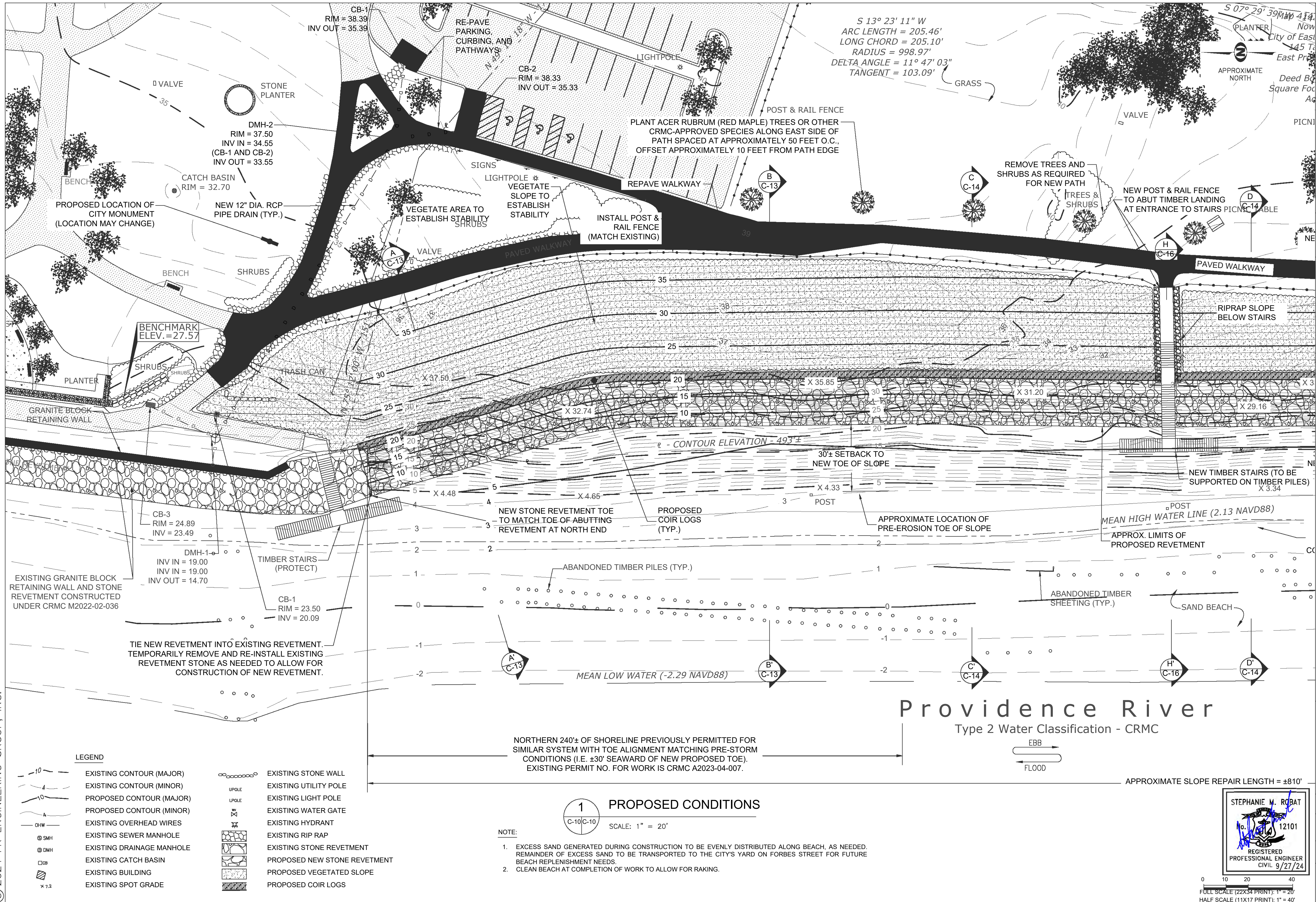
ROSE LARISA MEMORIAL PARK
SLOPE REPAIRS & SHORELINE PROTECTION
EAST PROVIDENCE, RHODE ISLAND
PROPOSED CONDITIONS PLAN - OVERALL

PERMIT PLAN SET
NOT FOR CONSTRUCTION

DATE: SEPTEMBER 27, 2024
DESIGN BY: SMR
DRAWN BY: SJR / CDD
CHECKED BY: SMR
PROJECT NUMBER: 22006.00

C-9
SHEET 9 OF 18





LEGEND

- | | | | |
|-------|---------------------------|---|------------------------------|
| -10- | EXISTING CONTOUR (MAJOR) | ○ | EXISTING STONE WALL |
| -4- | EXISTING CONTOUR (MINOR) | ○ | EXISTING UTILITY POLE |
| -10- | PROPOSED CONTOUR (MAJOR) | ○ | EXISTING LIGHT POLE |
| -4- | PROPOSED CONTOUR (MINOR) | ○ | EXISTING WATER GATE |
| -DHW- | EXISTING OVERHEAD WIRES | ○ | EXISTING HYDRANT |
| SMH | EXISTING SEWER MANHOLE | ○ | EXISTING RIP RAP |
| DMH | EXISTING DRAINAGE MANHOLE | ○ | EXISTING STONE REVETMENT |
| CB | EXISTING CATCH BASIN | ○ | PROPOSED NEW STONE REVETMENT |
| □ | EXISTING BUILDING | ○ | PROPOSED VEGETATED SLOPE |
| x 7.2 | EXISTING SPOT GRADE | ○ | PROPOSED COIR LOGS |

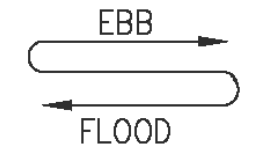
NORTHERN 240'± OF SHORELINE PREVIOUSLY PERMITTED FOR SIMILAR SYSTEM WITH TOE ALIGNMENT MATCHING PRE-STORM CONDITIONS (I.E. ±30' SEAWARD OF NEW PROPOSED TOE). EXISTING PERMIT NO. FOR WORK IS CRMC A2023-04-007.

1 PROPOSED CONDITIONS

SCALE: 1" = 20'

- NOTE:
- EXCESS SAND GENERATED DURING CONSTRUCTION TO BE EVENLY DISTRIBUTED ALONG BEACH, AS NEEDED. REMAINDER OF EXCESS SAND TO BE TRANSPORTED TO THE CITY'S YARD ON FORBES STREET FOR FUTURE BEACH REPLENISHMENT NEEDS.
 - CLEAN BEACH AT COMPLETION OF WORK TO ALLOW FOR RAKING.

