

GENERAL NOTES

- THE EXISTING CONDITIONS AND ABOVE GROUND FEATURES SHOWN ON THIS PLAN HAVE BEEN OBTAINED FROM FIELD SURVEY BY CROSSMAN ENGINEERING. SUBSURFACE UTILITIES SHOWN ARE BASED UPON PLAN INFORMATION PROVIDED BY RHODE ISLAND COLLEGE. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL EXISTING DRAINAGE, ELECTRIC AND UTILITIES, BOTH UNDERGROUND AND OVERHEAD, BEFORE EXCAVATION BEGINS IN ACCORDANCE WITH "DIG SAFE PROGRAM LAW" ENACTED BY THE R.I. LEGISLATURE AND BY CONTACTING THE INDIVIDUAL UTILITY COMPANIES. EXCAVATION SHALL BE IN ACCORDANCE WITH ALL STATUTES, ORDINANCES, RULES AND REGULATIONS OF ANY CITY, STATE OR FEDERAL AGENCY THAT MAY APPLY. ANY DAMAGE TO EXISTING UTILITIES SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
- SPECIFICATIONS TO GOVERN THIS PROJECT ARE IDENTIFIED WITHIN THE PROJECT MANUAL. FOR ALL EXCAVATION, PLACEMENT OF FILL, PIPE INSTALLATION, BITUMINOUS PAVEMENT, SIDEWALKS, CUTTING INTO MANHOLES, CONCRETE AND SAWCUTTING, THE CONTRACTOR SHALL ALSO PERFORM THE WORK IN FULL COMPLIANCE WITH THE RHODE ISLAND DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AMENDED MARCH 2018, WITH LATEST REVISIONS UNLESS OTHERWISE SHOWN ON PLANS. THE "METHOD OF MEASUREMENT" AND "BASIS OF PAYMENT" WITHIN THE R.I.D.O.T. SPECIFICATIONS ARE NOT APPLICABLE. THESE SPECIFICATIONS CAN BE OBTAINED ON-LINE AT:
[HTTP://WWW.DOT.RI.GOV/DOCUMENTS/DOINGBUSINESS/BLUEBOOK.PDF](http://www.dot.ri.gov/documents/doingbusiness/bluebook.pdf)
- IN ADDITION TO THE PROJECT MANUAL, FOR TRENCH EXCAVATION AND PLACEMENT OF BACKFILL, THE CONTRACTOR SHALL PERFORM THE WORK IN FULL COMPLIANCE WITH THE R.I. STANDARD SPECIFICATION SECTION 205.
- RHODE ISLAND STANDARDS REFERENCED ARE ACCORDING TO THE STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS "RHODE ISLAND STANDARD DETAILS" DATED JUNE 21, 2019, WITH ALL REVISIONS AS PREPARED BY THE DEPARTMENT OF TRANSPORTATION.
- THE CONTRACTOR MUST VERIFY PRIOR TO CONSTRUCTION THAT ALL REQUIRED AUTHORIZATION TO PERFORM WORK HAS BEEN OBTAINED. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR CONSTRUCTION OPERATIONS INCLUDING ALL ACTIONS OR OMISSIONS 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 ASPECTS OF ON-SITE SAFETY INCLUDING ANY DAMAGE TO EXISTING STRUCTURES.
- 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. THE BID PRICE SHALL INCLUDE ALL LABOR, INCIDENTALS, TOOLS EQUIPMENT, TESTING, 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 ACCEPTABLE TO THE ENGINEER AND OWNER.
- CONTRACTOR IS RESPONSIBLE TO VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO ANY WORK AND PRIOR TO PURCHASING PRODUCTS.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THIS PROJECT PRIOR TO THE INITIATION OF WORK. SHOULD THE CONTRACTOR FIND A CONFLICT WITH THE DOCUMENTS, RELATIVE TO THE SPECIFICATIONS OR APPLICABLE CODES, IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE PROJECT ENGINEER OF RECORD IN WRITING PRIOR TO THE START OF CONSTRUCTION. FAILURE BY THE CONTRACTOR TO NOTIFY THE PROJECT ENGINEER SHALL CONSTITUTE ACCEPTANCE OF FULL RESPONSIBILITY BY THE CONTRACTOR TO COMPLETE THE SCOPE OF WORK AS DEFINED BY THE DRAWINGS AND IN FULL CONFORMANCE WITH LOCAL REGULATIONS AND CODES.
- ALL DISTURBED AREAS SHALL BE REPLACED IN KIND UNLESS OTHERWISE SHOWN.
- FINE GRADING IS TO ENSURE THAT NO PUDDLING OR PONDING OF STORMWATER OCCURS IN REPAIRED PAVEMENT AREAS OR NEW SIDEWALK AREAS.
- EXCAVATION BACKFILL SHALL BE COMPACTED BY THE CONTRACTOR IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.

DRAINAGE NOTE

PROJECT-WIDE, DURING CONSTRUCTION THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN SURFACE RUNOFF TO DRAIN FREELY AND TO PREVENT PONDING OR PUDDLING ON PAVEMENT SURFACES. SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED THROUGHOUT THE PROJECT.

FLOOD ZONE NOTE

THE PROJECT LIMITS ARE LOCATED WITHIN ZONE X, AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN, AND ZONE A, SPECIAL FLOOD HAZARD AREA SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD, AS SHOWN ON THE FLOOD INSURANCE RATE MAP, PROVIDENCE COUNTY, RHODE ISLAND (ALL JURISDICTIONS) PANEL 304 OF 451, MAP NUMBER 44007C0304J, MAP REVISED OCTOBER 2, 2015.

LAYOUT NOTE

THE LAYOUT SHOWN REPRESENTS A GRAPHICAL DESIGN, AND PRIOR TO 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 ITEM FOUND WHICH DOES 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.

EXISTING CONDITIONS

FIELD SURVEY HAS BEEN CONDUCTED BY CROSSMAN ENGINEERING TO LOCATE THE ABOVE GRADE EXISTING CONDITIONS AND TOPOGRAPHY. UNDERGROUND UTILITIES SHOWN ON THESE PLANS ARE FROM INFORMATION PROVIDED BY RHODE ISLAND COLLEGE.

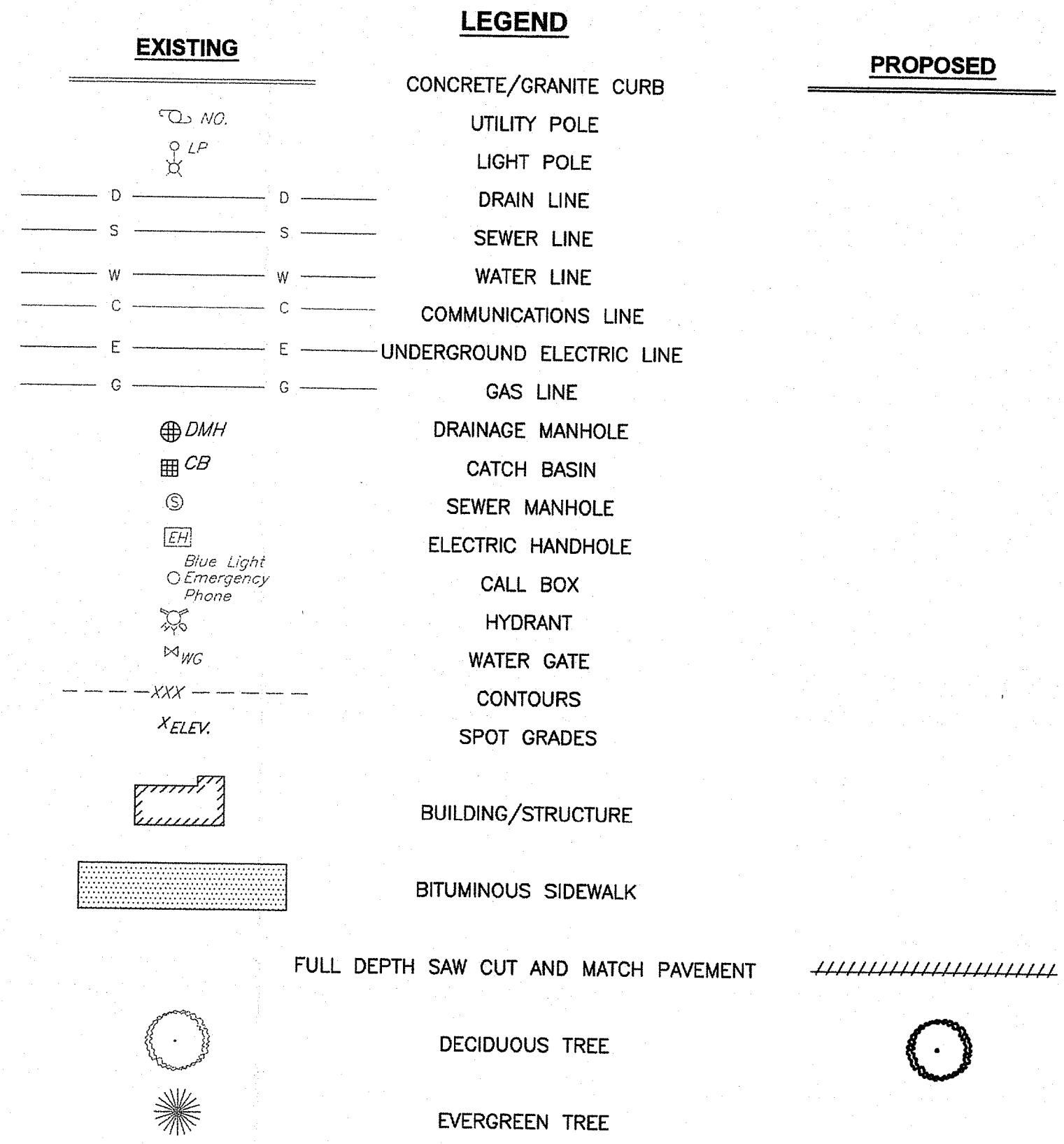
PROPOSED PAVEMENT STRUCTURE

- 1.5" BITUMINOUS CONCRETE SURFACE COURSE, CLASS 9.5 HMA
- 2.5" BITUMINOUS CONCRETE BASE COURSE, CLASS 12.5 HMA
- 12" GRAVEL BURROW SUBBASE

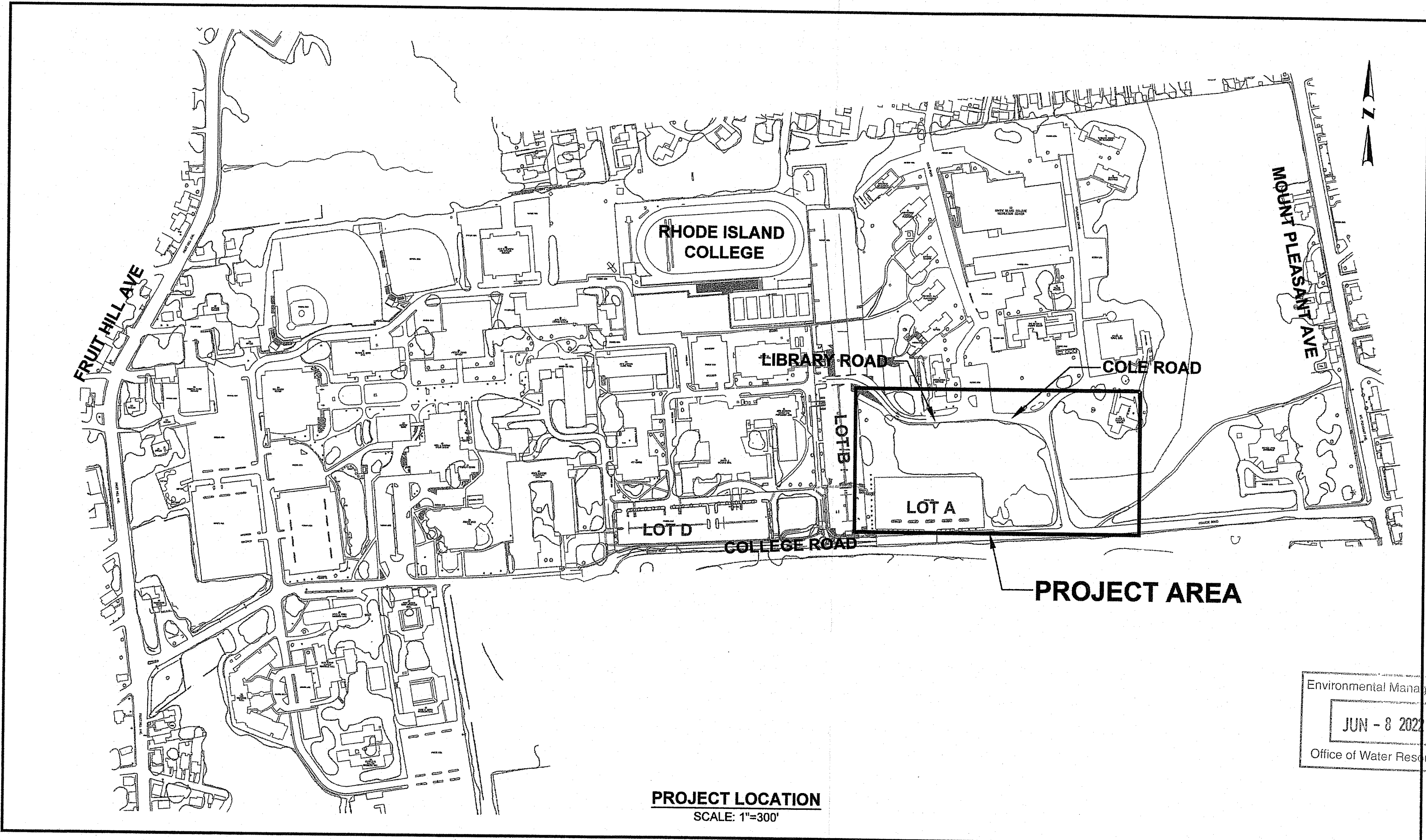
NOTE:
PAVEMENT MARKINGS SHALL BE REPLACED IN NEW PAVEMENT AREAS.

ALTERNATIVE BID ITEMS:

THIS PROJECT HAS 2 ALTERNATIVE BID ITEMS NOTED WITHIN THIS PLAN SET AND IN THE PROJECT MANUAL. THE ALTERNATIVE BID ITEMS CAN BE AN ADD OR DEDUCT PRICE ITEM TO THE BASE BID PRICE. RHODE ISLAND COLLEGE IS NOT OBLIGATED TO INCLUDE ANY ALTERNATIVE BID ITEM IN THE PROJECT SCOPE.



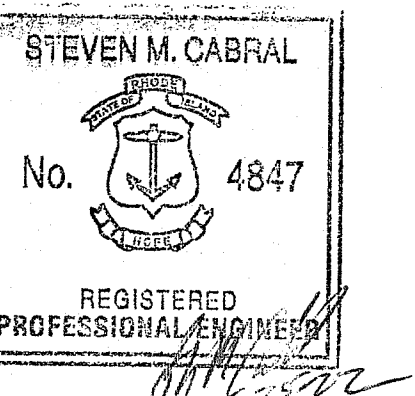
RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
RI ESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS AS
SPE 21-010 INT'L LETTER OF APPROVAL
DATED: 7/14/2022 FILE #: 22-0205
NO CHANGES MADE WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE
James B. Wemel



PROJECT LOCATION
SCALE: 1"=300'

Crossman Engineering
Rhode Island: 151 Centerville Road, Warwick, RI 02886, Phone (401) 738-5660
Massachusetts: 103 Commonwealth Avenue, North Attleboro, MA 02763, Phone (608) 695-1700
Email: cel@crossmaneng.com

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PROJECT TITLE:
PROPOSED ADA WALKWAY IMPROVEMENTS
600 MOUNT PLEASANT AVENUE
PROVIDENCE, RI

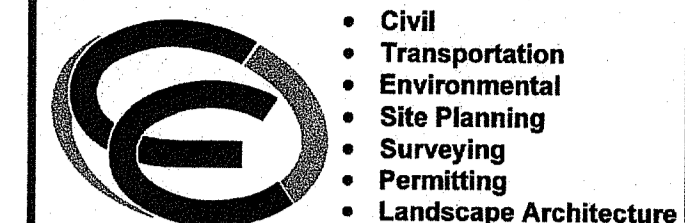
PREPARED FOR:
RHODE ISLAND COLLEGE CAPITAL PROJECTS ADMINISTRATION
600 MOUNT PLEASANT AVENUE
PROVIDENCE, RI 02908

DRAWING TITLE:
GENERAL NOTES and LEGEND

DATE: APRIL 2022 SCALE: AS NOTED
DWG. NAME: 2620-02-NOTE.dwg

REVISIONS	NUMBER	REMARKS	DATE
1	1	RIDEM SUBMISSION	04/20/22
2	2	BID ITEMS	04/29/22
3	3	ADDENDUM 1	05/23/22

DRAWING NUMBER
C1
SHEET: 2 OF 22



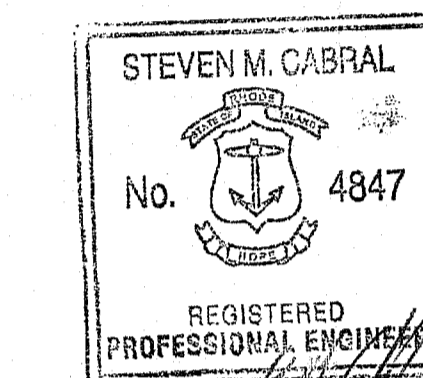
Crossman Engineering

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151 Centerville Road
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PROJECT TITLE:

PROPOSED ADA WALKWAY IMPROVEMENTS

600 MOUNT PLEASANT AVENUE
PROVIDENCE, RI

PREPARED FOR:

**RHODE ISLAND COLLEGE
CAPITAL PROJECTS
ADMINISTRATION**

600 MOUNT PLEASANT AVENUE
PROVIDENCE, RI 02908

DRAWING TITLE:

**EXISTING
CONDITIONS PLAN**

DATE: APRIL 2022 SCALE: 1"=30'

DWG. NAME: 2620-03-EXCN.DWG

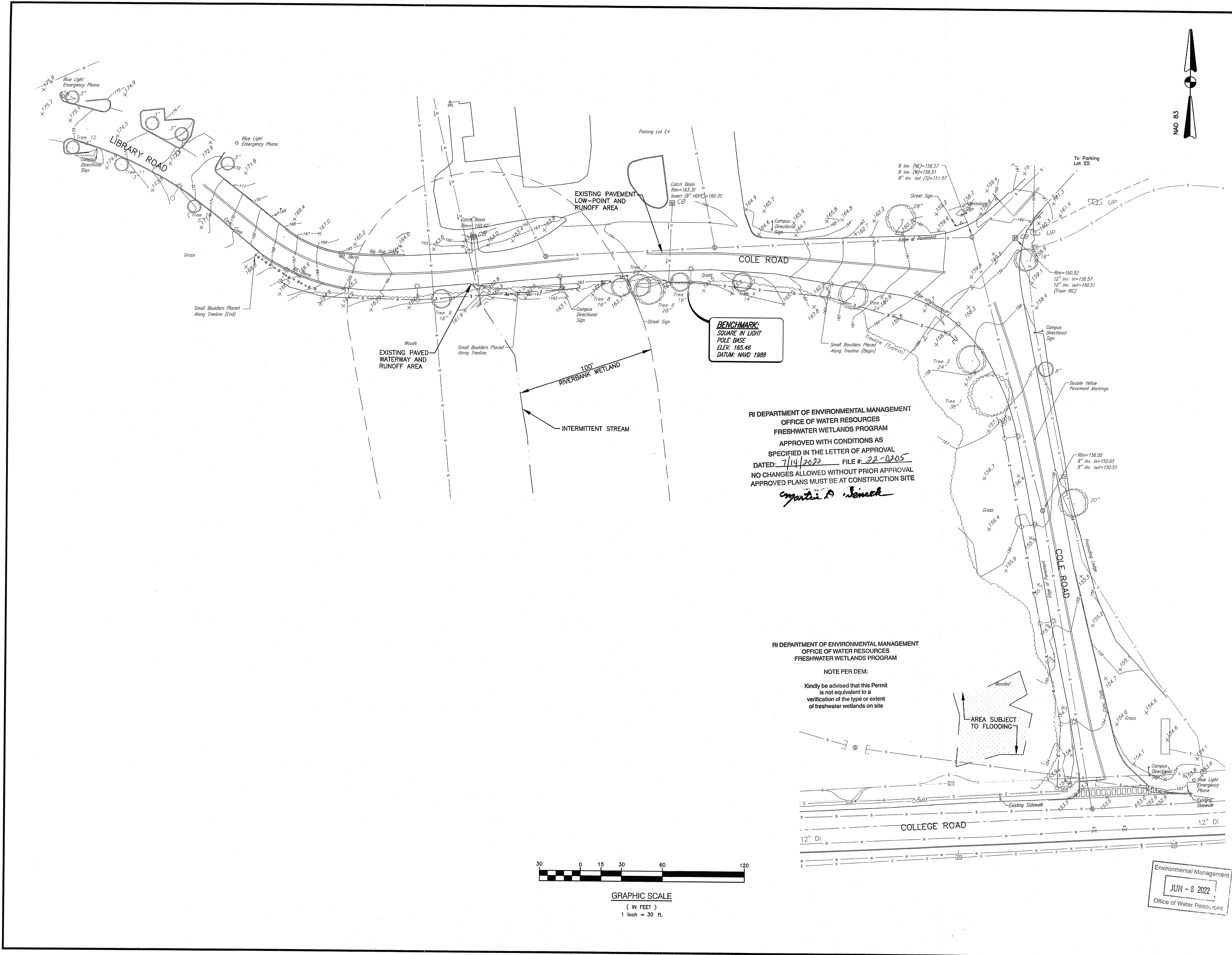
REVISIONS

NUMBER	REMARKS	DATE
1	RIDEM SUBMISSION	04/20/22
2	BID ITEMS	04/29/22
3	ADDENDUM 1	05/23/22

DRAWING NUMBER

C2

SHEET: 3 OF 22



RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS AS
SPECIFIED IN THE LETTER OF APPROVAL
DATED: 7/14/2022 FILE #: 22-0205
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Christopher P. Senack

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

NOTE PER DEM:
Kindly be advised that this Permit
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verification of the type or extent
of freshwater wetlands on site

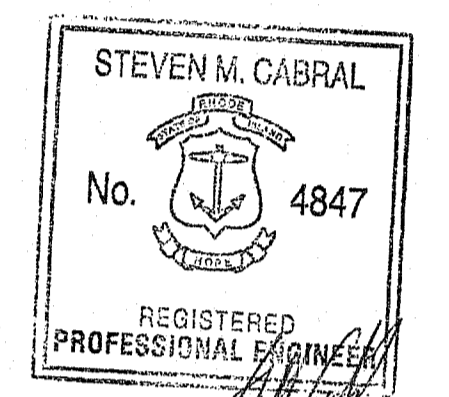
Environmental Management
JUN - 8 2022
Office of Water Resources



