

# SITE PLANS FOR A SIDEWALK IMPROVEMENT PROJECT

## SAYLES AVENUE

(210' NORTH OF BRIDGE WAY TO PASCOAG MAIN STREET)

&

## BRIDGE WAY

(SAYLES AVENUE TO THE RIVER WALK)



### BURRILLVILLE, RHODE ISLAND

MICHAEL C. WOOD, TOWN MANAGER

JEFFREY M. McCORMICK, P.E., DIRECTOR OF PUBLIC WORKS

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS  
AS SPECIFIED IN THE LETTER OF APPROVAL  
DATED APR 15 2011 FILE # 11-0022  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE.

#### PROJECT TEAM

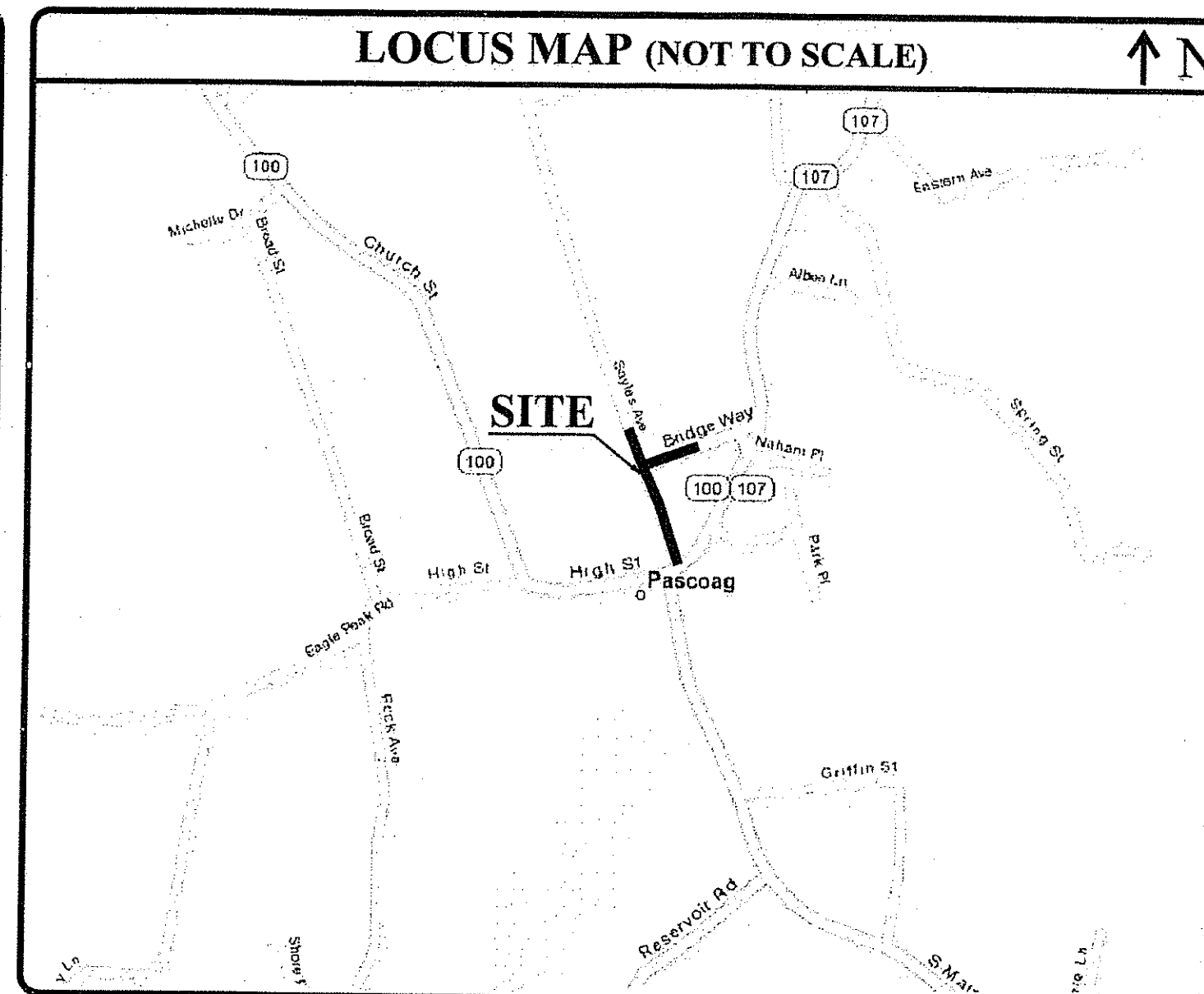
**OWNER:** TOWN OF BURRILLVILLE  
105 HARRISVILLE MAIN STREET  
BURRILLVILLE, RI 02830

**CIVIL:** JOE CASALI ENGINEERING, INC.  
300 POST ROAD  
WARWICK, RI 02888  
PHONE: 401-944-1300  
FAX: 401-944-1313

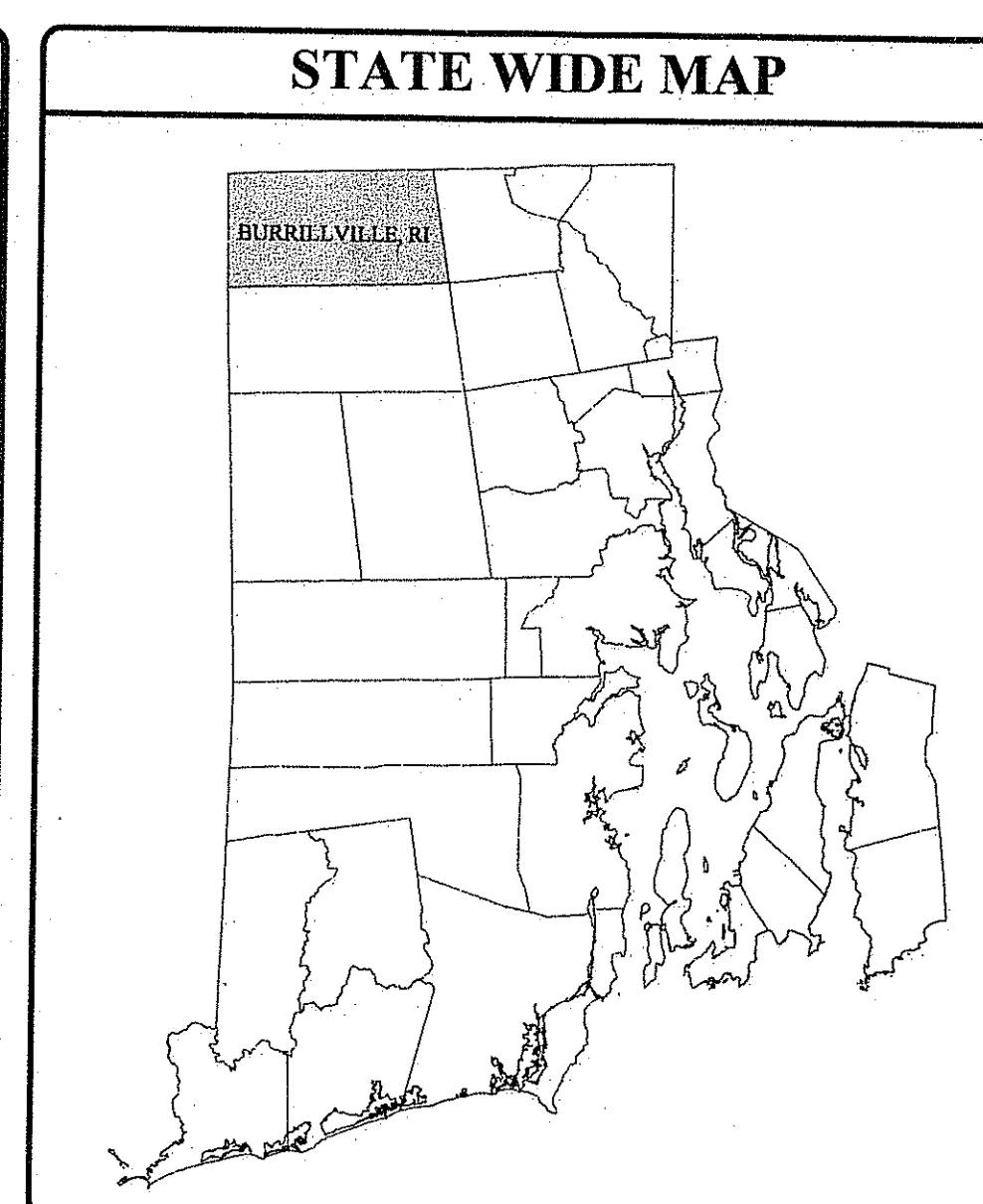
**SURVEYOR:** WATERMAN ENGINEERING COMPANY  
46 SUTTON AVENUE  
EAST PROVIDENCE, RI 02914  
PHONE: 401-438-5775

**LANDSCAPE ARCHITECT:** DIANE SOULE & ASSOCIATES  
422 FARNUM PIKE  
SMITHFIELD, RI 02914  
PHONE: 401-231-0736

#### LOCUS MAP (NOT TO SCALE)

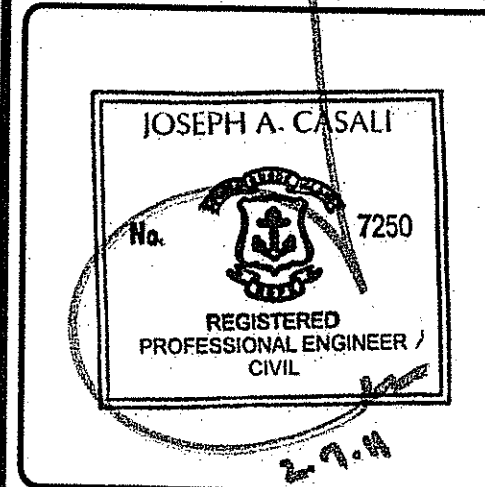
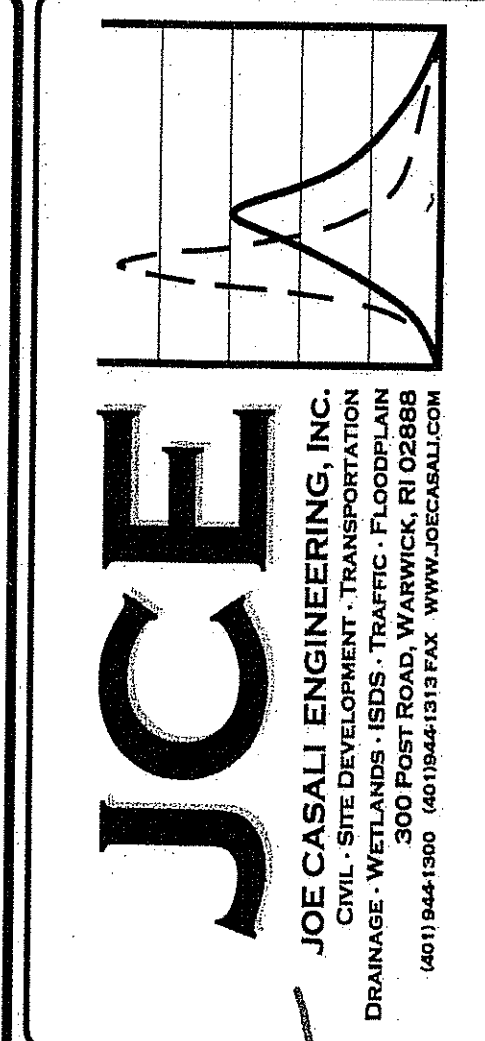
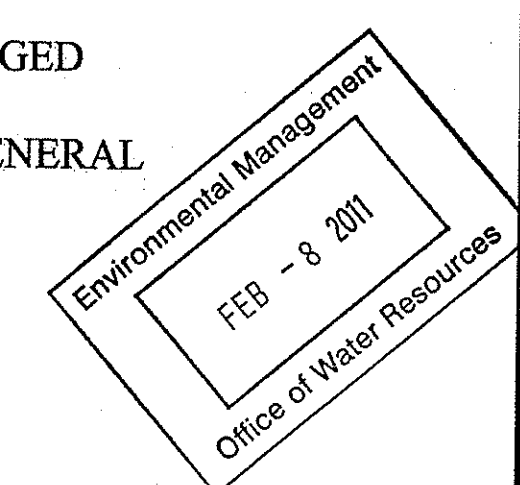
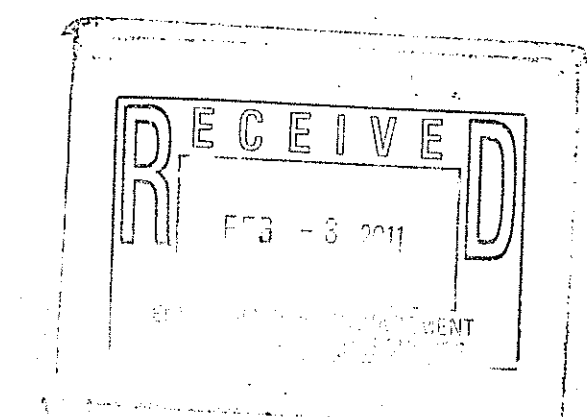


#### STATE WIDE MAP



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SAYLES AVENUE  
&  
BRIDGE WAY  
(210' NORTH OF BRIDGE WAY TO PASCOAG MAIN STREET)  
(SAYLES AVENUE TO THE RIVER WALK)  
BURRILLVILLE, RHODE ISLAND



| NO. | DATE     | DESCRIPTION      |
|-----|----------|------------------|
| 1   | 9/20/10  | 75% SUBMISSION   |
| 2   | 10/17/10 | 90% SUBMISSION   |
| 3   | 10/15/10 | 100% SUBMISSION  |
| 4   | 2/7/11   | RIDEM SUBMISSION |

DESIGNED BY: GEC  
DRAWN BY: WMLJR  
CHECKED BY: JAC  
DATE: AUGUST 2010  
PROJECT NO: 05-92b

100% DESIGN

**COVER SHEET**

**SHEET 1 OF 12**

Q:\05-92 Town of Burrillville\05-92b Sayles Ave SW Project\ACAS\05-92b Sayles Ave SIDEWALK (PLANS) SET.dwg Feb. 07. 2011 12:25pm

**GENERAL NOTES:**

- CLASS III TOPOGRAPHIC SURVEY AND RIGHT OF WAY INFORMATION COMPLETED BY WATERMAN ENGINEERING COMPANY, 46 SUITON AVENUE, EAST PROVIDENCE, RI.
  - THE LOCATION AND DEPTH OF EXISTING UTILITIES ARE APPROXIMATE AND HAVE BEEN PLOTTED FROM THE LATEST AVAILABLE INFORMATION. THE UTILITY LOCATIONS ARE APPROXIMATE AND MAY NOT BE ALL INCLUSIVE. THE CONTRACTOR SHALL CHECK AND VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES, BOTH OVERHEAD AND UNDERGROUND, AND "DIG-SAFE" MUST BE NOTIFIED PRIOR TO COMMENCING ANY CONSTRUCTION OPERATIONS. RESTORATION AND REPAIR OF DAMAGE TO EXISTING UTILITIES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR WITH NO ADDITIONAL COST TO THE OWNER. NO EXCAVATION SHALL COMMENCE UNTIL ALL INVOLVED UTILITY COMPANIES AND/OR CITY WHOSE FACILITIES MIGHT BE AFFECTED BY ANY WORK TO BE PERFORMED BY THE CONTRACTOR ARE NOTIFIED AT LEAST 72 HOURS IN ADVANCE.
- SITE NOTES:**
- CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND LEGALLY DISPOSING (R&D) OF ALL MATERIALS INDICATED ON THE PLANS.
  - STOCKPILES OF EARTH MATERIALS SHALL NOT BE LOCATED ADJACENT TO DRAINAGE STRUCTURES.
  - ALL DISTURBED AREAS OUTSIDE OF THE PAVED AREAS WILL RECEIVE A MINIMUM OF 6" OF LOAM AND SEED.
  - THE CONTRACTOR SHALL PROVIDE AND MAINTAIN SURVEY LAYOUT SERVICES FOR THE WORK AND SHALL SUBMIT "AS-BUILT" DRAWINGS OF ALL WORK, WHICH SHALL BE STAMPED AND CERTIFIED BY A RHODE ISLAND REGISTERED PROFESSIONAL LAND SURVEYOR OR A RHODE ISLAND REGISTERED PROFESSIONAL ENGINEER.
  - ANY ITEM OF WORK NOT SPECIFICALLY INDICATED ON THE PLANS BUT IS REQUIRED FOR THE COMPLETE CONSTRUCTION OF THE PROJECT WILL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND INCLUDED IN THE CONTRACT BID PRICE. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL EXISTING SITE CONDITIONS.
  - WHERE NECESSARY TO REMOVE CURBS, CATCH BASINS OR DRAINS TO COMPLETE WORK, THE CONTRACTOR SHALL REPLACE SUCH ITEMS TO THE SATISFACTION OF THE TOWN AT NO ADDITIONAL COST TO THE OWNER.
  - ANY EXISTING PIPE OR UTILITY DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED IMMEDIATELY BY THE CONTRACTOR AT NO COST TO THE OWNER OR TOWN.
  - THE CONTRACTOR SHALL RESTORE TO ITS ORIGINAL CONDITION OR REPLACE TREES, SHRUBS, FENCES, SIGNS, GUARDRAILS, DRIVEWAYS, SIDEWALKS AND ANY OTHER OBJECT AFFECTED BY THIS OPERATION.
  - THE TOPS OF ALL VALVE BOXES AND CURB BOXES SHALL BE FLUSH WITH GROUND OR PAVEMENT SURFACE LEVEL AND PLUMB, UNLESS OTHERWISE DIRECTED.
  - ROADWAYS SHALL BE LEFT PASSABLE AT ALL TIMES. CLOSURE OF ROADWAY IS NOT PERMITTED.
  - THE CONTRACTOR SHALL PROVIDE ACCESS TO ALL DRIVEWAYS AT COMPLETION OF EACH DAYS WORK.
  - WATER SERVICE SHALL BE MAINTAINED AT ALL TIMES.
  - ALL LEDGE TO BE REMOVED BY MECHANICAL MEANS.
  - ALL CONSTRUCTION WORK SHALL BE PERFORMED IN THE DRY. THE CONTRACTOR SHALL PROVIDE, OPERATE AND MAINTAIN ALL PUMPS, DRAINS, WET POINTS, SCREENS, OR OTHER FACILITIES NECESSARY TO CONTROL, COLLECT AND DISPOSE OF ALL SURFACE AND SUBSURFACE WATER ENCOUNTERED IN THE PERFORMANCE OF THE WORK.
  - ALL SITE WORK, INCLUDING BUT NOT LIMITED TO, BITUMINOUS PAVEMENT, ROADWAY CONSTRUCTION, AGGREGATE MATERIALS, DRAINAGE STRUCTURES, CURBING, SIDEWALK, LANDSCAPING, SAW CUTTING, ETC. SHALL CONFORM TO THE RHODE ISLAND DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADWAY AND BRIDGE CONSTRUCTION, 2004 EDITION (WITH LATEST ADDENDA) AND THE RIDOT STANDARD DETAILS, 1998 EDITION (WITH LATEST ADDENDA).

**MISCELLANEOUS UTILITY NOTES:**

- PRIOR TO CONSTRUCTION ALL POTENTIAL UTILITY/DRAINAGE CONFLICTS MUST BE IDENTIFIED BY THE CONTRACTOR. ANY MODIFICATIONS TO THE PROPOSED UTILITIES TO AVOID CONFLICTS MUST BE APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION.
- THE UTILITY PLAN DOES NOT DEPICT THE NECESSARY ELECTRICAL CONDUIT/WIRING TO SERVICE THE PROPOSED LIGHTING, WHICH WILL BE PERFORMED BY THE CONTRACTOR FOR NO ADDITIONAL COST.
- OVERHEAD ELECTRIC AND TELEPHONE SERVICES ARE TO BE REMOVED BY THE APPROPRIATE UTILITY COMPANY AND COORDINATED BY THE CONTRACTOR.
- THE CONTRACTOR SHALL AT ALL TIMES PROVIDE A SUFFICIENT NUMBER OF WORKMEN AND GUARDS AS MAY BE NECESSARY TO PROPERLY SAFEGUARD THE PUBLIC FROM THESE OPERATIONS.
- THE CONTRACTOR SHALL TAKE PRECAUTIONS AGAINST DAMAGING OF PAVING, SIDEWALKS, UTILITIES, OR PRIVATE PROPERTIES AND SHALL PROMPTLY REPAIR AT HIS OWN EXPENSE ANY DAMAGE TO SUCH PAVING, SIDEWALKS, UTILITIES, OR PRIVATE PROPERTIES TO THE SATISFACTION OF THE OWNER OR TOWN.
- EXISTING UTILITY FRAMES AND COVERS FOR SANITARY SEWER, WATER, GAS, STORM DRAINAGE AND OTHER UTILITIES SHALL BE ADJUSTED TO GRADE AS REQUIRED IN NEW PAVING AND PAVEMENT OVERLAY AREAS.

**LAYOUT NOTE:**

THE LAYOUT SHOWN REPRESENTS A GRAPHICAL DESIGN, AND PRIOR TO THE CONSTRUCTION, THE CONTRACTOR SHALL ENGAGE A PROFESSIONAL LAND SURVEYOR (PLS) REGISTERED IN THE STATE OF RHODE ISLAND TO SET AND VERIFY ALL LINES AND GRADES. ALL EXISTING UTILITY LOCATIONS AND ELEVATIONS ARE TO BE CONFIRMED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. ANY ITEMS FOUND WHICH DO NOT MATCH THE PLANS MUST BE BROUGHT TO THE ENGINEER'S ATTENTION PRIOR TO CONSTRUCTION FOR REVIEW. NO WORK SHALL PROCEED UNTIL AUTHORIZED BY THE ENGINEER.

**BMP MAINTENANCE SCHEDULE:**

- ALL MAINTENANCE (INCLUDING CLEANING) REQUIRED DURING THE CONSTRUCTION PHASE OF THE PROJECT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL INCLUDE:
  - MEASURES NEEDED TO ENSURE THE PROPER OPERATION OF THE STORMWATER RUNOFF (DRAINAGE) AND WATER QUALITY CONTROL SYSTEMS TO INCLUDE INSPECTION, CLEANING AND REPAIRS ALL PIPES, INTAKE AND DISCHARGE STRUCTURES, CATCH BASIN SUMPS, AND MANHOLES.
  - INSPECTION OF ALL SLOPES, BERMS, AND OTHER CONTROL STRUCTURES FOR STRUCTURAL INTEGRITY/STABILITY AND EVIDENCE OF SOIL EROSION PROCESSES, AND MAINTENANCE OF THESE STRUCTURES IF NECESSARY. INSPECTIONS SHALL BE PERFORMED FOLLOWING ALL RAIN EVENTS OF 1/2 INCH RAINFALL OR MORE IN A 24-HOUR PERIOD, OR BI-MONTHLY IF NO RAINFALL EVENT OCCURS.
- UPON COMPLETION OF THE PROJECT CONSTRUCTION, AND PRIOR TO VACATING THE SITE, THE CONTRACTOR SHALL CONDUCT A FINAL INSPECTION AND CLEANING OF THE DRAINAGE SYSTEM AND ALL ASSOCIATED STRUCTURES.
- AFTER THE COMPLETION OF THE ENTIRE PROJECT TO THE SATISFACTION OF THE OWNER OR ENGINEER, ALL MAINTENANCE OF THE DRAINAGE SYSTEM SHALL THEN BE THE RESPONSIBILITY OF THE TOWN OR THEIR APPROVED AGENTS.

**MAINTENANCE AND PROTECTION OF TRAFFIC NOTES:**

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MAINTENANCE AND PROTECTION OF PEDESTRIAN AND VEHICULAR TRAFFIC INCLUDING POLICE PROTECTION. ALL TEMPORARY AND VEHICULAR SIGNS, BARRICADES AND LANE CLOSURES SHALL BE IN CONFORMANCE WITH THE LATEST REVISIONS OF MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
- TEMPORARY CONSTRUCTION SIGNS AND ALL APPLICABLE TRAFFIC CONTROL DIVIDES SHALL BE IN PLACE PRIOR TO THE START OF WORK IN ANY AREA OPEN TO TRAFFIC.
- ALL MAINTENANCE AND PROTECTION OF TRAFFIC CONTROL SETUPS, SIGNS CHANNELING DEVICES, ETC, SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, 1988 EDITION, INCLUDING REVISION 3, SEPTEMBER 3, 1993 AND SUBSEQUENT ADDENDA.
- SIGN MOUNTINGS SHALL BE IN ACCORDANCE WITH THE RIDOT SPECIFICATIONS FOR TEMPORARY CONSTRUCTION SIGNS.