Providence River
Type 2 Water Classification - CRMC



APPROXIMATE SLOPE REPAIR LENGTH = ±810'

STEPHANIE M. ROBAT
No. 12101
REGISTERED PROFESSIONAL ENGINEER
CIVIL 9/27/24

0 10 20 40
FULL SCALE (22X34 PRINT): 1" = 20'
HALF SCALE (11X17 PRINT): 1" = 40'

REVISION DESCRIPTION	DATE	BY
ISSUED FOR PERMIT	9/27/24	SMR

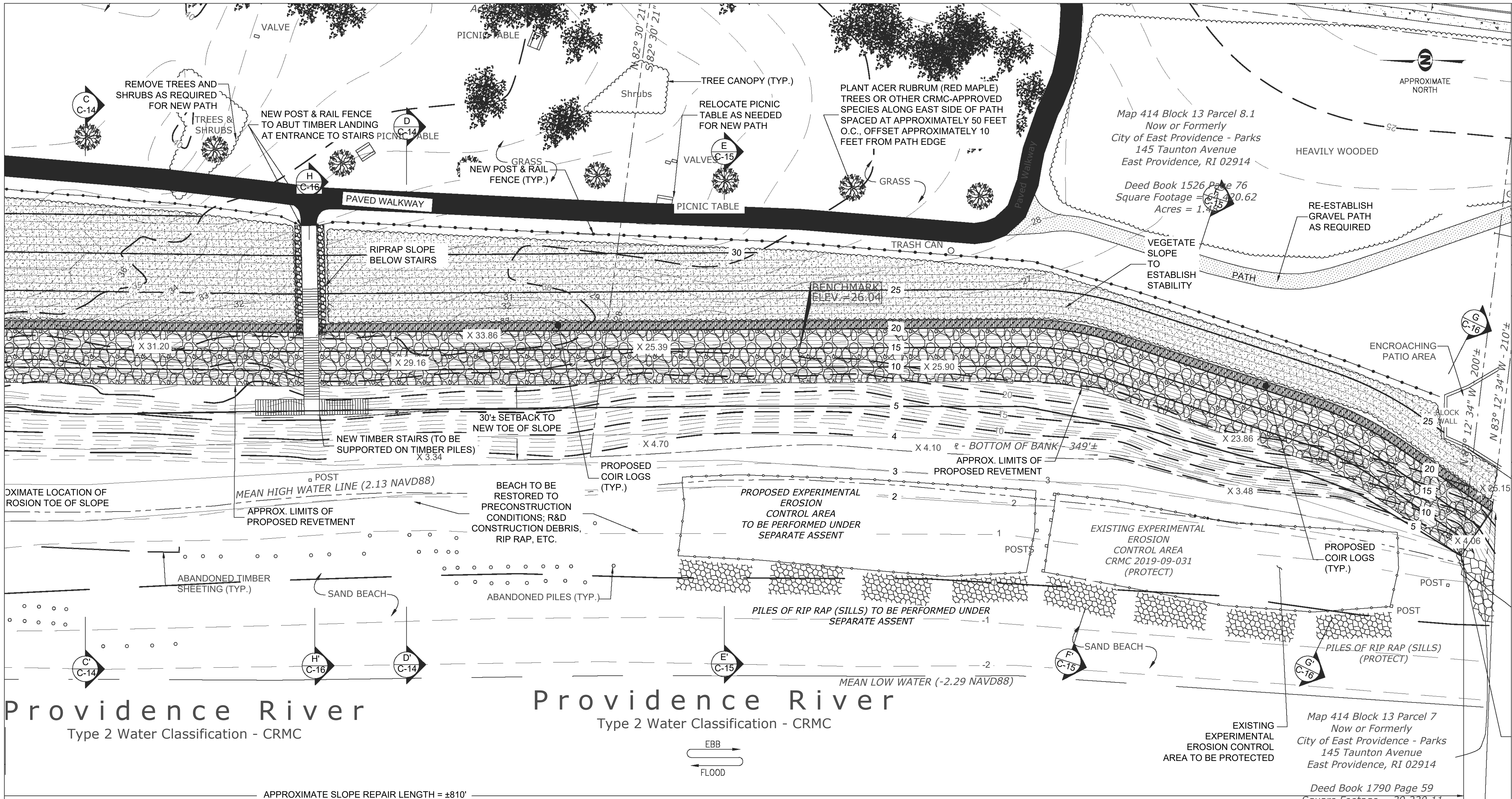
ROSE LARISA MEMORIAL PARK
SLOPE REPAIRS & SHORELINE PROTECTION
EAST PROVIDENCE, RHODE ISLAND
PROPOSED CONDITIONS PLAN - 1 OF 2

PERMIT PLAN SET
NOT FOR CONSTRUCTION

DATE: SEPTEMBER 27, 2024
DESIGN BY: SMR
DRAWN BY: SJR / CDD
CHECKED BY: SMR
PROJECT NUMBER: 22006.00

C-10
SHEET 10 OF 18





#	REVISION DESCRIPTION	DATE	BY
1	ISSUED FOR PERMIT	9/27/24	SMR

ROSE LARISA MEMORIAL PARK
 SLOPE REPAIRS & SHORELINE PROTECTION
 EAST PROVIDENCE, RHODE ISLAND

PROPOSED CONDITIONS PLAN - 2 OF 2



Providence River
 Type 2 Water Classification - CRMC

Providence River
 Type 2 Water Classification - CRMC

Map 414 Block 13 Parcel 7
 Now or Formerly
 City of East Providence - Parks
 145 Taunton Avenue
 East Providence, RI 02914
 Deed Book 1790 Page 59
 Square Footage = 39,220.11
 Acres = 0.90

PROTECT ADJACENT
 PROPERTY'S TIMBER
 RETAINING WALL
 DURING CONSTRUCTION

PERMIT PLAN SET
NOT FOR CONSTRUCTION

DATE: SEPTEMBER 27, 2024
 DESIGN BY: SMR
 DRAWN BY: SJR / CDD
 CHECKED BY: SMR
 PROJECT NUMBER: 22006.00

C-11
 SHEET 11 OF 18

LEGEND

	EXISTING CONTOUR (MAJOR)		EXISTING STONE WALL
	EXISTING CONTOUR (MINOR)		EXISTING UTILITY POLE
	PROPOSED CONTOUR (MAJOR)		EXISTING LIGHT POLE
	PROPOSED CONTOUR (MINOR)		EXISTING WATER GATE
	EXISTING OVERHEAD WIRES		EXISTING HYDRANT
	EXISTING SEWER MANHOLE		EXISTING RIP RAP
	EXISTING DRAINAGE MANHOLE		EXISTING STONE REVETMENT
	EXISTING CATCH BASIN		PROPOSED NEW STONE REVETMENT
	EXISTING BUILDING		PROPOSED VEGETATED SLOPE
	EXISTING SPOT GRADE		PROPOSED COIR LOGS

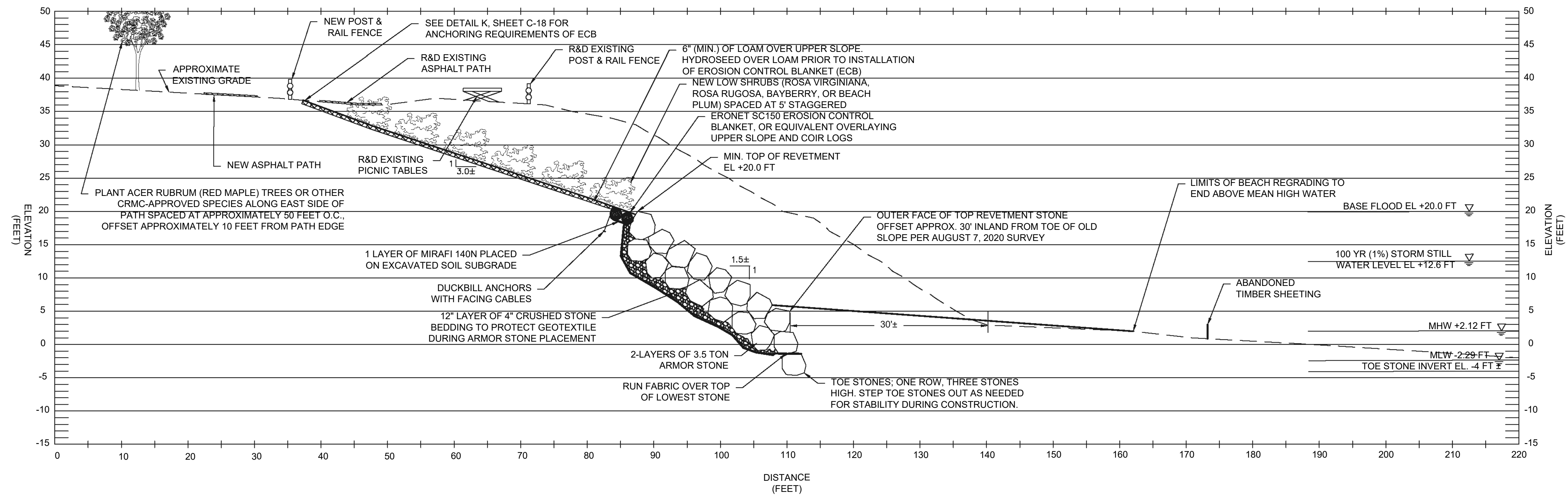
1 PROPOSED CONDITIONS

SCALE: 1" = 20'