Crossman Engineering
 Rhode Island: 181 Centerville Road, Warwick, RI 02808, (401) 738-5560
 Massachusetts: 103 Commonwealth Avenue, North Attleboro, MA 02763, (508) 695-1700
 Email: ce@crosmaneng.com

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
 FRESHWATER WETLANDS PROGRAM
 APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL DATED: 7/14/2022 FILE #: 22-2180
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Antonia D. Wemach

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PROJECT TITLE:
PROPOSED ADA WALKWAY IMPROVEMENTS
 600 MOUNT PLEASANT AVENUE PROVIDENCE, RI

PREPARED FOR:
RHODE ISLAND COLLEGE CAPITAL PROJECTS ADMINISTRATION
 600 MOUNT PLEASANT AVENUE PROVIDENCE, RI 02908

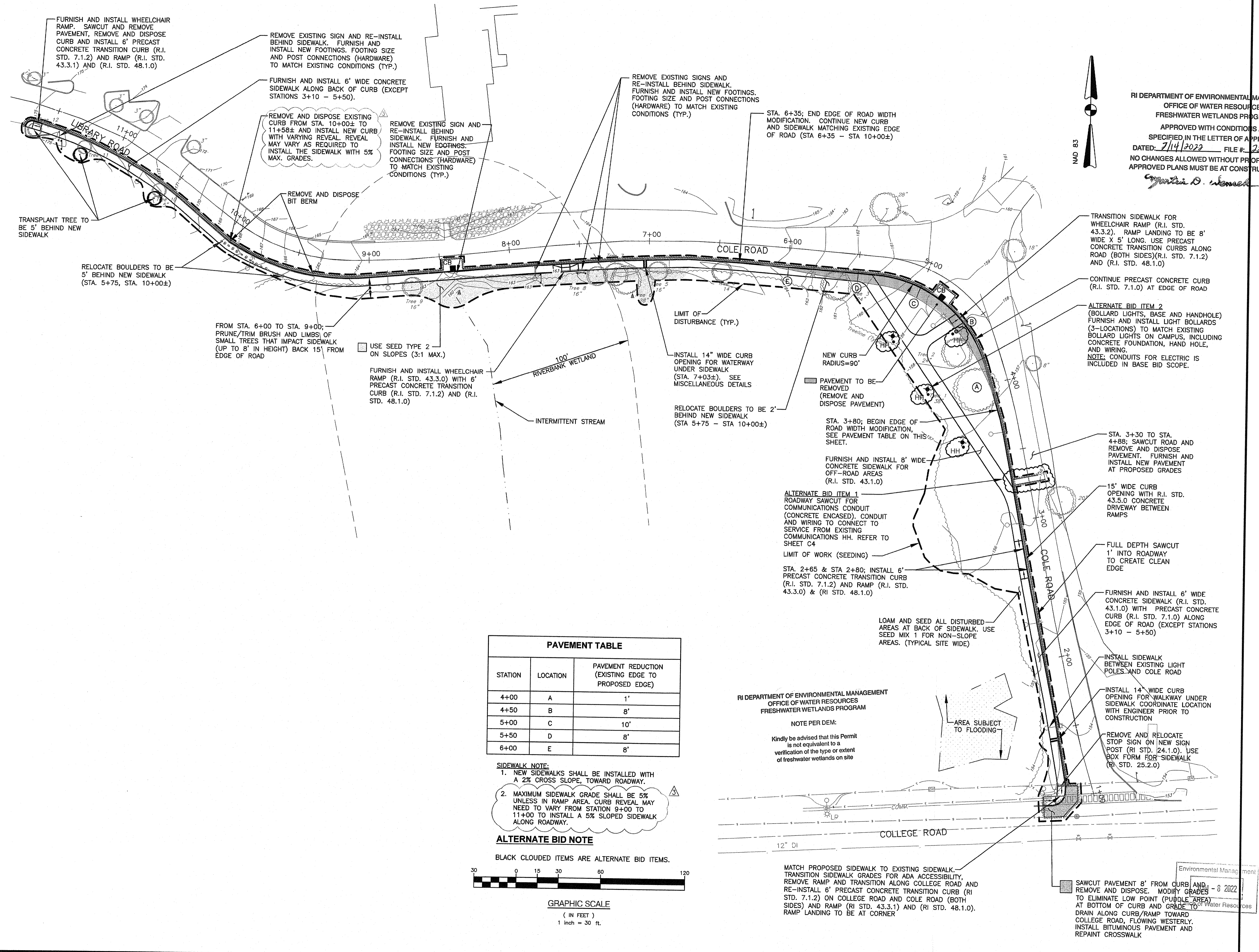
DRAWING TITLE:
OVERALL SITE LAYOUT PLAN

DATE: APRIL 2022 SCALE: 1"=30'
 DWG. NAME: 2620-04-SITE.DWG

REVISIONS

NUMBER	REMARKS	DATE
1	RIDEM SUBMISSION	04/20/22
2	BID ITEMS	04/29/22
3	ADDENDUM 1	05/23/22

DRAWING NUMBER:
C3
 SHEET: 4 OF 22



PAVEMENT TABLE

STATION	LOCATION	PAVEMENT REDUCTION (EXISTING EDGE TO PROPOSED EDGE)
4+00	A	1'
4+50	B	8'
5+00	C	10'
5+50	D	8'
6+00	E	8'

SIDEWALK NOTE:
 1. NEW SIDEWALKS SHALL BE INSTALLED WITH A 2% CROSS SLOPE, TOWARD ROADWAY.
 2. MAXIMUM SIDEWALK GRADE SHALL BE 5% UNLESS IN RAMP AREA. CURB REVEAL MAY NEED TO VARY FROM STATION 9+00 TO 11+00 TO INSTALL A 5% SLOPED SIDEWALK ALONG ROADWAY.

ALTERNATE BID NOTE
 BLACK CLOUDED ITEMS ARE ALTERNATE BID ITEMS.

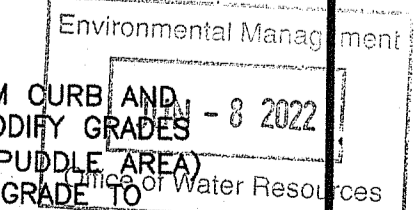
GRAPHIC SCALE
 (IN FEET)
 1 inch = 30 ft.

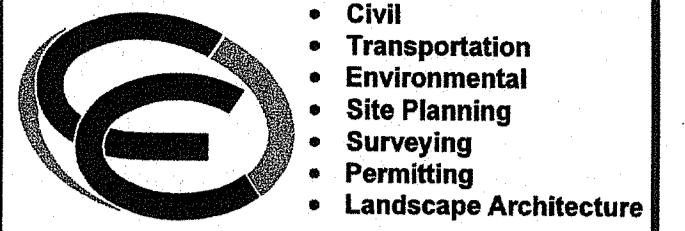
RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
 FRESHWATER WETLANDS PROGRAM

NOTE PER DEM:
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MATCH PROPOSED SIDEWALK TO EXISTING SIDEWALK. TRANSITION SIDEWALK GRADES FOR ADA ACCESSIBILITY. REMOVE RAMP AND TRANSITION ALONG COLLEGE ROAD AND RE-INSTALL 6" PRECAST CONCRETE TRANSITION CURB (RI STD. 7.1.2) ON COLLEGE ROAD AND COLE ROAD (BOTH SIDES) AND RAMP (RI STD. 43.3.1) AND (RI STD. 48.1.0). RAMP LANDING TO BE AT CORNER

SAWCUT PAVEMENT 8' FROM CURB AND REMOVE AND DISPOSE. MODIFY GRADES TO ELIMINATE LOW POINT (PUDDLE AREA) AT BOTTOM OF CURB AND GRADE TO DRAIN ALONG CURB/RAMP TOWARD COLLEGE ROAD, FLOWING WESTERLY. INSTALL BITUMINOUS PAVEMENT AND REPAINT CROSSWALK





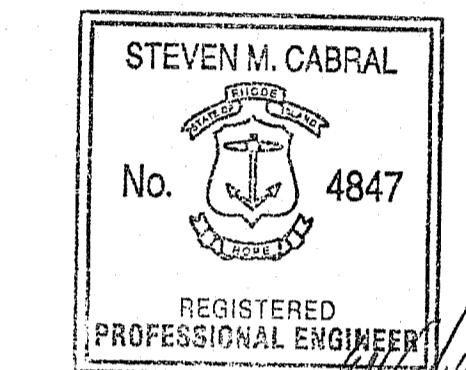
Crossman Engineering

Rhode Island
151 Centerville Road
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Phone (401) 738-5660

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Phone (508) 695-1700

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PROJECT TITLE:

PROPOSED ADA WALKWAY IMPROVEMENTS

600 MOUNT PLEASANT AVENUE
PROVIDENCE, RI

PREPARED FOR:

RHODE ISLAND COLLEGE CAPITAL PROJECTS ADMINISTRATION

600 MOUNT PLEASANT AVENUE
PROVIDENCE, RI 02908

DRAWING TITLE:

GRADING and UTILITY PLAN

DATE: APRIL 2022 SCALE: 1"=30'

DWG. NAME: 2620-05--GRADE.DWG

REVISIONS		
NUMBER	REMARKS	DATE
1	RIDEM SUBMISSION	04/20/22
2	BID ITEMS	04/29/22
3	ADDENDUM 1	05/23/22

DRAWING NUMBER

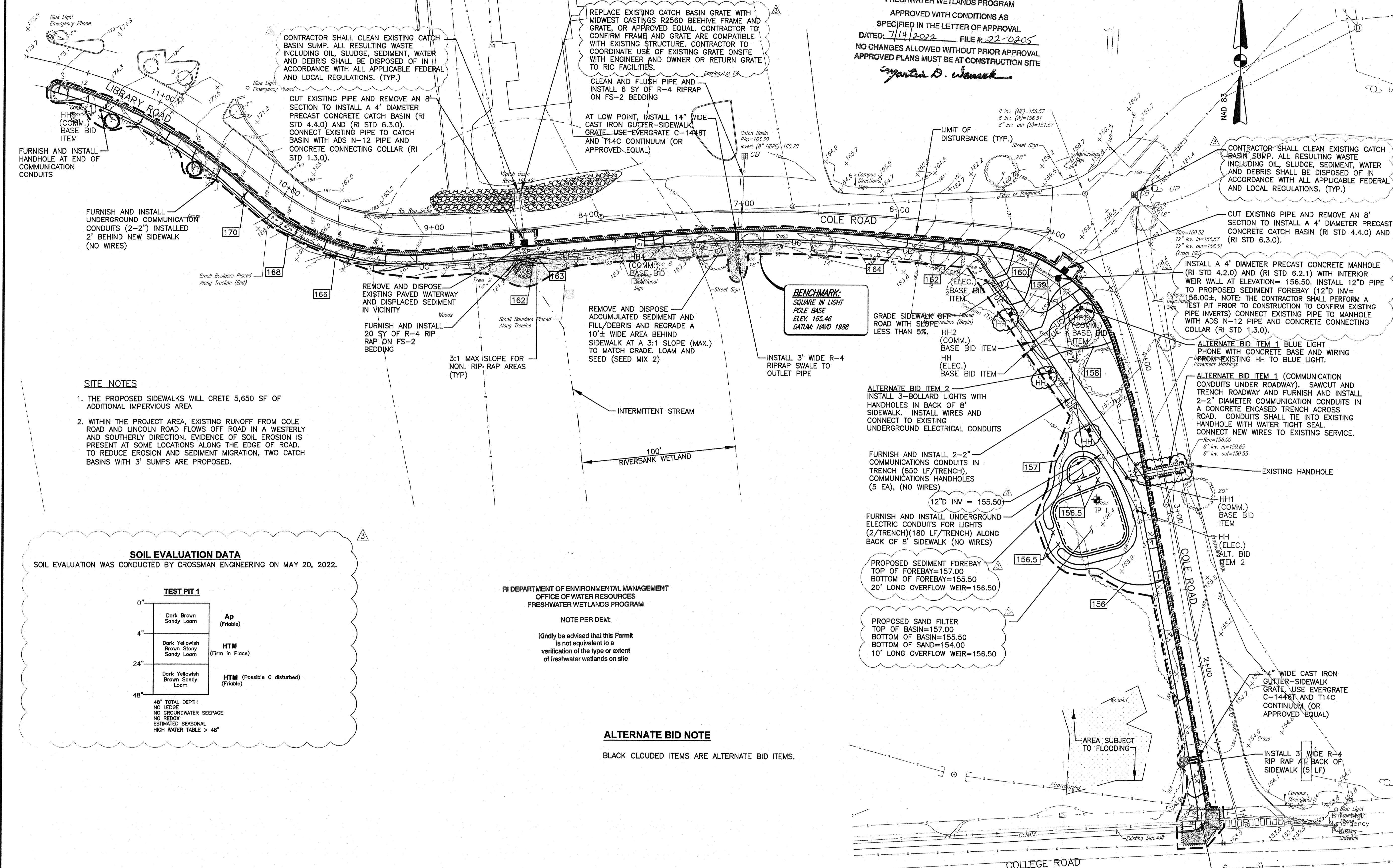
C4

SHEET: 5 OF 229

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

APPROVED WITH CONDITIONS AS
SPECIFIED IN THE LETTER OF APPROVAL
DATED: 7/14/2022 FILE #: 22-0205
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Martin D. Womack



CONTRACTOR SHALL CLEAN EXISTING CATCH BASIN SUMP. ALL RESULTING WASTE INCLUDING OIL, SLUDGE, SEDIMENT, WATER AND DEBRIS SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL APPLICABLE FEDERAL AND LOCAL REGULATIONS. (TYP.)

REPLACE EXISTING CATCH BASIN GRATE WITH MIDWEST CASTINGS R2550 BEEHIVE FRAME AND GRATE, OR APPROVED EQUAL. CONTRACTOR TO CONFIRM FRAME AND GRATE ARE COMPATIBLE WITH EXISTING STRUCTURE. CONTRACTOR TO COORDINATE USE OF EXISTING GRATE ON SITE WITH ENGINEER AND OWNER OR RETURN GRATE TO RIC FACILITIES.

CLEAN AND FLUSH PIPE AND INSTALL 6 SY OF R-4 RIPRAP ON FS-2 BEDDING

AT LOW POINT, INSTALL 14" WIDE CAST IRON GUTTER-SIDEWALK GRATE USE EVERGRATE C-1446T AND T14C CONTINUUM (OR APPROVED EQUAL)

CUT EXISTING PIPE AND REMOVE AN 8' SECTION TO INSTALL A 4' DIAMETER PRECAST CONCRETE CATCH BASIN (RI STD 4.4.0) AND (RI STD 6.3.0). CONNECT EXISTING PIPE TO CATCH BASIN WITH ADS N-12 PIPE AND CONCRETE CONNECTING COLLAR (RI STD 1.3.0).

CONTRACTOR SHALL CLEAN EXISTING CATCH BASIN SUMP. ALL RESULTING WASTE INCLUDING OIL, SLUDGE, SEDIMENT, WATER AND DEBRIS SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL APPLICABLE FEDERAL AND LOCAL REGULATIONS. (TYP.)

CUT EXISTING PIPE AND REMOVE AN 8' SECTION TO INSTALL A 4' DIAMETER PRECAST CONCRETE CATCH BASIN (RI STD 4.4.0) AND (RI STD 6.3.0).

INSTALL A 4' DIAMETER PRECAST CONCRETE MANHOLE (RI STD 4.2.0) AND (RI STD 6.2.1) WITH INTERIOR WEIR WALL AT ELEVATION= 156.50. INSTALL 12" PIPE TO PROPOSED SEDIMENT FOREBAY (12" INV= 156.00). NOTE: THE CONTRACTOR SHALL PERFORM A TEST PIT PRIOR TO CONSTRUCTION TO CONFIRM EXISTING PIPE INVERTS) CONNECT EXISTING PIPE TO MANHOLE WITH ADS N-12 PIPE AND CONCRETE CONNECTING COLLAR (RI STD 1.3.0).

ALTERNATE BID ITEM 1 BLUE LIGHT PHONE WITH CONCRETE BASE AND WIRING FROM EXISTING HH TO BLUE LIGHT.

ALTERNATE BID ITEM 1 (COMMUNICATION CONDUITS UNDER ROADWAY). SAWCUT AND TRENCH ROADWAY AND FURNISH AND INSTALL 2-2" DIAMETER COMMUNICATION CONDUITS IN A CONCRETE ENCASED TRENCH ACROSS ROAD. CONDUITS SHALL TIE INTO EXISTING HANDHOLE WITH WATER TIGHT SEAL. CONNECT NEW WIRES TO EXISTING SERVICE.

BENCHMARK:
SQUARE IN LIGHT
POLE BASE
ELEV. 165.46
DATUM: NAVD 1988

FURNISH AND INSTALL HANDHOLE AT END OF COMMUNICATION CONDUITS

FURNISH AND INSTALL UNDERGROUND COMMUNICATION CONDUITS (2-2") INSTALLED 2' BEHIND NEW SIDEWALK (NO WIRES)

REMOVE AND DISPOSE EXISTING PAVED WATERWAY AND DISPLACED SEDIMENT IN VICINITY

FURNISH AND INSTALL 20 SY OF R-4 RIPRAP ON FS-2 BEDDING

REMOVE AND DISPOSE ACCUMULATED SEDIMENT AND FILL/DEBRIS AND REGRADE A 10'± WIDE AREA BEHIND SIDEWALK AT A 3:1 SLOPE (MAX.) TO MATCH GRADE. LOAM AND SEED (SEED MIX 2)

INSTALL 3' WIDE R-4 RIPRAP SWALE TO OUTLET PIPE

SITE NOTES

1. THE PROPOSED SIDEWALKS WILL CRETE 5,650 SF OF ADDITIONAL IMPERVIOUS AREA
2. WITHIN THE PROJECT AREA, EXISTING RUNOFF FROM COLE ROAD AND LINCOLN ROAD FLOWS OFF ROAD IN A WESTERLY AND SOUTHERLY DIRECTION. EVIDENCE OF SOIL EROSION IS PRESENT AT SOME LOCATIONS ALONG THE EDGE OF ROAD. TO REDUCE EROSION AND SEDIMENT MIGRATION, TWO CATCH BASINS WITH 3' SUMPS ARE PROPOSED.

SOIL EVALUATION DATA

SOIL EVALUATION WAS CONDUCTED BY CROSSMAN ENGINEERING ON MAY 20, 2022.

TEST PIT 1		
0"	Dark Brown Sandy Loam	Ap (Friable)
4"	Dark Yellowish Brown Stony Sandy Loam	HTM (Firm in Place)
24"	Dark Yellowish Brown Sandy Loam	HTM (Possible C disturbed) (Friable)
48"	48" TOTAL DEPTH NO LODES NO GROUNDWATER SEEPAGE NO REDOX ESTIMATED SEASONAL HIGH WATER TABLE > 48"	

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

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ALTERNATE BID NOTE

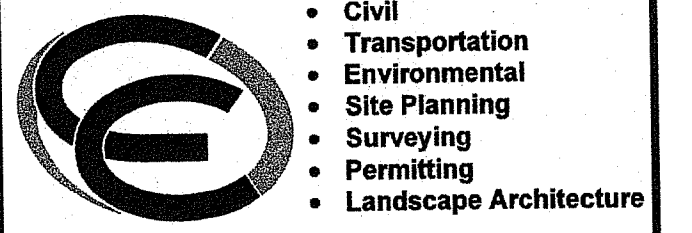
BLACK CLOUDED ITEMS ARE ALTERNATE BID ITEMS.



GRAPHIC SCALE

(IN FEET)
1 inch = 30 ft.

Environmental Management
JUN - 8 2022
Office of Water Resources



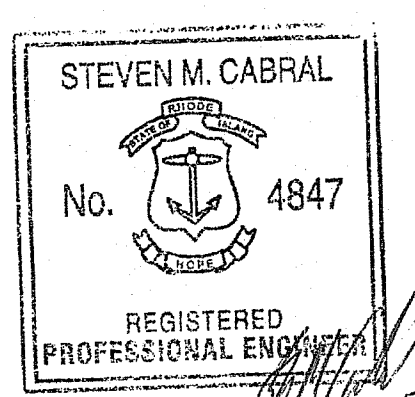
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PROPOSED ADA WALKWAY IMPROVEMENTS

600 MOUNT PLEASANT AVENUE
PROVIDENCE, RI

RHODE ISLAND COLLEGE
CAPITAL PROJECTS
ADMINISTRATION

600 MOUNT PLEASANT AVENUE
PROVIDENCE, RI 02908

SOIL EROSION and SEDIMENT CONTROL PLAN

DATE: APRIL 2022 SCALE: 1"=30'

DWG. NAME: 2620-06-SOIL-1.DWG

REVISIONS	NUMBER	REMARKS	DATE
1	1	RIDEM SUBMISSION	04/20/22
2	2	BID ITEMS	04/29/22
3	3	ADDENDUM 1	05/23/22

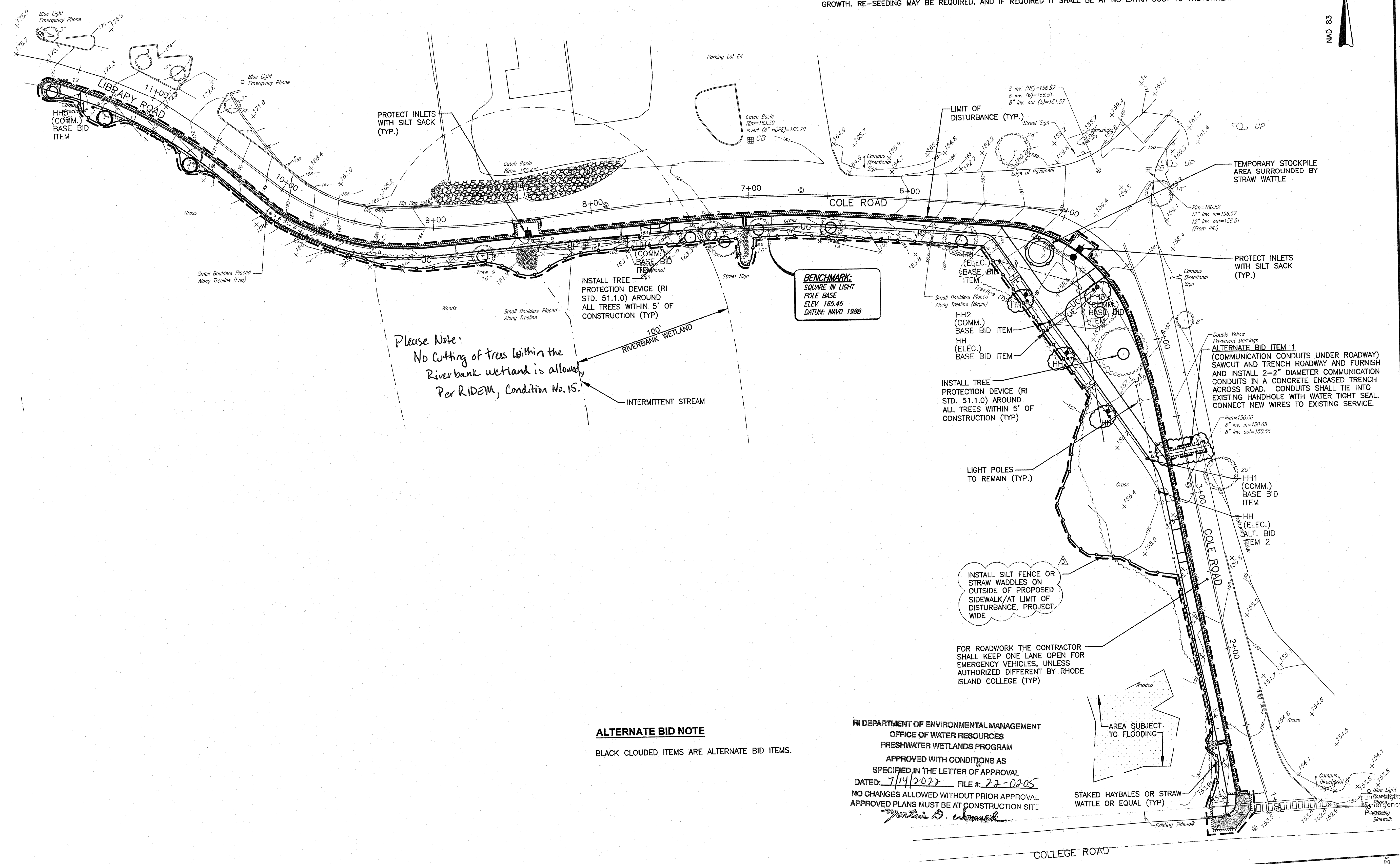
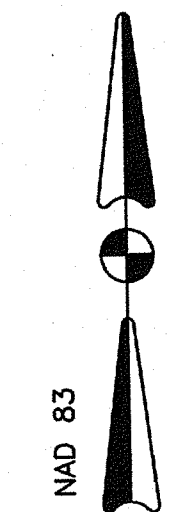
DRAWING NUMBER

C5

SHEET: 6 OF 129

NOTES

1. THE CONTRACTOR SHALL INCLUDE TEMPORARY SNOW FENCE TO PROTECT THE CONSTRUCTION AREA. LOCATIONS SHALL BE COORDINATED WITH RHODE ISLAND COLLEGE. NOTE: ANY REFERENCE TO TEMPORARY FENCE IN THE PROJECT MANUAL OR ON THE PLANS IS DEFINED AS TEMPORARY SNOW FENCE.
2. CONSTRUCTION SHALL BE STARTED AND COMPLETED IN THE SUMMER MONTHS DURING NON-SCHOOL CLASS TIMES. COORDINATE WITH RHODE ISLAND COLLEGE ON CONSTRUCTION DATES.
3. PLACEMENT OF SEED MAY BE NECESSARY DURING THE SUMMER MONTHS. THE NEW SEED SHALL BE PROTECTED WITH SMALL ROPE-TYPE FENCING UNTIL GRASS GROWTH IS ESTABLISHED. THE CONTRACTOR IS REQUIRED TO WATER THE NEW SEED FOR GRASS GROWTH. RE-SEEDING MAY BE REQUIRED, AND IF REQUIRED IT SHALL BE AT NO EXTRA COST TO THE OWNER.



