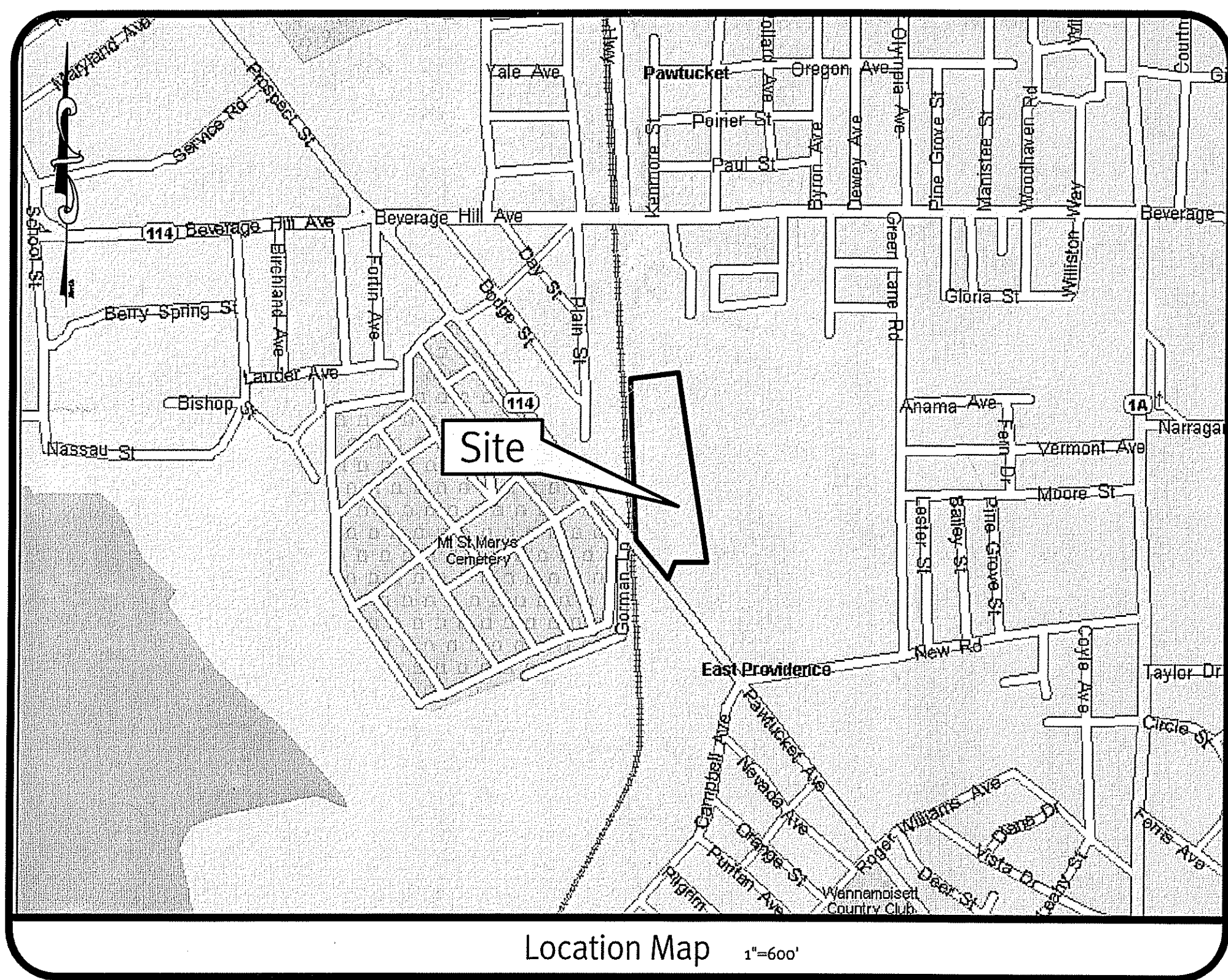


# RIDEM & RIDOT Submission

# Baer Supply

Pawtucket Avenue  
 East Providence, Rhode Island  
 Assessor's Map 301, Block 4, Lot 8



## Sheet Index

1. Cover Sheet
2. Aerial 1/2 Mile Radius
3. Existing Conditions & Demo Plan
4. Parking Layout Plan
5. Grading & Utility Plan
6. Erosion Control Details
7. Paving & Signage Details
8. Water, Sewer & Drainage Details
9. Pond 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  
 APPROVED WITH CONDITIONS  
 AS SPECIFIED IN THE LETTER OF APPROVAL  
 DATED FEB 26 2009 FILE # 09-0022  
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE.

*W. Joseph Conroy*

THIS REGULATORY SUBMISSION SET SHALL NOT BE USED FOR CONSTRUCTION PURPOSES UNLESS STAMPED 'ISSUED FOR CONSTRUCTION' AND SIGNED BY A DIPRETE ENGINEERING REPRESENTATIVE.

R.I.D.O.T.  
 THE PROPOSED IMPROVEMENTS WILL NOT INCREASE THE RATE OR VOLUME OF STORMWATER RUNOFF ONTO THE STATE HIGHWAY.  
 NO WORK IS PROPOSED WITHIN THE STATE RIGHT OF WAY.

**Cover**

**Baer Supply**  
 Assessor's Map 301, Block 4, Lot 8  
 East Providence, Rhode Island

**DiPrete Engineering**  
 Two Stafford Court, Cranston, RI 02920  
 tel 401-943-1000 fax 401-464-6006 www.DiPrete-Eng.com

Applicant  
**Adele Beck**  
 35 Angel Road, Lincoln, Rhode Island 02865  
 tel 401-725-8083

No.	Date	Description	By
3	01-26-09	RIDEM & RIDOT Submission	B.C.G.
2	01-14-09	East Providence Engineering Comments	B.C.G.
1	01-02-09	Waterfront Commission Comments	B.C.G.
0	11-12-08	Waterfront Commission Submission	B.C.G.

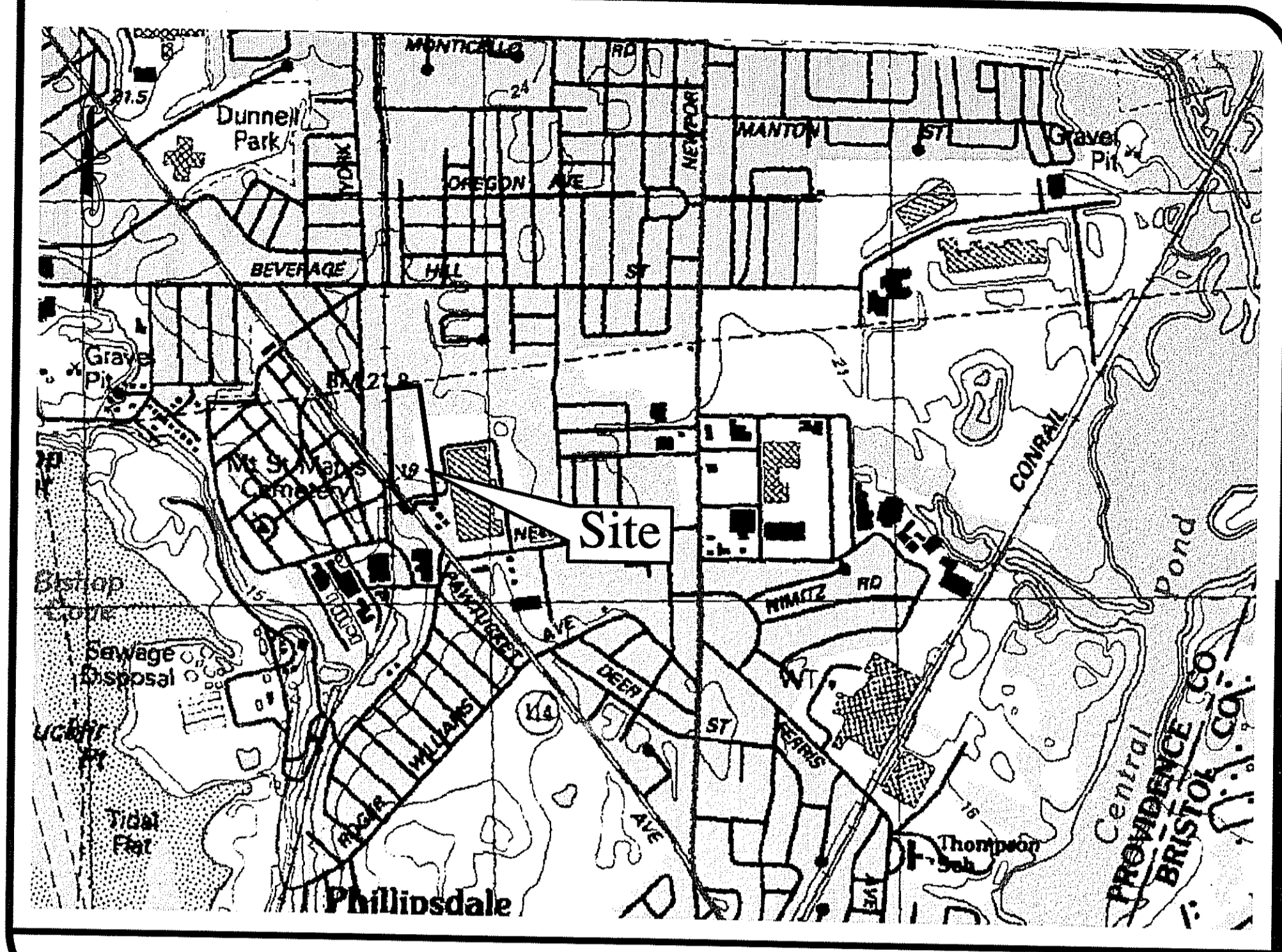
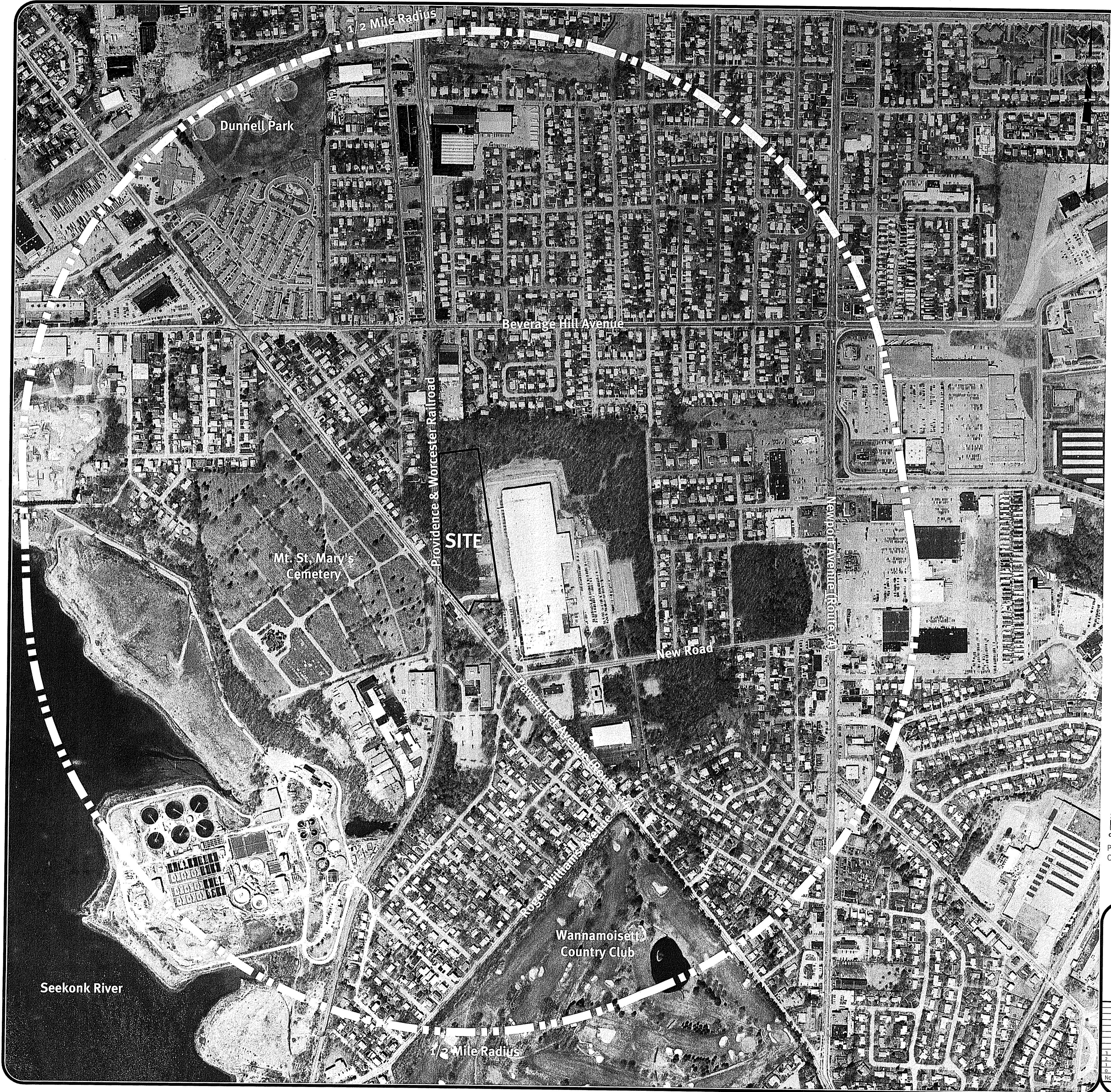
Drawn By: B.C.G.    Design By: B.C.G.    Checked By: A.D.O.

ENVIRONMENTAL ENGINEERING ASSOCIATES, INC. SHEET **1** OF 9

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USGS Map Scale: 1"=1000'

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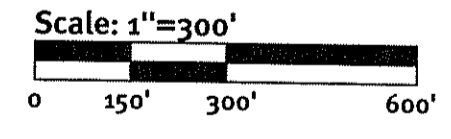
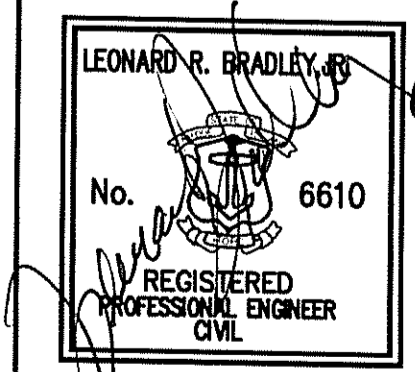


Photo obtained from the RI-GIS of 2004 Digital Orthophotography Eastern Urban Areas of Rhode Island.



**Aerial 1/2 Mile Radius**  
**Baer Supply**  
 Assessor's Map 301, Block 4, Lot 8  
 East Providence, Rhode Island



Two Stafford Court Cranston, RI 02920  
 tel 401-943-1000 fax 401-604-6006 www.DiPrete-Eng.com

**Applicant**  
**Adele Beck**  
 35 Angel Road Lincoln, Rhode Island 02865  
 tel 401-725-8089

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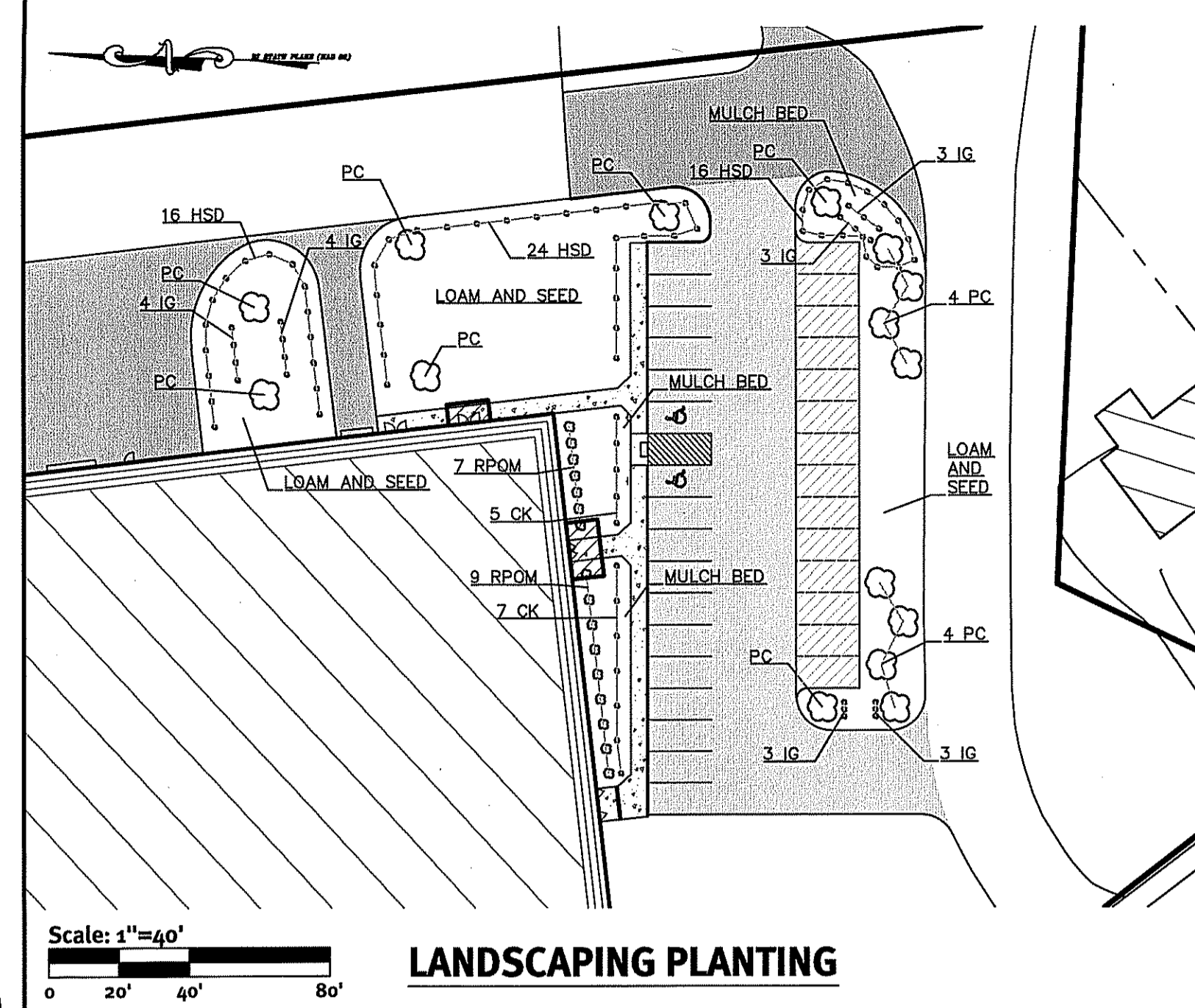
Drawn By: B.C.G. Design By: B.C.G. Checked By: A.D.O.

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Scale: 1"=40'  
0 20' 40' 80'

**LANDSCAPING PLANTING**

**LANDSCAPE NOTES**

**PLANTING BED PREPARATION**

1. ALL PLANTING BEDS ARE TO BE EXCAVATED TO A DEPTH OF 8" BELOW FINISH GRADE.
2. THE BOTTOM OF THE PLANTING BEDS ARE TO BE SCARIFIED TO ENCOURAGE DRAINAGE AND PREVENT COMPACTION.
3. ALL PLANTING BEDS ARE TO BE BACKFILLED WITH 8" LOOSE, FRIABLE, ORGANIC LOAM OR COMPOST.

**PLANTING**

1. PROVIDE QUALITY PLANTS IN THE GENUS, SPECIES, AND VARIETY INDICATED IN THE PLANTING SCHEDULE, COMPLYING WITH APPLICABLE REQUIREMENTS OF "ANSI Z66.1 AMERICAN STANDARD FOR NURSERY STOCK".
2. PROVIDE PLANTS IN THE SIZE AND NUMBER INDICATED IN THE PLANTING SCHEDULE. PLANTS SHALL BE GROWN IN NURSERIES LOCATED IN THE NORTHEASTERN U.S.
3. DELIVER FRESH DUG TREES WHICH ARE BALLED AND BURLAPPED, AND SHRUBS WHICH ARE BALLED AND BURLAPPED OR IN NURSERY CONTAINERS. ALL PLANTS ARE TO BE HEALTHY, VIGOROUS AND FREE OF INSECTS AND DISEASE.
4. PLANTS ARE TO BE INSTALLED ACCORDING TO RIDOT STANDARDS AND SPECIFICATIONS WITH ADEQUATE WATER PROVIDED DURING PLANTING TO ALLOW COMPACTION OF THE PLANTING SOIL, TO PREVENT ANY AIR POCKETS OR SETTLEMENT AFTER PLANTING.
5. RECOMMENDED PLANTING DATES ARE MARCH 15 TO JUNE 15 AND SEPTEMBER 15 TO NOVEMBER 15.

**LOAM & SEEDING**

1. AFTER ROUGH GRADING IS COMPLETED, ALL DISTURBED AREAS WHICH ARE LABELED AS "GRASS" ARE TO BE BROUGHT TO AN ELEVATION OF 6" BELOW THE PROPOSED FINISH GRADE. THE SUBGRADE IS TO BE SCARIFIED TO A DEPTH OF 12" WITH THE TEETH OF A BACKHOE OR A POWER RAKE TO RESULT IN AN UNCOMPACTED SUBSOIL. 6" OF GOOD QUALITY TOPSOIL IS THEN TO BE APPLIED AND RAKED TO FINISHED GRADE.