- NOTE:
- EXCESS SAND GENERATED DURING CONSTRUCTION TO BE EVENLY DISTRIBUTED ALONG BEACH, AS NEEDED. REMAINDER OF EXCESS SAND TO BE TRANSPORTED TO THE CITY'S YARD ON FORBES STREET FOR FUTURE BEACH REPLENISHMENT NEEDS.
 - CLEAN BEACH AT COMPLETION OF WORK TO ALLOW FOR RAKING.

STEPHANIE W. ROBAT
 12101
 REGISTERED PROFESSIONAL ENGINEER
 CIVIL 9/27/24

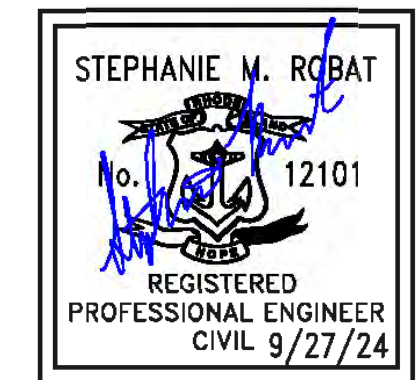
0 10 20 40
 FULL SCALE (22X34 PRINT): 1" = 20'
 HALF SCALE (11X17 PRINT): 1" = 40'



1 TYPICAL REVETMENT SECTION
 C-12/C-12 SCALE: 1" = 10'

NOTES:

1. A TWO ARMOR STONE LAYER REVETMENT SYSTEM IS SHOWN. A THIRD LAYER OF STONE MAY BE REQUIRED DEPENDING ON THE ACTUAL SIZE AND GEOMETRY OF THE STONES PLACED TO MEET THE MINIMUM TOP OF REVETMENT ELEVATION.
2. RECENTLY ERODED AREAS ARE NOT REFLECTED IN THE APPROXIMATE EXISTING GRADE SHOWN.
3. FEMA HAS ISSUED FIS NO. 44007CV001D, DATED JULY 19, 2023 FOR PROVIDENCE COUNTY, RHODE ISLAND. THE TOP OF THE REVETMENT STONE HAS BEEN SET TO EL. +20 FT TO REFLECT THE BFE PROVIDED FOR THE SITE IN THE REPORT. THE REVETMENT WAS DESIGNED FOR A SIGNIFICANT WAVE HEIGHT OF 7.6 FT IN ACCORDANCE WITH THE 2015 FIS TO MAINTAIN DESIGN CONSISTENCY WITH THE ADJACENT REVETMENT SYSTEMS.
4. CONTRACTOR TO PRUNE OR REMOVE DEAD, UNSTABLE/UNSAFE VEGETATION AS NEEDED TO CREATE A SAFE WORKING ENVIRONMENT. EXISTING TREES AND VEGETATION ALONG SLOPE NOT SHOWN FOR CLARITY.



0 5 10 20
 FULL SCALE (22X34 PRINT): 1" = 10'
 HALF SCALE (11X17 PRINT): 1" = 20'

#	REVISION DESCRIPTION	DATE	BY
1	ISSUED FOR PERMIT	9/27/24	SMR

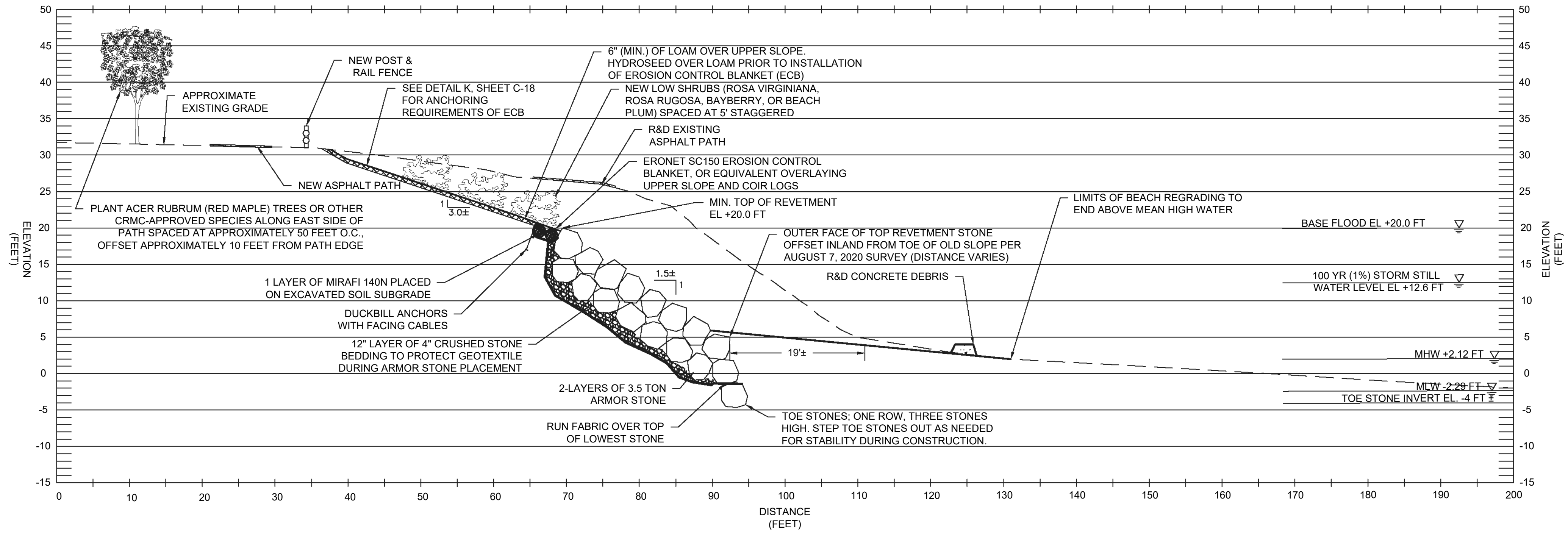
ROSE LARISA MEMORIAL PARK
 SLOPE REPAIRS & SHORELINE PROTECTION
 EAST PROVIDENCE, RHODE ISLAND
 TYPICAL SLOPE REPAIR SECTION