**DRAINAGE SYSTEM NOTES:**

- ALL RIM ELEVATIONS SHOWN ARE APPROXIMATE AND ARE TO BE SET FLUSH WITH FINAL GRADES.

**SOIL EROSION AND SEDIMENTATION CONTROL NOTES:**

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

**RIDEM EXEMPTIONS:**

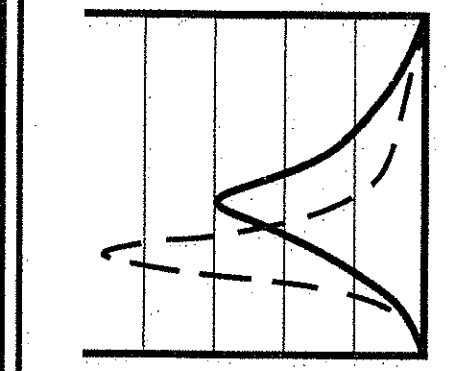
- RULE 6.03**
- B(4) THE PROPERTY OWNER MAINTAIN SITE PLANS THAT DETAIL THE CONDITION OF THE DRAINAGE STRUCTURE AS IT EXISTED PRIOR TO REPLACEMENT. A RIPRAP SCOUR PAD NOT GREATER THAN 10 FEET IN LENGTH MAY BE PLACED AT A CULVERT OUTFALL IF AN EROSION PROBLEM IS EVIDENT, PROVIDED THAT THE ACCESS FOR FISH AND WILDLIFE IS NOT IMPEDED.
- D. CLEANING OF DRAINAGE PIPES, CULVERTS, CATCH BASINS, MANHOLES AND DRAINAGE SWALES (FOR PURPOSES OF THIS RULE 6.03D, A DRAINAGE SWALE IS A CONVEYANCE OWNED BY A MUNICIPAL OR STATE GOVERNMENTAL BODY THAT FACILITATES THE DRAINAGE OF STORMWATER FROM PAVED ROADWAYS, BUT IS NOT AN AREA SUBJECT TO STORM FLOWAGE).
- E. REPAVING OF OR UNDERTAKING NORMAL ROADWAY MAINTENANCE OF, PAVED PUBLIC AND PRIVATE ROADWAYS, BIKEWAYS OR FOOTPATHS. NORMAL ROADWAY MAINTENANCE INCLUDES: RESURFACING OR IN-PLACE RECYCLING OF PAVED SURFACES; REPAIRS TO, RESETTING OR REPLACING CURBS, BERMS, SIDEWALKS OR GUARDRAILS; ADDITION OF GUARDRAILS, SIGNING, STRIPING OR SIGNALS; ADJUSTING MANHOLES, CATCH BASINS OR UTILITY STRUCTURES TO GRADE; AND STRUCTURAL REPAIRS TO, OR IN-PLACE REPLACEMENT OF MANHOLES, CATCH BASINS OR GRATES. PAVING OR OILING OF DIRT ROADS, HOWEVER, IS CONSIDERED AN ALTERATION WHICH REQUIRES A PERMIT.

**GENERAL LEGEND**

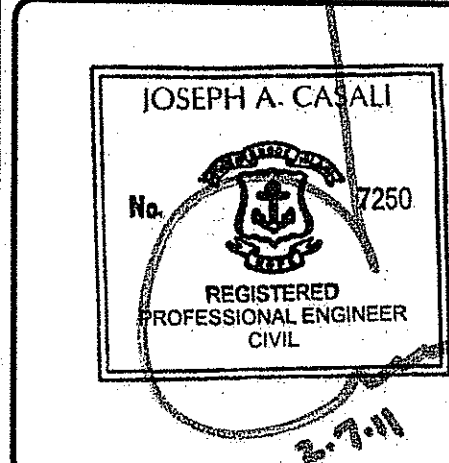
|       |  |
|-------|--|
| ---   | EXISTING PROPERTY LINE                   |
| ---   | PROPOSED PROPERTY LINE                   |
| ---   | ABUTTING PROPERTY LINE                   |
| ---   | BUILDING SETBACK LINE                    |
| ---   | 200' RIVERBANK WETLAND                   |
| ---   | EXISTING CONTOUR                         |
| ---   | PROPOSED CONTOUR                         |
| ○     | IRON PIN                                 |
| ⊙     | DRILL HOLE                               |
| □     | CONCRETE BOUND                           |
| ---   | EXISTING CURB                            |
| ---   | GUARD RAIL                               |
| ---   | DRAIN LINE                               |
| ---   | DRAINAGE MANHOLE                         |
| ---   | CATCH BASIN                              |
| ---   | UTILITY POLE                             |
| ---   | OVERHEAD WIRES                           |
| ---   | UNDERGROUND ELECTRIC                     |
| ---   | VERIZON LINE                             |
| ---   | WATER LINE                               |
| ---   | WATER SHUT OFF VALVE                     |
| ---   | WELL                                     |
| ---   | SEWER                                    |
| ---   | SIH                                      |
| N/F   | NOW OR FORMERLY                          |
| ---   | EXISTING LIMIT OF WOODLAND (APPROXIMATE) |
| ---   | HAY BALES                                |
| ---   | LIMIT OF DISTURBANCE                     |
| 06-01 | LEDGE TEST                               |
| TP    | SOIL EVALUATION                          |
| R&R   | REMOVE & RESET                           |
| R&D   | REMOVE & DISPOSE                         |
| R&S   | REMOVE & STOCKPILE                       |



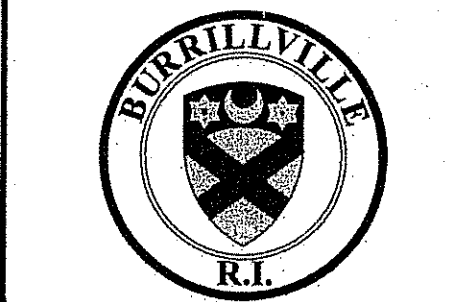
LOCATION OF EXISTING UTILITIES SHOWN, ARE FROM GATE LOCATION AND EXISTING DOCUMENTATION AND MAY NOT BE ACCURATE. EXACT LOCATION TO BE DONE BY THE APPROPRIATE UTILITY COMPANY OR MUNICIPALITY PRIOR TO ANY EXCAVATION CALL DIGSAFE AT: 1-888-DIG-SAFE 1-888-344-7233



**JCE ENGINEERING, INC.**  
 CIVIL, SITE DEVELOPMENT, TRANSPORTATION  
 DRAINAGE, WATER, SEWER, AND SANITARY  
 300 POST ROAD, WARWICK, RI 02889  
 (401) 944-1100 (401) 944-1313 FAX WWW.JCEENGINEERING.COM



**SIDEWALK IMPROVEMENT PROJECT**  
 SAYLES AVENUE  
 (210' NORTH OF BRIDGE WAY TO PASCOAG MAIN STREET)  
 &  
 BRIDGE WAY  
 (SAYLES AVENUE TO THE RIVER WALK)  
 BURRILLVILLE, RHODE ISLAND



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*Magdalena D. Wenczel*

**REVISIONS:**

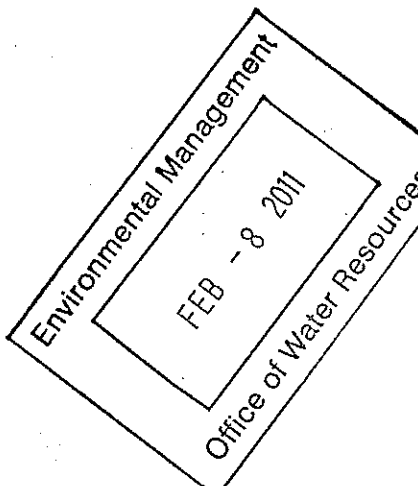
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 DRAWN BY: WMLR  
 CHECKED BY: JAC  
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100% DESIGN

**GENERAL NOTES & LEGEND**

**SHEET 2 OF 12**

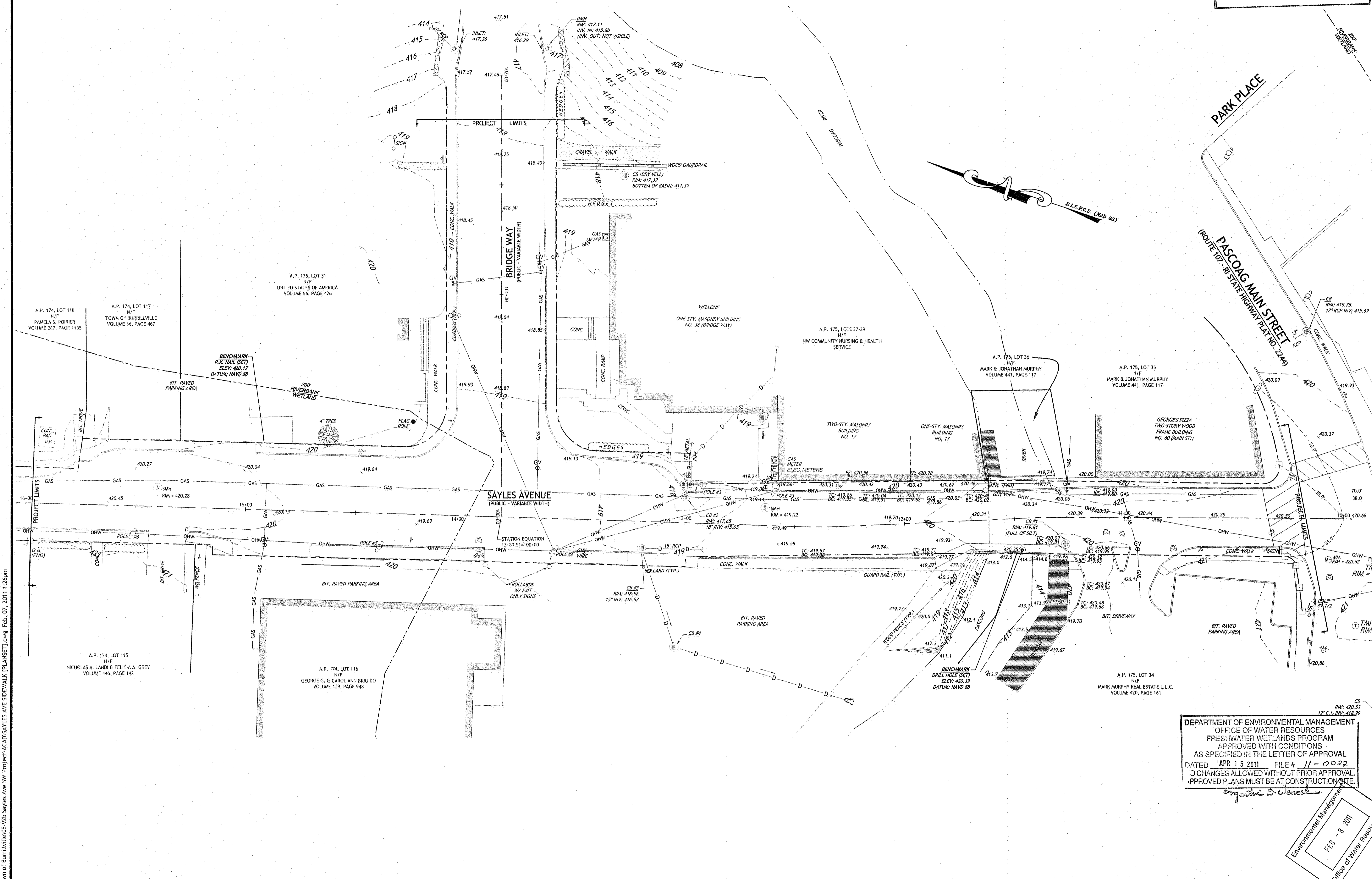


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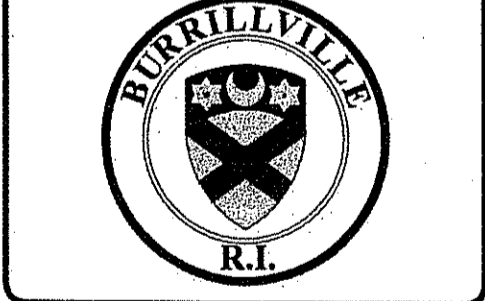
Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site.



WATERMAN ENGINEERING CO.  
CIVIL ENGINEERS / SURVEYORS - EST. 1894  
46 SUTTON AVENUE  
EAST PROVIDENCE, RHODE ISLAND 02914  
PH. (401) 438-5775 FAX. (401) 438-5773



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(SAYLES AVENUE TO THE RIVER WALK)  
BURLINGAME, RHODE ISLAND



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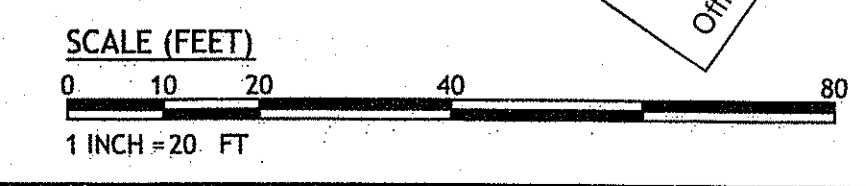
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*Signature*  
Environmental Management  
Office of Water Resources  
FEB - 8 2011

DESIGNED BY: GEC  
DRAWN BY: WMLR  
CHECKED BY: JAC  
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PROJECT NO: 05-92b

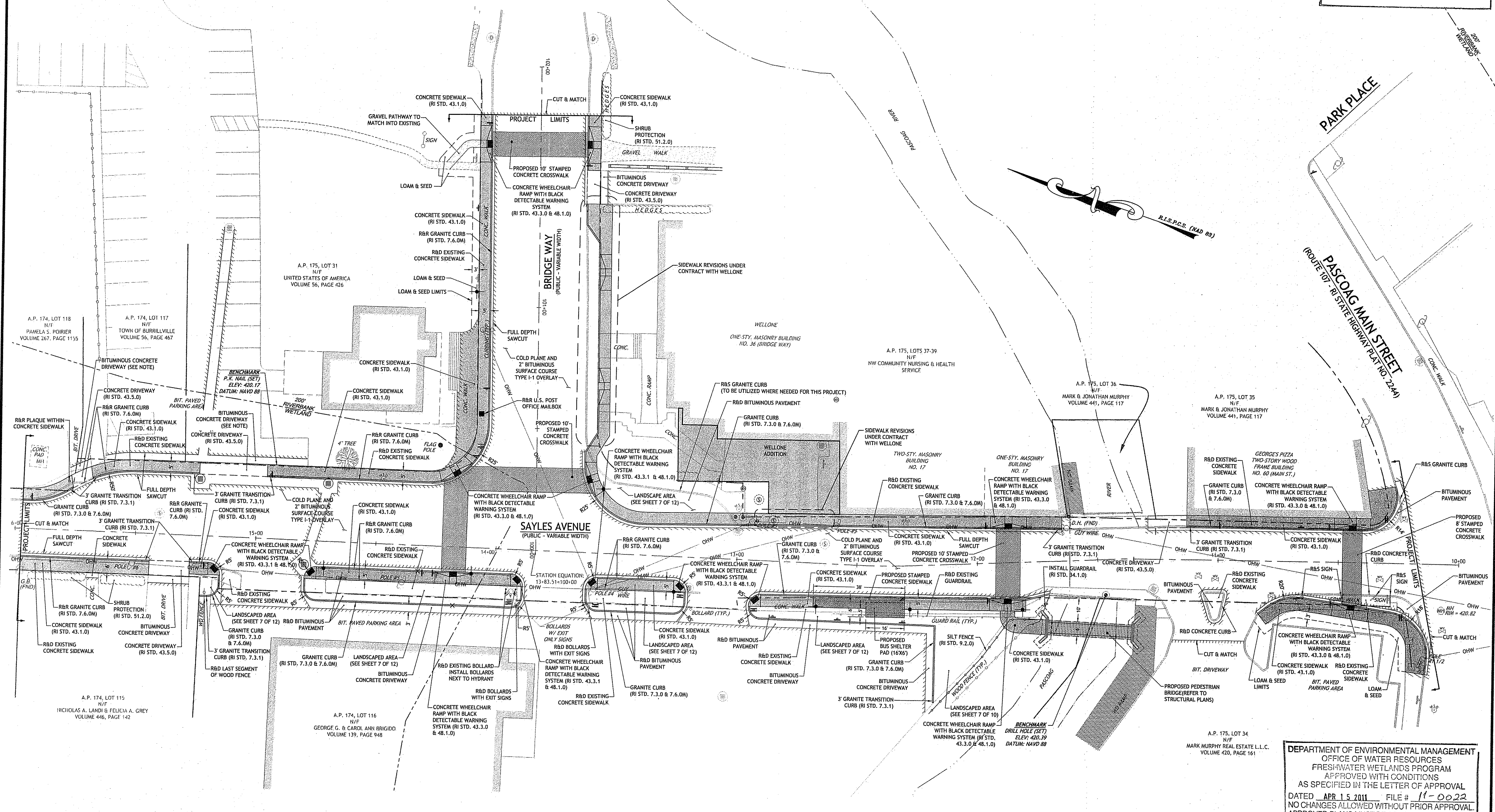
100% DESIGN  
**EXISTING CONDITIONS PLAN**

**SHEET 3 OF 12**



Q:\05-92 Town of Burrillville\05-92b Sayles Ave SW Project\ACAD\SAYLES AVE SIDEWALK [PLANSET].dwg Feb. 07. 2011 11:26pm

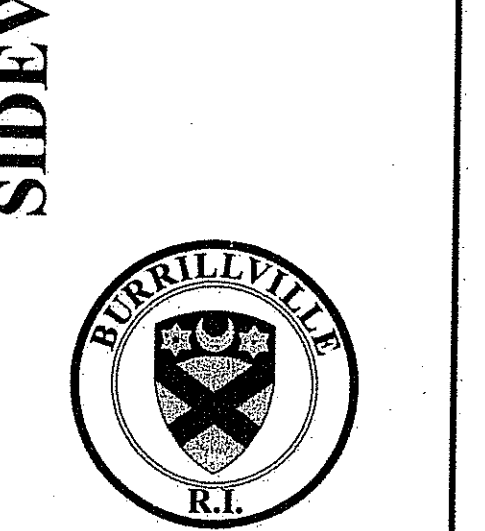
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**JOSEPH A. CASALI**  
 No. 7250  
 REGISTERED PROFESSIONAL ENGINEER  
 CIVIL  
 2-7-11

**SIDEWALK IMPROVEMENT PROJECT**  
**SAYLES AVENUE**  
 (21' NORTH OF BRIDGE WAY TO PASCOAG MAIN STREET)  
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 FRESHWATER WETLANDS PROGRAM  
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 AS SPECIFIED IN THE LETTER OF APPROVAL  
 DATED APR 15 2011 FILE # 11-0022  
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL.  
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE.

REVISIONS:

| NO. | DATE     | DESCRIPTION      |
|-----|----------|------------------|
| 1   | 9/20/10  | 75% SUBMISSION   |
| 2   | 10/1/10  | 90% SUBMISSION   |
| 3   | 10/15/10 | 100% SUBMISSION  |
| 4   | 2/7/11   | RIDEM SUBMISSION |

DESIGNED BY: GEC  
 DRAWN BY: WMLJR  
 CHECKED BY: JAC  
 DATE: AUGUST 2010  
 PROJECT NO: 05-926

100% DESIGN

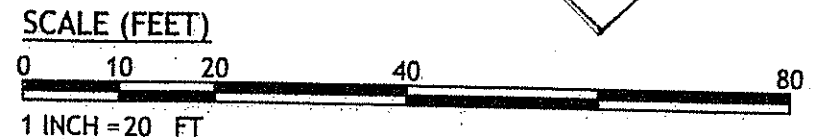
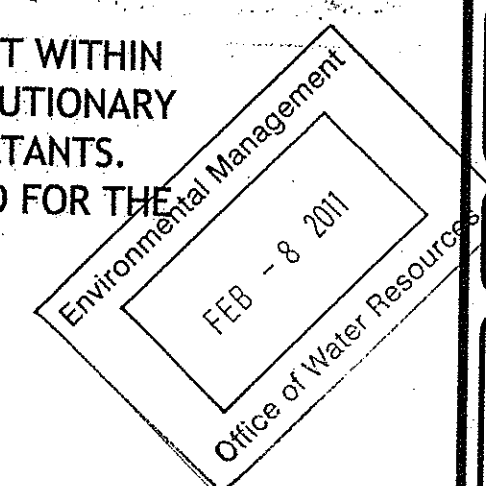
**SITE PLAN**

**SHEET 4 OF 12**

**BITUMINOUS CONCRETE DRIVEWAY**  
**2" BITUMINOUS SURFACE COURSE**  
**8" GRAVEL BORROW**

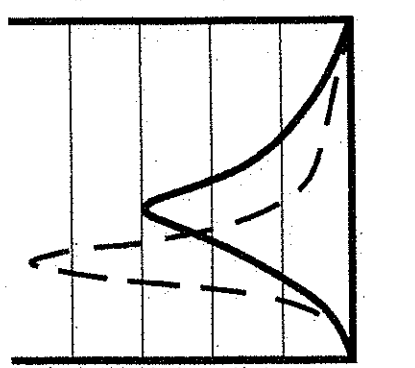
**NOTES:**

- CONTRACTOR SHALL BE AWARE OF THE OVERHEAD WIRES PRESENT WITHIN THE CONSTRUCTION PROJECT. CONTRACTOR SHALL TAKE PRECAUTIONARY MEASURES TO ENSURE THE SAFETY OF HIS CREW AND SUBCONSULTANTS.
- THE BUS SHELTER WILL BE INSTALLED BY OTHERS. CONCRETE PAD FOR THE SHELTER TO BE INSTALLED AS SHOWN ON THE PLANS.

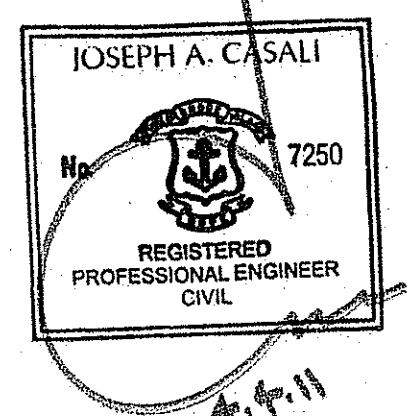


Q:\05-92 Town of Burrillville\05-926 Sayles Ave SW Project\ACAD\SAYLES AVE SIDEWALK (PLANSET).dwg Feb. 07. 2011 5:23pm

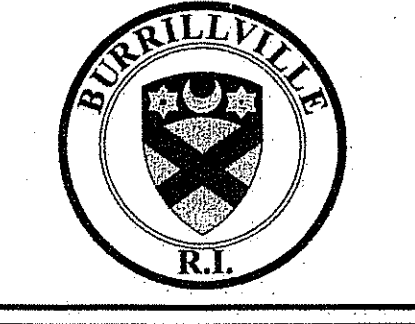
Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site.



