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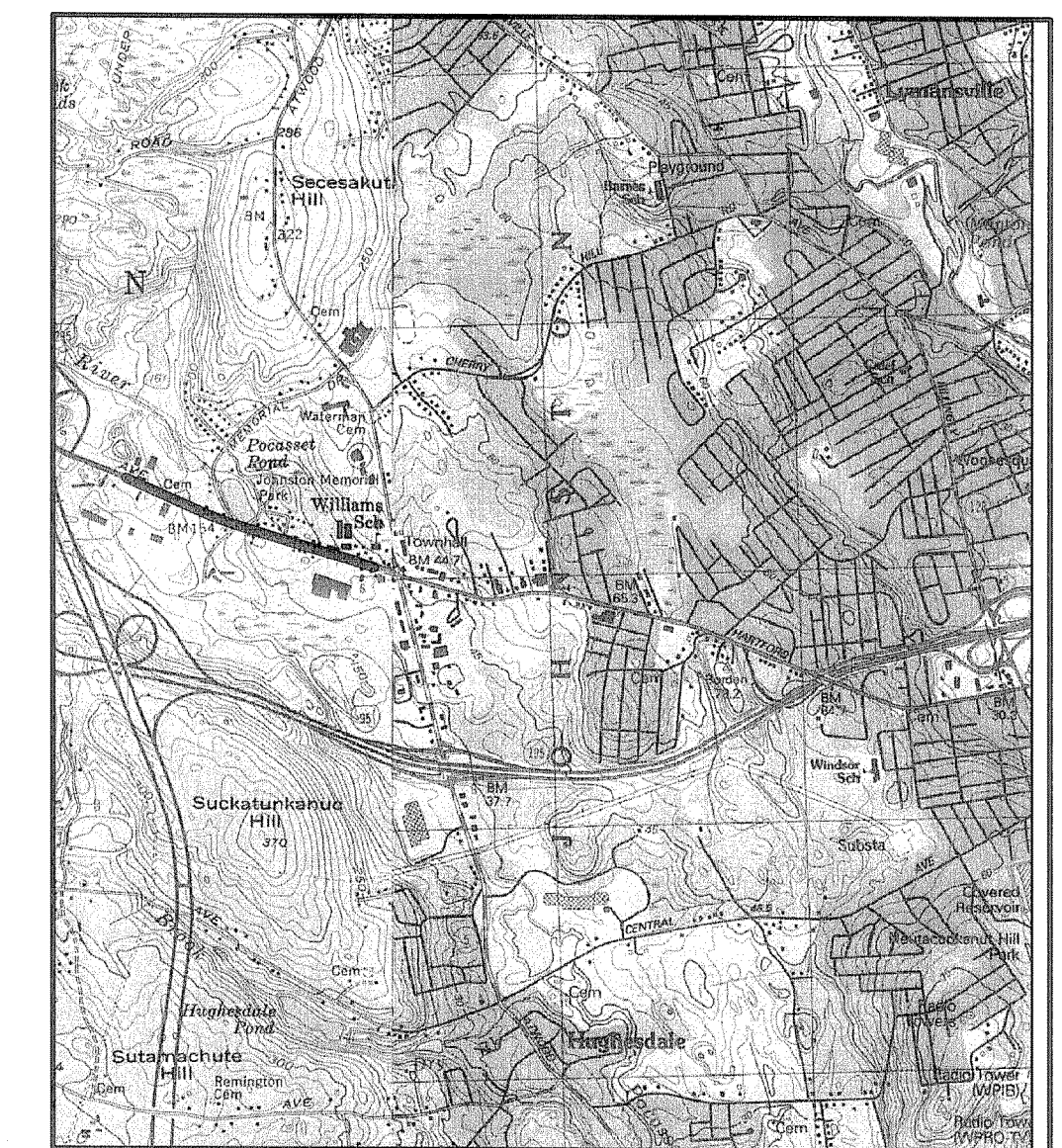
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# STATE OF RHODE ISLAND DEPARTMENT OF TRANSPORTATION

## PLAN, PROFILE AND SECTIONS OF PROPOSED STATE HIGHWAY RECONSTRUCTION OF HARTFORD AVENUE (ROUTE 6A) I-295 TO ATWOOD AVENUE

TOWN OF JOHNSTON  
COUNTY OF PROVIDENCE

R.I. CONTRACT NO. 2009-CH-009      F.A. PROJECT NO.  
0.65 MILES



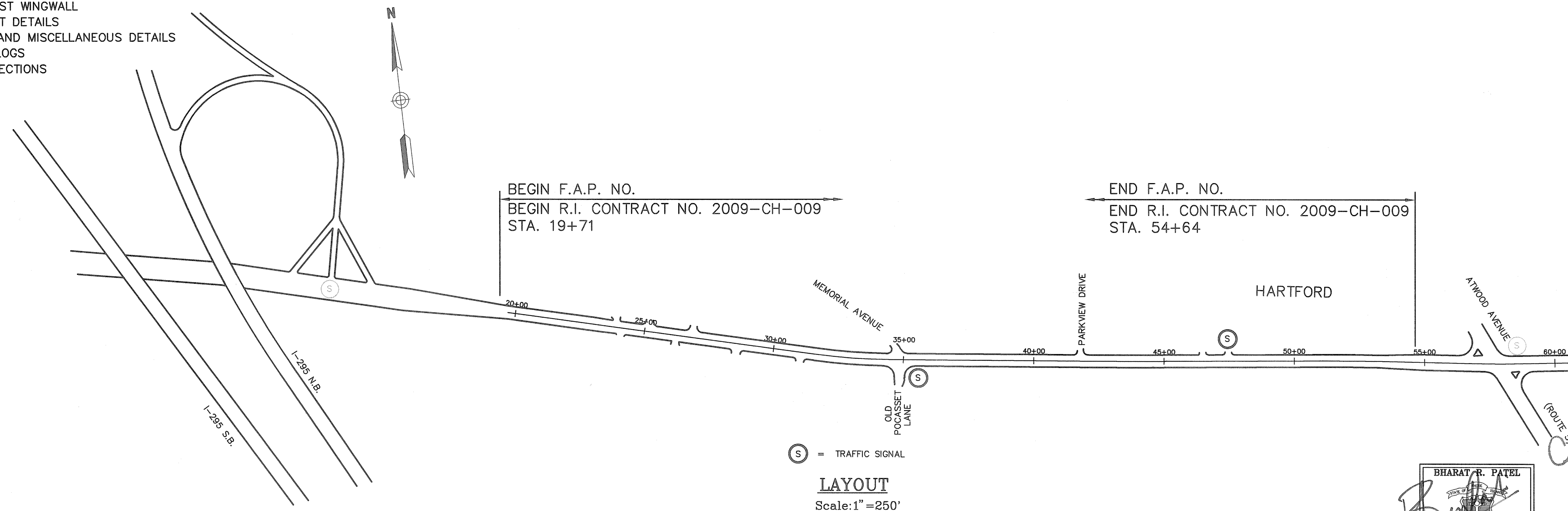
**LOCATION PLAN**  
SCALE: 1"=1/2 MILE

**PAVEMENT COMPOSITION**

2" BITUMINOUS SURFACE COURSE, TYPE I-1  
6" BITUMINOUS BASE COURSE  
12" GRAVEL BORROW SUBBASE COURSE  
(EXISTING GRAVEL BORROW TO REMAIN)

**DESIGN DESIGNATION**

2005 AADT	17,000 VPD
2030 AADT	21,800 VPD
D	60%
K	8.6%
T	2.3-2.6%
2005 DHV	1460 VPH
2015 DHV	1875 VPH
DESIGN SPEED	45 MPH

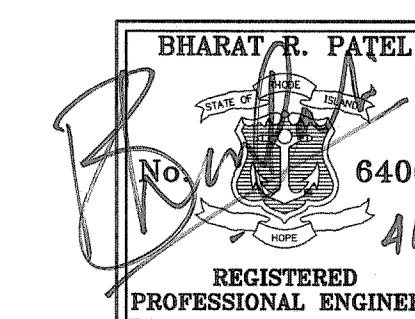


**LAYOUT**  
Scale: 1" = 250'

**SCALE OF DRAWINGS**

Plans:	1 inch = 20 feet
Profiles:	1 inch = 20 feet Horizontal
"	1 inch = 4 feet Vertical
Cross Sections	1 inch = 4 feet

**BASE OF LEVELS**  
N.G.V.D. 1929



**PERMITTING**  
MARCH, 2009

Contract Number 2009-CH-009  
Number of Sheet 1  
Total Sheets 108

<b>DEPARTMENT OF TRANSPORTATION</b> OFFICE OF ENVIRONMENTAL MANAGEMENT OFFICE OF WATER RESOURCES FRESHWATER WETLANDS PROGRAM APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROPRIATE DEPUTY CHIEF ENGINEER APPROVED CHANGES ALLOWED WITHOUT PRIOR APPROVAL APPROVED PLANS MUST BE AT CONSTRUCTION SITE	
CHIEF ENGINEER	DATE
APPROVED	
DIRECTOR	DATE
<b>DEPARTMENT OF TRANSPORTATION</b> <b>FEDERAL HIGHWAY ADMINISTRATION</b>	
APPROVED	
DIVISION ADMINISTRATOR	DATE

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**GENERAL NOTES:**

1. ANY DAMAGE TO EXISTING PAVEMENT, BRIDGES, CONDUIT, SIDEWALK, FENCES, ETC., CAUSED BY THE CONTRACTOR SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE STATE.
2. THE CONTRACTOR SHALL PLACE ALL EQUIPMENT AND MATERIAL AS FAR AWAY AS POSSIBLE FROM THE EDGE OF THE TRAVEL LANE SO AS NOT TO CAUSE A SAFETY HAZARD, IN ACCORDANCE WITH SECTION 106.06 OF THE R.I.D.O.T. STANDARD SPECIFICATION, LATEST EDITION.
3. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE EXISTING CONDITIONS ARE NOT OBSERVED BEFORE CONTROL POINTS ARE LOCATED AND CONSTRUCTION LAYOUT IS ESTABLISHED. THE CONSTRUCTION LAYOUT SHALL BE PROVIDED IN SUFFICIENT DETAIL THEREBY ENABLING HIM TO CONSTRUCT THE PROJECT IN CONFORMITY WITH THE PLANS AND SPECIFICATIONS. SURVEY WILL BE PROVIDED BY THE CONTRACTOR. THE RESIDENT ENGINEER WILL NOT AUTHORIZE CONSTRUCTION ACTIVITIES TO BEGIN UNTIL HE IS SATISFIED THAT ALL GROUND CONTROL HAS BEEN ESTABLISHED, TIED DOWN, AND DULY RECORDED IN STANDARD FIELD BOOKS.
4. ALL R.I. STD. 9.9.0 CONSTRUCTION ACCESS ROADS SHALL BE CONSTRUCTED PRIOR TO ANY ROADWAY ACCEPTING CONSTRUCTION TRAFFIC.
5. THE FREQUENCY AND APPLICATION RATES FOR THE DUST CONTROL ITEMS WILL BE AS DIRECTED BY THE ENGINEER.
6. ALL SIDEWALK AND DRIVEWAYS DESIGNATED FOR REPLACEMENT SHALL BE CUT AND MATCHED AT LOCATIONS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
7. ASPHALT EMULSION TACK COAT SHALL BE PLACED PRIOR TO PAVEMENT PLACEMENT ON THE CONCRETE BASE OR COLD PLANED PAVEMENT, AND ON ANY NEW COURSE WHICH HAS BEEN OPEN TO TRAFFIC, OR ANY NEW COURSE WHICH HAS BEEN EXPOSED FOR MORE THAN 3 DAYS, AND/OR AS DIRECTED BY THE ENGINEER. IT SHALL ALSO BE APPLIED TO VERTICAL PAVEMENT FACES BETWEEN ADJOINING PAVEMENT SECTIONS. ALL APPLICATIONS ON BOTH HORIZONTAL AND VERTICAL SURFACES SHALL BE PAID FOR UNDER THE CONTRACT UNIT BID PRICE FOR CODE 403.0300 "ASPHALT EMULSION TACK COAT."
8. THE LIMITS OF CLEARING AND SURFACE DISTURBANCE MUST BE STRICTLY ADHERED TO IN ALL AREAS. IN ADDITION TO THOSE AREAS SPECIFICALLY DESIGNATED ON THE PLANS, THE CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING AND PLACING, AT HIS OWN EXPENSE, PLANTABLE SOIL AND SEED IN AREAS WHICH ARE OUTSIDE OF THE PROJECT'S AREAS OF DISTURBANCE AND WHICH ARE IMPACTED BY CONSTRUCTION OPERATIONS INCLUDING THOSE AREAS WHERE VEHICLES, EQUIPMENT AND MATERIALS ARE STORED WITH THE PERMISSION OF THE ENGINEER.
9. UNDER NO CIRCUMSTANCE WILL THE CONTRACTOR BE ALLOWED TO STOCKPILE REMOVED PAVEMENT MATERIALS WITHIN THE PROJECT LIMITS.
10. CLEANING AND SWEEPING OF PAVEMENT WILL INCLUDE REMOVAL OF ALL PAVEMENT DEBRIS PRIOR TO THE PLACEMENT OF EACH BITUMINOUS PAVEMENT LIFT. ALL CLEANING AND SWEEPING SHALL BE DONE TO THE SATISFACTION OF THE ENGINEER.
11. PRIOR TO INSTALLATION, ALL SIGNS, MOUNTINGS AND LOCATIONS SHALL BE APPROVED OR MODIFIED BY THE ENGINEER.
12. THE COORDINATE SYSTEM IS THE R.I. STANDARD GRID SYSTEM, NAD 83. THE VERTICAL CONTROL IS NGVD 29.
13. PAVEMENT OPERATIONS FOR CURBED SECTIONS: IN AREAS WHERE CURBING IS SET TO FINISH LINE AND GRADE, THE CONTRACTOR WILL NOT BE REQUIRED TO UTILIZE THE SENSOR AND SKY-TYPE DEVICE FOR AUTOMATIC GRADE CONTROL, BUT WILL BE ALLOWED TO MANUALLY ADJUST THE BITUMINOUS PAVER FOR CONTROLLING GRADE.
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL ROADWAYS FREE OF DEBRIS RESULTING FROM THEIR CONSTRUCTION OPERATIONS. ALL DEBRIS SHALL BE REMOVED TO THE SATISFACTION OF THE ENGINEER AT NO ADDITIONAL COST TO THE STATE.
15. NO FUEL STORAGE, VEHICLE REFUELING, OR EQUIPMENT STORAGE SHALL TAKE PLACE IN DESIGNATED WETLANDS, NOR WITHIN 100' OF ANY WATER BODY. THIS REQUIREMENT SHALL NOT SUPERSEDE ANY FEDERAL, STATE OR LOCAL LAW, ORDINANCE, RULE OR REGULATION THAT APPLIES TO THE SAME, UNLESS THIS REQUIREMENT IS MORE STRINGENT THAN SAID LAW, ORDINANCE, RULE OR REGULATION.
16. THE CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE THAT AT THE END OF FINAL PAVING OPERATIONS, FLOW TO EXISTING DRAINAGE STRUCTURES HAS BEEN REESTABLISHED AND THAT NO ISOLATED DEPRESSIONS REMAIN. THERE SHALL BE NO SEPARATE PAYMENT FOR THIS PROVISION; IT SHALL BE CONSIDERED INCIDENTAL TO PAVING AND COLD PLANING OPERATIONS.
17. ALL EMBANKMENTS SHALL BE PLACED IN HORIZONTAL LAYERS NOT EXCEEDING 12" (AFTER COMPACTION) AND SHALL BE COMPACTED AS SPECIFIED BEFORE THE NEXT LAYER IS PLACED. ALSO, EMBANKMENT CONSTRUCTION SHALL CONFORM TO SECTION 202.03.2 OF THE R.I.D.O.T. STANDARD SPECIFICATIONS, LATEST EDITION.
18. IF THIS PROJECT IS ON A HURRICANE EVACUATION AND DIVERSIONARY ROUTE, AS DESIGNATED ON THE COVERSHEET, THE CONTRACTOR IS ADVISED THAT UPON 12 (TWELVE) HOURS NOTICE THE ROADWAY SHALL BE OPEN TO EVACUEES AND EMERGENCY PERSONNEL. ANY EXTRA WORK NECESSARY TO COMPLY WITH THIS REQUIREMENT WILL BE REIMBURSED UNDER FORCE ACCOUNT PROCEDURES.
19. THE CONTRACTOR SHALL READ, BECOME FAMILIAR WITH, AND ADHERE TO ALL OF THE PROVISIONS, CONDITIONS, AND STIPULATIONS STATED IN THE ENVIRONMENTAL APPROVALS ISSUED FOR THE PROJECT FROM THE DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (RIDEM), AND/OR THE ARMY CORPS OF ENGINEERS (ACOE), AND/OR THE COASTAL RESOURCES MANAGEMENT COUNCIL (CRMC). COPIES OF EACH OF THESE PERMITS ARE INCLUDED IN THE CS PAGES OF THE CONTRACT DOCUMENTS. ALL COSTS ASSOCIATED WITH THESE CONDITIONS SHALL BE CONSIDERED INCIDENTAL TO THE CONSTRUCTION AND INCLUDED WITH THE COST FOR THE ASSOCIATED BID ITEM(S).
20. FOR ALL PROJECTS INVOLVING KNOWN SITE REMEDIATION ISSUES, THE CONTRACTOR SHALL READ, BECOME FAMILIAR WITH, AND ADHERE TO ALL OF THE CONSTRUCTION RELATED PROVISIONS, CONDITIONS, AND STIPULATIONS OF ANY REMEDIAL PLANS DEVELOPED FOR THE PROJECT. COPIES OF THESE DOCUMENTS ARE INCLUDED IN THE CS PAGES OF THE CONTRACT DOCUMENTS. ALL COSTS ASSOCIATED WITH COMPLIANCE WITH THESE DOCUMENTS SHALL BE CONSIDERED INCIDENTAL TO THE CONSTRUCTION AND INCLUDED WITH THE COST FOR THE ASSOCIATED BID ITEM(S).
21. NO UNPROTECTED CONSTRUCTED FEATURE MAY PROJECT MORE THAN 4 INCHES ABOVE THE FINISHED GRADE OF A TRAVERSABLE SLOPE IN A CLEAR ZONE, E.G. HEADWALL, DRAINAGE INLET, ETC.
22. THE REMAINING SECTION OR STUB OF A BREAKAWAY BASE MAY NOT PROJECT MORE THAN 4 INCHES ABOVE THE FINISHED GRADE OF A TRAVERSABLE SLOPE IN A CLEAR ZONE, E.G. SIGN POSTS, LIGHT POLES, FIRE HYDRANTS, ETC.

**DRAINAGE AND EROSION CONTROL NOTES:**

1. FOR ALL PROJECTS WITH AT LEAST ONE(1) ACRE OF SOIL DISTURBANCE. R.I.D.O.T. IS REQUIRED TO DEVELOP AND ENFORCE A SITE SPECIFIC STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IN ORDER TO REMAIN IN COMPLIANCE WITH THE RIPDES GENERAL PERMIT FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL READ, BECOME FAMILIAR WITH, AND ADHERE TO ALL OF THE PROVISIONS, CONDITIONS, AND STIPULATIONS OF THE GENERAL PERMIT AND THE SITE SPECIFIC SWPPP FOR THIS PROJECT. COPIES OF THESE DOCUMENTS ARE INCLUDED IN THE CS PAGES OF THE CONTRACT DOCUMENTS. ALL COSTS ASSOCIATED WITH ADHERENCE TO THE SWPPP SHALL BE CONSIDERED INCIDENTAL TO THE CONSTRUCTION AND INCLUDED WITH THE COST FOR THE ASSOCIATED BID ITEM(S).
2. NO UNDISTURBED AREAS SHALL BE CLEARED OF EXISTING VEGETATION AFTER OCTOBER 15 OF ANY CALENDAR YEAR OR DURING ANY PERIOD OF FULL OR LIMITED WINTER SHUTDOWN. ALL DISTURBED SOILS EXPOSED PRIOR TO OCTOBER 15 OF ANY CALENDAR YEAR SHALL BE SEEDED OR PROTECTED BY THAT DATE. ANY SUCH AREAS THAT DO NOT HAVE ADEQUATE VEGETATIVE STABILIZATION, AS DETERMINED BY THE RESIDENT ENGINEER OR ENVIRONMENTAL INSPECTOR, BY NOVEMBER 15 OF ANY CALENDAR YEAR, MUST BE STABILIZED THROUGH THE USE OF EROSION CONTROL MATTING OR HAY MULCH, IN ACCORDANCE WITH SPECIFICATIONS CONTAINED WITHIN THE R.I. SOIL EROSION AND SEDIMENT CONTROL HANDBOOK. IF WORK CONTINUES WITHIN ANY OF THESE AREAS DURING THE PERIOD FROM OCTOBER 15 THROUGH APRIL 15, CARE MUST BE TAKEN TO ENSURE THAT ONLY THE AREA REQUIRED FOR THAT DAY'S WORK IS EXPOSED, AND ALL ERODIBLE SOIL MUST BE REESTABLISHED WITHIN 5 WORKING DAYS. ANY WORK TO CORRECT PROBLEMS RESULTING FROM FAILURE TO COMPLY WITH THIS PROVISION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THERE WILL BE NO SEPARATE PAYMENT FOR THIS PROVISION, IT SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION OPERATIONS. STABILIZATION OF ONE FORM OR ANOTHER AS DESCRIBED ABOVE SHALL BE ACHIEVED WITHIN 2 WEEKS OF FINAL GRADING.
3. STOCKPILES OF MATERIAL SHALL NOT BE LOCATED WITHIN REGULATED WETLANDS OR BUFFER ZONE AREAS. THEY SHALL HAVE SIDE SLOPES NO GREATER THAN 30% AND STOCKPILES OF ERODABLE MATERIAL SHALL ALSO BE SEEDED AND RINGED WITH R.I. STD. 9.1.0 TO STABILIZE.
4. IF THE PLANS INCLUDE SPECIFIC AREAS FOR PLACEMENT OF CONSTRUCTION DEWATERING BASINS AND/OR EQUIPMENT AND MATERIALS STORAGE AND STOCKPILING, AND IF THE CONTRACTOR ELECTS TO UTILIZE ANY OTHER AREAS FOR THESE PURPOSES, THIS SHALL BE APPROVED BY THE ENGINEER ONLY AFTER OBTAINING ANY NECESSARY PERMITS AND/OR PERMIT MODIFICATIONS FROM THE APPROPRIATE REGULATORY AUTHORITY(IES). ANY PERMITTING REQUIREMENTS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE ACCOMPLISHED AT NO COST TO THE STATE. THE ENGINEER WILL COORDINATE SUBMISSION OF ANY REQUIRED PERMIT APPLICATION MATERIALS WITH THE R.I.D.O.T. OFFICE OF ENVIRONMENTAL PROGRAMS.
5. JUTE MESH SHALL BE USED TO STABILIZE PLANTABLE SOIL AND/OR LOAM IN ALL DITCHES, ON ALL SLOPES ADJACENT TO WETLANDS AND WETLAND PERIMETERS, AND ON ALL SLOPES WITHIN WATER QUALITY BASINS. JUTE MESH IN DITCHES SHALL EXTEND TO AN ELEVATION 2 FEET ABOVE THE BOTTOM OF THE DITCH.
6. SEEDING ON ALL SLOPES 3 TO 1 OR STEEPER SHALL CONSIST OF THE FOLLOWING APPLICATIONS UNLESS CHANGED IN THE CONTRACT.
  - a. SEEDING TYPE I.
  - b. ADHESIVE MULCH STABILIZER
7. UNVEGETATED SLOPES SHALL NOT BE UNATTENDED OR EXPOSED FOR PERIODS IN EXCESS OF 2 WEEKS OR THROUGH THE INACTIVE WINTER SEASON.
8. PRIOR TO DRAINAGE AND UTILITY CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE LOCATION (HORIZONTAL AND VERTICAL) OF ALL EXISTING PIPES AND/OR STRUCTURES WHICH ARE TO BE CONNECTED. ANY VARIATION FOUND FROM THE PLANS MUST BE BROUGHT TO THE ENGINEER'S ATTENTION PRIOR TO DRAINAGE AND UTILITY CONSTRUCTION. WORK CAN COMMENCE ONLY UPON THE ENGINEER'S AUTHORIZATION.
9. ALL DRAINAGE AND UTILITY STRUCTURES WITHIN THE PAVED ROADWAY SHALL BE ADJUSTED TO GRADE WITH THE SURROUNDING PAVEMENT PRIOR TO THE WINTER SHUTDOWN.
10. DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING DRAINAGE AND RUNOFF FLOW DURING STORMS AND PERIODS OF RAINFALL THROUGHOUT THE WORK AREA.
11. CATCH BASIN RIM GRADES NOTED ON PLANS ARE DEPRESSED 0.1' LOWER THAN THE GUTTER GRADE. RIM ELEVATIONS SHOWN ARE FINAL GRADES. THE CONTRACTOR SHALL PLACE FRAMES AND GRATES 0.1' BELOW THE GRADE CONSTRUCTED IN THIS CONTRACT OR AS DIRECTED BY THE ENGINEER.
12. PROVISIONS FOR CLEARING TO ACCESS OUTFALLS DURING THE CLEANING AND FLUSHING OF THE CLOSED DRAINAGE SYSTEM SHALL BE KEPT TO A MINIMUM.
  - a. ANY VEGETATIVE CLEARING SHALL BE LIMITED TO BRUSH AND TREES LESS THAN 3" DIAMETER.
  - b. NO HEAVY EQUIPMENT MAY ENCRONCH UPON VEGETATED PERIMETER OR RIVERBANK WETLANDS AS WELL AS BIOLOGICAL WETLANDS.
13. THE CONTRACTOR SHALL INSTALL ALL EROSION CONTROL DEVICES FOR OUTLET PROTECTION PRIOR TO CLEANING AND FLUSHING STORM WATER DRAINAGE. EROSION CONTROL DEVICES SHALL REMAIN IN PLACE UNTIL ALL FLUSHED SEDIMENTS ARE REMOVED. AT ALL OUTFALL LOCATIONS WHERE PIPES ARE TO BE CLEANED AND FLUSHED, OUTLET PROTECTION (R.I. STD. 9.1.0 OR 9.3.0) SHALL BE INSTALLED TO TRAP SEDIMENTS. THESE SEDIMENTS SHALL THEN BE REMOVED AND DISPOSED OF LEGALLY BEFORE THE OUTLET PROTECTION DEVICES ARE REMOVED. IF OUTLET PROTECTION AT THE OUTFALL IS NOT FEASIBLE, THEN THE OUTLET PIPE OF THE LAST DRAINAGE STRUCTURE TO BE CLEANED SHALL BE PLUGGED TO CAPTURE ALL MATERIALS FLUSHED FROM PIPES. AFTER THE MATERIALS ARE REMOVED FROM THE DRAINAGE STRUCTURE, THE OUTLET SHALL BE UNPLUGGED TO RESUME NORMAL FUNCTIONING.
14. R.I. STD. 9.8.0 BALED HAY INLET PROTECTION SHALL BE INSTALLED AT ALL CATCH BASINS AND INLETS WHENEVER SUBBASE IS EXPOSED, AND SHALL REMAIN IN PLACE UNTIL THE ABUTTING GROUND SURFACES ARE STABILIZED.
15. WHERE BALED HAY INLET PROTECTION AND SILT FENCES ARE USED AT CATCH BASINS, THEY SHALL BE REMOVED AT THE END OF THE PROJECT OR AS DIRECTED BY THE ENGINEER IN ORDER TO PREVENT CLOGGING OF THE INLET.

**DRAINAGE AND EROSION CONTROL NOTES (CONTINUED):**

16. DETENTION AND RETENTION BASINS MAY BE ROUGH GRADED AND STABILIZED WITH VEGETATION AND/OR OTHER EROSION CONTROL MEASURES AS REQUIRED BY THE ENGINEER PRIOR TO USE AS TEMPORARY SEDIMENTATION BASINS DURING PROJECT CONSTRUCTION. FINAL BASIN CONSTRUCTION SHALL NOT COMMENCE UNTIL ALL SOURCES OF SEDIMENT HAVE BEEN ELIMINATED, FINAL ROADSIDE VEGETATION IS ESTABLISHED AND USE OF TEMPORARY BASINS IS NO LONGER REQUIRED AS DIRECTED BY THE ENGINEER. ANY ISSUES RELATING TO EROSION AND/OR SEDIMENT TRANSPORT INTO WETLAND AREAS RESULTING FROM SUCH USE OF SEDIMENTATION BASINS DURING CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. ANY CORRECTIVE ACTION REQUIRED TO RESOLVE SUCH ISSUES SHALL BE COMPLETED BY THE CONTRACTOR.
17. THE TOE OF ANY FILL SLOPE IS TO REMAIN AT LEAST 1' INSIDE OF ALL EROSION CONTROLS. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR COVER ANY PORTION OF THE EROSION CONTROL MEASURES WITH MATERIAL. ANY MATERIAL THAT IS PLACED ON ANY EROSION CONTROLS BY THE CONTRACTOR, OR ANY AGENT OF THE CONTRACTOR, SHALL BE IMMEDIATELY REMOVED BY THE CONTRACTOR, AND ANY NECESSARY REPAIRS TO THE EROSION CONTROLS ACCOMPLISHED.
18. PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES, EROSION AND SEDIMENTATION CONTROLS SHALL BE INSTALLED AT THOSE AREAS INDICATED ON THE PLANS. CLEARING MAY OCCUR PRIOR TO INSTALLATION OF SUCH CONTROLS, HOWEVER NO GRUBBING, GRADING, FILLING, OR OTHER SOIL DISTURBANCE SHALL OCCUR PRIOR TO INSTALLATION. THE LIMITS OF CLEARING AND SURFACE DISTURBANCE MUST BE STRICTLY ADHERED TO IN ALL AREAS.
19. ALL HAY BALES, SILT FENCE OR TEMPORARY PROTECTION SHALL REMAIN IN PLACE UNTIL AN ACCEPTABLE STAND OF GRASS IS ESTABLISHED. IF NEEDED, TEMPORARY SEEDING CAN HELP TO MINIMIZE EROSION. TEMPORARY SEED WILL CONFORM TO R.I.D.O.T. STANDARD TEMPORARY SEED MIX.
20. THE CONTRACTOR MUST REPAIR AND/OR RESEED ANY AREAS THAT DO NOT DEVELOP WITHIN THE PERIOD OF ONE YEAR AND HE SHALL DO SO AT NO ADDITIONAL EXPENSE TO THE STATE.
21. THE NORMAL ACCEPTABLE SEASONAL SEEDING DATES ARE SPECIFIED IN SUBSECTION L.02.03 OF THE R.I.D.O.T. STANDARD SPECIFICATIONS, LATEST EDITION.
22. ADDITIONAL EROSION CONTROLS, SHALL BE INSTALLED AS DIRECTED BY THE RESIDENT ENGINEER. THESE ADDITIONAL ITEMS WILL BE PAID AT THE UNIT PRICE FOR THAT BID ITEM.