PERMIT PLAN SET
NOT FOR CONSTRUCTION

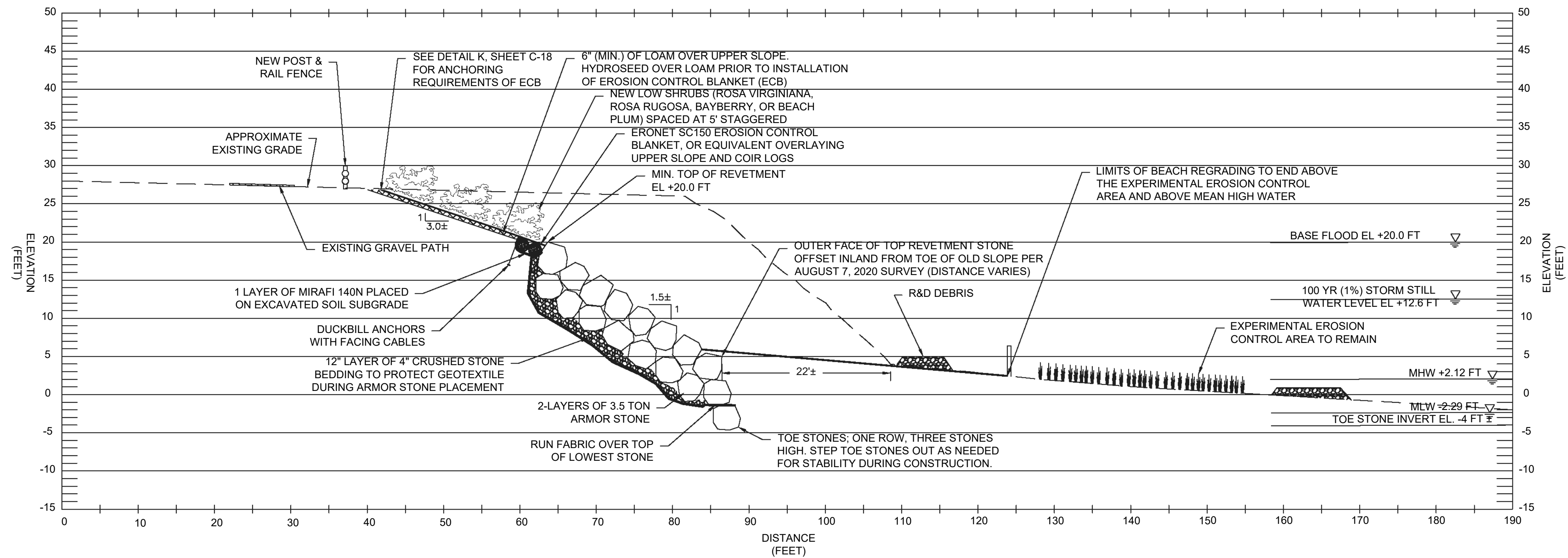
DATE: SEPTEMBER 27, 2024
 DESIGN BY: SMR
 DRAWN BY: SMR / CDD
 CHECKED BY: SJR
 PROJECT NUMBER: 22006.00

C-12
 SHEET 12 OF 18





E-E' REVETMENT SECTION E-E'
C-9 C-15 SCALE: 1" = 10'



F-F' REVETMENT SECTION F-F'
C-9 C-15 SCALE: 1" = 10'

NOTES:

- A TWO ARMOR STONE LAYER REVETMENT SYSTEM IS SHOWN. A THIRD LAYER OF STONE MAY BE REQUIRED DEPENDING ON THE ACTUAL SIZE AND GEOMETRY OF THE STONES PLACED TO MEET THE MINIMUM TOP OF REVETMENT ELEVATION.
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- CONTRACTOR TO PRUNE OR REMOVE DEAD, UNSTABLE/UNSAFE VEGETATION AS NEEDED TO CREATE A SAFE WORKING ENVIRONMENT. EXISTING TREES AND VEGETATION ALONG SLOPE NOT SHOWN FOR CLARITY.



0 5 10 20
FULL SCALE (22X34 PRINT): 1" = 10'
HALF SCALE (11X17 PRINT): 1" = 20'

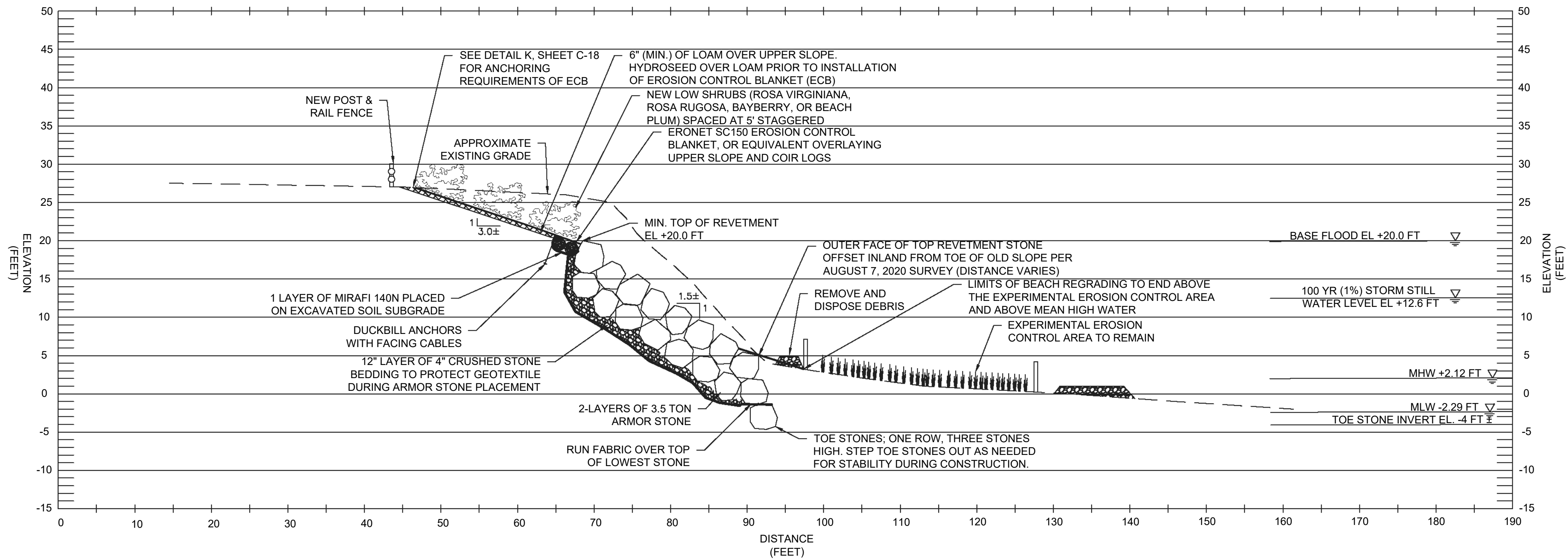
REVISION DESCRIPTION	DATE	BY
ISSUED FOR PERMIT	9/27/24	SMR

ROSE LARISA MEMORIAL PARK
SLOPE REPAIRS & SHORELINE PROTECTION
EAST PROVIDENCE, RHODE ISLAND
SLOPE REPAIR CROSS SECTION
3 OF 4