Please Note:
No cutting of trees within the
Riverbank wetland is allowed
Per R.I.D.E.M., Condition No. 15.

ALTERNATE BID NOTE

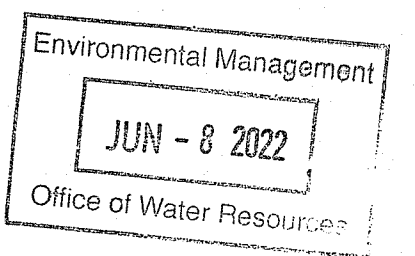
BLACK CLOUDED ITEMS ARE ALTERNATE BID ITEMS.

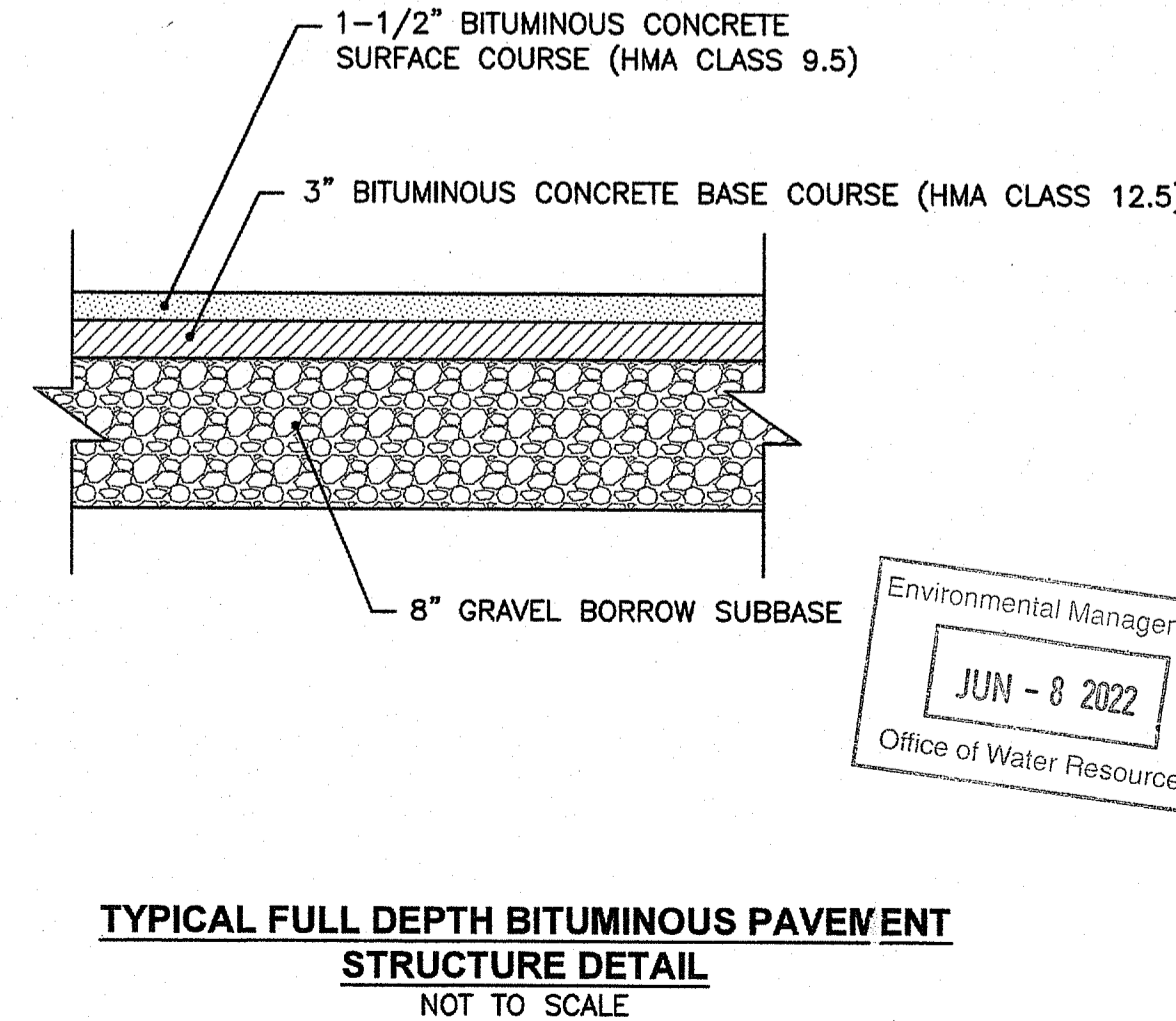
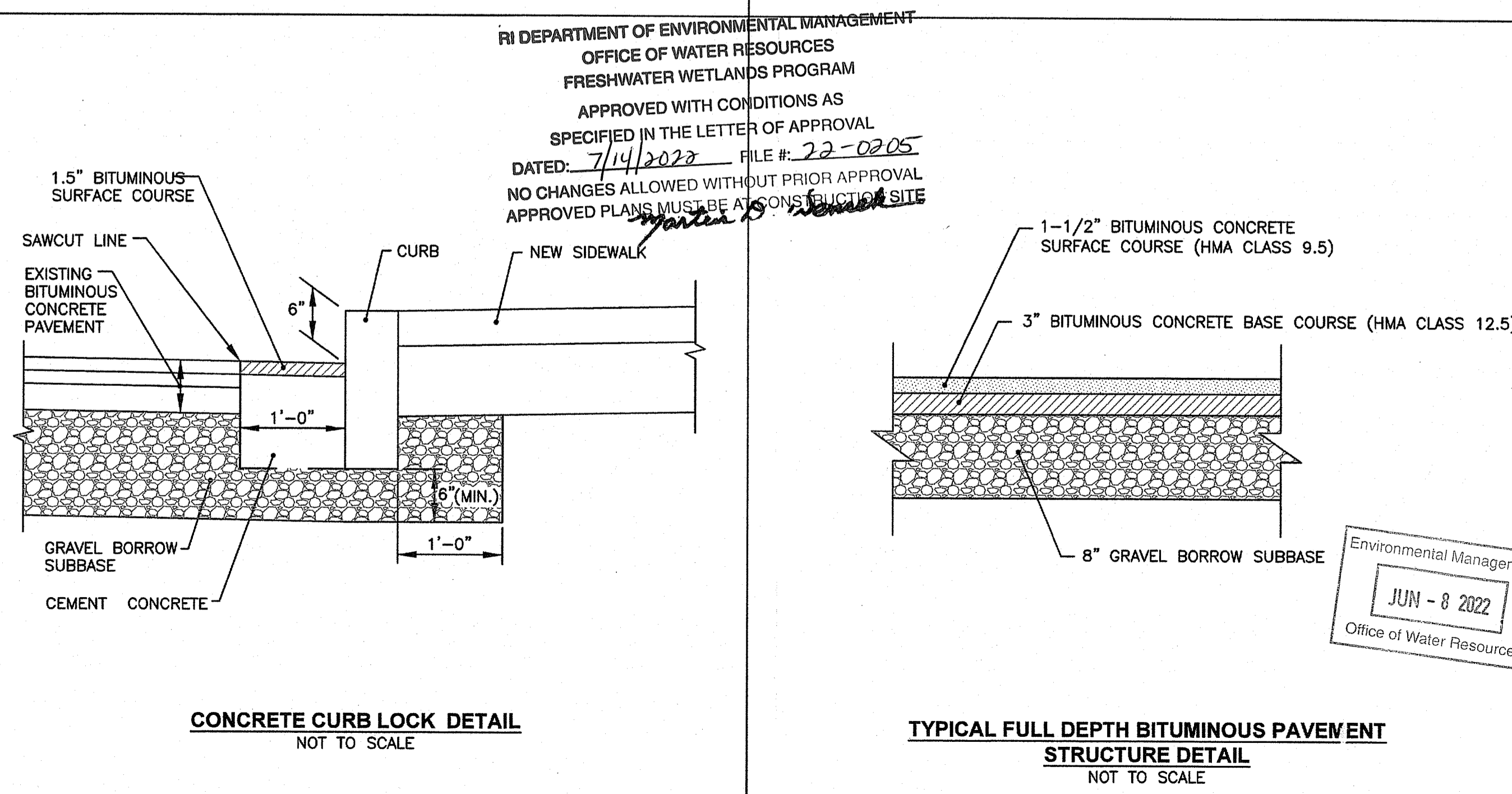
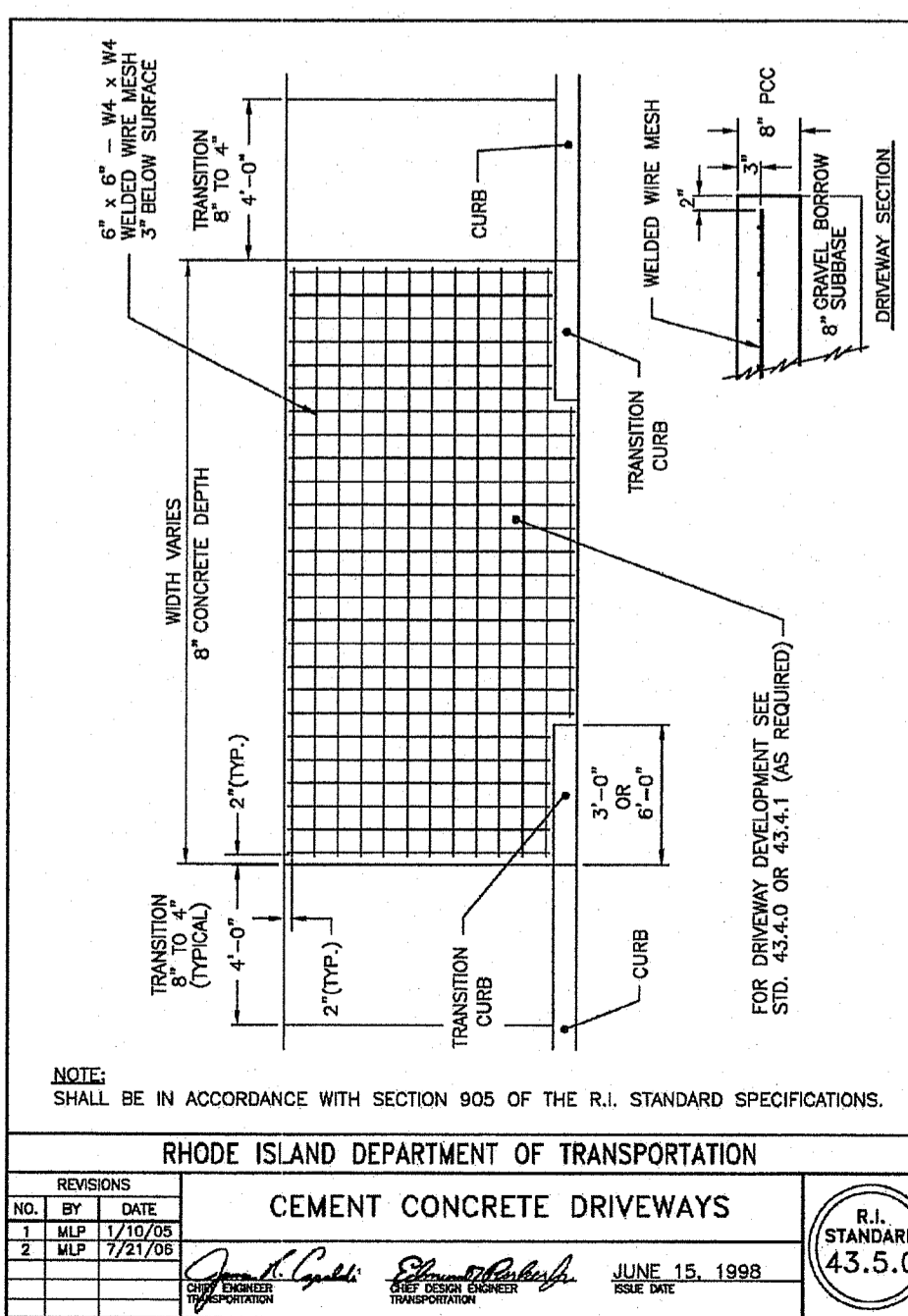
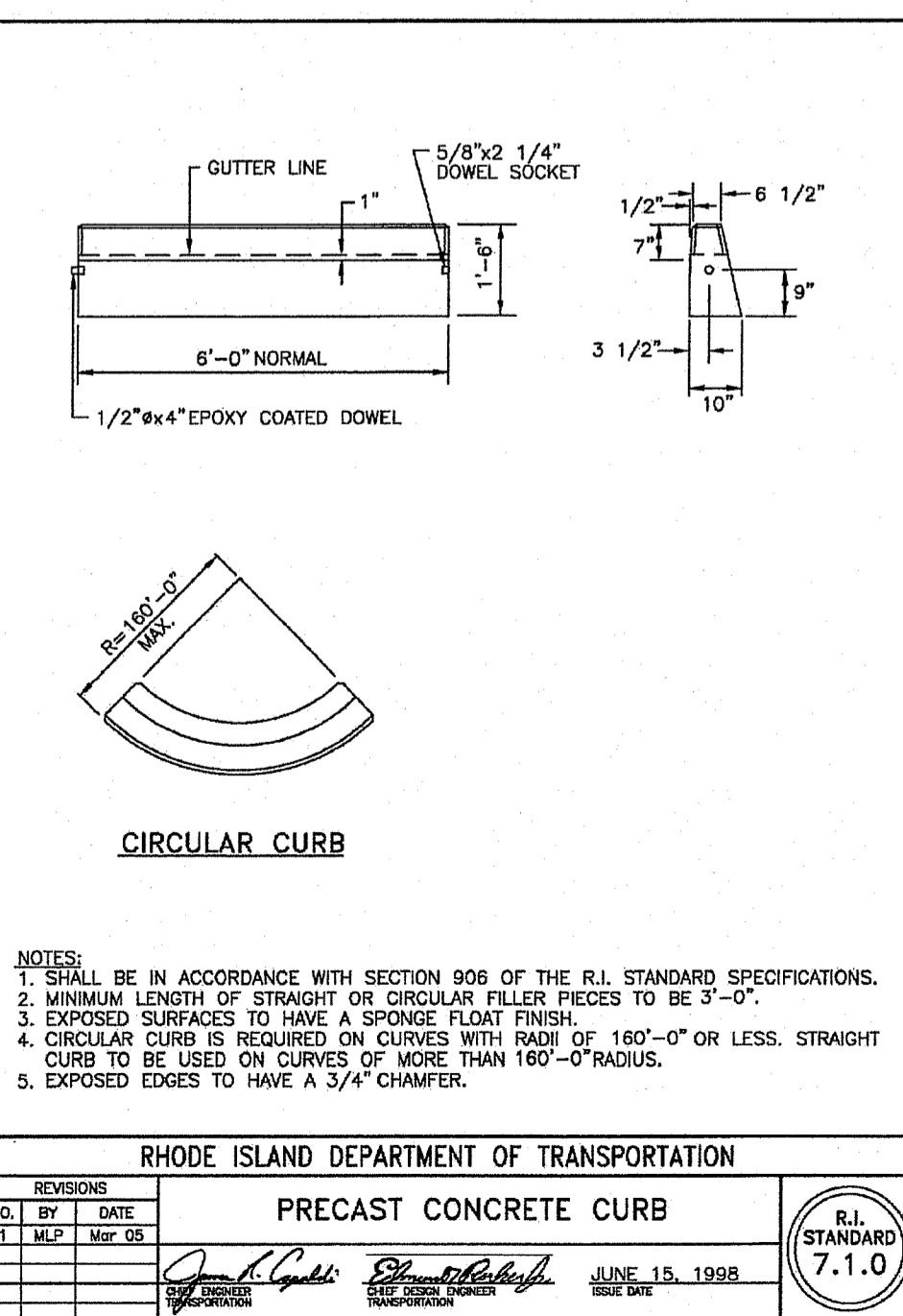
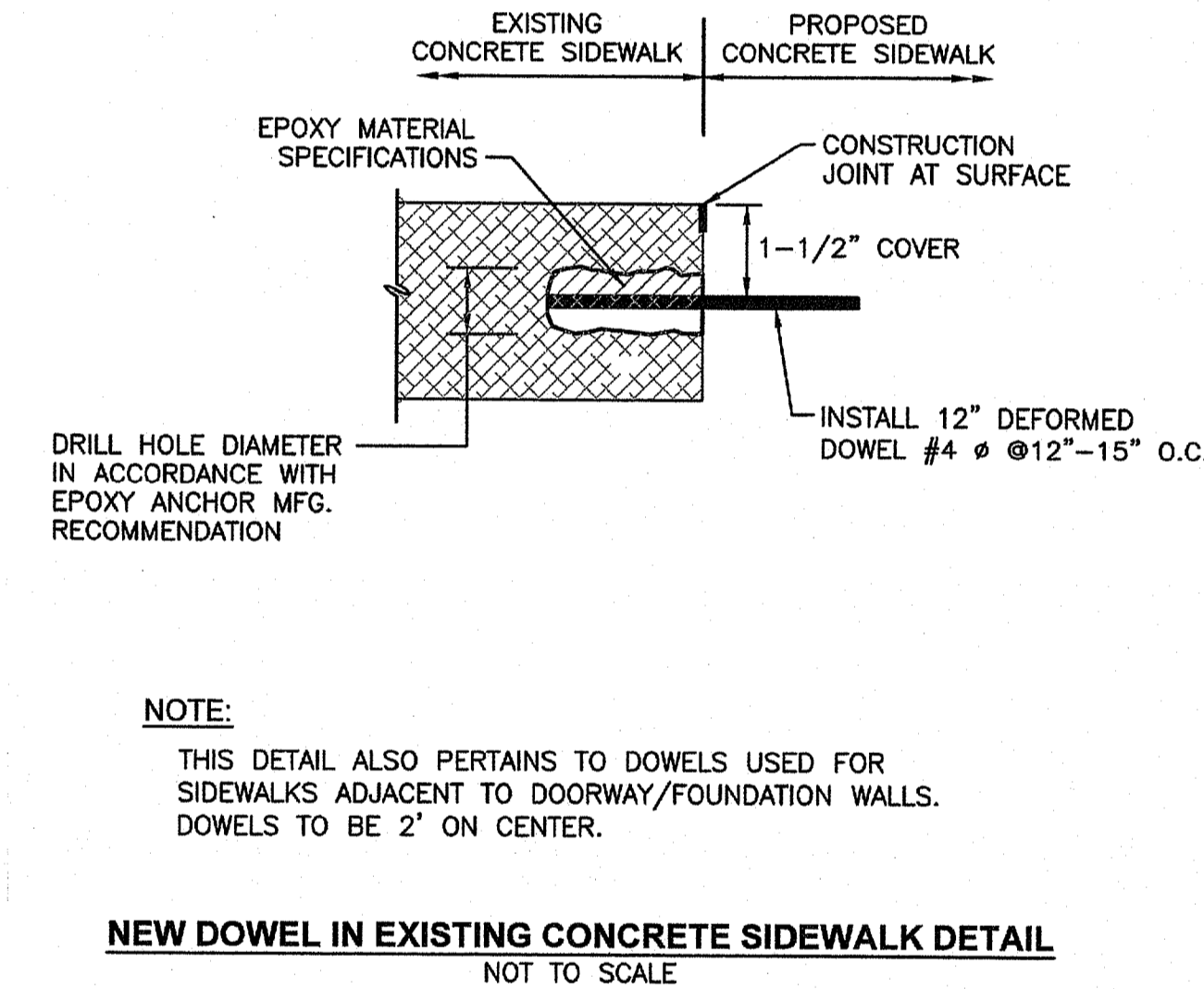
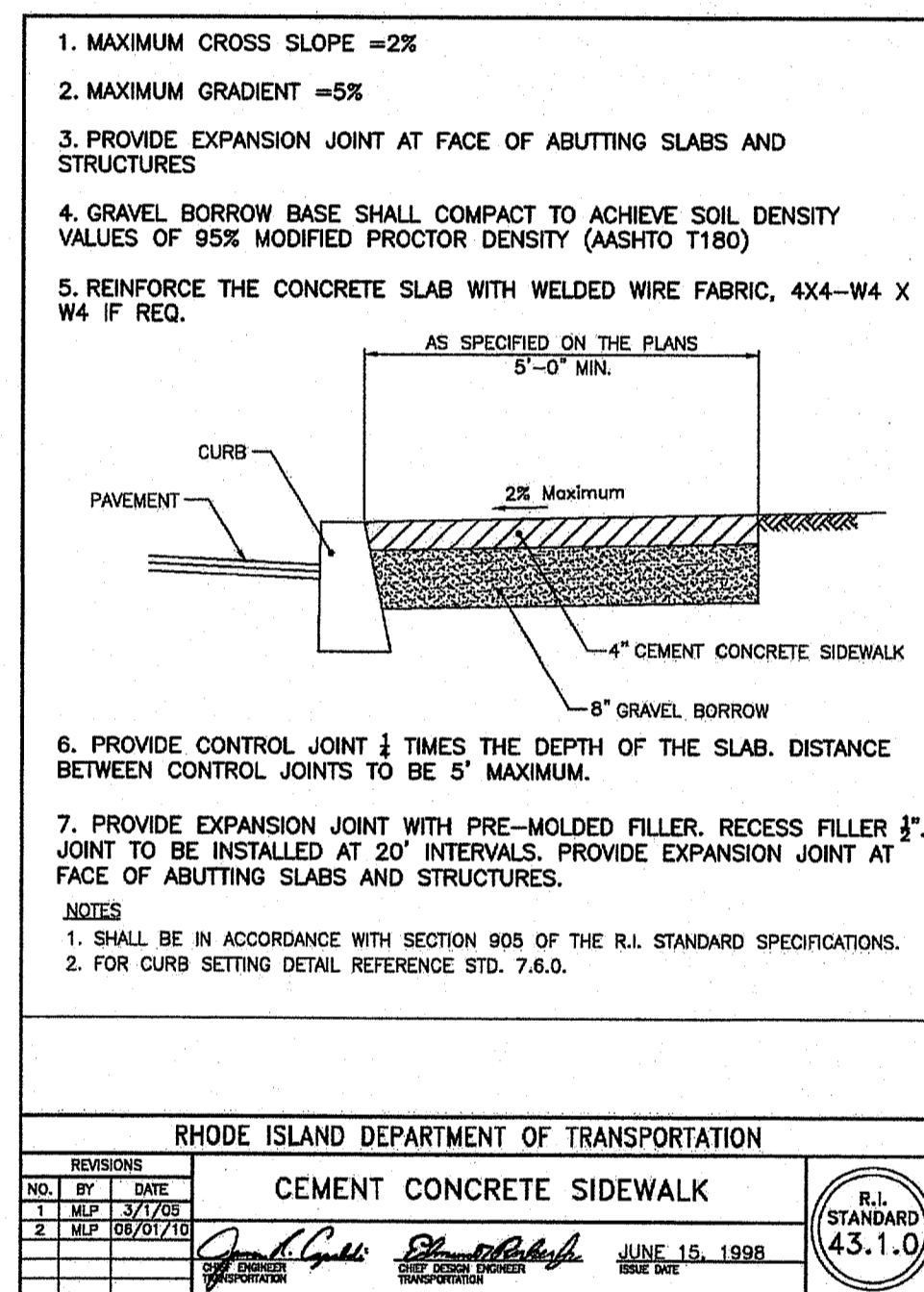