**UTILITY NOTES:**

1. EXISTING UTILITIES HAVE BEEN SHOWN ON THE PLANS USING THE BEST AVAILABLE INFORMATION AND ARE APPROXIMATE. BUILDING SERVICE CONNECTIONS (ELECTRIC, GAS, TELEPHONE, WATER AND SANITARY) ARE NOT SHOWN. CONTRACTOR IS TO ASSUME SERVICES ARE PRESENT TO ALL BUILDINGS.
2. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL EXISTING DRAINAGE AND UTILITIES BOTH UNDERGROUND AND OVERHEAD BEFORE EXCAVATION BEGINS IN ACCORDANCE WITH THE "DIG SAFE LAW" ENACTED BY R.I. LEGISLATURE BILL NO. 795-291, WHICH BECAME EFFECTIVE JULY 1, 1979 AND BY CONTACTING THE INDIVIDUAL UTILITY COMPANIES. EXCAVATION SHALL BE IN ACCORDANCE WITH ALL STATUTES, ORDINANCES, RULES AND REGULATIONS OF ANY APPLICABLE CITY, TOWN, STATE OR FEDERAL AGENCY. THE CONTRACTOR SHOULD UNDERSTAND THAT NOT ALL UTILITIES SUBSCRIBE TO THE DIG SAFE PROGRAM. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY ALL UTILITY COMPANIES AND ENSURE THAT ALL UTILITIES HAVE BEEN MARKED PRIOR TO COMMENCING THEIR WORK. ANY DAMAGE TO EXISTING UTILITIES MARKED IN THE FIELD, OR AS A RESULT OF FAILING TO CONTACT THE APPROPRIATE UTILITY COMPANY, SHALL BE REPAIRED OR REPLACED AT NO ADDITIONAL COST TO THE STATE.
3. ALL EXISTING UTILITIES TO BE ABANDONED SHALL BE CAPPED.
4. EXISTING WATER SERVICES SHALL BE RECONNECTED TO THE NEW WATER MAINS.
5. UTILITY SERVICE CONNECTIONS SHALL BE MAINTAINED TO ALL EXISTING FACILITIES TO REMAIN.
6. FIRE HYDRANTS SHALL NOT BE REMOVED FROM SERVICE WITHOUT WRITTEN AUTHORIZATION FROM THE FIRE DEPARTMENT OR THE WATER AUTHORITY.
7. ALL NEW WATER LINES SHALL BE DISINFECTED TO THE SATISFACTION OF THE WATER AUTHORITY IN ACCORDANCE WITH THE SPECIFICATIONS.
8. ALL UTILITY POLE RELATED WORK SHALL BE BY OTHERS.

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DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF WATER RESOURCES  
 FRESHWATER WETLANDS PROGRAM  
 APPROVED WITH CONDITIONS  
 AS SPECIFIED IN THE LETTER OF APPROVAL  
 DATED APR 21 2009 FILE# 04-0551  
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE

REVISIONS			RHODE ISLAND DEPARTMENT OF TRANSPORTATION	
NO.	DATE	BY		
			RECONSTRUCTION OF <b>HARTFORD AVENUE</b>	
			JOHNSTON	RHODE ISLAND
			<b>STANDARD NOTES – 1</b>	
			VANASSE HANGEN BRUSTLIN, INC. TRANSPORTATION LAND DEVELOPMENT ENVIRONMENTAL SERVICES PROVIDENCE, R.I.	
			CHECKED BY _____	DATE _____
			SCALE _____	

**LANDSCAPE NOTES:**

- ALL PLANT MATERIAL MUST BE TAGGED AT THE NURSERY IN ACCORDANCE WITH THE R.I.D.O.T. STANDARD SPECIFICATIONS, LATEST EDITION.
- ALL PLANT SUBSTITUTIONS AND/OR CHANGES IN PLANT LOCATION MUST BE APPROVED IN ACCORDANCE WITH THE R.I.D.O.T. STANDARD SPECIFICATIONS, LATEST EDITION.
- ALL PLANT MATERIAL IS TO BE FIELD LOCATED BY A REPRESENTATIVE FROM THE R.I.D.O.T. LANDSCAPE ARCHITECTURE UNIT.
- A LANDSCAPE REPRESENTATIVE MUST BE ON SITE TO APPROVE ALL TRIMMING AND CLEARING NECESSARY TO COMPLETE THE WORK AS SHOWN ON THE PLANS.
- ANY TOPSOIL USED AS PLANTABLE SOIL 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 SECTION M18 OF THE R.I.D.O.T. STANDARD SPECIFICATIONS, LATEST EDITION.

**STRUCTURAL NOTES FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS:**

**GENERAL**

- ALL SUPPORT DESIGNS AND ASSOCIATED SHOP DRAWING REVIEWS SHALL BE IN CONFORMANCE WITH THE LATEST EDITION, OF THE AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS (THE "SPECIFICATIONS"), INCLUDING THE LATEST INTERIM SPECIFICATIONS, EXCEPT AS MODIFIED HEREIN.

**CONSTRUCTION DRAWINGS AND DETAILS**

- THE FOLLOWING NOTES SHALL BE INCLUDED ON ALL PLANS AND/OR SHOP DRAWINGS IN REFERENCE TO ANCHOR BOLTS:
  - "PRETENSIONING OF ALL ANCHOR NUTS IS REQUIRED, AND SHALL BE ACCOMPLISHED BY TIGHTENING TO 1/6TH TURN BEYOND THE SNUG-TIGHT POSITION."
  - "THE MAXIMUM CLEARANCE BETWEEN THE BOTTOM OF THE LEVELING NUTS AND THE TOP OF THE CONCRETE IS CRITICAL AND SHALL NOT EXCEED THE AMOUNT SPECIFIED ON THIS DRAWING."
- THE USE OF GROUT UNDER BASE PLATES SHALL GENERALLY NOT BE PERMITTED. IF SPECIFIC CONDITIONS WARRANT ITS USE, THE GROUT SHALL NOT BE CONSIDERED LOAD CARRYING; LOADS SHALL BE DIRECTLY SUPPORTED BY THE ANCHOR BOLTS. ADEQUATE DRAINAGE SHALL BE PROVIDED.
- THE DAMPENING EFFECTS OF VIBRATION MITIGATION DEVICES SHALL NOT BE CONSIDERED IN THE DESIGN OF STRUCTURAL SUPPORTS FOR SIGNS AND TRAFFIC SIGNALS. IF THE CONTRACTOR CHOOSES TO USE THESE DEVICES FOR WARRANTY PURPOSES, THE TYPE OF DEVICES PROPOSED SHALL BE APPROVED BY THE DEPARTMENT PRIOR TO FABRICATION OF SUPPORTS.

**TRAFFIC SIGNAL NOTES:**

- ALL SALVAGED TRAFFIC SIGNAL EQUIPMENT SHALL BE DELIVERED TO THE R.I.D.O.T. MAINTENANCE HEADQUARTERS, 360 LINCOLN AVENUE, WARWICK, RHODE ISLAND, 02888.
- BACK PLATES SHALL BE INSTALLED ON ALL TRAFFIC SIGNAL HEADS.
- THE CONTRACTOR SHALL SUPPLY AND INSTALL ON THE UPPER LEFT HAND CORNER OF THE BACK OF THE CONTROLLER CABINET DOOR A LAMINATED INTERSECTION GRAPHIC AND TABLE DEPICTING THE TRAFFIC DETECTOR RELAY CHANNEL ASSIGNMENTS. THE DIAGRAM SHALL BE A GRAPHIC OF THE INDIVIDUAL INTERSECTION ORIENTED SIMILAR TO THE PLANS SHOWING THE LOCATIONS OF EACH OF THE LOOP DETECTORS. THE DIAGRAM SHALL, AT A MINIMUM, INCLUDE DETECTOR NUMBERS, STREET NAME LABELS, NORTH ARROW, AND CONTROLLER CABINET LOCATION. THE ASSIGNMENT INFORMATION SHALL BE INCLUDED IN A TABLE WHICH SHALL INCLUDE, AT A MINIMUM, THE APPROACH NAME, DETECTOR NUMBER, TERMINAL NUMBER, DETECTOR RACK SLOT NUMBER, RELAY NUMBER, RELAY CHANNEL NUMBER, AND PHASE ASSOCIATED WITH EACH DETECTOR.
- THE TRAFFIC CONTROLLER SHALL BE ORIENTED SO THAT THE CABINET DOOR IS FACING THE SIDEWALK, UNLESS OTHERWISE STATED ON PLANS.
- TRAFFIC CONTROLLER CABINETS, UNLESS OTHERWISE NOTED, SHALL BE NEMA TS2 TYPE 1 CABINET SIZE 6 ("P" TYPE) WITH NOMINAL DIMENSIONS OF 52"Hx44"Wx24"D.
- ALL DELAY AND EXTENSION TIMES, AS CALLED FOR ON THE PLANS, FOR PROPOSED LOOP DETECTORS SHALL BE PROGRAMMED IN THE TRAFFIC SIGNAL CONTROLLER AND NOT THE DETECTOR RELAY.
- A BARE GROUND WIRE SHALL BE PLACED IN ALL PVC CONDUITS AND SHALL BE BONDED TO GROUND RODS IN ACCORDANCE WITH SECTION T.03 OF THE RHODE ISLAND DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
- FINAL PLACEMENT OF SIGNAL HEADS, DETECTORS, STOP LINES AND CROSSWALKS TO BE DETERMINED BY THE ENGINEER IN THE FIELD DURING CONSTRUCTION ACCORDING TO OBSERVED INTERSECTION CHARACTERISTICS BY THE ENGINEER.
- A 2' MINIMUM BUFFER SHALL BE PROVIDED BETWEEN THE CURB AND ALL LATERAL OBSTRUCTIONS (INCLUDING ALL SIGNAL POLES AND TRAFFIC/PEDESTRIAN SIGNAL HEADS) TO PROVIDE ADEQUATE CLEARANCE FOR TURNING VEHICLES.
- ALL FOUNDATIONS MUST HAVE CONES OR BARRELS BOLTED TO FOUNDATION BASES UNTIL ACTUAL POLE IS INSTALLED.
- WHEN PLACING TRAFFIC SIGNAL HANDHOLES OR CONDUIT IN EXISTING PORTLAND CEMENT CONCRETE SIDEWALKS, THE ENTIRE SIDEWALK SQUARE OF CONCRETE SHALL BE REPLACED IN ACCORDANCE WITH R.I. STD. 43.1.0. NO PATCHES WILL BE ALLOWED.
- ACCESS TO PEDESTRIAN PUSHBUTTONS SHALL MEET ADA REQUIREMENTS. ALL PEDESTRIAN PUSHBUTTONS SHALL BE ADA COMPLIANT WITH A 2" DIAMETER PRESSURE ACTIVATED (NON-MOVING) BUTTON. SIGNS INSTALLED AT PROPOSED PEDESTRIAN PUSHBUTTONS SHALL BE MUTCD 2003 CODE R10-3B (LEFT OR RIGHT) AND SHALL BE INSTALLED SO THAT IT IS CLEARLY INDICATED WHICH CROSSING IS ASSIGNED TO EACH BUTTON.
- ALL LOOP DETECTORS SHALL BE CENTERED WITHIN EACH LANE AS DELINEATED, UNLESS OTHERWISE DIMENSIONED ON PLANS.
- ALL LOOP DETECTORS SHALL BE CUT INTO THE FINAL PAVEMENT SURFACE COURSE.
- TRAFFIC SIGNAL CONTROLLERS SHALL BE WIRED SO THAT ANY FIRE PRE-EMPTION SHALL OVERRIDE MANUAL (PUSH BUTTON) OPERATION.
- THE CONTRACTOR SHALL WORK CONTINUOUSLY TO RESTORE TRAFFIC SIGNAL OPERATION TO ITS INTENDED PURPOSE WHEN REPLACING THE TRAFFIC SIGNAL EQUIPMENT. A POLICE DETAIL IS REQUIRED TO DIRECT TRAFFIC AT THE INTERSECTION AT ALL TIMES WHEN THE TRAFFIC SIGNAL IS INOPERATIVE. AT NO TIME SHALL THE CONTRACTOR LEAVE THE SITE BEFORE RESTORING FULL TRAFFIC OPERATIONS.

**MAINTENANCE AND PROTECTION OF TRAFFIC NOTES:**

- ALL MAINTENANCE AND PROTECTION OF TRAFFIC CONTROL SETUPS, SIGNS, CHANNELIZING DEVICES, ETC., SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
- ALL SIGN MOUNTINGS FOR TEMPORARY AND CONSTRUCTION SIGNS SHALL BE IN ACCORDANCE WITH THE R.I.D.O.T. STANDARD SPECIFICATIONS, LATEST EDITION.
- THE CONTRACTOR SHALL COVER ALL EXISTING AND/OR TEMPORARY SIGNS THAT ARE NOT RELEVANT TO THE TRAFFIC CONTROL REQUIRED DURING ANY PARTICULAR STAGE OF THE CONTRACT.
- ADVANCE FLAGPERSON SIGNS (W20-7A) SHALL BE USED IN ADVANCE OF ANY POINT AT WHICH A FLAGPERSON OR A POLICE OFFICER HAS BEEN STATIONED TO CONTROL TRAFFIC. WHEN NEEDED, AN APPROPRIATE DISTANCE MESSAGE MAY BE DISPLAYED ON A SUPPLEMENTAL PLATE (24"x18") BELOW THE FLAGPERSON SYMBOL SIGN. THE SIGN SHALL BE PROMPTLY REMOVED OR COVERED WHENEVER THE FLAGPERSON IS NOT AT THE STATION.
- POLICE OFFICERS (AND NOT FLAGPERSONS) SHALL BE UTILIZED WHEN WORK WILL IMPACT SIGNALIZED INTERSECTIONS AND LIMITED ACCESS HIGHWAYS.
- POLYETHYLENE DRUMS SHALL BE UTILIZED AS A CHANNELIZING DEVICE WHEN A TRAFFIC CONTROL SET-UP IS TO REMAIN BEYOND WORKING HOURS WHEN NO WORKERS ARE PRESENT. CONES SHALL BE UTILIZED WHEN A TRAFFIC CONTROL SET-UP IS TO REMAIN ONLY DURING WORKING HOURS AND IS SUBSEQUENTLY BROKEN DOWN AT THE END OF THE WORKDAY.
- ARROW PANELS SHALL BE SET IN THE FLASHING FOUR CORNERS CAUTION MODE UNLESS UTILIZED FOR A MERGING TAPER. ARROW PANELS SET IN THE FLASHING ARROW MODE SHALL NOT BE UTILIZED FOR LANE SHIFTS.
- TEMPORARY CONSTRUCTION SIGNS AND OTHER WORKZONE TRAFFIC CONTROL DEVICES THAT ARE DAMAGED OR REQUIRE RELOCATION SHALL BE REPLACED AND / OR RELOCATED UNDER THE PAY ITEM FOR "MAINTENANCE AND MOVEMENT TRAFFIC PROTECTION."
- THE PRIVATE VEHICLES OF CONSTRUCTION WORKERS SHALL NOT BE PARKED ON THE TRAVEL LANES OR SHOULDERS. THEY MAY BE PARKED WITHIN THE STATE RIGHT-OF-WAY ONLY IN AREAS 30' BEYOND THE OUTSIDE EDGE OF THE TRAVEL LANES AND/OR IN AREAS APPROVED BY THE ENGINEER.
- TEMPORARY CONSTRUCTION SIGNS AND OTHER TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE INSTALLED PRIOR TO THE START OF WORK IN ANY AREA OPEN TO TRAFFIC, AND SHALL BE REMOVED AS SOON AS PRACTICAL WHEN THEY ARE NO LONGER APPROPRIATE.
- THE INTENDED VEHICLE PATHS THROUGH EACH WORK ZONE SHALL BE CLEARLY MARKED AT ALL TIMES. TEMPORARY PAVEMENT MARKINGS SHALL BE INSTALLED BEFORE THE END OF THE WORK SHIFT ON ALL COLD-PLANE OR NEW ROADWAY SURFACES THAT WILL BE OPENED TO TRAFFIC AT THE END OF THE SHIFT.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
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 DATED APR 21 2009 FILE # 04-0551  
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MAR 31 2009  
 ENGINEER  
 PROVISIONAL

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 TRANSPORTATION LAND DEVELOPMENT ENVIRONMENTAL SERVICES  
 PROVIDENCE, R.I.

REVISIONS		
NO.	DATE	BY

**RHODE ISLAND  
DEPARTMENT OF TRANSPORTATION**

**RECONSTRUCTION OF  
HARTFORD AVENUE**

JOHNSTON RHODE ISLAND

**STANDARD NOTES - 2**

CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ SCALE \_\_\_\_\_

### JOB SPECIFIC PLAN SYMBOLS

#### EXISTING

- △ SURVEYED WETLAND FLAG LOCATION
- <sup>234</sup> INTERPOLATED WETLAND FLAG LOCATION
- 50-FOOT PERIMETER WETLAND
- ▲—▲ RIVERBANK WETLAND

#### NEW

### JOB SPECIFIC LEGEND

- (3.4.5M) BRICK/SOLID BLOCK 7'-0" ROUND MANHOLE, R.I. STD. 3.4.5 MODIFIED
- (4.6.1M) CONCRETE COVER FOR SHALLOW 7'-0" ROUND MANHOLE, R.I. STD. 4.6.1 MODIFIED
- (4.7.2) ALTERNATE TOP COVER FOR ROUND PRECAST MANHOLES AND CATCH BASINS, R.I. STD. 4.7.2
- (7.2.3) PRECAST CONCRETE LOT CURB, R.I. STD. 7.2.3
- (14.2.0) GRANITE HIGHWAY BOUND, R.I. STD. 14.2.0
- (34.3.5) GUARDRAIL CONNECTION TO EXISTING END POST APPROACH END SECTION, R.I. STD. 34.3.5
- (34.3.6) GUARDRAIL CONNECTION TO EXISTING END POST TRAILING END SECTION, R.I. STD. 34.3.6
- (AMH) ADJUST MANHOLE TO GRADE
- (CCD) CEMENT CONCRETE DRIVEWAY  
4" CEMENT CONC. CLASS "B"  
8" GRAVEL BORROW SUBBASE COURSE
- (CSP) (SIZE) NEW TYPE K COPPER SERVICE PIPE WITH CURB STOP
- (CUT) TREE CUTOUT, SEE LANDSCAPE PLANS
- (DRP) REMOVE AND DISPOSE RIGID PAVEMENT
- (DW) REMOVE AND DISPOSE WALL
- (ET) GUARDRAIL END TREATMENT--ENERGY ABSORBING TERMINAL
- (FDP) FULL DEPTH PAVEMENT  
2" BITUMINOUS SURFACE COURSE, TYPE I-1  
6" BITUMINOUS BASE COURSE  
12" GRAVEL BORROW SUBBASE COURSE
- (NGG) FURNISH AND INSTALL NEW GAS GATE
- (RBM) RECONSTRUCT CATCH BASIN TO MANHOLE
- (RDG) REMOVE AND DISPOSE GAS GATE BOXES
- (RDW) REMOVE AND DISPOSE WATER GATE BOXES
- (UP) UTILITY POLE (BY OTHERS)

### JOB SPECIFIC GENERAL NOTES:

- ALL ITEMS NOT REFERENCED FOR MODIFICATION WILL BE "EXISTING TO REMAIN" UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
- THE COST OF ANY CURB CUTTING REQUIRED TO INSTALL NEW CURB WILL BE INCLUDED IN THE UNIT PRICE BID FOR THE NEW CURB.
- INTERSECTING ROADS SHALL BE RECONSTRUCTED TO THE LIMITS SHOWN ON THE PLANS AND CROSS SECTIONS OR AS DIRECTED BY THE ENGINEER. THE PAVEMENT MAKE-UP SHALL BE AS SHOWN ON THE PLANS AND TYPICAL DETAILS.
- STEEL BEAM GUARDRAIL REFLECTORIZED TRIANGULAR DELINEATORS, R.I. STD. 34.2.5, SHALL BE FURNISHED AND INSTALLED ON ALL NEW GUARDRAIL INSTALLATIONS AT 37'-6" SPACING.
- THE CONTRACTOR SHALL NOTE THAT THE THICKNESSES OF THE EXISTING BITUMINOUS CONCRETE PAVEMENT AND OF THE CEMENT CONCRETE BASE TO BE REMOVED AND DISPOSED WILL VARY.
- ALL NEW REGULATORY, WARNING AND GUIDE SIGNS SHALL HAVE SIGN SUPPORTS. UNLESS OTHERWISE INDICATED, SIGN MOUNTINGS SHALL BE R.I. STD. 24.1.0.
- ALL SIGNS SHALL HAVE A MINIMUM VERTICAL CLEARANCE OF 7' OVER THE SIDEWALK.
- STREET NAME SIGNS, R.I. STD. 24.6.1, SHALL BE FURNISHED AND INSTALLED AT ALL UNSIGNALIZED STREET CROSSINGS. THE CONTRACTOR SHALL PLACE SIGNS AT LOCATIONS ACCEPTABLE TO THE ENGINEER AND SHALL VERIFY THE STREET NAMES LISTED ON THE SIGNING & STRIPING PLANS BEFORE FABRICATION. OVERHEAD MOUNTED STREET NAME SIGNS SHALL USE 8" HIGH CAPITAL LETTERS, AND GROUND MOUNTED STREET NAME SIGNS SHALL USE 6" CAPITAL LETTERS, UNLESS OTHERWISE APPROVED IN WRITING BY THE ENGINEER.
- ALL PAVEMENT MARKINGS FOR THIS PROJECT SHALL BE EPOXY RESIN PIGMENT PAVEMENT MARKINGS UNLESS OTHERWISE INDICATED.
- THE LOCATION OF PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE 2003 MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AS AMENDED.
- AT THE COMPLETION OF EACH DAYS PAVING, THE CONTRACTOR IS REQUIRED TO PROVIDE TEMPORARY FAST-DRYING WATERBORNE PAVEMENT MARKINGS BEFORE COMPLETING THE WORK OF THAT DAY AND OPENING THE LANES TO TRAFFIC.
- EPOXY RESIN PAVEMENT MARKINGS SHALL BE PLACED ON THE FINAL SURFACE COURSE NO SOONER THAN 2 WEEKS BUT NO LONGER THAN 4 WEEKS FROM THE COMPLETION OF PAVING OPERATIONS.

### JOB SPECIFIC UTILITY NOTES:

- NO BLASTING SHALL BE ALLOWED ON THIS PROJECT.

### JOB SPECIFIC MAINTENANCE AND PROTECTION OF TRAFFIC NOTES:

- ALL TEMPORARY CONSTRUCTION SIGNS AND TRAFFIC BARRICADES ARE TO BE REMOVED FROM THE HIGHWAY WHEN THEY ARE NOT REQUIRED FOR CONTROL OF TRAFFIC.
- TEMPORARY CONSTRUCTION SIGN PANELS SHALL BE 3/4" THICK EXTERIOR GRADE PLYWOOD CONFORMING TO SECTION M-19 OF THE STANDARD SPECIFICATIONS.
- ALL SIGN RADII AND BORDERS SHALL BE AS SPECIFIED IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, 2003 VERSION.
- AT NO TIME WILL THE CONES, BARRICADES OR DRUMS BE ALLOWED TO COVER THE LANES OF OR EXTEND INTO AN OPEN LANE.

### JOB SPECIFIC DRAINAGE AND EROSION CONTROL NOTES:

- ALL CEMENT CONCRETE FOR DRAINAGE STRUCTURES SHALL BE CLASS B (AE).
- FOR DISPOSITION OF EXISTING DRAINAGE SYSTEM, SEE THE DRAINAGE AND UTILITY PLANS.
- WHEN A CATCH BASIN, MANHOLE OR HANDHOLE IS REMOVED AND DISPOSED, THE EXISTING FRAME AND GRATE OR COVER SHALL BE REMOVED AND DISPOSED AND SHALL BE INCLUDED IN THE COST TO REMOVE AND DISPOSE THE STRUCTURE.
- WHEN A CATCH BASIN OR MANHOLE IS REMOVED AND DISPOSED, ALL PIPES LEFT SHALL BE PLUGGED WITH A BRICK AND MORTAR PLUG UNLESS NOTED OTHERWISE ON THE PLANS.
- IF THE CONTRACTOR ELECTS TO UTILIZE ANY AREAS FOR EQUIPMENT & MATERIALS STORAGE & STOCKPILING, THE CONTRACTOR MUST FIRST OBTAIN ANY NECESSARY PERMITS AND/OR PERMIT MODIFICATIONS FROM THE APPROPRIATE REGULATORY AUTHORITY(IES). ANY PERMITTING REQUIREMENTS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE ACCOMPLISHED AT NO COST TO THE STATE. THE RIDOT RESIDENT ENGINEER WILL COORDINATE SUBMISSION OF ANY REQUIRED PERMIT MATERIALS WITH THE RIDOT OFFICE OF ENVIRONMENTAL PROGRAMS.

### JOB SPECIFIC TRAFFIC SIGNAL NOTES:

- ALL SALVAGED TRAFFIC SIGNAL EQUIPMENT, EXCEPT MAST ARMS AND SPAN POLES, SHALL BE DELIVERED TO THE R.I.D.O.T. MAINTENANCE HEADQUARTERS, 360 LINCOLN AVENUE, WARWICK, RHODE ISLAND, 02888. MAST ARMS AND SPAN POLES SHALL BE DELIVERED TO THE ANTHONY FACILITY, 16 MAPLEDALE STREET, COVENTRY, RHODE ISLAND, 02816. THIS NOTE SHALL SUPERCEDE TRAFFIC SIGNAL NOTE #1 ON "STANDARD NOTES-2" PLAN SHEET.
  - 6 AWG SINGLE CONDUCTOR CABLE 600V WIRE SHALL BE PLACED IN ALL PVC CONDUITS AND SHALL BE BONDED TO GROUND RODS IN ACCORDANCE WITH SECTION T.03 OF THE RHODE ISLAND DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. THIS NOTE SHALL SUPERCEDE TRAFFIC SIGNAL NOTE #7 ON "STANDARD NOTES-2" PLAN SHEET.
- IF THE ASSIGNED RIGHT OF WAY FOR ANY TRAFFIC MOVEMENT IS TO REMAIN IN EFFECT DURING THE NEXT CALLED PHASE, THE SIGNAL INDICATIONS FOR THAT TRAFFIC MOVEMENT WILL NOT CHANGE DURING THE CLEARANCE INTERVAL.
- THE RIGHT OF WAY MAY BE ASSIGNED TO ANY PHASE, OR COMBINATION OF
- NON-CONFLICTING PHASES.
  - CONTRACTOR SHALL HAND DIG AT ALL GAS PIPELINE CROSSINGS.
  - A ROTARY WHEEL OR OTHER MECHANICAL TRENCHING METHOD IN THE VICINITY OF GAS PIPELINES WILL NOT BE ALLOWED.
  - A 1 FOOT VERTICAL CLEARANCE IS REQUIRED BETWEEN NEW CONDUIT AND NEGC FACILITIES.
  - ALL NEW MANHOLES, HANDHOLES, PULL BOXES, AND FOUNDATIONS SHALL MEET A MINIMUM 2 FOOT LATERAL CLEARANCE AND NOT BE PLACED OVER NEGC FACILITIES.

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OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS  
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APR 21 2009 FILE # 09-0551  
DATED  
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**RHODE ISLAND  
DEPARTMENT OF TRANSPORTATION**

RECONSTRUCTION OF  
**HARTFORD AVENUE**

JOHNSTON RHODE ISLAND

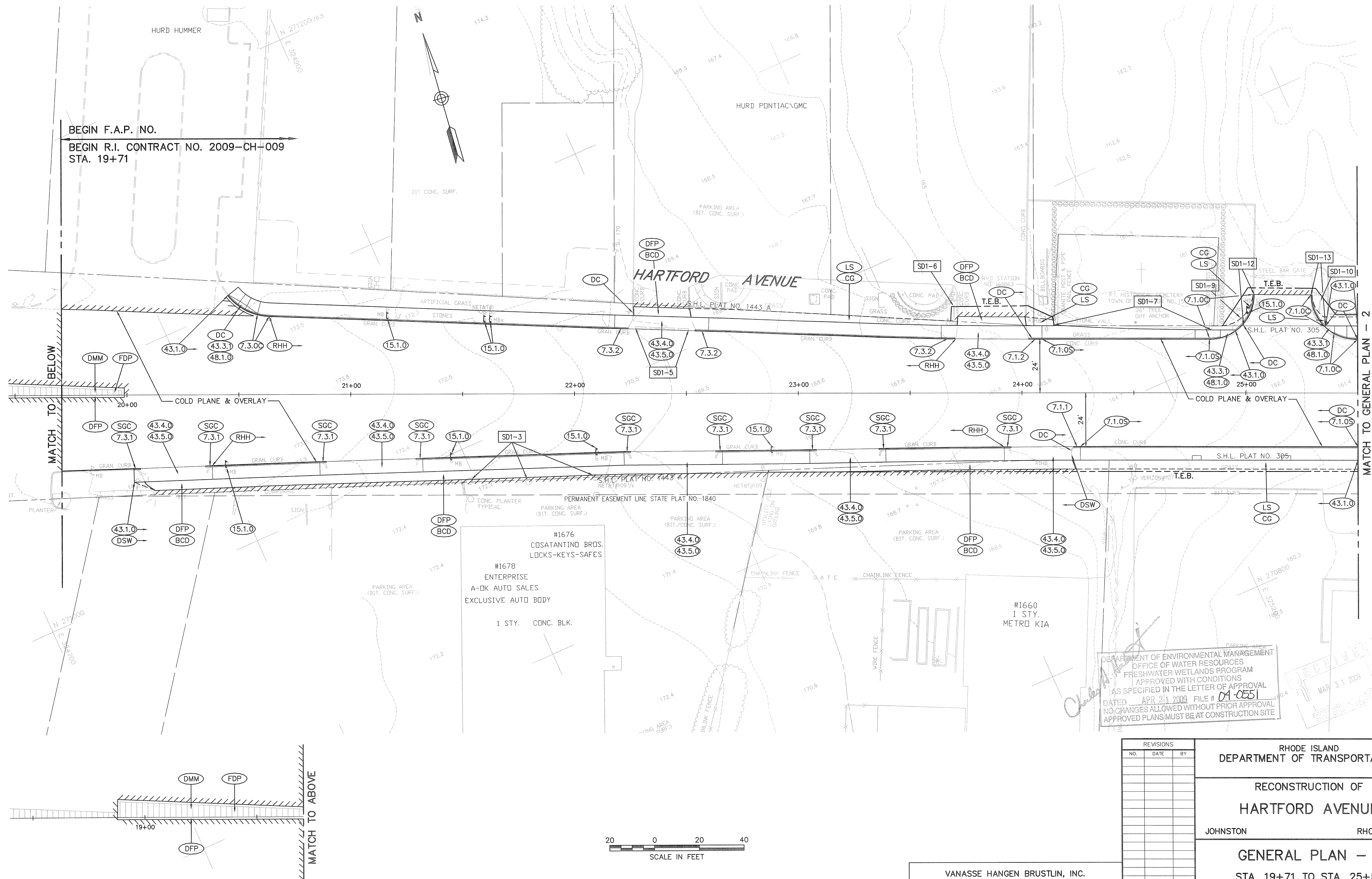
**JOB SPECIFIC  
PLAN SYMBOLS, LEGEND & NOTES**

CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ SCALE \_\_\_\_\_

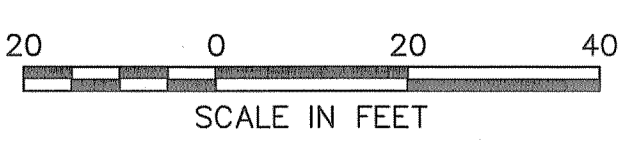
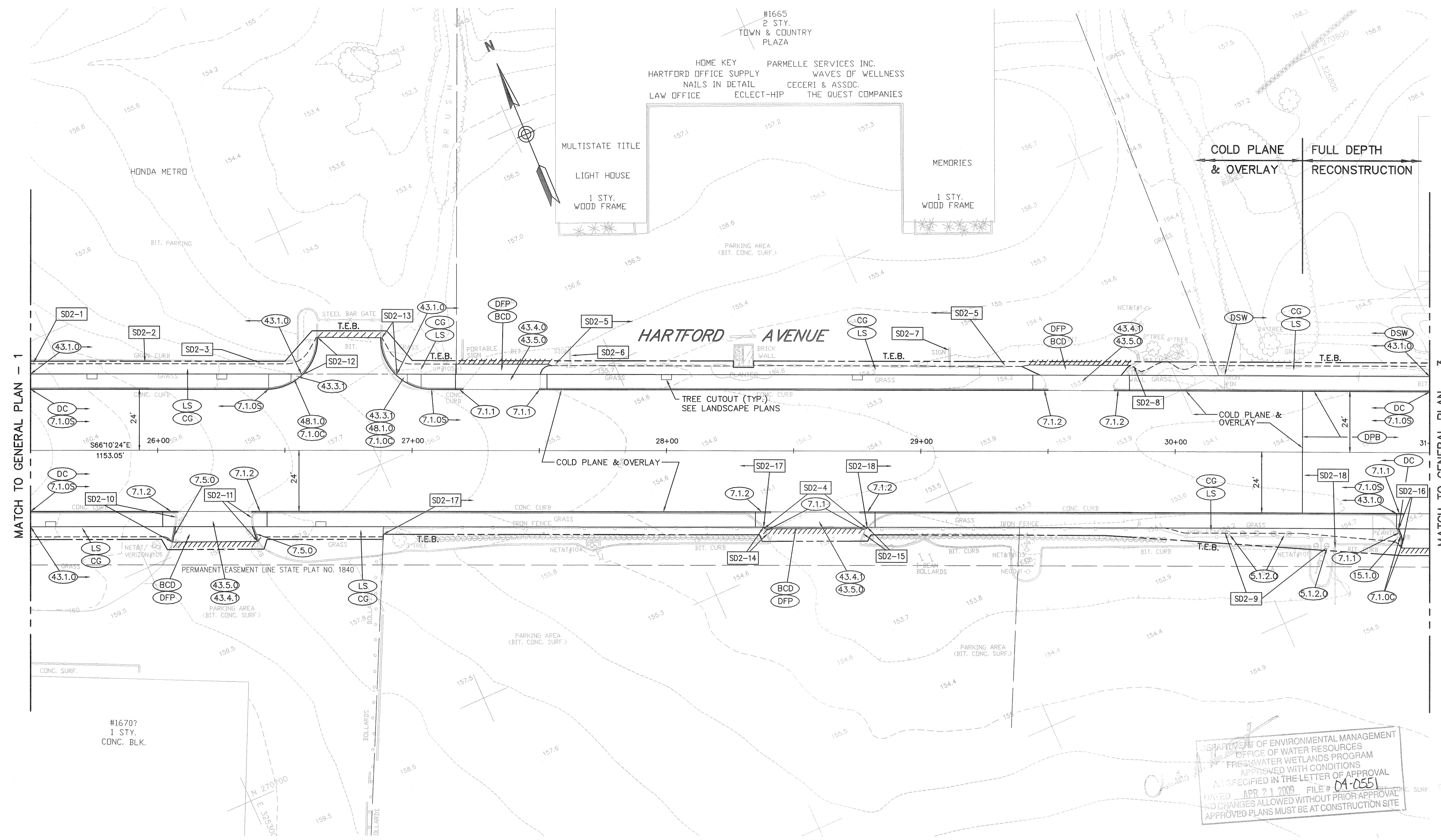
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RECONSTRUCTION OF  
**HARTFORD AVENUE**

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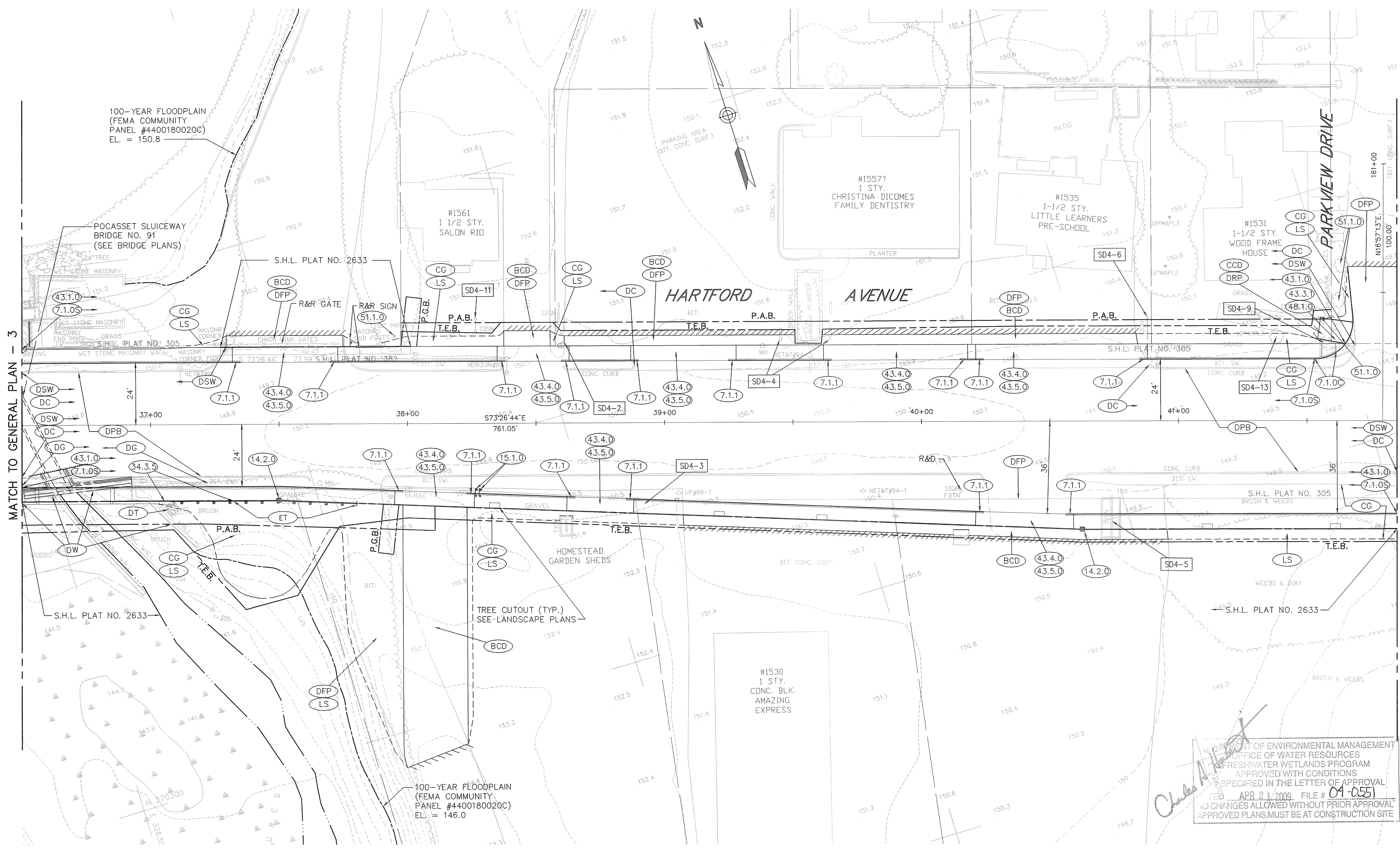
**GENERAL PLAN - 2**  
 STA. 25+50 TO STA. 31+00

CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ SCALE 1"=20'

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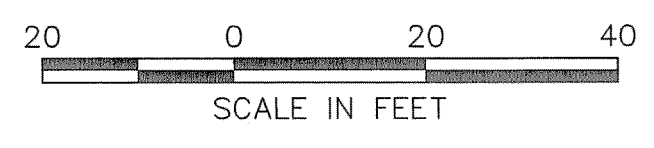


100-YEAR FLOODPLAIN  
(FEMA COMMUNITY  
PANEL #4400180020C)  
EL. = 150.8

POCASSET SLUICWAY  
BRIDGE NO. 91  
(SEE BRIDGE PLANS)

100-YEAR FLOODPLAIN  
(FEMA COMMUNITY  
PANEL #4400180020C)  
EL. = 146.0

STATE OF RHODE ISLAND  
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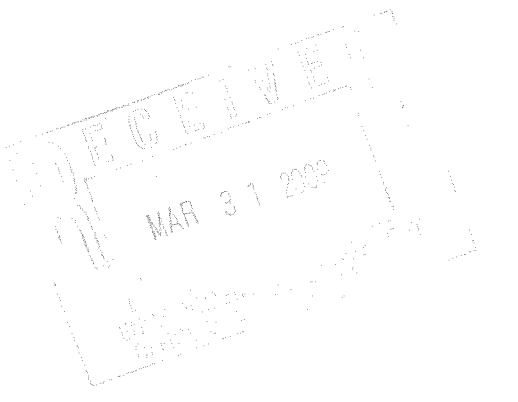
RECONSTRUCTION OF  
HARTFORD AVENUE

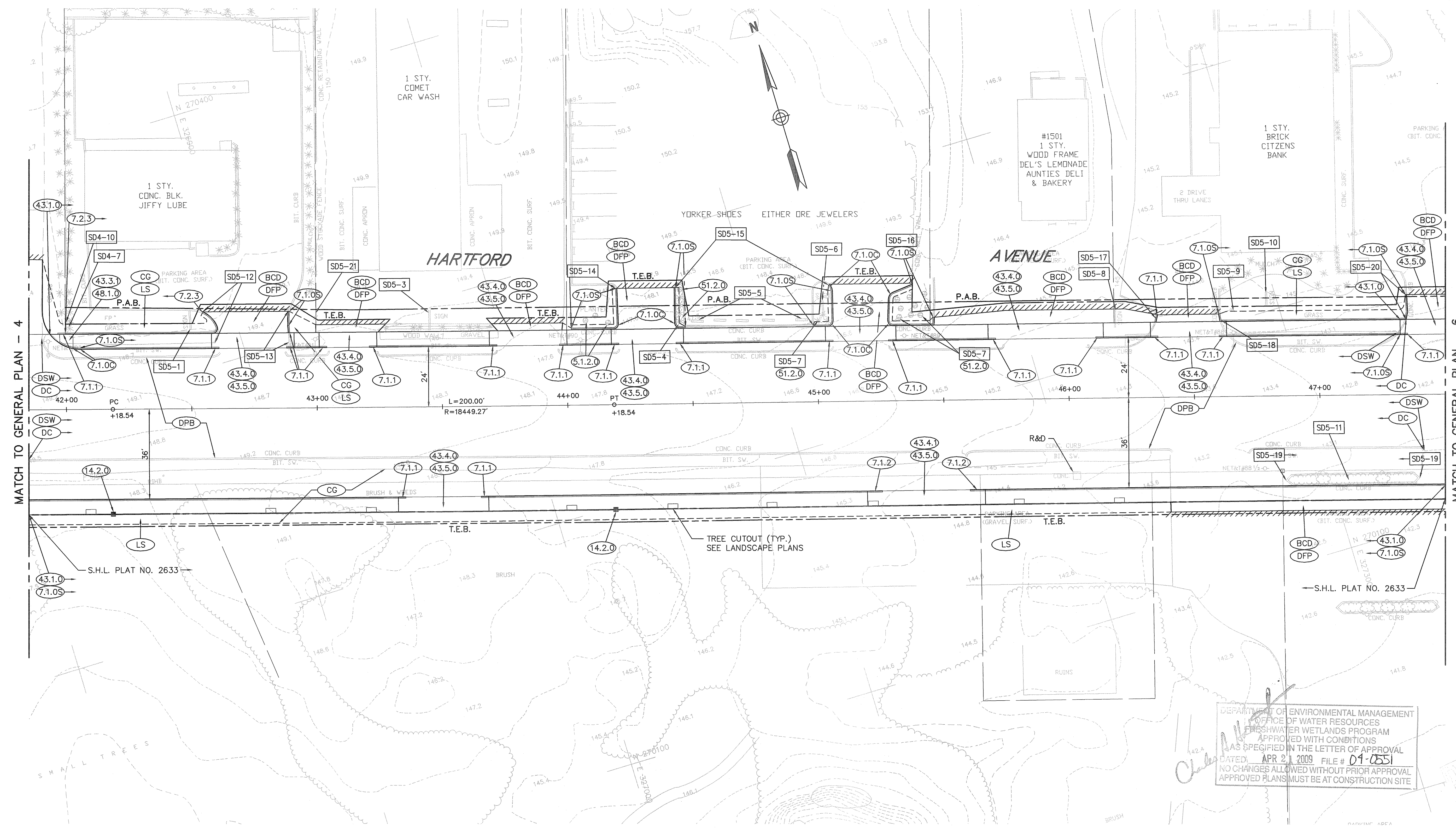
JOHNSTON RHODE ISLAND

GENERAL PLAN - 4  
STA. 36+50 TO STA. 41+85

CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ SCALE 1"=20'

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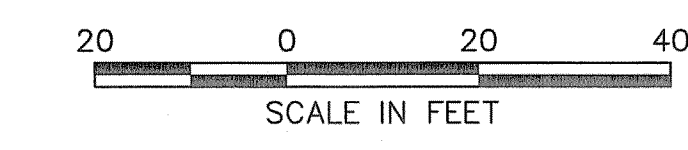
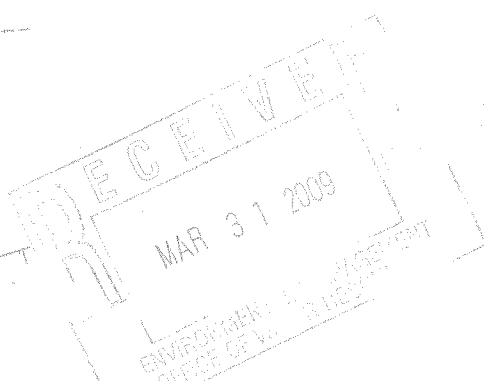




MATCH TO GENERAL PLAN - 4

MATCH TO GENERAL PLAN - 6

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF WATER RESOURCES  
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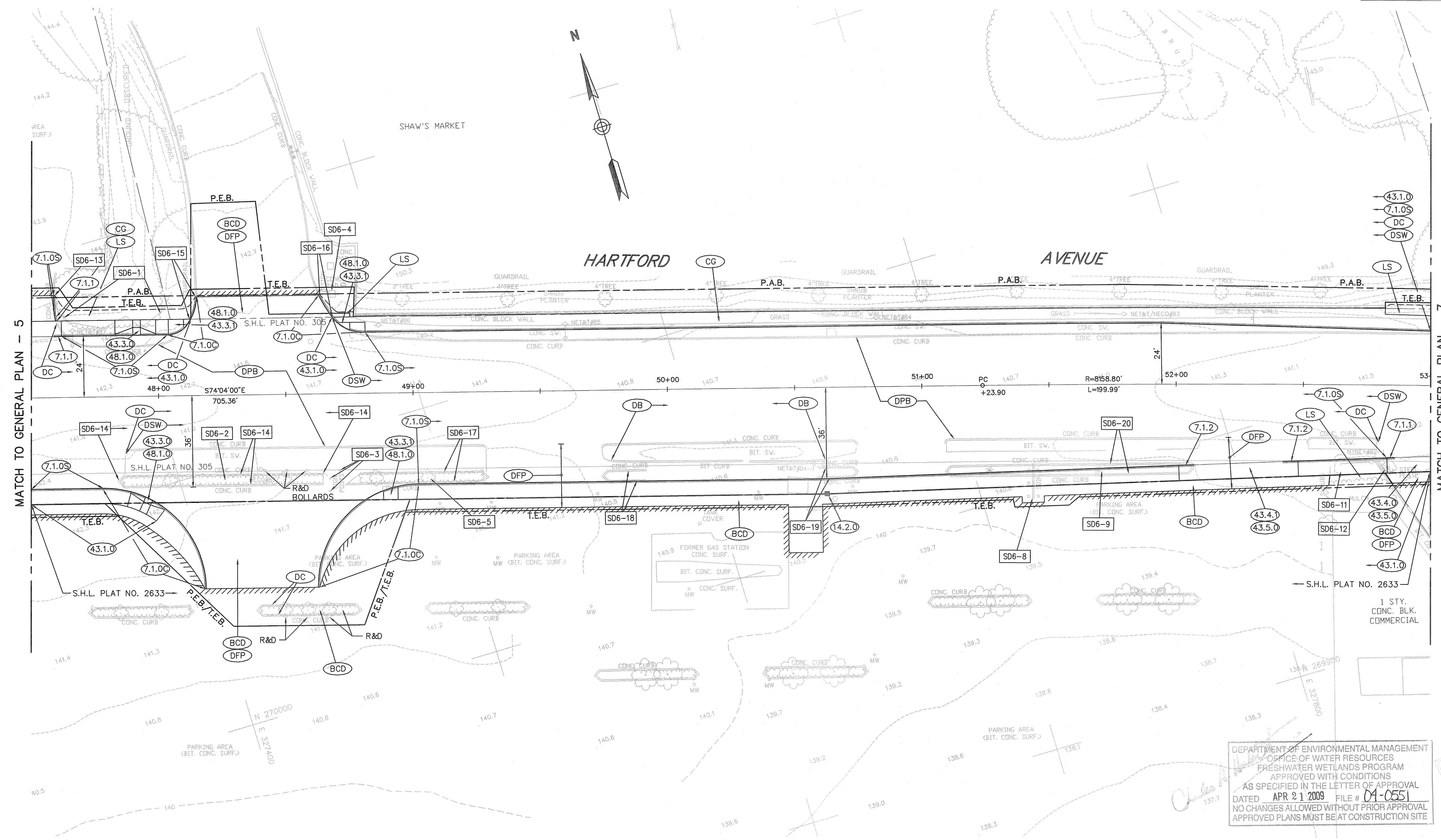
RECONSTRUCTION OF  
**HARTFORD AVENUE**

JOHNSTON RHODE ISLAND

**GENERAL PLAN - 5**  
STA. 41+85 TO STA. 47+50

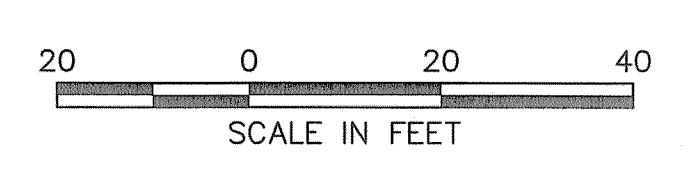
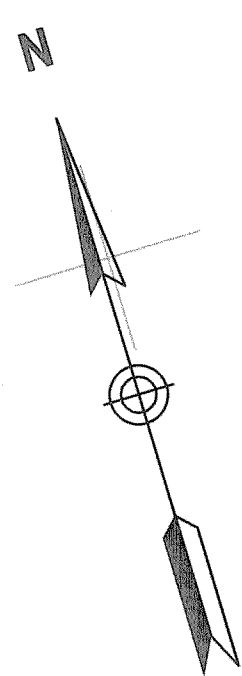
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MATCH TO GENERAL PLAN - 5

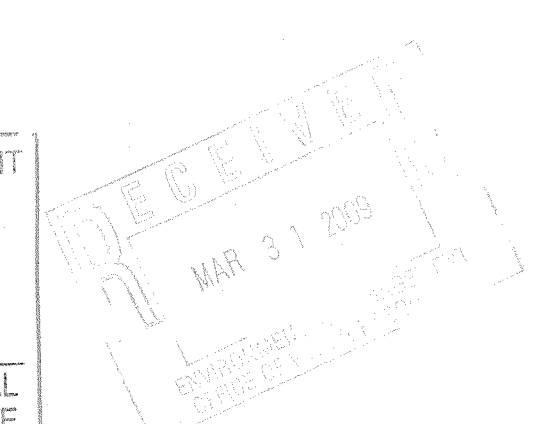
MATCH TO GENERAL PLAN - 7



**NOTES:**

- SEE "TRAFFIC SIGNAL PLAN - 1" FOR CALLOUTS FOR PROPOSED TRAFFIC SIGNAL STRUCTURES, HANDHOLES, AND CONDUITS AT INTERSECTION OF HARTFORD AVENUE AT SHAW'S DRIVEWAY.
- UTILITY LINES TO BE RAISED FOR PROPER VERTICAL CLEARANCE OVER PROPOSED TRAFFIC SIGNAL POLES.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
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RHODE ISLAND DEPARTMENT OF TRANSPORTATION	
RECONSTRUCTION OF HARTFORD AVENUE	
JOHNSTON	RHODE ISLAND
GENERAL PLAN - 6 STA. 47+50 TO STA. 53+00	
CHECKED BY _____	DATE _____ SCALE 1"=20'

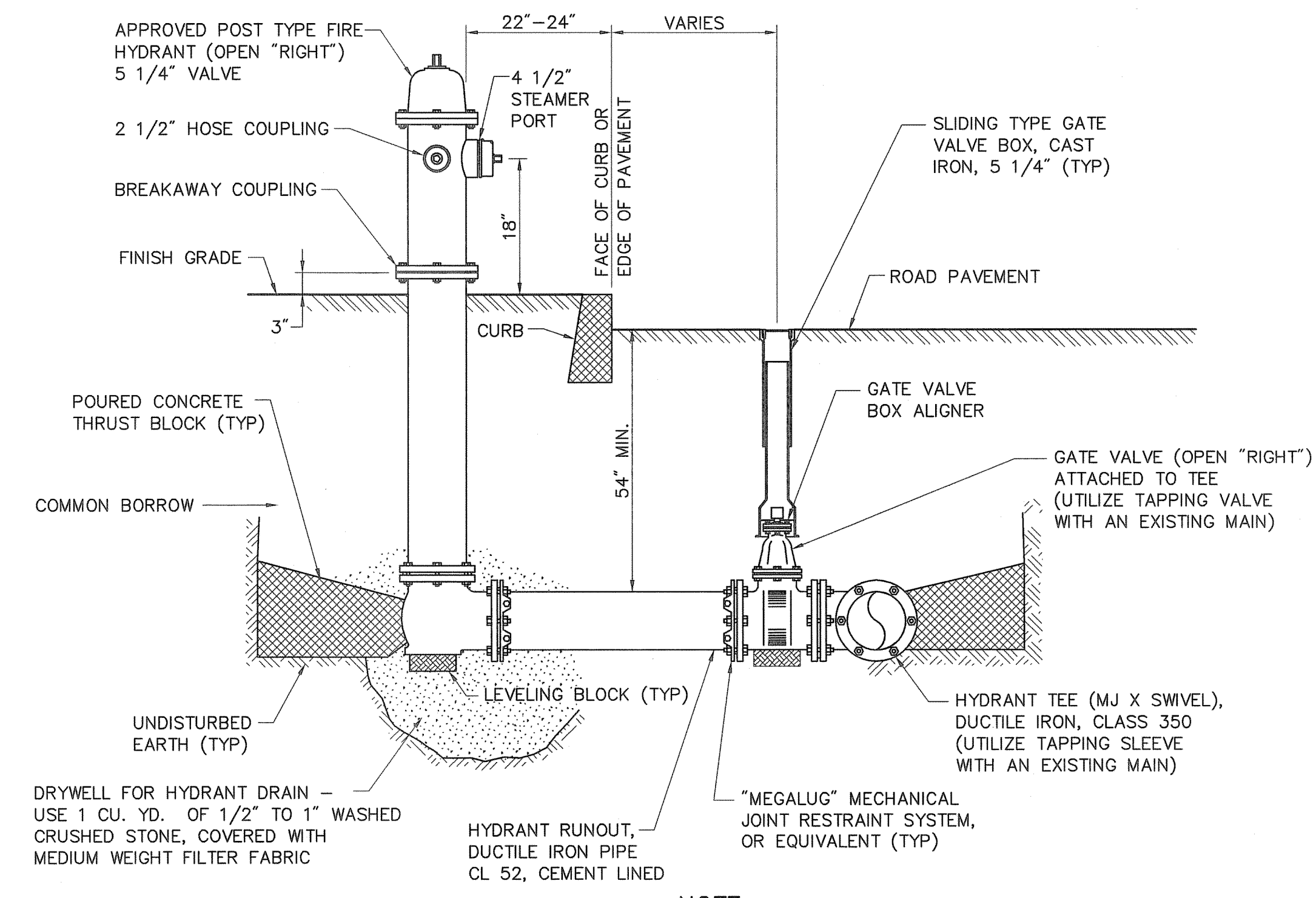
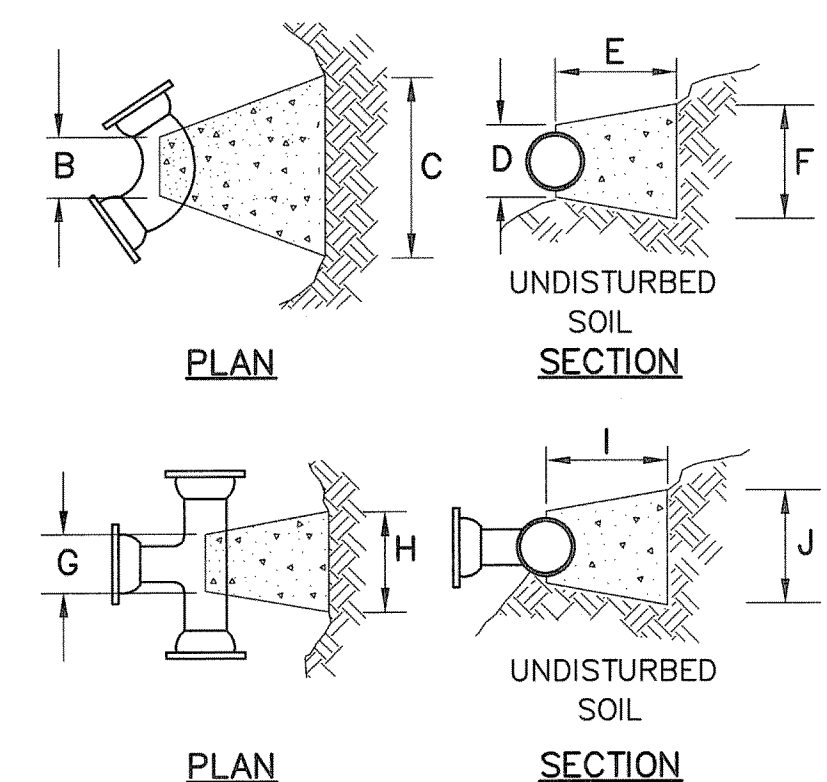
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BENDS		B	C	D	E	F	BENDS		B	C	D	E	F
4"	22-1/2"	8"	12"	12"	24"	12"							
4"	45"	8"	20"	12"	24"	12"							
6"	11-1/4"	8"	15"	12"	24"	12"	6"	45"	8"	30"	12"	24"	14"
6"	22-1/2"		19"				6"	90"		30"			27"
8"	11-1/4"		20"				6"	45"		38"			36"
8"	22-1/2"		22"				8"	90"		40"			40"
12"	11 1/4"		30"			15"	12"	45"		60"			52"
12"	22-1/2"		35"			25"	12"	90"					

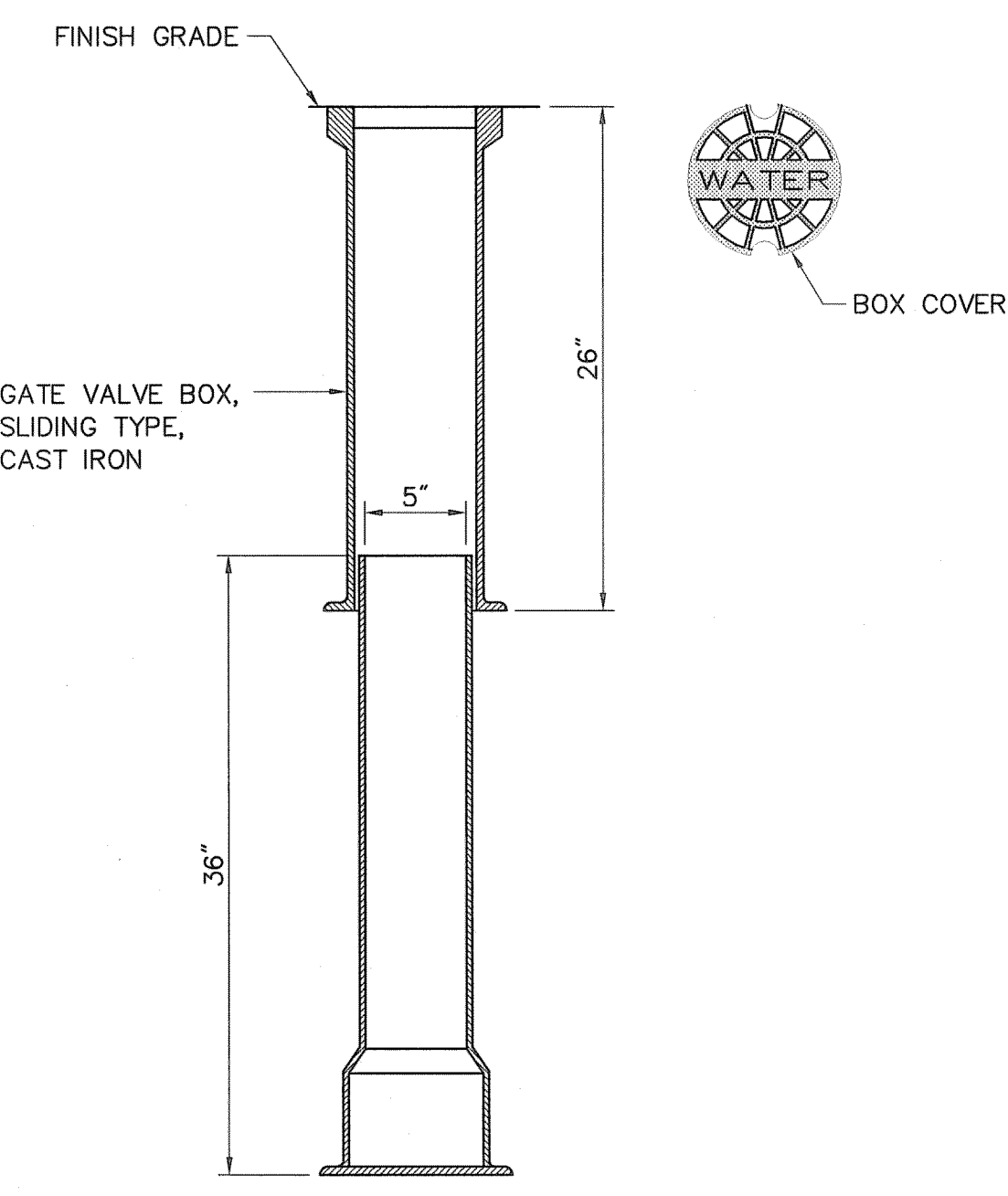
  

TEES		G	H	I	J	TEES		G	H	I	J
6"x 6"x 6"		12"	24"	24"	18"			8"x 8"x 8"	12"	24"	24"
8"x 8"x 4"											
8"x 8"x 6"											
12"x 12"x 4"		24"	24"	12"							
12"x 12"x 6"											
12"x 12"x 8"					24"						
12"x 12"x 12"		36"			36"						

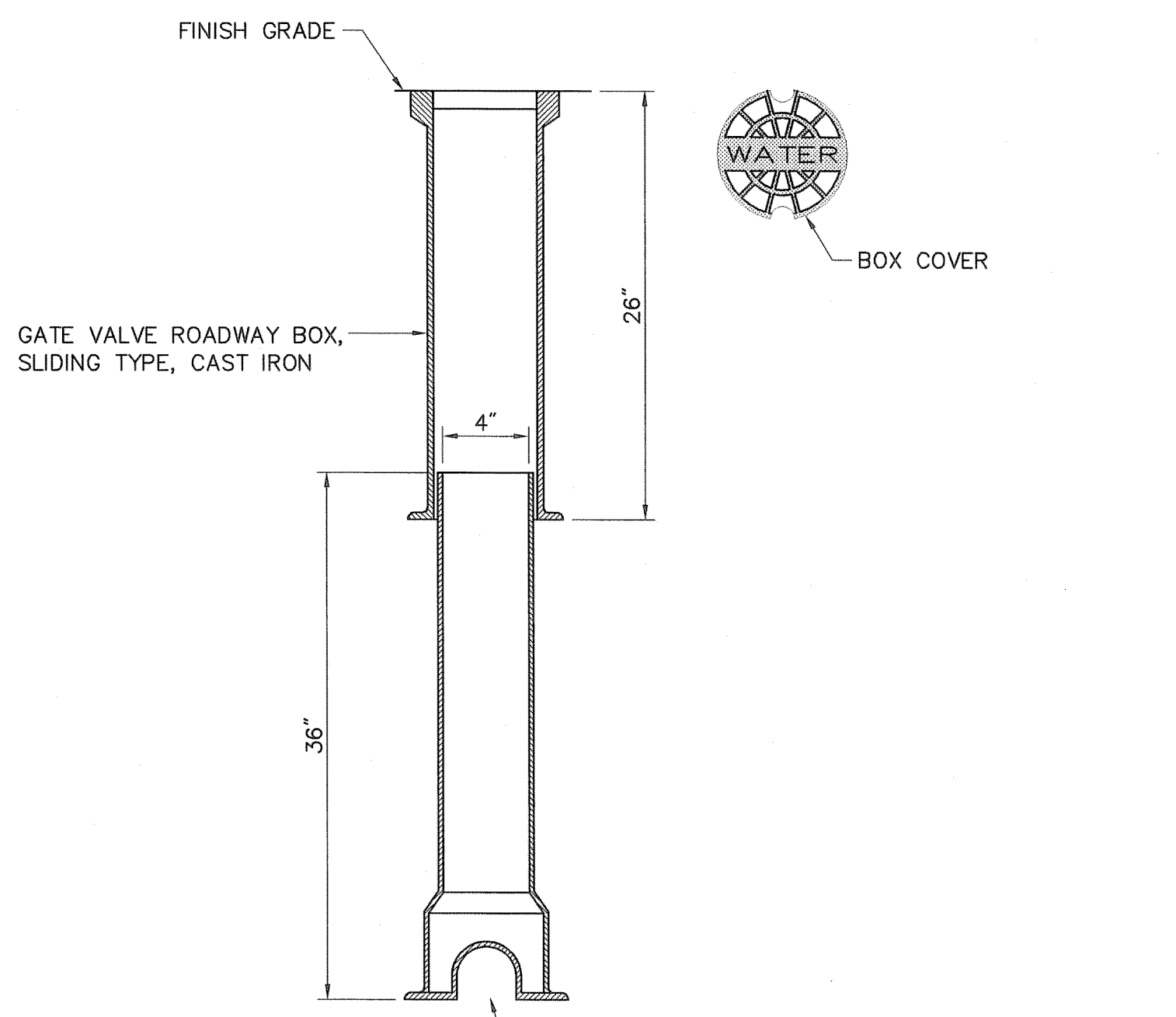


**NOTE:**  
 THRUST BLOCK IS CAST-IN-PLACE (FORMED) 3,000 PSI (MIN) PORTLAND CEMENT CONCRETE BEARING AGAINST UNDISTURBED EARTH. DESIGN PARAMETERS: 150 PSI WATER PRESSURE (MIN), SOIL BEARING STRENGTH 1,500 PSF. TO BE USED IN CONJUNCTION WITH MECHANICAL JOINT RESTRAINT SYSTEM.