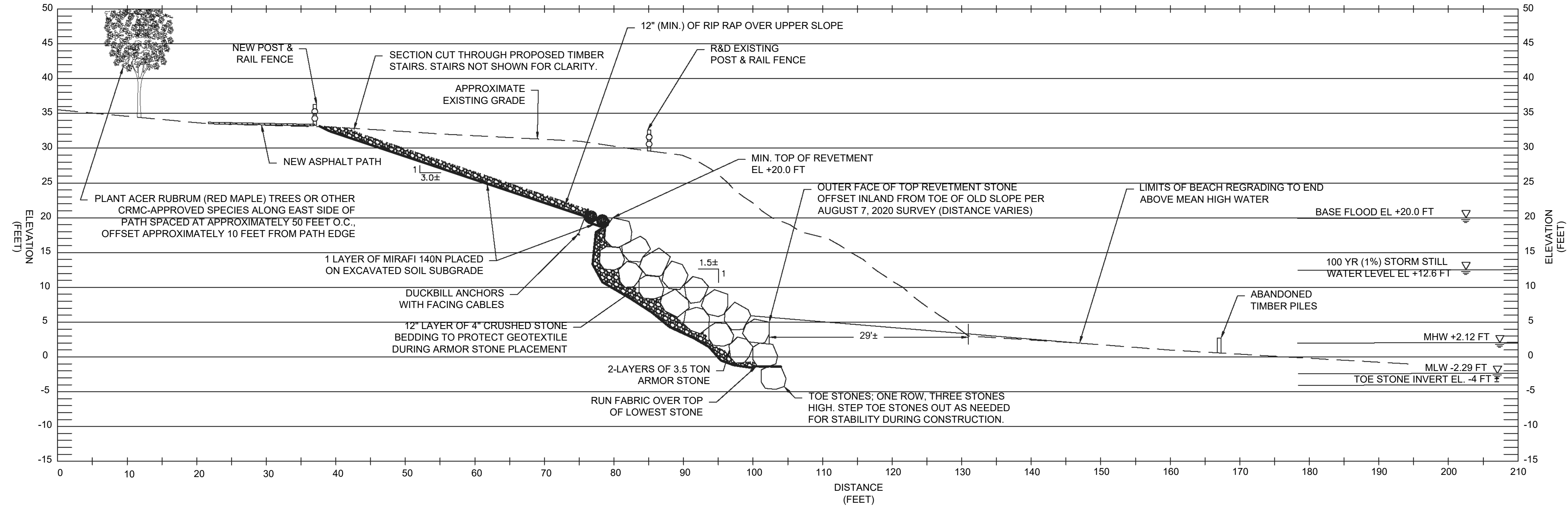
PERMIT PLAN SET
NOT FOR CONSTRUCTION

DATE: SEPTEMBER 27, 2024
DESIGN BY: SMR
DRAWN BY: ADS / CDD
CHECKED BY: SMR
PROJECT NUMBER: 22006.00





G-G' REVETMENT SECTION G-G'
C-9 C-16 SCALE: 1" = 10'



H-H' REVETMENT SECTION H-H'
C-9 C-16 SCALE: 1" = 10'

NOTES:

- A TWO ARMOR STONE LAYER REVETMENT SYSTEM IS SHOWN. A THIRD LAYER OF STONE MAY BE REQUIRED DEPENDING ON THE ACTUAL SIZE AND GEOMETRY OF THE STONES PLACED TO MEET THE MINIMUM TOP OF REVETMENT ELEVATION.
- RECENTLY ERODED AREAS ARE NOT REFLECTED IN THE APPROXIMATE EXISTING GRADE SHOWN.
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- CONTRACTOR TO PRUNE OR REMOVE DEAD, UNSTABLE/UNSAFE VEGETATION AS NEEDED TO CREATE A SAFE WORKING ENVIRONMENT. EXISTING TREES AND VEGETATION ALONG SLOPE NOT SHOWN FOR CLARITY.



0 5 10 20
FULL SCALE (22X34 PRINT): 1" = 10'
HALF SCALE (11X17 PRINT): 1" = 20'

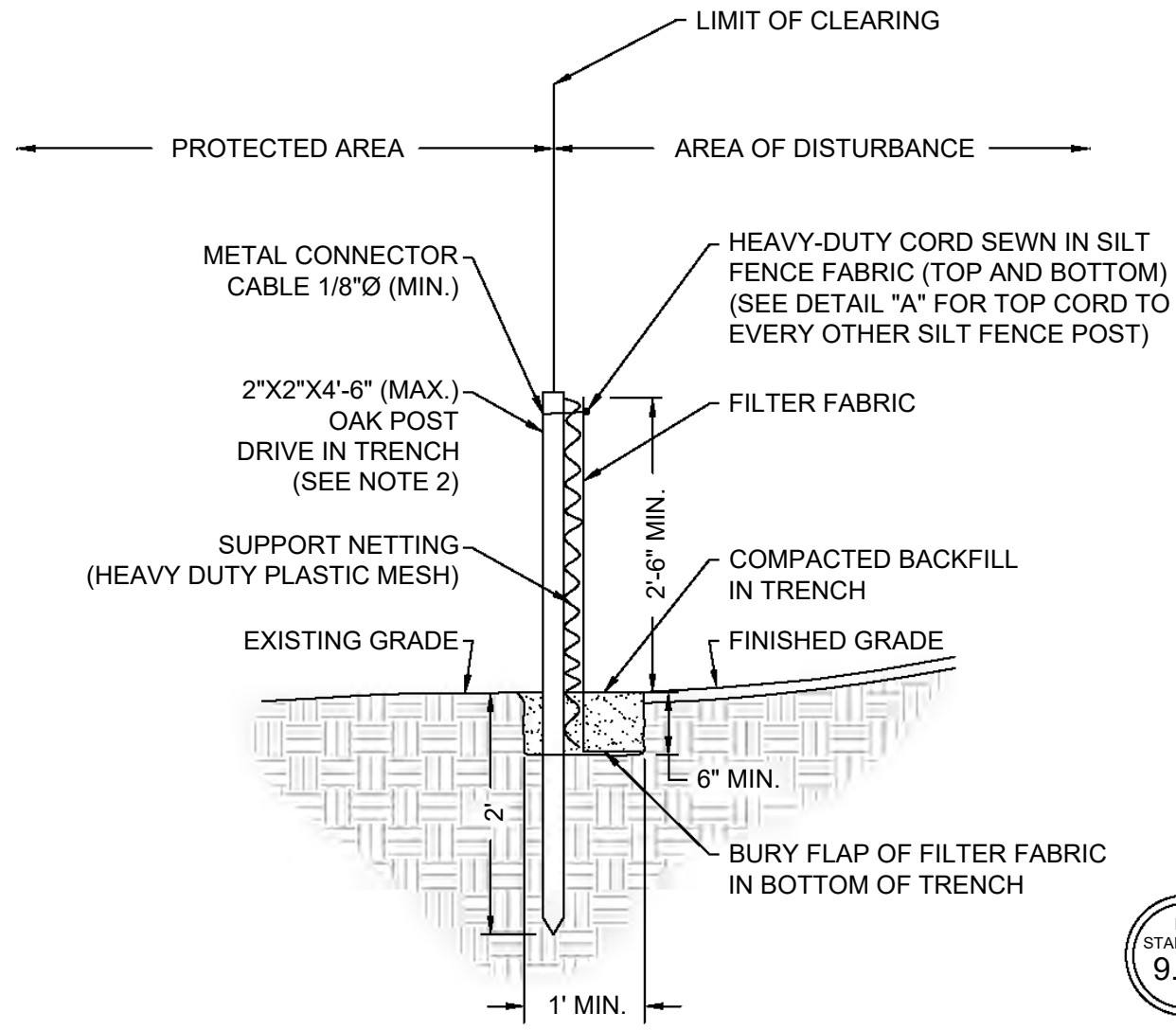
REVISION DESCRIPTION	DATE	BY
ISSUED FOR PERMIT	9/27/24	SMR

ROSE LARISA MEMORIAL PARK
SLOPE REPAIRS & SHORELINE PROTECTION
EAST PROVIDENCE, RHODE ISLAND
SLOPE REPAIR CROSS SECTION
4 OF 4