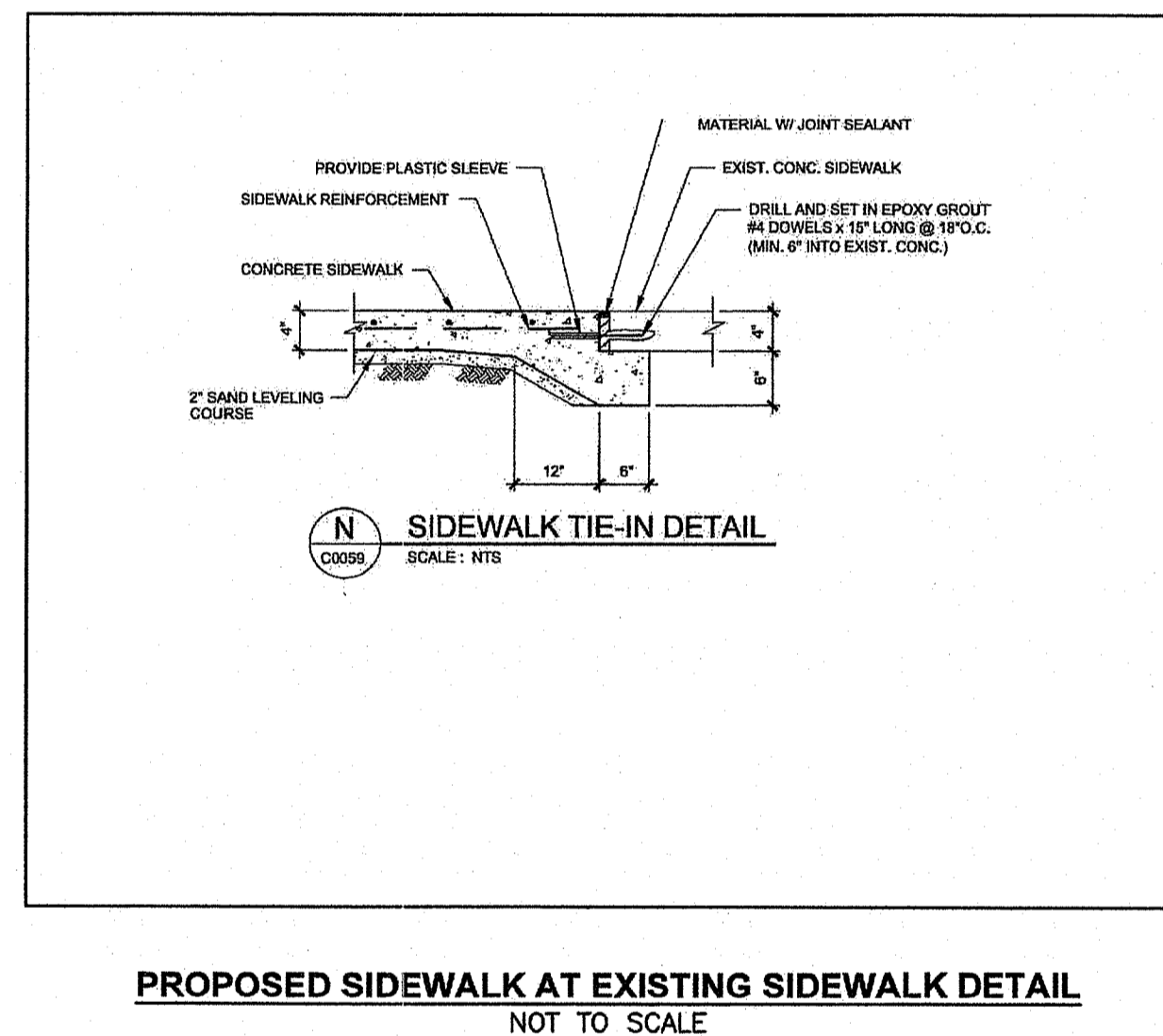
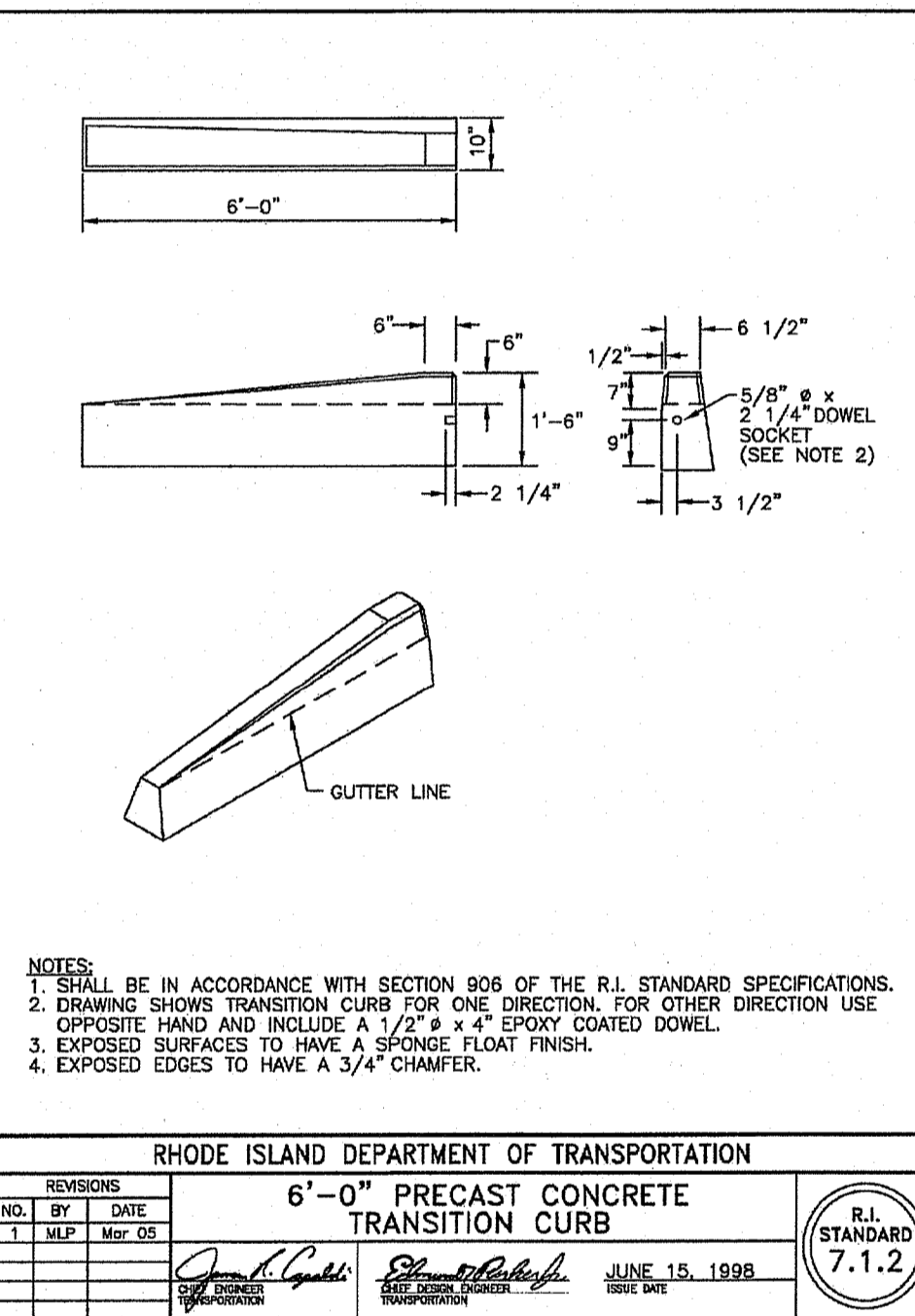
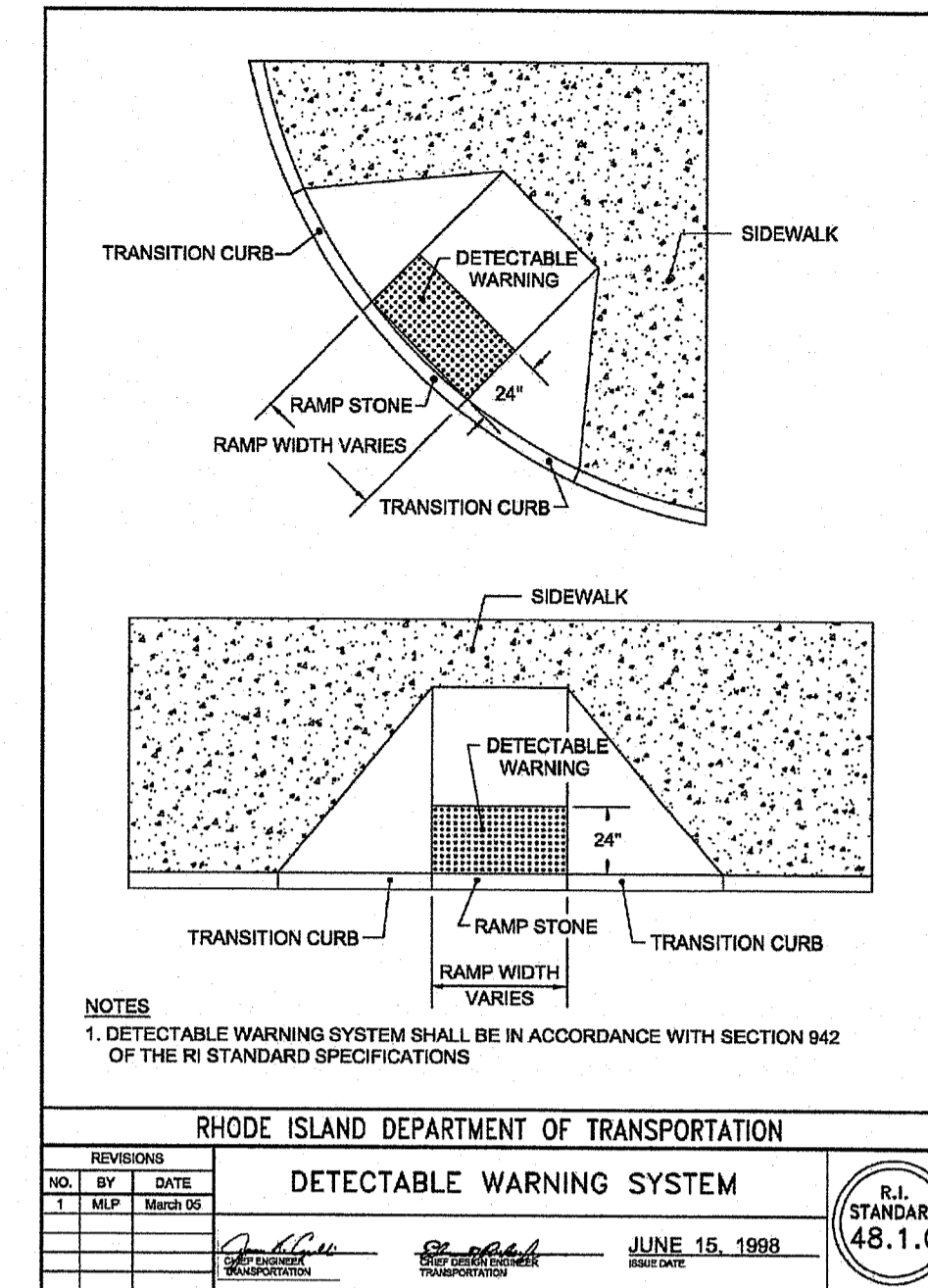
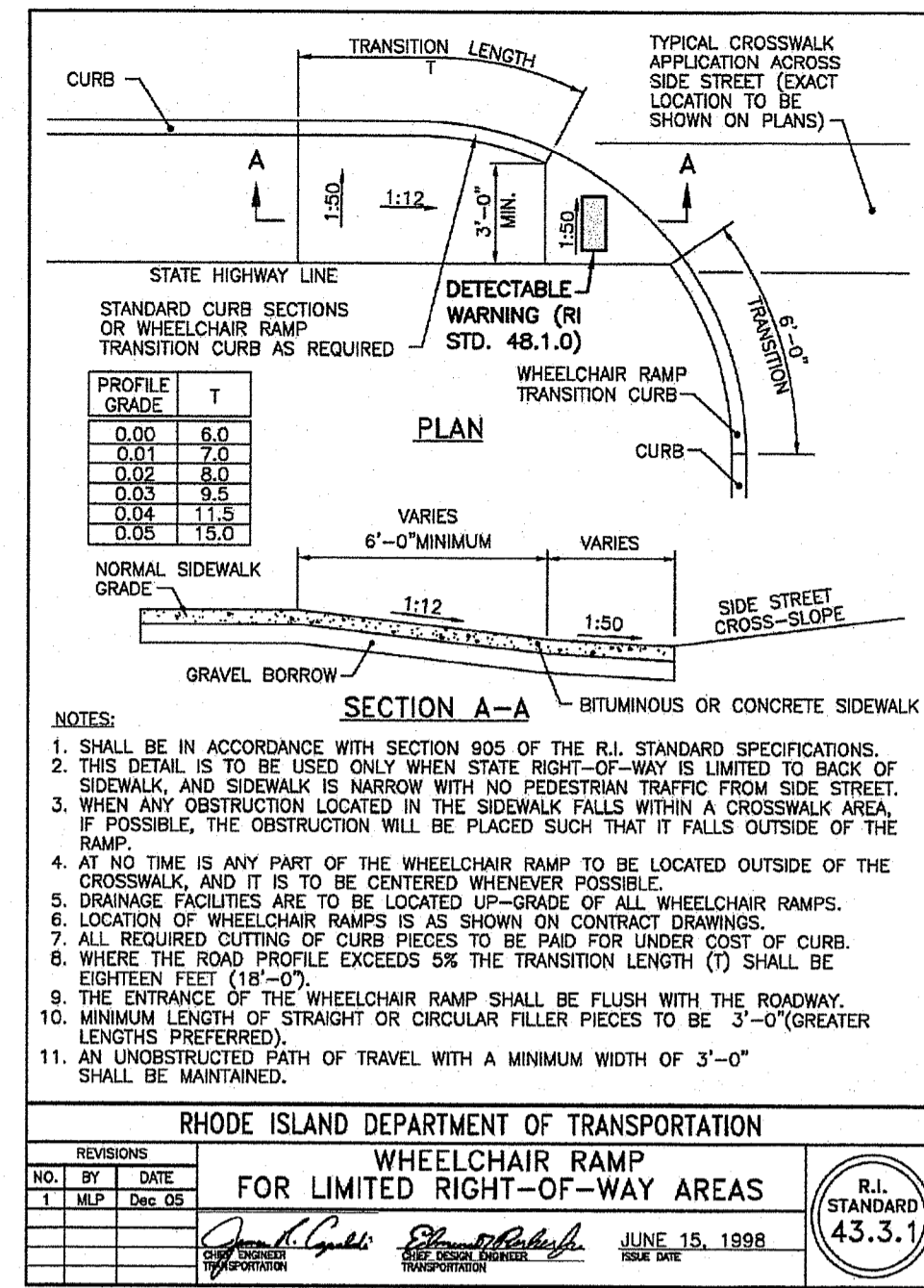
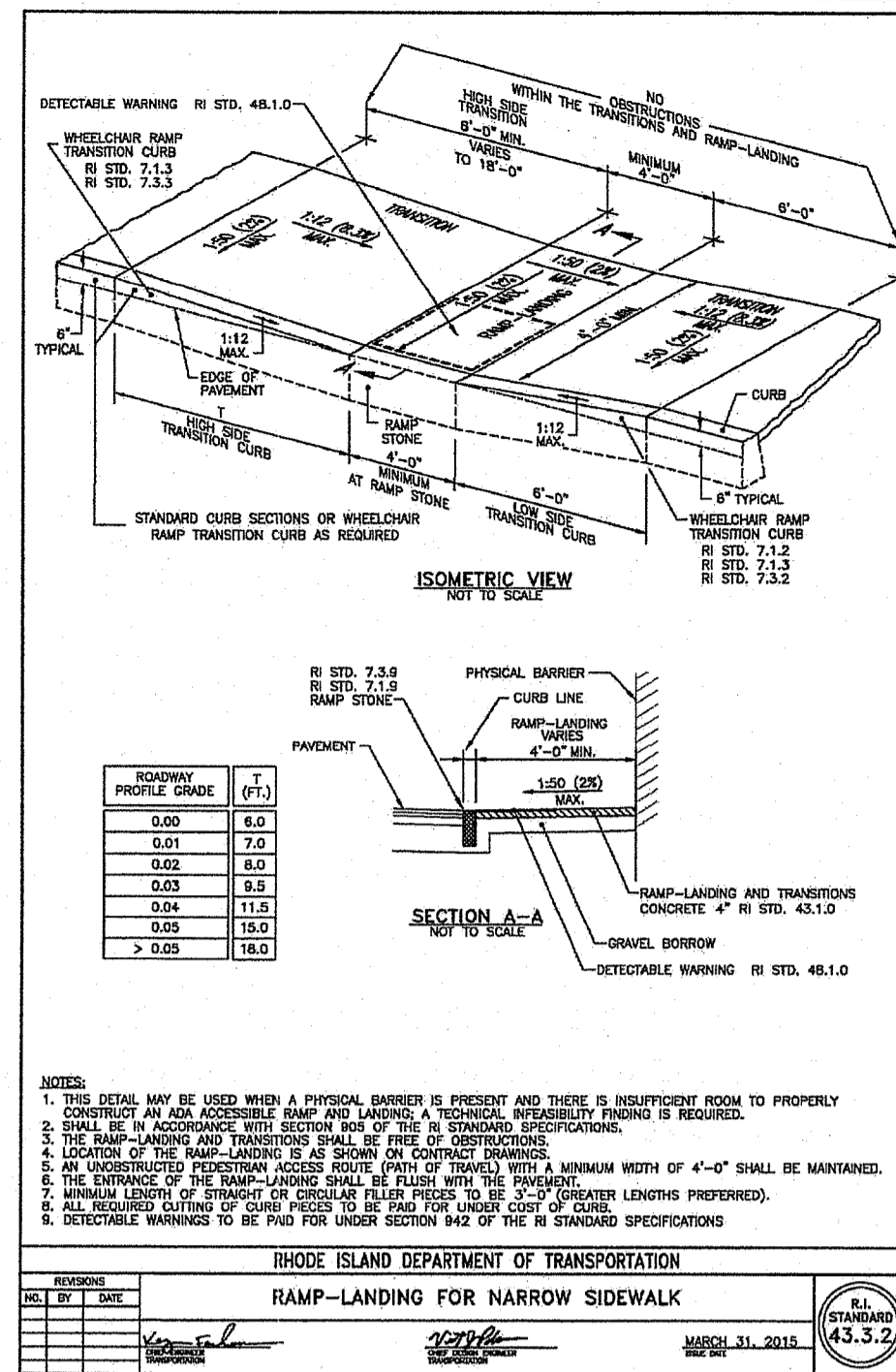
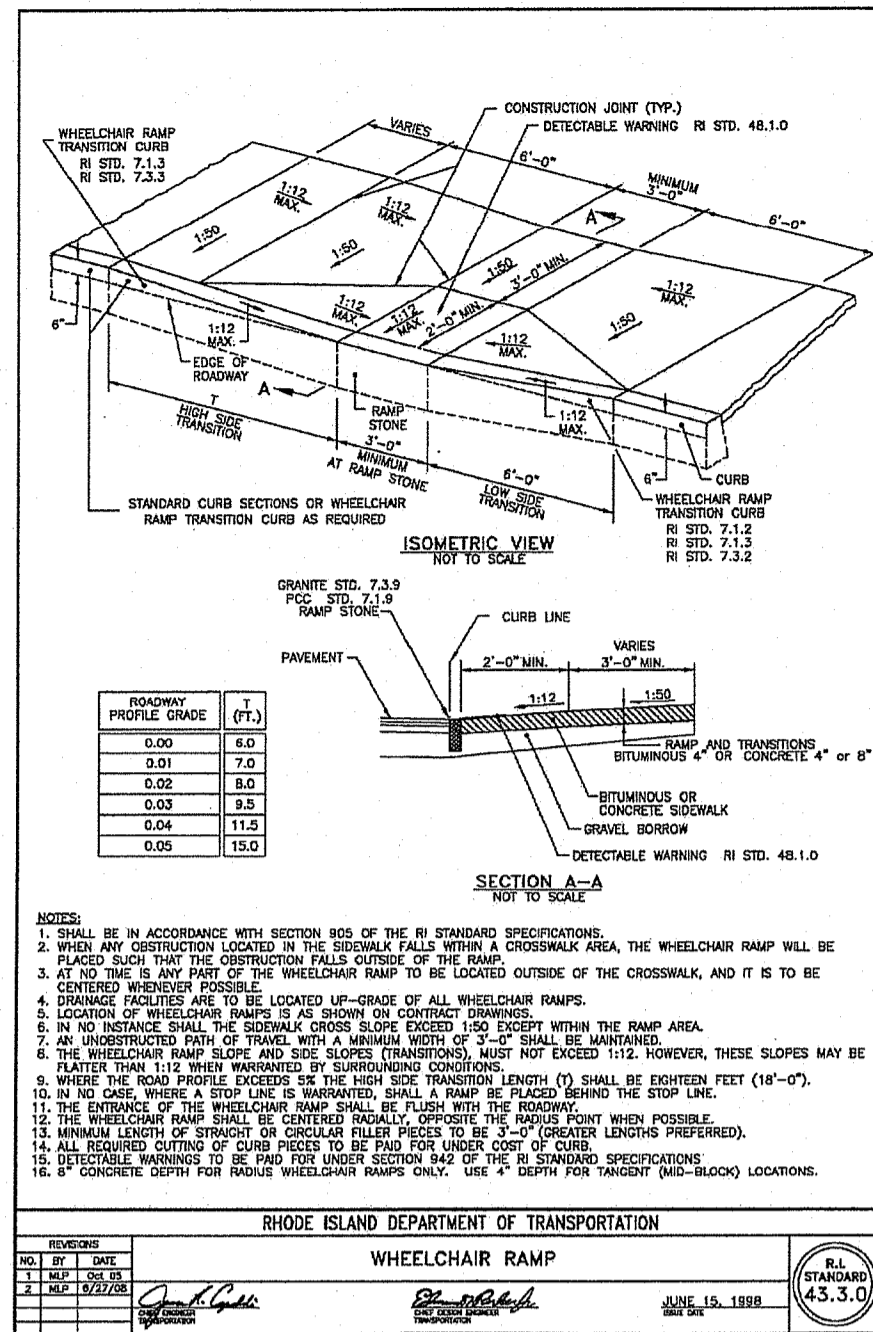
RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS AS
SPECIFIED IN THE LETTER OF APPROVAL
DATED: 7/14/2022 FILE #: 22-0205
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Antonia D. Wenzel