**FIRE HYDRANT (POST TYPE)**  
 NOT TO SCALE



**5" GATE VALVE ROADWAY BOX**  
 NOT TO SCALE

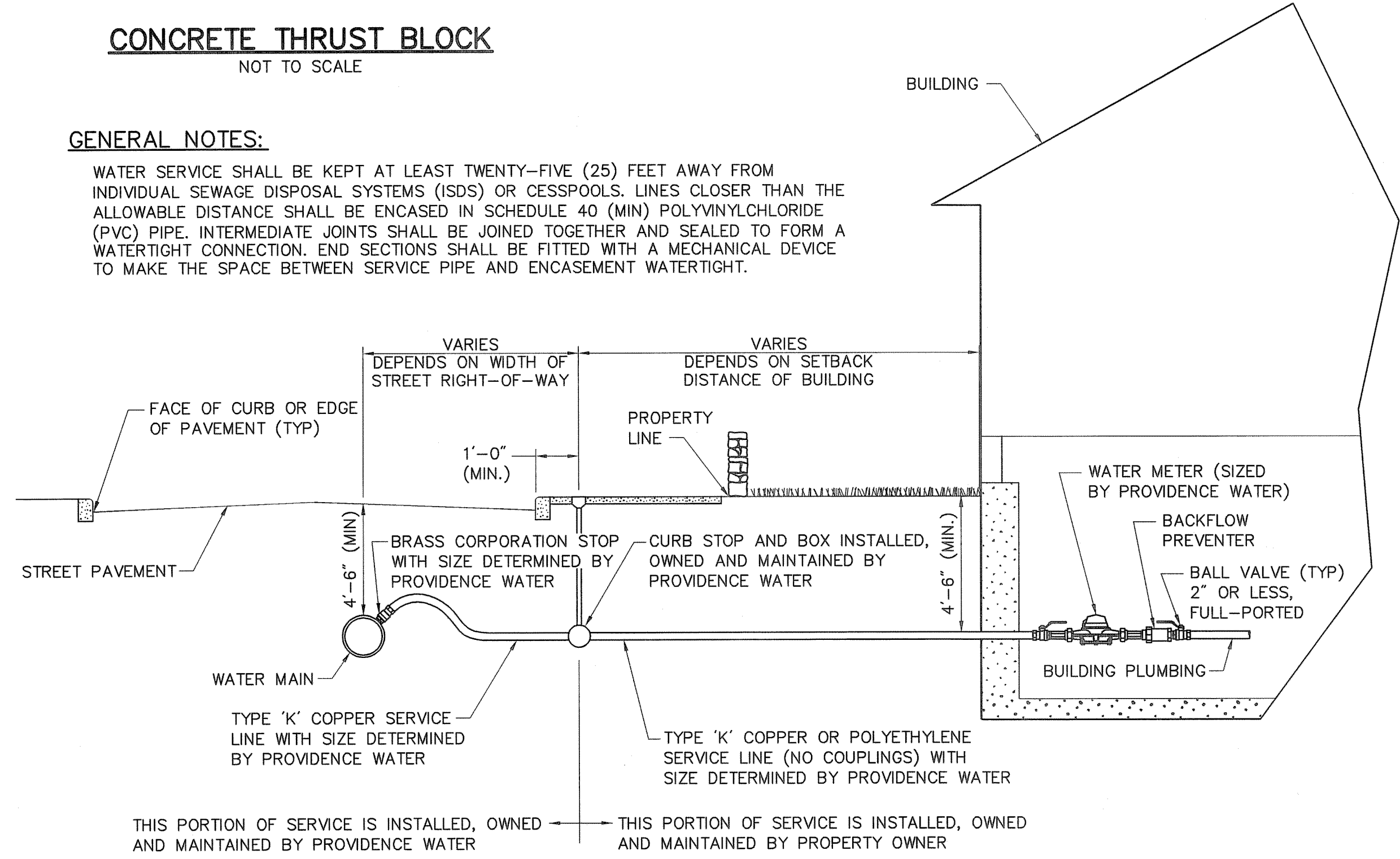


**4" GATE VALVE ROADWAY BOX**  
 NOT TO SCALE

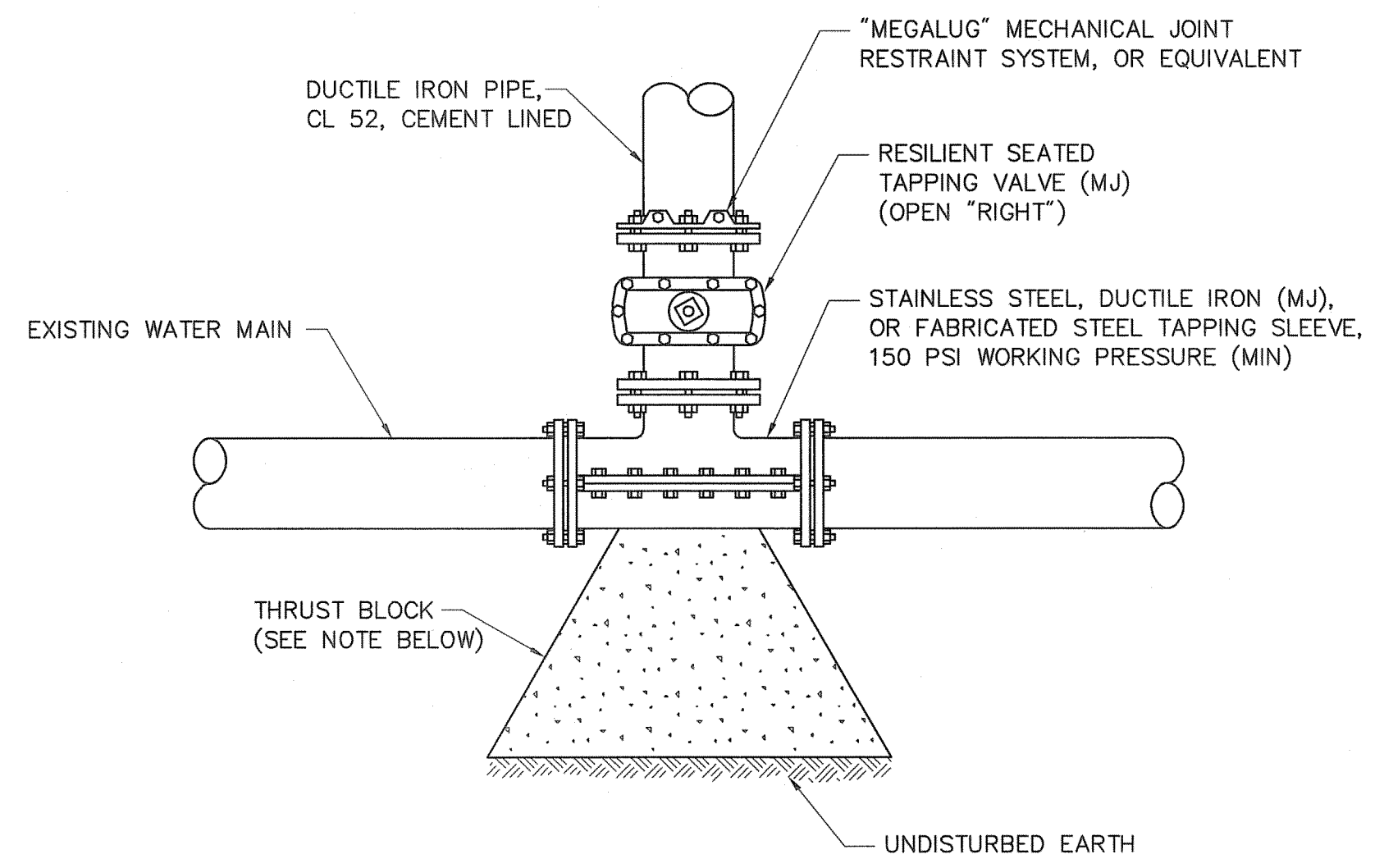
- NOTES:**
- PROVIDE BLOCKS FOR VERTICAL BENDS AND PROVIDE ANCHOR RODS AT VERTICAL BENDS AND GATE VALVES
  - CONCRETE SHALL NOT BE PLACED AGAINST PIPE BEYOND FITTING.

**CONCRETE THRUST BLOCK**  
 NOT TO SCALE

**GENERAL NOTES:**  
 WATER SERVICE SHALL BE KEPT AT LEAST TWENTY-FIVE (25) FEET AWAY FROM INDIVIDUAL SEWAGE DISPOSAL SYSTEMS (ISDS) OR CESSPOOLS. LINES CLOSER THAN THE ALLOWABLE DISTANCE SHALL BE ENCASED IN SCHEDULE 40 (MIN) POLYVINYLCHLORIDE (PVC) PIPE. INTERMEDIATE JOINTS SHALL BE JOINED TOGETHER AND SEALED TO FORM A WATERTIGHT CONNECTION. END SECTIONS SHALL BE FITTED WITH A MECHANICAL DEVICE TO MAKE THE SPACE BETWEEN SERVICE PIPE AND ENCASEMENT WATERTIGHT.

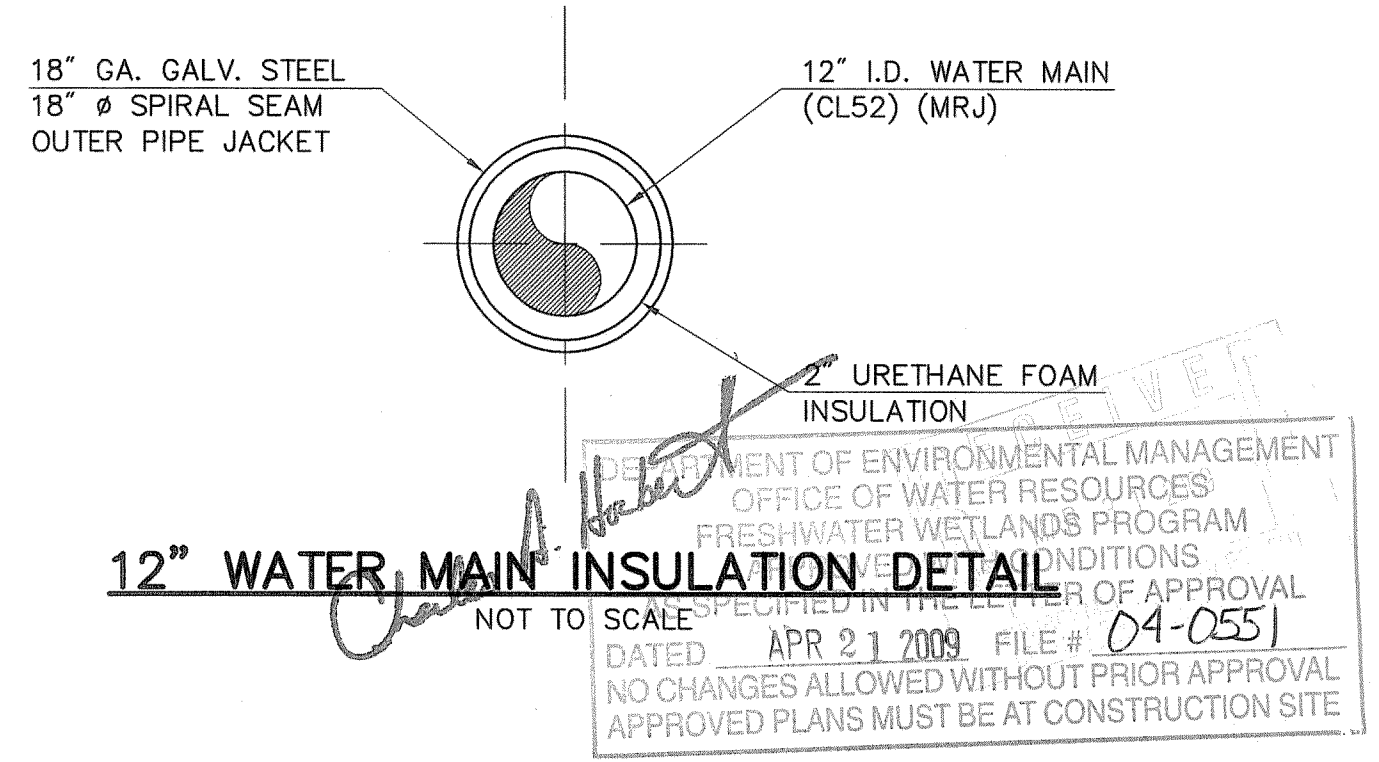


**RESIDENTIAL SERVICE CONNECTION DIAGRAM**  
 NOT TO SCALE



**NOTE:**  
 THRUST BLOCK IS CAST-IN-PLACE (FORMED) 3,000 PSI (MIN) PORTLAND CEMENT CONCRETE BEARING AGAINST UNDISTURBED EARTH. DESIGN PARAMETERS: 150 PSI WATER PRESSURE (MIN), SOIL BEARING STRENGTH 1,500 PSF. TO BE USED IN CONJUNCTION WITH MECHANICAL JOINT RESTRAINT SYSTEM.

**TAPPING SLEEVE AND VALVE**  
 NOT TO SCALE



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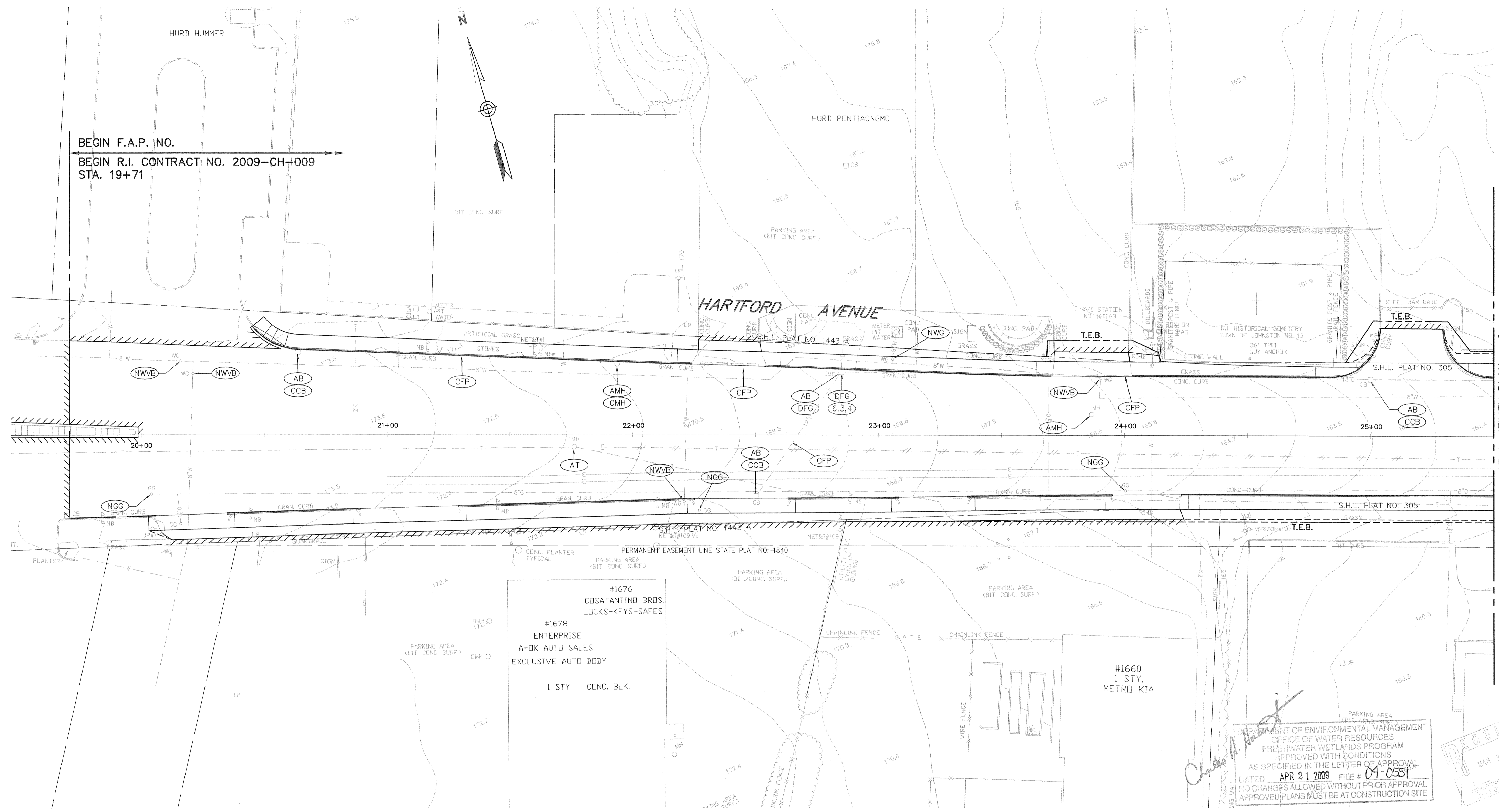
RHODE ISLAND  
 DEPARTMENT OF TRANSPORTATION

RECONSTRUCTION OF  
**HARTFORD AVENUE**

JOHNSTON RHODE ISLAND

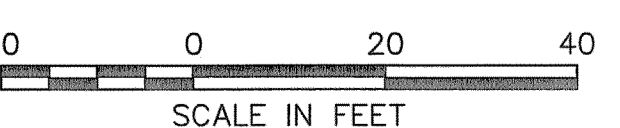
**HIGHWAY DETAILS**

CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ SCALE AS NOTED



BEGIN F.A.P. NO.  
 BEGIN R.I. CONTRACT NO. 2009-CH-009  
 STA. 19+71

HARTFORD AVENUE



VANASSE HANGEN BRUSTLIN, INC.  
 TRANSPORTATION, LAND DEVELOPMENT, ENVIRONMENTAL SERVICES  
 PROVIDENCE, R.I.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF WATER RESOURCES  
 FRESHWATER WETLANDS PROGRAM  
 APPROVED WITH CONDITIONS  
 AS SPECIFIED IN THE LETTER OF APPROVAL  
 DATED APR 21 2009 FILE # 04-0551  
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
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RECONSTRUCTION OF  
**HARTFORD AVENUE**

JOHNSTON RHODE ISLAND

**DRAINAGE & UTILITY  
 PLAN - 1**  
 STA. 19+71 TO STA. 25+50

CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ SCALE 1"=20'

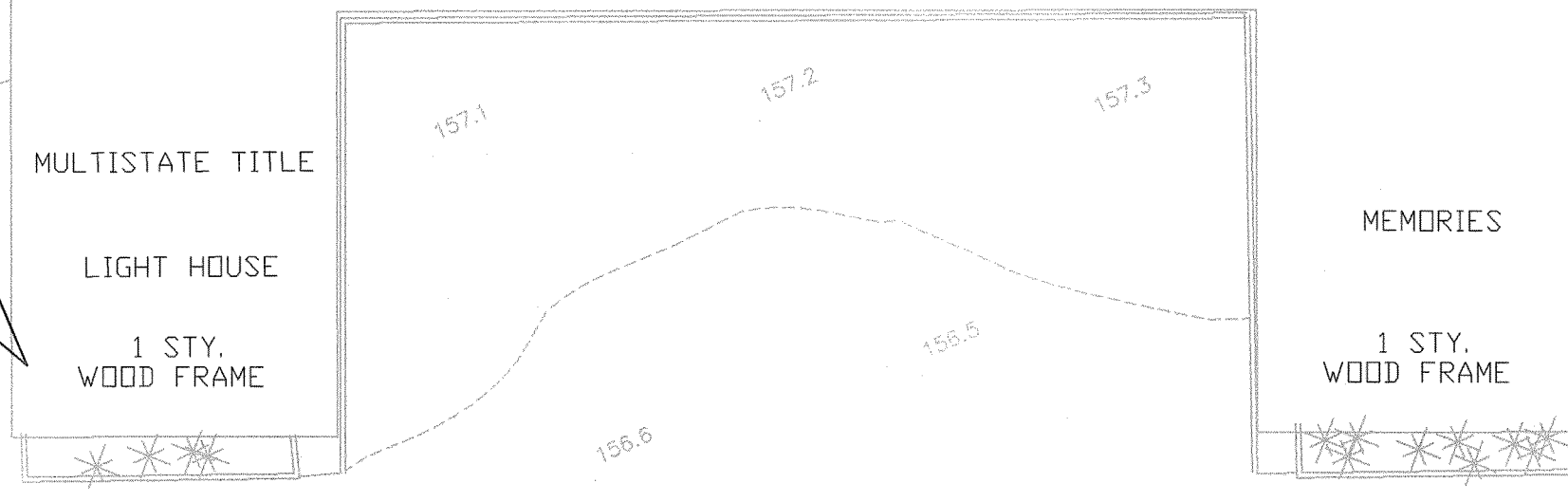
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MATCH TO DRAINAGE & UTILITY PLAN - 2

#1665  
2 STY.  
TOWN & COUNTRY  
PLAZA

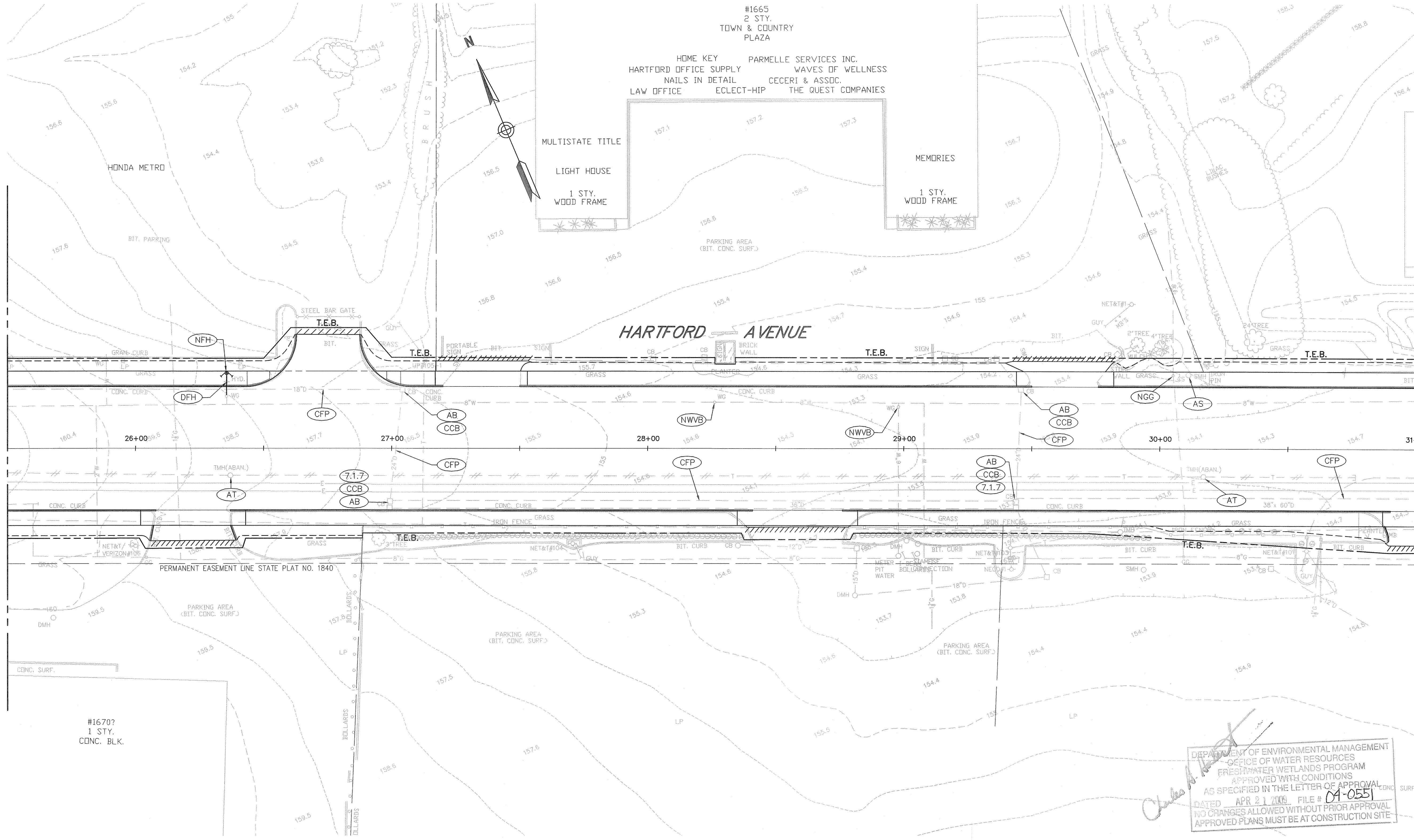
HOME KEY  
HARTFORD OFFICE SUPPLY  
NAILS IN DETAIL  
LAW OFFICE

PARMELLE SERVICES INC.  
WAVES OF WELLNESS  
CECERI & ASSOC.  
THE QUEST COMPANIES



MATCH TO DRAINAGE & UTILITY PLAN - 1

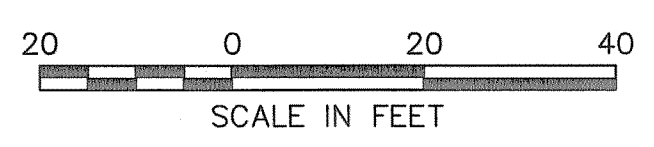
MATCH TO DRAINAGE & UTILITY PLAN - 3



#1670?  
1 STY.  
CONC. BLK.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
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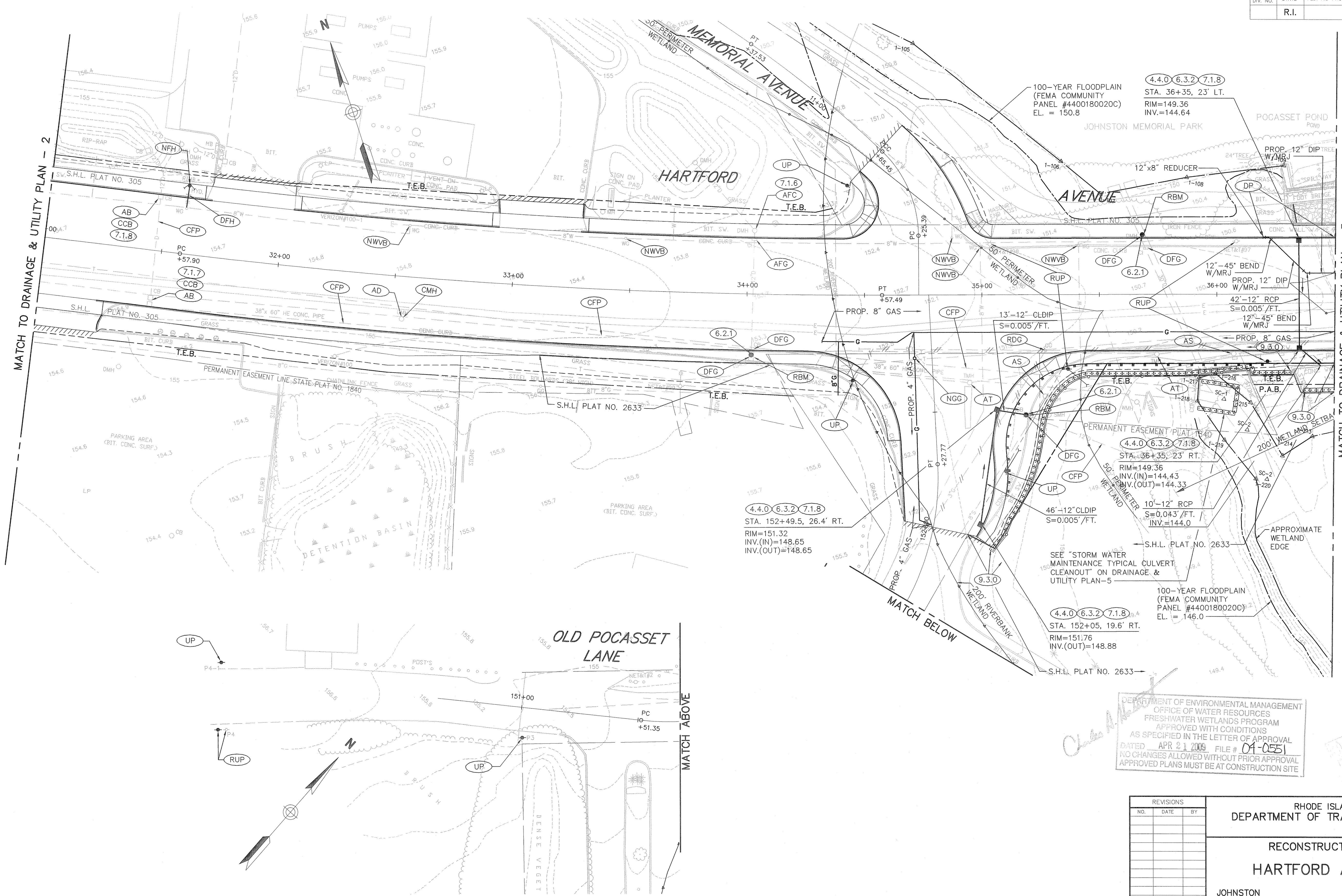
RHODE ISLAND  
DEPARTMENT OF TRANSPORTATION

RECONSTRUCTION OF  
HARTFORD AVENUE

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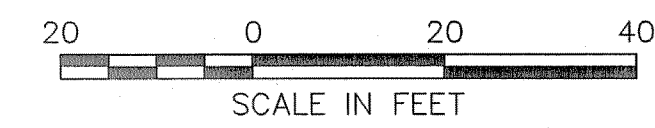
DRAINAGE & UTILITY  
PLAN - 2  
STA. 25+50 TO STA. 31+00

CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ SCALE 1"=20'



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 APPROVED WITH CONDITIONS  
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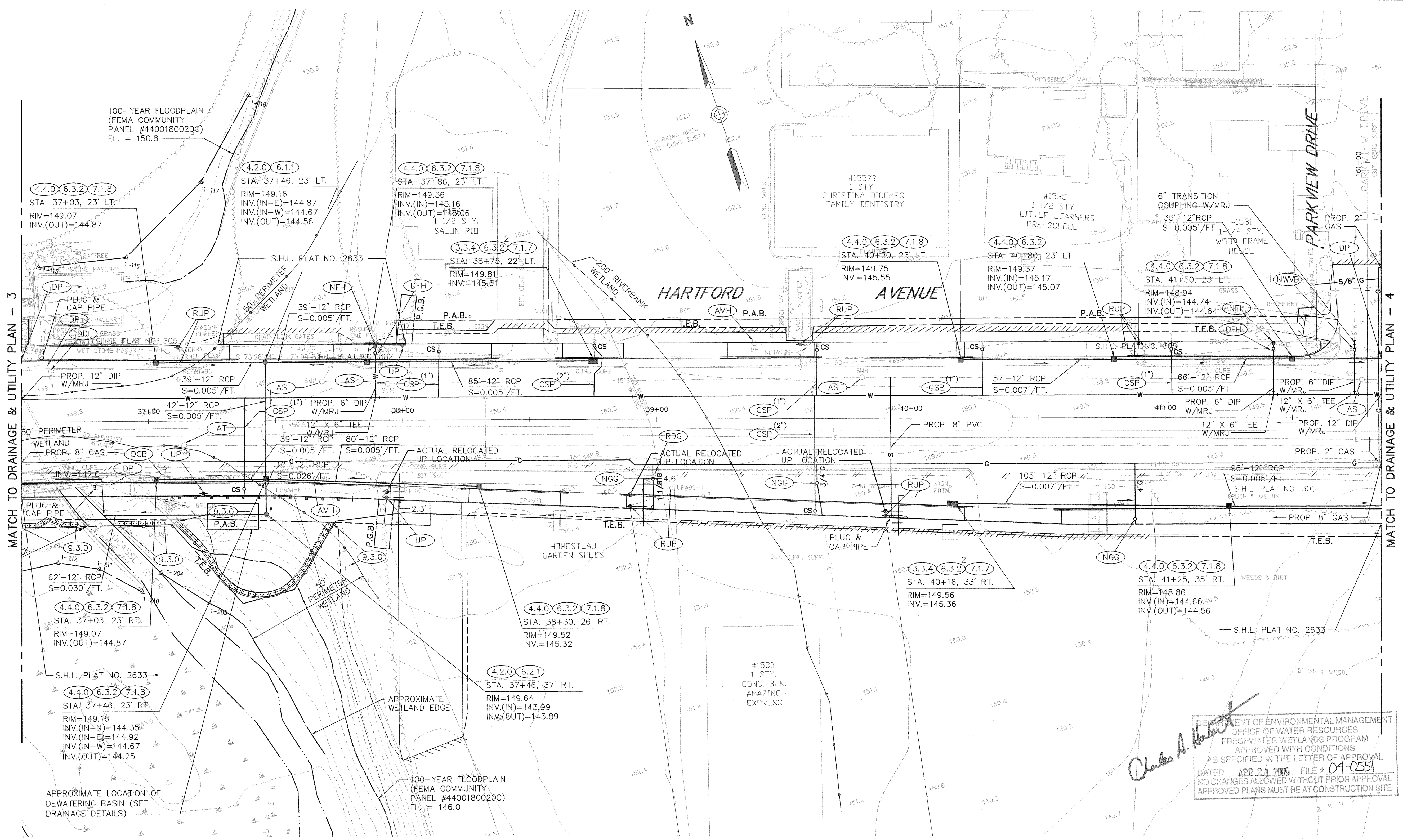
RECONSTRUCTION OF  
**HARTFORD AVENUE**

JOHNSTON RHODE ISLAND

**DRAINAGE & UTILITY  
 PLAN - 3**

STA. 31+00 TO STA. 36+50

CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ SCALE 1"=20'



MATCH TO DRAINAGE & UTILITY PLAN - 3

MATCH TO DRAINAGE & UTILITY PLAN - 4

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
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 FRESHWATER WETLANDS PROGRAM  
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 DATED APR 21 2009 FILE # 09-0551  
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*Charles A. Water...*

MAR 31 2009

20 0 20 40  
 SCALE IN FEET

VANASSE HANGEN BRUSTLIN, INC.  
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 PROVIDENCE, R.I.