**JCE**  
 JOE CASALI ENGINEERING, INC.  
 CIVIL, SITE DEVELOPMENT, TRANSPORTATION  
 DRAINAGE, WETLANDS, ENVIRONMENTAL  
 300 POST ROAD, WARWICK, RI 02886  
 (401) 944-1000 (401) 944-1313 FAX WWW.JOECASALI.COM



**SIDEWALK IMPROVEMENT PROJECT**  
 SAYLES AVENUE  
 &  
 BRIDGE WAY  
 (210' NORTH OF BRIDGE WAY TO PASCOAG MAIN STREET)  
 BURRILLVILLE, RHODE ISLAND



REVISIONS:

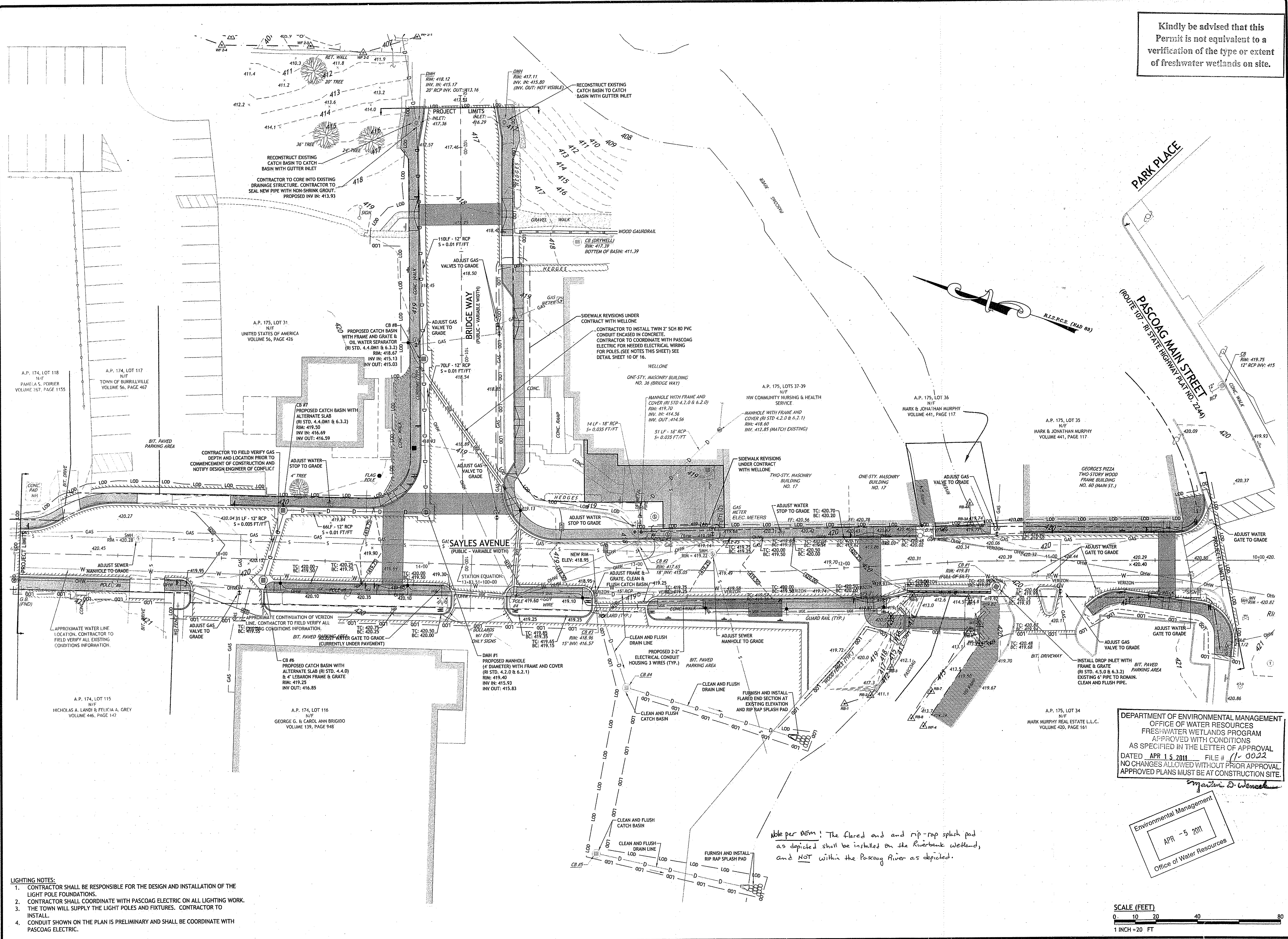
| NO. | DATE     | DESCRIPTION      |
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| 3   | 10/15/10 | 100% SUBMISSION  |
| 4   | 2/7/11   | RIDEM SUBMISSION |
| 5   | 3/4/11   | RIDEM COMMENTS   |

DESIGNED BY: GEC  
 DRAWN BY: WMLJR  
 CHECKED BY: JAC  
 DATE: AUGUST 2010  
 PROJECT NO: 05-92B

BID SET - NOT ISSUED FOR CONSTRUCTION

**GRADING & UTILITY PLAN**

**SHEET 12 OF 16**



Note per DEM! The flared end and rip-rap splash pad as depicted shall be installed on the Riverbank wetland, and NOT within the Pascoag River as depicted.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF WATER RESOURCES  
 FRESHWATER WETLANDS PROGRAM  
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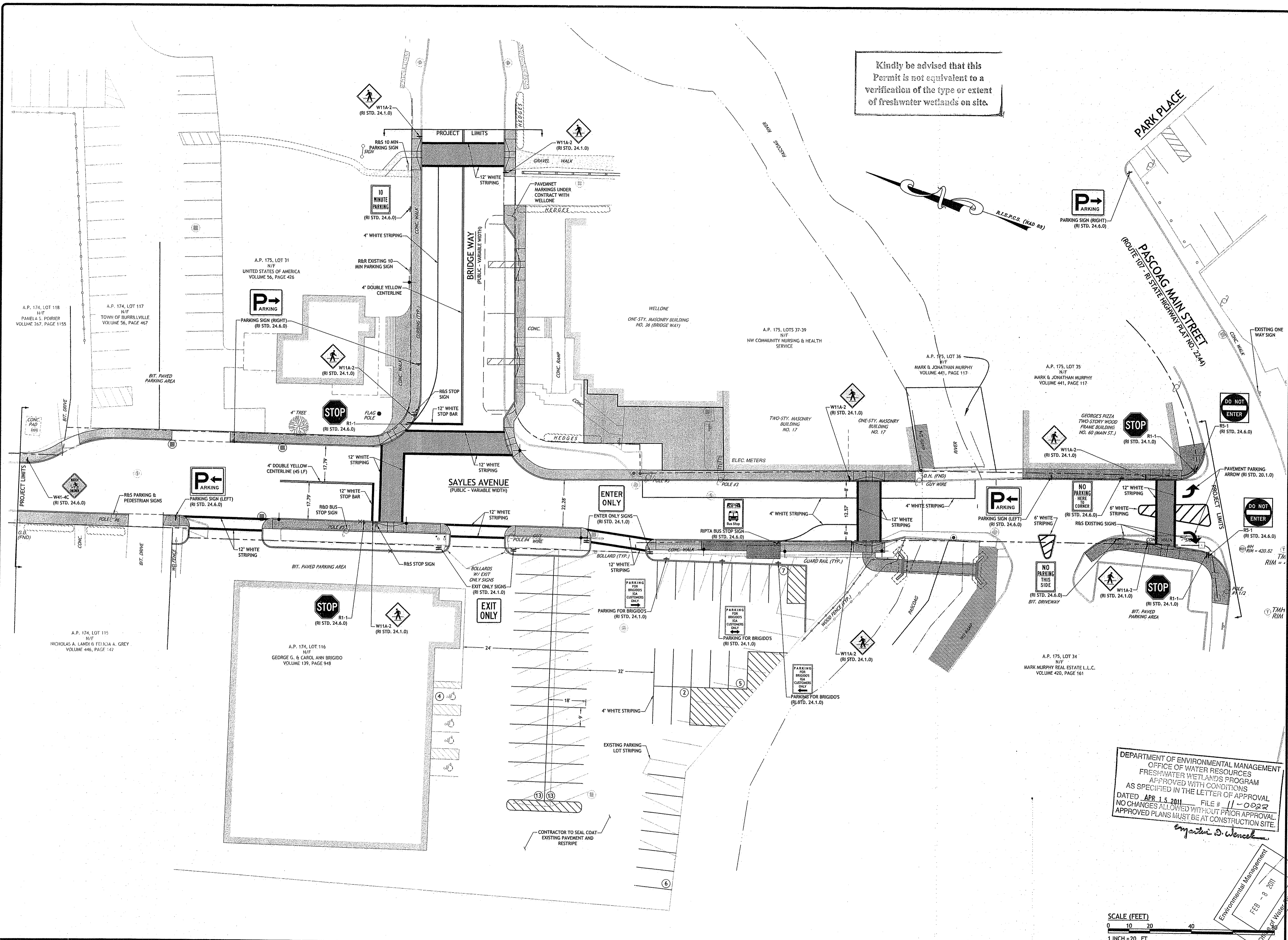
Environmental Management  
 APR -5 2011  
 Office of Water Resources

SCALE (FEET)  
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 1 INCH = 20 FT

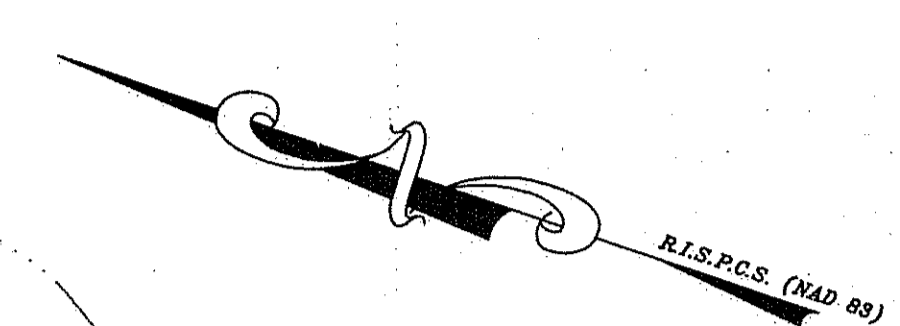
- LIGHTING NOTES:**
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN AND INSTALLATION OF THE LIGHT POLE FOUNDATIONS.
  - CONTRACTOR SHALL COORDINATE WITH PASCOAG ELECTRIC ON ALL LIGHTING WORK.
  - THE TOWN WILL SUPPLY THE LIGHT POLES AND FIXTURES. CONTRACTOR TO INSTALL.
  - CONDUIT SHOWN ON THE PLAN IS PRELIMINARY AND SHALL BE COORDINATE WITH PASCOAG ELECTRIC.

C:\05-92 Town of Burrillville\05-92B Sayles Ave SW Sidewalk (PLANSET).dwg Apr. 04, 2011 12:08pm

Q:\05-92 Town of Burrillville\05-92b Sayles Ave SW Project\CAD\ASAYLES AVE SIDEWALK (PLANSHEET).dwg Feb. 07, 2011 14:46pm



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



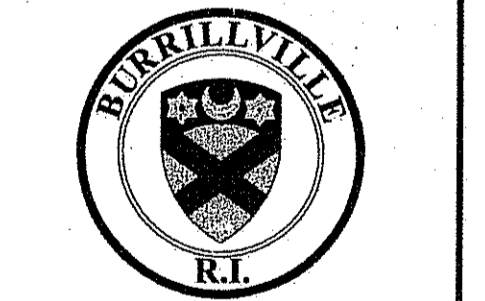
SCALE (FEET)  
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1 INCH = 20 FT

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
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DATED APR 15 2011 FILE # 11-0022  
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APPROVED PLANS MUST BE AT CONSTRUCTION SITE.  
*Emmanuel D. Wences*

Environmental Management  
FEB - 8 2011

JOSEPH A. CASALI  
7250  
REGISTERED PROFESSIONAL ENGINEER  
CIVIL  
2-7-11

**SIDEWALK IMPROVEMENT PROJECT**  
**SAYLES AVENUE**  
(210' NORTH OF BRIDGE WAY TO PASCOAG MAIN STREET)  
**BRIDGE WAY**  
(SAYLES AVENUE TO THE RIVER WALK)  
**BURRILLVILLE, RHODE ISLAND**

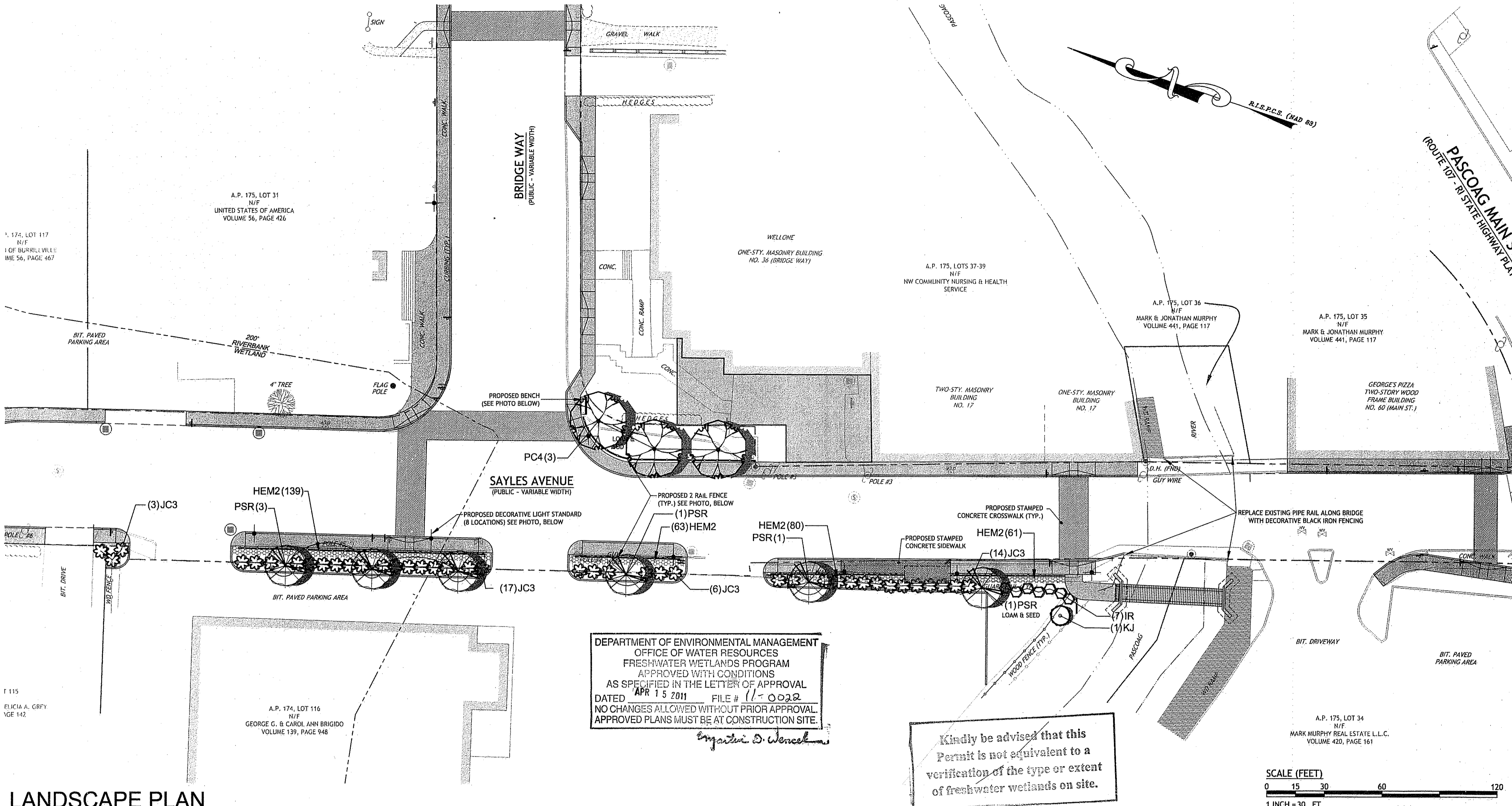


REVISIONS:

| NO. | DATE     | DESCRIPTION      |
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| 1   | 9/20/10  | 75% SUBMISSION   |
| 2   | 10/17/10 | 90% SUBMISSION   |
| 3   | 10/15/10 | 100% SUBMISSION  |
| 4   | 2/7/11   | RIDEM SUBMISSION |

DESIGNED BY: GEC  
DRAWN BY: WMLJR  
CHECKED BY: JAC  
DATE: AUGUST 2010  
PROJECT NO: 05-92b

100% DESIGN  
**SIGNAGE & STRIPING PLAN**  
SHEET 6 OF 12



DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF WATER RESOURCES  
 FRESHWATER WETLANDS PROGRAM  
 APPROVED WITH CONDITIONS  
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*Magister D. Wenczel*

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SCALE (FEET)  
 0 15 30 60 120  
 1 INCH = 30 FT

LANDSCAPE PLAN

PLANT SCHEDULE

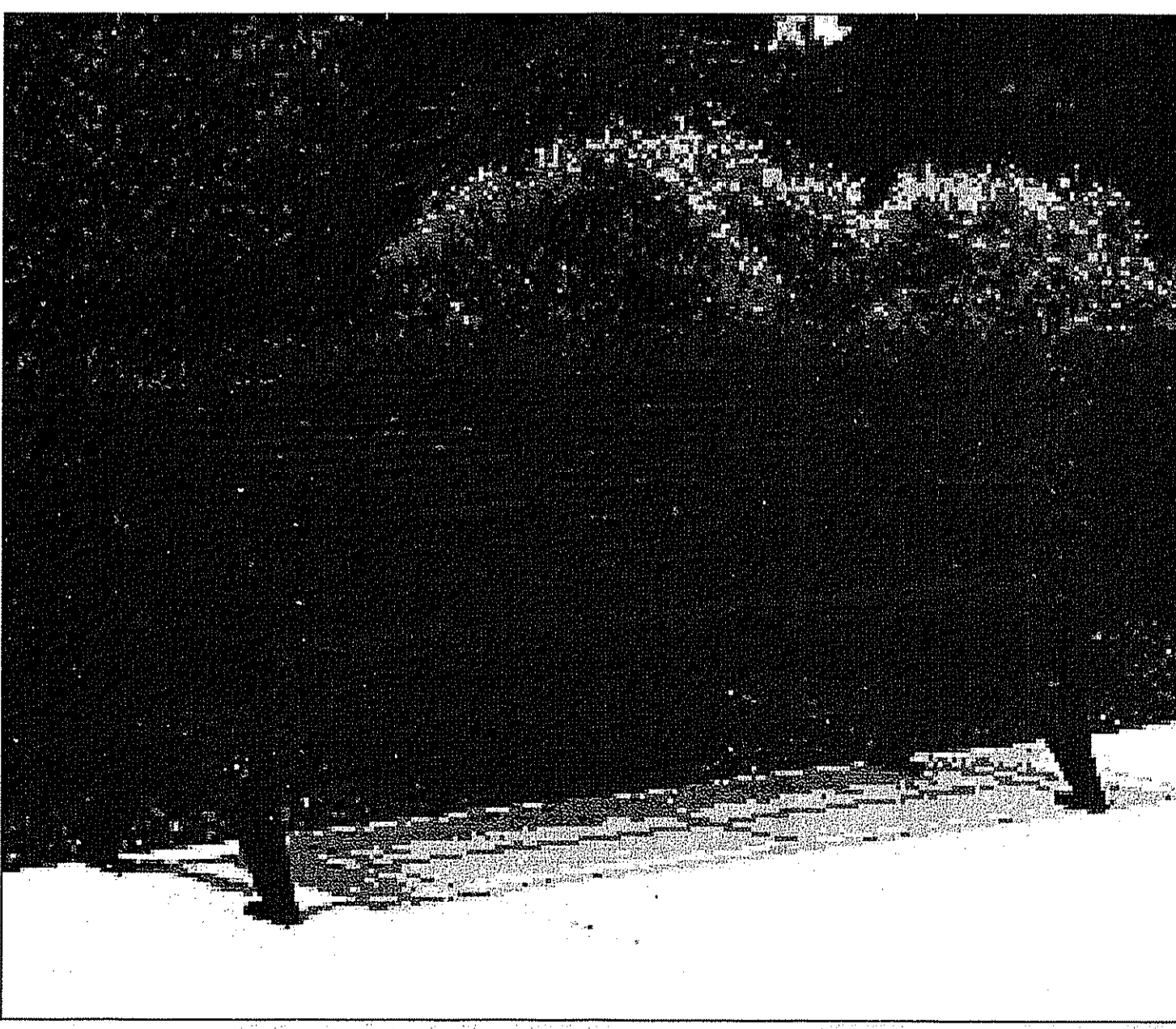
| FLOWERING TREES | CODE | QTY | BOTANICAL NAME / COMMON NAME                                | CONT   | CAL              |
|-----------------|------|-----|---|--------|------------------|
|                 | PSR  | 6   | Prunus sargentii 'Rancho' / Sargent Cherry                  | B & B  | 3 1/2" - 4" cal. |
|                 | PC4  | 3   | Pyrus calleryana 'Cleveland Select' / Cleveland Select Pear | B & B; | 3 1/2" - 4" cal. |

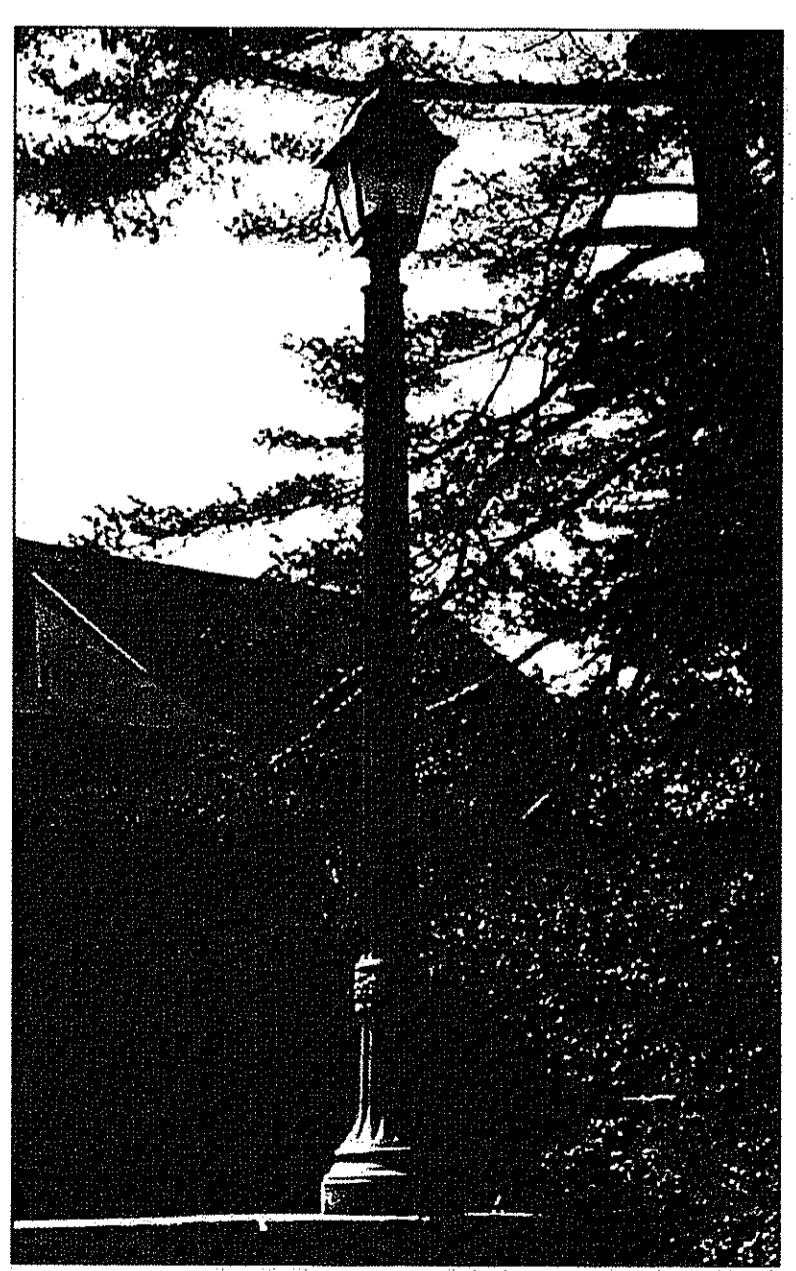
| SHRUBS | CODE | QTY | BOTANICAL NAME / COMMON NAME                                  | CONT  |
|--------|------|-----|---|-------|
|        | IR   | 7   | Ilex verticillata 'Red Sprite' / Red Sprite Winterberry       | 5 gal |
|        | JC3  | 40  | Juniperus chinensis 'Pfitzeriana Compacta' / Compacta Pfitzer | 2 gal |
|        | KJ   | 1   | Karria japonica / Japanese Rose                               | 7 gal |