2. THE TOPSOIL IS TO BE GOOD QUALITY LOAM, FERTILE AND FREE OF WEEDS, STICKS, AND STONES OVER 3/4" IN SIZE AND OTHERWISE COMPLYING WITH SECTION M.18.01 OF THE RIDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
3. AFTER THE SEED BED IS PREPARED SEED IS TO BE BROADCAST EVENLY OVER THE SURFACE AND WORKED INTO THE TOP 1" OF SOIL.
4. RECOMMENDED SEEDING DATES ARE MARCH 15 TO JUNE 15 AND SEPTEMBER 15 TO NOVEMBER 15.
5. RATHER THAN SEEDING AS DESCRIBED ABOVE, THE CONTRACTOR MAY HYDROSEED USING AN APPROVED SEED MIX.

**MAINTENANCE & WARRANTY**

1. THE CONTRACTOR SHALL WARRANTY ALL PLANTS FOR A PERIOD OF ONE YEAR AFTER THE DATE OF SUBSTANTIAL COMPLETION AGAINST DEFECTS INCLUDING DEATH AND UNSATISFACTORY GROWTH.
2. AFTER PLANTING IS COMPLETED, THE OWNER SHALL BE RESPONSIBLE TO PROVIDE ADEQUATE WATER TO ENSURE HEALTHY AND VIGOROUS GROWTH.
3. ANY PLANT WHICH IS NOT HEALTHY AND GROWING VIGOROUSLY AFTER ONE YEAR SHALL BE REPLACED BY THE CONTRACTOR IN CONFORMANCE WITH THE PLANTING SPECIFICATIONS.
4. IF NECESSARY, THE CONTRACTOR SHALL OVERSEED OR SOD ANY AREAS WHICH ARE NOT SUBSTANTIALLY COVERED BY ADEQUATE GRASS GROWTH FOR ONE YEAR AFTER THE INITIAL SEED APPLICATION.
5. LAWN AREAS TO BE MAINTAINED WEEKLY SPRING THROUGH FALL.

**IRRIGATION**

1. AN IRRIGATION SYSTEM IS TO BE INSTALLED FOR LAWN AND PLANTING AREAS.
2. ALL IRRIGATION SYSTEM COMPONENTS SHALL BE SUPPLIED AND INSTALLED BY A LOCAL DISTRIBUTOR, WHO SHALL BE RESPONSIBLE TO WARRANTY SERVICE AND OPERATIONS OF ALL IRRIGATION COMPONENTS.

KEY	BOTANICAL NAME	COMMON NAME	SIZE (MIN)	QUANTITY
PC	PYRUS CALLERYANA CHANTICLEER	CHANTICLEER PEAR	2"-2.5" CALIPER	15
RPO	RHODODENDRON P.J.M	RHODODENDRON P.J.M	3"-4"	16
IG	FLEX GLABRA SHAMROCK	SHAMROCK INKBERRY	18"-24"	20
HSD	HEMEROCALLIS SPELLA D'ORO	CONTINUOUS BLOOM YELLOW DAY LILLY	1 GALLON	56
CK	CALAMAGROSTIS ACUTIFOLIA	FEATHER REED GRASS		12

**PLANTING SCHEDULE**

**DIMENSIONAL REGULATIONS**

CURRENT ZONING: EAST PROVIDENCE WATERFRONT SPECIAL DEVELOPMENT DISTRICT - PAWTUCKET AVENUE SPECIAL DEVELOPMENT SUB-DISTRICT

MINIMUM LOT AREA: N/A  
 MINIMUM LOT WIDTH: N/A  
 MINIMUM LOT DEPTH: N/A  
 MINIMUM FRONTAGE: N/A  
 MINIMUM FRONT YARD: 40'  
 MINIMUM INTERIOR SIDE YARD: N/A  
 MINIMUM CORNER SIDE YARD: N/A  
 MINIMUM REAR YARD: N/A

**PARKING CALCULATIONS**

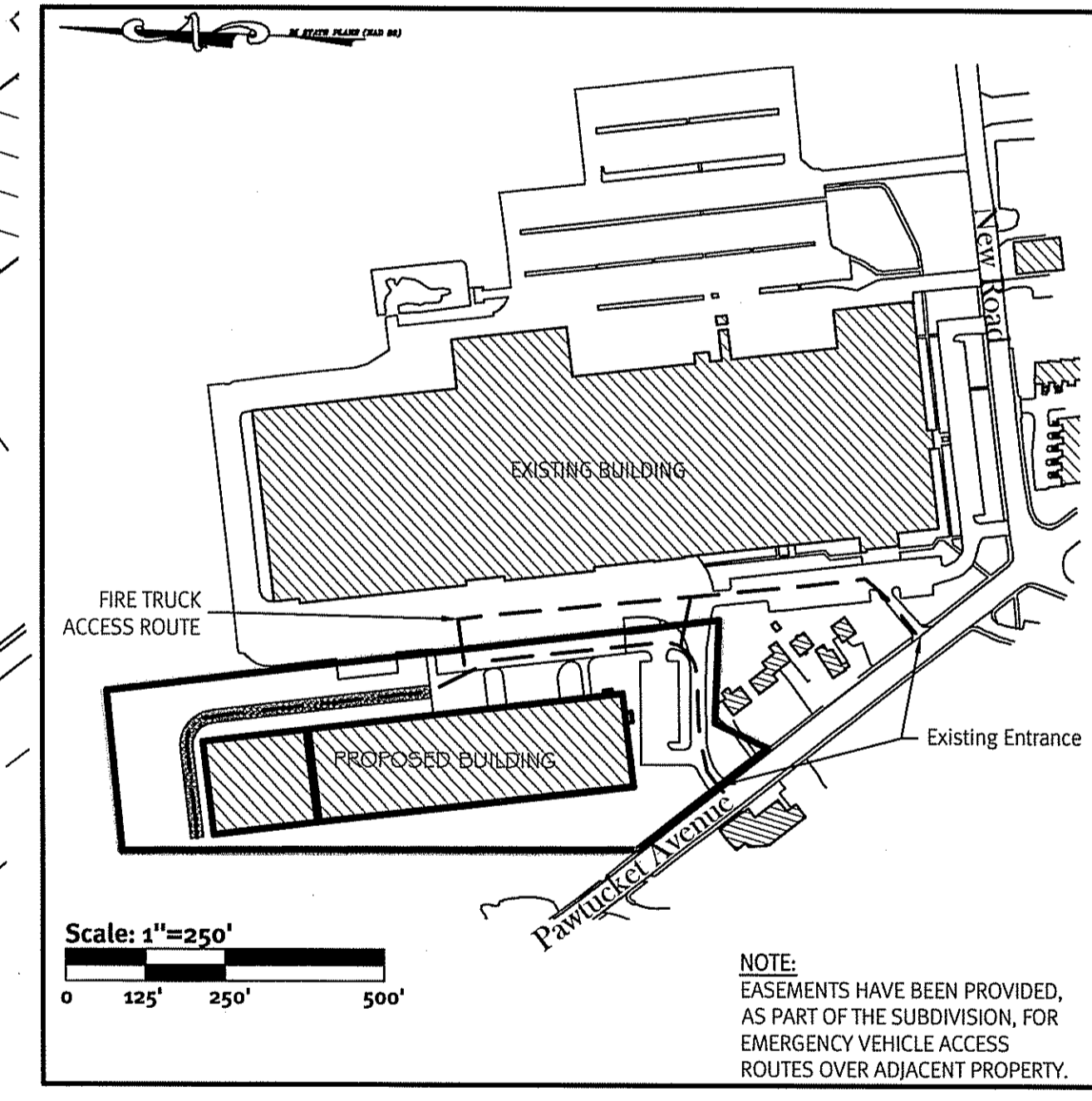
ON SITE PARKING SPACES REQUIRED: 200 PARKING SPACES  
 1 PER 500 SF OF BUILDING AREA (PER WATERFRONT REGULATIONS)  
 31 PARKING SPACES (4 RESERVE) (MAX 30 EMPLOYEES PER TENANT)

TOTAL PARKING PROPOSED: 200

REQUIRED ACCESSIBLE PARKING SPACES: 2  
 PROVIDED ACCESSIBLE PARKING SPACES: 2

**GENERAL NOTES**

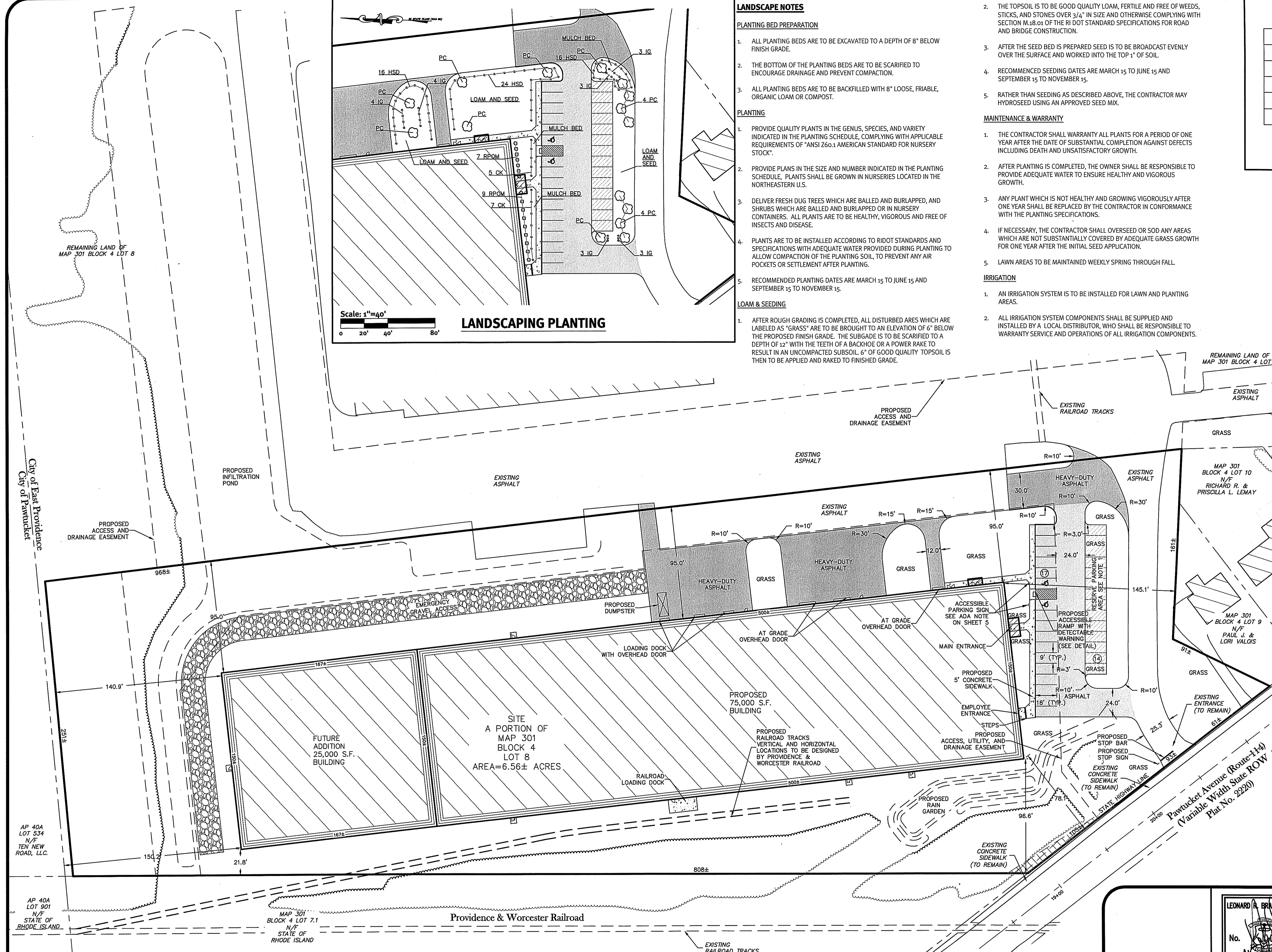
1. THERE IS NO PROPOSED WORK WITHIN THE STATE RIGHT OF WAY. SITE TO BE SERVICED USING EXISTING SITE ENTRANCE. NO ALTERATIONS ARE PROPOSED FOR THE EXISTING ENTRANCE.
2. RESERVE PARKING AREA TO BE LOAMED AND SEEDED. THERE IS NO REQUIREMENT TO PAVE THE RESERVE PARKING AREA. RESERVE AREA TO BE PAVED IF OWNER NEEDS ADDITIONAL PARKING AREA. ALL STORMWATER CALCULATIONS ASSUME RESERVE AREA IS PAVED WITH INITIAL SITE DEVELOPMENT.
3. THERE IS NO WORK PROPOSED, BY THIS PLAN, TO THE SOUTH OF THE EXISTING SITE ENTRANCE.



Scale: 1"=250'  
0 125' 250' 500'

NOTE: EASEMENTS HAVE BEEN PROVIDED, AS PART OF THE SUBDIVISION, FOR EMERGENCY VEHICLE ACCESS ROUTES OVER ADJACENT PROPERTY.

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*W. Joseph Cooney*

Scale: 1"=40'  
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LEONARD R. BRADLEY, R.  
 No. 6610  
 REGISTERED PROFESSIONAL ENGINEER  
 CIVIL

**Parking Layout Plan**  
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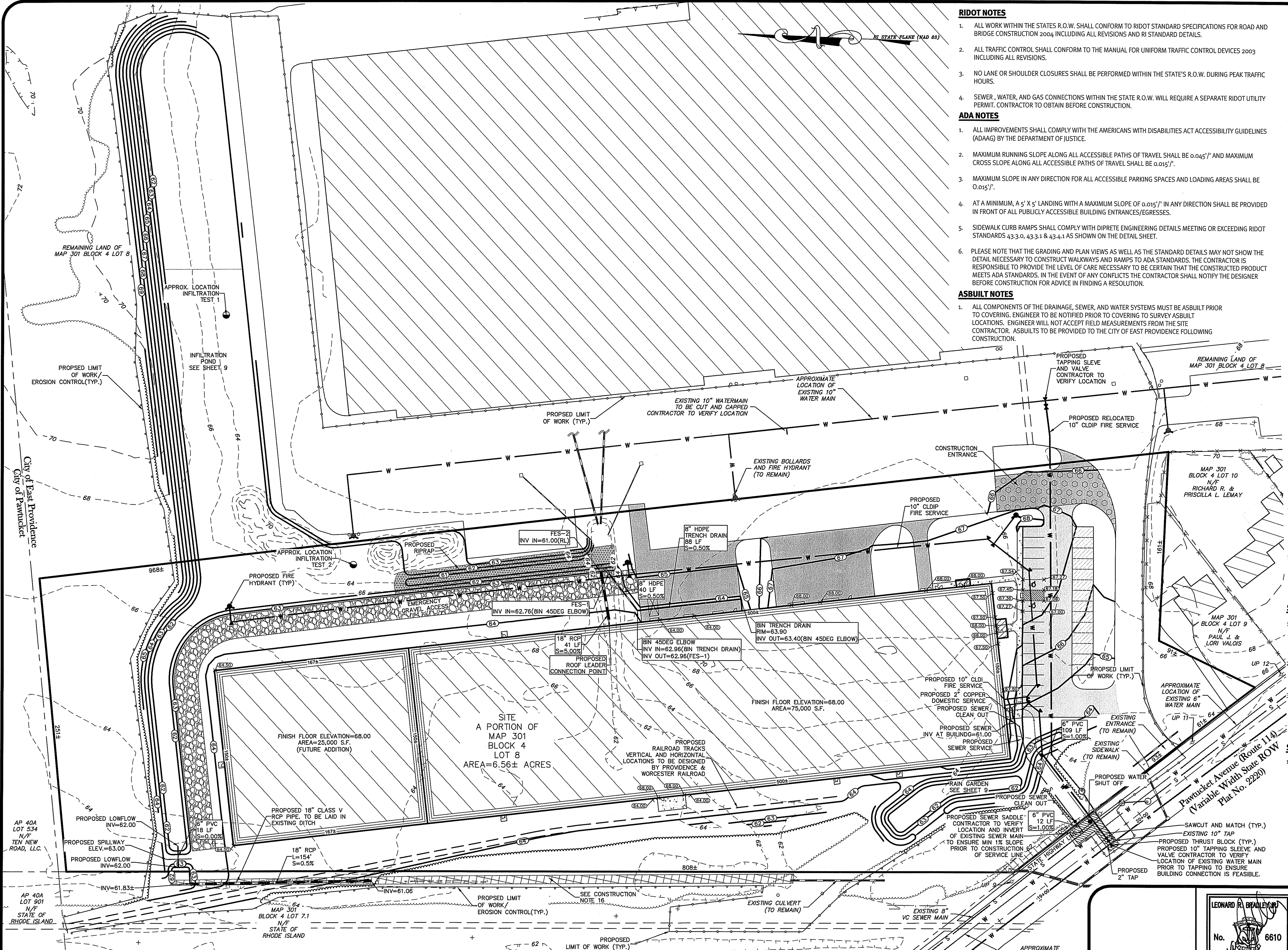
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Drawn By: B.C.G. Design By: B.C.G. Checked By: A.D.O.

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**RIDOT NOTES**

1. ALL WORK WITHIN THE STATES R.O.W. SHALL CONFORM TO RIDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION 2004 INCLUDING ALL REVISIONS AND RI STANDARD DETAILS.
2. ALL TRAFFIC CONTROL SHALL CONFORM TO THE MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES 2003 INCLUDING ALL REVISIONS.
3. NO LANE OR SHOULDER CLOSURES SHALL BE PERFORMED WITHIN THE STATE'S R.O.W. DURING PEAK TRAFFIC HOURS.
4. SEWER, WATER, AND GAS CONNECTIONS WITHIN THE STATE R.O.W. WILL REQUIRE A SEPARATE RIDOT UTILITY PERMIT. CONTRACTOR TO OBTAIN BEFORE CONSTRUCTION.

**ADA NOTES**

1. ALL IMPROVEMENTS SHALL COMPLY WITH THE AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES (ADAAG) BY THE DEPARTMENT OF JUSTICE.
2. MAXIMUM RUNNING SLOPE ALONG ALL ACCESSIBLE PATHS OF TRAVEL SHALL BE 0.045'/1' AND MAXIMUM CROSS SLOPE ALONG ALL ACCESSIBLE PATHS OF TRAVEL SHALL BE 0.015'/1'.
3. MAXIMUM SLOPE IN ANY DIRECTION FOR ALL ACCESSIBLE PARKING SPACES AND LOADING AREAS SHALL BE 0.015'/1'.
4. AT A MINIMUM, A 5' X 5' LANDING WITH A MAXIMUM SLOPE OF 0.015'/1' IN ANY DIRECTION SHALL BE PROVIDED IN FRONT OF ALL PUBLICLY ACCESSIBLE BUILDING ENTRANCES/EGRESSES.
5. SIDEWALK CURB RAMPS SHALL COMPLY WITH DIPRETE ENGINEERING DETAILS MEETING OR EXCEEDING RIDOT STANDARDS 43.3.0, 43.3.1 & 43.4.1 AS SHOWN ON THE DETAIL SHEET.
6. PLEASE NOTE THAT THE GRADING AND PLAN VIEWS AS WELL AS THE STANDARD DETAILS MAY NOT SHOW THE DETAIL NECESSARY TO CONSTRUCT WALKWAYS AND RAMPS TO ADA STANDARDS. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE THE LEVEL OF CARE NECESSARY TO BE CERTAIN THAT THE CONSTRUCTED PRODUCT MEETS ADA STANDARDS. IN THE EVENT OF ANY CONFLICTS THE CONTRACTOR SHALL NOTIFY THE DESIGNER BEFORE CONSTRUCTION FOR ADVICE IN FINDING A RESOLUTION.

**ASBUILT NOTES**

1. ALL COMPONENTS OF THE DRAINAGE, SEWER, AND WATER SYSTEMS MUST BE ASBUILT PRIOR TO COVERING. ENGINEER TO BE NOTIFIED PRIOR TO COVERING TO SURVEY ASBUILT LOCATIONS. ENGINEER WILL NOT ACCEPT FIELD MEASUREMENTS FROM THE SITE CONTRACTOR. ASBUILTS TO BE PROVIDED TO THE CITY OF EAST PROVIDENCE FOLLOWING CONSTRUCTION.

**GENERAL NOTES**

1. THE SITE IS TO BE SERVICED BY PUBLIC SEWER AND PUBLIC WATER.
2. THE DRAINAGE SYSTEM IS DESIGNED TO MEET THE CITY OF EAST PROVIDENCE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS WITH THE USE OF CATCH BASINS, CULVERTS, A RAIN GARDEN AND AN INFILTRATION BASIN. THE STORMWATER MANAGEMENT SYSTEM IS DESIGNED TO MEET RIDEM BEST MANAGEMENT PRACTICES.
3. THE SITE IS PROPOSED TO BE BUILT IN 1 PHASES WITH A FUTURE BUILDING ADDITION.
4. THE SITE CONTRACTOR IS TO VERIFY THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO THE START OF CONSTRUCTION.