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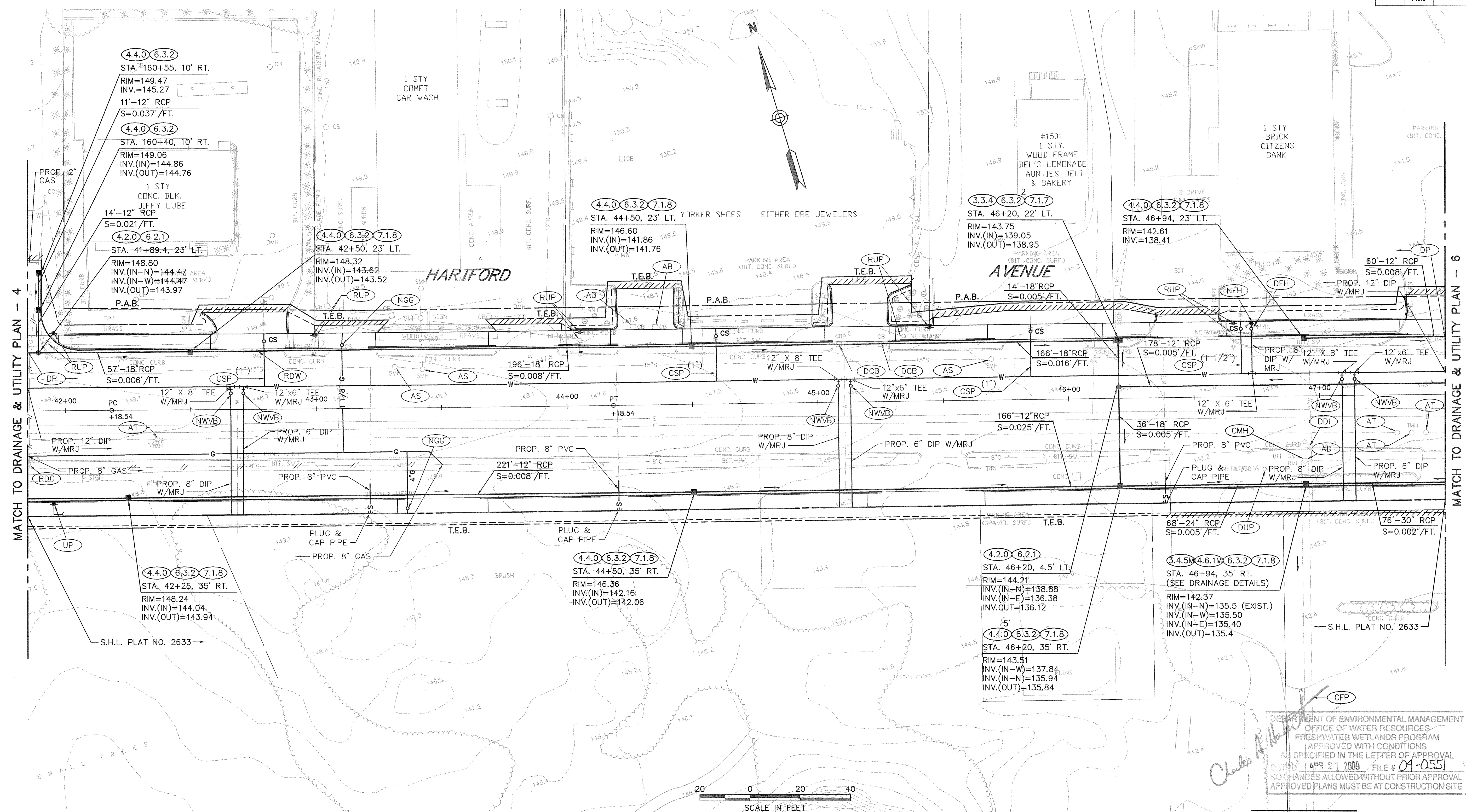
RECONSTRUCTION OF  
**HARTFORD AVENUE**

JOHNSTON RHODE ISLAND

**DRAINAGE & UTILITY  
 PLAN - 4**  
 STA. 36+50 TO STA. 41+85

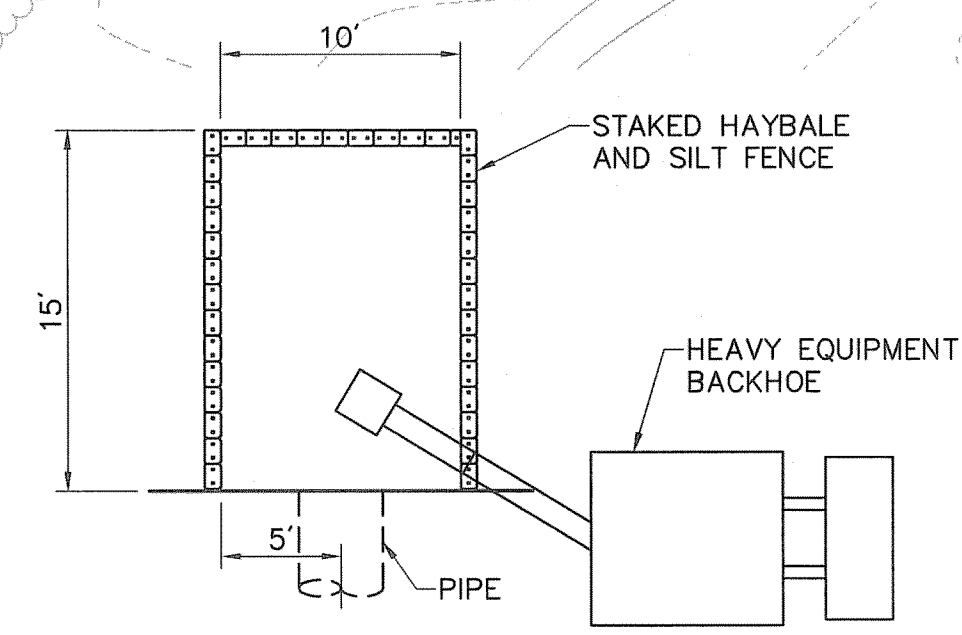
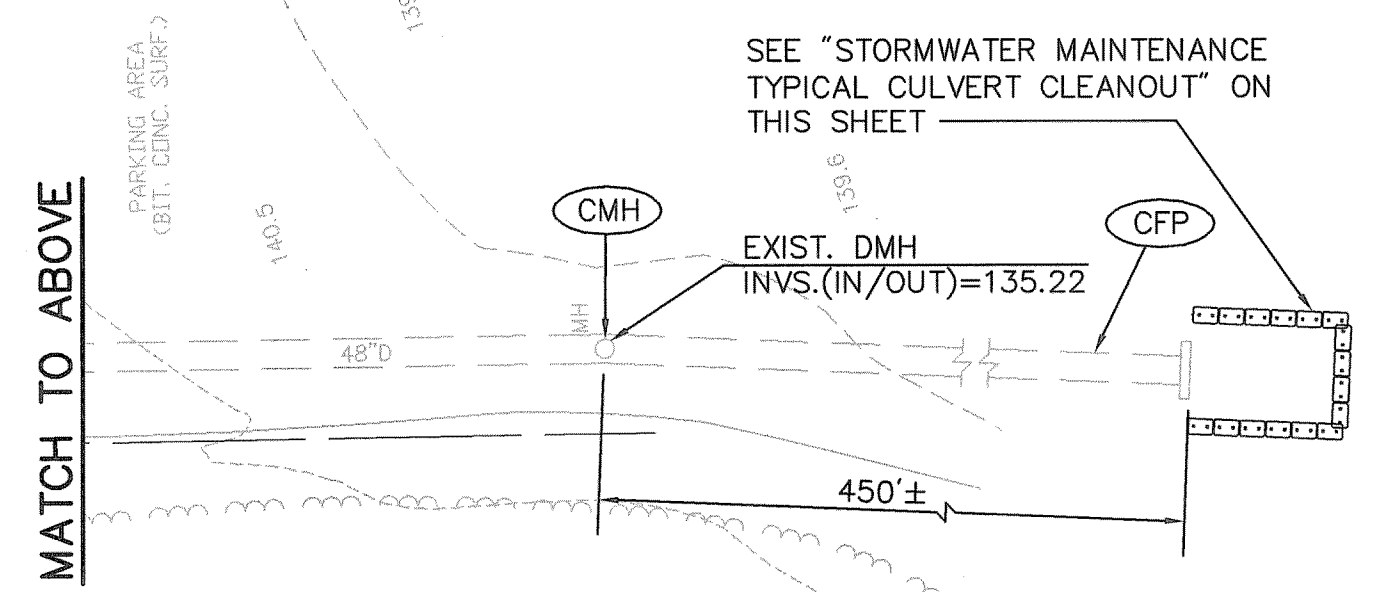
CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ SCALE 1"=20'

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MATCH TO DRAINAGE & UTILITY PLAN - 4

MATCH TO DRAINAGE & UTILITY PLAN - 6



**STORMWATER MAINTENANCE TYPICAL CULVERT CLEANOUT**  
SCALE: 1"=8'

- NOTES:**
1. ALL EQUIPMENT WILL BE STAGED IN UPLAND AREAS.
  2. SEDIMENT WILL BE REMOVED TO 3 FEET BELOW THE INVERT OF THE CULVERT TO CREATE A SUMP FOR CATCHING ADDITIONAL SEDIMENT TRAPPED IN THE PIPE.
  3. SEDIMENT WILL BE DISPOSED OF AT A PROPERLY LICENSED FACILITY.

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OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
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DATE: APR 21 2009 FILE # 04-0551  
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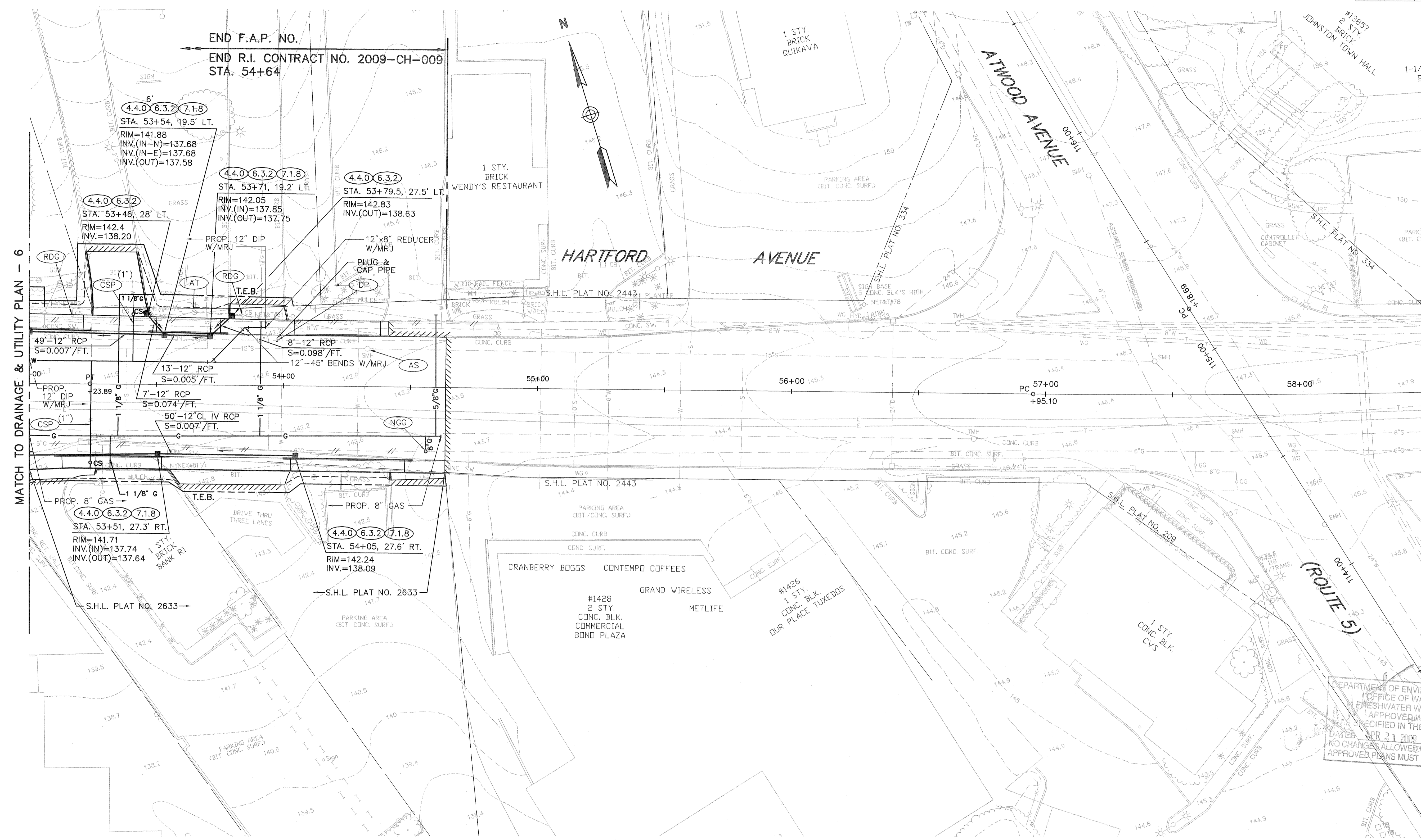
MATCH TO BELOW

REVISIONS		
NO.	DATE	BY

RHODE ISLAND DEPARTMENT OF TRANSPORTATION	
RECONSTRUCTION OF HARTFORD AVENUE	
JOHNSTON	RHODE ISLAND
DRAINAGE & UTILITY PLAN - 5	
STA. 41+85 TO STA. 47+50	
CHECKED BY _____	DATE _____ SCALE 1"=20'

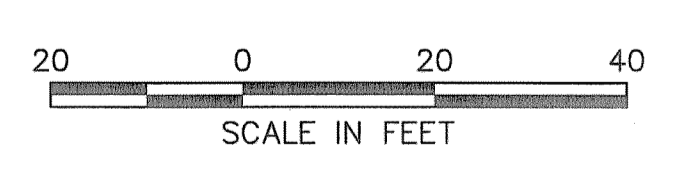
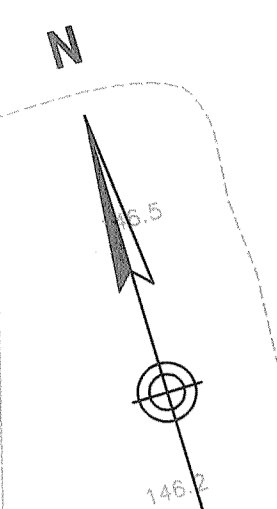
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MATCH TO DRAINAGE & UTILITY PLAN - 6

END F.A.P. NO.  
END R.I. CONTRACT NO. 2009-CH-009  
STA. 54+64



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OFFICE OF WATER RESOURCES  
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DEPARTMENT OF TRANSPORTATION

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RECONSTRUCTION OF  
**HARTFORD AVENUE**

JOHNSTON RHODE ISLAND

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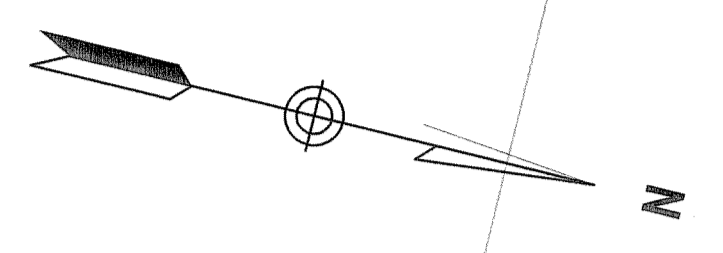
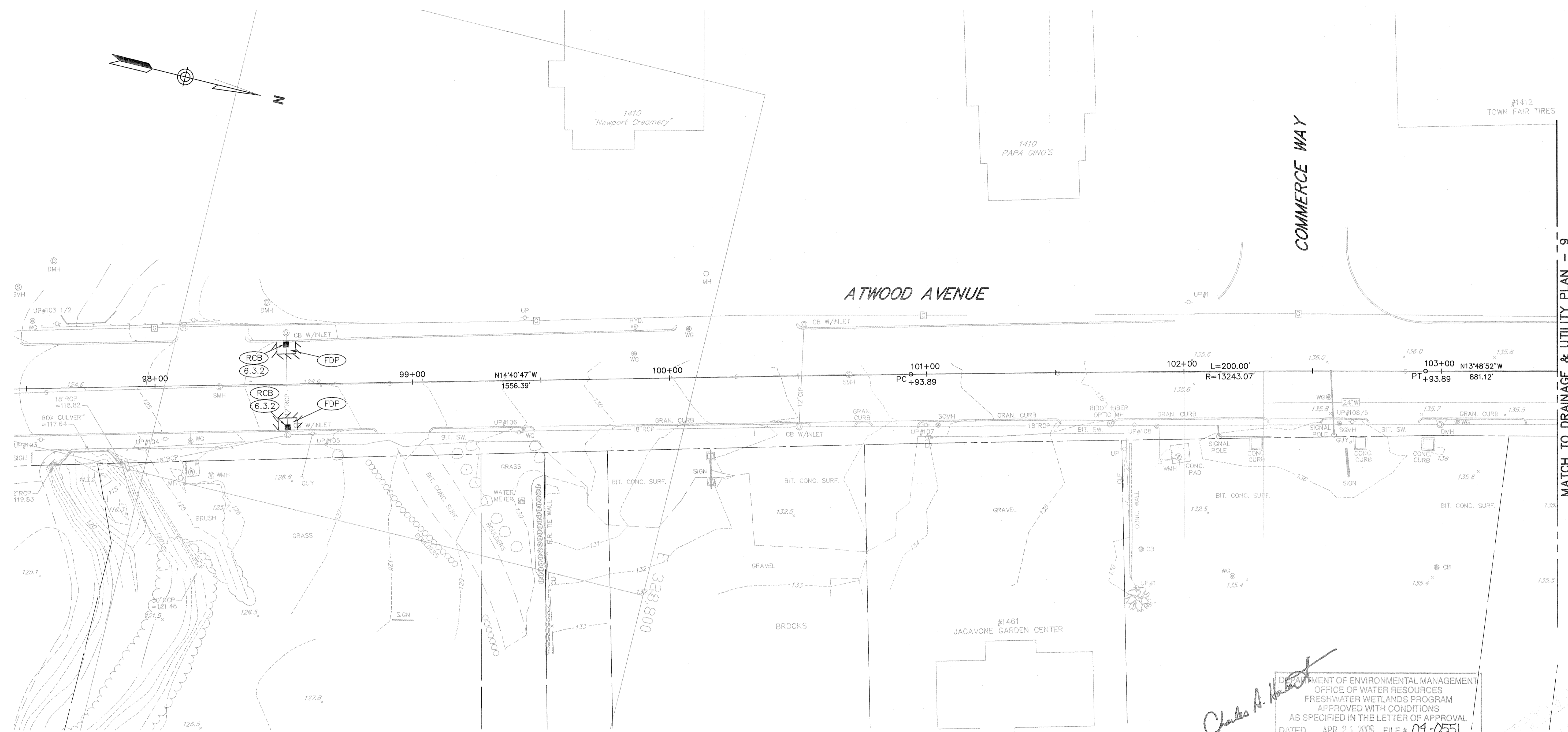
**DRAINAGE & UTILITY  
PLAN - 7**  
STA. 53+00 TO STA. 58+50

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CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ SCALE 1"=20'

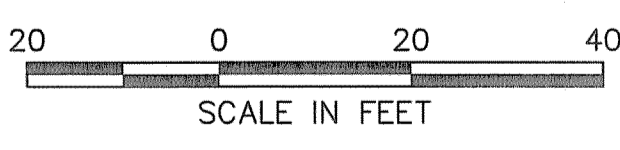
VANASSE HANGEN BRUSTLIN, INC.  
TRANSPORTATION, LAND DEVELOPMENT, ENVIRONMENTAL SERVICES  
PROVIDENCE, R.I.

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 OFFICE OF WATER RESOURCES  
 FRESHWATER WETLANDS PROGRAM  
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*Charles A. H. [Signature]*

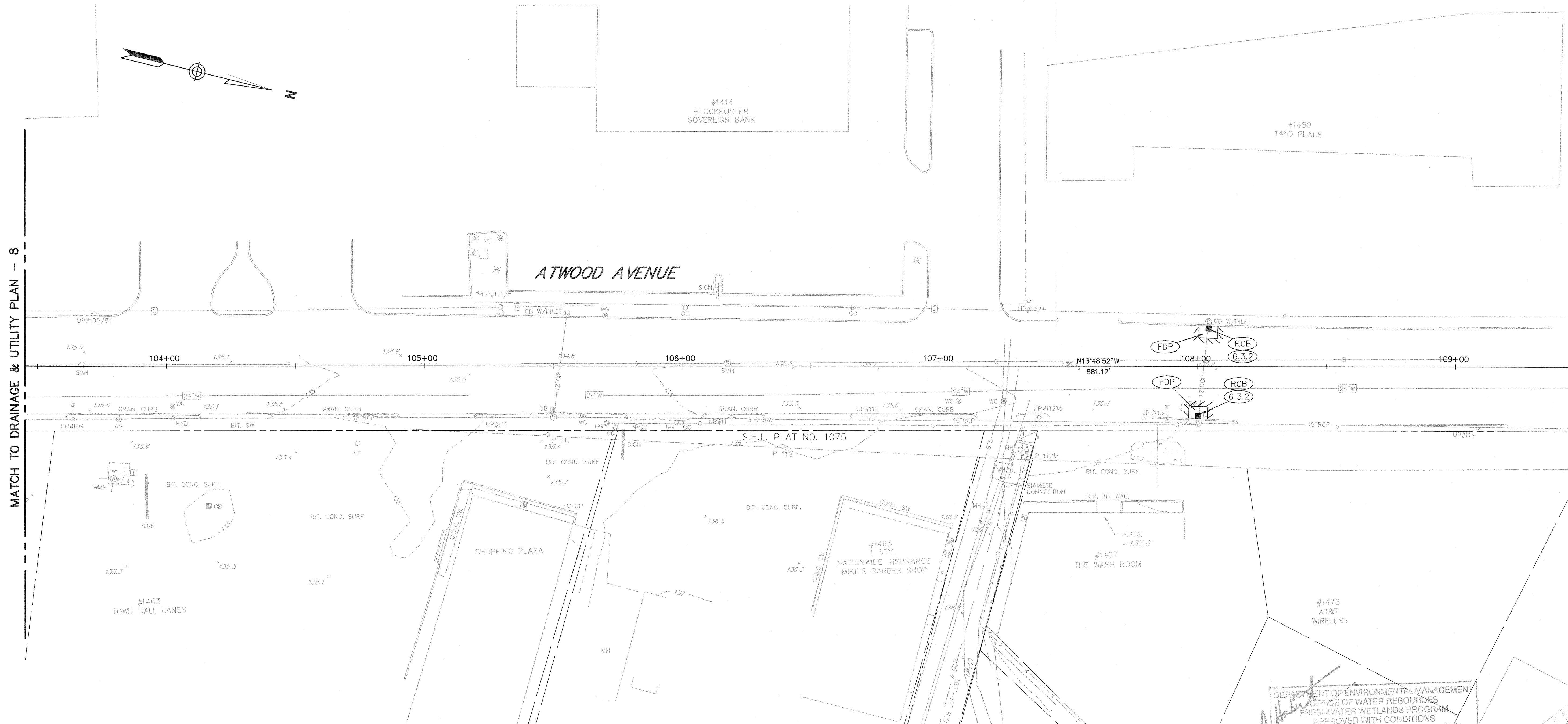


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 DEPARTMENT OF TRANSPORTATION  
 RECONSTRUCTION OF  
**HARTFORD AVENUE**  
 JOHNSTON RHODE ISLAND  
**DRAINAGE & UTILITY PLAN - 8**  
 ATWOOD AVENUE  
 CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ SCALE 1"=20'

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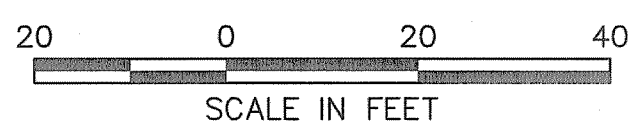


MATCH TO DRAINAGE & UTILITY PLAN - 8

MATCH TO DRAINAGE & UTILITY PLAN - 10

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
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 FRESHWATER WETLANDS PROGRAM  
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*Charles A. [Signature]*



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RECONSTRUCTION OF  
 HARTFORD AVENUE

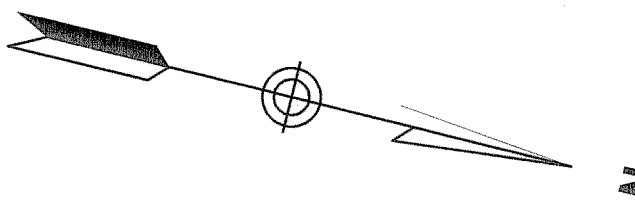
JOHNSTON RHODE ISLAND

**DRAINAGE & UTILITY  
 PLAN - 9  
 ATWOOD AVENUE**

CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ SCALE 1"=20'

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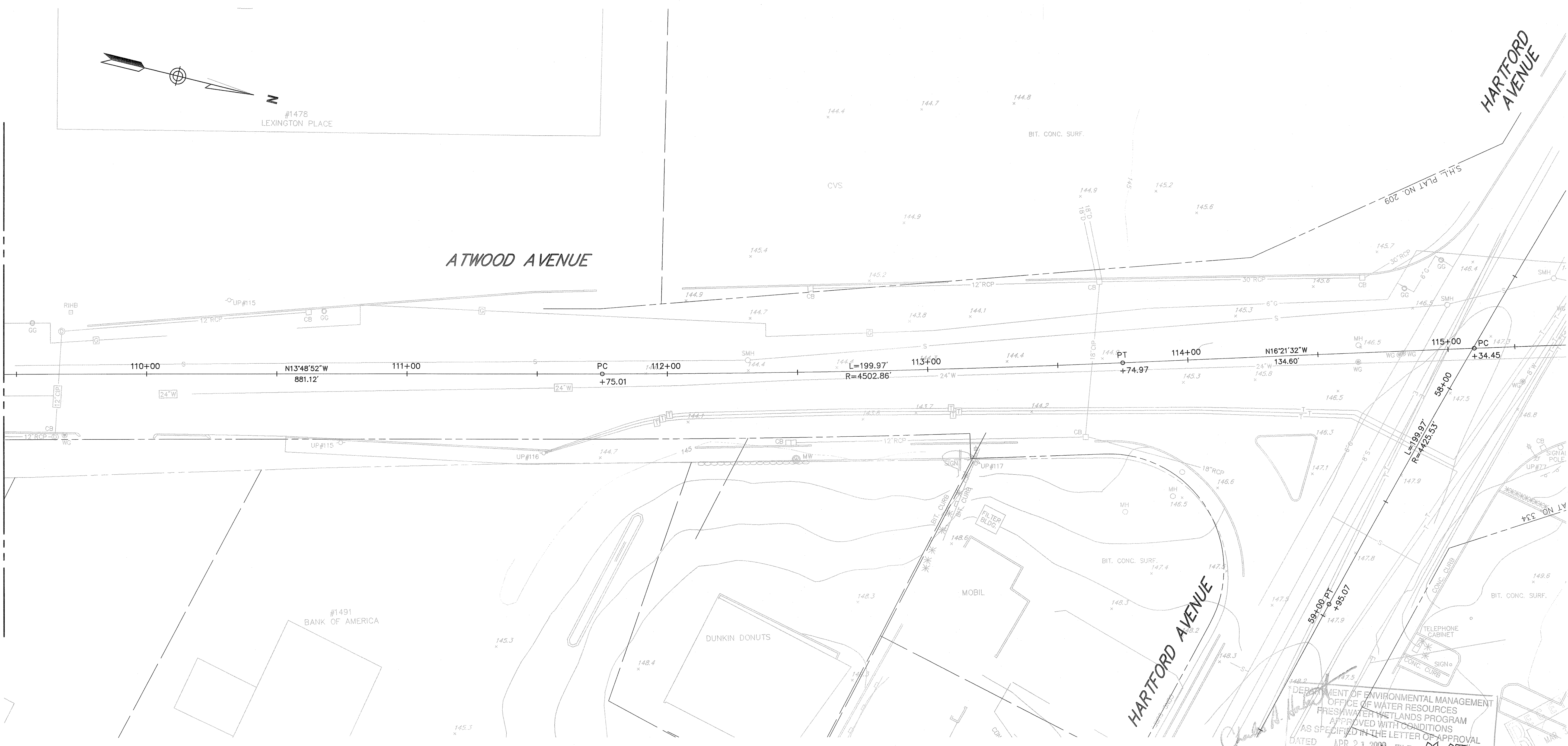