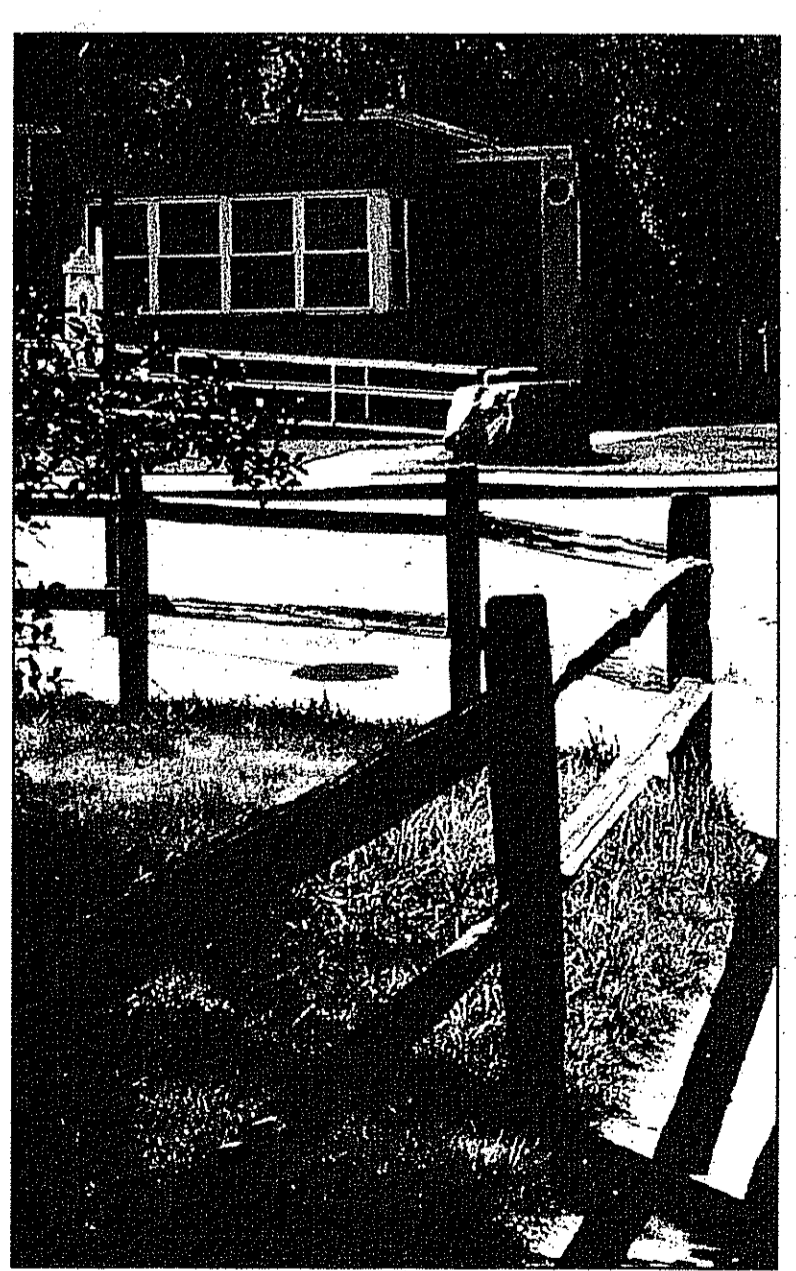
| PERENNIALS | CODE | QTY | BOTANICAL NAME / COMMON NAME                                 | CONT          |
|------------|------|-----|--|---------------|
|            | HEM2 | 343 | Heemerocallis hybrid 'Stella de Oro' / Stella de Oro Daylily | bulb @ 18" oc |



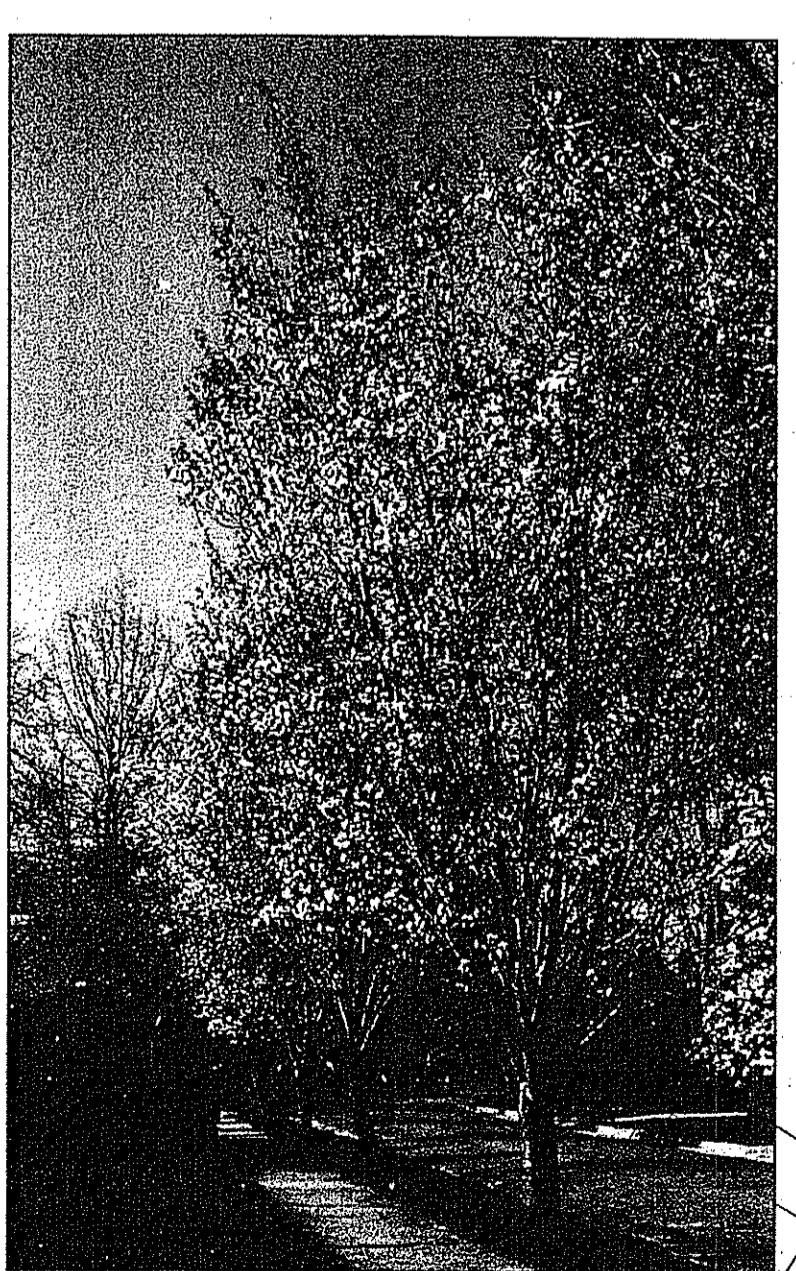
Example of a decorative classic iron bench chosen to compliment street lighting poles proposed for this project.



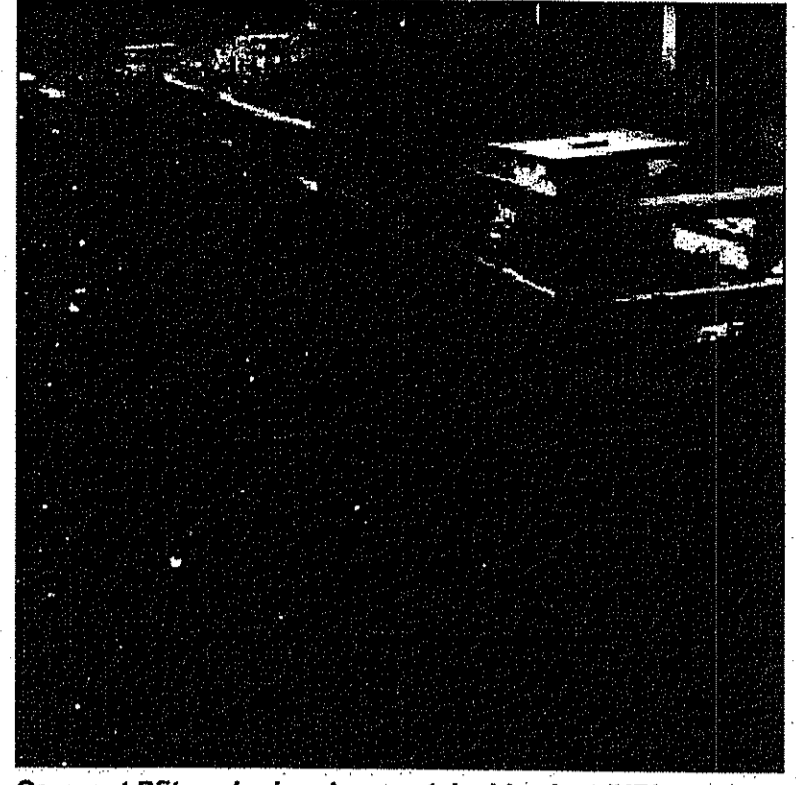
Existing decorative pole and light on bridge is repeated at crosswalks as shown on plan.



Existing 2 rail fence design is repeated for style of proposed fencing shown on plan.



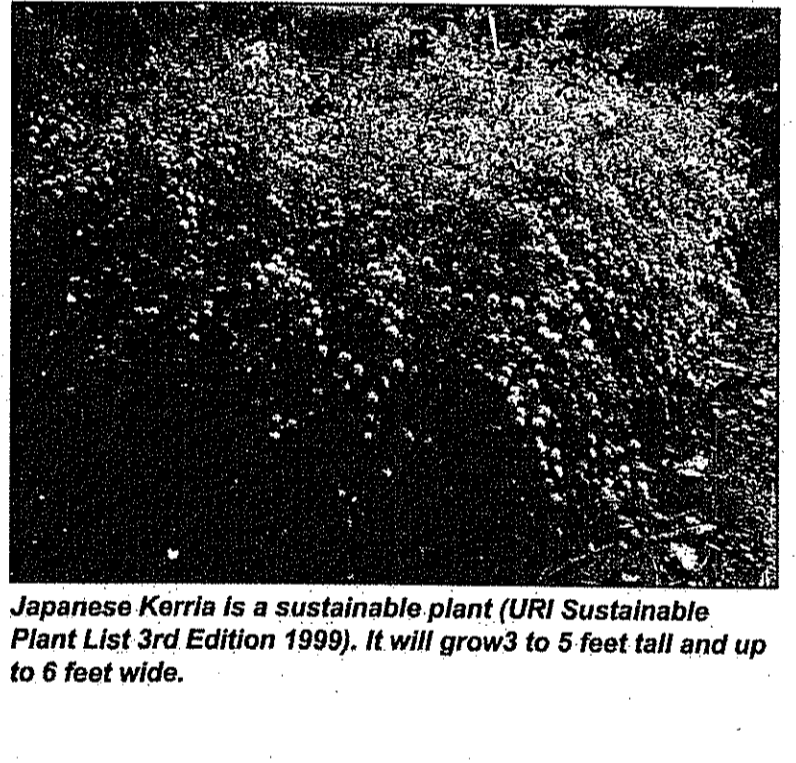
Columnar Sargent Cherry is a sustainable plant (URI Sustainable Plant List 3rd Edition 1999). It has a narrow crown at maturity with an overall size of 15 feet wide x 25 feet tall making it an excellent vase shaped street tree.



Compact Pfitzer Juniper is a sustainable plant (URI Sustainable Plant List 3rd Edition 1999). It is salt, drought and wind tolerant growing 12 to 24 inches tall and 3 to 6 feet wide. Provides year round color and as shown in the photo, provides a nice compliment to a 2 rail fence application.



Winterberry is a sustainable plant (URI Sustainable Plant List 3rd Edition 1999). It has year round interest and this variety will grow 3 feet tall and up to 6 feet wide.



Japanese Karria is a sustainable plant (URI Sustainable Plant List 3rd Edition 1999). It will grow 3 to 5 feet tall and up to 6 feet wide.

DIANE C. SOULE & ASSOCIATES, ASLA  
 LANDSCAPE ARCHITECTURE • GRAPHICS • DESIGN  
 Smithfield, Rhode Island 401.231.0736 e-mail: diane@DCSA.ws



**SIDEWALK IMPROVEMENT PROJECT**  
 SAYLES AVENUE  
 (210' NORTH OF BRIDGE WAY TO PASCOAG MAIN STREET)  
 &  
 BRIDGE WAY  
 (SAYLES AVENUE TO THE RIVER WALK)  
 BURRILLVILLE, RHODE ISLAND



REVISIONS:

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| 4   | 2/7/11   | RIDEM SUBMISSION |

DESIGNED BY: GEC  
 DRAWN BY: WMLJR  
 CHECKED BY: JAC  
 DATE: AUGUST 2010  
 PROJECT NO: 05-92b

100% DESIGN

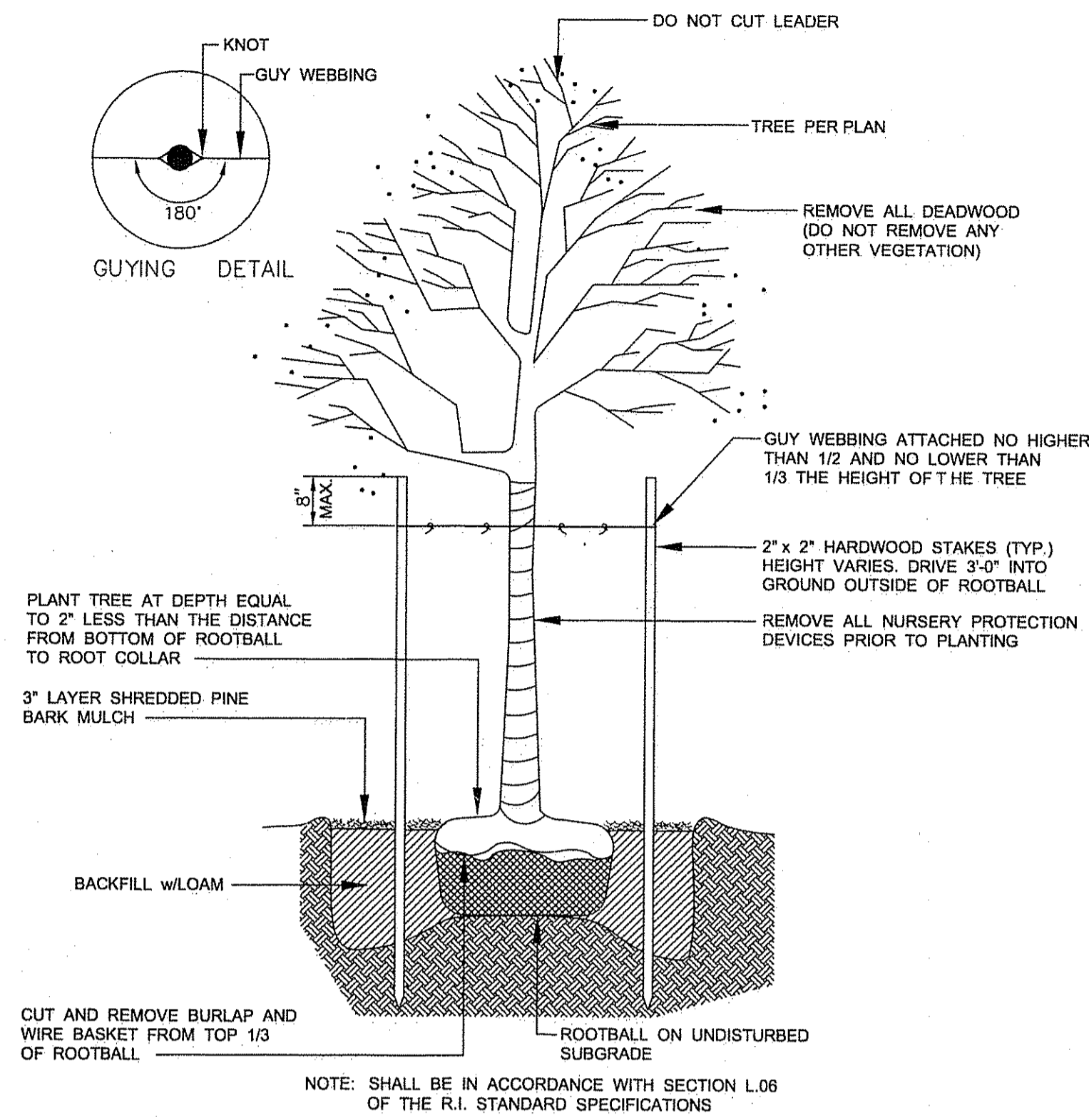
LANDSCAPE PLAN

SHEET 7 OF 12

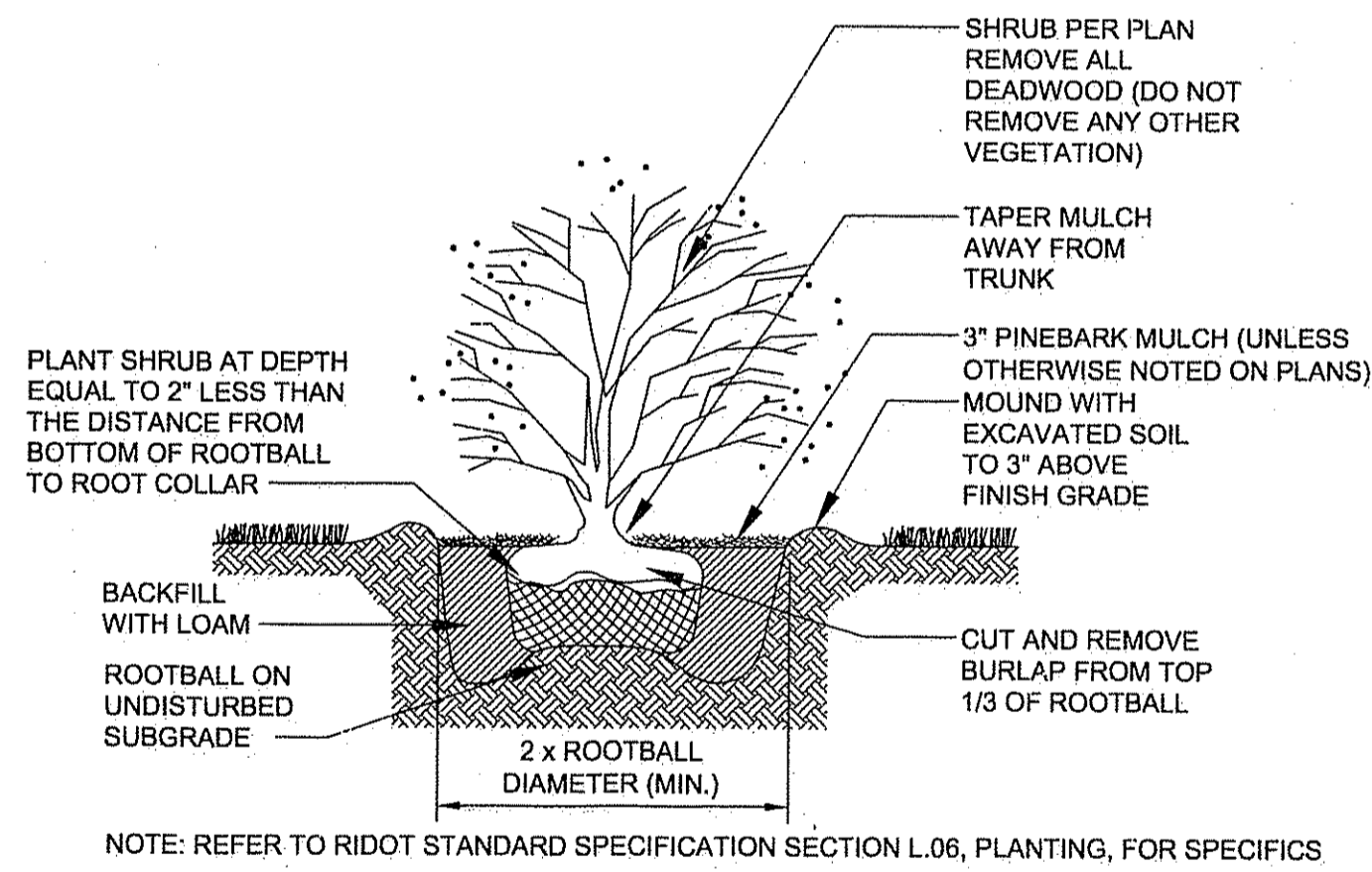
Q:\05-92 Town of Burrillville\05-92b Sayles Ave SW Project\CADD\SAYLES AVE SIDEWALK [PLANSET].dwg Feb. 07. 2011 1:27pm

**LANDSCAPE NOTES:**

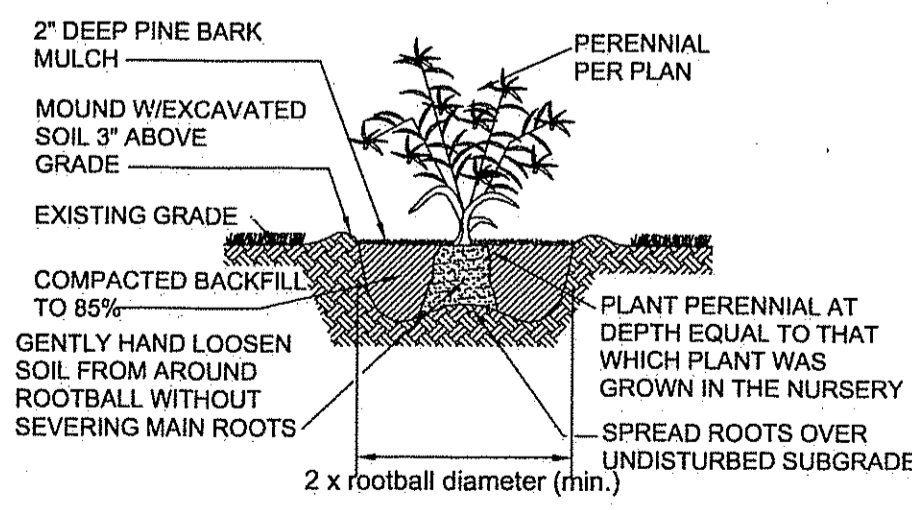
1. GUARANTEE THAT, UPON COMPLETION AND FINAL ACCEPTANCE, LANDSCAPE PLANTINGS CONFORM TO REQUIREMENTS OF CONTRACT DOCUMENTS. PROVIDE A WARRANTY FOR TREE PLANTINGS FOR A MINIMUM OF TWO (2) YEARS, INCLUDING TWO (2) CONTINUOUS GROWING SEASONS. COMMENCE WARRANTY ON DATE IDENTIFIED IN THE 'CERTIFICATE OF FINAL COMPLETION'. REPLACEMENTS: PLANTS OF SAME SIZE AND SPECIES AS SPECIFIED, PLANTED IN THE NEXT GROWING SEASON, WITH NEW WARRANTY AND EXTENDED MAINTENANCE SERVICE COMMENCING ON THE DATE OF REPLACEMENT.
2. PLANT MATERIALS SHALL BE OF SIZE AND CALIPER REQUIRED AND CONFORM TO THE REQUIREMENTS DESCRIBED IN THE LATEST EDITION OF AMERICAN STANDARD FOR NURSERY STOCK, PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN.
3. PLANTS OF OTHER KINDS THAN THOSE NAMED IN THE PLANT SCHEDULE SHALL NOT BE ACCEPTED WITHOUT APPROVAL. REPLACEMENT PLANTS LARGER IN SIZE THAN EXISTING MAY BE USED IF APPROVED BY THE A/E, PROVIDED USE OF LARGER PLANTS DOES NOT INCREASE CONTRACT PRICE.
4. A PROFESSIONAL HORTICULTURIST/NURSERYMAN SHALL BE CONSULTED TO DETERMINE THE PROPER TIME TO MOVE AND INSTALL PLANT MATERIAL SO THAT STRESS TO THE PLANT IS MINIMIZED. PLANTING OF DECIDUOUS MATERIAL MAY BE CONTINUED DURING WINTER MONTHS PROVIDED THERE IS NO FROST IN THE GROUND AND FROST-FREE TOPSOIL PLANTING MIXTURES ARE USED.
5. UNLESS OTHERWISE APPROVED BY THE A/E, ALL PLANTS SHALL BE NURSERY GROWN IN ACCORDANCE WITH GOOD HORTICULTURAL PRACTICES AND SHALL HAVE BEEN GROWN UNDER CLIMATIC CONDITIONS SIMILAR TO THOSE IN THE LOCALITY OF THE PROJECT FOR AT LEAST TWO (2) YEARS.
6. SET PLANTS PLUMB AND AT SUCH A LEVEL THAT AFTER SETTLEMENT THEY BEAR THE SAME RELATION TO THE SURROUNDING GROUND AS THEY BORE TO THE GROUND FROM WHICH THEY WERE DUG. SETTLE BACKFILL MATERIAL FOR PLANTS, THOROUGHLY & PROPERLY, BY FIRING OR TAMPING. ACCOMPANY BACKFILLING WITH THOROUGH WATERING UNLESS OTHERWISE APPROVED. FORM SAUCER CAPABLE OF HOLDING WATER AROUND INDIVIDUAL PLANTS.
7. FERTILIZE SHRUB BEDS WITH 10-6-4 FERTILIZER AT THE RATE OF 3 POUNDS PER 100 SQUARE FEET OF SURFACE AREA, BROAD CAST. APPLY THE FERTILIZER UNIFORMLY TO THE SURFACE BEDS AND WORK INTO THE UPPER TWO (2) INCHES OF SOIL. FERTILIZE INDIVIDUAL TREES AT THE RATE OF ONE (1) AGRIFORM PELLET PER INCH OF TREE DIAMETER (FOLLOW MANUFACTURER'S WRITTEN INSTRUCTIONS). APPLY A SECOND APPLICATION OF FERTILIZER TO ALL PLANT ITEMS AT THE SAME SPECIFIED RATES OVER THE MULCH AT THE END OF AN EIGHT WEEK PERIOD.
8. CONTAINER GROWN MATERIALS: REMOVE PLANT FROM CONTAINER AND "BUTTERFLY" ROOT BALL OR OTHERWISE SPREAD OUT ROOTS ON SETTING MOUND. BACKFILL SHALL BE SIFTED THROUGH THEM AND SOLIDLY FIRMED.
9. AFTER PLANTING PRUNE ONLY BROKEN OR DEFORMED BRANCHES AND IN SUCH MANNER AS TO PRESERVE NATURAL CHARACTER OF PLANT.
10. IMMEDIATELY AFTER PLANTING, STAKE TREES OVER FIVE (5) FEET AS INDICATED ON DETAIL DRAWING INDICATED OR APPROVED BY THE OWNERS REPRESENTATIVE. REMOVE STAKES AT THE END OF GUARANTEE PERIOD.
11. MULCH SHALL BE APPLIED A MINIMUM OF THREE (3) INCHES IN DEPTH IN ALL PLANTING BEDS, AS INDICATED ON THE DRAWINGS.
12. THE PLANTS SHALL BE WATERED IMMEDIATELY FOLLOWING PLANTING, PREFERABLY WHEN TWO THIRDS OF THE BACKFILL HAS BEEN PLACED SO ALL AIR POCKETS ARE REMOVED AND THE PLANT PROPERLY SET. ADDITIONAL WATERING SHALL BE MADE AT LEAST ONCE EVERY THREE (3) WEEKS UNLESS OTHERWISE DIRECTED UNTIL FINAL ACCEPTANCE OF THE PLANT MATERIAL.
13. INSTALL 'JUTE MESH' EROSION CONTROL FABRIC WHERE FINAL GRADES ARE 3:1 (33%) OR GREATER PER MANUFACTURER'S INSTRUCTIONS.
14. UNLESS OTHERWISE SPECIFIED, CONTRACTOR TO LOAM AND SEED ALL DISTURBED AREAS.
15. SEEDING NOTE: USE UNIVERSITY OF RHODE ISLAND NO. 2 IMPROVED SEED MIX OR EQUAL.
16. TREE STAKING NOTE: ANY TREE STAKING APPARATUS MUST BE REMOVED NO LATER THAN ONE YEAR (1) AFTER INSTALLATION.
17. TREE PRUNING NOTE: STREET TREES SHOULD BE PRUNED TO MAINTAIN A MINIMAL BRANCH HEIGHT OF 8' WITHIN TWO (2) YEARS OF INSTALLATION OF THE TREE.
18. LANDSCAPE ESTABLISHMENT AND MAINTENANCE NOTE: CONTRACTOR SHALL ENSURE THAT ALL LAWN AREAS AND PLANTINGS ARE FULLY ESTABLISHED AND ACCEPTABLE TO THE OWNER'S REPRESENTATIVE PRIOR TO RELINQUISHING THEIR RESPONSIBILITIES FOR MAINTENANCE OF THESE AREAS.
19. TREE PROTECTION NOTE: NO MATERIAL, TEMPORARY SOIL DEPOSIT OR EXCAVATION SHALL OCCUR WITHIN FOUR FEET OF SHRUBS OR WITHIN TWO FEET OF THE DRIP LINE OF ANY SHRUBS OR TREES TO REMAIN. ANY RETAINED EXISTING VEGETATION SHALL BE PROTECTED AS PER NORTH KINGSTOWN ZONING ORDINANCE, SECTION 21-277, SUBSECTION 3a: PROTECTION OF EXISTING PLANTINGS AND SITE FEATURES.