**CONSTRUCTION NOTES**

1. THE CONTRACTOR IS TO NOTIFY DIG SAFE PRIOR TO THE START OF CONSTRUCTION. ALL EXISTING UTILITIES SHOWN ARE SCHEMATIC IN NATURE AND DIPRETE ENGINEERING ASSOCIATES, INC. DOES NOT CERTIFY ITS ACCURACY. THE CONTRACTOR IS TO VERIFY THE UTILITY LOCATIONS PRIOR TO THE START OF CONSTRUCTION.
2. NO STOCKPILING OF MATERIAL IS TO BE ALLOWED WITHIN A PUBLIC R.O.W. NO OPEN TRENCHES ARE TO BE LEFT OVERNIGHT.
3. CONTRACTOR TO OBTAIN ALL FEDERAL, STATE, AND MUNICIPAL APPROVALS PRIOR TO THE START OF CONSTRUCTION.
4. THE CONTRACTOR IS TO NOTIFY THE DIRECTOR OF PUBLIC WORKS, RHODE ISLAND DEPARTMENT OF TRANSPORTATION, THE CITY ENGINEER, AND RI DEPT. OF ENVIRONMENTAL MANAGEMENT AT LEAST 48 HOURS PRIOR TO THE START OF CONSTRUCTION.
5. ALL WORK PERFORMED HEREIN SHALL BE GOVERNED BY THE RHODE ISLAND STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION AND CITY OF EAST PROVIDENCE STANDARD SPECIFICATIONS AND DETAILS.
6. ALL EXCESS SOIL, STUMPS, TREES, ROCKS, BOULDERS AND OTHER REFUSE, SHALL BE DISCARDED OFF SITE IN AN APPROVED MANNER AT AN APPROVED LOCATION.
7. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING FINISH GRADING AND DRAINAGE AROUND THE BUILDING TO ENSURE SURFACE WATER AND/OR GROUND WATER ARE DIRECTED AWAY FROM THE STRUCTURE. THIS PLAN SHOWS GENERAL GRADING ONLY AND ADDITIONAL DETAIL IS LIKELY TO BE REQUIRED AROUND THE BUILDING.
8. ALL LOAM IN DISTURBED AREAS TO BE STOCKPILED FOR FUTURE USE.
9. ALL PROPOSED DRAINAGE PIPE TO BE HDPE UNLESS OTHERWISE NOTED.
10. PROPOSED WATER METER AND BACKFLOW EQUIPMENT TO BE LOCATED INSIDE THE PROPOSED BUILDING.
11. WATER LINE SIZES ARE APPROXIMATE AND WILL BE UPDATED AFTER THE COMPLETION OF FIRE FLOW CALCULATIONS.
12. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS FOR UTILITY CONNECTIONS.
13. UNDERGROUND ELECTRIC, TELEPHONE AND CABLE IS PROPOSED FOR THE SITE. CONTRACTOR SHALL COORDINATE WITH OWNER AND LOCAL COMPANIES.
14. ALL STEEP SLOPES ARE SHOWN SCHEMATICALLY ONLY AND DIPRETE ENGINEERING ASSOCIATES, INC. IS NOT PROVIDING THE DESIGN OF THESE ITEMS. THE ACTUAL SLOPES ARE TO BE BUILT UNDER THE DIRECTION OF A GEOTECHNICAL ENGINEER AND CERTIFIED TO THE OWNER PRIOR TO THE COMPLETION OF THE PROJECT. SHOP DRAWINGS TO BE SUBMITTED PRIOR TO CONSTRUCTION.
15. ALL CUT AND FILL AREAS ARE TO BE DONE UNDER THE DIRECTION OF A GEOTECHNICAL ENGINEER WITH TESTING AND CERTIFICATION TO BE PROVIDED TO THE OWNER AT THE COMPLETION OF THE PROJECT. DIPRETE ENGINEERING ASSOCIATES, INC. HAS NOT PROVIDED THE FILL SPECIFICATION, GEOTECHNICAL ENGINEERING, STRUCTURAL ENGINEERING SERVICES, OR SUPERVISION AS PART OF THESE DRAWINGS.
16. ALL WORK WITHIN THE PROVIDENCE & WORCESTER RAILROAD TO BE COORDINATED WITH PROVIDENCE & WORCESTER RAILROAD. RELOCATION OF TRACKS TO BE COORDINATED WITH PROVIDENCE & WORCESTER RAILROAD. EXISTING DITCH TO BE CLEANED AND MAINTAINED. DITCH SHOULD HAVE POSITIVE DRAINAGE TO INLET LOCATED AT PAWTUCKET AVENUE (ROUTE 11A) WITH AN APPROXIMATE SLOPE OF S=0.5%. ALL WORK SHALL BE DONE BY HAND OR WITH SMALL EQUIPMENT IN ORDER TO PROTECT EXISTING VEGETATION.

**SEWER MAIN INSTALLATION NOTES**

1. NOTICE MUST BE GIVEN TO THE DIRECTOR OF PUBLIC WORKS 24 HOURS BEFORE ANY STREET OR PUBLIC WAY CAN BE OPENED FOR THE PURPOSE OF LAYING A PRIVATE DRAIN OR BEFORE ANY DRAIN PIPE CAN BE EXTENDED FROM WORK PREVIOUSLY DONE ANY ACCEPTED, OR NEW CONNECTIONS OF ANY KIND MADE.
2. THE TESTING OF SEWER LINES AND MANHOLES SHALL BE CONDUCTED IN THE PRESENCE OF THE EAST PROVIDENCE SEWER DEPARTMENT. THE EAST PROVIDENCE SEWER DEPARTMENT SHALL BE NOTIFIED 24 HOURS IN ADVANCE OF ANY TESTING.
3. TESTING OF EACH SECTION OF SEWER INSTALLED SHALL INCLUDE THE PORTIONS OF SERVICE CONNECTIONS THAT ARE TO BE INSTALLED IN THE PRESENCE OF THE EAST PROVIDENCE SEWER DEPARTMENT. THE SITE CONTRACTOR SHALL TEST EACH MANHOLE REACH AS SOON AS CONSTRUCTION OF SUCH REACH IS COMPLETE. THE SITE CONTRACTOR WILL BE REQUIRED TO PERFORM THE PIPE DEFLECTION TEST ON EACH SECTION OF PIPE INSTALLED, VACUUM TEST OF MANHOLES AND AN INFILTRATION TEST OR LOW PRESSURE TEST AS APPLICABLE.

**SEWER/WATER SEPARATION POLICY**

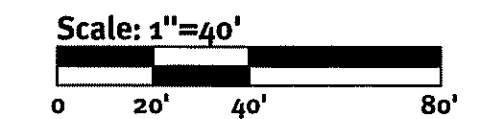
1. WATER MAINS SHALL BE LAID WITH A MINIMUM OF TEN-FOOT HORIZONTAL CLEARANCE FROM ANY EXISTING SEWER FACILITIES. THE DISTANCE SHALL BE MEASURED EDGE TO EDGE. WATER MAINS CROSSING UNDER SEWERS SHALL BE FORBIDDEN. WATER MAINS CROSSING OVER SEWERS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL SEPARATION OF EIGHTEEN-INCHES BETWEEN THE INVERT OF THE WATER MAIN AND THE CROWN OF THE SEWER. RE-ALIGNMENT OF AN EXISTING WATER MAIN OR RELOCATION OF THE SEWER MAY BE NECESSARY TO ACHIEVE THIS VERTICAL SEPARATION. THE GENERAL MANAGER/CHEF ENGINEER MUST APPROVE ANY DEVIATION FROM THESE REQUIREMENTS. CONCRETE ENCASUREMENT SHALL NOT BE ALLOWED IN THE DESIGN FOR SEWER AND WATER CROSSINGS.

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*W. Joseph C. Carey*



**LEONARD R. BRADLEY**  
No. 6610  
REGISTERED PROFESSIONAL ENGINEER  
CIVIL

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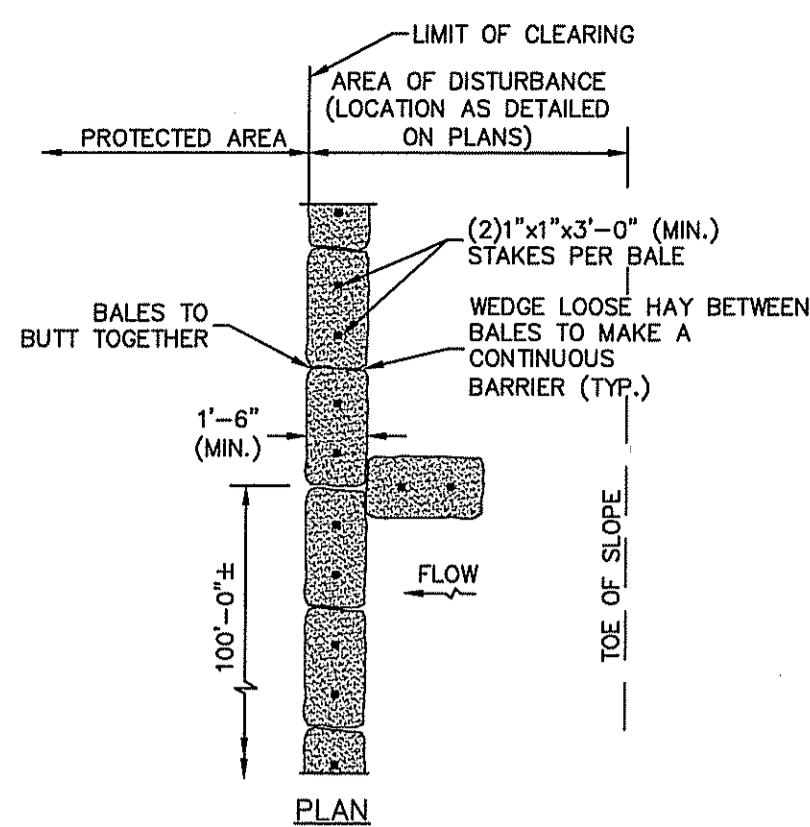
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SHEET 5 OF 9

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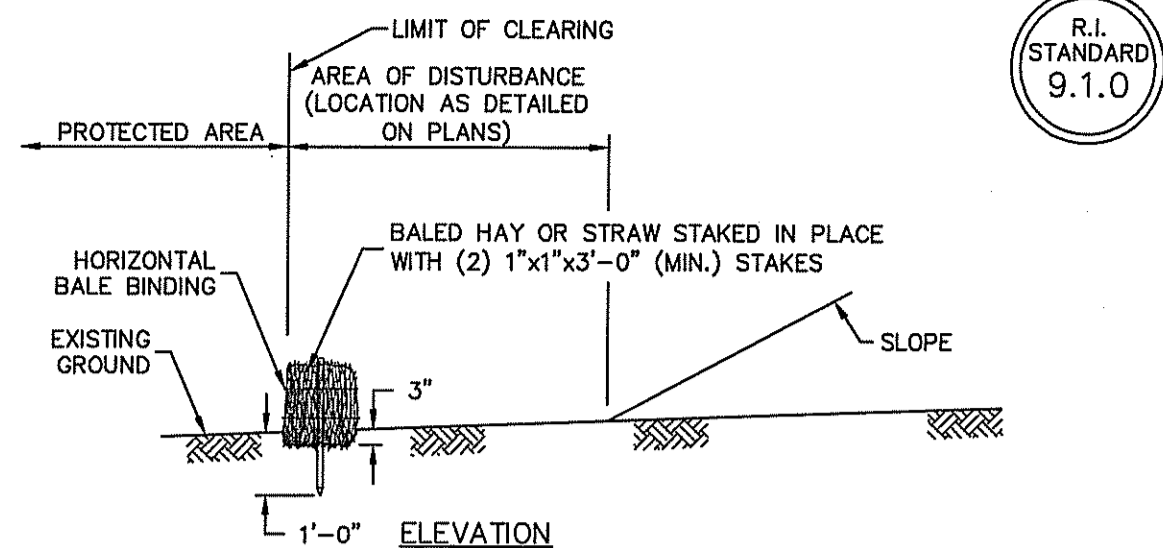
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**BALED HAY EROSION CHECK**

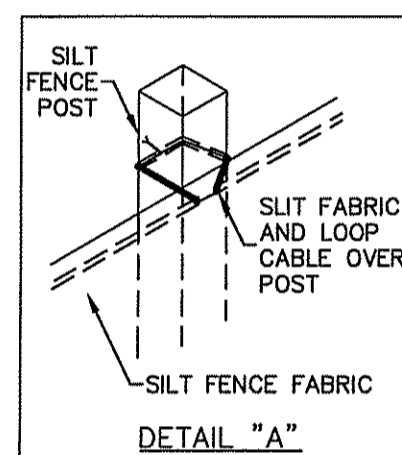
NOT TO SCALE



- NOTES:**
1. SHALL BE IN ACCORDANCE WITH SECTION 206 OF THE R.I. STANDARD SPECIFICATIONS.
  2. TO BE USED WHERE THE EXISTING GROUND SLOPES AWAY FROM THE HIGHWAY EMBANKMENT AS CALLED FOR ON PLANS.
  3. AT APPROXIMATE 100'-0" INTERVALS A BALE OF HAY IS TO BUTT PERPENDICULARLY.

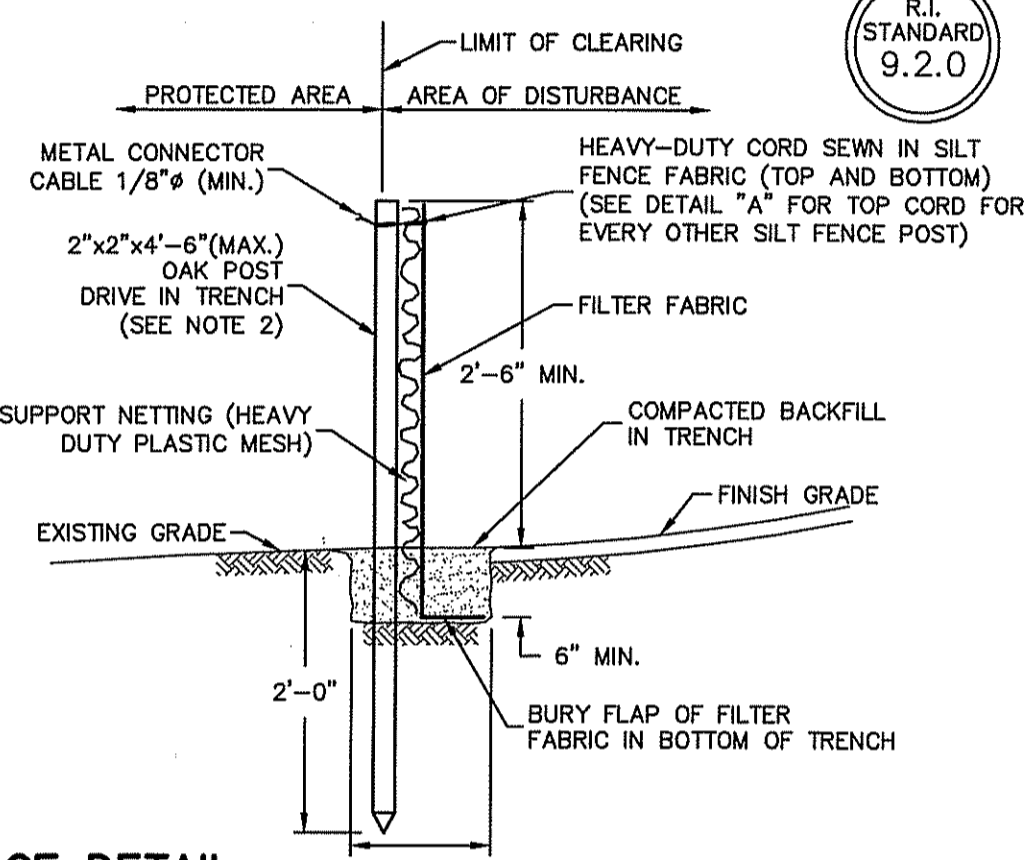
R.I. STANDARD 9.1.0

- NOTES:**
1. SHALL BE IN ACCORDANCE WITH SECTION 206 OF THE R.I. STANDARD SPECIFICATIONS.
  2. 2"x2"x4'-6" (MAX.) OAK POSTS FOR SILT FENCE SHALL BE LOCATED 8'-0" (MAX.) O.C. IN WETLAND AREAS AND 4'-0" (MAX.) O.C. IN WETLAND RAVINE, GULLY OR DROP-OFF AREAS AS SHOWN ON PLANS.
  3. 1"x1"x4'-6" (MIN.) POSTS PERMITTED FOR PRE-FABRICATED SILT FENCE.
  4. SILT FENCE SHALL BE INSTALLED BEFORE ANY GRUBBING OR EARTH EXCAVATION TAKES PLACE.



**SILT FENCE DETAIL**

NOT TO SCALE

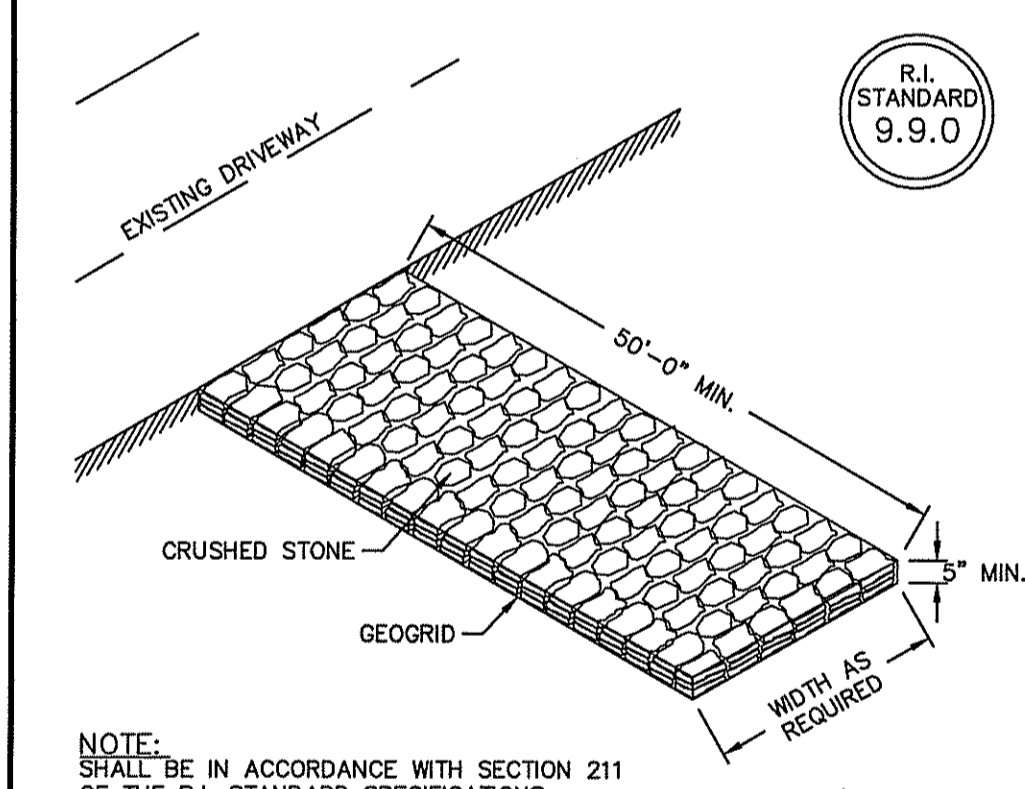
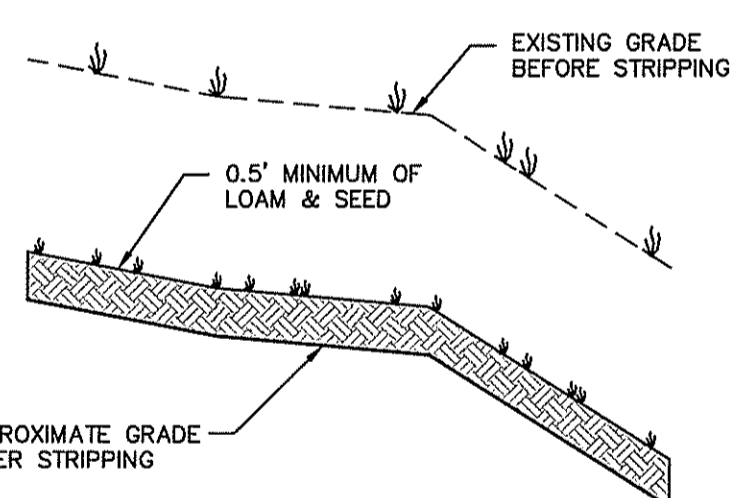


R.I. STANDARD 9.2.0

- NOTES:**
1. THIS DETAIL IS PROVIDED AS THE MINIMUM REQUIREMENTS TO BE MET BY THE CONTRACTOR.
  2. THIS DETAIL ONLY IS VOID IN CASES WHERE CONFLICTS OCCUR WITH THE PLANTING DETAILS PROVIDED BY A LANDSCAPE ARCHITECT REGISTERED WITH THE STATE OF RHODE ISLAND.
  3. SPECIAL CARE SHALL BE TAKEN TO INSURE THAT THE SOIL EROSION CONTROL MEASURES AND PROCEDURES ARE FOLLOWED.