GRAPHIC SCALE
(IN FEET)
1 inch = 30 ft.





STEVEN M. CABRAL
No. 4847
REGISTERED PROFESSIONAL ENGINEER

PROPOSED ADA WALKWAY IMPROVEMENTS

600 MOUNT PLEASANT AVENUE
PROVIDENCE, RI

RHODE ISLAND COLLEGE CAPITAL PROJECTS ADMINISTRATION

600 MOUNT PLEASANT AVENUE
PROVIDENCE, RI 02908

MISCELLANEOUS DETAILS PLAN NO. 1

DATE: APRIL 2022 SCALE: AS NOTED

DWG. NAME: 2620-07-DET01.DWG

REVISIONS	NUMBER	REMARKS	DATE
1		RIDEM SUBMISSION	04/20/22
2		BID ITEMS	04/28/22
3		ADDENDUM 1	05/23/22

NO.	BY	DATE
1	MEP	07/27/20
2	MEP	08/20/20

DRAWING NUMBER: **C6**
SHEET: 7 OF 129

Crossman Engineering
Rhode Island: 181 Centerville Road, Warwick, RI 02886, Phone (401) 738-5660
Massachusetts: 103 Commonwealth Avenue, North Attleboro, MA 02763, Phone (508) 698-1700
Email: cel@crossmaneng.com

THESE DRAWINGS ARE THE PROPERTY OF CROSSMAN ENGINEERING AND HAVE BEEN PREPARED FOR YOUR CLIENT FOR A SPECIFIC SITE AND PROJECT. THESE DRAWINGS ARE NOT TO BE COPIED OR USED FOR ANY OTHER PURPOSE WITHOUT THE WRITTEN CONSENT OF CROSSMAN ENGINEERING.

PREPARED FOR:

RHODE ISLAND COLLEGE CAPITAL PROJECTS ADMINISTRATION

600 MOUNT PLEASANT AVENUE
PROVIDENCE, RI 02908

MISCELLANEOUS DETAILS PLAN NO. 1

DATE: APRIL 2022 SCALE: AS NOTED

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PREPARED FOR:

RHODE ISLAND COLLEGE CAPITAL PROJECTS ADMINISTRATION

600 MOUNT PLEASANT AVENUE
PROVIDENCE, RI 02908

MISCELLANEOUS DETAILS PLAN NO. 1

DATE: APRIL 2022 SCALE: AS NOTED

DWG. NAME: 2620-07-DET01.DWG

REVISIONS	NUMBER	REMARKS	DATE
1		RIDEM SUBMISSION	04/20/22
2		BID ITEMS	04/28/22
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NO.	BY	DATE
1	MEP	07/27/20
2	MEP	08/20/20

DRAWING NUMBER: **C6**
SHEET: 7 OF 129

Crossman Engineering
 Rhode Island: 151 Centerville Road, Warwick, RI 02886, Phone (401) 738-5660
 Massachusetts: 103 Commonwealth Avenue, North Attleboro, MA 02763, Phone (508) 695-1700
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STEVEN M. CABRAL
 No. 4847
 REGISTERED PROFESSIONAL ENGINEER
 PROJECT TITLE: **PROPOSED ADA WALKWAY IMPROVEMENTS**