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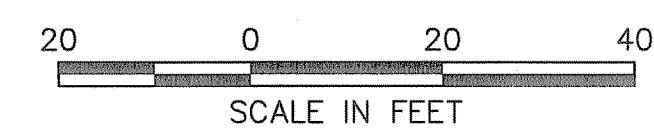
MATCH TO DRAINAGE & UTILITY PLAN - 9

ATWOOD AVENUE

HARTFORD AVENUE



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OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
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HARTFORD AVENUE

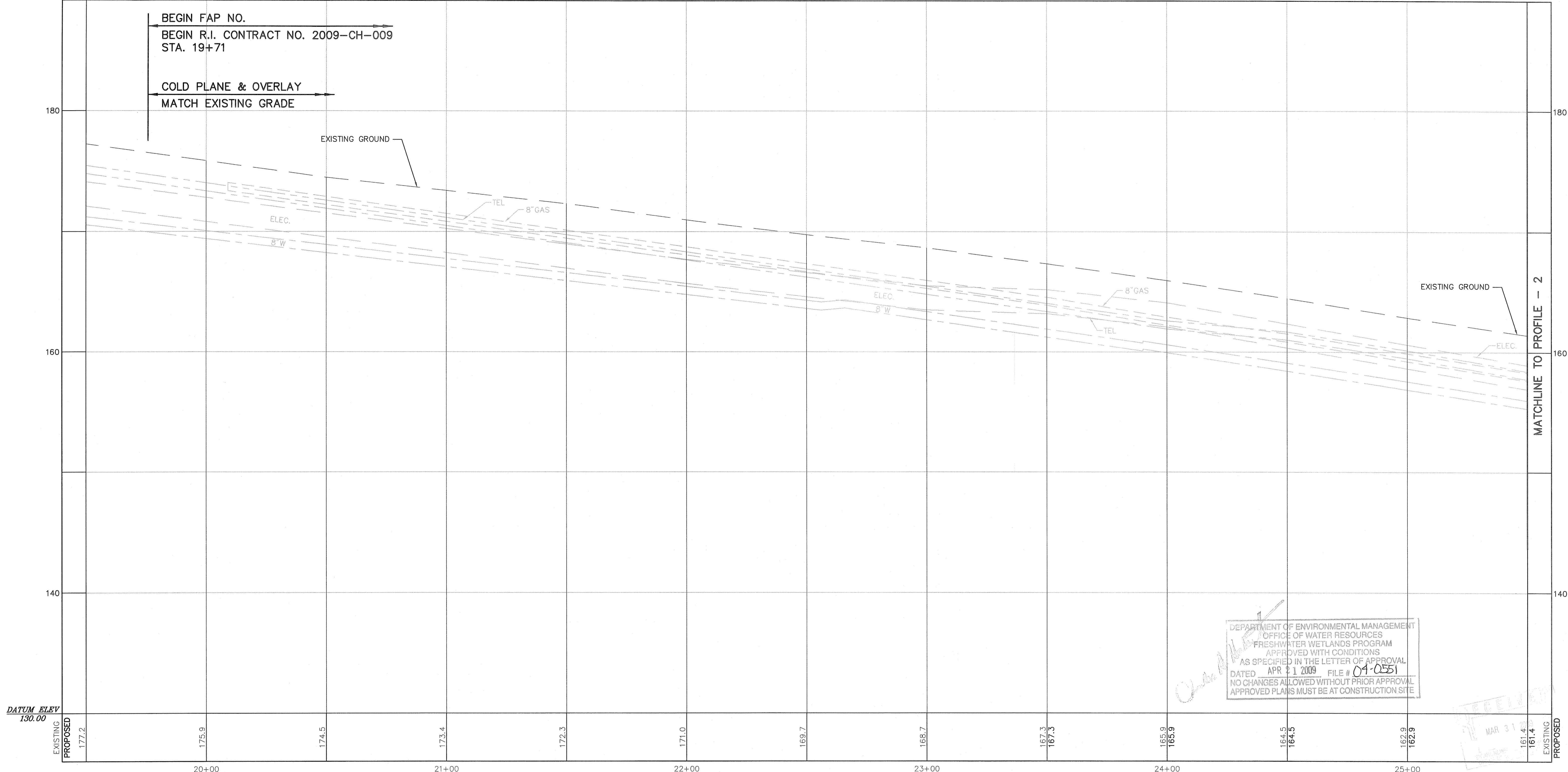
JOHNSTON RHODE ISLAND

DRAINAGE & UTILITY  
PLAN - 10  
ATWOOD AVENUE

CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ SCALE 1"=20'

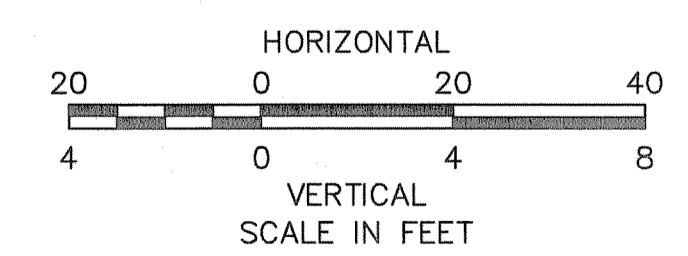
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 MAR 31 2009  
 161.4  
 EXISTING  
 PROPOSED

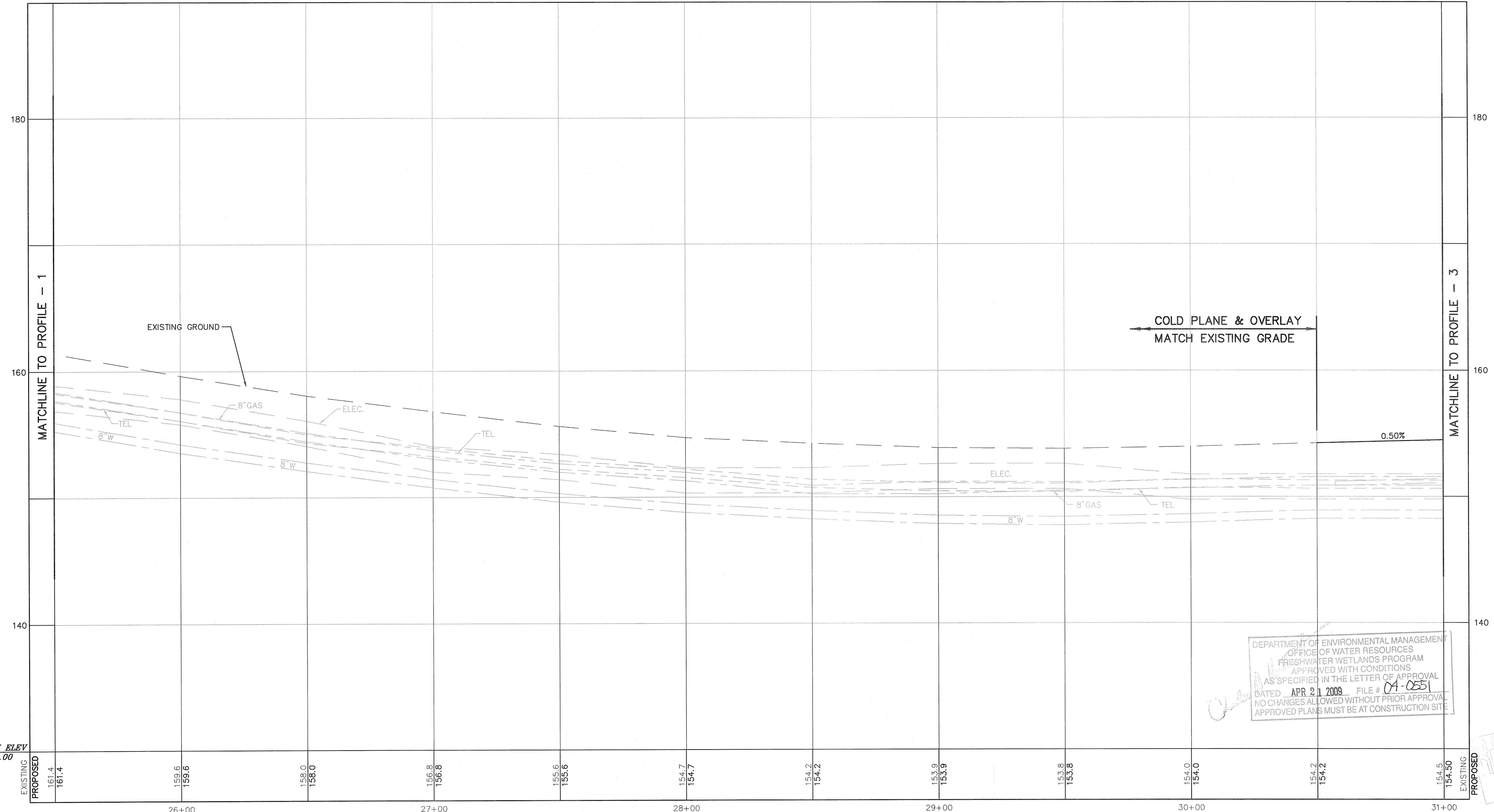


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 PROVIDENCE, R.I.

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**RHODE ISLAND  
DEPARTMENT OF TRANSPORTATION**  
  
**RECONSTRUCTION OF  
HARTFORD AVENUE**  
  
 JOHNSTON RHODE ISLAND  
  
**PROFILE -- 1**  
  
 CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ SCALE HOR. 1"=20'  
 VER. 1"=4'

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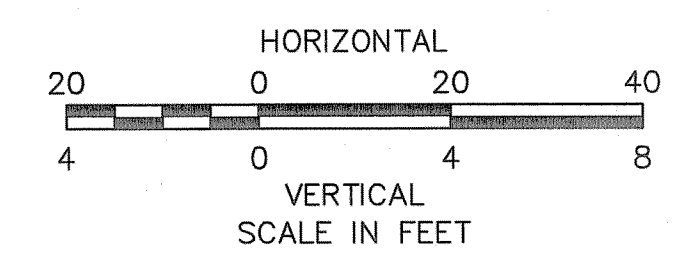


DATUM ELEV  
130.00

EXISTING	161.4	159.6	158.0	156.8	155.6	154.7	154.2	153.9	153.8	154.0	154.2	154.5
PROPOSED	161.4	159.6	158.0	156.8	155.6	154.7	154.2	153.9	153.8	154.0	154.2	154.5

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
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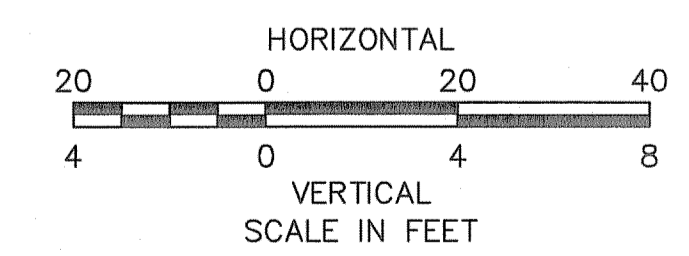
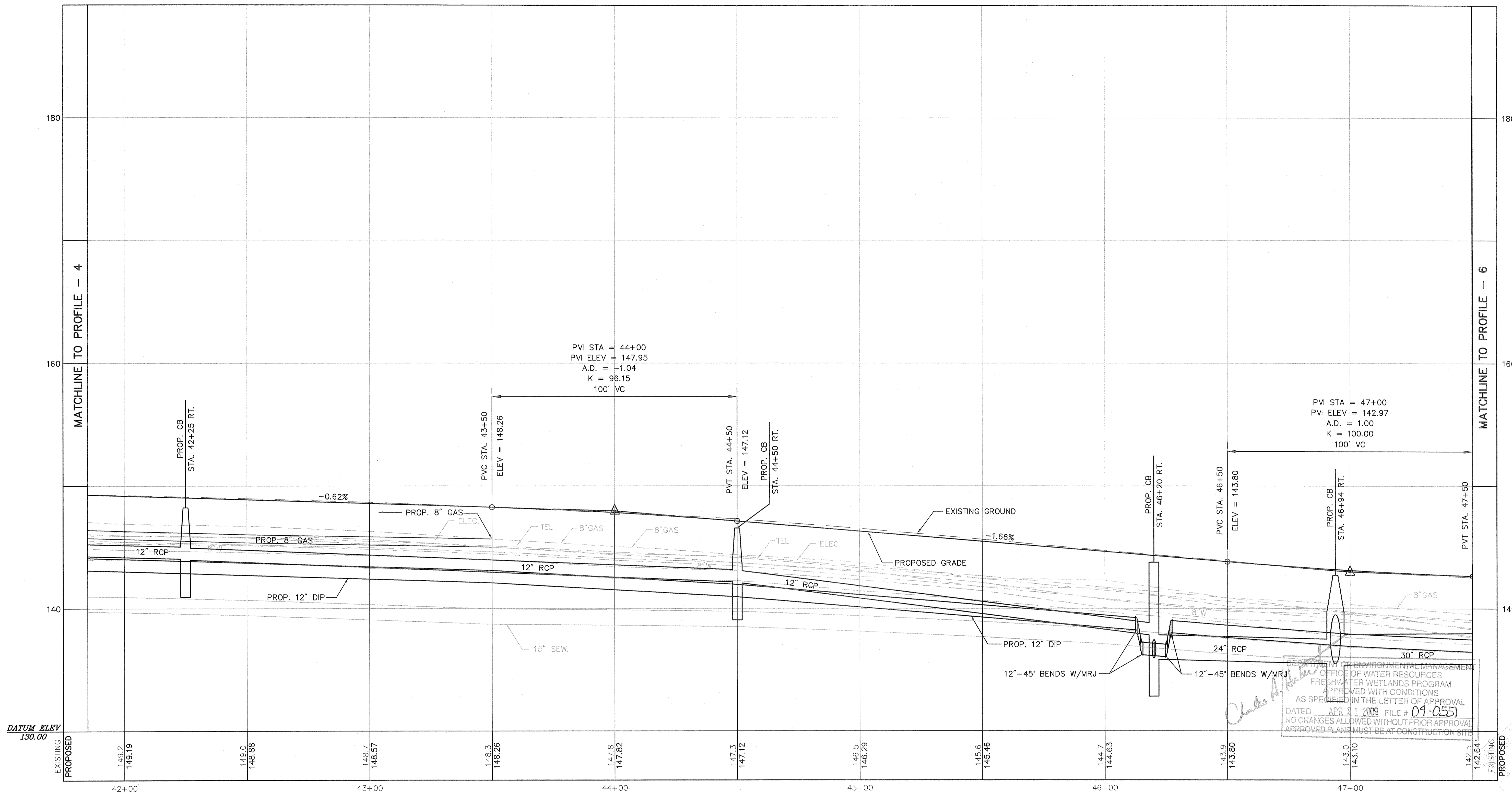
REVISIONS		
NO.	DATE	BY

RHODE ISLAND  
DEPARTMENT OF TRANSPORTATION  
RECONSTRUCTION OF  
HARTFORD AVENUE  
JOHNSTON RHODE ISLAND  
PROFILE - 2  
CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ SCALE  $\frac{HOR:1"=20'}{VER:1"=4'}$

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DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF WATER RESOURCES  
 FRESHWATER WETLANDS PROGRAM  
 APPROVED WITH CONDITIONS  
 AS SPECIFIED IN THE LETTER OF APPROVAL  
 DATED APR 21 2009 FILE # 01-055  
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE

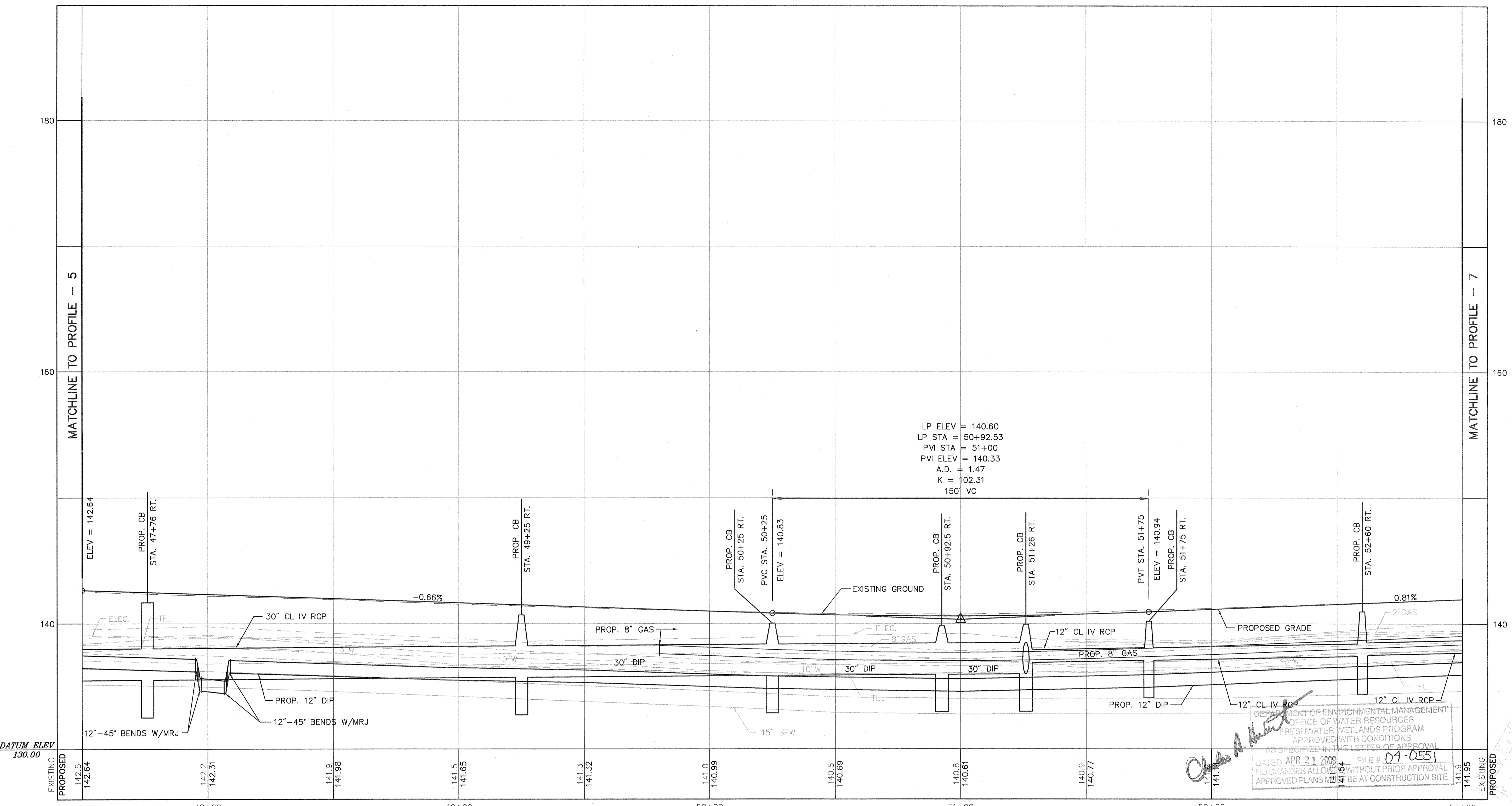
*Charles A. [Signature]*

REVISIONS		
NO.	DATE	BY

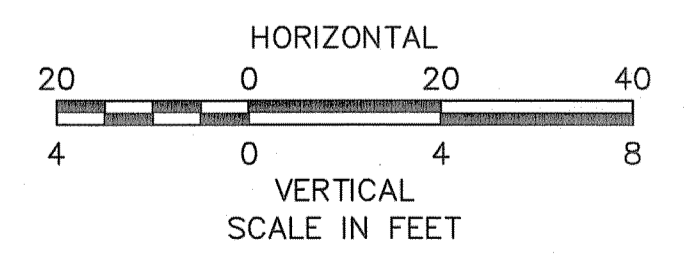
RHODE ISLAND  
 DEPARTMENT OF TRANSPORTATION  
 RECONSTRUCTION OF  
 HARTFORD AVENUE  
 JOHNSTON RHODE ISLAND  
 PROFILE - 5  
 CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ SCALE \_\_\_\_\_ HOR: 1"=20'  
 VER: 1"=4'

VANASSE HANGEN BRUSTLIN, INC.  
 TRANSPORTATION LAND DEVELOPMENT ENVIRONMENTAL SERVICES  
 PROVIDENCE, R.I.

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DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF WATER RESOURCES  
 FRESHWATER WETLANDS PROGRAM  
 APPROVED WITH CONDITIONS  
 AS SPECIFIED IN THE LETTER OF APPROVAL  
 DATED APR 21 2009 FILE # 09-0551  
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE



REVISIONS		
NO.	DATE	BY

**RHODE ISLAND**  
**DEPARTMENT OF TRANSPORTATION**

RECONSTRUCTION OF  
**HARTFORD AVENUE**

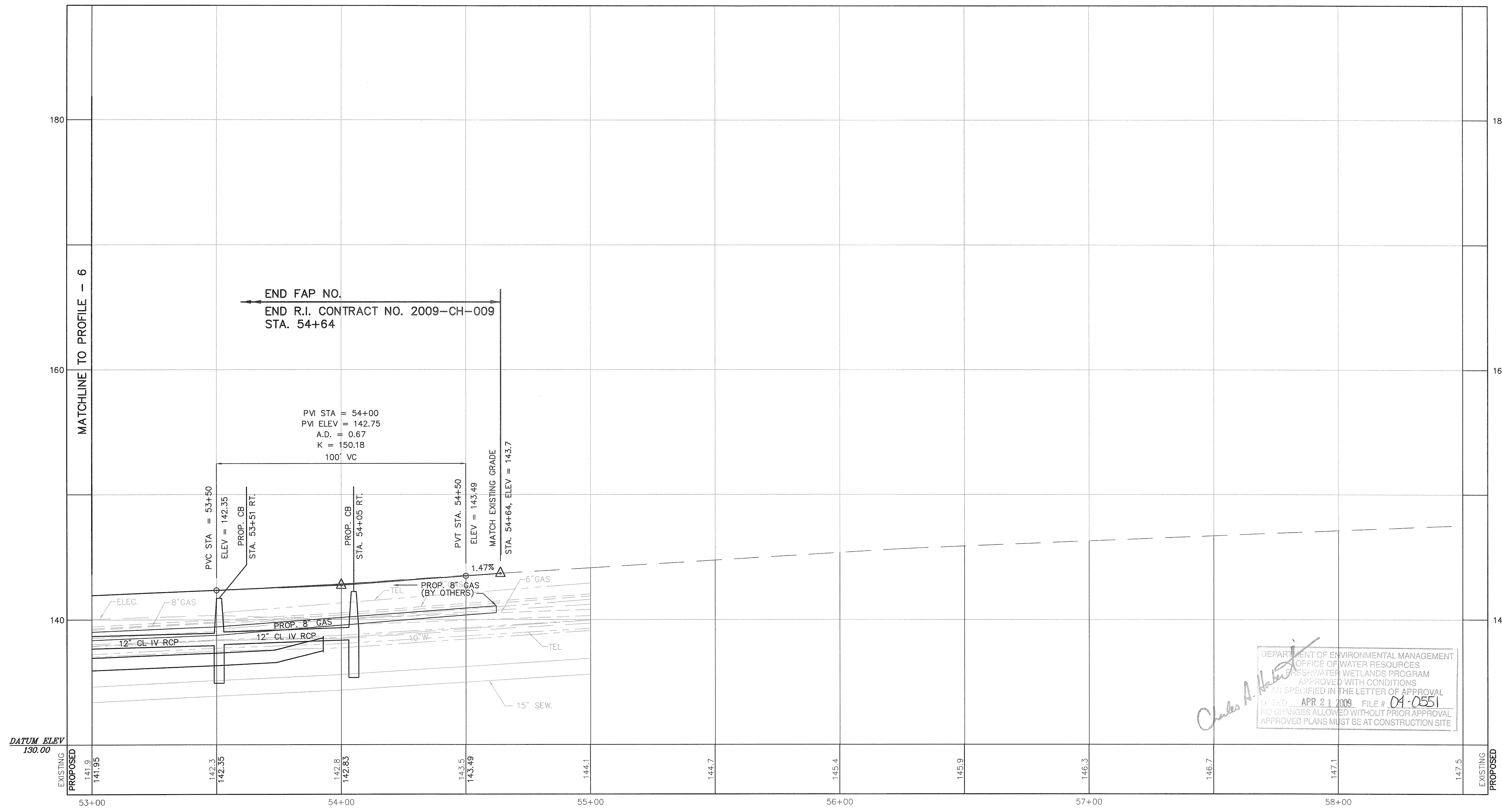
JOHNSTON      RHODE ISLAND

**PROFILE -- 6**

CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ SCALE \_\_\_\_\_ HOR. 1"=20'  
 VER. 1"=4'

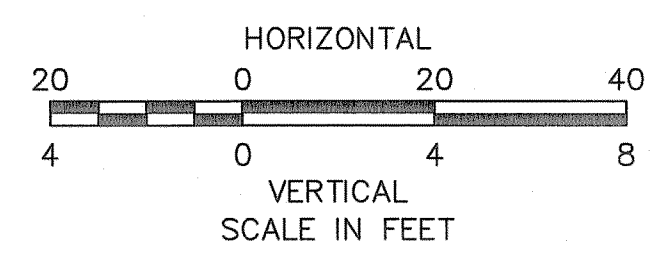
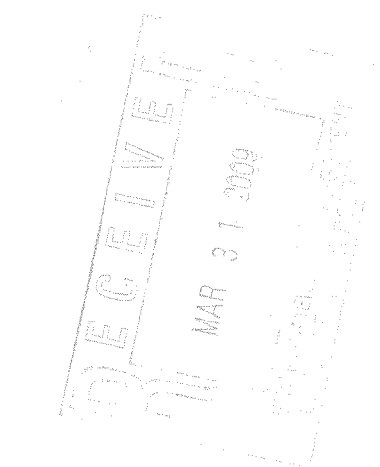
VANASSE HANGEN BRUSTLIN, INC.  
 TRANSPORTATION LAND DEVELOPMENT ENVIRONMENTAL SERVICES  
 PROVIDENCE, R.I.

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DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS  
AS SPECIFIED IN THE LETTER OF APPROVAL  
DATED APR 21 2009 FILE # 04-0551  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

*Charles A. [Signature]*

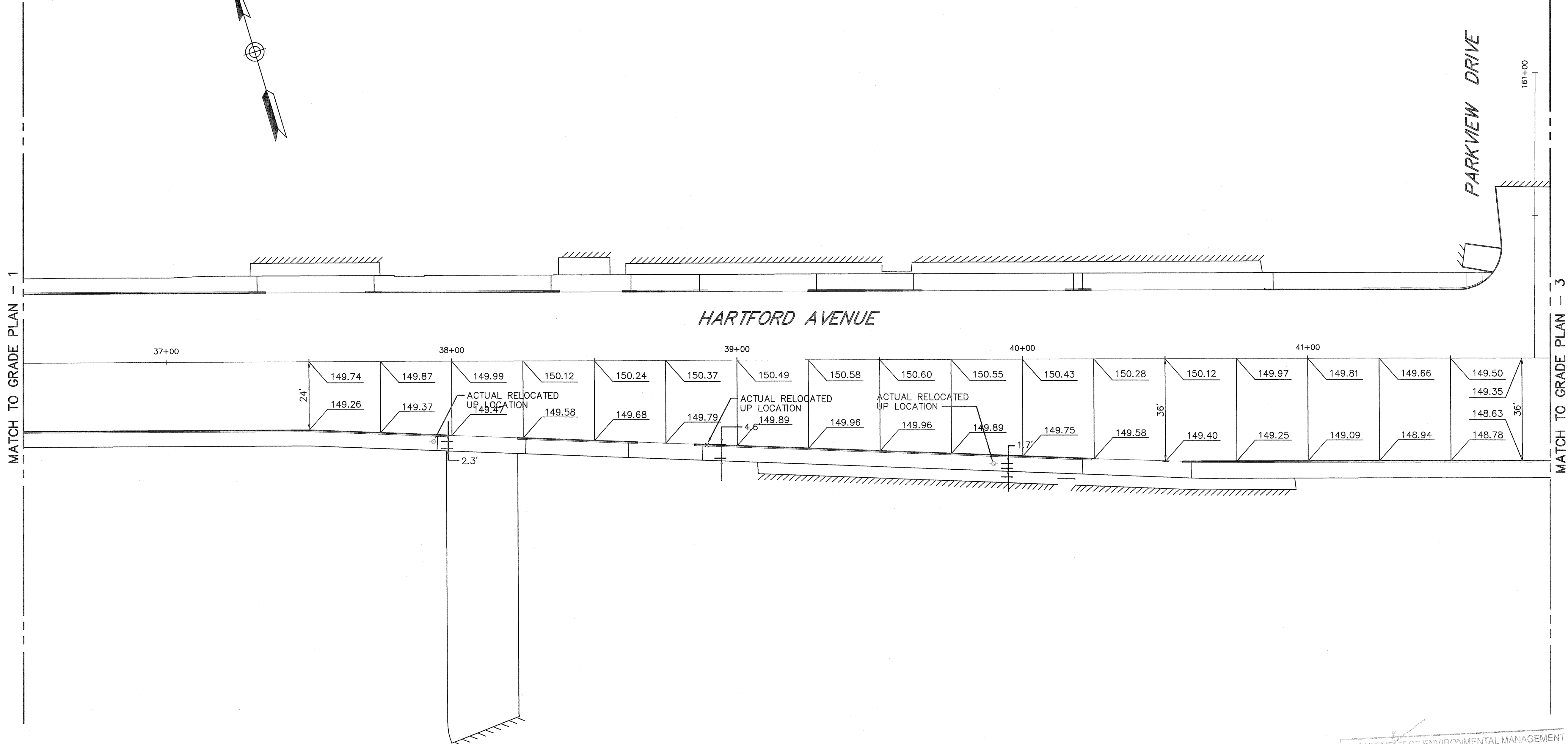
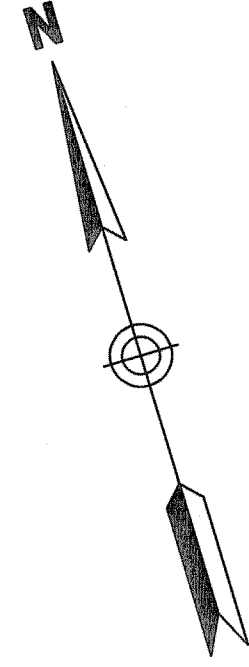


VANASSE HANGEN BRUSTLIN, INC.  
TRANSPORTATION LAND DEVELOPMENT ENVIRONMENTAL SERVICES  
PROVIDENCE, R.I.

REVISIONS			RHODE ISLAND DEPARTMENT OF TRANSPORTATION	
NO.	DATE	BY	RECONSTRUCTION OF HARTFORD AVENUE	
			JOHNSTON RHODE ISLAND	
			PROFILE - 7	
CHECKED BY _____			DATE _____	SCALE HOR. 1"=20' VER. 1"=4'

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HARTFORD AVENUE

MATCH TO GRADE PLAN - 1

MATCH TO GRADE PLAN - 3

PARKVIEW DRIVE

161+00

37+00

38+00

39+00

40+00

41+00

149.74	149.87	149.99	150.12	150.24	150.37	150.49	150.58	150.60	150.55	150.43	150.28	150.12	149.97	149.81	149.66	149.50
149.26	149.37	149.49	149.58	149.68	149.79	149.89	149.96	149.96	149.89	149.75	149.58	149.40	149.25	149.09	148.94	148.78

ACTUAL RELOCATED UP LOCATION

ACTUAL RELOCATED UP LOCATION

ACTUAL RELOCATED UP LOCATION

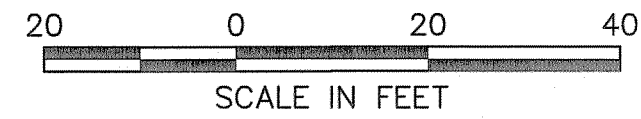
2.3'

24'

4.6'

36'

36'



DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF WATER RESOURCES  
 FRESHWATER WETLANDS PROGRAM  
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 DATED APR 21 2009 FILE # 04-0551  
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RECEIVED  
 MAR 3 2009

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VANASSE HANGEN BRUSTLIN, INC.  
 TRANSPORTATION LAND DEVELOPMENT ENVIRONMENTAL SERVICES  
 PROVIDENCE, R.I.