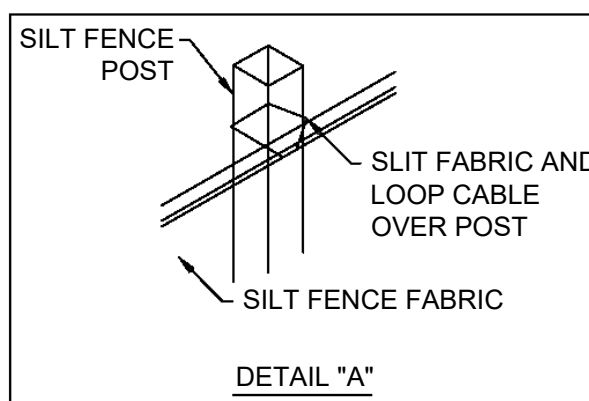
PERMIT PLAN SET
NOT FOR CONSTRUCTION

DATE: SEPTEMBER 27, 2024
DESIGN BY: SMR
DRAWN BY: ADS / CDD
CHECKED BY: SMR
PROJECT NUMBER: 22006.00

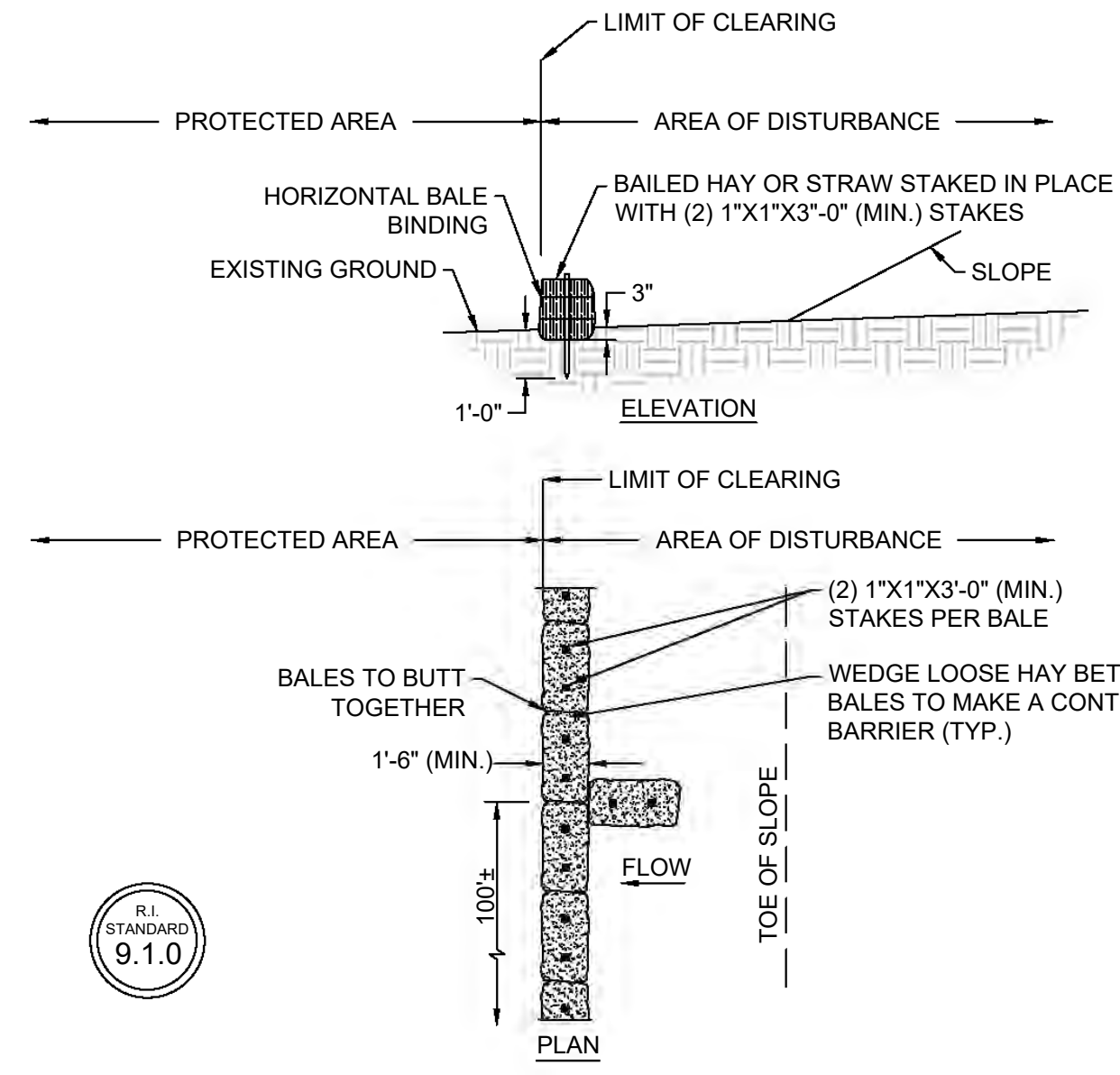




- NOTES:
1. SHALL BE IN ACCORDANCE WITH SECTION 208 OF THE RHODE ISLAND STANDARD SPECIFICATIONS.
 2. 2"x2"x4'-6" (MAX.) OAK POSTS FOR SILT FENCE SHALL BE LOCATED 8'-0" (MAX.) O.C. IN WETLAND AREAS AND 4'-0" (MAX.) O.C. IN WETLAND RAVINE, GULLY OR DROP-OFF AREAS.
 3. 1"x1"x4'-6" (MIN.) POSTS PERMITTED FOR PRE-FABRICATED SILT FENCE.
 4. SILT FENCE SHALL BE INSTALLED BEFORE ANY GRUBBING OR EARTH EXCAVATION TAKES PLACE.