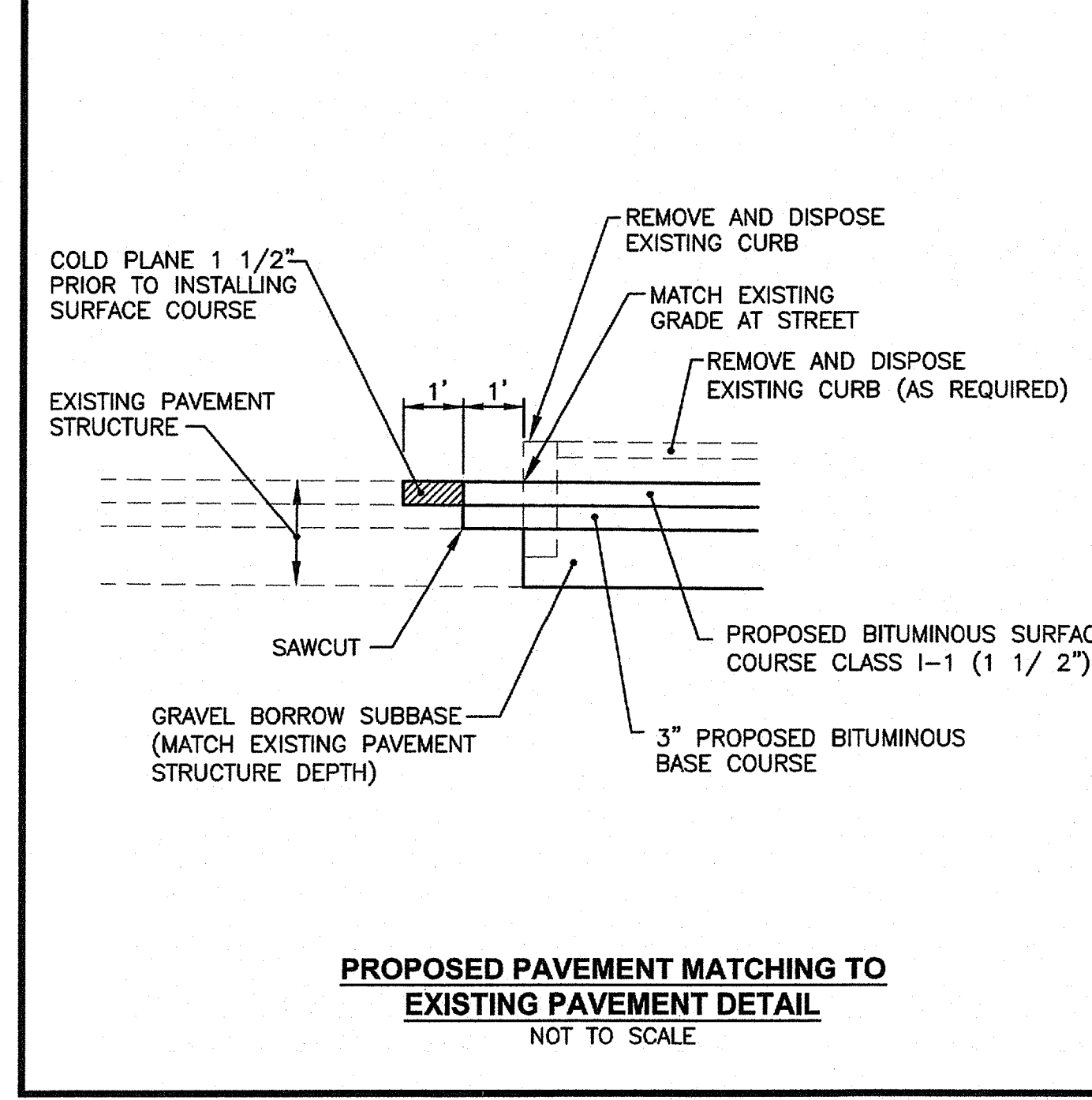
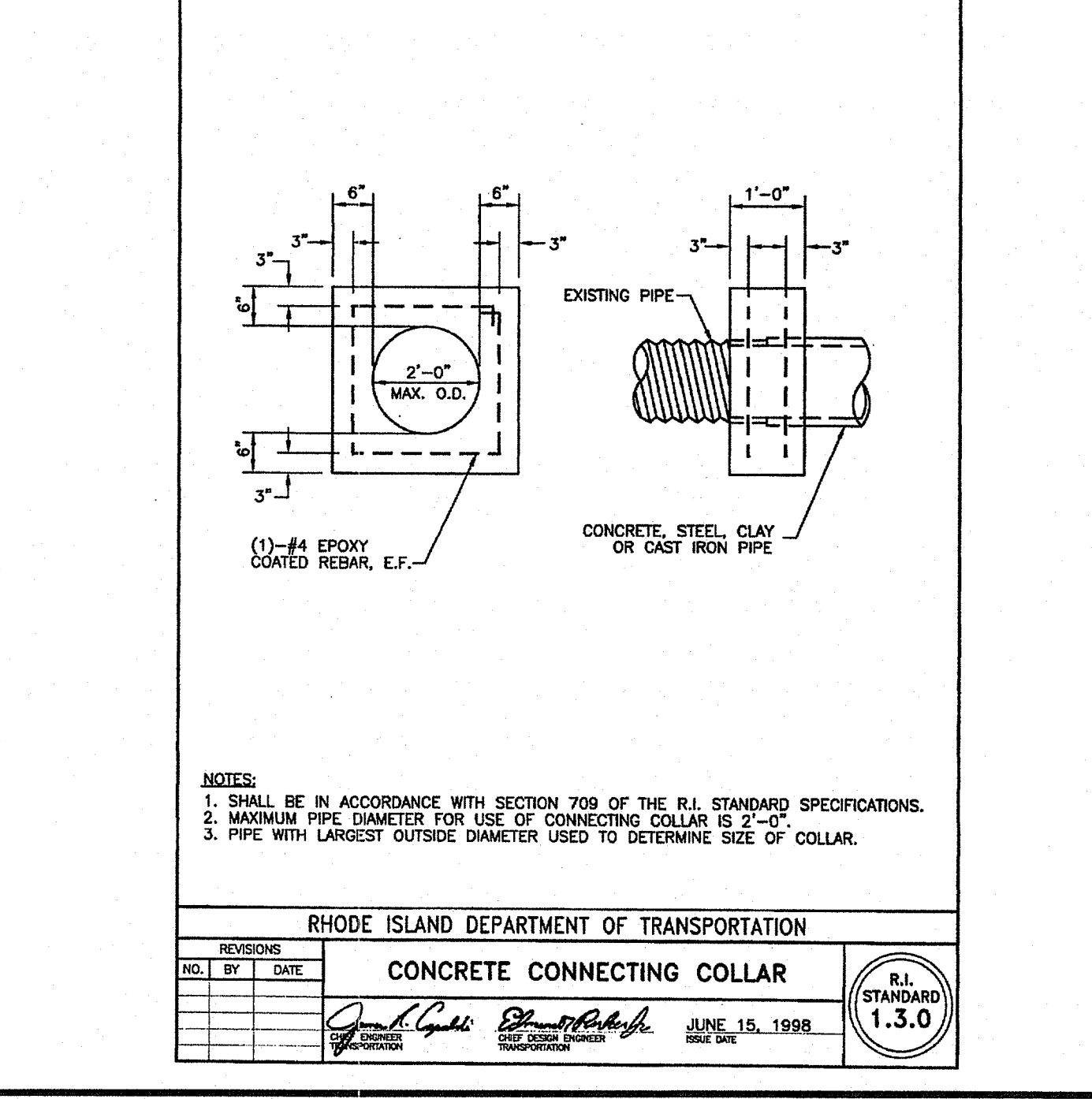
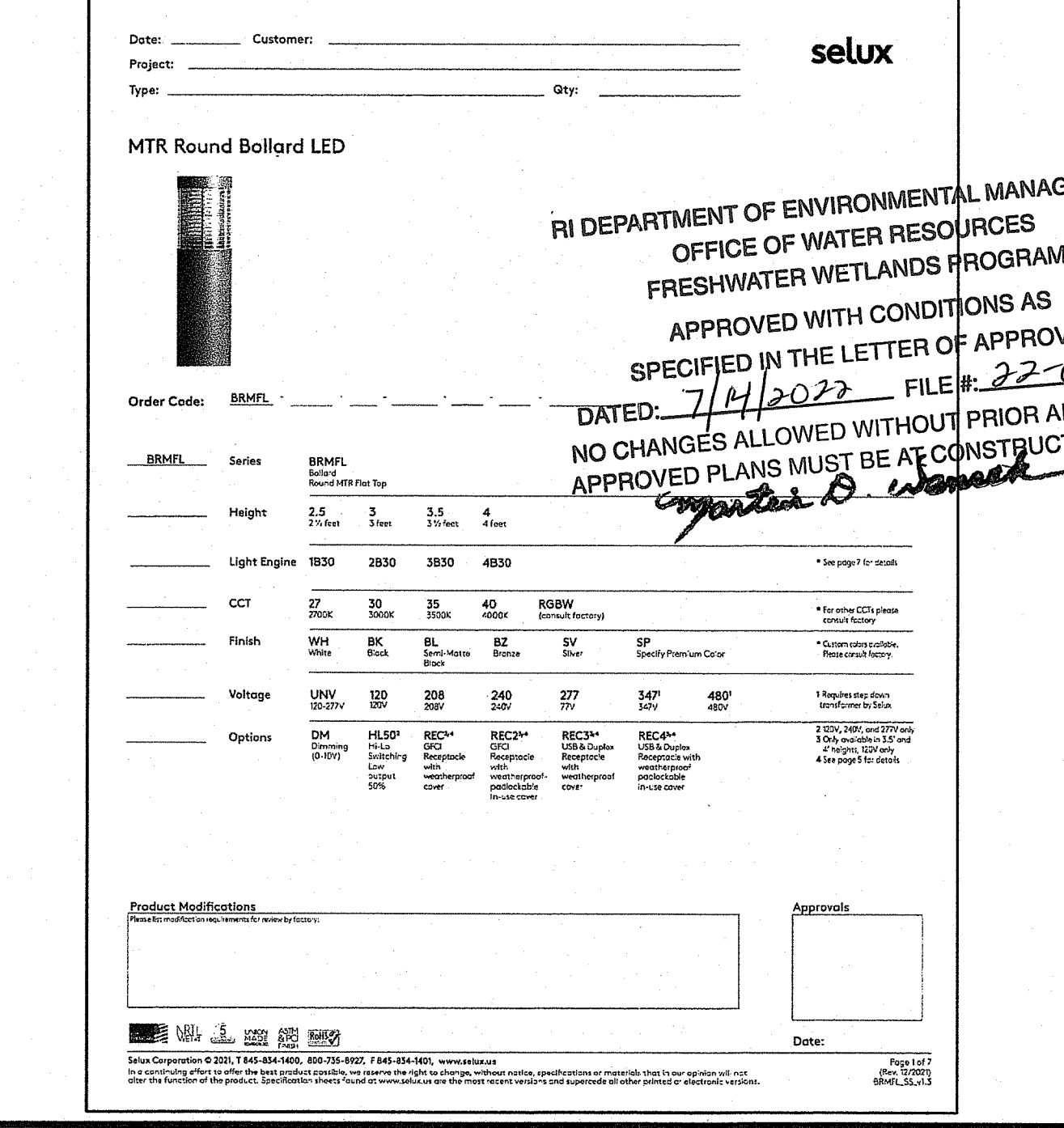
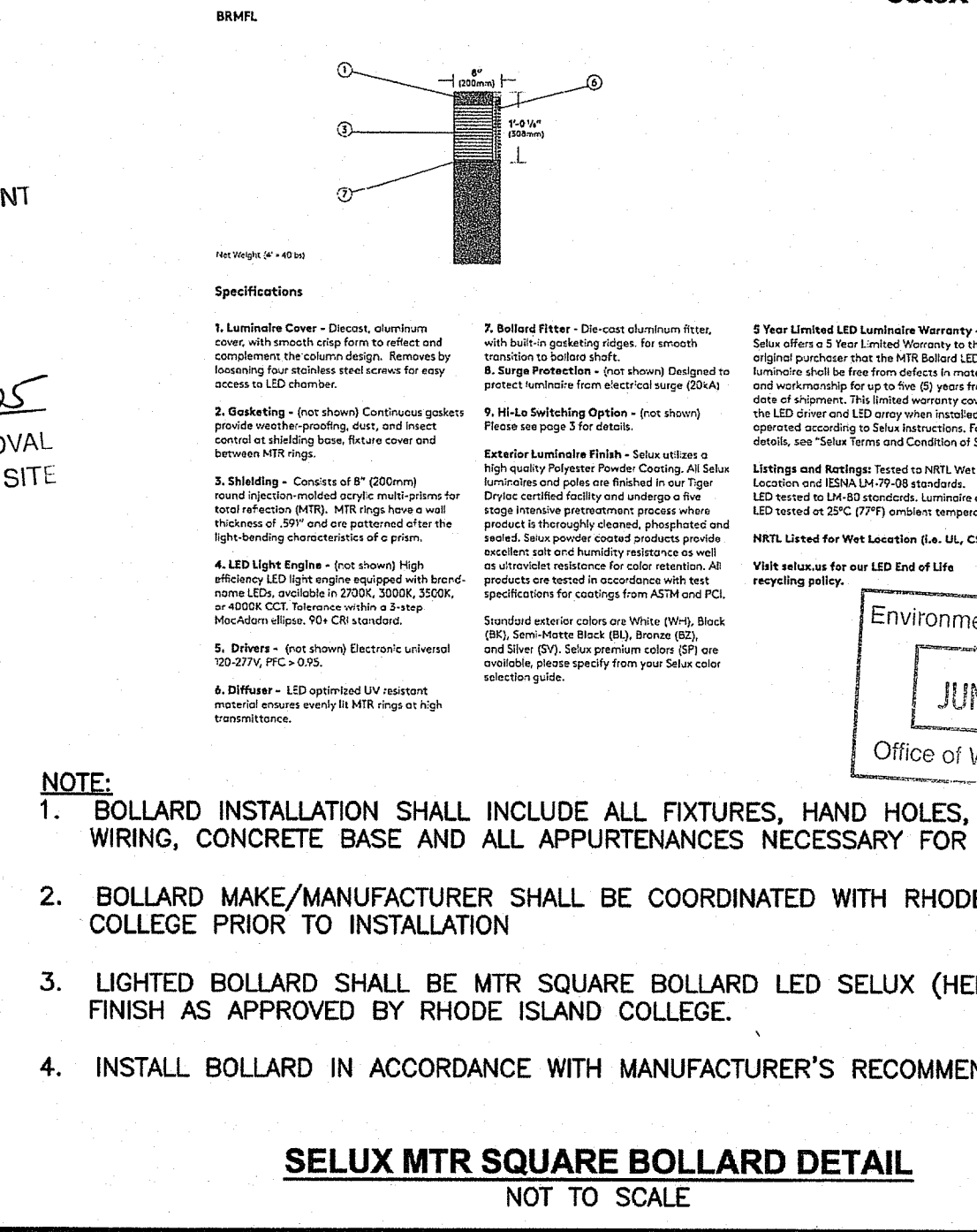
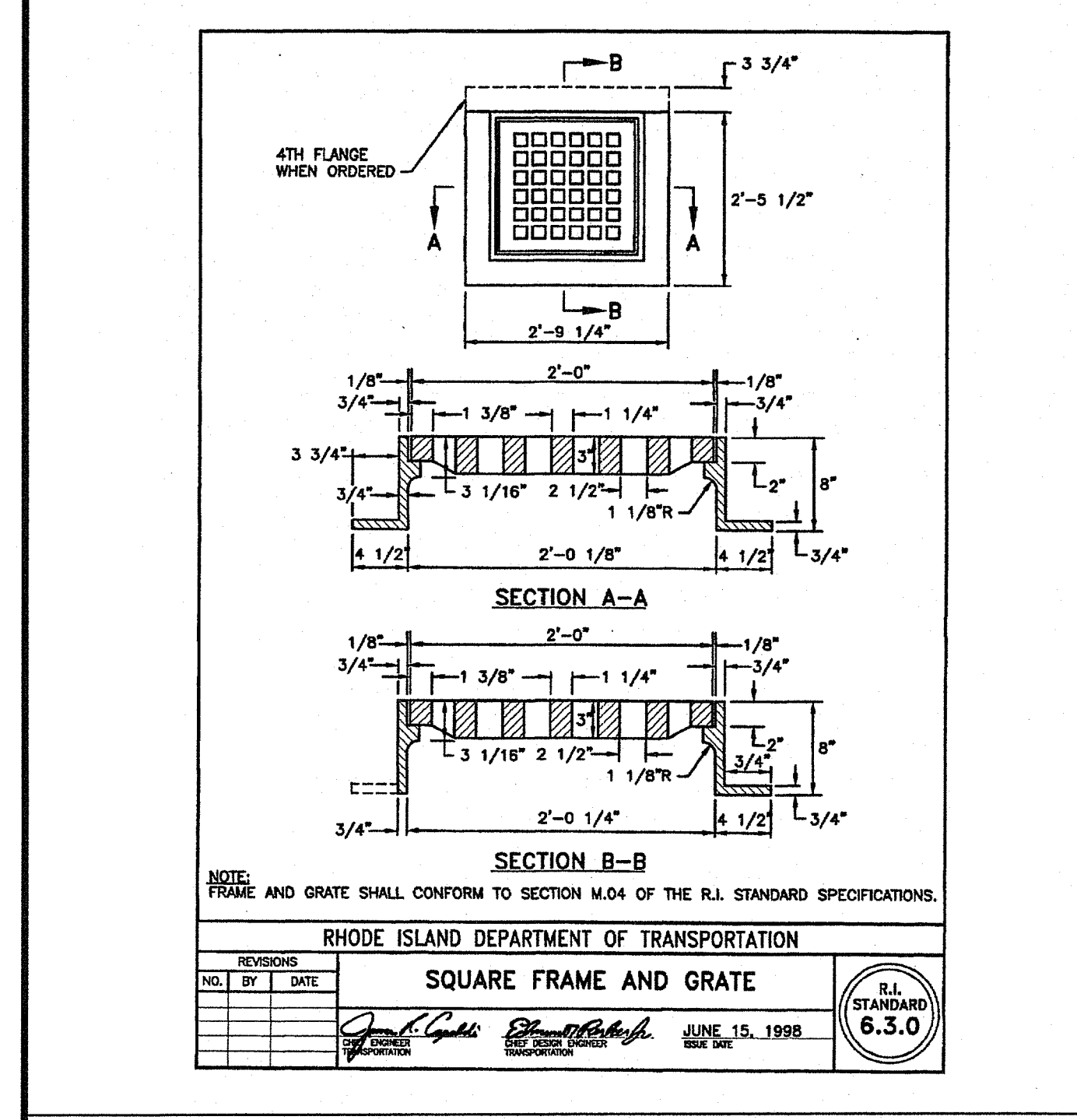
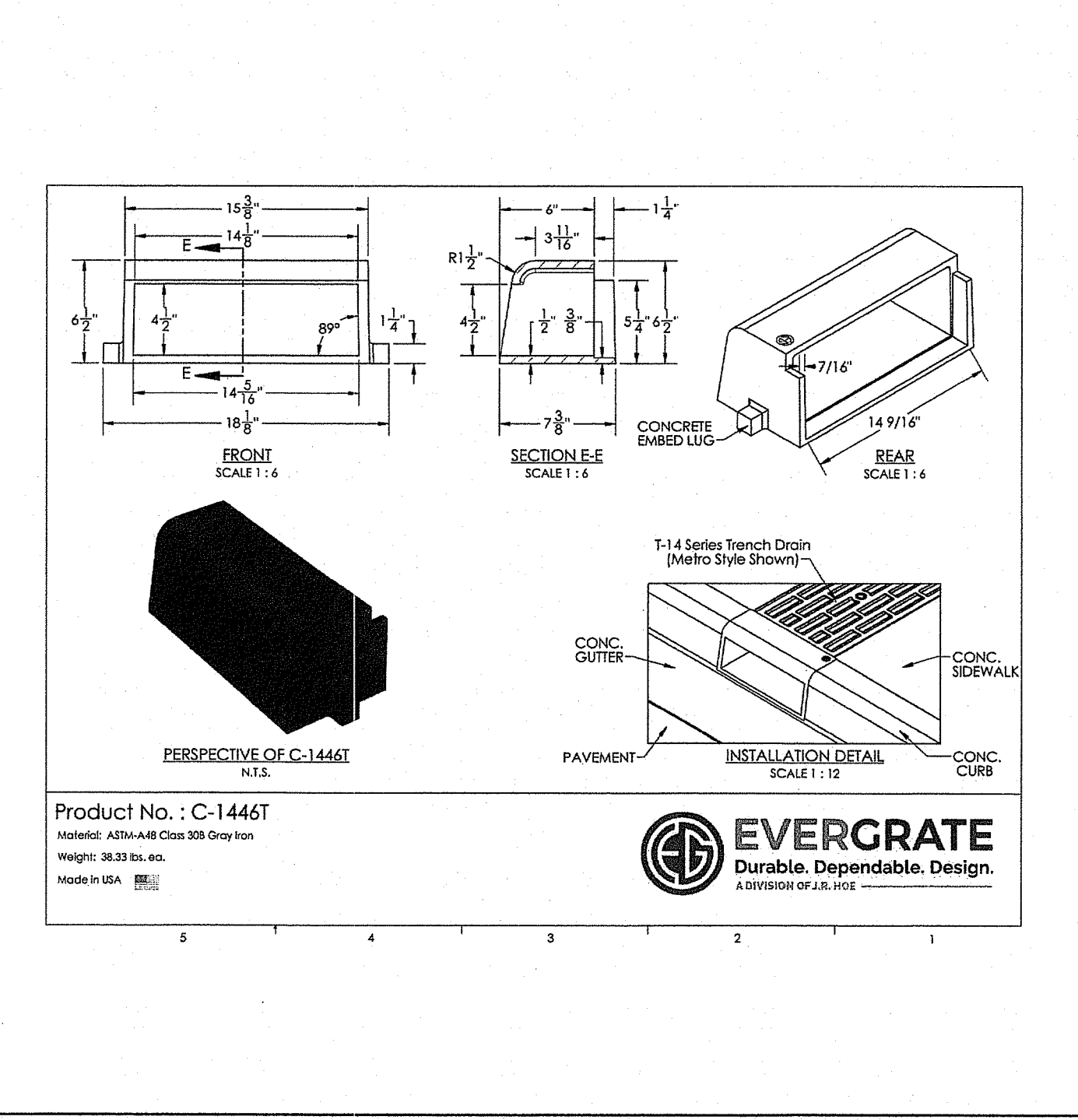
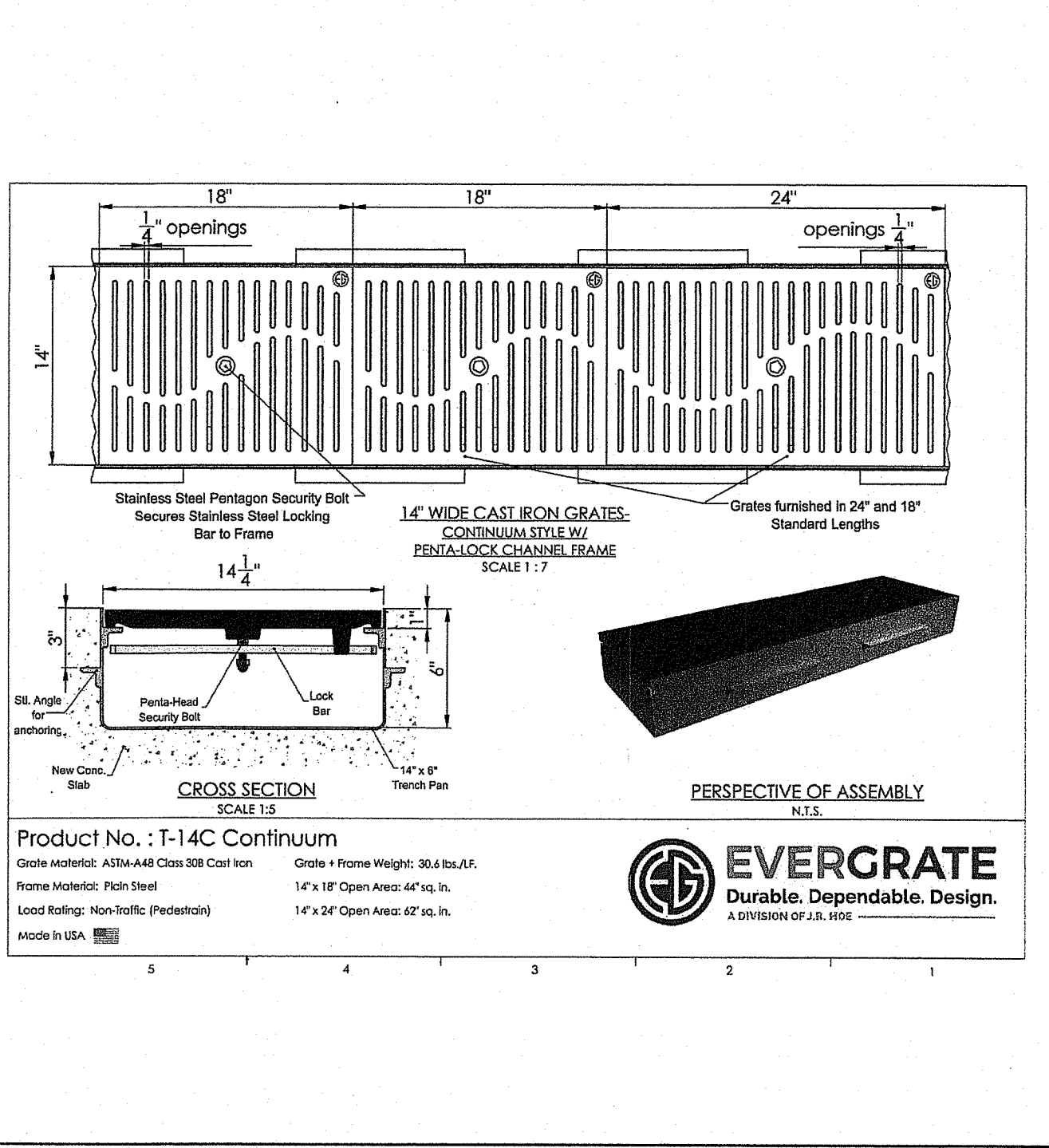
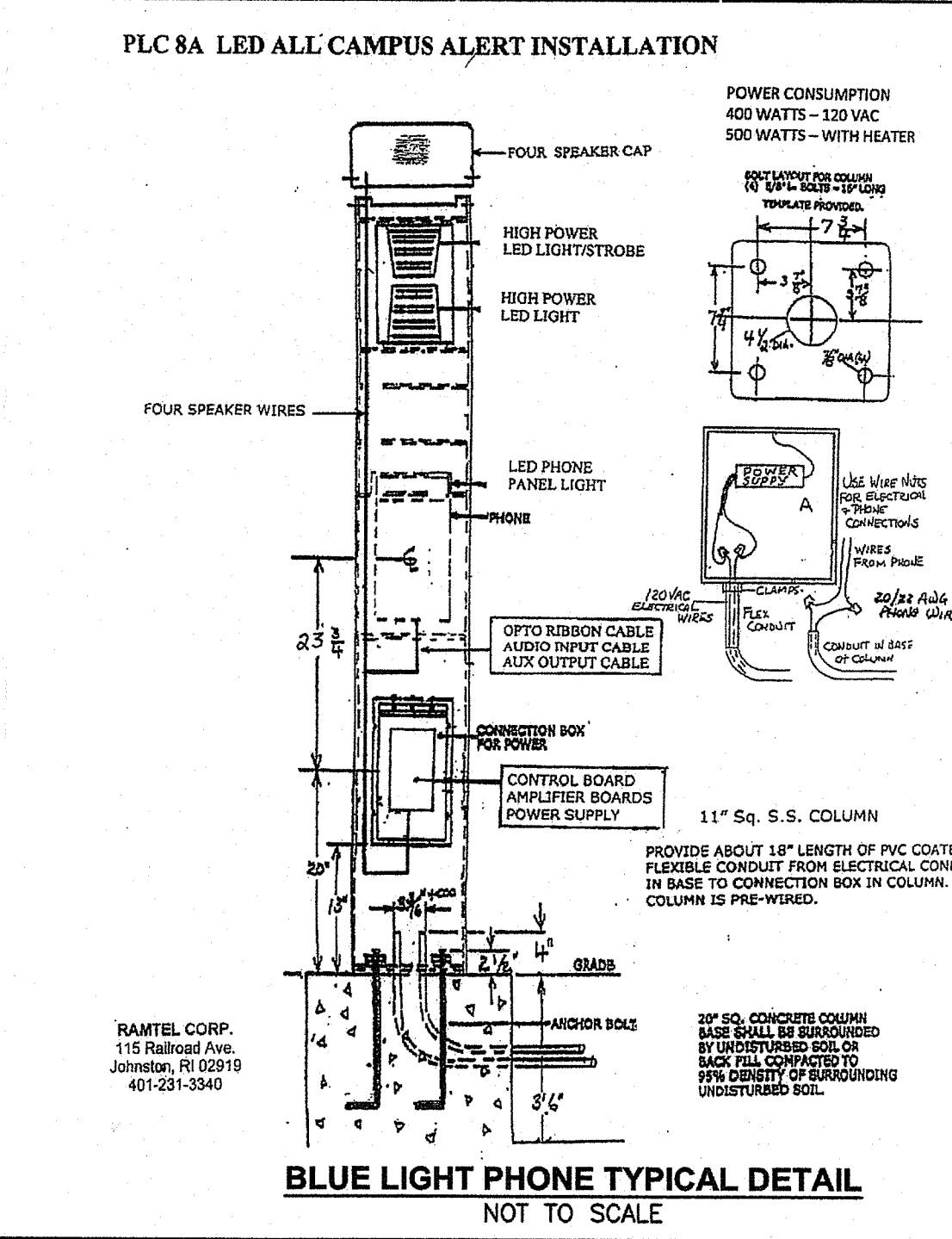
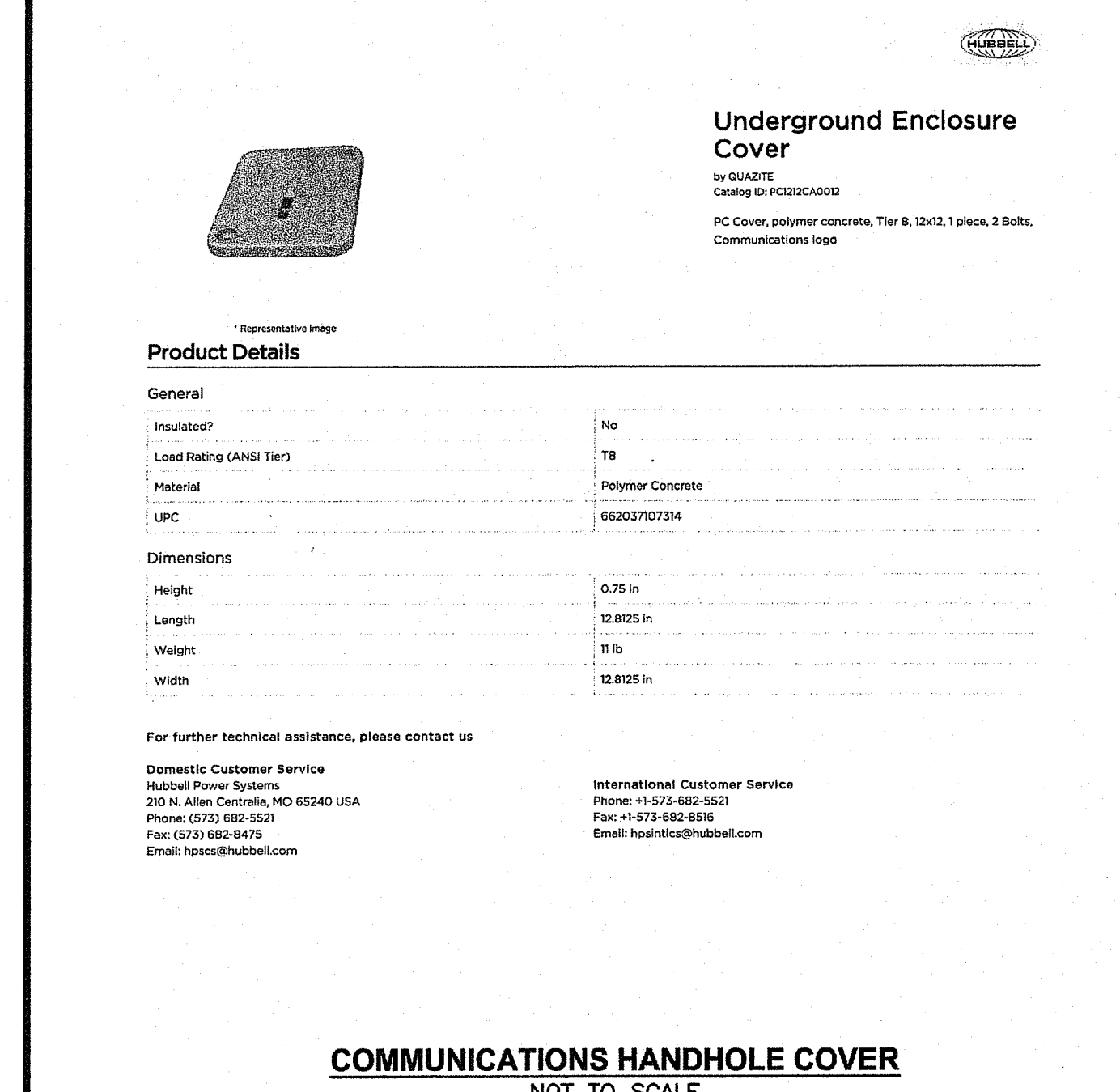
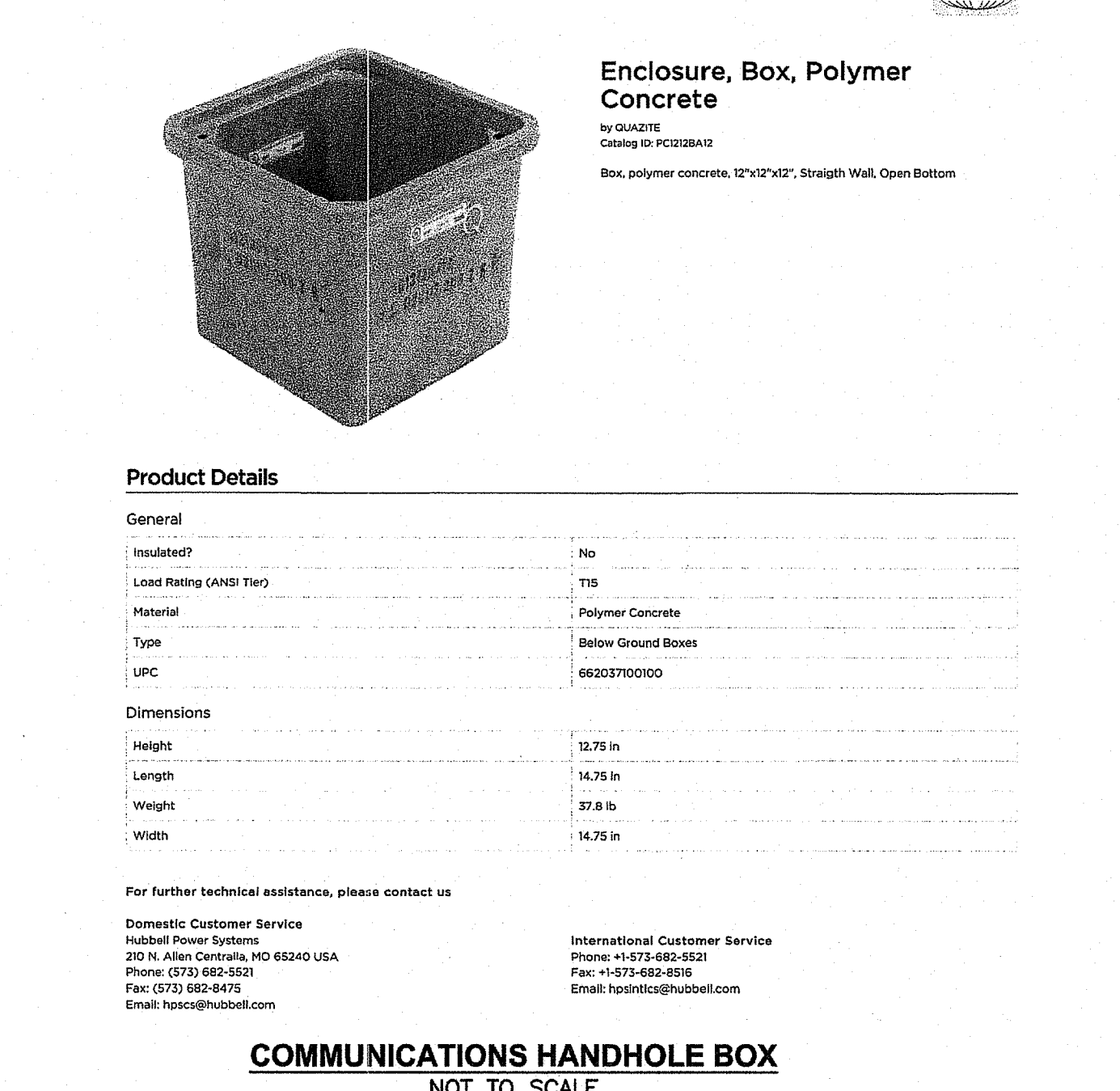
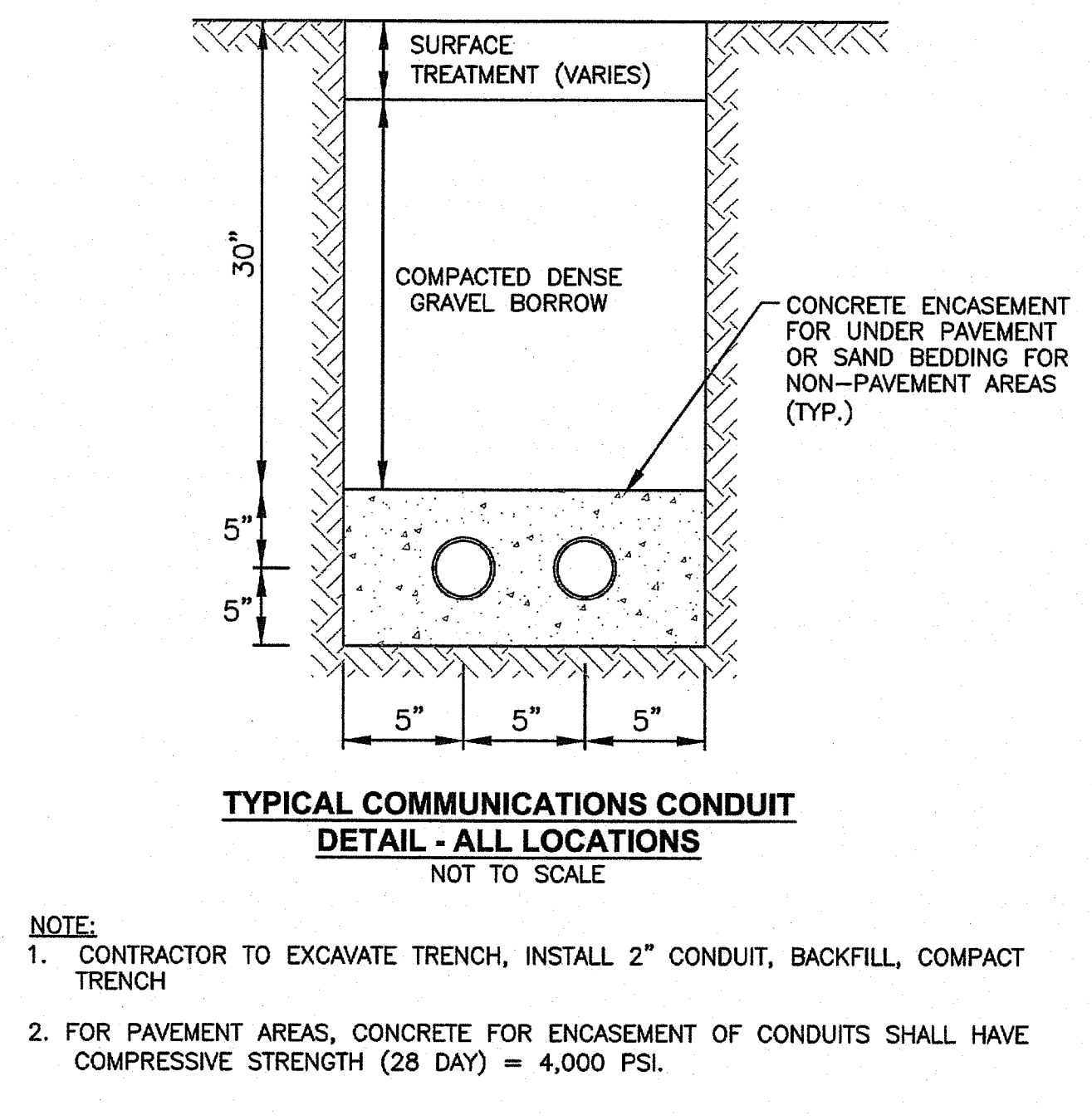
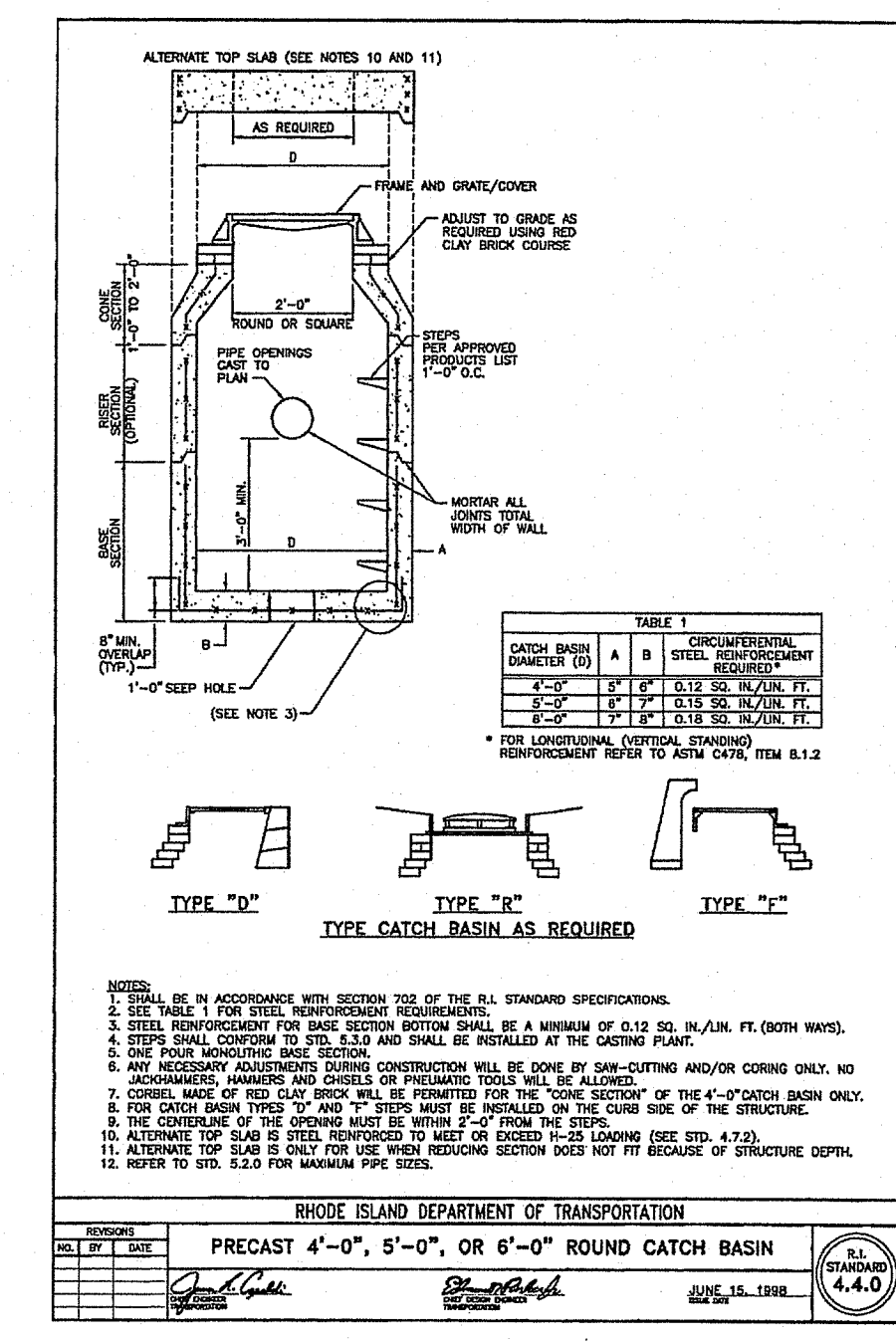
600 MOUNT PLEASANT AVENUE PROVIDENCE, RI
 PREPARED FOR: **RHODE ISLAND COLLEGE CAPITAL PROJECTS ADMINISTRATION**