**RE-ESTABLISHMENT OF VEGETATIVE COVER (AREA OF TOPSOIL STRIPPING)**

NOT TO SCALE

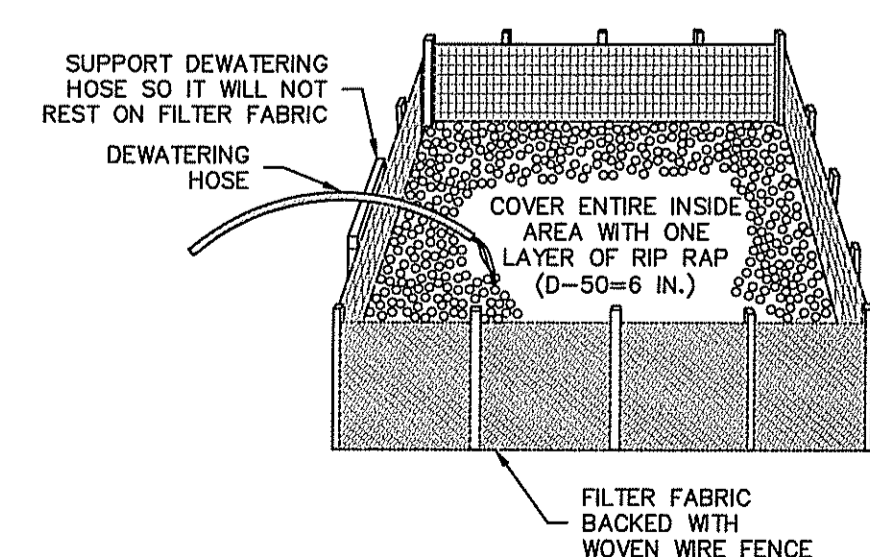


R.I. STANDARD 9.9.0

**CONSTRUCTION ACCESS**

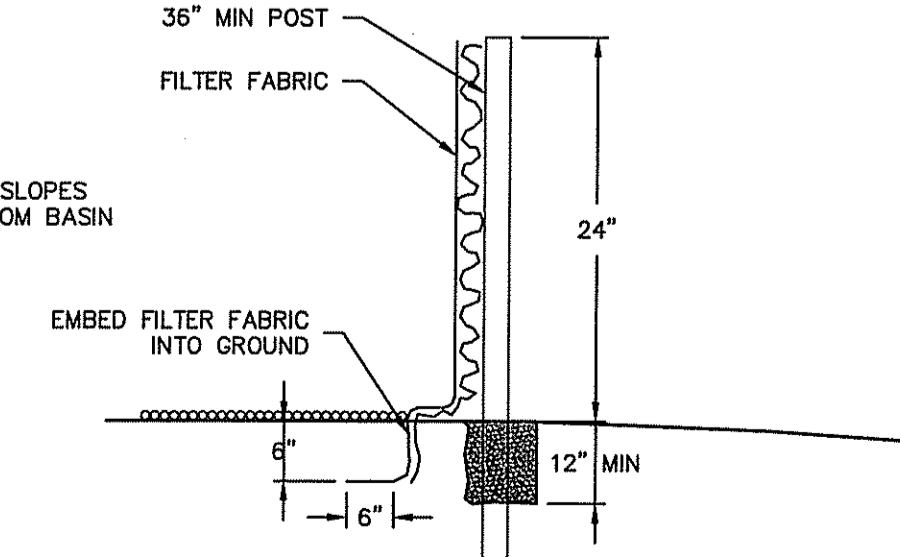
NOT TO SCALE

- NOTES:**
1. THE BASIN STORAGE VOLUME SHOULD NOT BE LESS THAN THE TOTAL VOLUME OF WATER THAT COULD BE PUMPED DURING A 4-HOUR PERIOD.
  2. FILTER FABRIC BASINS SHOULD BE CONSTRUCTED ON NEARLY LEVEL GROUND.
  3. THE AREA AROUND THE FILTER FABRIC BASIN MUST BE STABILIZED TO PREVENT EROSION BY WATER EXITING THE BASIN.
  4. REMOVE SEDIMENT WHEN ACCUMULATION REACHES ONE-HALF THE ORIGINAL HEIGHT OF THE FILTER FABRIC.
  5. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE STRUCTURE IN PROPER WORKING CONDITIONS AS LONG AS IT IS IN PLACE.
  6. FILTER FABRIC BASINS AND ACCUMULATED SEDIMENT MUST BE REMOVED WHEN THE BASIN'S USEFUL LIFE HAS BEEN COMPLETED. THE AREA COVERED BY THE BASIN SHALL BE SEEDED AND MULCHED IMMEDIATELY AFTER THE BASIN IS REMOVED.



**FILTER FABRIC BASIN FOR PUMPED DEWATERING DISCHARGE**

NOT TO SCALE



**NON-STRUCTURAL MEASURES**

1. CONSTRUCTION TRAFFIC SHALL BE LIMITED TO THE ACCESS ROAD, UTILITY EASEMENTS AND AREAS TO BE GRADED.
2. TOPSOIL SHALL BE STRIPPED FROM AREAS TO BE GRADED AND STOCKPILED FOR LATER USE. STOCKPILE LOCATION SHALL BE SUBJECT TO APPROVAL BY THE PROJECT ENGINEER. A SEDIMENT BARRIER SHALL SURROUND ALL TOPSOIL STOCKPILES.
3. ALL TYPES OF WASTE GENERATED AT THE SITE SHALL BE DISPOSED OF IN A MANNER CONSISTENT WITH STATE LAW AND CITY REGULATIONS. CONSTRUCTION DEBRIS SHALL BE DISPOSED OF DAILY TO AVOID EXPOSURE TO PRECIPITATION.
4. THE CONSTRUCTION SUPERINTENDENT SHALL HAVE OVERALL RESPONSIBILITY FOR PLAN IMPLEMENTATION OF NON-STRUCTURAL MEASURES AND FOR SEEING THAT THE APPROPRIATE WORKERS ARE AWARE OF THE PROVISIONS OF THE PLAN.
5. REFERENCE THE "RHODE ISLAND SOIL EROSION AND SEDIMENT CONTROL HANDBOOK" PREPARED BY THE USDA SOIL CONSERVATION SERVICE 1989, AS A GUIDE.

**STRUCTURAL MEASURES**

1. RUNOFF WATER QUALITY IS IMPROVED UTILIZING WATER QUALITY BASINS (AN INFILTRATION BASIN AND A RAIN GARDEN). CONSTRUCTION OF THE INFILTRATION BASIN AND RAIN GARDEN SHALL BE SUPERVISED BY THE PROJECT ENGINEER. THE INFILTRATION BASIN SHALL BE BUILT TO CONTROL RUNOFF FOR 2 THROUGH 100 YEAR STORM FREQUENCIES. SIDE SLOPES WITHIN THE INFILTRATION BASIN SHALL BE 3:1 MAXIMUM, UNLESS NOTED OTHERWISE. ALL FILL EMBANKMENTS OF THE BASINS SHALL BE THOROUGHLY COMPACTED UPON PLACEMENT IN STRICT CONFORMANCE WITH R.I. STANDARD SPECIFICATION SECTION 202. THE SPILLWAY SHALL BE LOAMED AND SEEDED. A GRADUATED GAGE IS TO BE SET WITHIN THE BASIN TO MONITOR ACCUMULATED SEDIMENTS. A REPORT AND PLAN OF AS-BUILT CONSTRUCTION SHALL BE AVAILABLE TO THE CITY.
2. A STONE STABILIZATION PAD IS LOCATED AT THE SITE ENTRANCE TO REDUCE THE TRACKING OR FLOWING OF SEDIMENT ONTO THE PUBLIC RIGHT OF WAY.
3. RIP RAP APRONS AND/OR LEVEL SPREADERS SHALL BE INSTALLED AT THE OUTLETS OF ALL DRAINAGE PIPES.
4. HAY BALES OR SILT FENCE SHALL BE INSTALLED DOWNSTREAM OUTSIDE THE LIMITS OF ANY PROPOSED CONSTRUCTION AS SHOWN ON THE SITE PLANS AND PRIOR TO THE COMMENCEMENT OF THE PROPOSED ALTERATION.
5. TEMPORARY BERMS/ OR SWALES SHALL BE USED TO DIRECT SURFACE RUNOFF TO DRAINAGE FACILITIES TO CAPTURE AND TREAT THE MAXIMUM AMOUNT OF STORM WATER.
6. THE CONSTRUCTION SUPERINTENDENT SHALL HAVE THE OVERALL RESPONSIBILITY FOR STRUCTURAL MEASURES IMPLEMENTATION AND FOR SEEING THAT THE APPROPRIATE WORKERS ARE AWARE OF THE PROVISIONS OF THE PLAN.
7. REFERENCE THE "RHODE ISLAND SOIL EROSION AND SEDIMENT CONTROL HANDBOOK" PREPARED BY THE USDS SOIL CONSERVATION SERVICE 1989, AS A GUIDE.

**MAINTENANCE: SHORT TERM / LONG TERM**

1. THE STONE STABILIZATION PADS AT THE SITE ENTRANCE SHALL BE MAINTAINED BY THE CONTRACTOR. THE MAINTENANCE SHALL INCLUDE TOP DRESSING WITH ADDITIONAL STONE OR ADDITIONAL LENGTH AS CONDITIONS DEMAND OR AS DIRECTED BY THE ENGINEER. ALL SEDIMENTS SPILLED, DROPPED, WASHED, OR TRACKED ON THE PUBLIC RIGHT OF WAY MUST BE REMOVED IMMEDIATELY BY THE CONTRACTOR.
2. ALL HAY BALES/SILT FENCE, TEMPORARY TREATMENTS (HAY, STRAW, ETC.), AND TEMPORARY PROTECTION SHALL BE MAINTAINED BY THE CONTRACTOR THROUGHOUT CONSTRUCTION. HAY BALES/SILT FENCE SHALL BE INSPECTED BY THE CONTRACTOR WITHIN 24 HOURS AFTER EACH STORM EVENT OR EVERY 7 DAYS, WHICHEVER COMES FIRST, FOR UNDERMINING AND DETERIORATION. A STORM EVENT SHALL BE DEFINED AS 0.25 INCHES OF RAIN WITHIN A 24-HOUR PERIOD. THE HAY BALES/SILT FENCE SHALL BE REPAIRED OR REPLACED AS WARRANTED. THE CONTRACTOR SHALL CLEAN THE ACCUMULATED SEDIMENT IF HALF OF THE ORIGINAL HEIGHT OF THE HAY BALES/SILT FENCE BECOMES FILLED IN WITH SEDIMENT. THE HAY BALES/SILT FENCE SHALL REMAIN IN PLACE UNTIL AN ACCEPTABLE STAND OF GRASS OR APPROVED GROUND COVER IS ESTABLISHED. FOLLOWING CONFIRMATION FROM THE CITY AND/OR THE PROJECT ENGINEER THAT AN ACCEPTABLE STAND OF GRASS OR APPROVED GROUND COVER HAS BEEN ESTABLISHED THE HAY BALES/SILT FENCE SHALL BE REMOVED.
3. THE CONTRACTOR SHALL MAINTAIN ALL TOPSOIL STOCKPILES AND SEDIMENT BARRIERS THROUGHOUT CONSTRUCTION. EXTREME CARE SHALL BE TAKEN TO ENSURE THAT SEDIMENTS DO NOT SPILL OVER THE SEDIMENT BARRIER. HAY BALES OR SILT FENCE SHALL BE STAKED AROUND THE STOCKPILES.
4. ALL DISTURBED SLOPES EITHER NEWLY CREATED OR CURRENTLY EXPOSED SHALL BE SEEDED, PROTECTED, AND MAINTAINED BY THE CONTRACTOR FOLLOWING FINAL GRADING AND CONSTRUCTION. THE CONTRACTOR SHALL CHECK REGULARLY ALL SEEDED AREAS TO SEE THAT A GOOD STAND OF VEGETATION IS MAINTAINED. THE CONTRACTOR MUST REPAIR OR RESEED ANY AREAS THAT DO NOT DEVELOP WITHIN THE PERIOD OF ONE YEAR AND SHALL DO SO AT NO ADDITIONAL EXPENSE TO THE OWNER.
5. THE CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE AND INSPECTION OF THE BASIN DURING AND UP TO A YEAR AFTER COMPLETION OF CONSTRUCTION AND ACCEPTANCE BY THE OWNER. THE OWNER IS RESPONSIBLE FOR INSPECTIONS AND MAINTENANCE THEREAFTER. THE CONTRACTOR'S MAINTENANCE/INSPECTION RESPONSIBILITIES SHALL INCLUDE RESEEDING ANY UNSTABILIZED AREAS WITHIN THE BASIN AT NO ADDITIONAL EXPENSE TO THE OWNER, REMOVING ACCUMULATED SILT WHEN SEDIMENTS IN THE BASIN REACHES THE HEIGHT SPECIFIED IN THE SEDIMENT VOLUME CALCULATIONS AND MAINTAINING THE GRASS TO A GROWING HEIGHT BETWEEN 2"-10". THE CONTRACTOR SHALL INSPECT RIP RAP PADS AFTER EACH STORM AND REPAIR AS NECESSARY. THE OWNER'S MAINTENANCE/INSPECTION RESPONSIBILITIES SHALL INCLUDE INSPECTION OF THE BASIN AND RIP RAP PADS SEMIANNUALLY AND AFTER MAJOR STORMS. IF REPAIRS ARE NEEDED, THEY SHALL BE CARRIED OUT IMMEDIATELY. THE OWNER SHALL MAINTAIN A GOOD VEGETATIVE COVER (GRASS BETWEEN 2"-10" OR VEGETATION AS SPECIFIED). THE BOTTOM OF THE INFILTRATION BASIN SHALL BE INSPECTED ON A SEMI-ANNUAL BASIS AND ACCUMULATED SEDIMENTS SHALL BE REMOVED WHEN THEY REACH 1.01 FT FOR THE INFILTRATION POND AND 0.18 FT FOR THE RAIN GARDEN OR EVERY 3 YEARS, WHICHEVER COMES FIRST.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSPECTION, MAINTENANCE AND REPAIR TO ALL DRAINAGE STRUCTURES AND RELATED APPURTENANCES ON SITE DURING CONSTRUCTION AND IMMEDIATELY FOLLOWING CONSTRUCTION FOR A MAXIMUM OF ONE YEAR, OR UNTIL ACCEPTANCE BY THE ENGINEER AND THE OWNER. THE OWNER IS RESPONSIBLE FOR INSPECTIONS AND MAINTENANCE THEREAFTER.
7. THE FOLLOWING MAINTENANCE PROCEDURES SHALL BE FOLLOWED FOR THE INFILTRATION POND AND THE RAIN GARDEN:
 

ACTIVITY	INSPECTION SCHEDULE
INSPECT AND CLEAN PRETREATMENT DEVICES	BI-ANNUALLY
FIRST FEW MONTHS: INSPECT FACILITIES - FOCUS ON DURATION OF STANDING WATER	AFTER EVERY MAJOR STORM
AFTER FIRST FEW MONTHS: CLEAN AND REMOVE DEBRIS FROM SURFACE OF INFILTRATION FACILITY AND INLET AND OUTLET PIPE TILL AND REVEGETATE SURFACE SOIL REPLACE UPPER LAYER OF STONE AND FILTER FABRIC MOW GRASS IN THE FACILITY, SIDE SLOPES, AND BUFFER AREAS REMOVE GRASS CLIPPINGS AND ACCUMULATED TRASH	BI-ANNUALLY AS NEEDED AS NEEDED AS NEEDED TWICE DURING GROWING SEASON (MINIMUM) TWICE DURING GROWING SEASON (MINIMUM)
8. THE CONTRACTOR SHALL MAINTAIN THE DRAINAGE NETWORK DURING CONSTRUCTION. THE ACCUMULATED SEDIMENTS IN THE TRENCH DRAINS SHALL BE REMOVED AND DRAINAGE PIPES FLUSHED BY THE CONTRACTOR THROUGHOUT CONSTRUCTION. CATCH BASIN SLUMPS SHALL BE CHECKED WEEKLY AND SEDIMENTS SHALL BE REMOVED IF THEY EXCEED 3" DEPTH OR EVERY 3 YEARS, WHICHEVER COMES FIRST.
9. IF STANDING WATER PERSISTS SEVENTY TWO (72) HOURS AFTER A STORM EVENT WITHIN THE INFILTRATION BASIN THE BASIN SHALL UNDERGO MAINTENANCE IMMEDIATELY AND NON-IMPROVEMENT OF CONDITIONS THEREAFTER WILL CALL FOR REPLACEMENT OF THE SYSTEM AND/ OR IMPROVEMENT OF THE SURROUNDING STONE.
10. THE CONSTRUCTION SUPERINTENDENT SHALL HAVE OVERALL RESPONSIBILITY FOR THE MAINTENANCE PROGRAM DURING THE CONSTRUCTION PHASE AND FOR A PERIOD OF ONE YEAR AFTER CONSTRUCTION. THE SUPERINTENDENT SHALL SEE THAT THE APPROPRIATE WORKERS ARE AWARE OF THE PROVISIONS OF THE PLAN.
11. AFTER ACCEPTANCE OF THE SITE BY THE OWNER THE OWNER SHALL HAVE OVERALL RESPONSIBILITY FOR IMPLEMENTING THE MAINTENANCE PROGRAM FOR THE STORMWATER MANAGEMENT PLAN.

**ESTABLISHMENT OF VEGETATIVE COVER**

1. SLOPES SHALL NOT BE LEFT UNATTENDED OR EXPOSED FOR EXCESSIVE PERIODS OF TIME SUCH AS THE INACTIVE WINTER SEASON. THE CONTRACTOR SHALL INITIATE APPROPRIATE VEGETATIVE PRACTICES ON ALL DISTURBED AREAS AS SOON AS POSSIBLE BUT NOT MORE THAN FOURTEEN (14) DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT AREA HAS TEMPORARILY OR PERMANENTLY CEASED, UNLESS THE ACTIVITY IS TO RESUME WITHIN TWENTY-ONE (21) DAYS.
2. ALL DISTURBED SLOPES EITHER NEWLY CREATED OR CURRENTLY EXPOSED SHALL BE SEEDED OR PROTECTED.
3. THE TOPSOIL SHALL HAVE A SANDY LOAM TEXTURE RELATIVELY FREE OF SUBSOIL MATERIAL, STONES, ROOTS, LUMPS OF SOIL, TREE LIMBS, TRASH OR CONSTRUCTION DEBRIS AND SHALL CONFORM WITH RHODE ISLAND'S STANDARD SPECIFICATION, M.20.
4. THE TEMPORARY SEEDING DESIGN MIX SHALL BE COMPRISED OF THE FOLLOWING:
 

TYPE	LBS/AC
WINTER RYE	50
MILLET OR SUDANGRASS	20
ANNUAL OR PERENNIAL RYE GRASS	30
5. THE CONSERVATION SEED MIX SHALL BE COMPRISED OF THE FOLLOWING:
 

TYPE	LBS/AC
FOWL MANNGRASS	20
PENNSYLVANIA SMARTWEED	20
JAPANESE MILLET	20
VIRGINIA WILD RYE	20
FOX SEDGE	10
DEER TONGUE	5
BLACKWELL SWITCHGRASS	5
6. THE GENERAL PURPOSE SEED MIX SHALL BE COMPRISED OF THE FOLLOWING:
 

TYPE	LBS/AC
RED FESCUE	75
KENTUCKY BLUEGRASS	15
COLONIAL BENTGRASS	5
PERENNIAL RYEGRASS	5

EARLY SPRING OR LATE SUMMER SEEDING IS RECOMMENDED. SEEDING SCHEDULE SHOULD CONFORM WITH RHODE ISLAND'S STANDARD SPECIFICATION, L.02.03.1 SEEDING DATES. PERMANENT SEEDING SHALL BE DURING THE APRIL 1 TO MAY 31 OR AUGUST 15 TO OCTOBER 15. TEMPORARY SEEDING MAY BE DONE ANYTIME BETWEEN MARCH 15 AND NOVEMBER 15 WITH THE APPROVAL OF THE ENGINEER OF RECORD. FERTILIZE AS REQUIRED BY SOIL TESTING TO COMPLEMENT OR UPGRADE EXISTING CONDITIONS. THE SEED MIX SHALL BE INOCULATED WITHIN 24 HOURS AND BEFORE MIXING AND PLANTING, WITH APPROPRIATE INOCULUMS FOR EACH VARIETY.

7. TEMPORARY TREATMENTS SHALL CONSIST OF HAY, STRAW, OR FIBER MULCH OR PROTECTIVE COVERS SUCH AS A MAT OR FIBER LINING. TEMPORARY HAY MULCH TO BE TACKED IN PLACE WITH NYLON MESH NETTING. SIDE SLOPES OF BASIN SHALL BE TREATED WITH NORTH AMERICAN GREEN EROSION CONTROL BLANKETS SUCH AS S150 OR APPROVED EQUAL. THEY SHALL BE INCORPORATED INTO THE WORK AS WARRANTED OR AS ORDERED BY THE ENGINEER. HAY OR STRAW APPLICATIONS SHALL BE IN THE AMOUNT OF 2 TONS/ACRE.
8. ALL HAY BALES OR TEMPORARY PROTECTION SHALL REMAIN IN PLACE UNTIL AN ACCEPTABLE STAND OF GRASS OR APPROVED GROUND COVER IS ESTABLISHED.
9. ALL FILL SHALL BE THOROUGHLY COMPACTED UPON PLACEMENT IN STRICT CONFORMANCE WITH LOCAL MUNICIPAL REQUIREMENTS AND THE RHODE ISLAND STANDARD SPECIFICATION FOR ROAD AND BRIDGE SECTION 202.
10. STOCKPILES OF TOPSOIL SHALL NOT BE LOCATED NEAR WATERWAYS. THEY SHALL HAVE SIDE SLOPES NO GREATER THAN 2:1 AND SHALL BE TEMPORARILY SEEDED AND/OR STABILIZED.
11. ALL AREAS PROPOSED TO BE VEGETATED THAT ARE DISTURBED BY CONSTRUCTION SHALL BE STABILIZED WITH PERMANENT SEEDING IMMEDIATELY FOLLOWING FINISH GRADING. PERMANENTLY SEEDED AREAS SHALL BE PROTECTED DURING ESTABLISHMENT WITH MULCH. ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STANDARD IS MAINTAINED. WELL ESTABLISHED VEGETATION SHALL BE MAINTAINED. BARE OR ERODED AREAS SHALL BE IMMEDIATELY REPAIRED AND RESEEDED BY THE CONTRACTOR. ACTIVITIES SHALL BE CONFINED TO WITHIN THE LIMIT OF WORK AS SHOWN ON THE PLANS.
12. MAXIMUM PERMANENT GRADED SLOPE WITHIN THE SITE IS TO BE 3:1 UNLESS NOTED OTHERWISE.
13. THE CONSTRUCTION SUPERINTENDENT SHALL HAVE OVERALL RESPONSIBILITY FOR PLAN IMPLEMENTATION AND FOR SEEING THAT THE APPROPRIATE WORKERS ARE AWARE OF THE PROVISIONS OF THE PLAN. THE CONTRACTOR MUST REPAIR AND/OR RESEED ANY AREAS THAT DO NOT DEVELOP WITHIN THE PERIOD OF ONE YEAR AND SHALL DO SO AT NO ADDITIONAL EXPENSE TO THE OWNER.
14. REFERENCE THE "RHODE ISLAND SOIL EROSION AND SEDIMENTATION CONTROL HANDBOOK" PREPARED BY THE USDA SOIL CONSERVATION SERVICE 1989 AS A GUIDE.