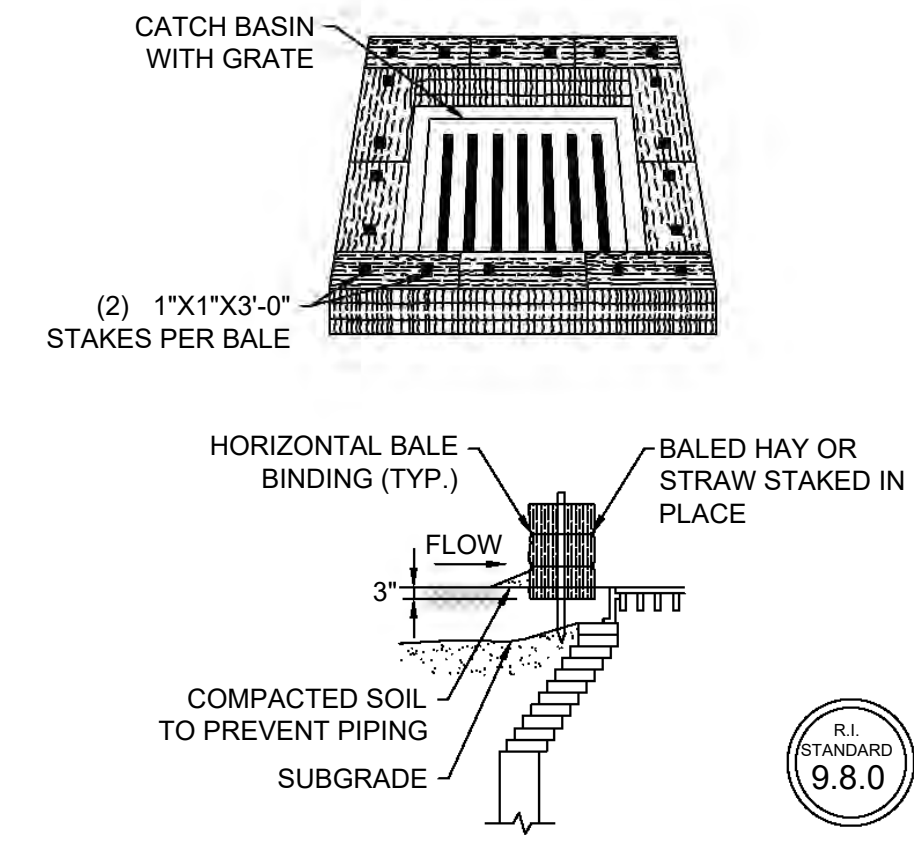


A SILT FENCE
C-17/C-17 SCALE: NTS



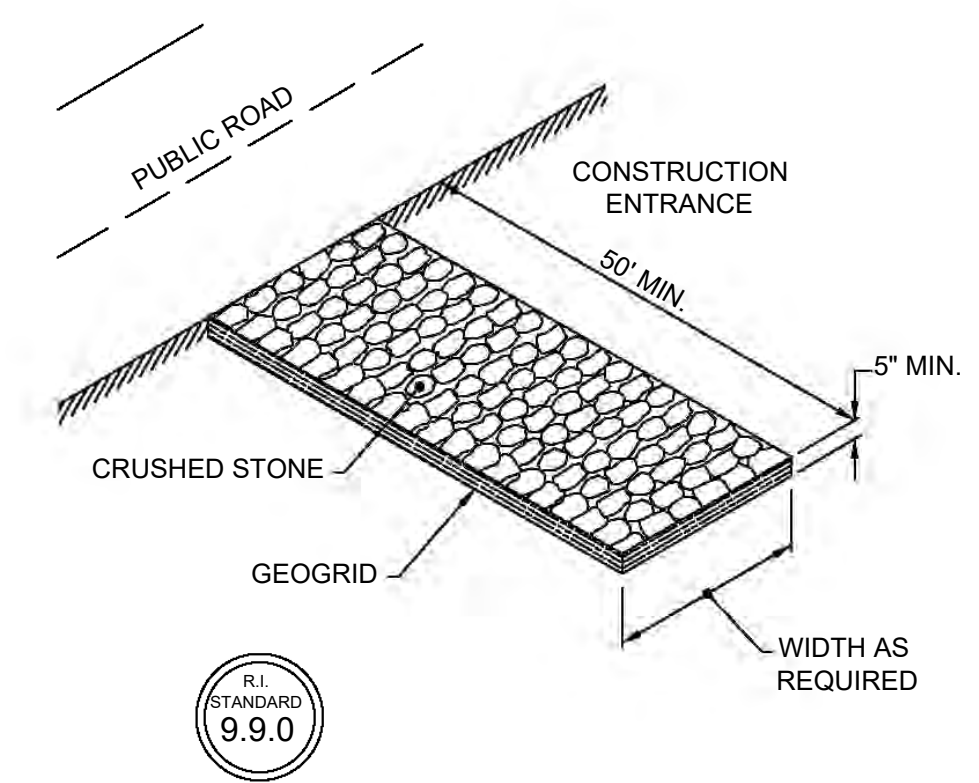
- NOTES:
1. SHALL BE IN ACCORDANCE WITH SECTION 206 OF THE RHODE ISLAND STANDARD SPECIFICATIONS.
 2. AT APPROXIMATE 100' INTERVALS, A BALE OF HAY IS TO BUTT PERPENDICULARLY.

B BALED HAY EROSION CHECK
C-17/C-17 SCALE: NTS



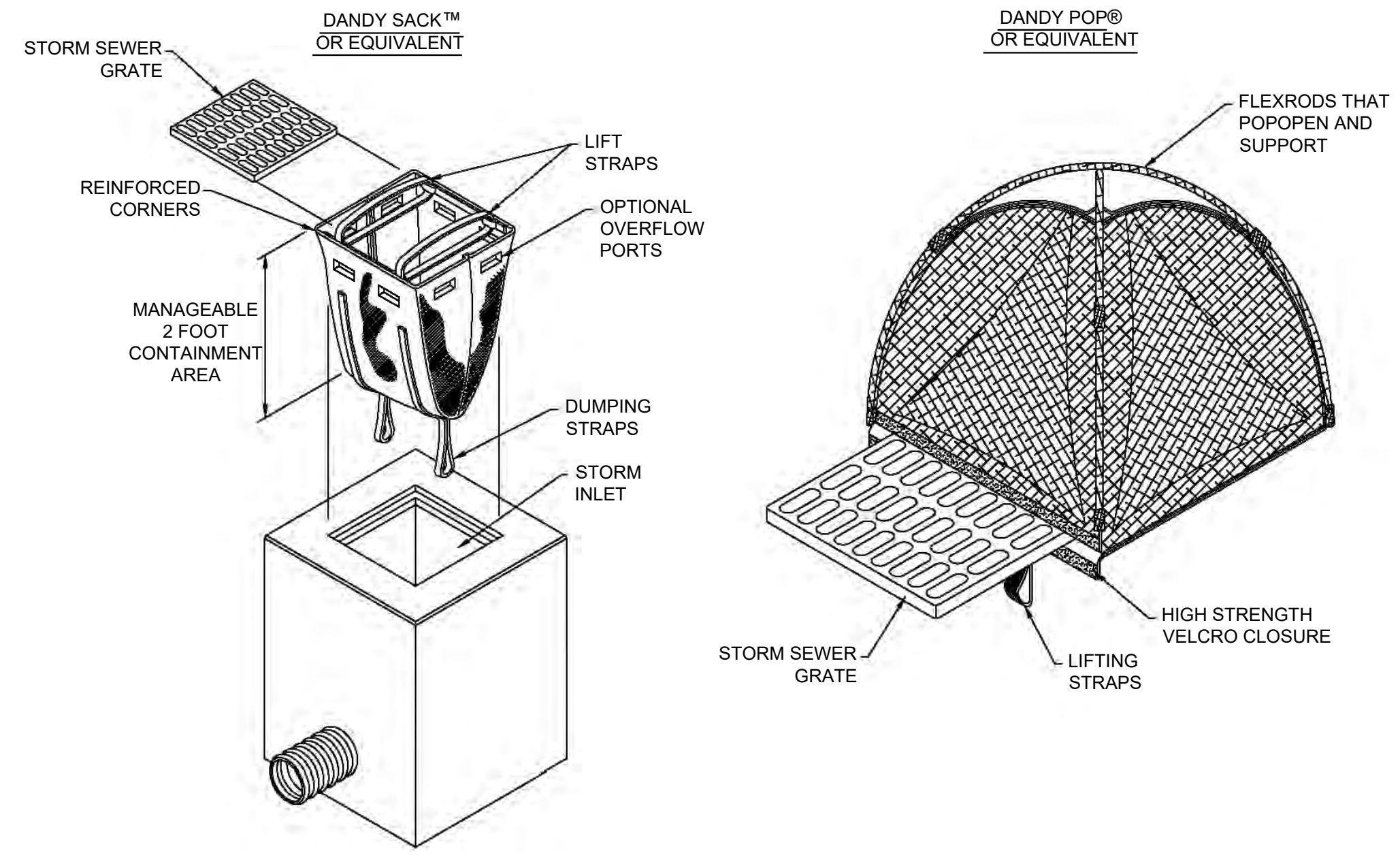
- NOTES:
1. SHALL BE IN ACCORDANCE WITH THE RHODE ISLAND STANDARD SPECIFICATIONS.
 2. THIS INLET PROTECTION CAN ALSO BE USED WHEN CONSTRUCTION SEQUENCING REQUIRES A CATCH BASIN TO BE EXPOSED TO SEDIMENT FROM THE SUBGRADE. THIS WILL BE ACHIEVED BY INSTALLING THE BALED HAY AS SHOWN IN THIS DETAIL IN TO THE SUBGRADE.
 3. THE PERIMETER CONFIGURATION OF THE BALED HAY WILL VARY DEPENDING ON THE PARTICULAR TYPE OF CATCH BASIN INLET BEING CONSTRUCTED.