**TREE PLANTING DETAIL**  
no scale



**SHRUB PLANTING DETAIL**  
no scale

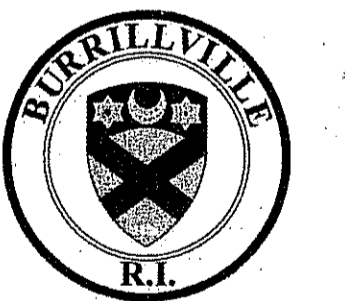


**PERENNIAL PLANTING DETAIL**  
no scale

**DIANE C. SOULE & ASSOCIATES, ASLA**  
LANDSCAPE ARCHITECTURE • GRAPHICS • DESIGN  
Smithfield, Rhode Island 401.231.0736 e-mail: diane@DCSA.ws



**SIDEWALK IMPROVEMENT PROJECT**  
SAYLES AVENUE  
(210' NORTH OF BRIDGE WAY TO PASCOAG MAIN STREET)  
&  
BRIDGE WAY  
(SAYLES AVENUE TO THE RIVER WALK)  
BURRILLVILLE, RHODE ISLAND



DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
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*Angela D. Wenzel*

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|------------|--------------------------|
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| 2          | 10/1/10 90% SUBMISSION   |
| 3          | 10/15/10 100% SUBMISSION |
| 4          | 2/7/11 RIDEM SUBMISSION  |

DESIGNED BY: GEC  
DRAWN BY: WMLR  
CHECKED BY: JAC  
DATE: AUGUST 2010  
PROJECT NO: 05-92b

100% DESIGN

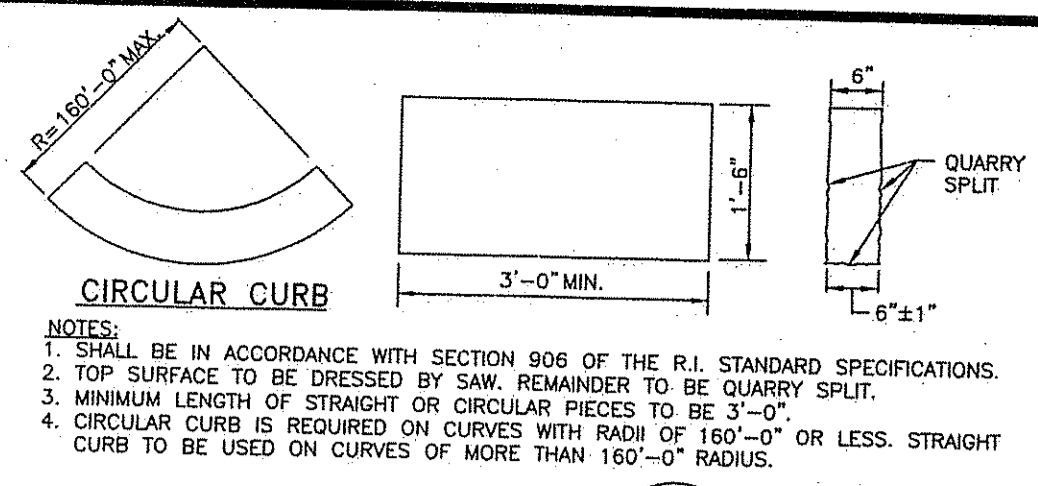
**LANDSCAPE DETAILS**

**SHEET 8 OF 12**

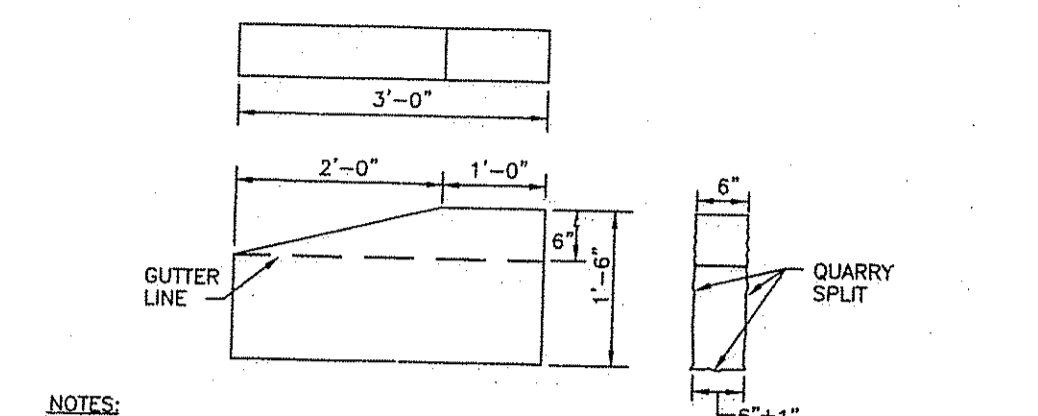
C:\05-92 Town of Burrillville\05-92b Sayles Ave SW Project\CADD\SAYLES AVE SIDEWALK (PLANS)SET.dwg Feb. 07. 2011 1:29pm

Environmental Management  
FEB - 8 2011  
Office of Water Resources

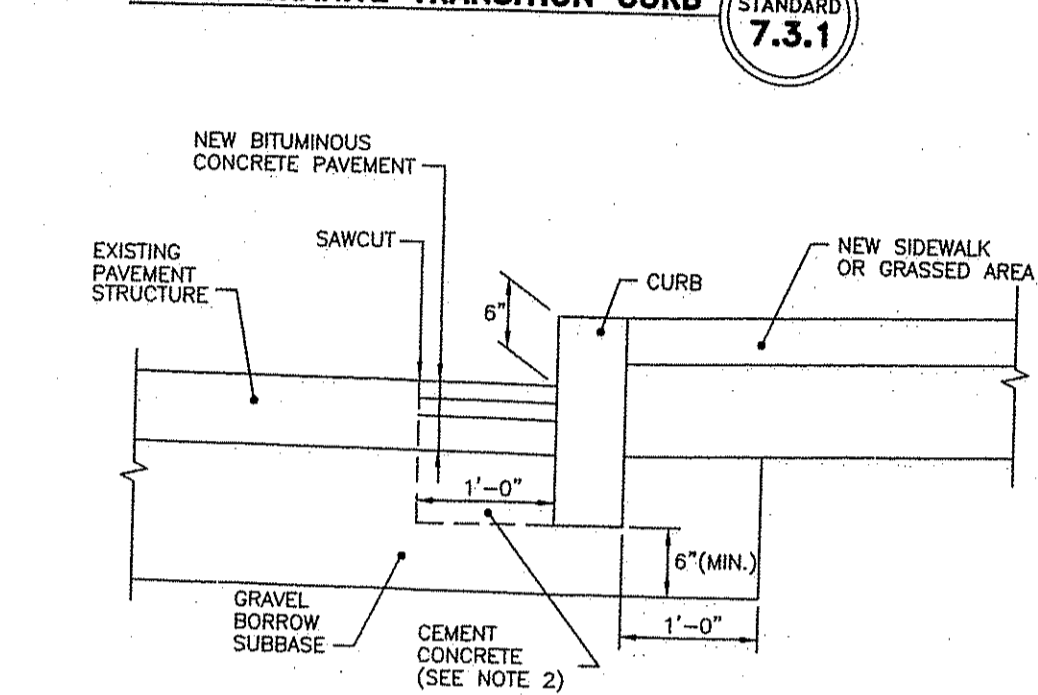
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
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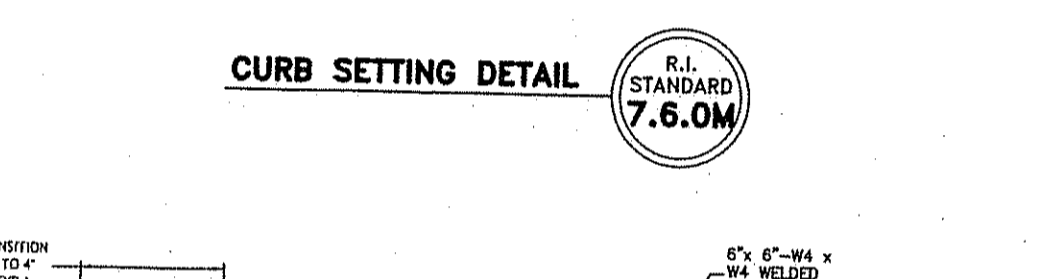
**CIRCULAR CURB**  
 R.I. STANDARD 7.3.0



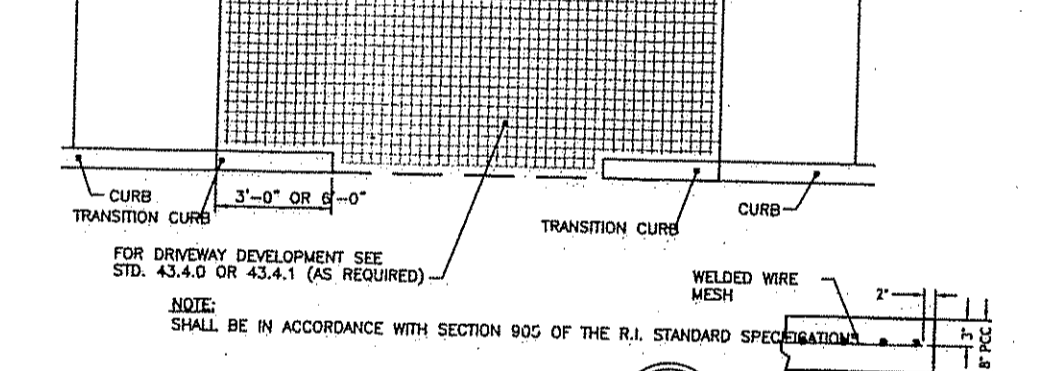
**GRANITE CURB**  
 R.I. STANDARD 7.3.0



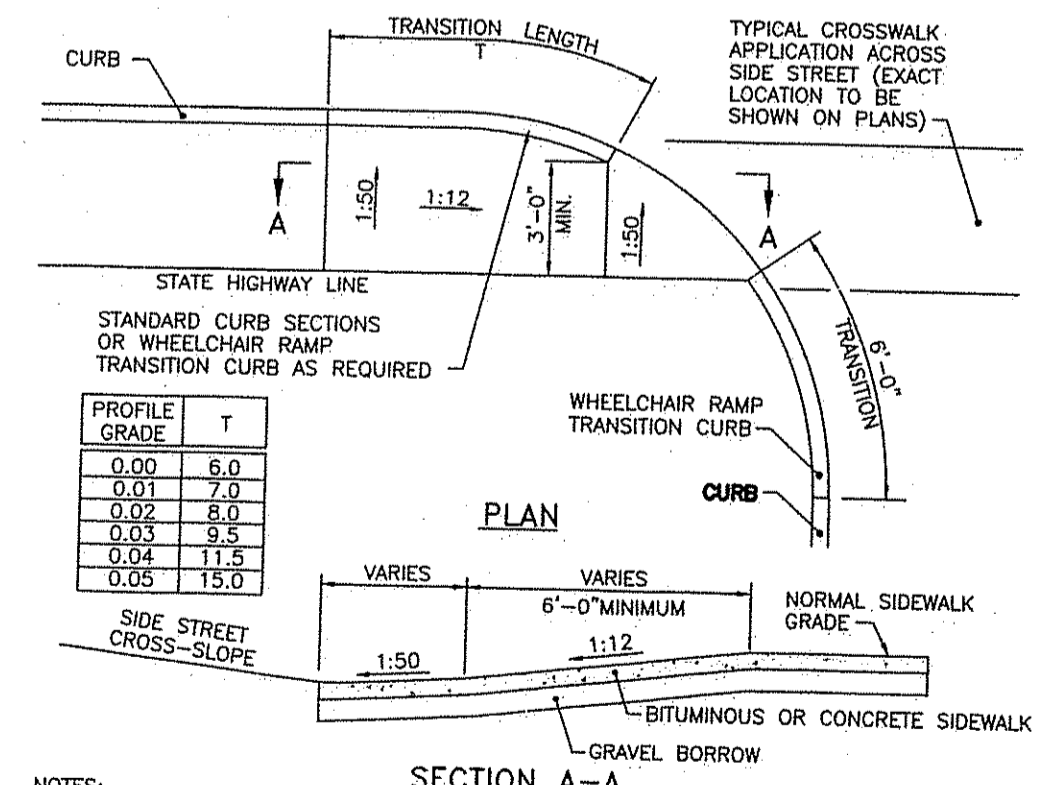
**3'-0" GRANITE TRANSITION CURB**  
 R.I. STANDARD 7.3.1



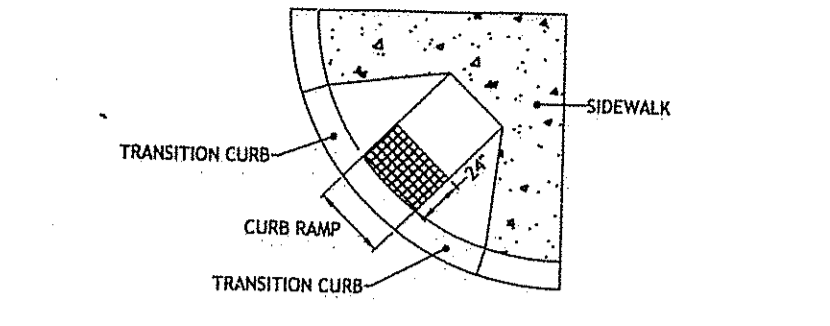
**CURB SETTING DETAIL**  
 R.I. STANDARD 7.6.0M



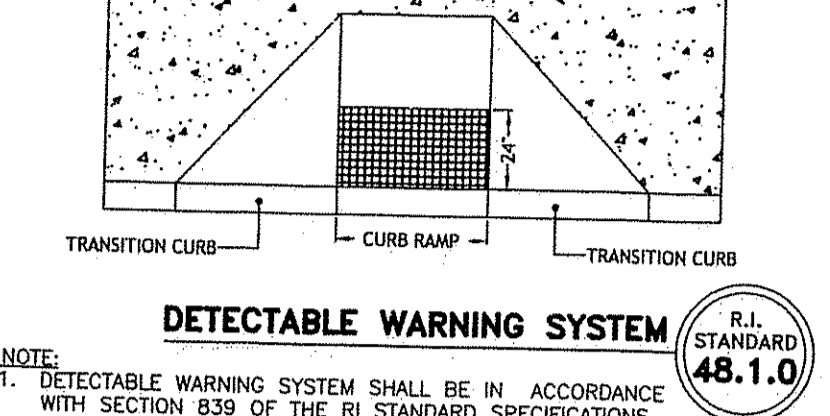
**CEMENT CONCRETE DRIVEWAYS**  
 R.I. STANDARD 43.5.0



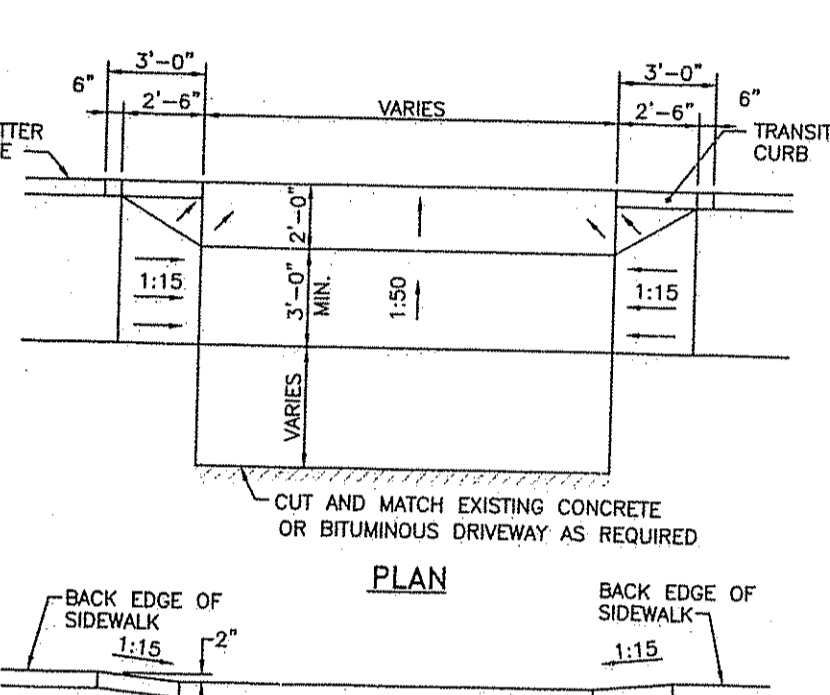
**WHEELCHAIR RAMP FOR LIMITED RIGHT-OF-WAY AREAS**  
 R.I. STANDARD 43.3.1



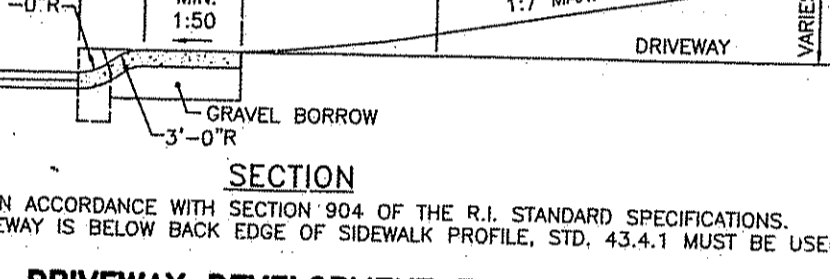
**DETECTABLE WARNING SYSTEM**  
 R.I. STANDARD 48.1.0



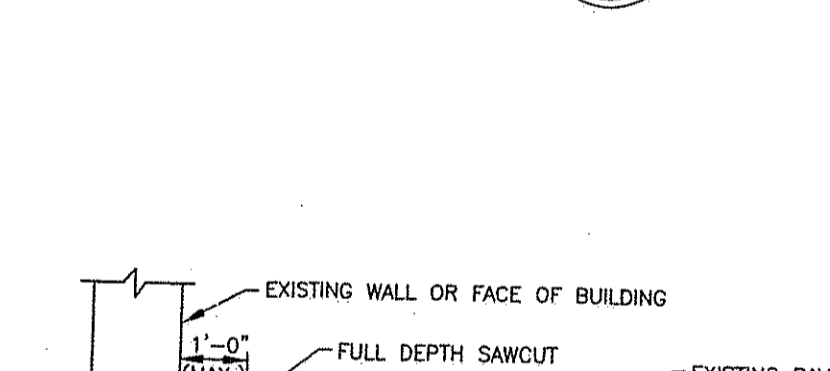
**DRIVEWAY DEVELOPMENT FOR 3'-0" TRANSITION CURB**  
 R.I. STANDARD 43.4.0



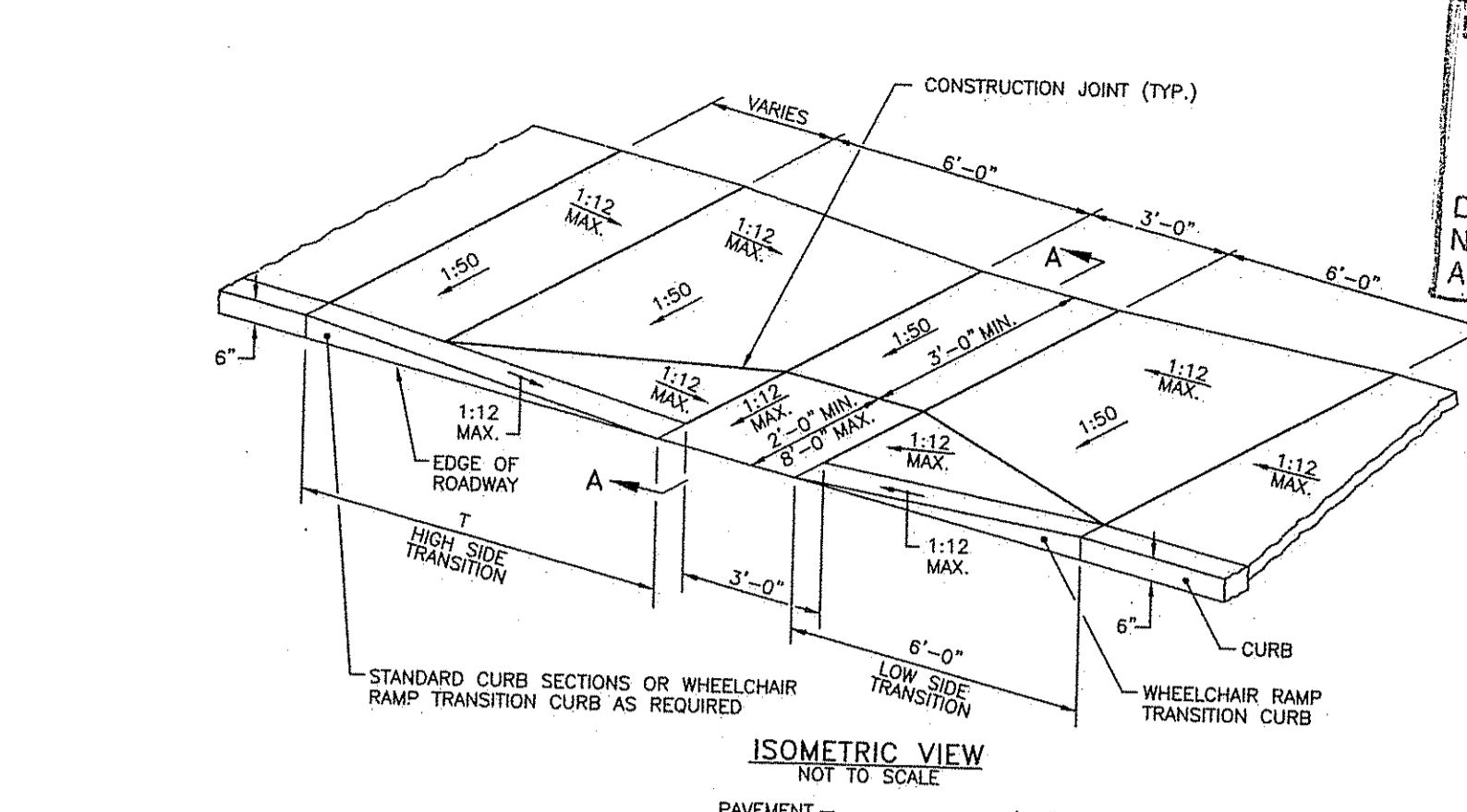
**CEMENT CONCRETE SIDEWALK**  
 R.I. STANDARD 43.1.0