**SEQUENCE OF CONSTRUCTION AND STAGING OF LAND DISTURBING ACTIVITIES**

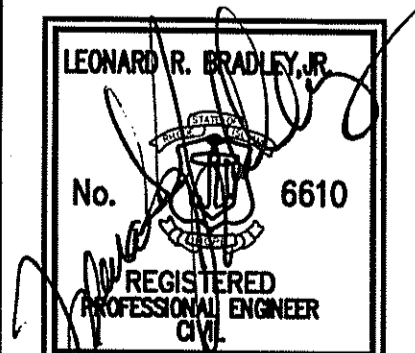
1. CONTRACTOR IS RESPONSIBLE FOR SOIL EROSION AND SEDIMENT CONTROL (SE & SO) ON SITE. SEQUENCE OF CONSTRUCTION PROVIDED MAY BE MODIFIED AS FIELD CONDITIONS WARRANT WITH PRIOR APPROVAL FROM THE OWNER OR OWNER'S REPRESENTATIVE AND THE PROJECT ENGINEER.
2. CONSTRUCTION TO BEGIN IN THE SPRING OF 2009 OR UPON RECEIPT OF ALL NECESSARY APPROVALS.
3. SURVEY AND STAKE PROPOSED BUILDING, PARKING, INFILTRATION BASIN, RAIN GARDEN, DRAINAGE LINES, AND LIMIT OF SEDIMENTATION BARRIERS/LIMIT OF DISTURBANCE.
4. PLACE SEDIMENTATION BARRIERS (HAY BALES OR SILT FENCE) AS SHOWN ON THE PLANS AND STAKED OUT IN THE FIELD. IN NO CASE IS THE LIMIT OF WORK TO EXTEND BEYOND THE SEDIMENTATION BARRIERS.
5. BEGIN CLEARING AND GRUBBING IN AREA OF THE BUILDING, PARKING, AND INFILTRATION BASIN. TOPSOIL IS TO BE STRIPPED FROM THE AREA OF THE PROPOSED BUILDING, PARKING, AND INFILTRATION BASIN AND STOCKPILED IN APPROVED LOCATIONS. TOPSOIL STOCKPILES ARE TO BE PROTECTED BY A ROW OF SEDIMENTATION BARRIERS AND COVERED OR TEMPORARILY SEEDED.
6. EXCAVATE AND GRADE THE PROPOSED INFILTRATION BASIN, RAIN GARDEN, AND PARKING AREAS. THE INFILTRATION BASIN SHALL BE PERMANENTLY SEEDED FOLLOWING FINISH GRADING.
7. INSTALL DRAIN PIPING, DRAINAGE MANHOLES, CATCH BASINS, AND STONE BEGINNING AT THE INFILTRATION BASIN AND WORKING UP GRADIENT. PROTECT DISCHARGE OUTLETS WITH RIP-RAP APRONS. PLACE EROSION CONTROLS AT THE DISCHARGE POINTS AND SEED THE INFILTRATION BASIN AND DISTURBED AREAS OUTSIDE OF THE BUILDING AND AREA TO BE PAVED. THE INFILTRATION BASIN AND DRAINAGE NETWORK ARE TO BE PROTECTED FROM RUNOFF FROM DISTURBED AREAS UNTIL ALL DISTURBED AREAS ARE STABILIZED WITH VEGETATION OR IMPERVIOUS COVER.
8. CONSTRUCTION OF THE PROPOSED BUILDING CAN BEGIN AS SOON AS THE PROPOSED SE & SO IMPROVEMENTS ARE IN PLACE.
9. ONCE THE INSTALLATION OF THE DRAINAGE NETWORK IS COMPLETE INSTALL THE NEW WATER SERVICE FOR THE EXISTING AND PROPOSED BUILDINGS. CUT AND CAP EXISTING WATER SERVICE AT FIRST JUNCTION BEYOND PROPERTY LINE. INSTALL SEWER SERVICE AND OTHER UNDERGROUND UTILITIES SUCH AS; ELECTRIC, TELEPHONE, AND CABLE IN ACCORDANCE WITH THE APPROVED FINAL PLANS.
10. PLACE COMPACTED GRAVEL FOUNDATION AND ROUGH GRADE THE PARKING AREAS IN ACCORDANCE WITH THE SITE PLANS, IN ACCORDANCE WITH THE CITY OF EAST PROVIDENCE, RHODE ISLAND, LAND DEVELOPMENT AND SUBDIVISION REGULATIONS, AND RIDOT STANDARDS AND SPECIFICATIONS.
11. PLACE BITUMINOUS ASPHALT BINDER PER SITE PLANS AND IN ACCORDANCE WITH THE CITY OF EAST PROVIDENCE, RHODE ISLAND, LAND DEVELOPMENT AND SUBDIVISION REGULATIONS, SITE PLANS, AND RIDOT STANDARDS AND SPECIFICATIONS.
12. FINISH PERMANENT STABILIZATION. REPAIR DRAINAGE OUTLETS AND BASIN AS REQUIRED. TREE LIMBS, LEAVES, COBBLES, BOULDERS, ETC. SHALL BE REMOVED FROM THE BOTTOM OF THE BASIN.
13. SWEEP THE PARKING AREA TO REMOVE ALL SEDIMENTS.
14. THE CONTRACTOR SHALL CLEAN AND FLUSH THE DRAINAGE STRUCTURES AND PIPES AT THE END OF CONSTRUCTION AND ALL ACCUMULATED SEDIMENTS IN THE INFILTRATION BASIN SHALL BE REMOVED.
15. REMOVE ALL TEMPORARY SOIL EROSION AND SEDIMENTATION CONTROL MEASURES FOLLOWING VEGETATIVE ESTABLISHMENT OF ALL DISTURBED AREAS.

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  
APPROVED WITH CONDITIONS  
AS SPECIFIED IN THE LETTER OF APPROVAL  
DATED FEB 26 2009 FILE # 09-022  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL.  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE.

*W. Joseph Casey*

THIS REGULATORY SUBMISSION SET SHALL NOT BE USED FOR CONSTRUCTION PURPOSES UNLESS STAMPED 'ISSUED FOR CONSTRUCTION' AND SIGNED BY A DIPRETE ENGINEERING REPRESENTATIVE.



**Erosion Control Details**

**Baer Supply**

Assessor's Map 301, Block 4, Lot 8  
East Providence, Rhode Island

**DiPrete Engineering**

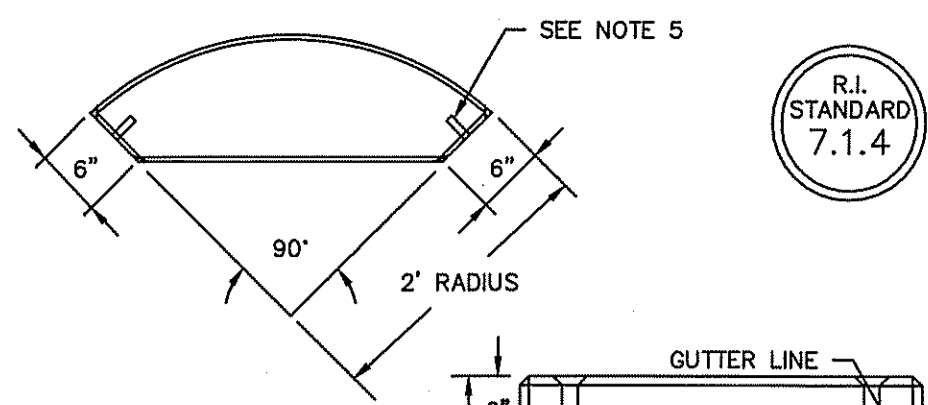
Two Stafford Court Cranston, RI 02920  
tel 401-943-1000 fax 401-464-6006 www.DiPrete-Eng.com

**Adele Beck**

35 Angel Road Lincoln, Rhode Island 02865  
tel 401-725-8083

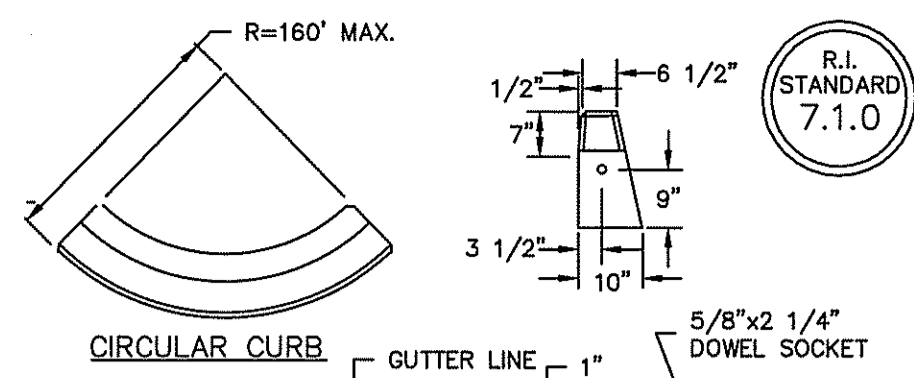
No.	Date	Description	By:
3	01-26-09	RIDEM & RIDOT Submission	B.C.G.
2	01-14-09	East Providence Engineering Comments	B.C.G.
1	01-07-09	Waterfront Commission Comments	B.C.G.
0	11-12-08	Waterfront Commission Submission	B.C.G.

Drawn By: B.C.G. Design By: B.C.G. Checked By: A.D.O.



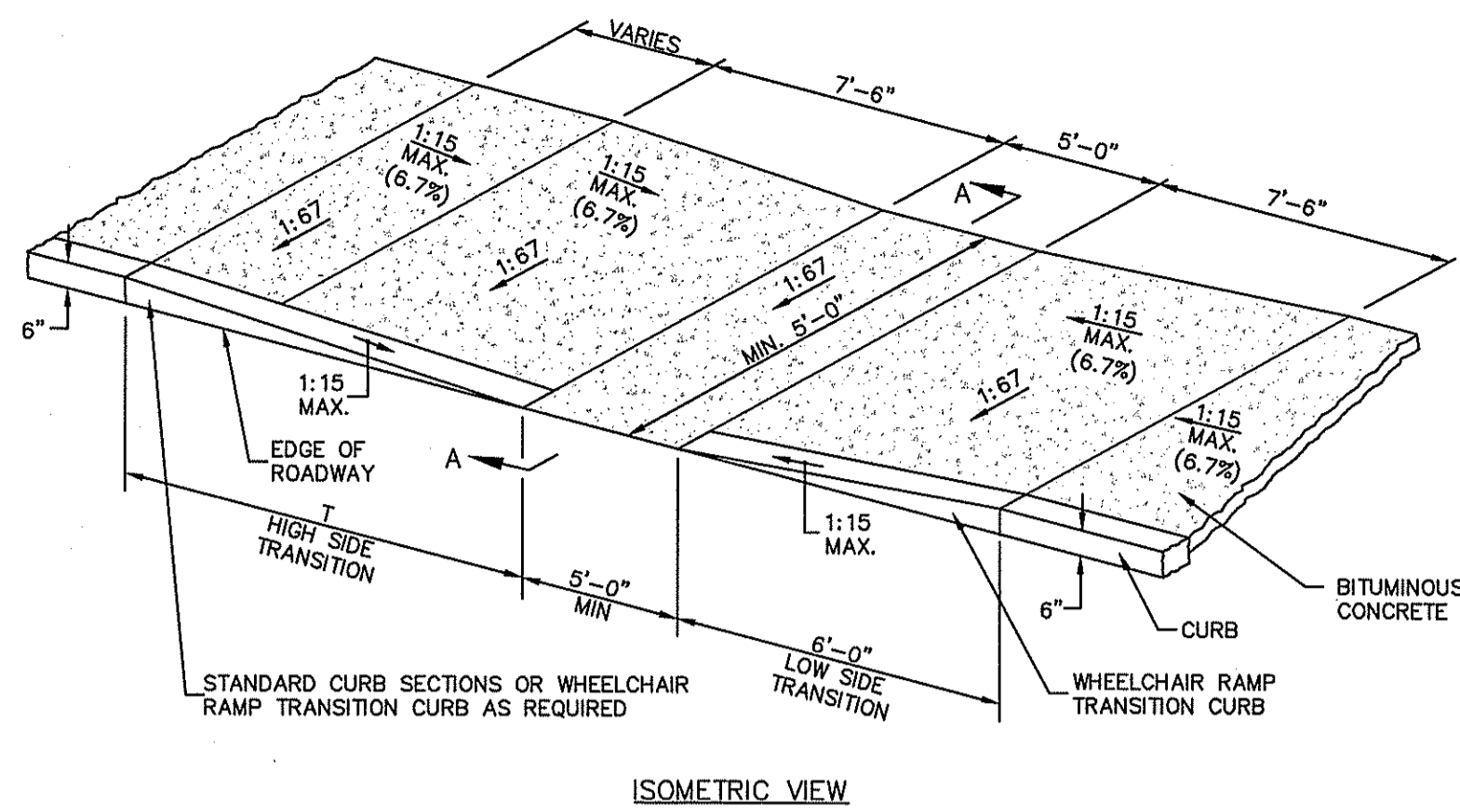
- NOTES:**
1. SHALL BE IN ACCORDANCE WITH SECTION 905 OF THE R.I. STANDARD SPECIFICATIONS.
  2. EXPOSED SURFACES TO HAVE A SPONGE FLOAT FINISH.
  3. NO REINFORCEMENT REQUIRED.
  4. EXPOSED EDGES TO HAVE A 3/4" CHAMFER.
  5. SEE STD. 7.1.0 FOR DOWEL SOCKET LOCATION.

**PRECAST CONCRETE  
2' RADIUS CORNER**  
NOT TO SCALE



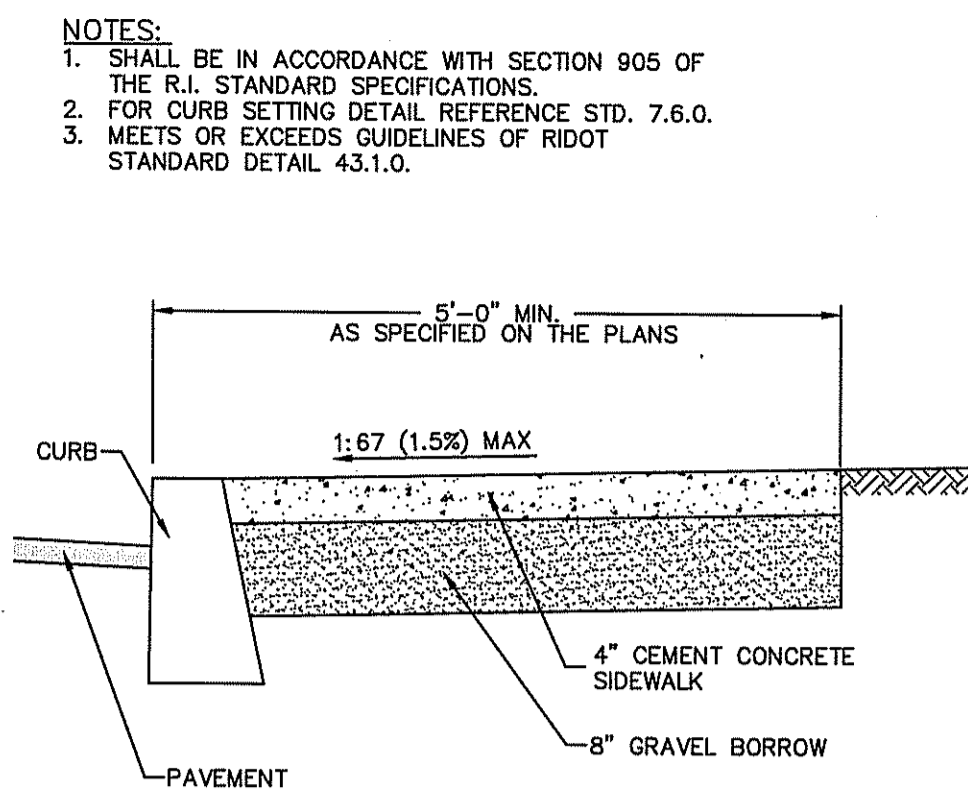
- NOTES:**
1. SHALL BE IN ACCORDANCE WITH SECTION 905 OF THE R.I. STANDARD SPECIFICATIONS.
  2. MINIMUM LENGTH OF STRAIGHT OR CIRCULAR FILLER PIECES TO BE 3'-0".
  3. EXPOSED SURFACES TO HAVE A SPONGE FLOAT FINISH.
  4. CIRCULAR CURB IS REQUIRED ON CURVES WITH RADII OF 160'-0" OR LESS. STRAIGHT CURB TO BE USED ON CURVES OF MORE THAN 160'-0" RADIUS.
  5. EXPOSED EDGES TO HAVE A 3/4" CHAMFER.

**PRECAST CONCRETE CURB**  
NOT TO SCALE

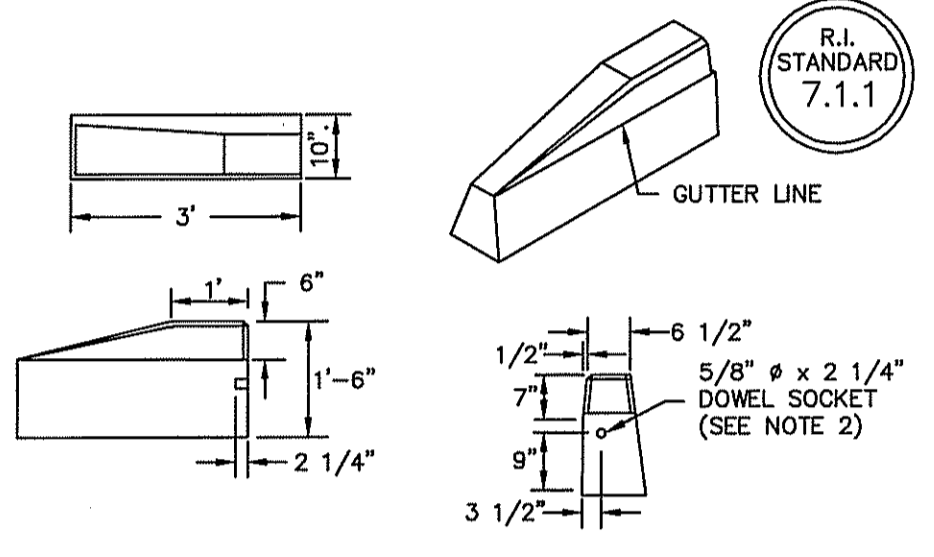


- NOTES:**
1. SHALL BE IN ACCORDANCE WITH SECTION 904 OF THE R.I. STANDARD SPECIFICATIONS.
  2. WHEN ANY OBSTRUCTION LOCATED IN THE SIDEWALK FALLS WITHIN A CROSSWALK AREA, THE WHEELCHAIR RAMP WILL BE PLACED SUCH THAT THE OBSTRUCTION FALLS OUTSIDE OF THE RAMP.
  3. AT NO TIME IS ANY PART OF THE WHEELCHAIR RAMP TO BE LOCATED OUTSIDE OF THE CROSSWALK, AND IT IS TO BE CENTERED WHENEVER POSSIBLE.
  4. DRAINAGE FACILITIES ARE TO BE LOCATED UP-GRADE OF ALL WHEELCHAIR RAMPS.
  5. LOCATION OF WHEELCHAIR RAMPS IS AS SHOWN ON CONTRACT DRAWINGS.
  6. IN NO INSTANCE SHALL THE SIDEWALK CROSS SLOPE EXCEED 1:50 EXCEPT WITHIN THE RAMP AREA.
  7. AN UNOBSTRUCTED PATH OF TRAVEL WITH A MINIMUM WIDTH OF 3'-0" SHALL BE MAINTAINED.
  8. THE WHEELCHAIR RAMP SLOPE AND SIDE SLOPES (TRANSITIONS), MUST NOT EXCEED 1:12. HOWEVER, THESE SLOPES MAY BE FLATTER THAN 1:12 WHEN WARRANTED BY SURROUNDING CONDITIONS.
  9. IN NO CASE, WHERE A STOP LINE IS WARRANTED, SHALL A RAMP BE PLACED BEHIND THE STOP LINE.
  10. THE ENTRANCE OF THE WHEELCHAIR RAMP SHALL BE FLUSH WITH THE ROADWAY.
  11. THE WHEELCHAIR RAMP SHALL BE CENTERED RADIIALLY, OPPOSITE THE RADIUS POINT WHEN POSSIBLE.
  12. MINIMUM LENGTH OF STRAIGHT OR CIRCULAR FILLER PIECES TO BE 3'-0" (GREATER LENGTHS PREFERRED).
  13. ALL REQUIRED CUTTING OF CURB PIECES TO BE PAID FOR UNDER COST OF CURB.
  14. MEETS OR EXCEEDS GUIDELINES OF RIDOT STANDARD DETAIL 43.3.0.