C BALED HAY CATCH BASIN INLET PROTECTION
C-17/C-17 SCALE: NTS



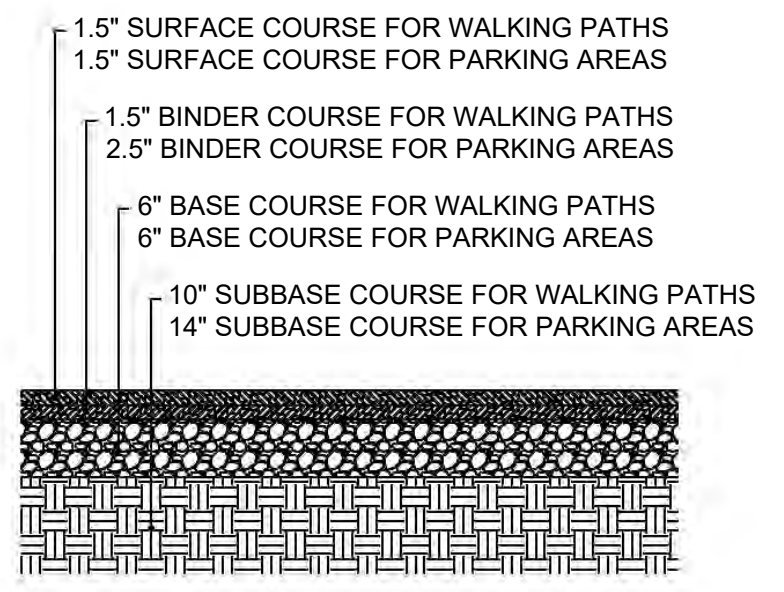
- NOTE:
1. SHALL BE IN ACCORDANCE WITH SECTION 211 OF THE RHODE ISLAND STANDARD SPECIFICATIONS.

D CONSTRUCTION ENTRANCE
C-17/C-17 SCALE: NTS



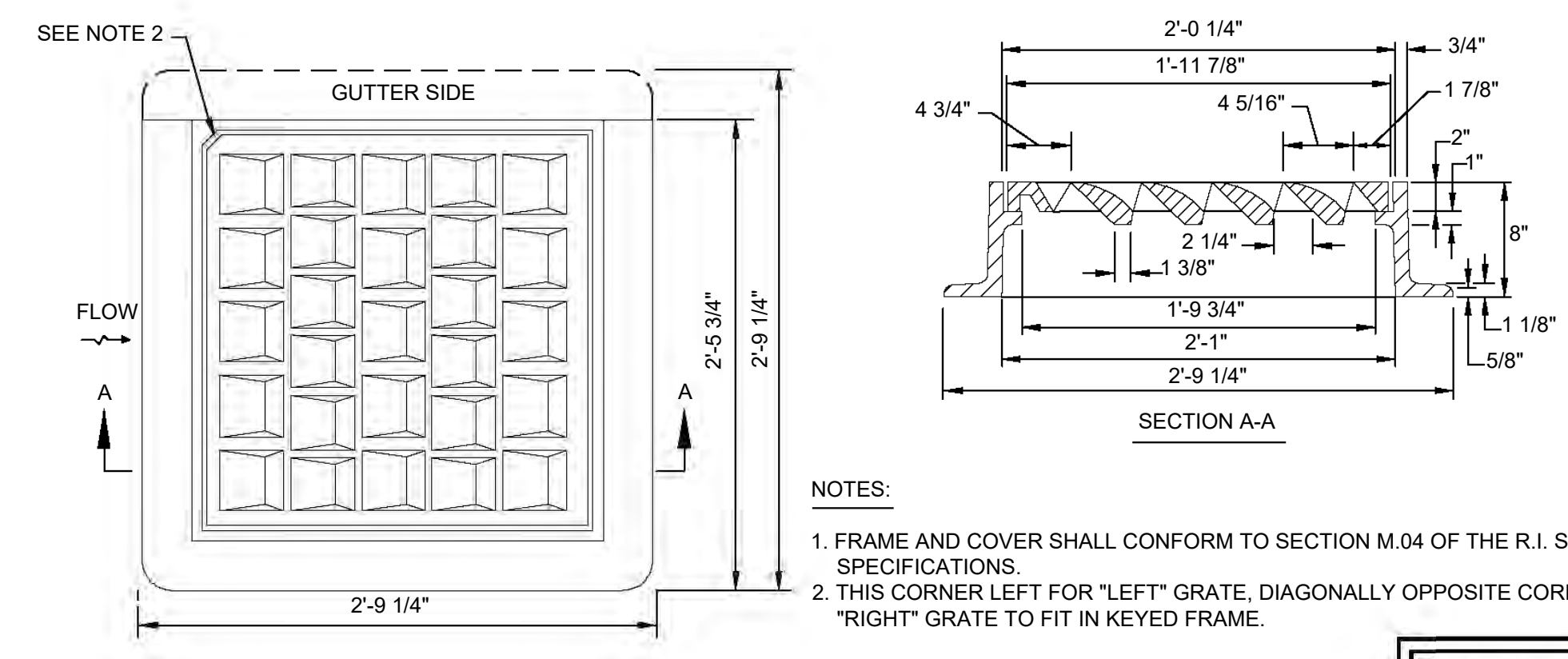
- NOTE:
1. SHALL BE INSTALLED AND MAINTAINED PER THE MANUFACTURER'S RECOMMENDATIONS.

E CATCH BASIN SEDIMENT PROTECTION
C-17/C-17 SCALE: NTS



- NOTES:
1. SURFACE AND BINDER COURSE SHALL CONFORM TO RIDOT BLUEBOOK M.03 BITUMINOUS PAVEMENT.
 2. BASE COURSE SHALL BE GRAVEL BORROW CONFORMING TO RIDOT BLUEBOOK M01.09, TABLE 1, I, "GRAVEL BORROW", 1A (<8 PASSING #200 SIEVE).
 3. SUBBASE SHALL BE PERVIOUS FILL CONFORMING TO RIDOT BLUEBOOK M01.09, TABLE 1, IV, "PREVIOUS FILL", TYPE D.
 4. EXPOSED SUBGRADE SHALL BE PROOF ROLLED OR PROOF COMPACTED PRIOR TO PLACING SUBBASE. WEAK AREAS SHALL BE EXCAVATED AND REPLACED WITH PERVIOUS FILL COMPACTED TO A MIN. 95% OF THE MODIFIED PROCTOR DENSITY.
 5. BASE AND SUBBASE COURSES SHALL BE COMPACTED TO A MIN. OF 95% OF THE MODIFIED PROCTOR DENSITY.
 6. RE-STRIPE PAVEMENT WHERE NEEDED TO MATCH EXISTING CONDITIONS.

F PAVEMENT
C-17/C-17 SCALE: NTS



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

G HIGH CAPACITY FRAME AND GRATE (BICYCLE SAFE)
C-17/C-17 SCALE: NTS



REVISION DESCRIPTION	DATE	BY
ISSUED FOR PERMIT	9/27/24	SMR

ROSE LARISA MEMORIAL PARK
SLOPE REPAIRS & SHORELINE PROTECTION
EAST PROVIDENCE, RHODE ISLAND

TYPICAL DETAILS
1 OF 2

PERMIT PLAN SET
NOT FOR CONSTRUCTION

DATE:
SEPTEMBER 27, 2024
DESIGN BY: SMR
DRAWN BY: SJR / CDD
CHECKED BY: SMR
PROJECT NUMBER:
22006.00