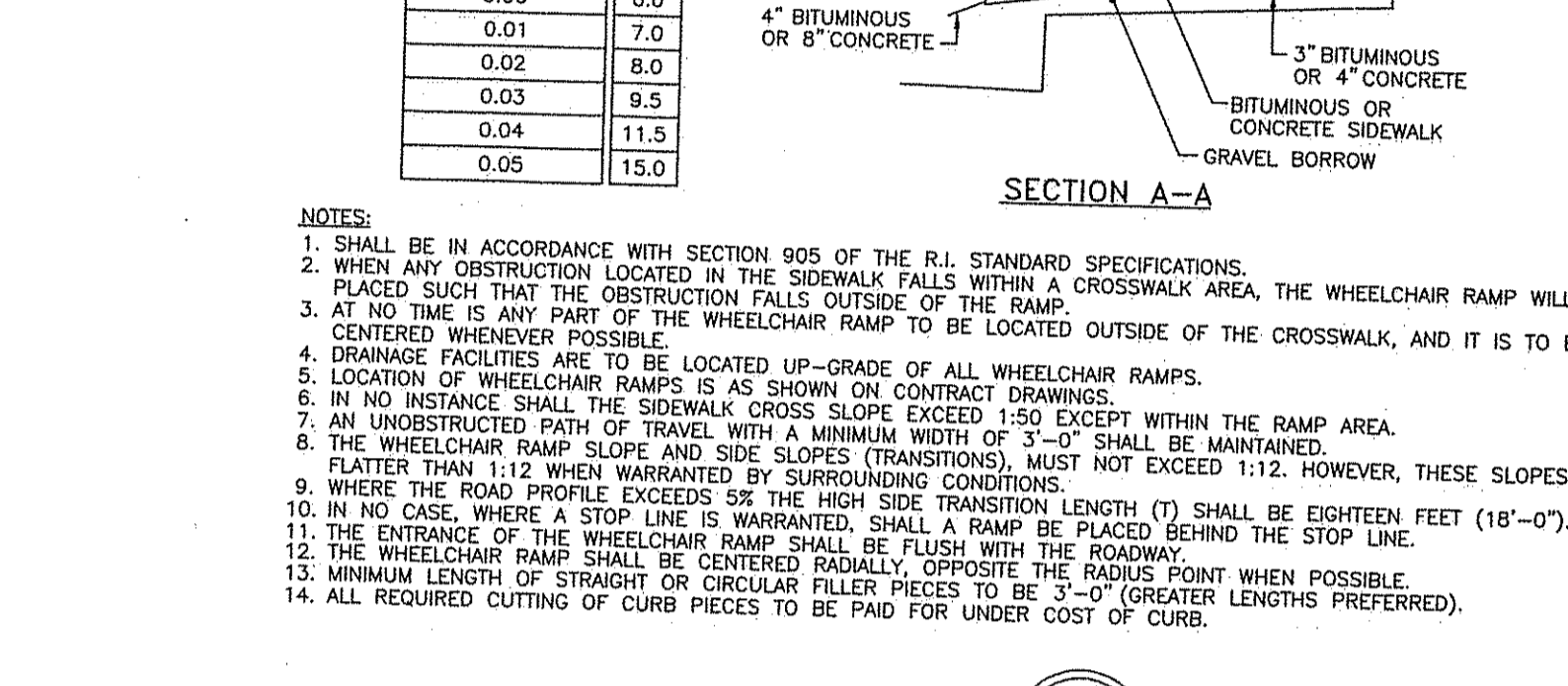
**SIDEWALK REMOVAL DETAIL (ABUTTING EXISTING WALL OR FACE OF BUILDING)**  
 NOT TO SCALE



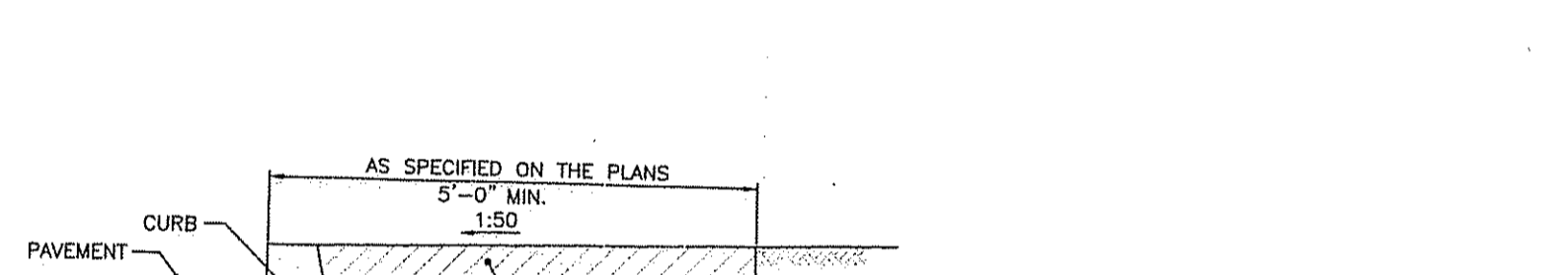
**SHRUB PROTECTION DEVICE**  
 R.I. STANDARD 51.2.0



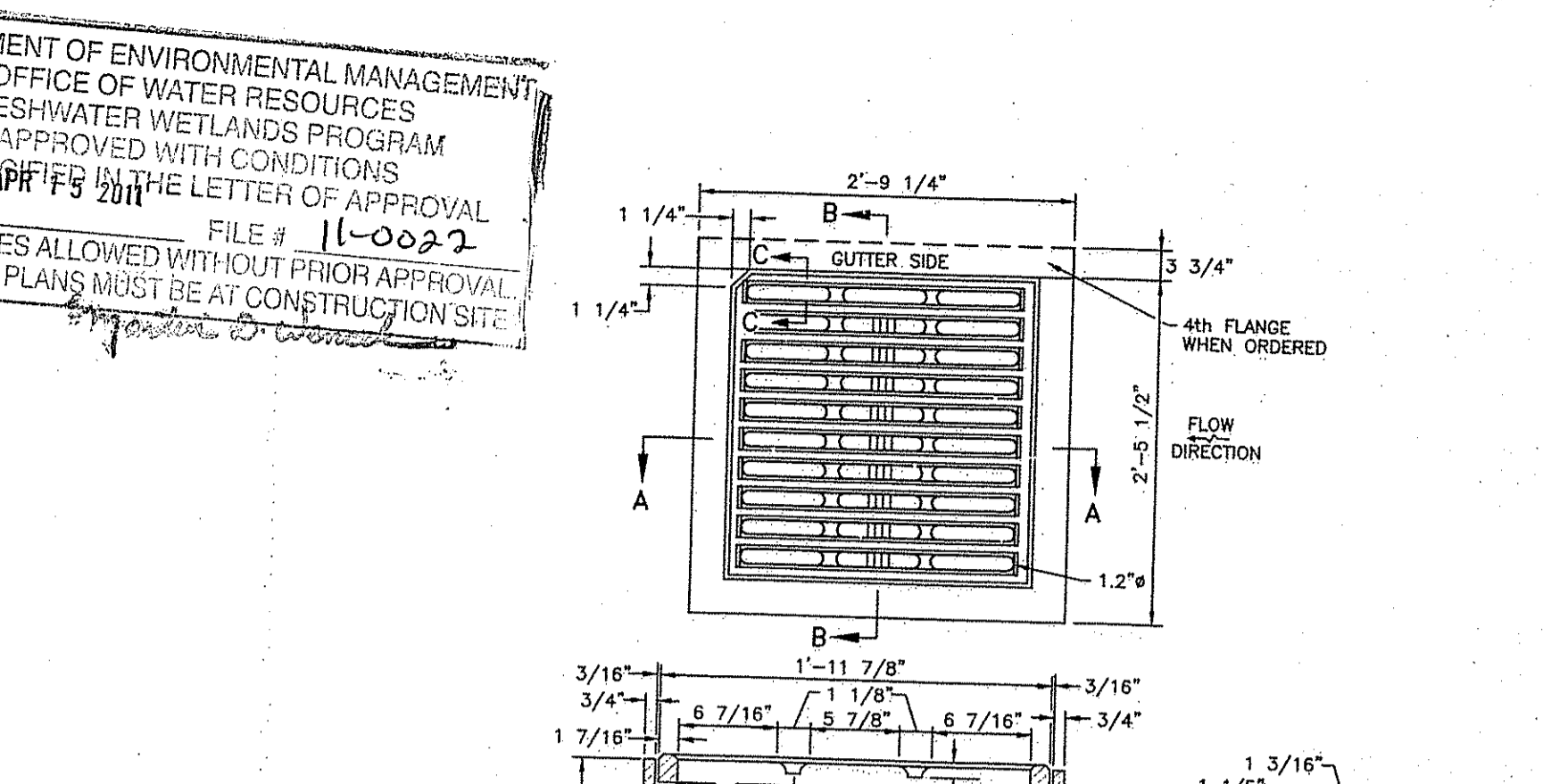
**WHEELCHAIR RAMP**  
 R.I. STANDARD 43.3.0



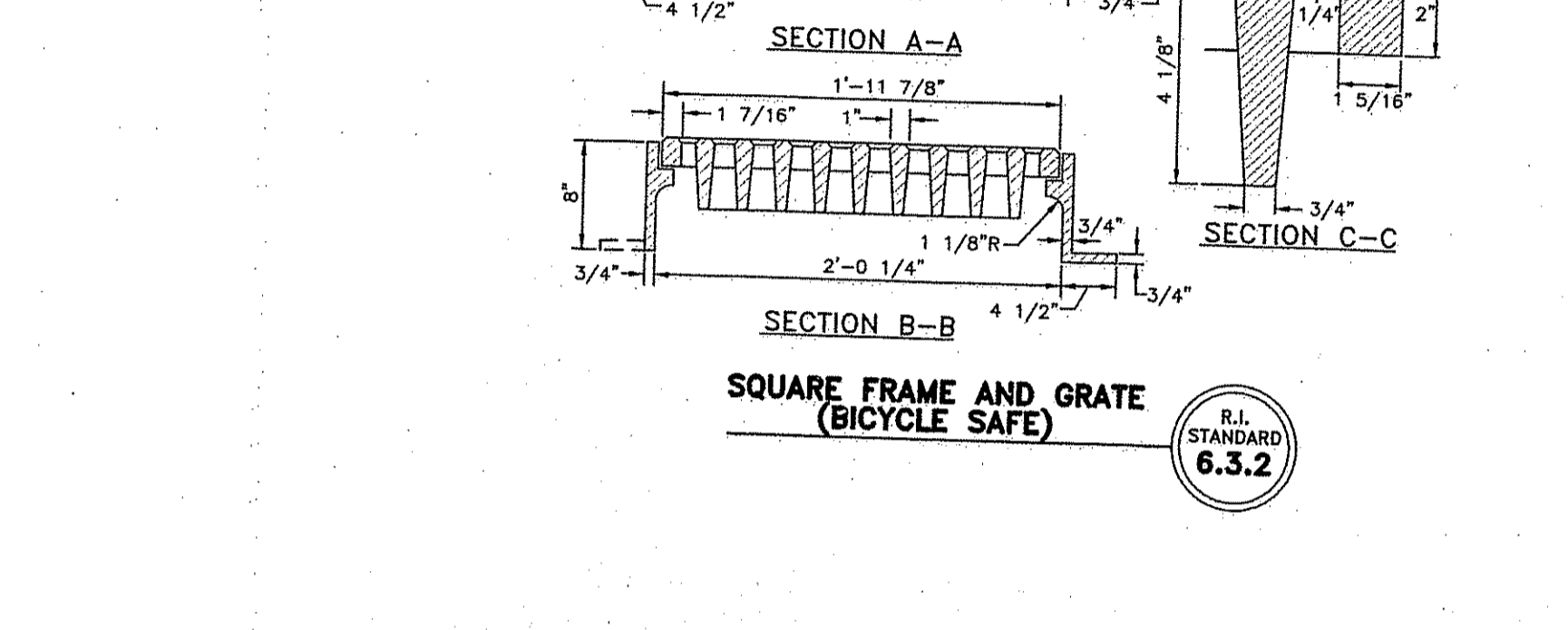
**CURB AND SIDEWALK DETAIL - WIDENING OF SIDEWALK**  
 NOT TO SCALE



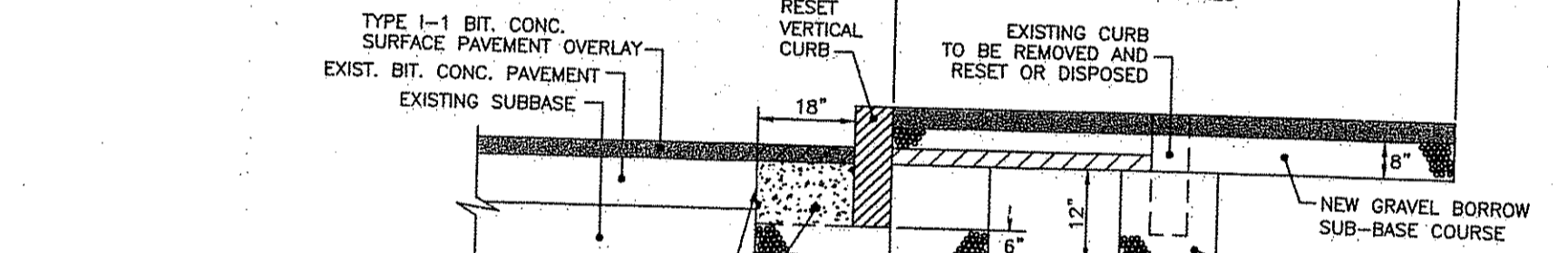
**PRECAST 4'-0", 5'-0", OR 6'-0" ROUND CATCH BASIN**  
 R.I. STANDARD 4.4.0



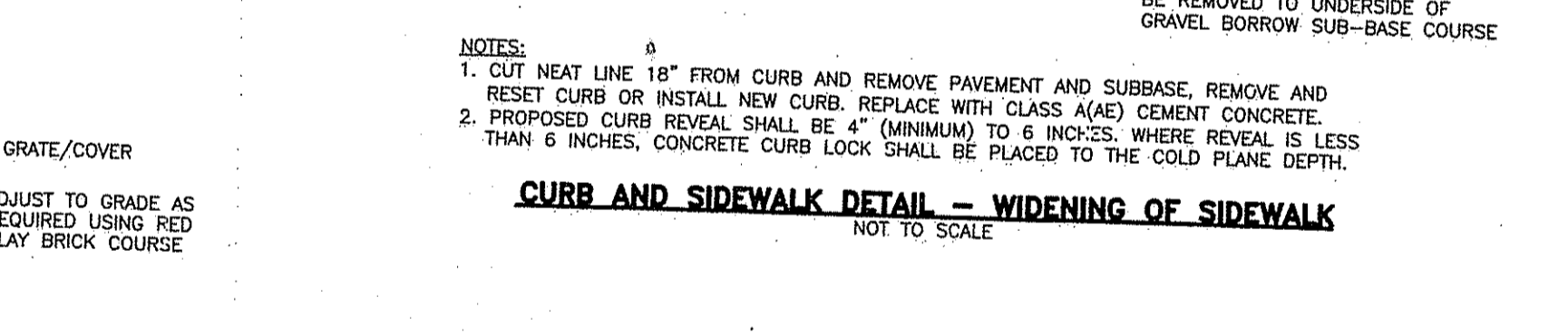
**SQUARE FRAME AND GRATE (BICYCLE SAFE)**  
 R.I. STANDARD 6.3.2



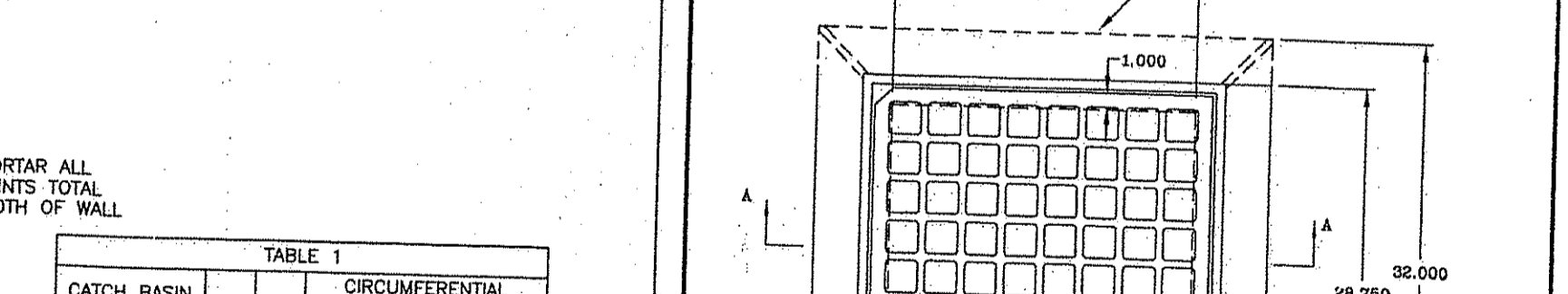
**CURB AND SIDEWALK DETAIL - WIDENING OF SIDEWALK**  
 NOT TO SCALE



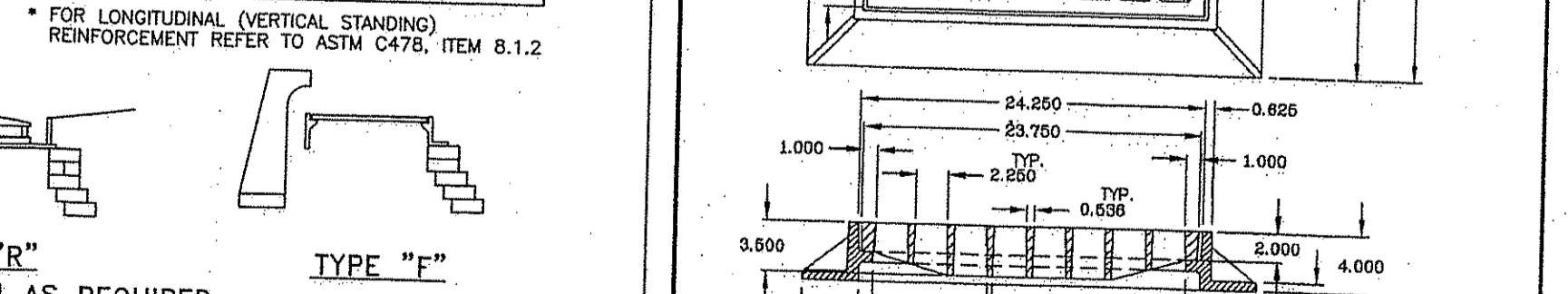
**PRECAST 4'-0", 5'-0", OR 6'-0" ROUND CATCH BASIN**  
 R.I. STANDARD 4.4.0



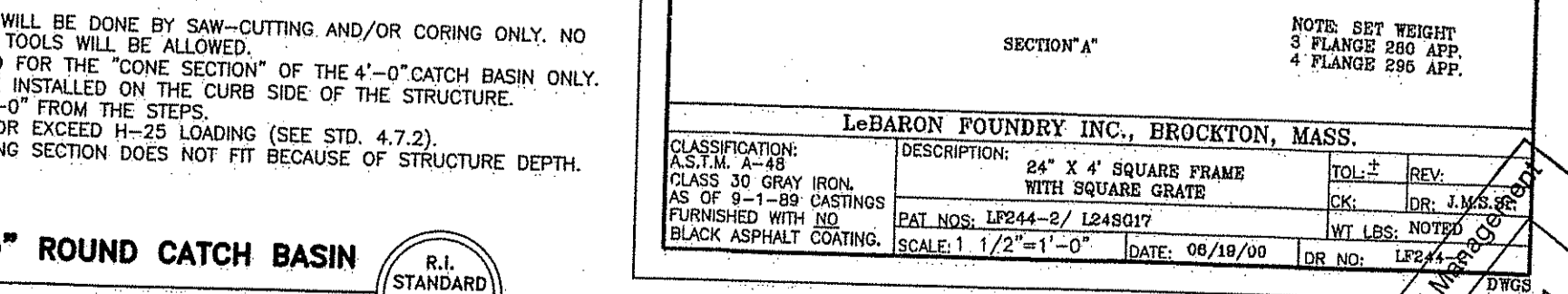
**CURB AND SIDEWALK DETAIL - WIDENING OF SIDEWALK**  
 NOT TO SCALE



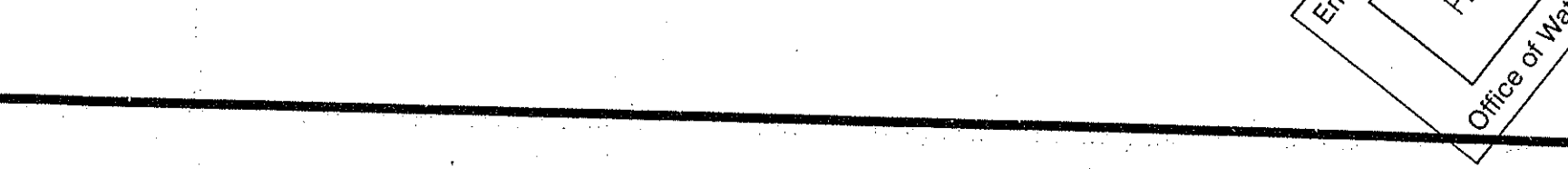
**CURB AND SIDEWALK DETAIL - WIDENING OF SIDEWALK**  
 NOT TO SCALE



**CURB AND SIDEWALK DETAIL - WIDENING OF SIDEWALK**  
 NOT TO SCALE



**CURB AND SIDEWALK DETAIL - WIDENING OF SIDEWALK**  
 NOT TO SCALE



**CURB AND SIDEWALK DETAIL - WIDENING OF SIDEWALK**  
 NOT TO SCALE

**JOE CASALI ENGINEERING, INC.**  
 CIVIL - SITE DEVELOPMENT - TRAINING  
 DRAINAGE - WETLANDS - TRAFFIC - FLOODPLAIN  
 800 POST ROAD, WARWICK, RI 02888  
 401.944.1000 • 401.944.1313 FAX • WWW.JOE-CALL.COM

**JOSEPH A. CASALI**  
 No. 7250  
 REGISTERED PROFESSIONAL ENGINEER  
 CIVIL  
 2-9-11

**SIDEWALK IMPROVEMENT PROJECT**  
 SAYLES AVENUE  
 (210' NORTH OF BRIDGE WAY TO PASCOAG MAIN STREET)  
 &  
 BRIDGE WAY  
 (SAYLES AVENUE TO THE RIVER WALK)  
 BURRILLVILLE, RHODE ISLAND

**BURRILLVILLE**  
 R.I.

**REVISIONS:**

| NO. | DATE     | DESCRIPTION      |
|-----|----------|------------------|
| 1   | 9/20/10  | 75% SUBMISSION   |
| 2   | 10/1/10  | 90% SUBMISSION   |
| 3   | 10/15/10 | 100% SUBMISSION  |
| 4   | 2/7/11   | RIDEM SUBMISSION |