**WHEELCHAIR RAMP (ADA)**  
NOT TO SCALE

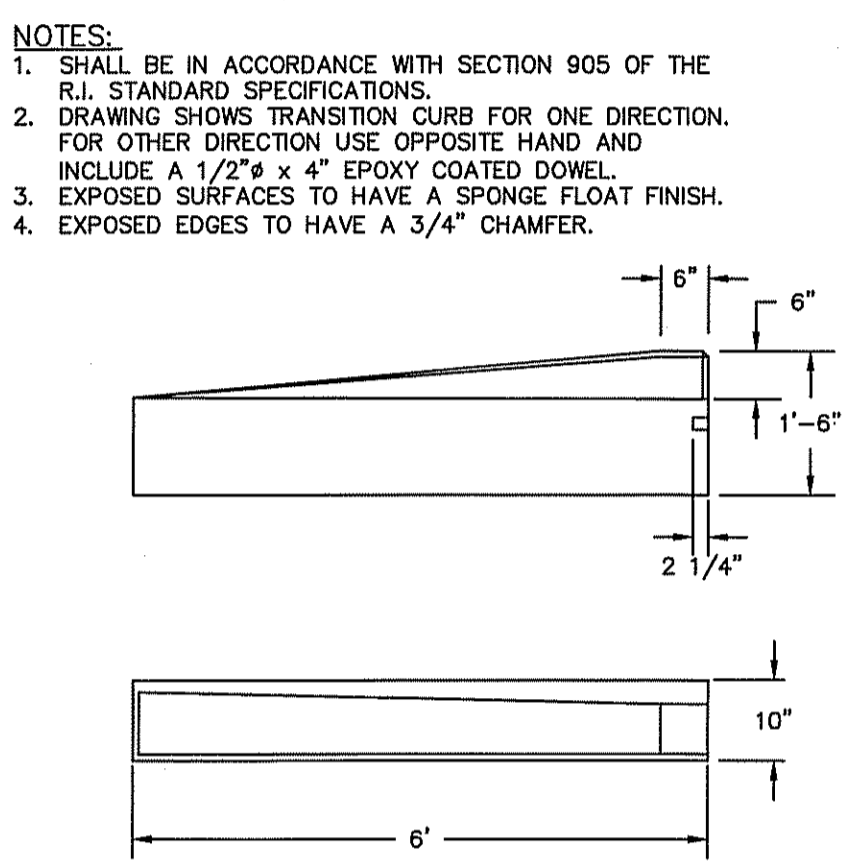


**CEMENT CONCRETE SIDEWALK**  
NOT TO SCALE



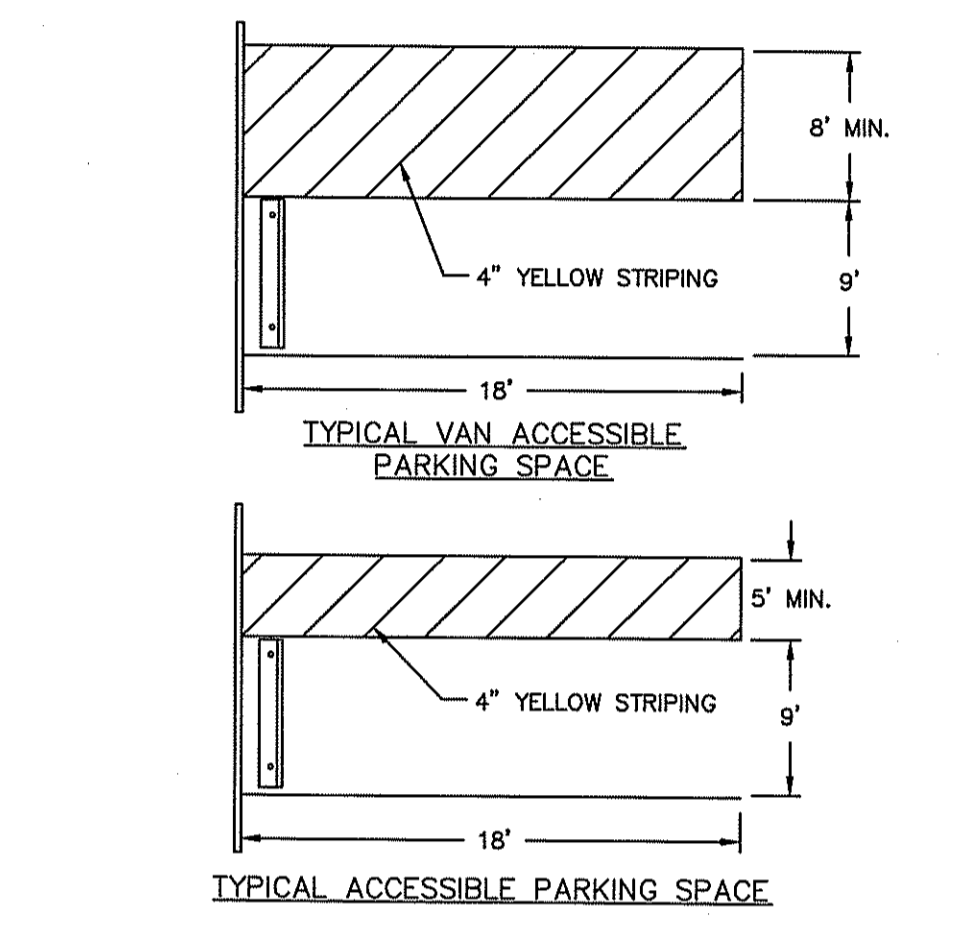
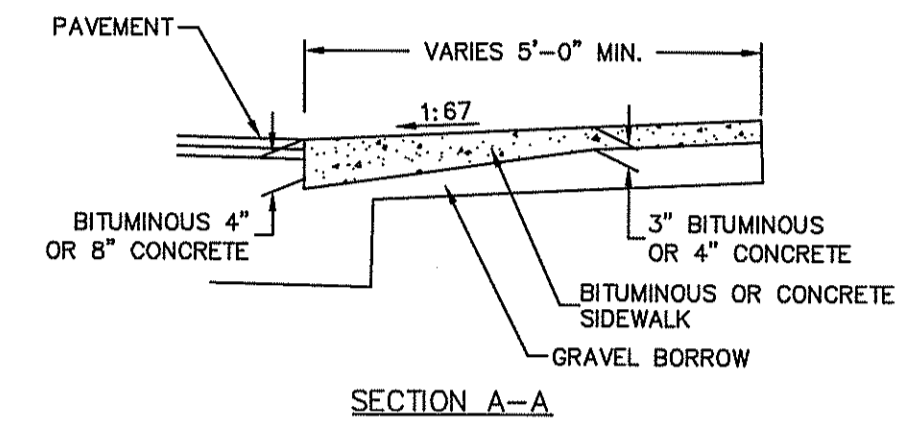
- NOTES:**
1. SHALL BE IN ACCORDANCE WITH SECTION 905 OF THE R.I. STANDARD SPECIFICATIONS.
  2. DRAWING SHOWS TRANSITION CURB FOR ONE DIRECTION, FOR OTHER DIRECTION USE OPPOSITE HAND AND INCLUDE A 1/2" x 4" EPOXY COATED DOWEL.
  3. EXPOSED SURFACES TO HAVE A SPONGE FLOAT FINISH.
  4. EXPOSED EDGES TO HAVE A 3/4" CHAMFER.

**3' PRECAST CONCRETE  
TRANSITION CURB**  
NOT TO SCALE

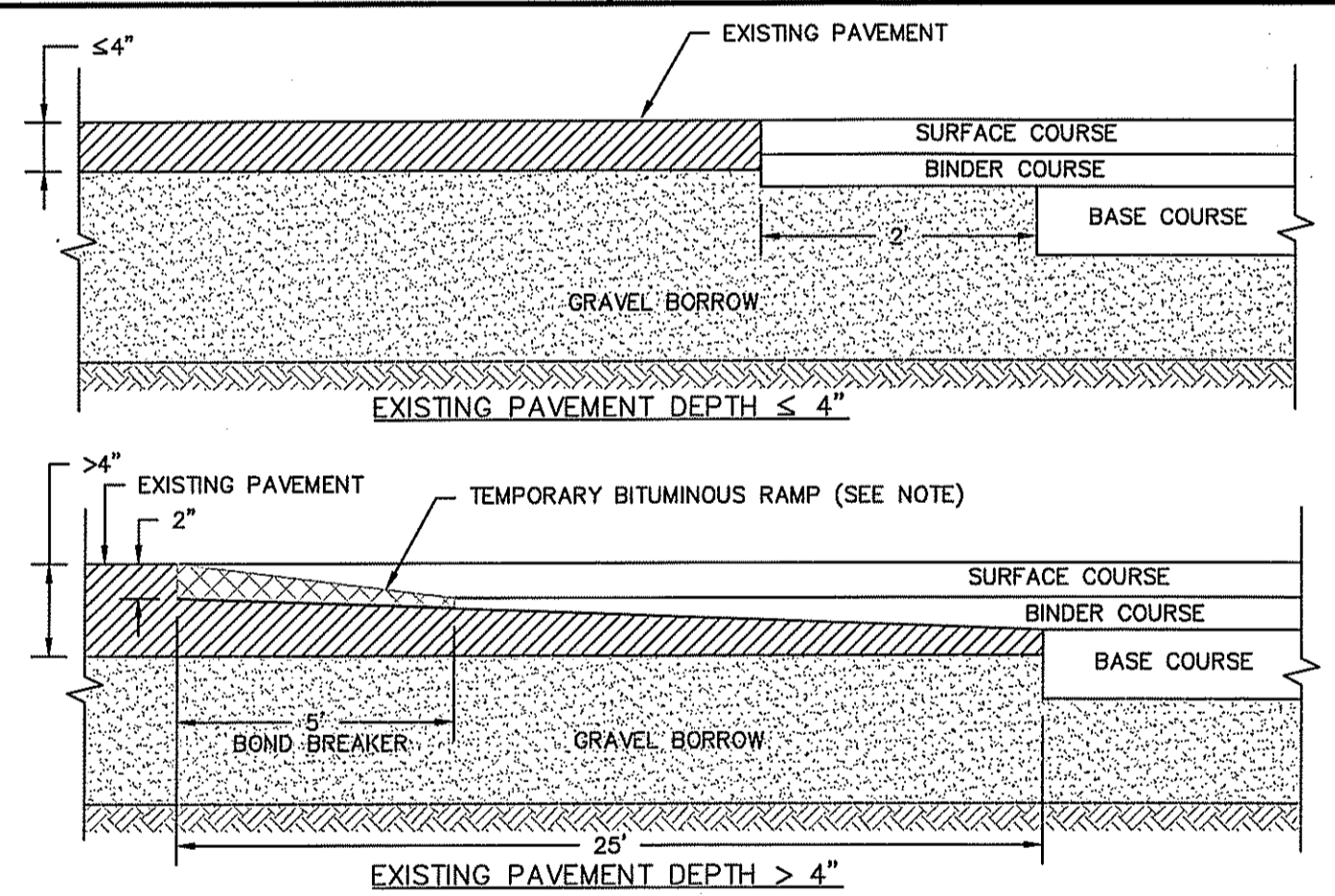


- NOTES:**
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  2. DRAWING SHOWS TRANSITION CURB FOR ONE DIRECTION, FOR OTHER DIRECTION USE OPPOSITE HAND AND INCLUDE A 1/2" x 4" EPOXY COATED DOWEL.
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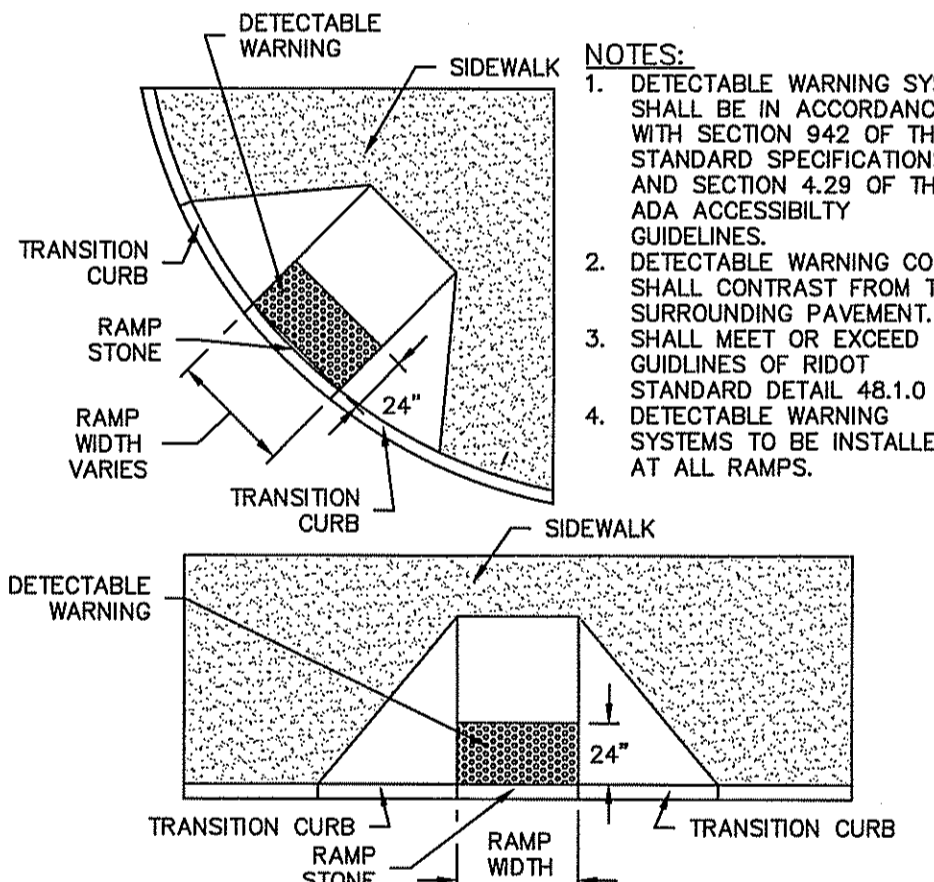
**6' PRECAST CONCRETE TRANSITION CURB**  
NOT TO SCALE



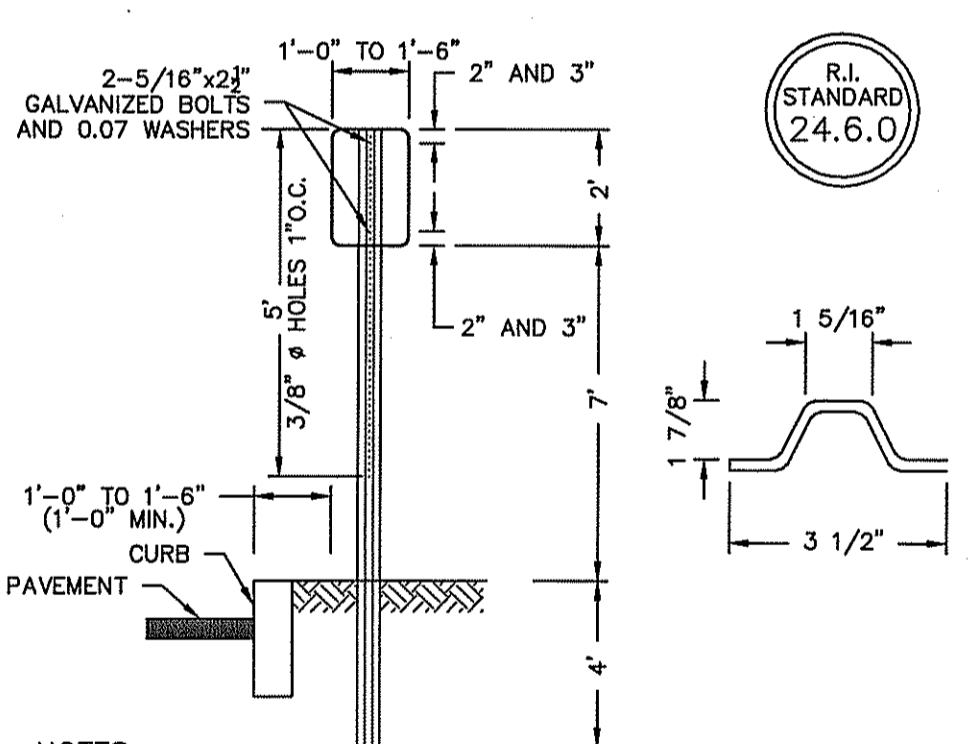
**TYPICAL ACCESSIBLE PARKING SPACES**  
NOT TO SCALE



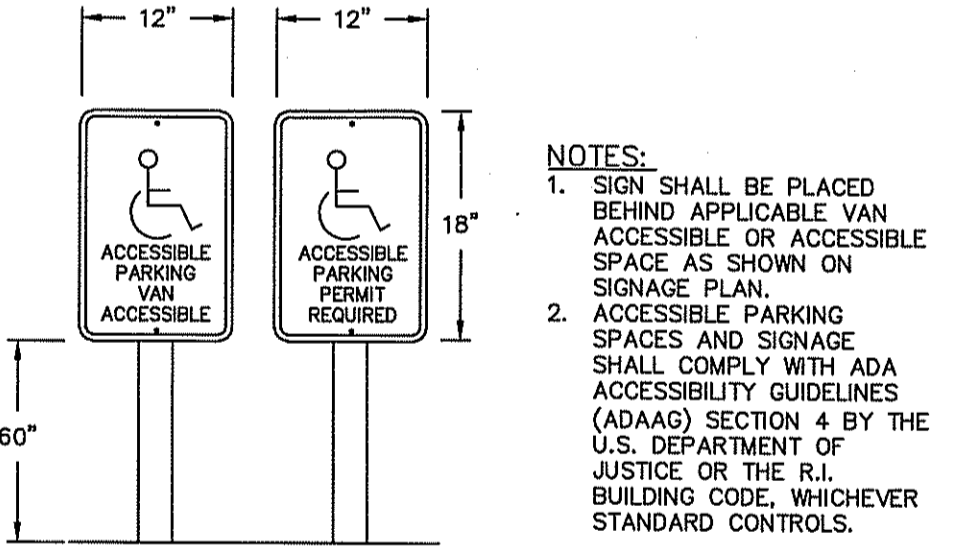
**TRANSVERSE PAVEMENT CUT AND MATCH**  
NOT TO SCALE



**DETECTABLE WARNING SYSTEM**  
NOT TO SCALE



**PARKING SIGN MOUNTING DETAIL**  
NOT TO SCALE



**TYPICAL ACCESSIBLE  
PARKING POST & SIGN**  
NOT TO SCALE

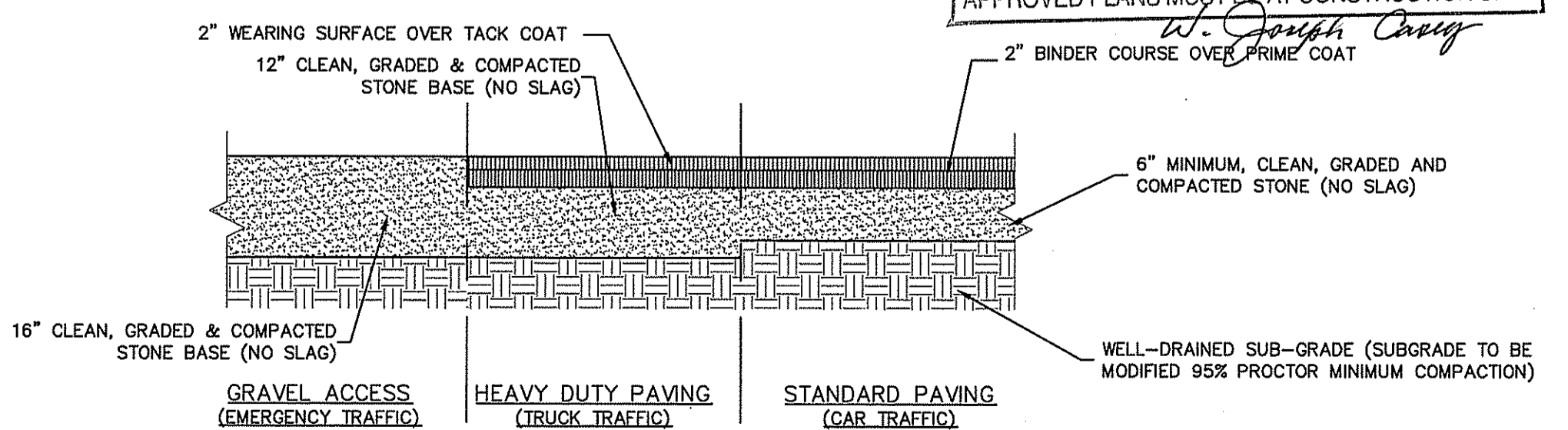
- ADA NOTES**
1. ALL IMPROVEMENTS SHALL COMPLY WITH THE AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES (ADAAG) BY THE DEPARTMENT OF JUSTICE.
  2. MAXIMUM RUNNING SLOPE ALONG ALL ACCESSIBLE PATHS OF TRAVEL SHALL BE 0.045'/' AND MAXIMUM CROSS SLOPE ALONG ALL ACCESSIBLE PATHS OF TRAVEL SHALL BE 0.015'/'.
  3. MAXIMUM SLOPE IN ANY DIRECTION FOR ALL ACCESSIBLE PARKING SPACES AND LOADING AREAS SHALL BE 0.015'/'.
  4. AT A MINIMUM, A 5' X 5' LANDING WITH A MAXIMUM SLOPE OF 0.015'/' IN ANY DIRECTION SHALL BE PROVIDED IN FRONT OF ALL PUBLICLY ACCESSIBLE BUILDING ENTRANCES/EGRESSES.
  5. SIDEWALK CURB RAMPS SHALL COMPLY WITH DIPRETE ENGINEERING DETAILS MEETING OR EXCEEDING RIDOT STANDARDS 43.3.0, 43.3.1 & 43.4.1 AS SHOWN ON THE DETAIL SHEET.
  6. PLEASE NOTE THAT THE GRADING AND PLAN VIEWS AS WELL AS THE STANDARD DETAILS MAY NOT SHOW THE DETAIL NECESSARY TO CONSTRUCT WALKWAYS AND RAMPS TO ADA STANDARDS. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE THE LEVEL OF CARE NECESSARY TO BE CERTAIN THAT THE CONSTRUCTED PRODUCT MEETS ADA STANDARDS. IN THE EVENT OF ANY CONFLICTS THE CONTRACTOR SHALL NOTIFY THE DESIGNER BEFORE CONSTRUCTION FOR ADVICE IN FINDING A RESOLUTION.