REVISIONS		
NO.	DATE	BY

RHODE ISLAND  
 DEPARTMENT OF TRANSPORTATION

RECONSTRUCTION OF  
**HARTFORD AVENUE**

JOHNSTON RHODE ISLAND

**GRADE PLAN - 2**

CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ SCALE 1"=20'



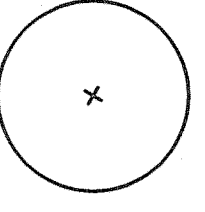

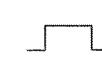


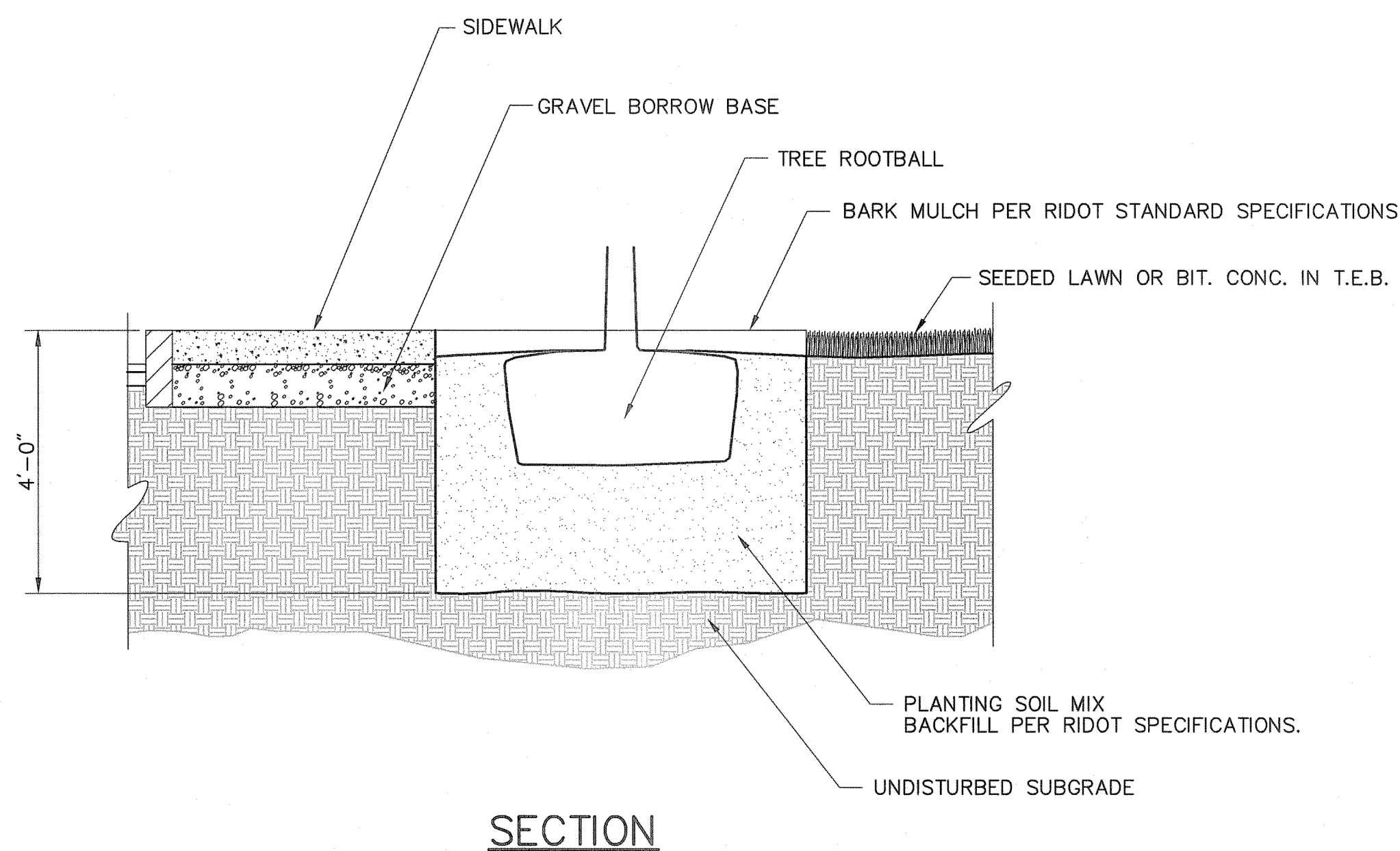
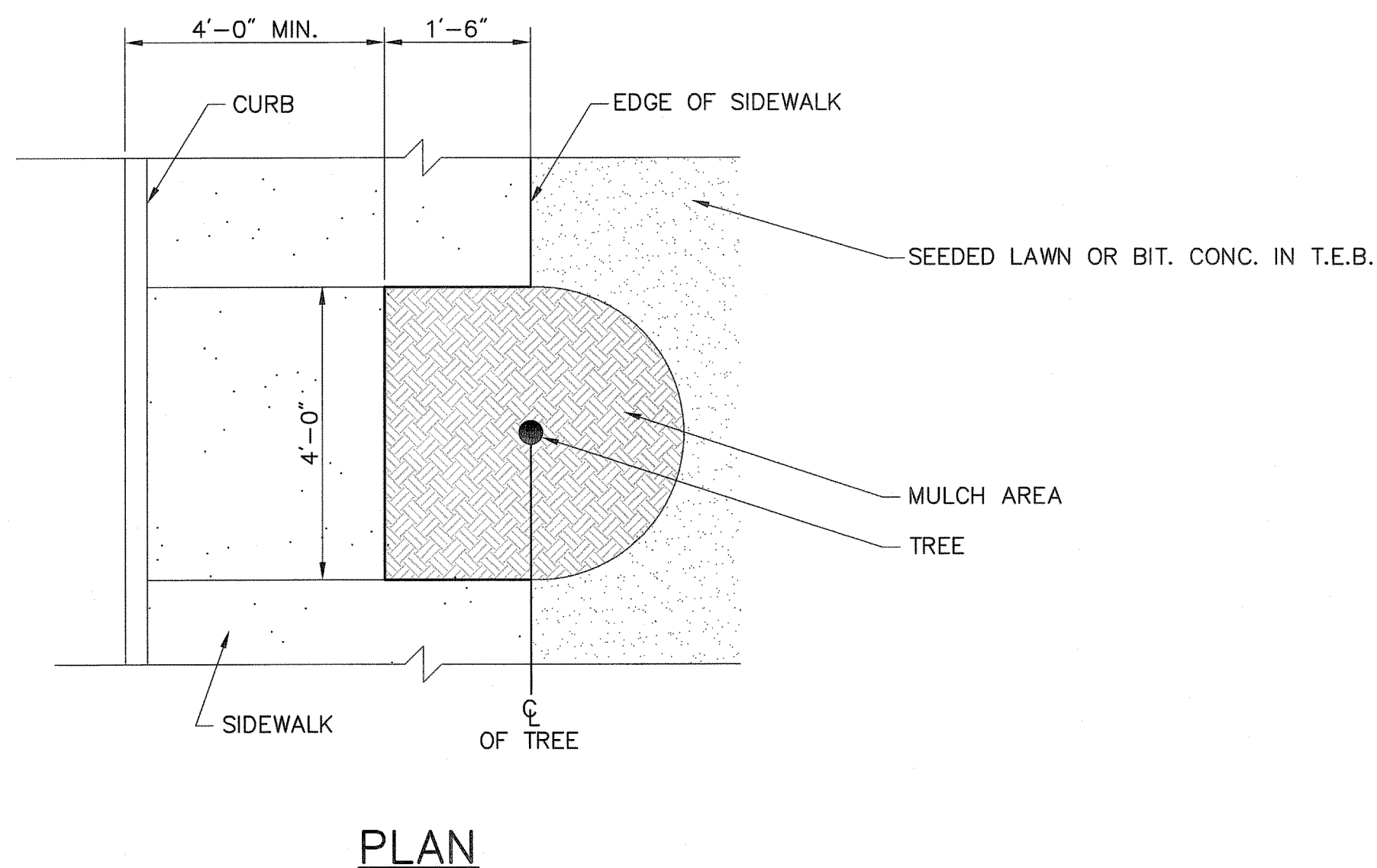
MASTER PLANT LIST						
TREES						
KEY	BOTANICAL NAME	COMMON NAME	QUAN	SIZE	SPACING	ROOT/CONTAINER
AR	ACER RUBRUM 'OCTOBER GLORY'	RED MAPLE	2	3-3.5" CAL.	AS NOTED	B & B
PAB	PLATANUS ACERIFOLIA 'BLOODGOOD'	LONDON PLANE	9	3-3.5" CAL.	AS NOTED	B & B
UP	ULMUS 'PIONEER'	PIONEER ELM	8	3-3.5" CAL.	AS NOTED	B & B
ZSG	ZELKOVA SERRATA 'GREEN VASE'	JAP. ZELKOVA 'GREEN VASE'	6	3-3.5" CAL.	AS NOTED	B & B
ZSV	ZELKOVA SERRATA 'VILLAGE GREEN'	JAP. ZELKOVA 'VILLAGE GREEN'	9	3-3.5" CAL.	AS NOTED	B & B
GROUND COVER/PERENNIALS						
HH	HEMEROCALLIS 'HAPPY RETURNS'	HAPPY RETURNS DAYLILY	818	1 GAL.	12" OC	POT
JC	JUNIPERUS SARGENTII	SARGENT JUNIPER	221	18-24"	24" O.C	POT

### GENERAL LANDSCAPE NOTES

1. ALL PLANT MATERIAL SHALL BE TAGGED AT THE NURSERY IN ACCORDANCE WITH L.06.03.3 OF THE R.I. STANDARD SPECIFICATIONS, LATEST EDITION.
2. ALL PLANT SUBSTITUTES AND/OR CHANGES IN PLANT LOCATIONS SHALL BE APPROVED BY ACCORDANCE WITH SECTION L.06.03.4 AND L.06.03.5 OF THE R.I. STANDARD SPECIFICATIONS, LATEST EDITION.
3. ALL TREES ADJACENT TO SIDEWALKS SHALL HAVE A MINIMUM 6'- 8" LOWER BRANCH HEIGHT.
4. MULCH ALL AREAS WITHIN BEDLINES AND INDIVIDUAL PLANTS WITH 3" PINE BARK MULCH.
5. ALL DISTURBED AREAS TO BE SEEDDED UNLESS OTHERWISE NOTED ON PLANS. MULCH.

### LEGEND

-  CANOPY TREE
-  GROUND COVER/PERENNIAL
-  TREE CUTOUT, **CUT**, SEE DETAIL 1.1, THIS SHEET



**1.1 TREE CUTOUT DETAIL (NTS)**

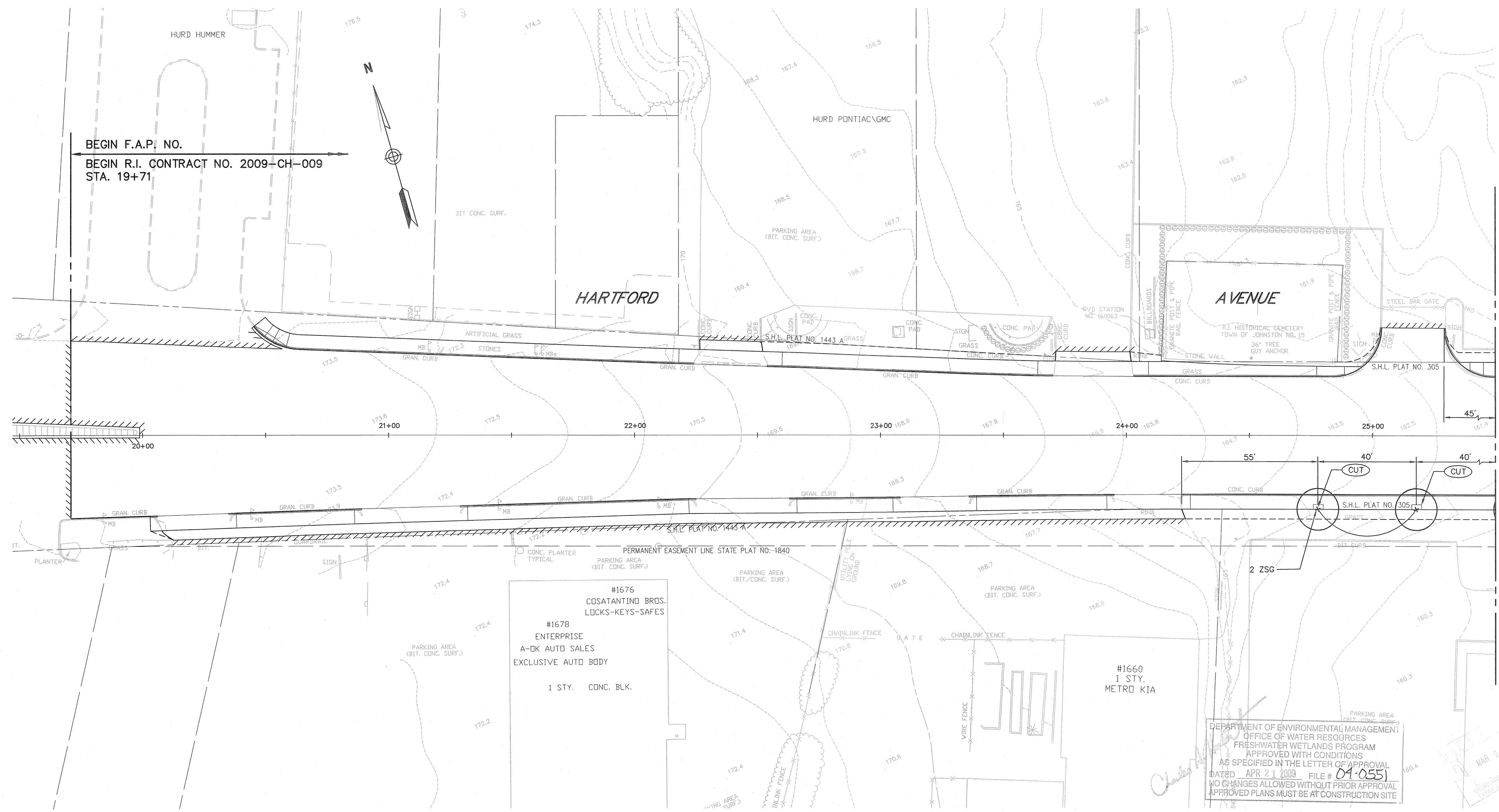
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF WATER RESOURCES  
 FRESHWATER WETLANDS PROGRAM  
 APPROVED WITH CONDITIONS  
 AS SPECIFIED IN THE LETTER OF APPROVAL  
 DATED APR 21 2009 FILE # 01-0551  
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 APPROVED PLANS MUST BE AT CONSTRUCTION SITE

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VANASSE HANGEN BRUSTLIN, INC.  
 TRANSPORTATION, LAND DEVELOPMENT, ENVIRONMENTAL SERVICES  
 PROVIDENCE, R.I.

REVISIONS		
NO.	DATE	BY

RHODE ISLAND DEPARTMENT OF TRANSPORTATION	
RECONSTRUCTION OF HARTFORD AVENUE	
JOHNSTON	RHODE ISLAND
LANDSCAPE PLAN NOTES AND LEGEND	
CHECKED BY _____	DATE _____ SCALE AS NOTED



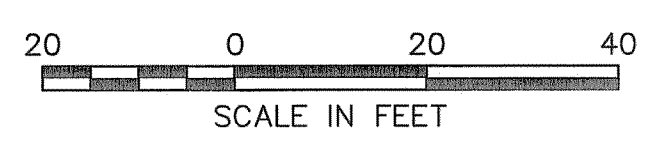
BEGIN F.A.P. NO.  
 BEGIN R.I. CONTRACT NO. 2009-CH-009  
 STA. 19+71

MATCH TO LANDSCAPE PLAN - 2

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF WATER RESOURCES  
 FRESHWATER WETLANDS PROGRAM  
 APPROVED WITH CONDITIONS  
 AS SPECIFIED IN THE LETTER OF APPROVAL  
 DATED APR 21 2009 FILE # 04-055  
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE

PLANT LIST (THIS SHEET)						
TREES						
KEY	BOTANICAL NAME	COMMON NAME	QUAN	SIZE	SPACING	ROOT/CONTAINER
ZSG	ZELKOVA SERRATA 'GREEN VASE'	JAP. ZELKOVA 'GREEN VASE'	2	3-3.5" CAL.	AS NOTED	B & B

NOTES:  
 1. REFER TO LANDSCAPE PLAN NOTES AND LEGEND FOR GENERAL LANDSCAPE NOTES.  
 2. ALL TREES ARE TO HAVE A MINIMUM LOWER BRANCH HEIGHT OF 6'-8".



VANASSE HANGEN BRUSTLIN, INC.  
 TRANSPORTATION, LAND DEVELOPMENT, ENVIRONMENTAL SERVICES  
 PROVIDENCE, R.I.

REVISIONS		
NO.	DATE	BY

RHODE ISLAND  
 DEPARTMENT OF TRANSPORTATION

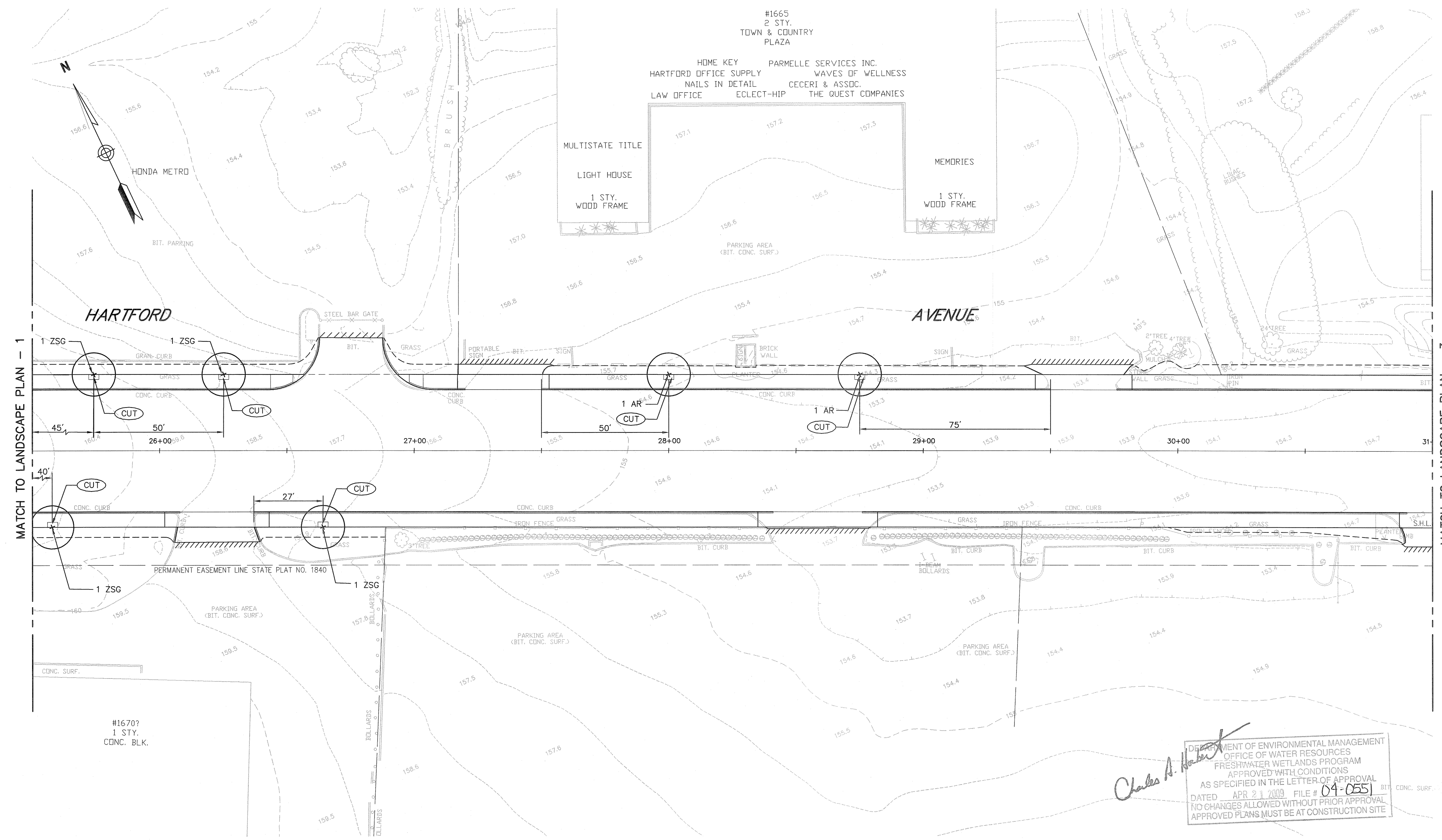
RECONSTRUCTION OF  
**HARTFORD AVENUE**

JOHNSTON RHODE ISLAND

LANDSCAPE PLAN-1  
 STA. 19+71 TO STA. 25+50

CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ SCALE 1"=20'

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#1665  
2 STY.  
TOWN & COUNTRY  
PLAZA

HOME KEY  
HARTFORD OFFICE SUPPLY  
NAILS IN DETAIL  
LAW OFFICE

PARMELLE SERVICES INC.  
WAVES OF WELLNESS  
CECERI & ASSOC.  
THE QUEST COMPANIES

ECLECT-HIP

MULTISTATE TITLE

LIGHT HOUSE  
1 STY.  
WOOD FRAME

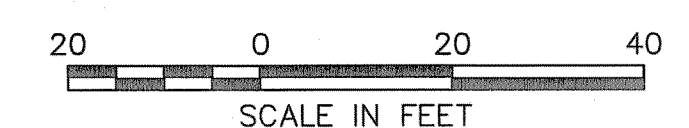
MEMORIES  
1 STY.  
WOOD FRAME

MATCH TO LANDSCAPE PLAN - 1

MATCH TO LANDSCAPE PLAN - 3

PLANT LIST (THIS SHEET)						
TREES						
KEY	BOTANICAL NAME	COMMON NAME	QUAN	SIZE	SPACING	ROOT/CONTAINER
AR	ACER RUBRUM 'OCTOBER GLORY'	RED MAPLE	2	3-3.5" CAL.	AS NOTED	B & B
ZSG	ZELKOVA SERRATA 'GREEN VASE'	JAP. ZELKOVA 'GREEN VASE'	4	3-3.5" CAL.	AS NOTED	B & B

NOTES:  
1. REFER TO LANDSCAPE PLAN NOTES AND LEGEND FOR GENERAL LANDSCAPE NOTES.  
2. ALL TREES ARE TO HAVE A MINIMUM LOWER BRANCH HEIGHT OF 6'-8".



DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
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DATED APR 21 2009 FILE # 04-0551  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

*Charles A. Hackett*

REVISIONS		
NO.	DATE	BY

RHODE ISLAND  
DEPARTMENT OF TRANSPORTATION

RECONSTRUCTION OF  
HARTFORD AVENUE

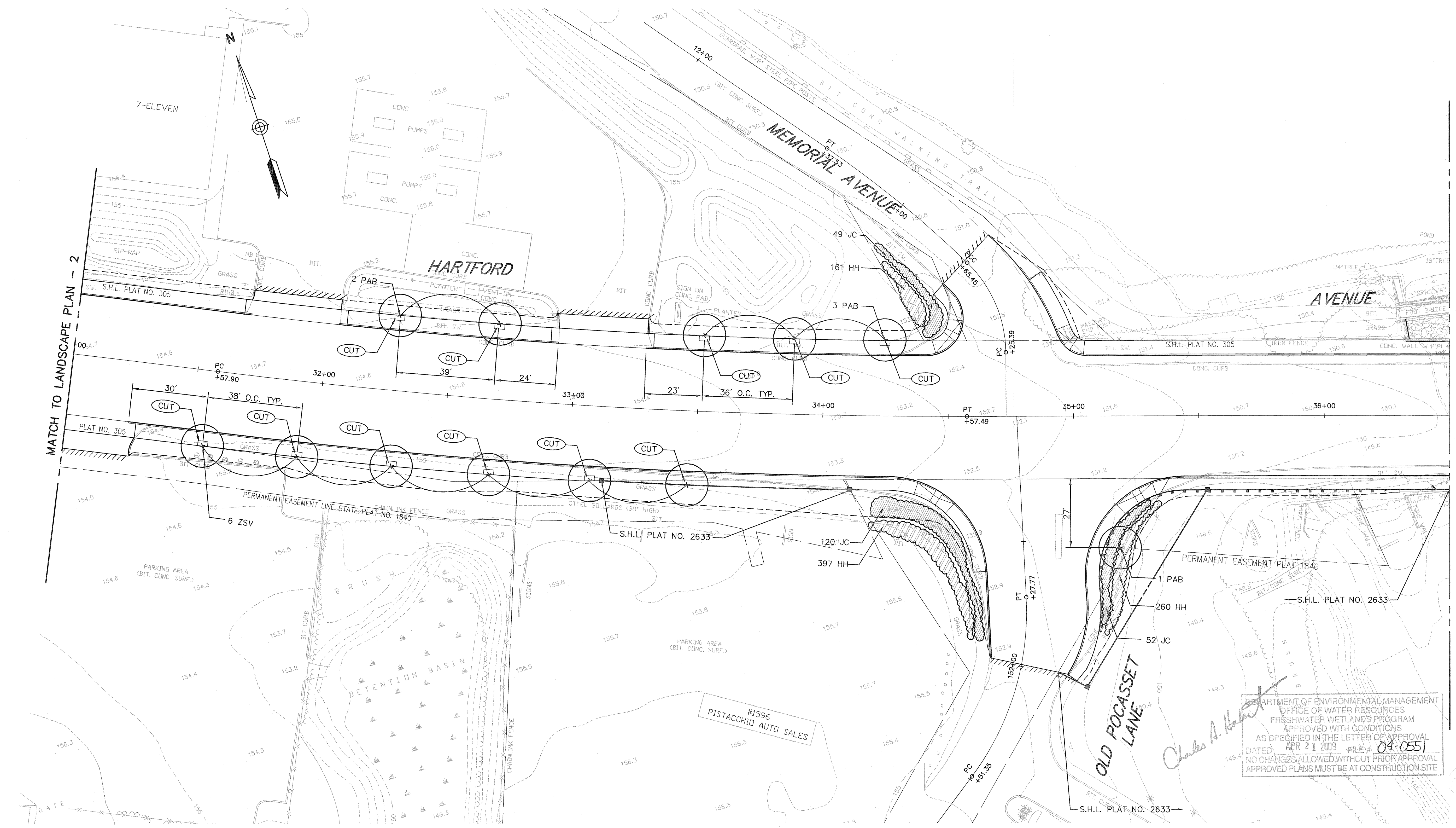
JOHNSTON RHODE ISLAND

LANDSCAPE PLAN - 2  
STA. 25+50 TO STA. 31+00

CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ SCALE 1"=20'

VANASSE HANGEN BRUSTLIN, INC.  
TRANSPORTATION, LAND DEVELOPMENT, ENVIRONMENTAL SERVICES  
PROVIDENCE, R.I.

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PLANT LIST (THIS SHEET)

KEY	BOTANICAL NAME	COMMON NAME	QUAN	SIZE	SPACING	ROOT/CONTAINER
TREES						
PAB	PLATANUS ACERIFOLIA 'BLOODGOOD'	LONDON SYCAMORE	6	3-3.5" CAL.	AS NOTED	B & B
ZSV	ZELKOVA SERRATA 'VILLAGE GREEN'	JAP. ZELKOVA 'VILLAGE GREEN'	6	3-3.5" CAL.	AS NOTED	B & B
HH	HEMEROCALLIS 'HAPPY RETURNS'	HAPPY RETURNS DAYLILY	818	1 GAL.	12" OC	POT
JC	JUNIPERUS SARGENTII	SARGENT JUNIPER	221	18-24"	24" O.C.	POT

NOTES:  
 1. REFER TO LANDSCAPE PLAN NOTES AND LEGEND FOR GENERAL LANDSCAPE NOTES.  
 2. ALL TREES ARE TO HAVE A MINIMUM LOWER BRANCH HEIGHT OF 6'-8".



VANASSE HANGEN BRUSTLIN, INC.  
 TRANSPORTATION, LAND DEVELOPMENT, ENVIRONMENTAL SERVICES  
 PROVIDENCE, R.I.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF WATER RESOURCES  
 FRESHWATER WETLANDS PROGRAM  
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REVISIONS		
NO.	DATE	BY

RHODE ISLAND  
DEPARTMENT OF TRANSPORTATION

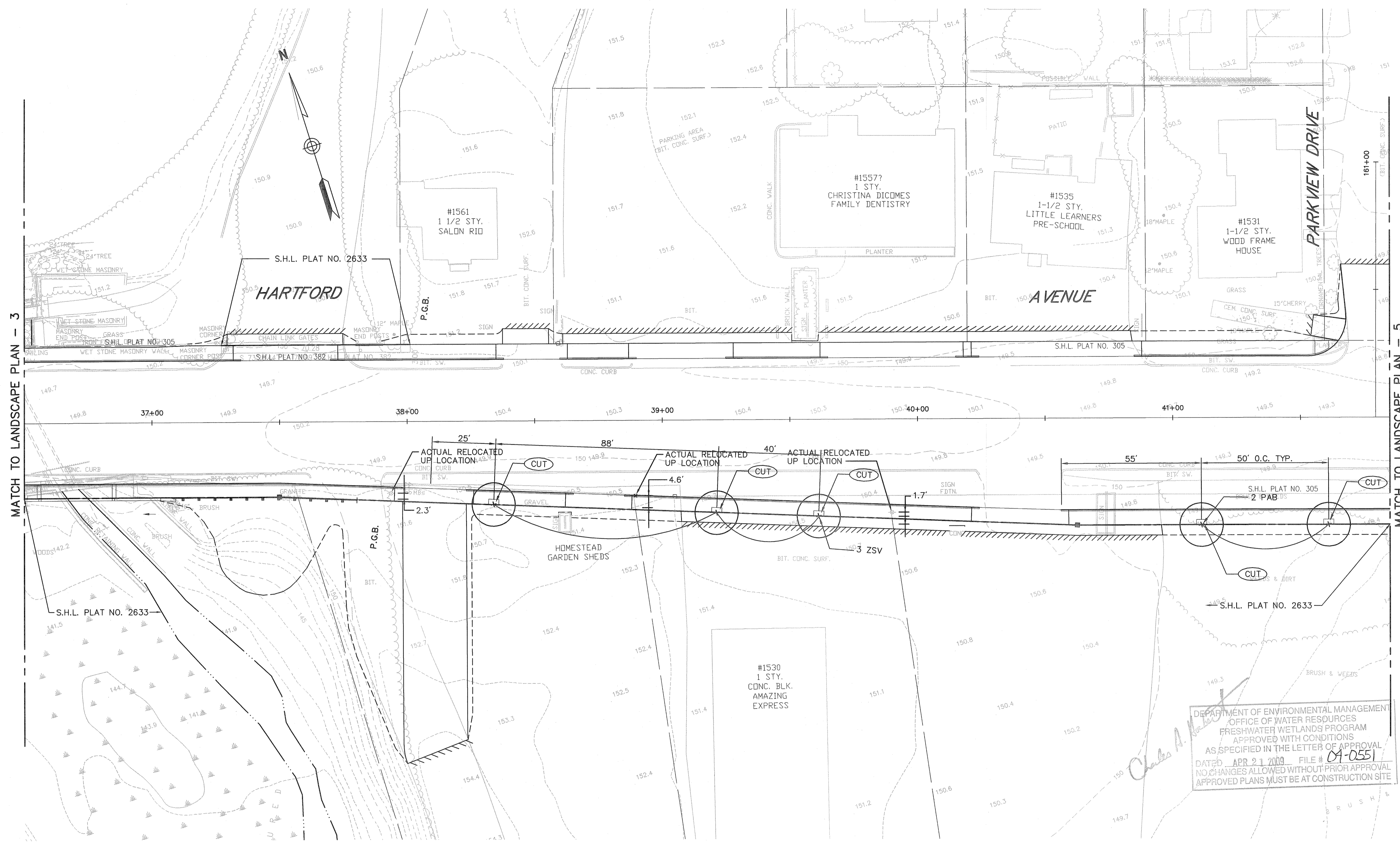
RECONSTRUCTION OF  
HARTFORD AVENUE

JOHNSTON RHODE ISLAND

LANDSCAPE PLAN - 3  
STA. 31+00 TO STA. 36+00

CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ SCALE 1"=20'

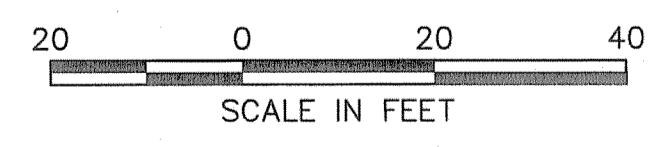
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MATCH TO LANDSCAPE PLAN - 3

MATCH TO LANDSCAPE PLAN - 5

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF WATER RESOURCES  
 FRESHWATER WETLANDS PROGRAM  
 APPROVED WITH CONDITIONS  
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PLANT LIST (THIS SHEET)						
TREES						
KEY	BOTANICAL NAME	COMMON NAME	QUAN	SIZE	SPACING	ROOT/CONTAINER
PAB	PLATANUS ACERIFOLIA 'BLOODGOOD'	LONDON SYCAMORE	2	3-3.5" CAL.	AS NOTED	B & B
ZSV	ZELKOVA SERRATA 'VILLAGE GREEN'	JAP. ZELKOVA 'VILLAGE GREEN'	3	3-3.5" CAL.	AS NOTED	B & B

NOTES:  
 1. REFER TO LANDSCAPE PLAN NOTES AND LEGEND FOR GENERAL LANDSCAPE NOTES.  
 2. ALL TREES ARE TO HAVE A MINIMUM LOWER BRANCH HEIGHT OF 6'-8".