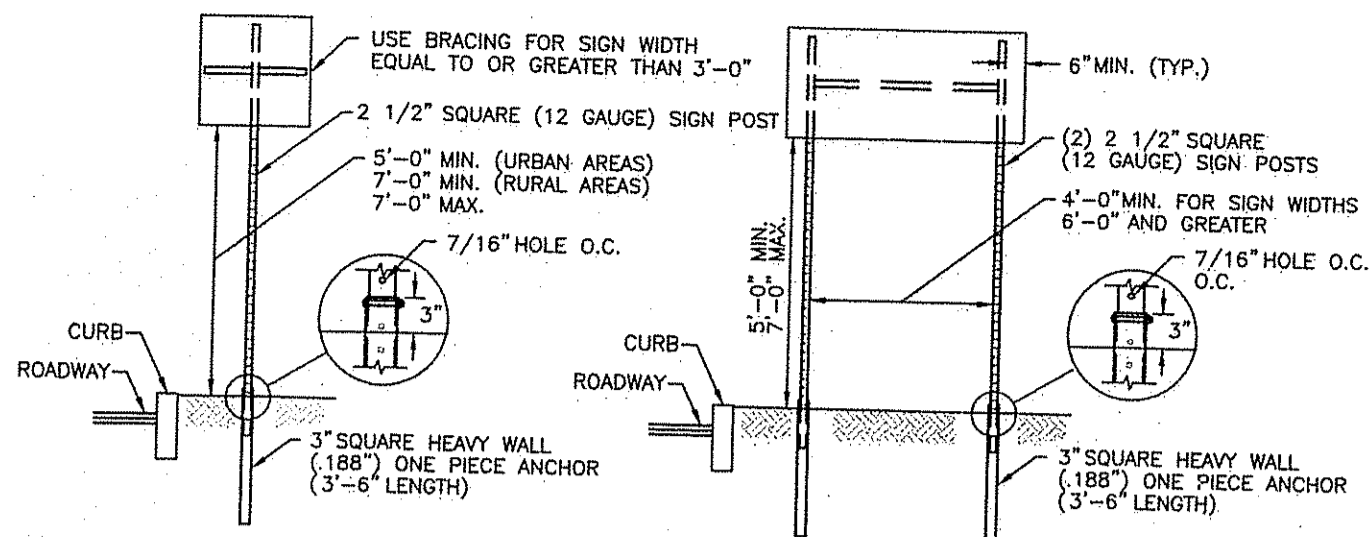
DESIGNED BY: GEC  
 DRAWN BY: WMLJR  
 CHECKED BY: JAC  
 DATE: AUGUST 2010  
 PROJECT NO: 05-92b

100% DESIGN

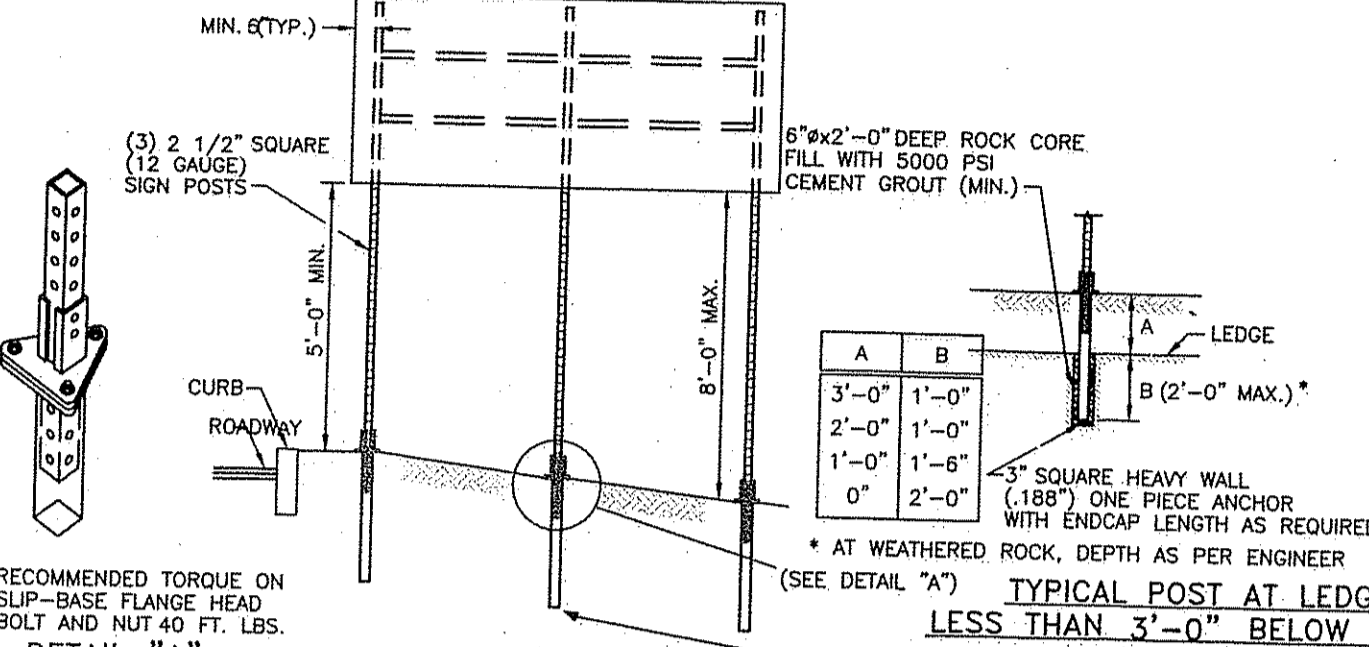
**CONSTRUCTION DETAILS I**

**SHEET 9 OF 12**

Q:\05-92 Town of Burrillville\05-92b Sayles Ave SW Project\CAD\DWG\SAYLES AVE SIDEWALK [PLANSET].dwg Feb. 07. 2011 1:29pm



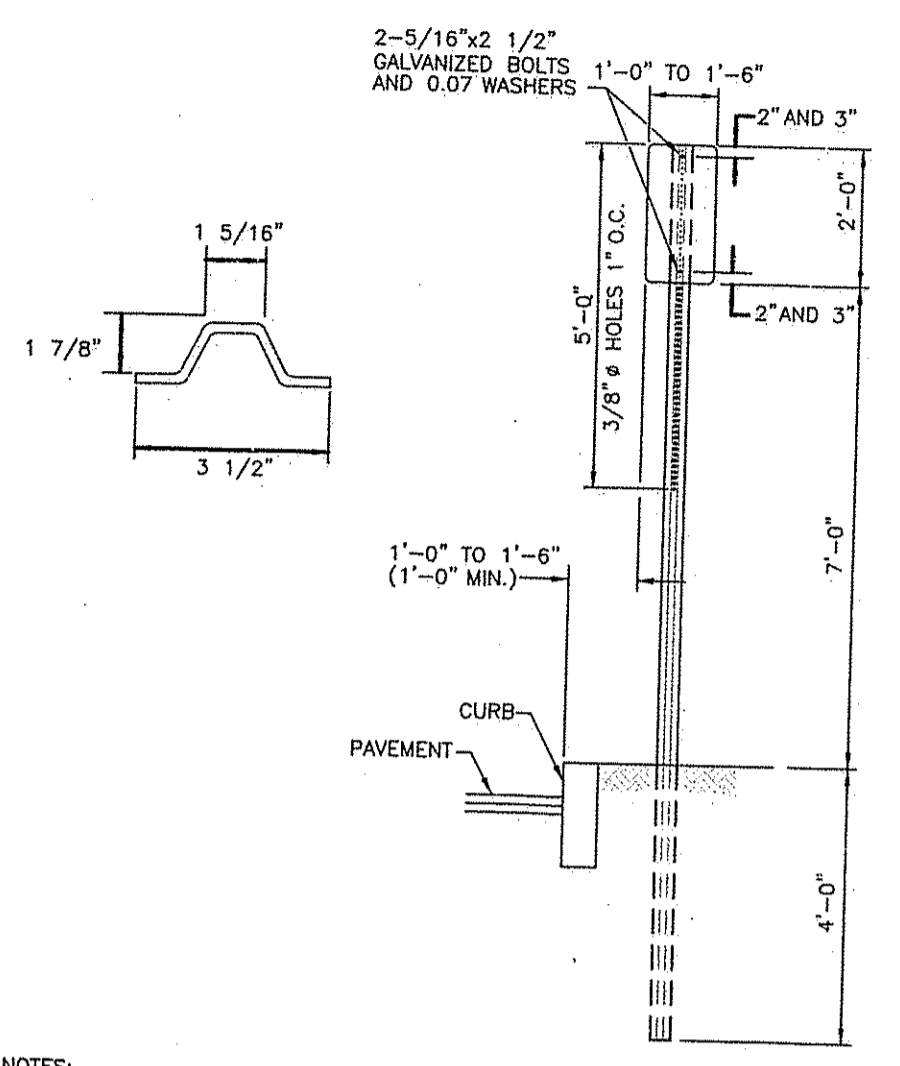
SIGNS UP TO 12 SQ. FT. SIGNS UP TO 28 SQ. FT.



TYPICAL POST AT LEDGE LESS THAN 3'-0" BELOW GRADE

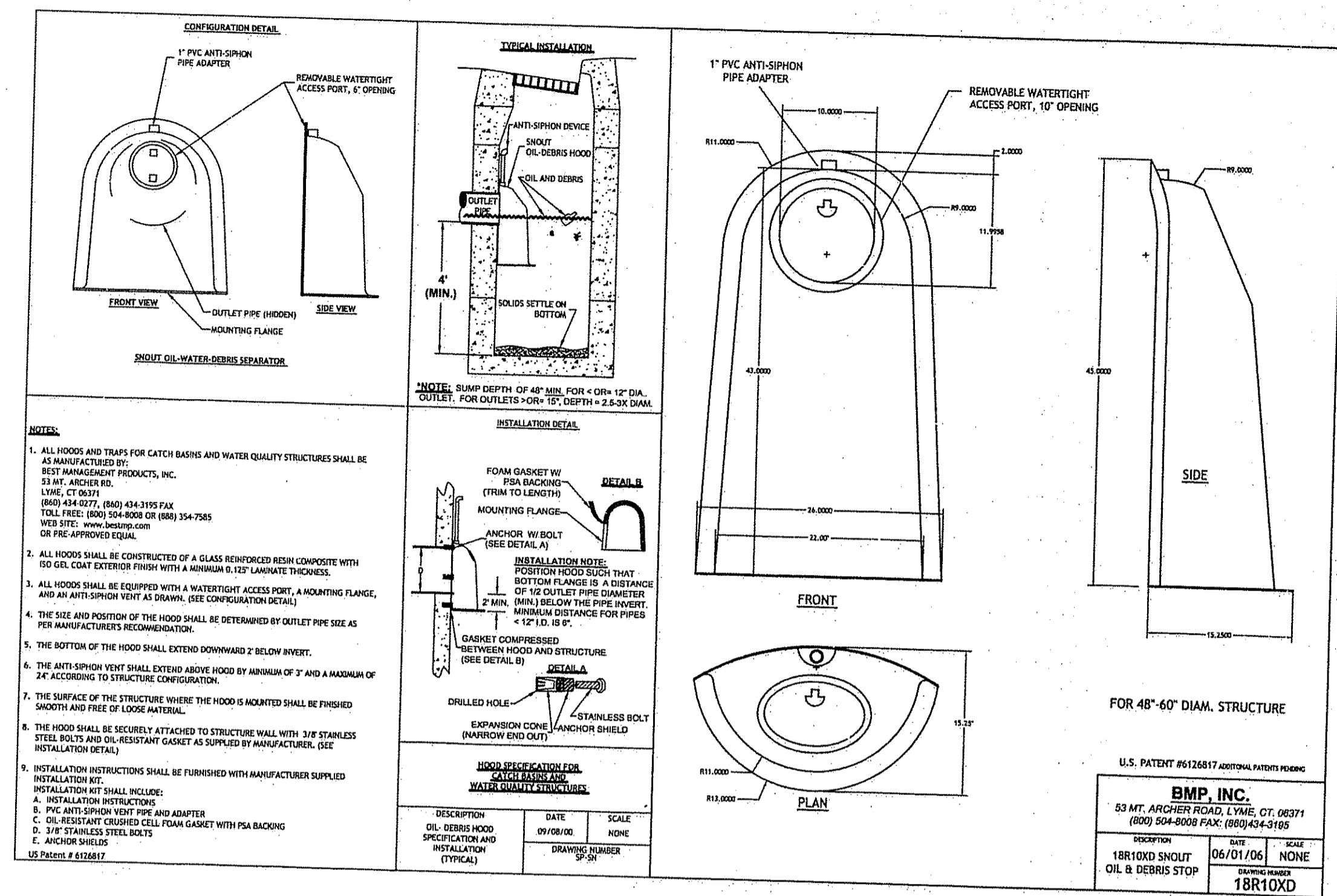
- NOTES:
- SHALL BE IN ACCORDANCE WITH SECTION T.15 OF THE R.I. STANDARD SPECIFICATIONS.
  - SIGN SUPPORTS HAVE BEEN DESIGNED IN ACCORDANCE WITH AASHTO SPECIFICATIONS FOR A 10-YEAR MEAN WIND RECURRENCE INTERVAL.
  - FOR INSTALLATION IN GROUND OR BITUMINOUS CONCRETE DRIVE SIGN POST ANCHOR TO REQUIRED DEPTH SO THAT THE HOLE WILL MATCH TO SIGN POST ABOVE GROUND FOR THE BOLT CONNECTION. INSERT SIGN POST AND BOLT IN PLACE.
  - FOR INSTALLATION IN LEDGE LESS THAN 3'-0" BELOW GRADE SEE DETAIL ABOVE.
  - EDGE OF SIGN SHALL BE 1'-0" (MIN.) FROM EDGE OF CURB IN URBAN AREAS AND 6'-0" (MIN.) FROM EDGE OF CURB IN RURAL AREAS.
  - INSTALLATION PROCEDURES SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
  - BREAKAWAY SIGN SUPPORTS SHALL BE FABRICATED FROM STEEL AND SHALL CONFORM TO THE BREAKAWAY DESIGN SHOWN ON THIS SHEET.
  - STEEL POSTS SHALL CONFORM TO ASTM-A361, Fy= 55 KSI. THE CROSS SECTION OF THE POST SHALL BE SQUARE TUBE FORMED OF 12 GAUGE (1.05" U.S.S. GAUGE) COLD-ROLLED CARBON STEEL SHEETS WHICH HAVE BEEN ZINC COATED FREQUENCY RESISTANCE WELDING OR EQUAL AND EXTERNALLY SCALED TO AGREE WITH CORNER RADII. STANDARD CORNER RADIUS SHALL BE 3/32" PLUS OR MINUS 1/64".
  - ALL BOLTS SHALL CONFORM TO ASTM-A307, CLASS A.
  - ALL BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED AS PER ASTM-A153.
  - FOR SIGNS GREATER THAN 32 SQ. FT., REFER TO STD. 30.1.0, 30.1.1, 30.2.0, 30.2.1, 30.3.0, 30.3.1, 30.4.0, 30.4.1, 30.4.2 AND 30.4.3.

SIGN POST SELECTION AND INSTALLATION DETAILS SQUARE POST (SIGNS UP TO 8'-0" Wx4'-0" H)

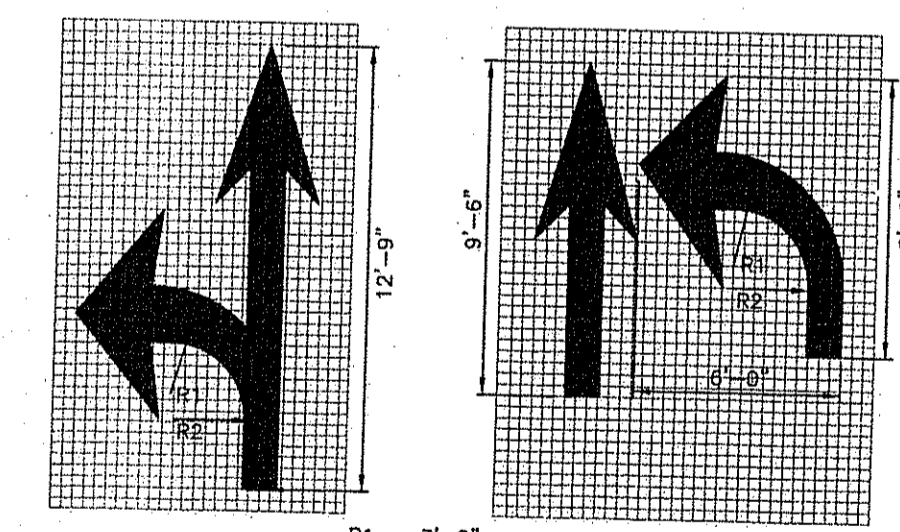


- NOTES:
- SHALL BE IN ACCORDANCE WITH SECTION T.15 OF THE STANDARD SPECIFICATIONS.
  - PARKING SIGNS SHALL BE SET AT AN ANGLE OF NOT LESS THAN 30° NOR MORE THAN 45° WITH A LINE PARALLEL TO FLOW OF TRAFFIC, 1'-6" (1'-0" MIN.) FROM EDGE OF CURB FACE.

PARKING SIGN MOUNTING DETAIL



|   |          |         |
|---|----------|---------|
| DESCRIPTION   | DATE     | SCALE   |
| HOODS AND TRAPS FOR CATCH BASINS AND WATER QUALITY STRUCTURES | 06/01/06 | NONE    |
| 18R10XD SHOUT OIL & DEBRIS STOP                               |          | 18R10XD |



- NOTES:
- SHALL BE IN ACCORDANCE WITH SECTION T.20 OF THE R.I. STANDARD SPECIFICATIONS.
  - THE LONGITUDINAL SPACE BETWEEN WORDS OR SYMBOL MESSAGES, INCLUDING ARROWS, SHOULD BE AT LEAST FOUR TIMES THE HEIGHT OF THE CHARACTER FOR LOW SPEED ROADS BUT NOT MORE THAN TEN TIMES THE HEIGHT OF THE CHARACTER UNDER ANY CONDITIONS.
  - THE SPACING OF THE PAVEMENT MARKINGS WILL BE AS SHOWN ON THE PLAN AND AS PER THE MUTCD.
  - SYMBOLS AND WORDS SHALL MEET THE REQUIREMENTS OF THE FHWA STANDARD ALPHABET AND SYMBOLS FOR HIGHWAY PAVEMENT MARKINGS.

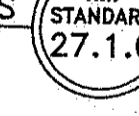
PAVEMENT MARKINGS ARROWS AND ONLY



| SIGN NUMBER    | R1-1                         | RS-1                         |
|----------------|------------------------------|------------------------------|
| LEGEND         | STOP                         | DO NOT ENTER                 |
| COLOR          | BACKGROUND: WHITE, COPY: RED | BACKGROUND: RED, COPY: WHITE |
| SIGN DIMENSION | WIDTH: 24", 30", 36", 48"    | HEIGHT: 24", 30", 36", 48"   |

- NOTES:
- SHALL BE IN ACCORDANCE WITH SECTION T.15 OF THE R.I. STANDARD SPECIFICATIONS.
  - REGULATORY SIGNS SHALL BE MOUNTED IN ACCORDANCE WITH STD. 24.1.0, 24.2.0 OR 24.6.0.
  - THICKNESS OF ALUMINUM SIGN PLATES: 1/8" THIN TO 3/16" THIN - 0.001 IN. 1/4" THIN TO 3/8" THIN - 0.102 IN. GREATER THAN 3/8" THIN - 0.102 IN.
  - FOR ADDITIONAL SIGNS SEE THE MUTCD.

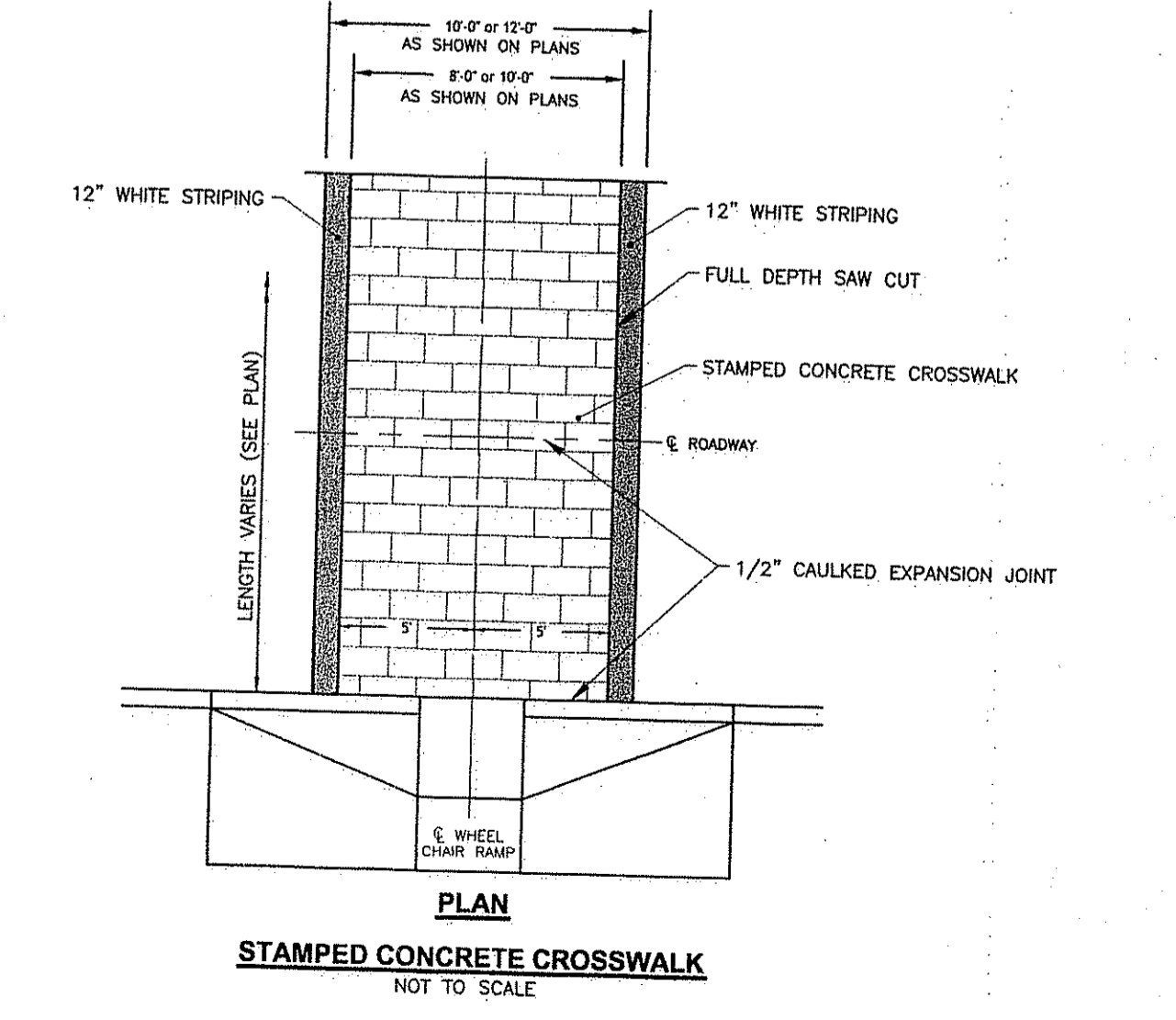
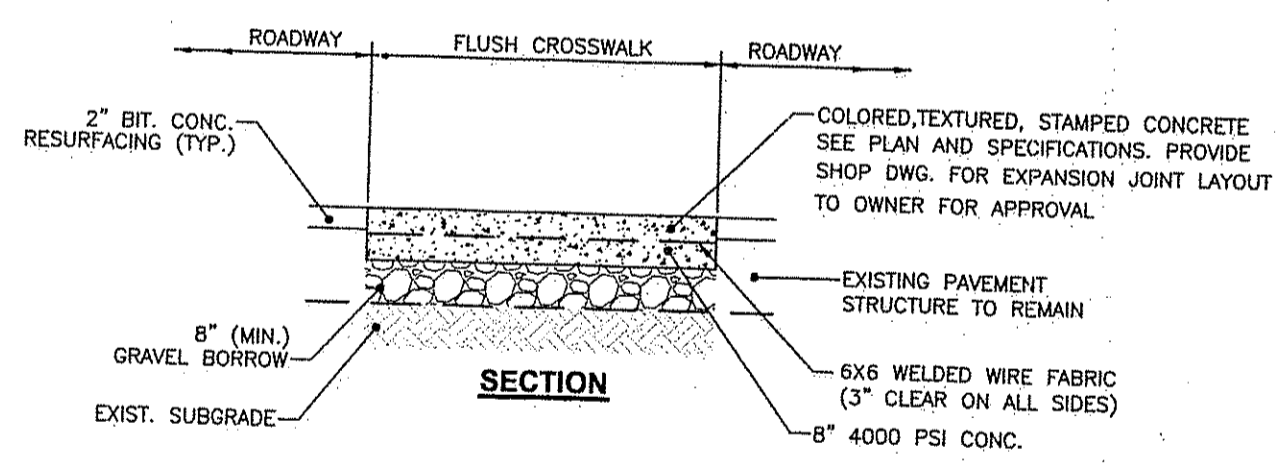
REGULATORY SIGNS



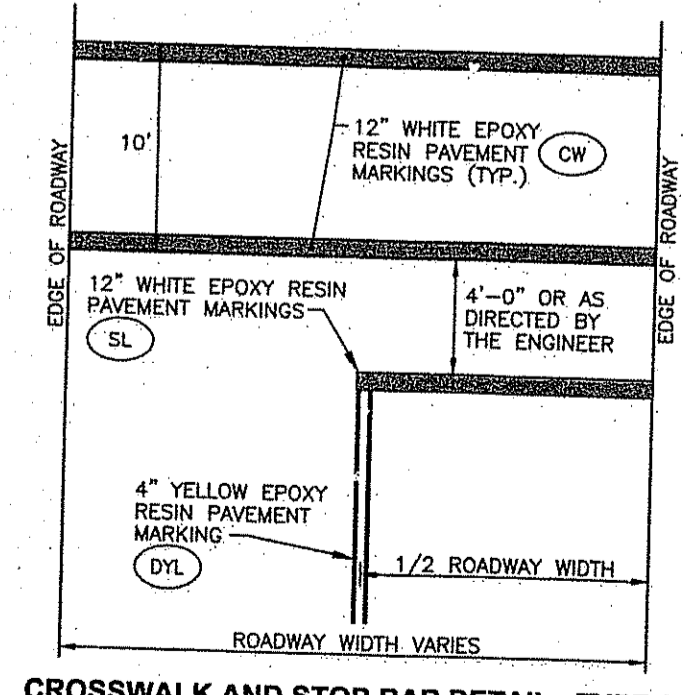
| SIGN NUMBER    | W14-2                           |
|----------------|---------------------------------|
| LEGEND         | WHEEL CHAIR RAMP                |
| COLOR          | BACKGROUND: YELLOW, COPY: BLACK |
| SIGN DIMENSION | WIDTH: 30", 36", 48"            |
|                | HEIGHT: 30", 36", 48"           |

- NOTES:
- SHALL BE IN ACCORDANCE WITH SECTION T.15 OF THE R.I. STANDARD SPECIFICATIONS.
  - IDENTIFY TYPE GRADE SHEETING, IF USED WITHIN WORK ZONE, USE TYPE Z SHEETING.
  - WARNING SIGNS SHALL BE MOUNTED IN ACCORDANCE WITH STD. 24.1.0, 24.2.0 OR 24.6.4.
  - FOR ADDITIONAL SIGNS SEE THE MUTCD.