- NOTE:**
- A BOND BREAKER (TAPERED OR EQUIVALENT) WILL BE PLACED 5'-0" FROM THE JOINT AND COVERED WITH THE BINDER COURSE AS THE TEMPORARY RAMP. PRIOR TO PLACING THE SURFACE COURSE, THE BINDER COURSE, AND BOND BREAKER WILL BE REMOVED.

- NOTES:**
1. DETECTABLE WARNING SYSTEM SHALL BE IN ACCORDANCE WITH SECTION 942 OF THE R.I. STANDARD SPECIFICATIONS AND SECTION 4.29 OF THE ADA ACCESSIBILITY GUIDELINES.
  2. DETECTABLE WARNING COLOR SHALL CONTRAST FROM THE SURROUNDING PAVEMENT.
  3. SHALL MEET OR EXCEED GUIDELINES OF RIDOT STANDARD DETAIL 48.1.0.
  4. DETECTABLE WARNING SYSTEMS TO BE INSTALLED AT ALL RAMPS.

- NOTES:**
1. SHALL BE IN ACCORDANCE WITH SECTION T.15 OF THE STANDARD SPECIFICATIONS.
  2. 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" MIN.) FROM EDGE OF CURB FACE.

- NOTE:**
- THIS PAVEMENT SECTION DETAIL REFLECTS MINIMUM REQUIREMENTS. ENGINEER TO DETERMINE DESIGN BASED ON GEO-TECHNICAL DATA OF SPECIFIC PROJECT AND DAILY TRAFFIC DESIGN REQUIREMENT.



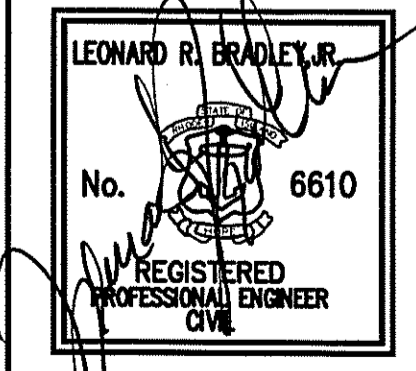
**TYPICAL PAVEMENT SECTION**  
NOT TO SCALE

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS  
AS SPECIFIED IN THE LETTER OF APPROVAL  
DATED FEB 26 2009 FILE # 09-0122  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL.  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE.

*W. Joseph Carey*

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

THIS REGULATORY SUBMISSION SET SHALL NOT BE USED FOR CONSTRUCTION PURPOSES  
UNLESS STAMPED 'ISSUED FOR CONSTRUCTION' AND SIGNED BY A DIPRETE ENGINEERING  
REPRESENTATIVE.



**Paving & Signage Details**

**Baer Supply**

Assessor's Map 301, Block 4, Lot 8  
East Providence, Rhode Island

**DiPrete Engineering**

Two Stafford Court Cranston, RI 02920  
tel 401-943-1000 fax 401-464-6006 www.DiPrete-Eng.com

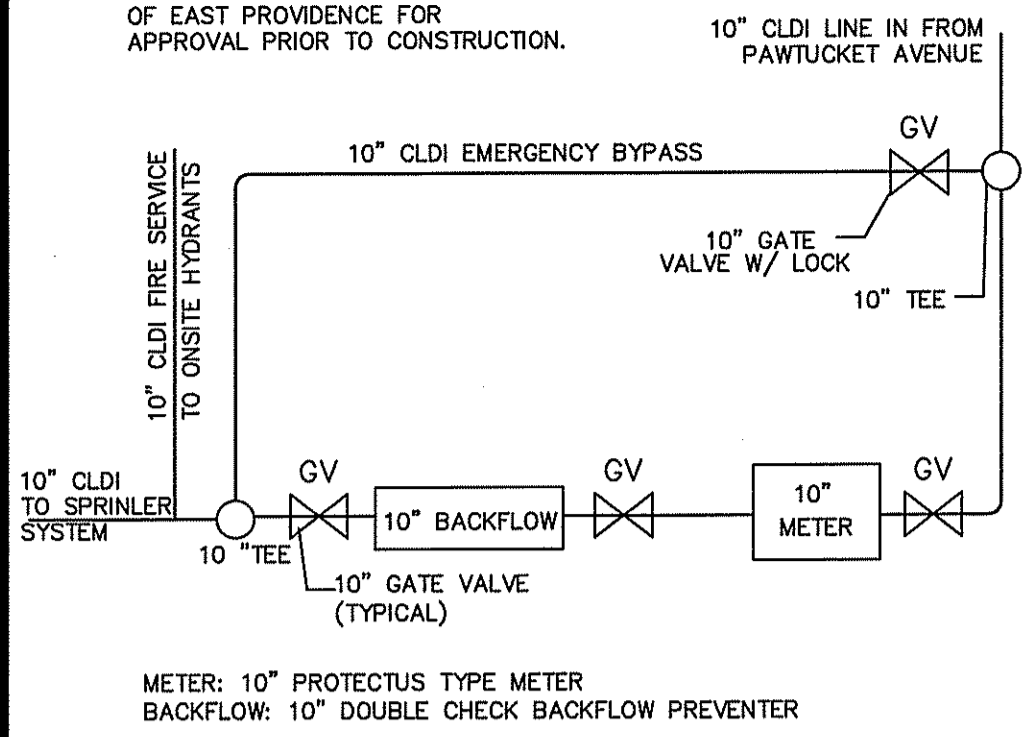
**Adele Beck**

35 Angel Road Lincoln, Rhode Island 02865  
tel 401-725-8083

No.	Date	Description	By
3	01-26-09	BIDEM & RIDOT Submission	B.C.G.
2	01-14-09	East Providence Engineering Comments	B.C.G.
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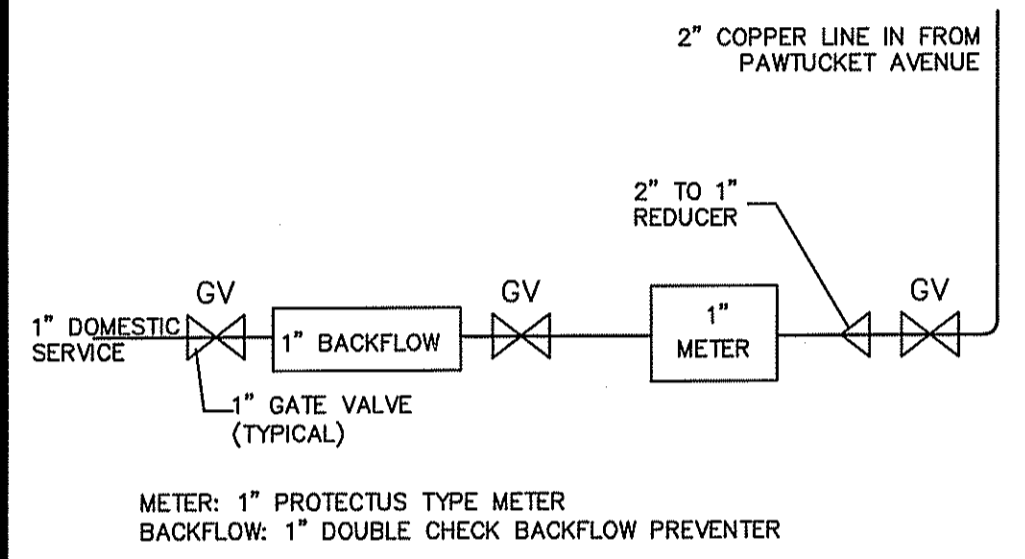
Drawn By: B.C.G. Design By: B.C.G. Checked By: A.D.O.

NOTE:  
SHOP DRAWINGS TO BE PROVIDED TO DESIGN ENGINEER AND THE CITY OF EAST PROVIDENCE FOR APPROVAL PRIOR TO CONSTRUCTION.



**FIRE SERVICE METER AND BACKFLOW SCHEMATIC**  
NOT TO SCALE

NOTE:  
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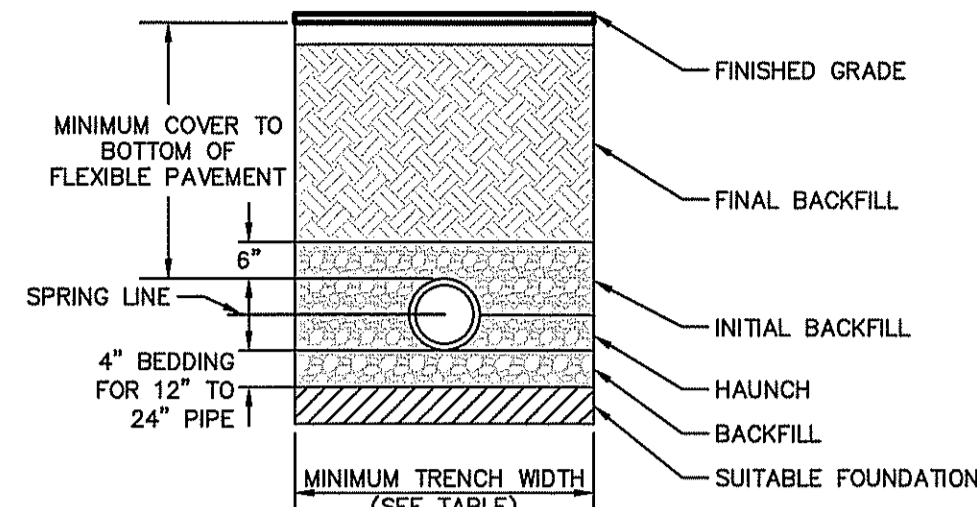


**DOMESTIC WATER METER AND BACKFLOW SCHEMATIC**  
NOT TO SCALE

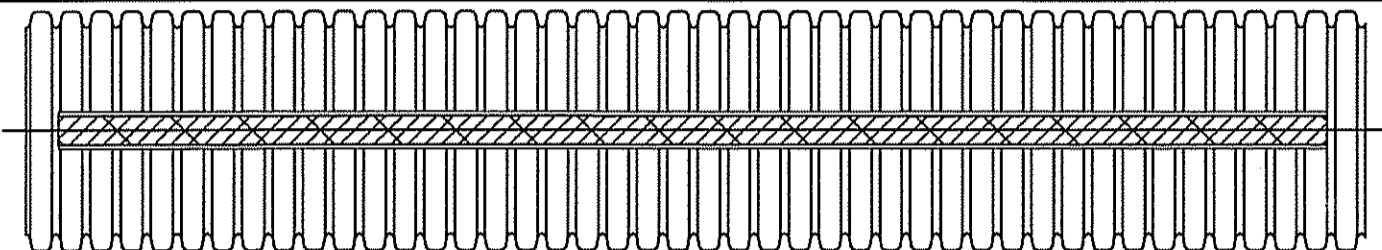
**HDPE INSTALLATION NOTES:**

1. ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS, LATEST EDITION.
2. MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL, WHEN REQUIRED.
3. FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER. AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.
4. BEDDING: SUITABLE MATERIAL SHALL BE CLASS I, II OR III. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER, UNLESS OTHERWISE NOTED BY THE ENGINEER. MINIMUM BEDDING THICKNESS SHALL BE 4" (100MM) FOR 4"-24" (100MM-600MM); 6" (150MM) FOR 30"-60" (750MM-900MM).
5. INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE CLASS I, II OR III IN THE PIPE ZONE EXTENDING NOT LESS THAN 6" ABOVE CROWN OF PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.
6. MINIMUM COVER: MINIMUM COVER, H, IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" FROM THE TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOATION. FOR TRAFFIC APPLICATIONS, MINIMUM COVER, H, IS 12" UP TO 48" DIAMETER PIPE AND 24" OF COVER FOR 54"-60" DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT.

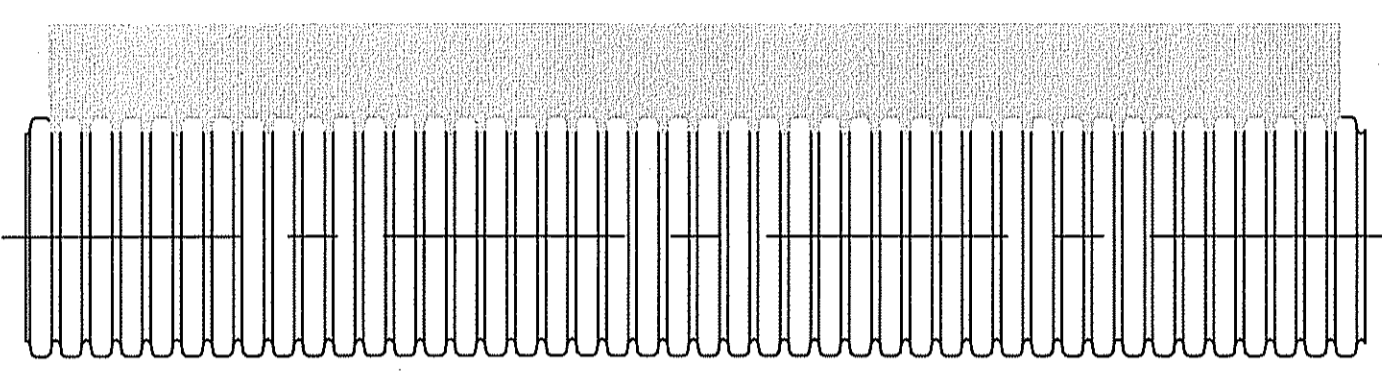
PIPE DIAMETER	MINIMUM TRENCH WIDTH
6"	23"
8"	26"
12"	30"
15"	34"
24"	39"



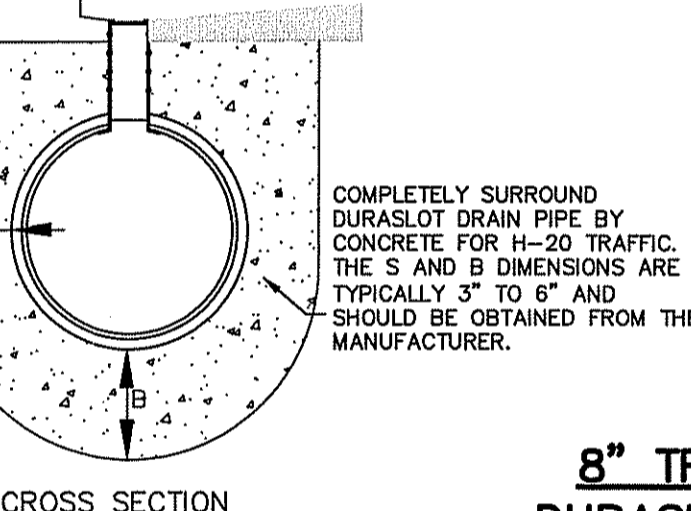
**HDPE TRENCH DETAIL**  
NOT TO SCALE



**PLAN VIEW**



**ELEVATION**

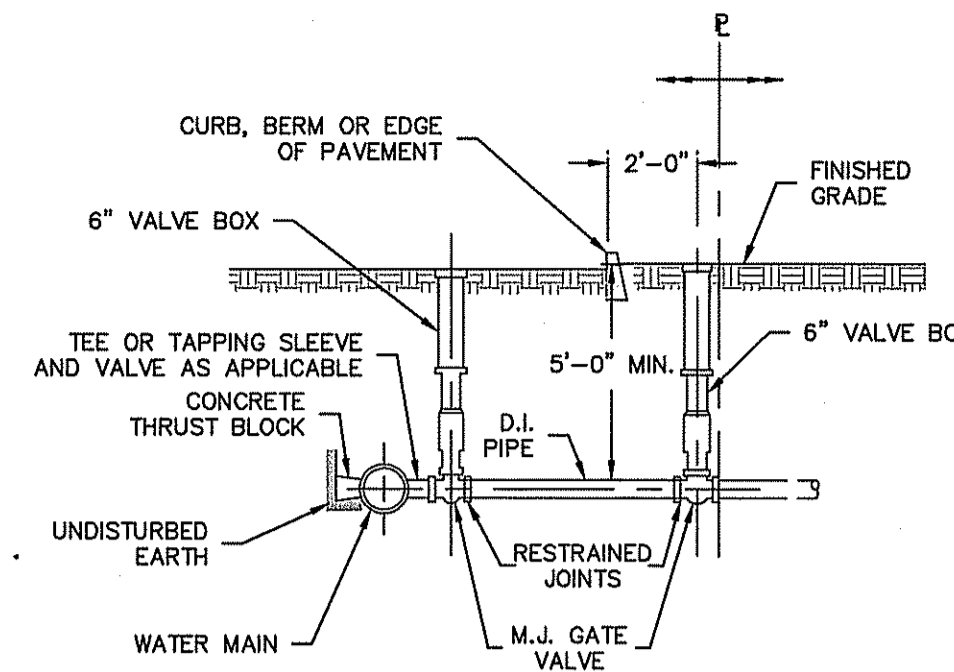


**CROSS SECTION**

**8" TRUCK WELL DRAIN DURASLOT WITH 6" SLOT OR EQUAL**  
NOT TO SCALE

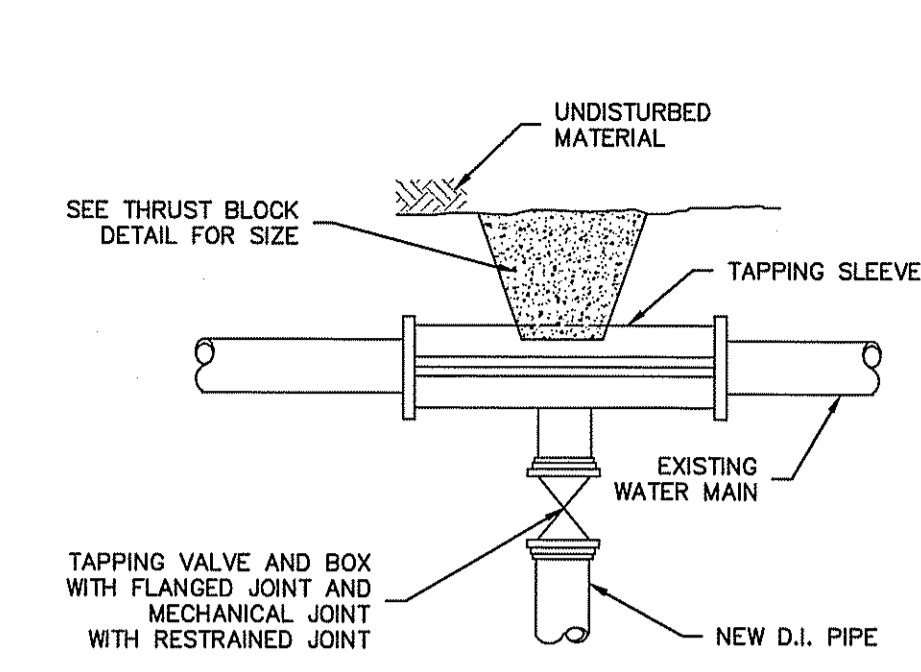
NOTE:  
FOR INVERTS OF PIPE SEE GRADING AND UTILITY PLANS. TRENCH DRAIN SHALL SLOPE AT S=0.5% MIN.

NOTE:  
MATERIALS PER RIDOT AND THE CITY OF EAST PROVIDENCE SPECIFICATIONS



**WATER SERVICE CONNECTION GREATER THAN 4 INCHES**  
NOT TO SCALE

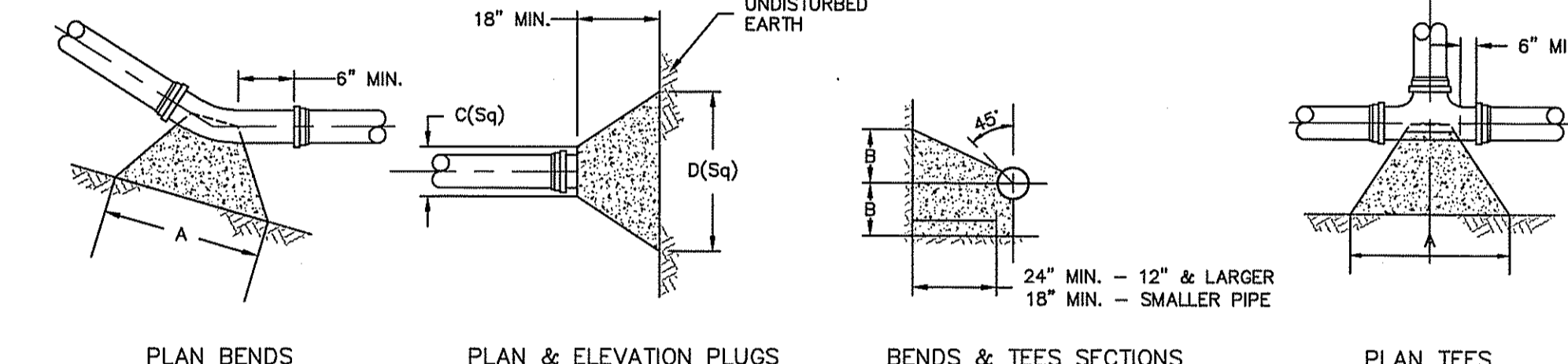
NOTE:  
TAPPING SLEEVE AND VALVE TO BE SWABBED WITH CHLORINE SOLUTION.