**VANASSE HANGEN BRUSTLIN, INC.**  
 TRANSPORTATION, LAND DEVELOPMENT, ENVIRONMENTAL SERVICES  
 PROVIDENCE, R.I.

REVISIONS		
NO.	DATE	BY

**RHODE ISLAND  
DEPARTMENT OF TRANSPORTATION**

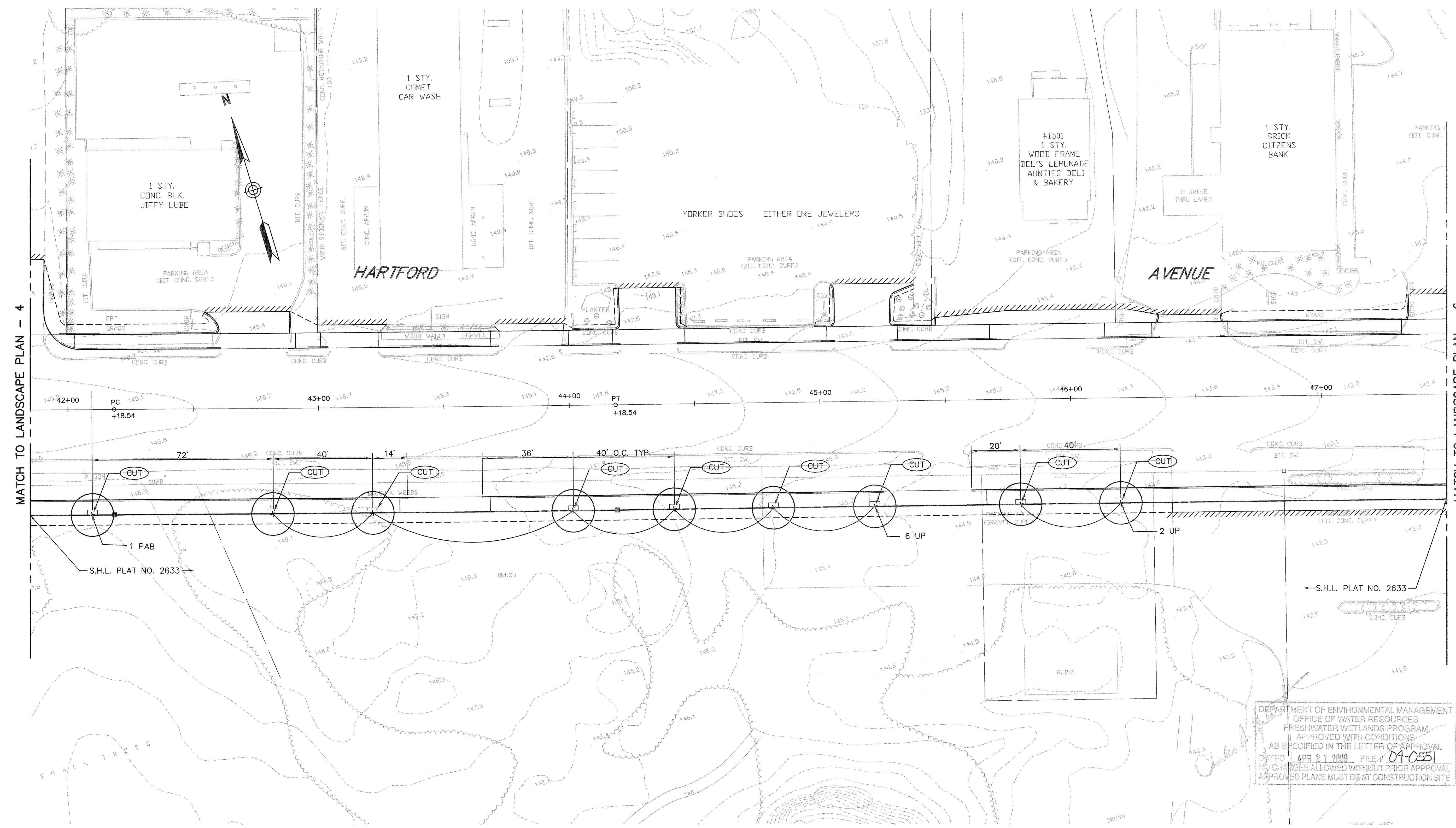
**RECONSTRUCTION OF  
HARTFORD AVENUE**

JOHNSTON RHODE ISLAND

**LANDSCAPE PLAN - 4**

**STA. 36+50 TO STA. 41+85**

CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ SCALE 1"=20'



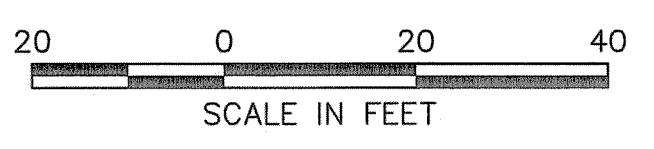
MATCH TO LANDSCAPE PLAN - 4

MATCH TO LANDSCAPE PLAN - 6

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF WATER RESOURCES  
 FRESHWATER WETLANDS PROGRAM  
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 DATED APR 21 2009 FILE # 04-0551  
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PLANT LIST (THIS SHEET)						
TREES						
KEY	BOTANICAL NAME	COMMON NAME	QUAN	SIZE	SPACING	ROOT/CONTAINER
UP	ULMUS 'PIONEER'	PIONEER ELM	8	3-3.5" CAL.	AS NOTED	B & B
PAB	PLATANUS ACERIFOLIA 'BLOODGOOD'	LONDON SYCAMORE	1	3-3.5" CAL.	AS NOTED	B & B

NOTES:  
 1. REFER TO LANDSCAPE PLAN NOTES AND LEGEND FOR GENERAL LANDSCAPE NOTES.  
 2. ALL TREES ARE TO HAVE A MINIMUM LOWER BRANCH HEIGHT OF 6'-8".



VANASSE HANGEN BRUSTLIN, INC.  
 TRANSPORTATION, LAND DEVELOPMENT, ENVIRONMENTAL SERVICES  
 PROVIDENCE, R.I.

REVISIONS		
NO.	DATE	BY

RHODE ISLAND  
 DEPARTMENT OF TRANSPORTATION

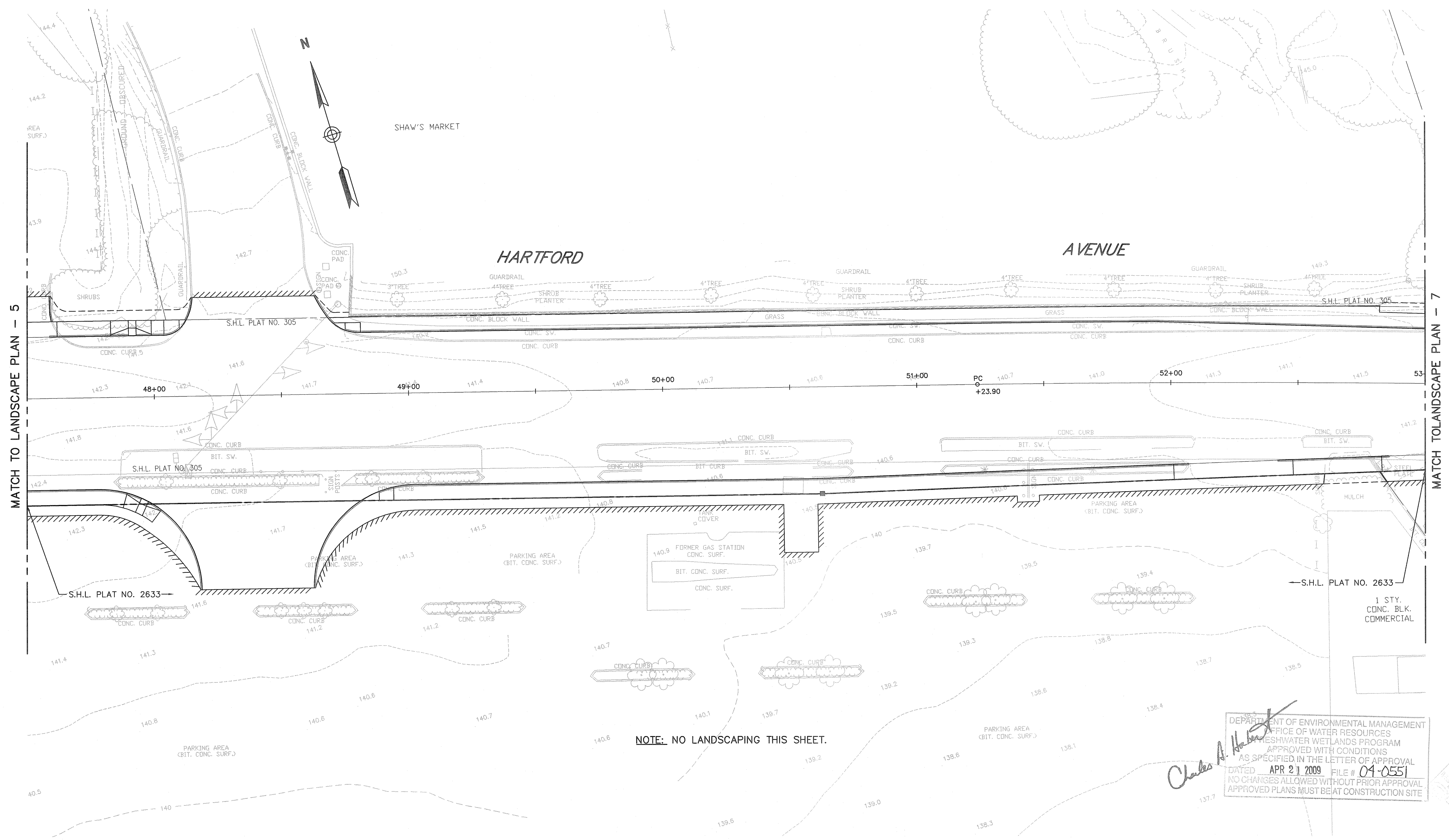
RECONSTRUCTION OF  
**HARTFORD AVENUE**

JOHNSTON RHODE ISLAND

LANDSCAPE PLAN - 5  
 STA. 41+85 TO STA. 47+50

CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ SCALE 1"=20'

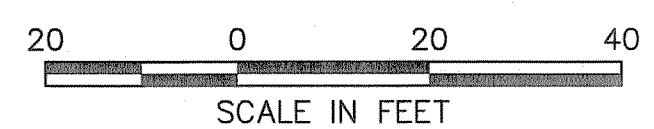
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MATCH TO LANDSCAPE PLAN - 5

MATCH TO LANDSCAPE PLAN - 7

NOTE: NO LANDSCAPING THIS SHEET.



DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
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*Charles A. Hester*

REVISIONS		
NO.	DATE	BY

RHODE ISLAND  
 DEPARTMENT OF TRANSPORTATION

RECONSTRUCTION OF  
**HARTFORD AVENUE**

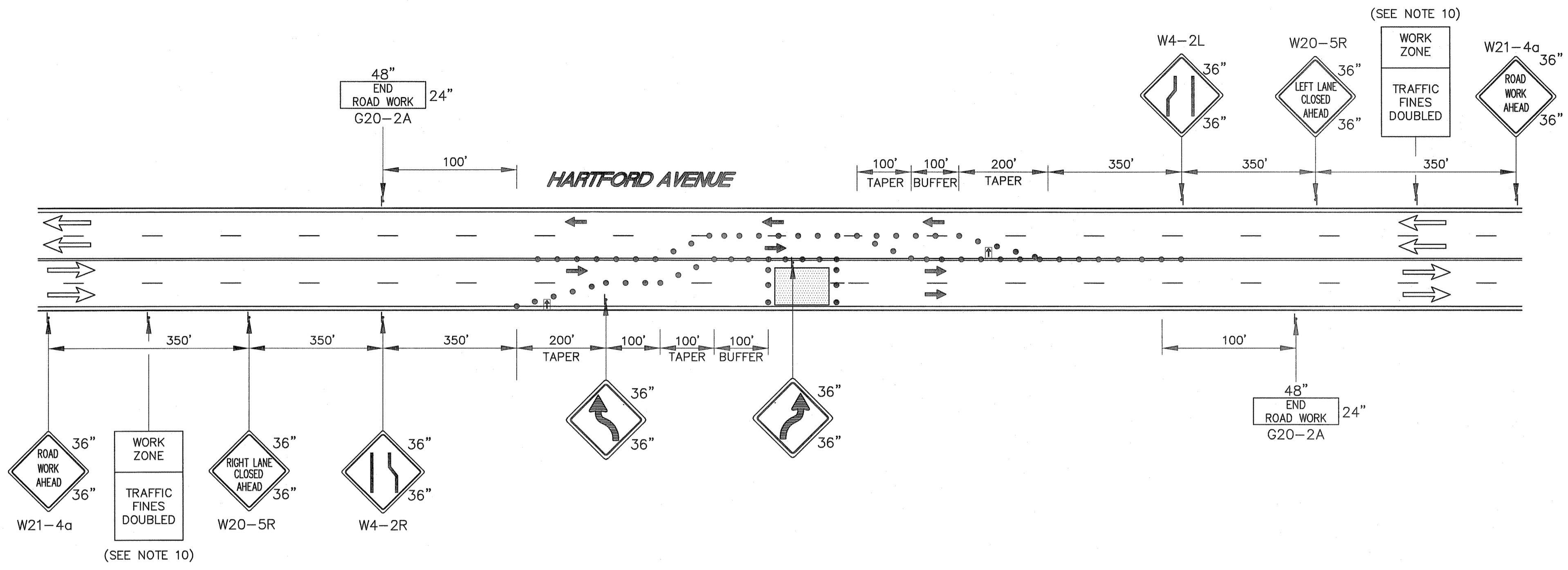
JOHNSTON RHODE ISLAND

LANDSCAPE PLAN - 6  
 STA. 47+50 TO STA. 53+00

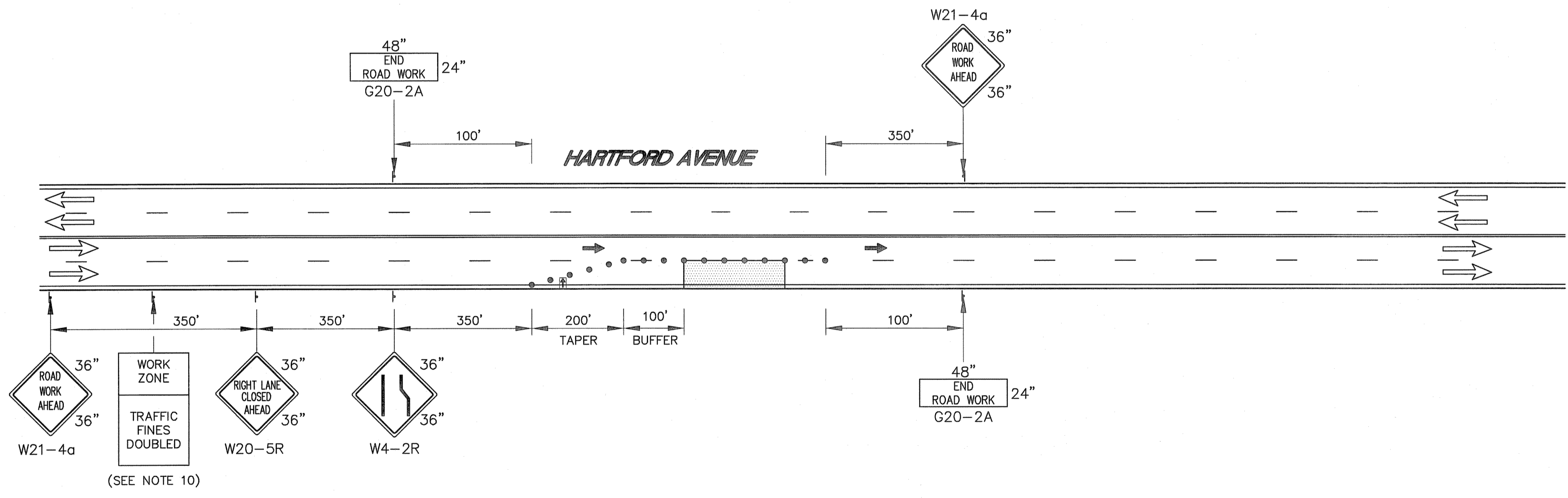
CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ SCALE 1"=20'

VANASSE HANGEN BRUSTLIN, INC.  
 TRANSPORTATION, LAND DEVELOPMENT, ENVIRONMENTAL SERVICES  
 PROVIDENCE, R.I.





**TYPICAL TWO LANE CLOSURE**  
N.T.S.



**TYPICAL ONE LANE CLOSURE (HALF-SECTION)**  
N.T.S.

- LEGEND**
- † TEMPORARY CONSTRUCTION SIGN. TYPE NOTED
  - FLUORESCENT DRUM BARRICADE R.I. STD. 26.2.0
  - FLUORESCENT TRAFFIC CONE R.I. STD. 26.1.0
  - ☀ POLICE OFFICER WITH CRUISER & FLASHING LIGHTS
  - ➔ TRAFFIC LANE DURING CONSTRUCTION
  - ▨ WORK AREA
  - ➔ EXISTING TRAFFIC FLOW

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
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REVISIONS		
NO.	DATE	BY

RHODE ISLAND  
DEPARTMENT OF TRANSPORTATION

RECONSTRUCTION OF  
HARTFORD AVENUE

JOHNSTON RHODE ISLAND

TRAFFIC CONTROL PLAN - 2

CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ SCALE AS NOTED

VANASSE HANGEN BRUSTLIN, INC.  
TRANSPORTATION LAND DEVELOPMENT ENVIRONMENTAL SERVICES  
PROVIDENCE, R.I.

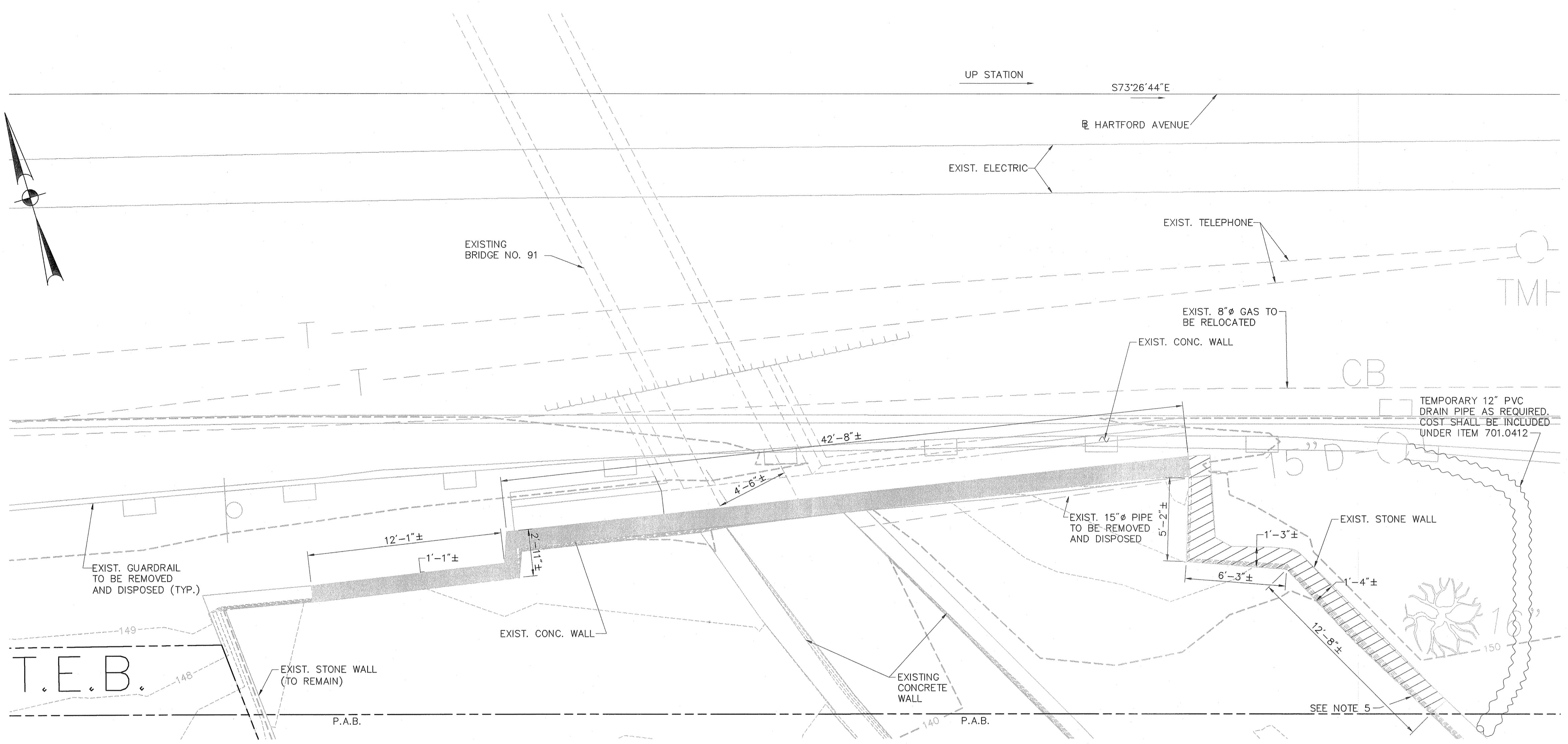
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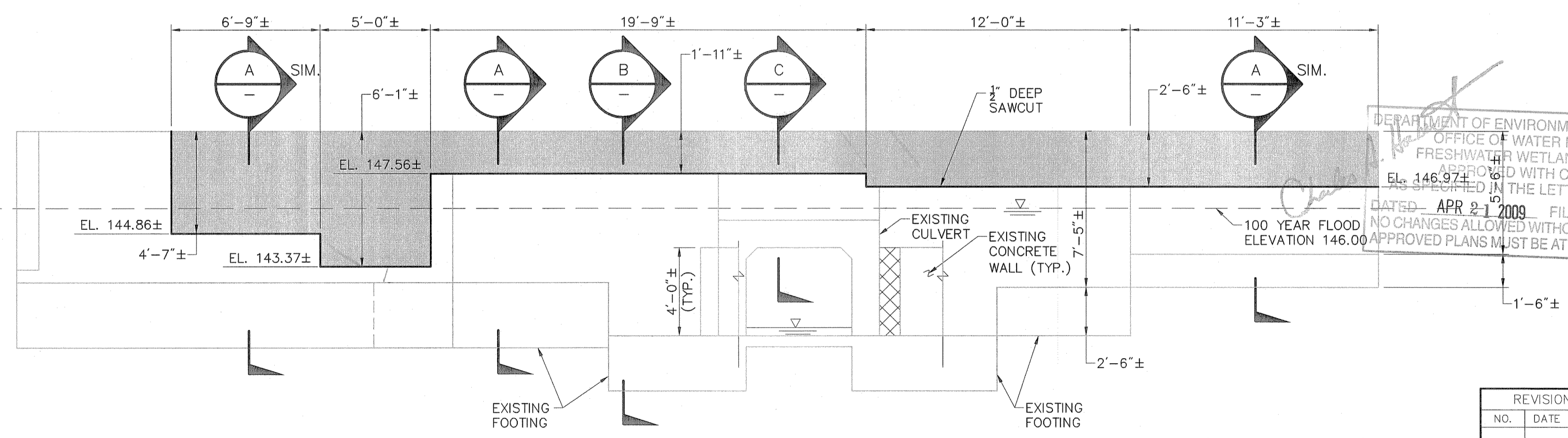
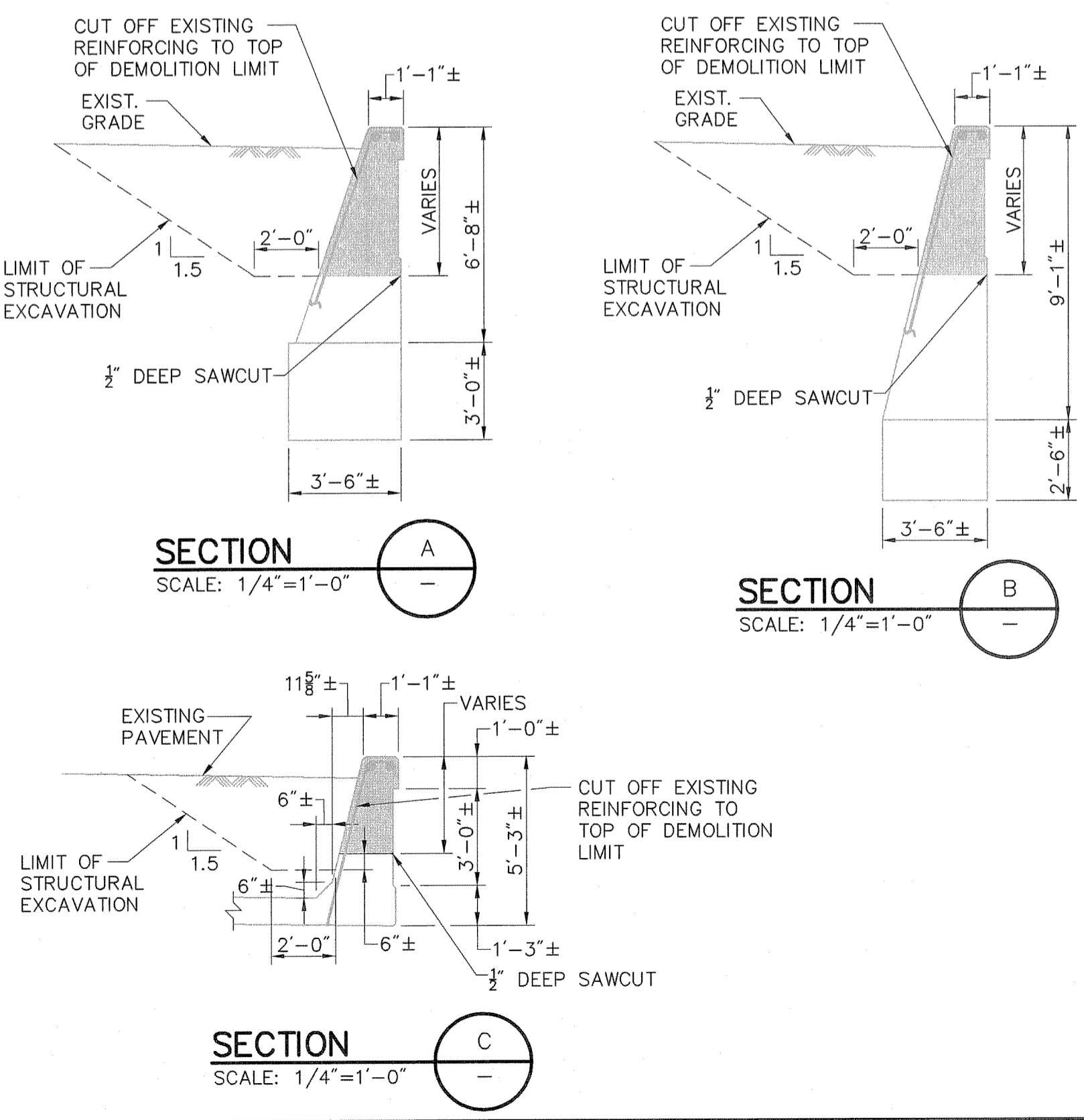


FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	R.I.		2009	78	108



- NOTES:**
1. THE CONTRACTOR SHALL EXERCISE EXTREME CARE SO AS NOT TO DAMAGE THE EXISTING STRUCTURE DESIGNATED TO REMAIN. IF ANY DAMAGE TO THE EXISTING STRUCTURE DOES OCCUR AS A RESULT OF THE CONTRACTOR'S OPERATIONS, IT SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER AT NO ADDITIONAL COST TO THE STATE.
  2. SUBSTRUCTURE DEMOLITION SHALL BE IN ACCORDANCE WITH SPECIAL PROVISION ITEM CODE 803.9901, "REMOVE AND DISPOSE EXISTING CONCRETE STRUCTURE".
  3. EXTREME CARE SHALL BE EXERCISED SO AS TO PREVENT ANY DEMOLITION AND CONSTRUCTION DEBRIS FROM FALLING INTO THE POCASSET RIVER. THE CONTRACTOR SHALL PROVIDE A METHOD FOR PREVENTING DEBRIS, RESULTING FROM THE DEMOLITION AND CONSTRUCTION OPERATIONS, FROM FALLING INTO THE WATERWAY. SUCH METHOD SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO COMMENCING ANY DEMOLITION OF THE EXISTING STRUCTURE. IF ANY MATERIAL/EQUIPMENT FALLS IN THE RIVER, IT SHALL BE IMMEDIATELY REMOVED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE STATE.
  4. DETAILS DEVELOPED FROM ORIGINAL CONSTRUCTION DRAWINGS AND FIELD DIMENSIONS ARE SHOWN FOR INFORMATION ONLY. THE CONTRACTOR IS TO VERIFY ALL DIMENSIONS AS SHOWN.
  5. REMOVAL OF EXISTING STONE WALL SHALL BE PAID FOR UNDER ITEM CODE 803.9901 "REMOVE AND DISPOSE EXISTING CONCRETE MASONRY STRUCTURE".

**PLAN**  
SCALE: 1/4"=1'-0"



DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
NOTED WITH CONDITIONS  
AS SPECIFIED IN THE LETTER OF APPROVAL  
DATED APR 21 2009 FILE # 04-0551  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

- LEGEND:**
- FULL DEPTH DEMOLITION
  - CONCRETE PATCH REPAIR
  - PARTIAL DEPTH DEMOLITION

REVISIONS		
NO.	DATE	BY

**RHODE ISLAND DEPARTMENT OF TRANSPORTATION**

**POCASSET SLUICWAY BRIDGE NO. 91 WIDENING**

JOHNSTON RHODE ISLAND

**DEMOLITION PLAN**

CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ SCALE AS SHOWN

**VHB** VANASSE HANGEN BRUSTLIN, INC.  
TRANSPORTATION LAND DEVELOPMENT ENVIRONMENTAL SERVICES  
PROVIDENCE, RHODE ISLAND

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