600 MOUNT PLEASANT AVENUE PROVIDENCE, RI 02908
 DRAWING TITLE: **MISCELLANEOUS DETAILS PLAN NO. 2**

DATE: APRIL 2022 SCALE: AS NOTED
 DWG. NAME: 2620-08-DET02.DWG

REVISIONS	NUMBER	REMARKS	DATE
	1	RIDEM SUBMISSION	04/20/22
	2	BID ITEMS	04/29/22
	3	ADDENDUM 1	05/23/22

DRAWING NUMBER: **C7**
 SHEET: 8 OF 329



GENERAL PROJECT WIDE NOTES

- THE LIMIT OF DISTURBANCE ALONG THE WOODS LINE SHALL BE MARKED WITH STAKES AND EROSION CONTROLS SHALL BE INSTALLED PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, MAINTAINED ON A REGULAR BASIS.
- THE CONTRACTOR MUST REPLACE AND/OR RESEED ANY VEGETATION THAT DOES NOT DEVELOP/SURVIVE WITHIN THE PERIOD OF ONE YEAR AND HE SHALL DO SO AT NO ADDITIONAL EXPENSE TO THE OWNER.
- ALL STRAW WATTLE OR TEMPORARY PROTECTION SHALL REMAIN IN PLACE UNTIL AN ACCEPTABLE STAND OF GRASS OR APPROVED GROUND COVER/STABILIZATION IS ESTABLISHED AND POTENTIAL SEDIMENTATION SOURCES ARE REMOVED.
- TREES AND OTHER EXISTING VEGETATION SHALL BE RETAINED WHENEVER FEASIBLE; THE AREA BEYOND THE DRILLPIECE SHALL BE FENCED OR ROPED OFF TO PROTECT TREES FROM CONSTRUCTION EQUIPMENT.
- AREAS DAMAGED DURING CONSTRUCTION SHALL BE RESEDED, RESEEDING, OR OTHERWISE RESTORED AT THE CONTRACTOR'S EXPENSE.
- STOCKPILES SHALL HAVE NO SLOPE STEEPER THAN 2:1 AND SHALL BE SURROUNDED BY STRAW WATTLE. COORDINATE WITH OWNER ON APPROPRIATE STOCKPILE LOCATIONS.
- STOCKPILES EXPOSED FOR EXCESSIVE PERIODS SHALL RECEIVE TEMPORARY TREATMENT CONSISTING OF HAY, STRAW, FIBER MATTING OR APPROVED EQL.
- SILT FENCE OR COMPOST FILTER SOCK MAY BE USED IN LIEU OF THE STRAW WATTLE.
- THE CONTRACTOR IS RESPONSIBLE TO KEEP THE SITE CLEAN FROM TRASH. DAILY PATROL OF THE CONSTRUCTION SITE SHOULD BE CONDUCTED TO PICK-UP TRASH. THE OPERATOR SHALL REQUIRE THE CONTRACTOR TO HAVE PORTABLE SANITARY FACILITIES ONSITE.
- AT THE COMPLETION OF EACH WORKDAY THE CONTRACTOR SHALL PROTECT THE CONSTRUCTION AREA WITH SIGNAGE, CONES, BARRELS AND SECURITY TAPE OR FENCING. NO EXCAVATION SHALL REMAIN OPEN DURING NON-WORKING HOURS.
- THE CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL AND PEDESTRIAN PROTECTION THROUGHOUT CONSTRUCTION DURATION. ADDITIONAL PROTECTION SHALL BE PROVIDED IF REQUESTED BY RHODE ISLAND COLLEGE.

DUST CONTROL NOTES

ON AN AS-NEEDED BASIS OR AS DIRECTED BY R.I.D.E.M. OR OWNER, THE CONTRACTOR SHALL UTILIZE THE FOLLOWING METHOD (AS RECOMMENDED BY THE "R.I. SOIL EROSION AND SEDIMENT CONTROL HANDBOOK") TO CONTROL DUST:

THE EXPOSED SOIL SURFACE SHOULD BE MOISTENED PERIODICALLY WITH ADEQUATE WATER TO CONTROL DUST.

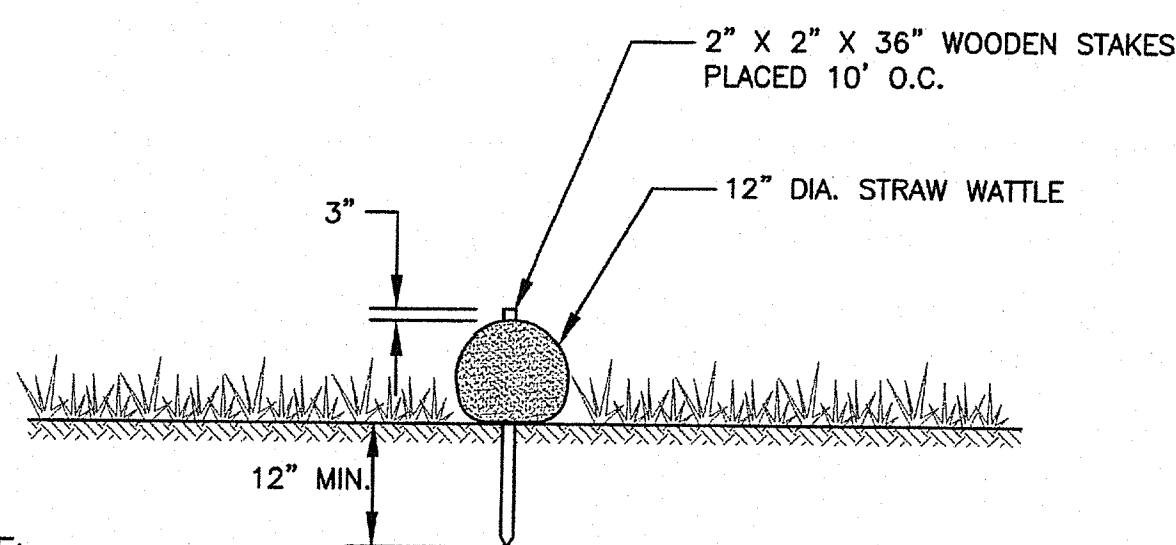
THE METHOD SHOULD BE REPEATED AS NEEDED, AND SPECIAL ATTENTION MUST BE GIVEN TO THE ACCESS DRIVES.

EROSION CONTROL AND SOIL STABILIZATION PROGRAM

- EXTREME CARE SHALL BE EXERCISED SO AS TO PREVENT ANY UNSUITABLE MATERIAL FROM ENTERING THE DRAINAGE SYSTEM, WOODS, AND ROADWAYS.
- TEMPORARY TREATMENTS SHALL CONSIST OF A HAY, STRAW, OR FIBER MULCH PROTECTIVE COVERS, SUCH AS A MAT OR FIBER LINING (BURLAP, JUTE, FIBERGLASS NETTING, EXCELSIOR BLANKETS). THEY SHALL BE INCORPORATED INTO THE WORK AS WARRANTED OR AS ORDERED BY THE OWNER.
- HAY OR STRAW APPLICATIONS SHALL BE IN THE AMOUNT OF 3,000-4,000 LBS./ACRE.
- ADDITIONAL HAY BALES OR SANDBAGS SHALL BE LOCATED AS CONDITIONS WARRANT OR AS DIRECTED BY THE ENGINEER, OWNER OR MUNICIPAL REPRESENTATIVES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING DUST CONTROL AT NO ADDITIONAL COST TO THE OWNER.
- THE EXISTING CATCH BASINS WITHIN THE VICINITY OF CONSTRUCTION SHALL BE PROTECTED BY SILT SACKS.
- CONTRACTOR SHALL INSPECT EROSION CONTROLS DAILY, IF SOIL EROSION OR SEDIMENT IS OBSERVED IN THESE AREAS, THE CONTRACTOR SHALL RELOCATE OR INSTALL ADDITIONAL STRAW WATTLE IN LOCATIONS THAT CAN BE STAKED. THIS WORK IS INCLUDED IN THE PROJECT SCOPE.

INSPECTION/MAINTENANCE NOTES

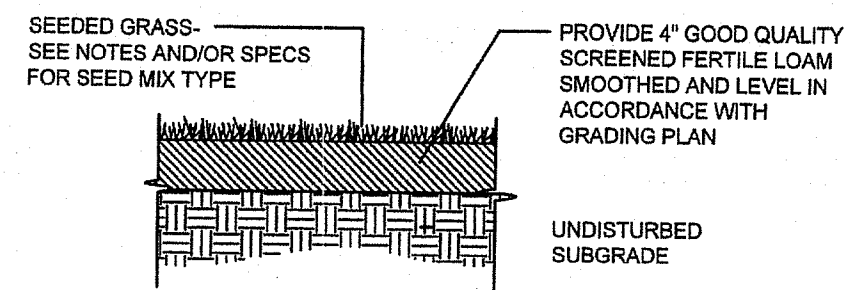
- PRIOR TO COMMENCING GRUBBING OPERATIONS AND EARTHWORK, STRAW WATTLE SHALL BE PLACED AROUND THE PERIMETER OF THE SITE TO PREVENT SEDIMENT FROM ENTERING EXISTING ROADWAY, SWALE, AND ADJUTING PROPERTIES.
- ALL DISTURBED AREAS WHICH BECOME SUBJECT TO EROSION TENDENCIES WHETHER THEY BE NEWLY FILLED OR EXCAVATED SHALL RECEIVE SLOPE PROTECTION - SUCH AS RIP-RAP.
- DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING DRAINAGE AND RUNOFF FLOW DURING PERIODS OF RAINFALL.
- DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EROSION CONTROL MAINTENANCE AND SHALL INSPECT / REPLACE DAILY DURING CONSTRUCTION, FOLLOWING RAINFALL AND WEEKLY DURING NON CONSTRUCTION PERIODS.
- ADDITIONAL STRAW WATTLES, FILTERSOX, OR SANDBAGS SHALL BE LOCATED AS CONDITIONS WARRANT OR AS DIRECTED BY THE ENGINEER.
- THE "R.I. SOIL EROSION AND SEDIMENT CONTROL HANDBOOK" PREPARED BY THE RHODE ISLAND STATE CONSERVATION COMMITTEE, 2014, MUST BE UTILIZED BY THE CONTRACTOR AS A GUIDE.
- THE CONTRACTOR IS RESPONSIBLE FOR ALL DUST CONTROL AND FOR THE ENTIRE PROJECT DURATION, INCLUDING TEMPORARY SHUT-DOWN PERIODS, MUST MONITOR AND REPAIR, AS NEEDED, ALL SLOPES TO ENSURE A STABLE PRODUCT.
- IF ANY SEDIMENT IS TRACKED TO THE ROADWAY, DAILY SWEEPING SHALL BE REQUIRED.



NOTE:

- CONTRACTOR IS RESPONSIBLE TO BECOME FAMILIAR WITH THE PRODUCT AND COORDINATE INSTALLATION SCHEDULES AND METHODS WITH THE ENGINEER PRIOR TO PLACEMENT.
- CONTRACTOR SHALL SUBMIT STRAW WATTLE, OR EQUAL, TO ENGINEER FOR APPROVAL.

STRAW WATTLE SECTION
NOT TO SCALE



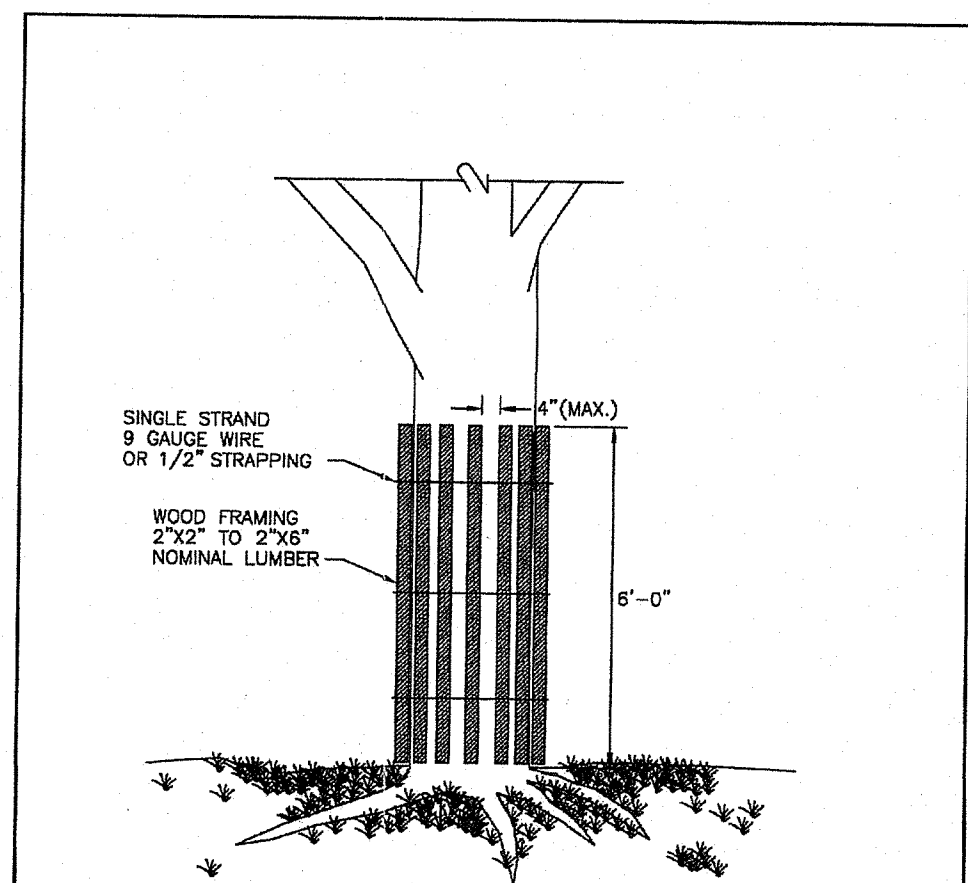
SEEDING NOTES

- LOAM SHALL BE SPREAD TO A MINIMUM DEPTH OF 4" OVER ALL AREAS DESIGNATED ON PLANS.
- SHAPE AND SMOOTH THE SURFACE TO THE LINES AND GRADES AS SHOWN ON PLANS.
- FERTILIZE WITH 10-10-10 OR EQUIVALENT ANALYSIS. AT LEAST 40% OF THE FERTILIZER NITROGEN SHALL BE IN A SLOW RELEASE FORM. INCORPORATE THE FERTILIZER INTO THE TOP 3 TO 4 INCHES OF THE PLANTING SOIL. APPLY AT THE RATE OF 8 POUNDS PER 1,000 SQ. FT. AT SEEDING.
- LIME SPREAD EVENLY AND WORK INTO THE SOIL DURING PREPARATION OF SEED BED AT THE RATE OF ONE TON PER ACRE. INCORPORATE INTO THE SOIL BY DICING OR OTHER APPROVED METHOD. DISTRIBUTE LIME UNIFORMLY AND WORK INTO TOP 4 INCHES OF TOP SOIL (MINIMUM) AND UNIFORMLY BLEND BY DICING OR ROTOTILLING.
- ANY LOAM EXPOSED FOR ONE WEEK SHALL BE PLANTED WITH ANNUAL RYE GRASS SEED & SEED MIX #1. ALL LOAM STOCKPILES TO BE SEED IMMEDIATELY.
- APPLICATION OF SEED:
 - RATE OF APPLICATION OF SEED SHALL BE 8 POUNDS PER 1,000 SQ. FT. OR AS INDICATED ON PLANS.
 - SEEDING SHALL BE DONE IN ACCORDANCE WITH SECTION L.02.03 OF THE RI STANDARD SPECIFICATIONS AND ONLY DURING THE FOLLOWING DATES:
 - SPRING SEEDING: APRIL 1 TO MAY 31
 - FALL SEEDING: AUGUST 15 TO OCTOBER 15
 - THE CONTRACTOR SHALL KEEP ALL SEEDING AREAS WATERED AND IN GOOD CONDITION, RESEEDING IF AND WHEN NECESSARY FOR AN 8-WEEK PERIOD OR UNTIL A GOOD, HEALTHY, UNIFORM GROWTH IS ESTABLISHED OVER THE ENTIRE AREA. THE CONTRACTOR SHALL LEAVE THESE AREAS IN GOOD CONDITION, ALSO MAINTAIN THESE AREAS IN GOOD CONDITION UNTIL PROVISIONAL ACCEPTANCE.
 - DURING THIS PERIOD, WATER TURF AS NECESSARY TO MAINTAIN AN ADEQUATE SUPPLY OF MOISTURE, THE EQUIVALENT OF ONE INCH OF ABSORBED WATER PER WEEK THAT IS DELIVERED AT WEEKLY INTERVALS IN THE FORM OF NATURAL RAIN OR IS AUGMENTED AS REQUIRED BY PERIODIC WATERINGS IS REQUIRED.
 - OVERSEED WHEN NECESSARY TO PROMOTE GRASS GROWTH.
 - REPLANT AREAS VOID OF TURF ONE SQUARE FOOT OR LARGER.
- SEED ALL AREAS DESIGNATED ON PLAN AS WELL AS ALL DISTURBED EXISTING AREAS WITH THE FOLLOWING SEED MIX:

SEED MIX CHART		SEED TYPE #2 SLOPES AT 3:1	
SEED TYPE #1 LAWN AREAS - LESS THAN 3:1	PROPORTIONED BY WEIGHT	GRASS TYPE	PROPORTIONED BY WEIGHT
REBEL TALL FESCUE	20%	REBEL TALL FESCUE	20%
WEeping LOVEGRASS	20%	WEeping LOVEGRASS	20%
RELIANT HARD FESCUE	10%	RELIANT HARD FESCUE	10%
JAMESTOWN 2 CHEWINGS FESCUE	10%	JAMESTOWN 2 CHEWINGS FESCUE	10%
PALMER PERENNIAL RYEGRASS	20%	PALMER PERENNIAL RYEGRASS	20%
WHITE CLOVER	5%	WHITE CLOVER	5%
BLACKWELL SWITCHGRASS	5%	BLACKWELL SWITCHGRASS	5%
CROWN VETCH	10%	CROWN VETCH	10%

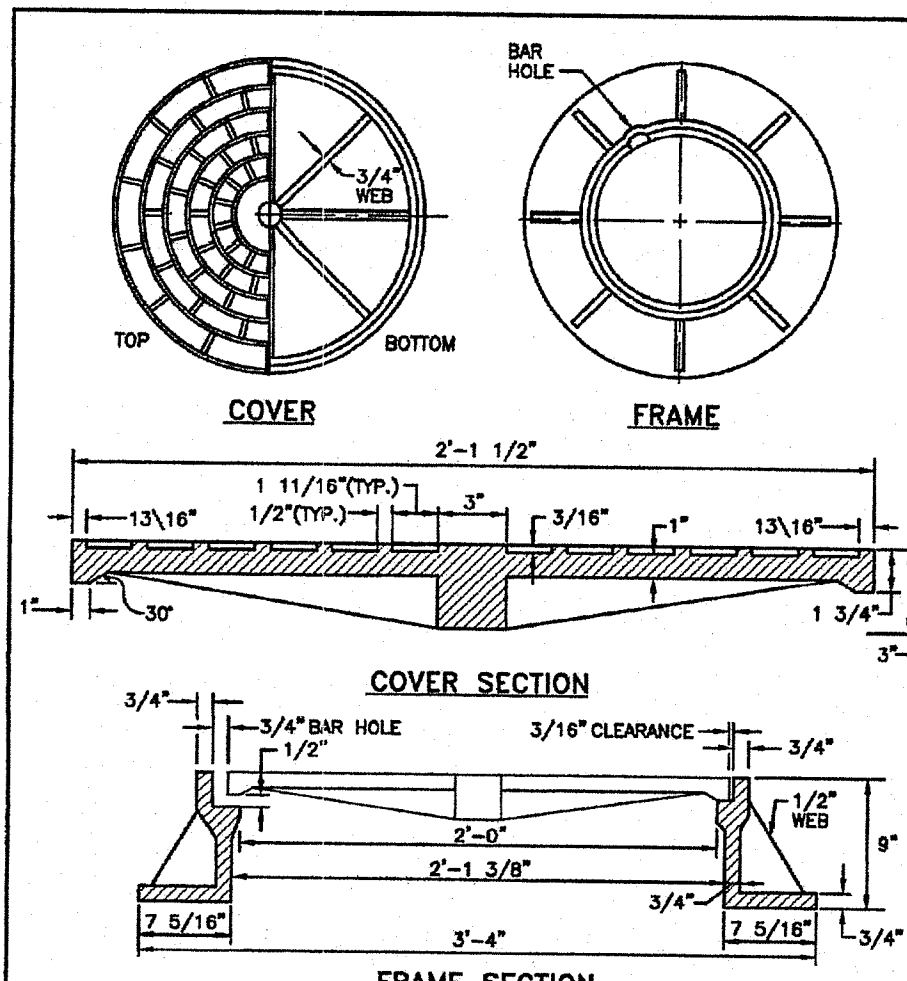
APPLY AT THE RATE OF 8# PER 1,000 S.F.

APPLY AT THE RATE OF 7# PER 1,000 S.F.



NOTE: SHALL BE IN ACCORDANCE WITH SECTION L.11 OF THE STANDARD SPECIFICATIONS.

RHODE ISLAND DEPARTMENT OF TRANSPORTATION
TREE PROTECTION DEVICE
R.I. STANDARD 51.1.0
JUNE 15, 1998

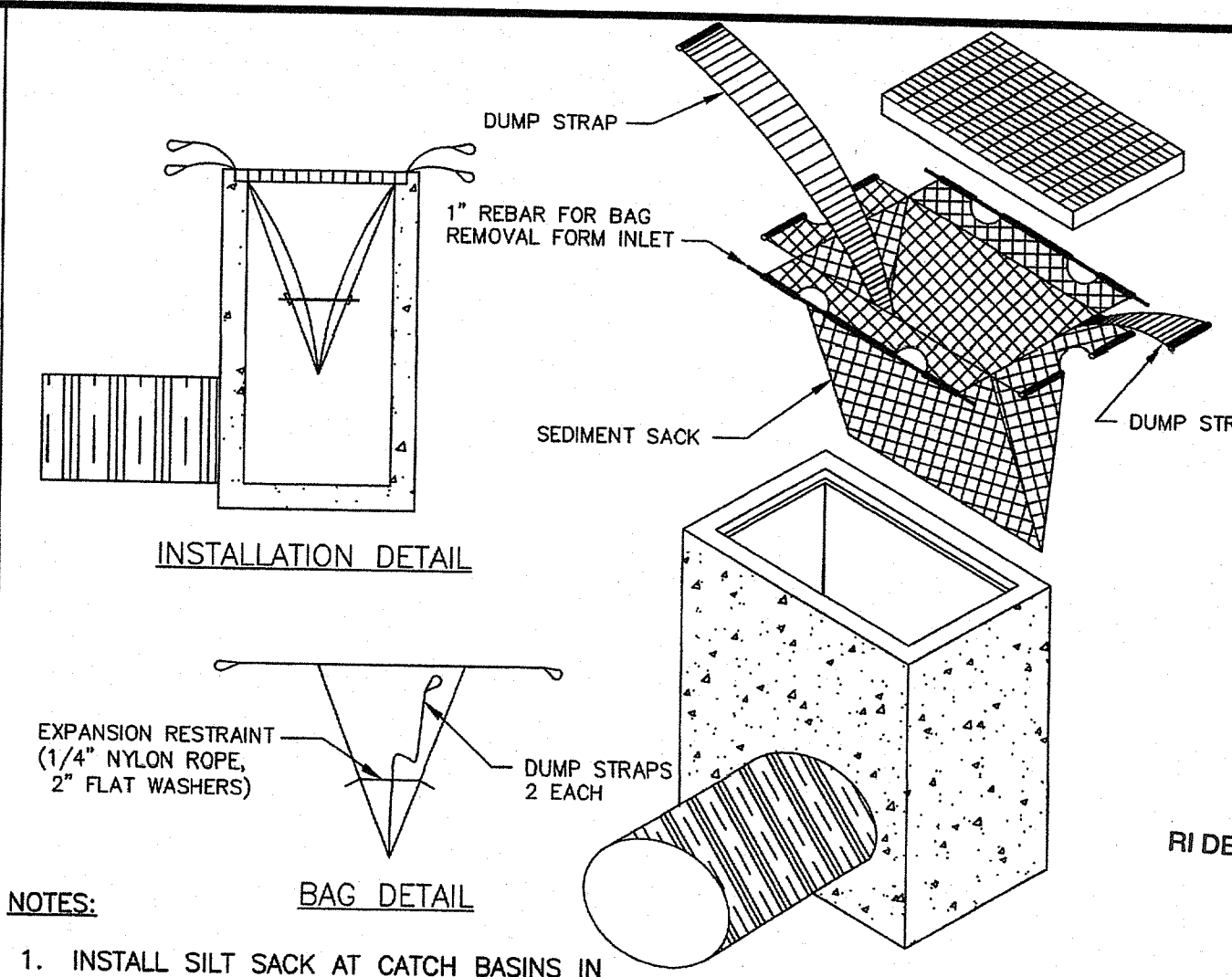


NOTE: 1. FRAME AND GRATE SHALL CONFORM TO SECTION M.04 OF THE R.I. STANDARD SPECIFICATIONS. 2. FRAME AND COVER SEATS MUST HAVE MACHINE FINISH.

RHODE ISLAND DEPARTMENT OF TRANSPORTATION
HEAVY-DUTY ROUND FRAME AND COVER
R.I. STANDARD 6.2.1
JUNE 15, 1998

SEEDING NOTES

- LOAM SHALL BE SPREAD TO A MINIMUM DEPTH OF 4" OVER ALL AREAS DESIGNATED ON PLANS.
- SHAPE AND SMOOTH THE SURFACE TO THE LINES AND GRADES AS SHOWN ON PLANS.
- FERTILIZE WITH 10-10-10 OR EQUIVALENT ANALYSIS. AT LEAST 40% OF THE FERTILIZER NITROGEN SHALL BE IN A SLOW RELEASE FORM. INCORPORATE THE FERTILIZER INTO THE TOP 3 TO 4 INCHES OF THE PLANTING SOIL. APPLY AT THE RATE OF 8 POUNDS PER 1,000 SQUARE FEET AT SEEDING.
- LIME SPREAD EVENLY AND WORK INTO THE SOIL DURING PREPARATION OF SEED BED AT THE RATE OF ONE TON PER ACRE. INCORPORATE INTO THE SOIL BY DICING OR OTHER APPROVED METHOD. DISTRIBUTE LIME UNIFORMLY AND WORK INTO TOP 4 INCHES OF TOP SOIL (MINIMUM) AND UNIFORMLY BLEND BY DICING OR ROTOTILLING.
- APPLICATION OF SEED:
 - RATE OF APPLICATION OF SEED SHALL BE 8 POUNDS PER 1,000 SQUARE FEET OR AS INDICATED ON PLANS.
 - SEEDING SHALL BE DONE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND INSTRUCTIONS, AND ONLY DURING THE FOLLOWING DATES:
 - SPRING SEEDING: APRIL 1 TO MAY 31
 - FALL SEEDING: AUGUST 15 TO OCTOBER 15
 - THE CONTRACTOR SHALL KEEP ALL SEEDING AREAS WATERED AND IN GOOD CONDITION, RESEEDING IF AND WHEN NECESSARY FOR AN 8 WEEK PERIOD OR UNTIL A GOOD, HEALTHY, UNIFORM GROWTH IS ESTABLISHED OVER THE ENTIRE AREA. THE CONTRACTOR SHALL ALSO MAINTAIN THESE AREAS IN AN APPROVED CONDITION UNTIL PROVISIONAL ACCEPTANCE.
 - DURING THIS PERIOD, WATER TURF AS NECESSARY TO MAINTAIN AN ADEQUATE SUPPLY OF MOISTURE WITHIN THE ROOT ZONE. AN ADEQUATE SUPPLY OF MOISTURE IS EQUIVALENT OF ONE INCH OF ABSORBED WATER PER WEEK THAT IS DELIVERED AT WEEKLY INTERVALS IN THE FORM OF NATURAL RAIN OR IS AUGMENTED AS REQUIRED BY PERIODIC WATERING.
 - OVERSEED WHEN NECESSARY TO PROMOTE GRASS GROWTH.
 - REPLANT AREAS VOID OF TURF ONE SQUARE FOOT OR LARGER.
- SEED:
 - SEED ALL AREAS DESIGNATED ON PLAN AS WELL AS ALL DISTURBED EXISTING AREAS WITH THE FOLLOWING SEED MIX:
- IN THE BASE BID PRICE, THE CONTRACTOR SHALL OWN THE FIRST TWO CUTTINGS OF GRASS WITHIN THE CONSTRUCTION AREA.
- IF THE OWNER REQUESTS SEEDING DURING THE SUMMER MONTHS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR WATERING SEED AND OBTAINING AN ACCEPTABLE GRASS GROWTH.



NOTES:

- INSTALL SILT SACK AT CATCH BASINS IN VICINITY OF CONSTRUCTION.
- CONTRACTOR SHALL SUBMIT SILT SACK PRODUCT TO ENGINEER FOR APPROVAL.

TYPICAL SILT SACK DETAIL
NOT TO SCALE

Manhole Castings L-20

Midwest Castings Indiana, Ohio



Catch Basin Frame & Grate

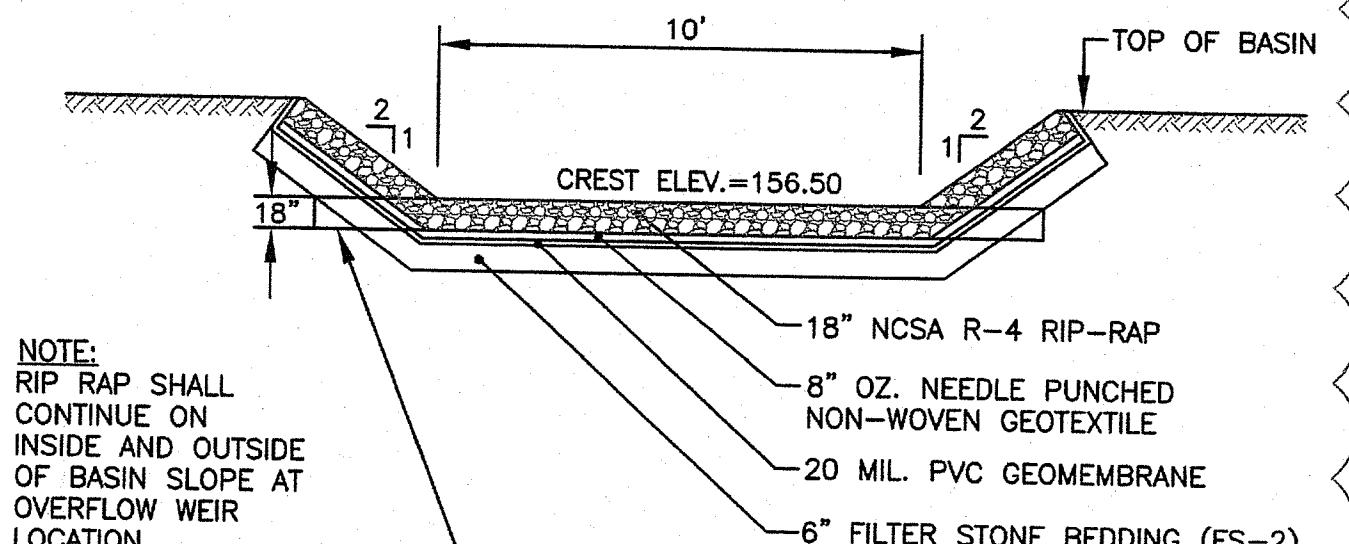
R-2560 Series
Beehive Grates with Frames

Specifications:
• Suitable for drainage in circumstances where clogging of a flat grating is a problem. Excellent for roadside or earth ditch catch basins.

BEEHIVE GRATE DETAIL
NOT TO SCALE

DESCRIPTION	PRODUCT NUMBER
26" x 7" Beehive Frame & Grate 2560E1	69718

NOTE: BEEHIVE GRATE SHALL BE MIDWEST CASTINGS R-2560 OR APPROVED EQUAL.



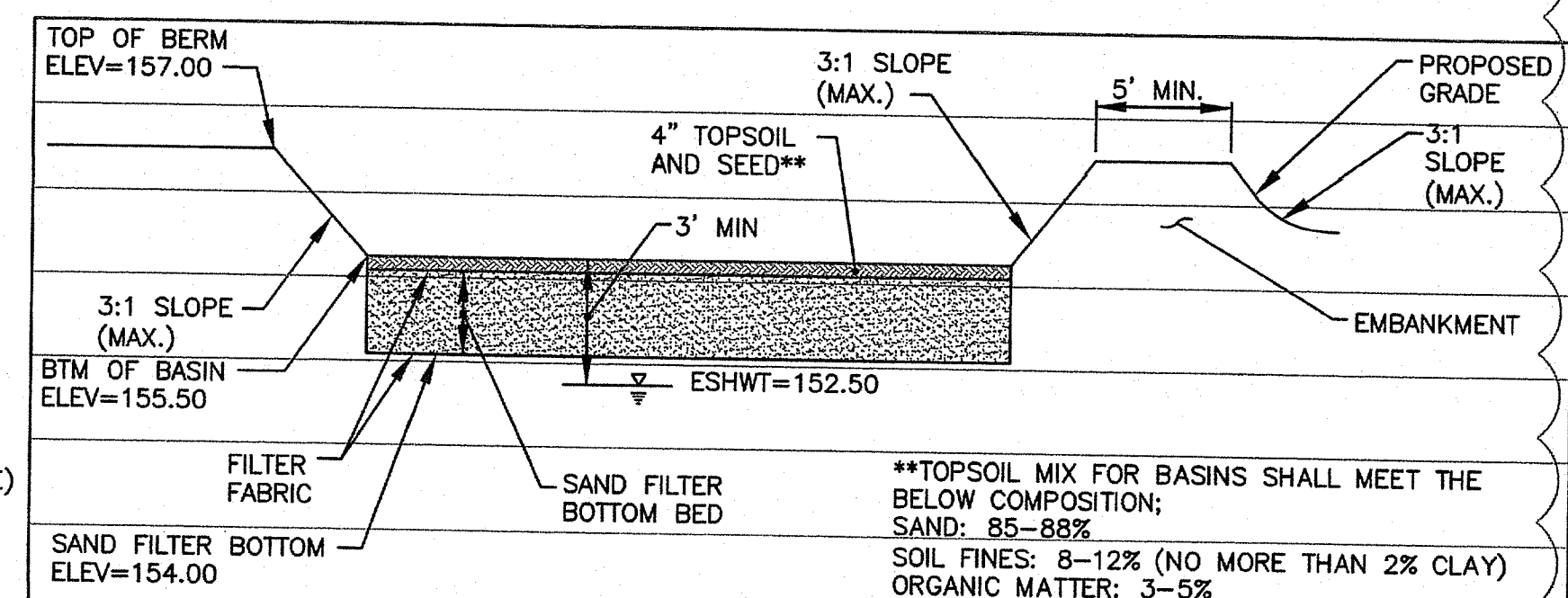
NOTE: RIP RAP SHALL CONTINUE ON INSIDE AND OUTSIDE OF BASIN SLOPE AT OVERFLOW WEIR LOCATION.

TYPICAL BASIN OVERFLOW WEIR DETAIL
NOT TO SCALE

SAND FILTER BOTTOM BED NOTE

THE SAND FILTER BOTTOM BED SHALL BE AASHTO M6 OR ASTM 33 CONCRETE SAND.

FILTER FABRIC PLACED BETWEEN SAND FILTER BOTTOM BED AND TOPSOIL LAYERS SHALL BE MIRAFI 180-N OR APPROVED EQUAL.



SAND FILTER TYPICAL SECTION
NOT TO SCALE

SAND FILTER NOTES

- SAND FILTER BASIN CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE RHODE ISLAND STORMWATER DESIGN AND INSTALLATION STANDARDS MANUAL, APPENDIX F.5, CONSTRUCTION STANDARDS/SPECIFICATIONS FOR FILTER BMP'S.
- MATERIAL USED SHALL MEET THE REQUIREMENTS OF TABLE F-16 IN APPENDIX F.5.
- THE CONTRACTOR IS RESPONSIBLE TO BECOME FAMILIAR WITH THE ABOVE REFERENCED MANUAL. THE MANUAL CAN BE FOUND AT <http://www.dem.ri.gov/pubs/regs/water/swmanual.pdf>.
- CONTRACTOR IS RESPONSIBLE TO SUBMIT SHOP DRAWINGS AND SPECIFICATIONS FOR SAND FILTER MATERIAL PRIOR TO START OF CONSTRUCTION.

SAND FILTER SEED MIX (SEED MIX NO. 3)

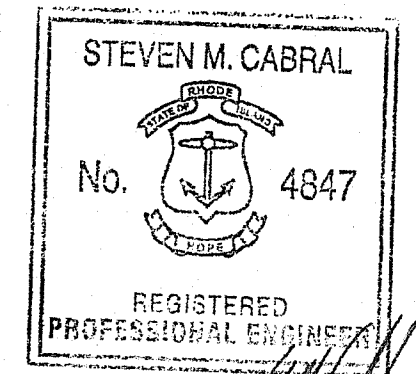
APPLICATION RATE = 15-25 LBS. / ACRE (SEASONALLY FLOODED MIX) (SAND FILTER BOTTOM AREA)

- 20% FOX SEDGE, PA ECOTYPE (CAREX VULPINOIDEA, PA ECOTYPE)
- 16% VIRGINIA WILD RYE, PA ECOTYPE (ELYMUS VIRGINICUS, PA ECOTYPE)
- 15% RIVERBANK WILD RYE, PA ECOTYPE (ELYMUS RIPARIUS, PA ECOTYPE)
- 15% JAPANESE MILLET (Echinochloa crusgalli var. frumentacea)
- 15% DEER TONGUE, 'TIOGA' (PANICUM CLADESTINUM (DICANTHELIUM C.), 'TIOGA')
- 9% BLUNT BROOM SEDGE, PA ECOTYPE (CAREX SCOPARIA, PA ECOTYPE)
- 5% SWITCHGRASS, 'CAVE-IN-ROCK' (PANICUM VIRGATUM, 'CAVE-IN-ROCK')
- 2% GREEN-BULRUSH, PA ECOTYPE (SCIRPUS ATROVIRENS, PA ECOTYPE)
- 2% AWL SEDGE, PA ECOTYPE (CAREX STIPATA, PA ECOTYPE)
- 1% AUTUMN BENTGRASS, APB (AGROSTIS PERENNANS, APB)

Crossman Engineering
Rhode Island: 151 Centerville Road, Warwick, RI 02886, Phone (401) 738-8680
Massachusetts: 103 Commonwealth Avenue, North Attleboro, MA 02763, Phone (508) 695-1700
Email: ce@crossmaneng.com

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RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESH WATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL
DATED: 7/11/2022 FILE # 22-0205
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE



PROJECT TITLE:
PROPOSED ADA WALKWAY IMPROVEMENTS
600 MOUNT PLEASANT AVENUE PROVIDENCE, RI

PREPARED FOR:
RHODE ISLAND COLLEGE CAPITAL PROJECTS ADMINISTRATION
600 MOUNT PLEASANT AVENUE PROVIDENCE, RI 02908

DRAWING TITLE:
MISCELLANEOUS DETAILS PLAN NO. 3

DATE: APRIL 2022 SCALE: AS NOTED
DWG. NAME: 2620-09-DET03.DWG

NUMBER	REMARKS	DATE
1	RIDEM SUBMISSION	04/20/22
2	BID ITEMS	04/29/22
3	ADDENDUM 1	05/23/22

DRAWING NUMBER
C8
SHEET: 9 OF 14