WARNING SIGNS



STAMPED CONCRETE CROSSWALK NOT TO SCALE



CROSSWALK AND STOP BAR DETAIL - TYPE 2 NOT TO SCALE

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS  
AS SPECIFIED IN THE LETTER OF APPROVAL  
DATED APR 13 2011 FILE # 11-0022  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE.

**JCE**  
JOE CASALI ENGINEERING, INC.  
CIVIL - SITE DEVELOPMENT - TRANSPORTATION  
DRAINAGE - WETLANDS - I&DS - TRAFFIC - FLOODPLAIN  
16011844-1300 (401)844-1313 FAX WWW.JCEINC.COM

JOSEPH A. CASALI  
No. 7250  
REGISTERED PROFESSIONAL ENGINEER  
CIVIL  
2-7-11

**SIDEWALK IMPROVEMENT PROJECT**  
SAYLES AVENUE  
(210' NORTH OF BRIDGE WAY TO PASCOAG MAIN STREET)  
&  
BRIDGE WAY  
(SAYLES AVENUE TO THE RIVER WALK)  
BURLINGAME, RHODE ISLAND

REVISIONS:

| NO. | DATE     | DESCRIPTION      |
|-----|----------|------------------|
| 1   | 9/20/10  | 75% SUBMISSION   |
| 2   | 10/17/10 | 90% SUBMISSION   |
| 3   | 10/15/10 | 100% SUBMISSION  |
| 4   | 2/7/11   | RIDEM SUBMISSION |

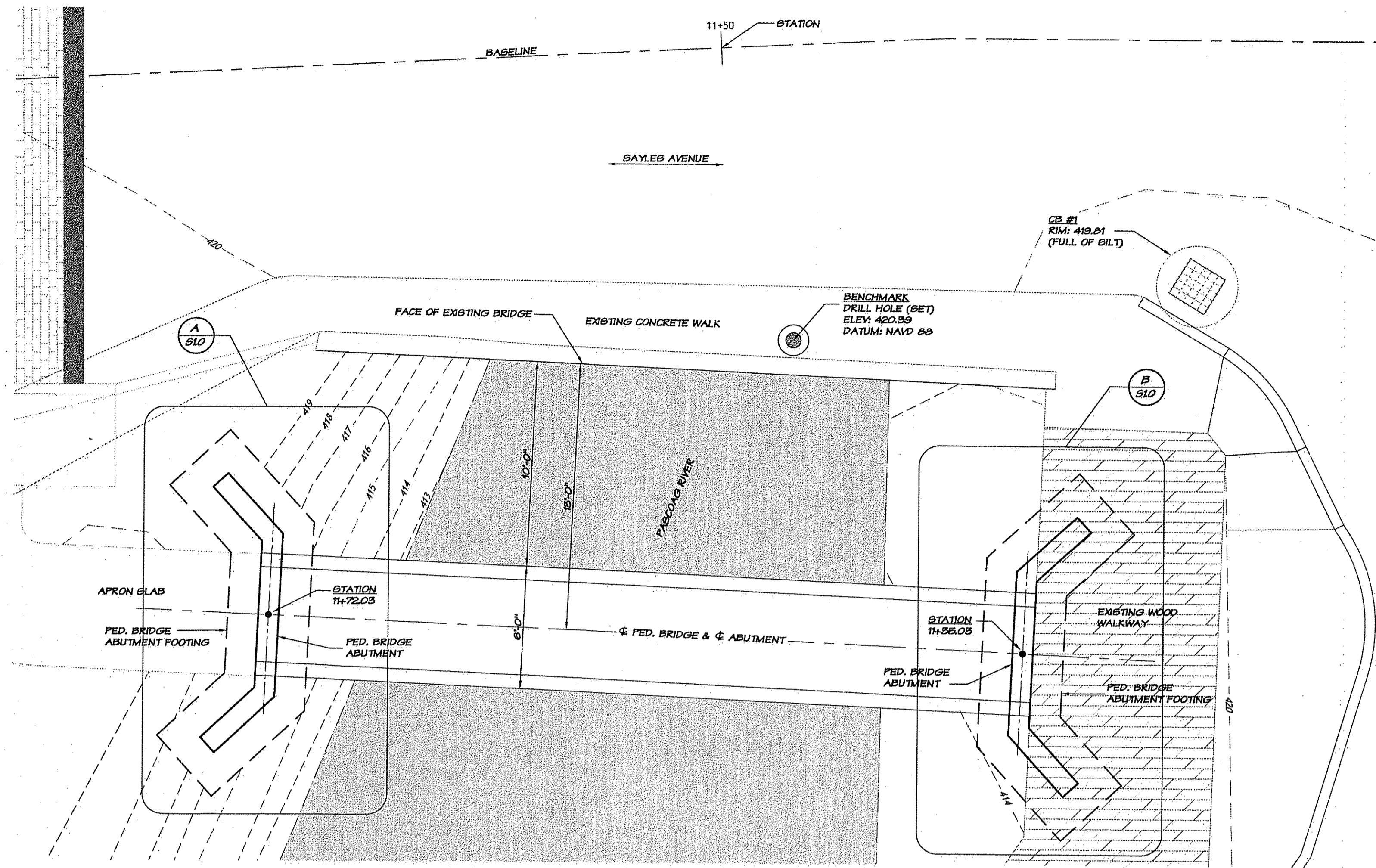
|              |             |
|--------------|-------------|
| DESIGNED BY: | GEC         |
| DRAWN BY:    | WMLJR       |
| CHECKED BY:  | JAC         |
| DATE:        | AUGUST 2010 |
| PROJECT NO.: | 05-92b      |

100% DESIGN

**CONSTRUCTION DETAILS II**

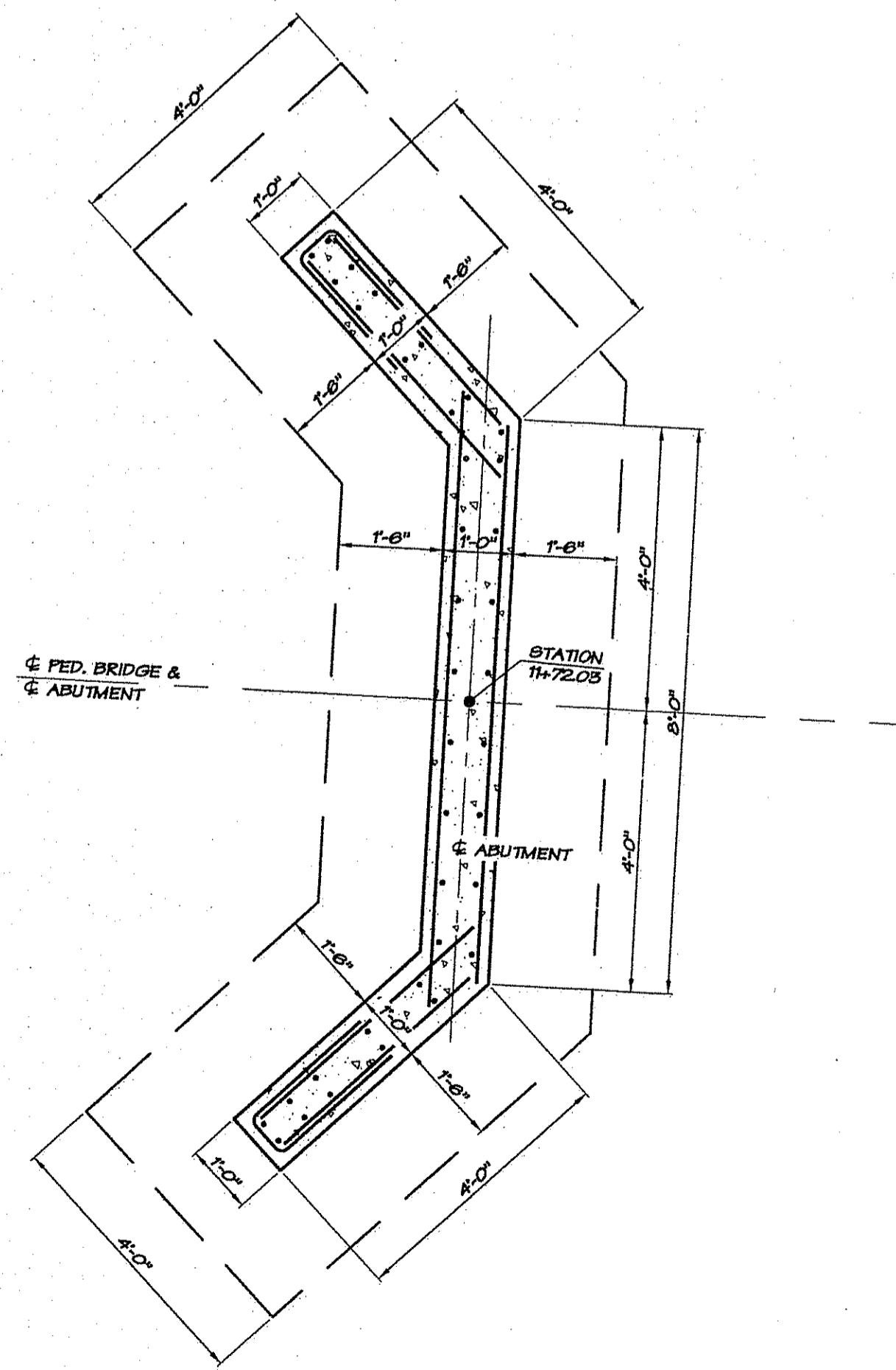
SHEET 10 OF 12

Environmental Management  
FEB - 8 2011  
Office of Water Resources



PEDESTRIAN BRIDGE PLAN VIEW

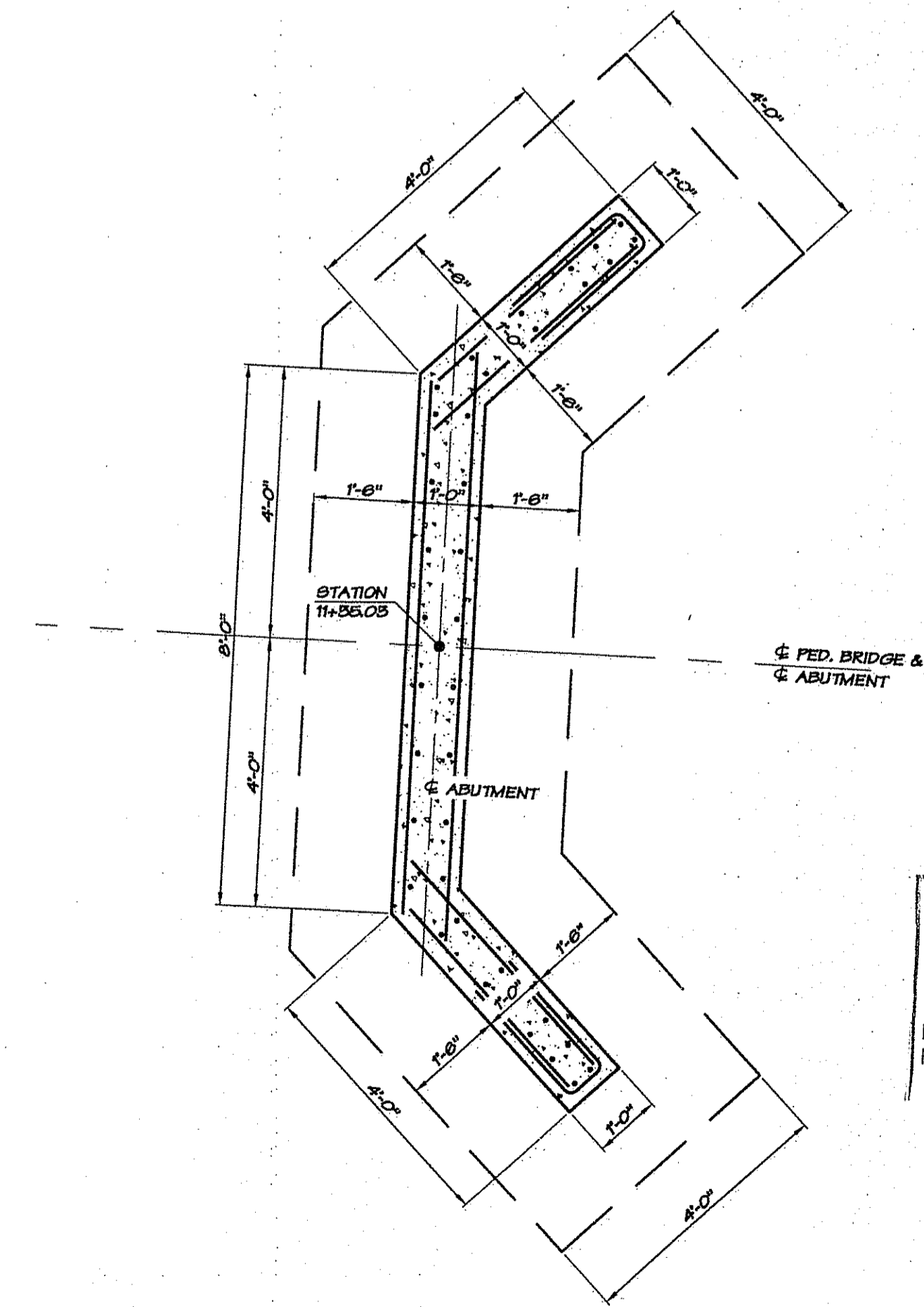
1/4" = 1'-0"



NORTH ABUTMENT PLAN

1/2" = 1'-0"

A  
S10



SOUTH ABUTMENT PLAN

1/2" = 1'-0"

B  
S10

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS  
AS SPECIFIED IN THE LETTER OF APPROVAL  
DATED APR 13 2011 FILE # 11-0022  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL.  
PROVED PLANS MUST BE AT CONSTRUCTION SITE.

*Signature*

Environmental Management  
FWP - 8 2011  
Office of Water Resources

SIDEWALK IMPROVEMENT PROJECT

SAYLES AVENUE  
&  
BRIDGE WAY  
(SAYLES AVENUE TO THE RIVER WALK)



BURRILLVILLE, RHODE ISLAND

PEDESTRIAN BRIDGE PLAN VIEW  
ENLARGED ABUTMENT PLANS

DRAWING STATUS 75% SUBMISSION

ISSUED ON 14 JAN. 2011

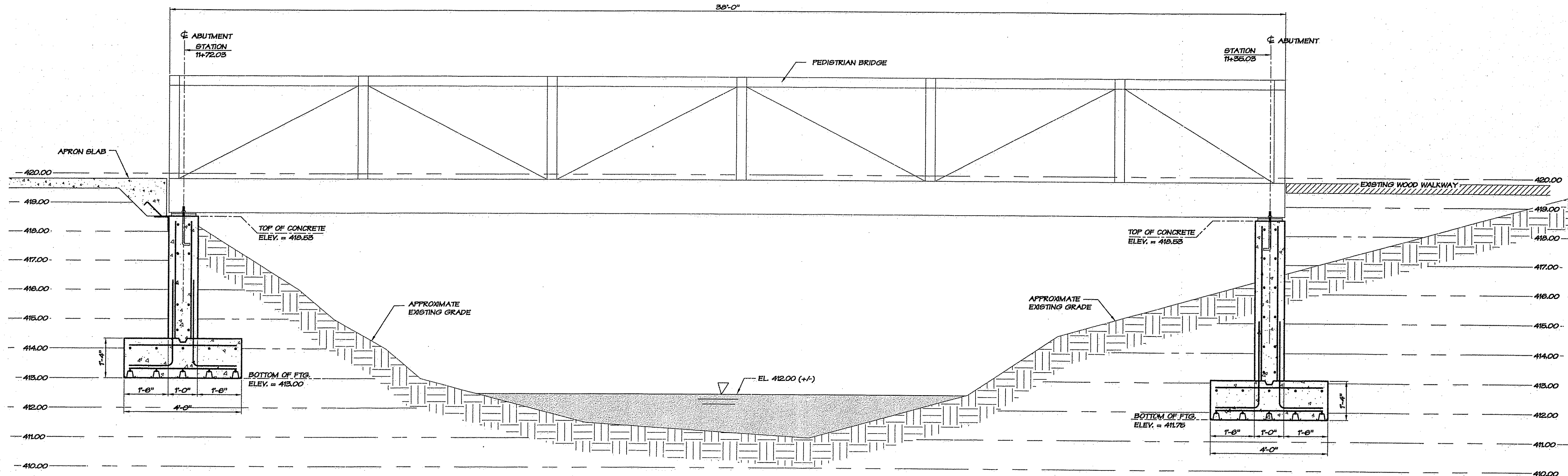
JOB No. 60310

S1.0

|           |         |
|-----------|---------|
| DRAWN BY  | CHKD BY |
| REVISIONS |         |
| LJH       |         |

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**B&A**  
BENN & ASSOCIATES INC.  
STRUCTURAL ENGINEERS  
81 BUCKWOOD DRIVE  
N. KINGSTOWN, RI 02881  
PH: 401.487.6160 FX: 401.285.1310



**PEDESTRIAN BRIDGE CROSS SECTION**

1/2" = 1'-0"

**GENERAL NOTES:**

**FOUNDATION:**

FOUNDATION DESIGN IS BASED ON A 3000 PSF ALLOWABLE SOIL BEARING PRESSURE. CONTRACTOR TO RETAIN THE SERVICES OF AN ENGINEERING TESTING AGENCY TO VERIFY THE ALLOWABLE SOIL BEARING PRESSURE PRIOR TO THE PLACEMENT OF ANY FOUNDATIONS. SEND A COPY OF VERIFICATION TO THE A/E FOR RECORDS.

- REFER TO THE SITE/CIVIL DRAWINGS FOR GENERAL REQUIREMENTS OF EARTHWORK, OVEREXCAVATION, SUBGRADE PREPARATION, FILL AND COMPACTION, WATERPROOFING AND OTHER PERTINENT REQUIREMENTS AND INFORMATION. IF THERE IS A CONFLICT BETWEEN THE SITE/CIVIL DRAWINGS AND STRUCTURAL PLANS THEN THE MORE STRINGENT CRITERIA SHALL APPLY UNLESS OTHERWISE DIRECTED BY AN RFI.
- MAINTAIN SUBGRADE AND FILL MOISTURE CONTENT UNTIL FOUNDATIONS ARE PLACED. DO NOT PERMIT PONDING OF RUN-OFF AT FOUNDATION EXCAVATIONS.
- ARRANGE FOR OWNER'S INDEPENDENT TESTING AGENCY TO MONITOR CUT AND FILL OPERATIONS AND PERFORM FIELD DENSITY AND MOISTURE CONTENT TESTS TO VERIFY COMPACTION AND APPROVE FOOTING SUBGRADES PRIOR TO PLACING ANY CONCRETE.
- DO NOT PLACE FOOTINGS AGAINST SUBGRADE CONTAINING FREE WATER, FROST, OR ICE.
- MAINTAIN PROPER SITE DRAINAGE DURING CONSTRUCTION TO ENSURE SURFACE RUNOFF AWAY FROM STRUCTURES AND TO PREVENT PONDING OF SURFACE RUNOFF NEAR THE STRUCTURES.

**CONCRETE:**

- PROVIDE BATCH MIXING, TRANSPORTATION, PLACING AND CURING OF CONCRETE IN ACCORDANCE WITH RECOMMENDATIONS OF ACI 301 AND ACI 318. USE TYPE I PORTLAND CEMENT UNLESS NOTED OTHERWISE. PROVIDE ADMIXTURES AND SPECIAL REQUIREMENTS AS SPECIFIED.
  - A. ALL CONCRETE SHALL BE NORMAL WEIGHT (145 PCF) CONCRETE:
    - f<sub>c</sub> = 4000 PSI AT FOUNDATION WALLS AND FOOTINGS (AIR-ENTRAINED).
- PROVIDE CONCRETE MIXES DESIGNED BY A QUALIFIED TESTING LABORATORY FOR REVIEW AND APPROVAL BY THE STRUCTURAL ENGINEER.

**REINFORCING STEEL:**

- PROVIDE DETAILING, FABRICATION, AND INSTALLATION OF REINFORCING AND ACCESSORIES IN ACCORDANCE WITH ACI 318 AND ACI 318.
- PROVIDE NEW BILLET STEEL REINFORCING BARS IN ACCORDANCE WITH ASTM A 615, GRADE 60.
- COORDINATE PLACEMENT OF CAST-IN-PLACE EMBEDS AND ANCHOR RODS. SET ANCHOR RODS WITH A TEMPLATE. SECURELY ATTACH EMBED ITEMS TO FORMWORK OR REINFORCING.
- PROVIDE CLASS "B" REINFORCEMENT SPLICES FOR CONTINUOUS REINFORCEMENT. PROVIDE STANDARD 90-DEGREE HOOKS IN ACCORDANCE WITH ACI 318, UNLESS NOTED OTHERWISE.
- MAINTAIN THE FOLLOWING CONCRETE COVERAGE FOR REINFORCING STEEL UNLESS NOTED OTHERWISE:
  - CONCRETE CAST AGAINST EARTH: 3 INCHES
  - CONCRETE EXPOSED TO WEATHER: 1 1/2 INCHES
  - CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH THE GROUND:
    - WALLS: 3/4 INCHES
- DO NOT WELD OR BEND REINFORCEMENT IN THE FIELD UNLESS SPECIFICALLY SHOWN OR APPROVED BY STRUCTURAL ENGINEER.
- WHERE REQUIRED, PROVIDE DOWELS TO MATCH SIZE AND SPACING OF MAIN REINFORCING.
- PROVIDE CONTINUOUS HORIZONTAL WALL REINFORCEMENT WITH 90 DEGREE BENDS AND EXTENSIONS AT CORNERS AND INTERSECTIONS AS SHOWN ON TYPICAL BAR PLACING DETAILS.

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

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF WATER RESOURCES  
 FRESHWATER WETLANDS PROGRAM  
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 DATED APR 15 2011 FILE # 11-0022  
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
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*Imaginer D. Wenzel*

Environmental Management  
 FEB - 8 2011  
 Office of Water Resources

CHECKED BY  
 DRAWN BY LJM

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**BENN & ASSOCIATES, INC.**  
 STRUCTURAL ENGINEERS  
 61 BUCKWOOD DRIVE  
 N. KINGSTOWN, PA 17052  
 PH 401.497.6150 FX 401.286.1310

**SIDEWALK IMPROVEMENT PROJECT**  
 SAYLES AVENUE  
 &  
 BRIDGE WAY  
 (SAYLES AVENUE TO THE RIVER WALK)  
 BURRILLVILLE, RHODE ISLAND  
 210' NORTH OF BRIDGE WAY TO PASCOG MAIN STREET

PEDESTRIAN BRIDGE  
 CROSS SECTION  
 GENERAL NOTES  
 DRAWING STATUS 75% SUBMISSION  
 ISSUED ON 14 JAN. 2011  
 JOB No. 60310

**S1.1**  
 12 OF 12