**WATER TAPPING SLEEVE AND VALVE**  
NOT TO SCALE

- NOTES:
1. ALL CONCRETE SHALL BE 4000 P.S.I. @ 28 DAYS
  2. CONCRETE THRUST BLOCKS SHALL BEAR AGAINST UNDISTURBED EARTH
  3. FORMS TO BE USED AS NECESSARY
  4. ALL BOLTS AND NUTS TO BE PROTECTED FROM CONCRETE AND EASILY ACCESSIBLE WHEN THRUST BLOCK INSTALLED
  5. REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF RHODE ISLAND SHALL VERIFY CALCULATIONS DURING DESIGN TO MEET CONDITIONS OF PROJECT AND THE CITY OF EAST PROVIDENCE REQUIREMENTS

SIZE	TEES		PLUGS		90° BEND		45° BEND		22.5° BEND		11.25° BEND	
	A	B	C	D	A	B	A	B	A	B	A	B
6"	20"	10"	10"	21"	24"	12"	18"	9"	13"	7"	9"	5"
8"	26"	13"	12"	26"	32"	16"	24"	12"	17"	9"	12"	6"
10"	34"	17"	14"	34"	40"	20"	30"	15"	22"	11"	15"	8"
12"	41"	20"	16"	41"	48"	24"	35"	18"	25"	13"	18"	9"
16"	54"	27"	20"	54"	64"	32"	47"	23"	34"	17"	24"	12"



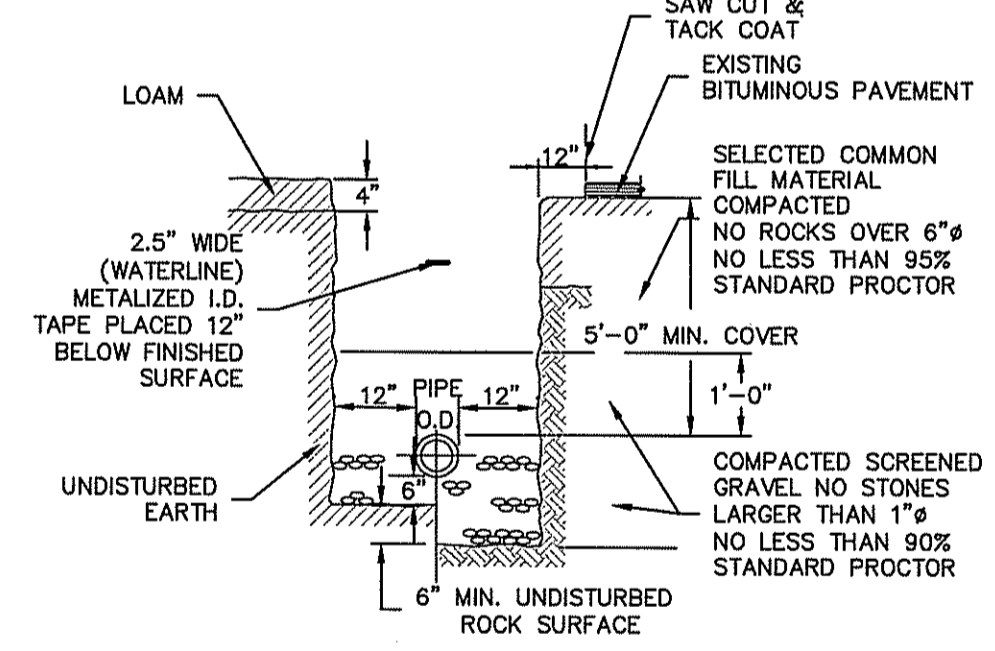
**WATER THRUST BLOCK**  
NOT TO SCALE

**SEWER LINE / WATER MAIN SEPARATION POLICY FOR DESIGN OF SANITARY SEWERS.**

- A. LATERAL PLACEMENT OF SEWERS AND WATER MAINS**
- SEWERS SHALL BE LAID AT LEAST 10 FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED WATER MAIN. THE DISTANCE SHALL BE MEASURED OUTSIDE EDGE-TO-OUTSIDE EDGE. THERE IS NO MINIMUM VERTICAL SEPARATION REQUIRED PROVIDED THE 10 FOOT HORIZONTAL SEPARATION IS MAINTAINED.
- IN CASES WHERE IT IS NOT POSSIBLE TO MAINTAIN A 10 FOOT HORIZONTAL SEPARATION, THE DIVISION MAY ALLOW DEVIATION ON A CASE BY CASE BASIS, IF SUPPORTED BY DATA FROM THE DESIGN ENGINEER. SUCH DEVIATION MAY ALLOW INSTALLATION OF THE SEWER CLOSER TO A WATER MAIN, PROVIDED THAT:
1. THE SEWER AND WATER MAIN ARE LAID IN SEPARATE TRENCHES, OR
  2. THE SEWER AND WATER MAIN MAY BE INSTALLED IN THE SAME TRENCH WITH THE WATER MAIN PLACED ON A BENCH OF UNDISTURBED EARTH, AND
  3. IN EITHER CASE, THE CROWN OF THE SEWER SHALL BE AT LEAST 18 INCHES BELOW THE INVERT OF THE WATER MAIN.
- IN SITUATIONS WHERE IT IS IMPOSSIBLE TO OBTAIN PROPER HORIZONTAL AND VERTICAL SEPARATION AS STIPULATED ABOVE, THE FOLLOWING PROTECTION SHALL BE PROVIDED:
4. ENCASEMENT OF THE SEWER PIPE IN CONCRETE (MIN. 6 INCH THICKNESS) OR A CARRIER PIPE FOR AT LEAST 10 FEET EITHER SIDE OF THE AREA NOT COMPLYING WITH THE MINIMUM HORIZONTAL AND VERTICAL SEPARATION, OR
  5. DESIGN AND CONSTRUCTION OF THE SEWER EQUAL TO WATER MAIN PIPE (CEMENT-LINED DUCTILE IRON OR OTHER AWWA-APPROVED MATERIAL FOR POTABLE WATER CONVEYANCE), AND PRESSURE TESTED IN ACCORDANCE WITH AWWA SPECIFICATIONS.

- B. SEWERS CROSSING WATER MAINS**
- SEWERS CROSSING OVER WATER MAINS SHOULD BE AVOIDED, BUT IF CONDITIONS WARRANT THIS SITUATION, THEN ADEQUATE STRUCTURAL SUPPORT SHALL BE PROVIDED FOR THE SEWER TO MAINTAIN LINE AND GRADE. SEWERS CROSSING UNDER WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL SEPARATION OF 18 INCHES BETWEEN THE INVERT OF THE WATER MAIN AND THE CROWN OF THE SEWER. THE CROSSING SHALL BE ARRANGED SO THAT SEWER JOINTS WILL BE EQUIDISTANT AND AS FAR AS POSSIBLE FROM THE WATER MAIN JOINTS.
- WHERE CONDITIONS PREVENT AN 18 INCH VERTICAL SEPARATION FROM BEING MAINTAINED, THE FOLLOWING METHODS SHALL BE SPECIFIED:
- A. THE SEWER SHALL BE DESIGNED AND CONSTRUCTED EQUAL TO WATER MAIN PIPE (CEMENT-LINED DUCTILE IRON PIPE, PVC OR OTHER AWWA APPROVED MATERIAL FOR POTABLE WATER CONVEYANCE) FOR A DISTANCE OF 12 FEET ON EACH SIDE OF THE CROSSING, MEASURED PERPENDICULAR TO THE WATER MAIN AND PRESSURE TESTED IN ACCORDANCE WITH AWWA SPECIFICATIONS, OR
  - B. EITHER THE WATER MAIN OR THE SEWER MAY BE ENCASED IN CONCRETE (MIN. 6 INCH THICKNESS) OR A CARRIER PIPE FOR A DISTANCE OF 12 FEET ON EACH SIDE OF THE CROSSING, MEASURED PERPENDICULAR TO THE WATER MAIN. THE CARRIER PIPE SHALL BE DESIGNED AND CONSTRUCTED OF MATERIALS WHICH ARE SATISFACTORY TO THE DIVISION, OR
  - C. ANY OTHER METHODS, IF SUPPORTED BY DATA FROM THE DESIGN ENGINEER, WHICH ENSURE ADEQUATE WATER TIGHTNESS AND ARE SATISFACTORY TO THE DIVISION.

**WATER TRENCH INSTALLATION IN ROCK AND SOIL**  
NOT TO SCALE



**WATER TRENCH INSTALLATION IN ROCK AND SOIL**  
NOT TO SCALE

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  
APPROVED WITH CONDITIONS  
AS SPECIFIED IN THE LETTER OF APPROVAL  
DATED FEB 26 2009 FILE # 02-2022  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE.

*W. Joseph Conroy*

THIS REGULATORY SUBMISSION SET SHALL NOT BE USED FOR CONSTRUCTION PURPOSES UNLESS STAMPED ISSUED FOR CONSTRUCTION AND SIGNED BY A DIPRETE ENGINEERING REPRESENTATIVE.

**Water, Sewer & Drainage Details**

**Baer Supply**  
Assessor's Map 301, Block 4, Lot 8  
East Providence, Rhode Island

**DiPrete Engineering**  
Two Stafford Court Cranston, RI 02920  
tel 401-943-1000 fax 401-664-6006 www.DiPrete-Eng.com

Applicant  
**Adele Beck**  
35 Angel Road Lincoln, Rhode Island 02865  
tel 401-725-8083

LEONARD R. BRADLEY, JR.  
No. 6610  
REGISTERED PROFESSIONAL ENGINEER  
CIVIL

Drawn By: B.C.G. Design By: B.C.G. Checked By: A.D.O.

SHEET 8 OF 9

**CITY OF EAST PROVIDENCE DEPARTMENT OF PUBLIC WORKS ENGINEERING DIVISION STANDARD DETAIL**

**SANITARY SEWER TRENCH DETAIL**

PIPE DIAMETER	TRENCH WIDTH (W <sub>u</sub> )	TRENCH BEDDING
4"	2.5'	6"
6"	2.5'	6"
8"	3.0'	12"
10"	3.0'	12"
12"	3.0'	12"

PIPE GREATER THAN 12"  
W<sub>u</sub>=DIA.+2.0

**CITY OF EAST PROVIDENCE DEPARTMENT OF PUBLIC WORKS ENGINEERING DIVISION STANDARD DETAIL**

**SADDLE INSTALLATION**

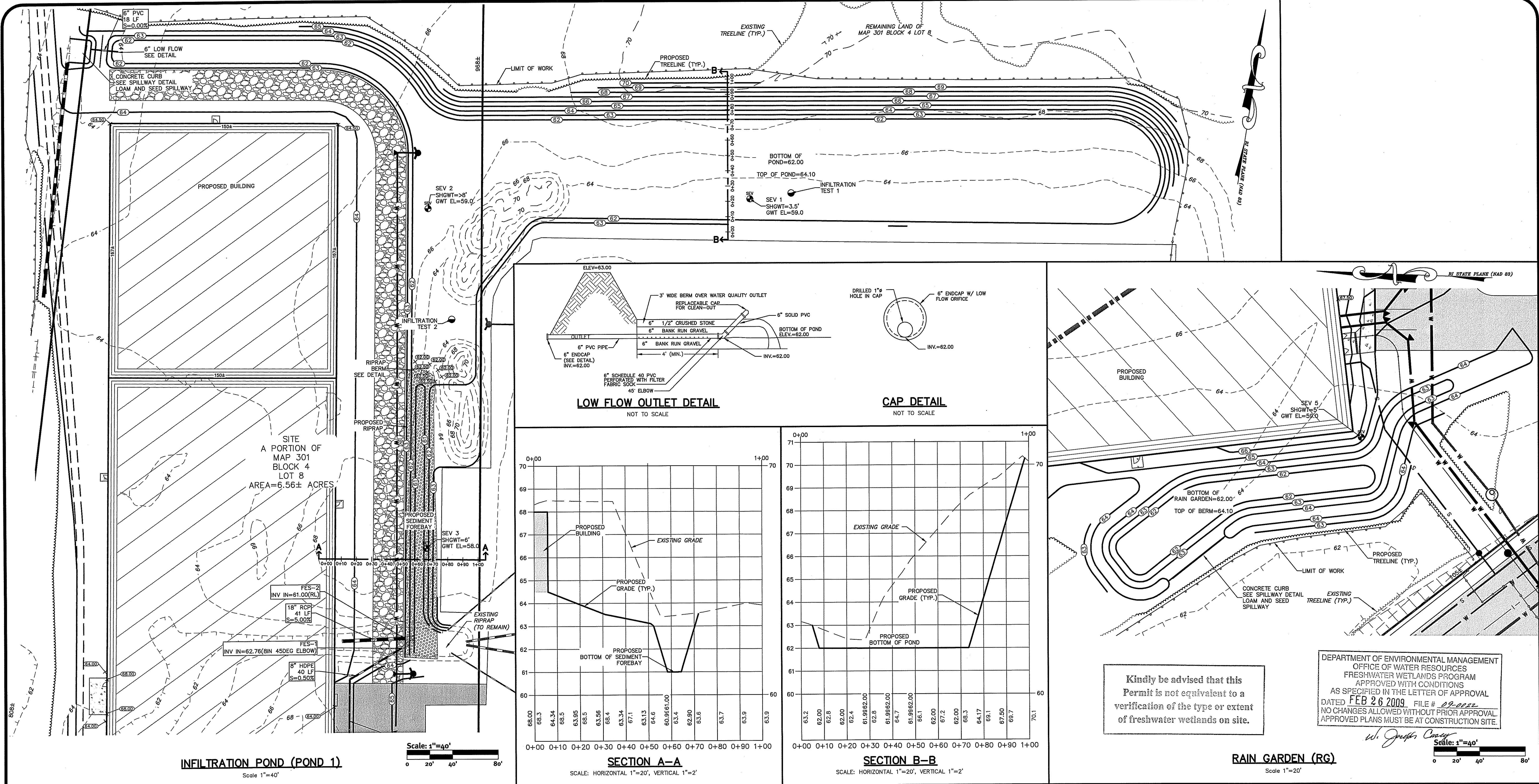
NOTE:  
MAIN TO BE ENCASED WITH 1" CONCRETE ALL AROUND

W=SIZE OF MAIN

**CITY OF EAST PROVIDENCE DEPARTMENT OF PUBLIC WORKS ENGINEERING DIVISION STANDARD DETAIL**

**SANITARY SEWER CONNECTION AND CLEANOUT**

I:\Projects\1545-001\B Baer Supply Waterfront Commission.dwg, 1/26/2009 3:13:49 PM, DWFG ePlot.pc3



SITE  
A PORTION OF  
MAP 301  
BLOCK 4  
LOT 8  
AREA=6.56± ACRES

Kindly be advised that this  
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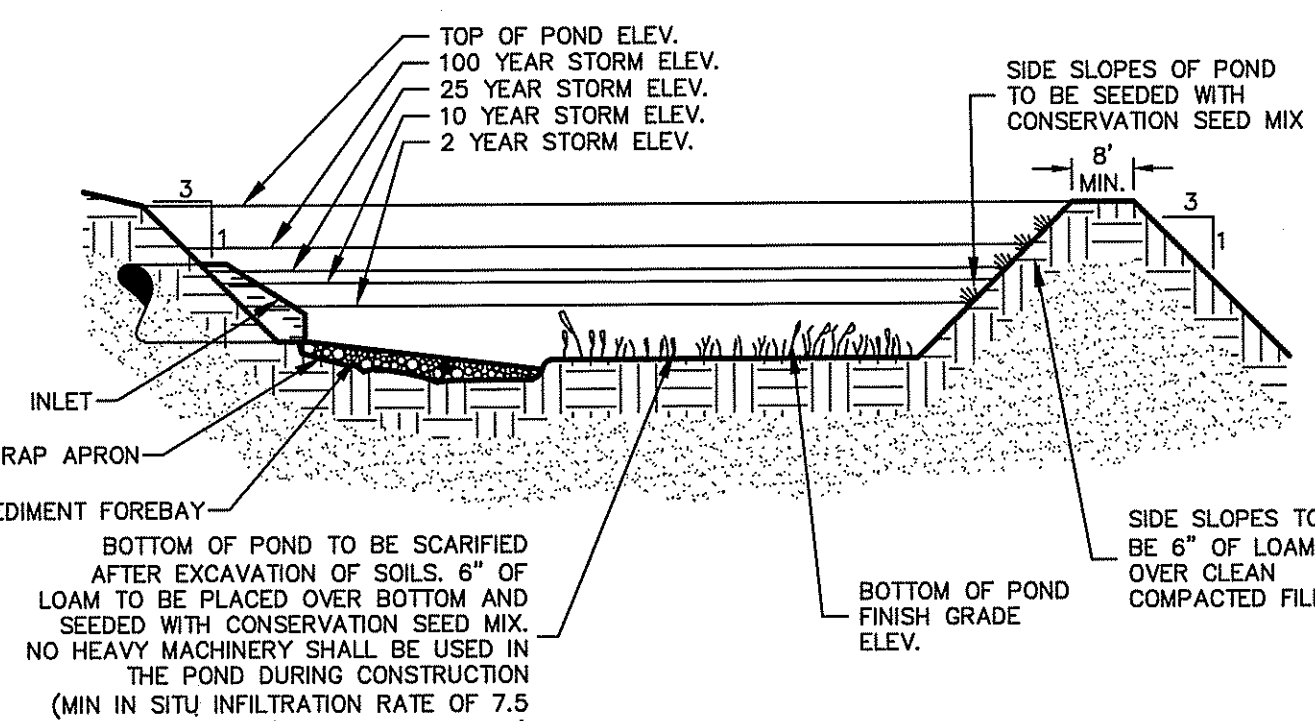
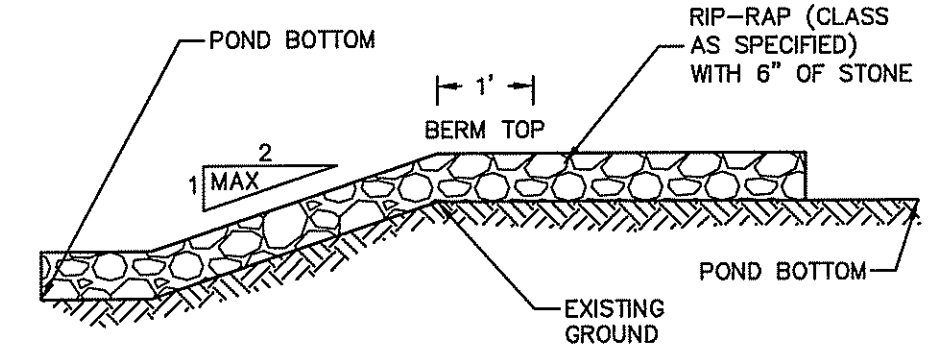
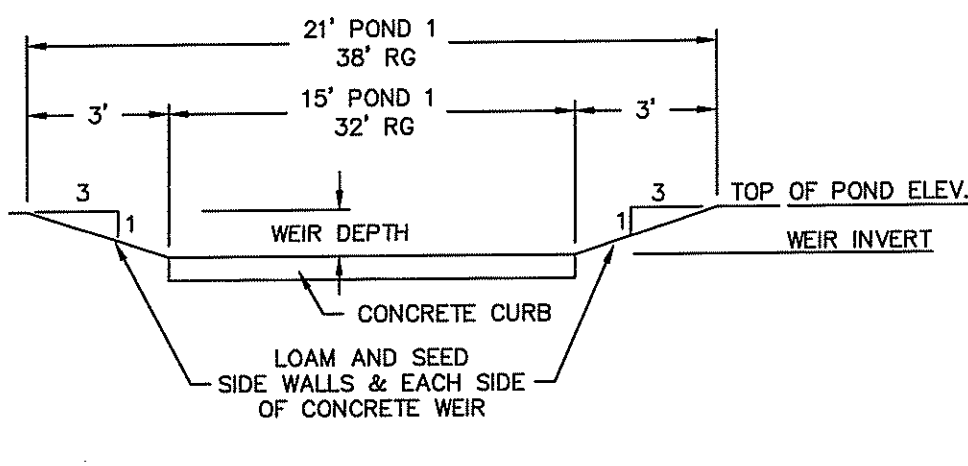
*W. Joseph Conroy*  
Scale: 1"=40'

LOCATION	TOP OF POND ELEV.	WEIR INVERT	WEIR DEPTH
POND 1	64.10	63.00	1.1'
RG	64.10	63.00	1.1'

NOTE:  
TYPICAL CROSS SECTION OF RIP-RAP BERM  
LOCATED IN POND.

LOCATION	LENGTH	TOP ELEVATION
POND 1	22'	62.50

DESCRIPTION	POND 1	RG
TOP OF POND ELEVATION	64.10	64.10
BOTTOM OF POND	62.00	62.00
100 YEAR STORM ELEVATION	63.05	63.06
25 YEAR STORM ELEVATION	62.60	62.90
10 YEAR STORM ELEVATION	62.36	62.70
2 YEAR STORM ELEVATION	62.02	62.30
SEASONAL HIGH GWT ELEVATION	59.00	59.00
BOTTOM OF POND ELEVATION FOR SEDIMENT FOREBAY	61.00	N/A



**LEONARD R. BRADLEY, R.**  
No. 6610  
REGISTERED PROFESSIONAL ENGINEER  
CIVIL

Drawn By: B.C.G. Design By: B.C.G. Checked By: A.D.O.

No.	Date	Description	By
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