

# HILLCREST VILLAGE

OWNED BY  
**KARMIK, LLC**  
 PLAT 120, LOT 46  
 265 PROSPECT AVENUE  
 MIDDLETOWN, R.I.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF WATER RESOURCES  
 FRESHWATER WETLANDS PROGRAM  
 APPROVED WITH CONDITIONS  
 AS SPECIFIED IN THE LETTER OF APPROVAL  
 DATED **MAR 19 2013** FILE # **11-0033**  
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE

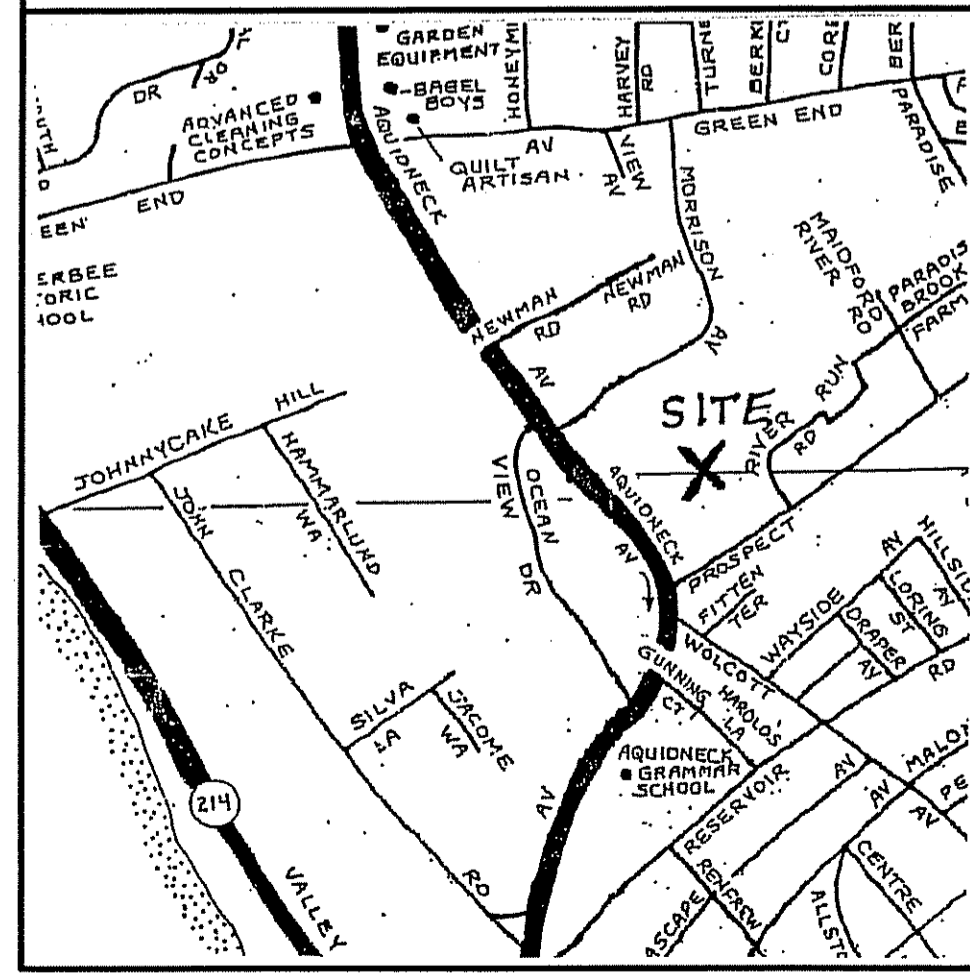
*Michael P. Darveau*

FEB 21 2013

**DARVEAU LAND SURVEYING, INC.**  
 P.O. BOX 7918  
 CUMBERLAND, R.I. 02864  
 PHONE 401-475-5700  
 E-MAIL: DARVEAUSURVEY@COX.NET

PROPOSED PLANS FOR  
**KARMIK, LLC**  
 PLAT 120, LOT 46  
 265 PROSPECT AVENUE  
 MIDDLETOWN, RHODE ISLAND

LOCUS  
 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.

SHEET INDEX:

1 OF 12	=	COVER SHEET
2 OF 12	=	EXISTING CONDITIONS PLAN
3 OF 12	=	MASTER SITE PLAN
4 OF 12	=	SITE LAYOUT PLAN
5 OF 12	=	GRADING AND DRAINAGE PLAN
6 OF 12	=	UTILITIES PLAN
7 OF 12	=	SOIL EROSION CONTROL PLAN
8 OF 12	=	DETAILS AND NOTES
9 OF 12	=	DETAILS AND NOTES
10 OF 12	=	DETAILS AND NOTES
11 OF 12	=	DETAILS AND NOTES
12 OF 12	=	DRAINAGE AREA MAP

*Michael P. DeFrancesco*  
 MICHAEL P. DeFRANCESCO  
 No. 3632  
 REGISTERED PROFESSIONAL ENGINEER

*Michael R. Darveau*  
 MICHAEL R. DARVEAU  
 NO. 1978  
 PROFESSIONAL LAND SURVEYOR

I HEREBY CERTIFY THAT THIS SURVEY AND PLAN CONFORMS TO A CLASS 1 STANDARD AS ADOPTED BY THE RHODE ISLAND BOARD OF REGISTRATION FOR PROFESSIONAL LAND SURVEYORS.

BY: *Michael R. Darveau* DATE: **2/14/13**  
 MICHAEL R. DARVEAU, PLS#1978

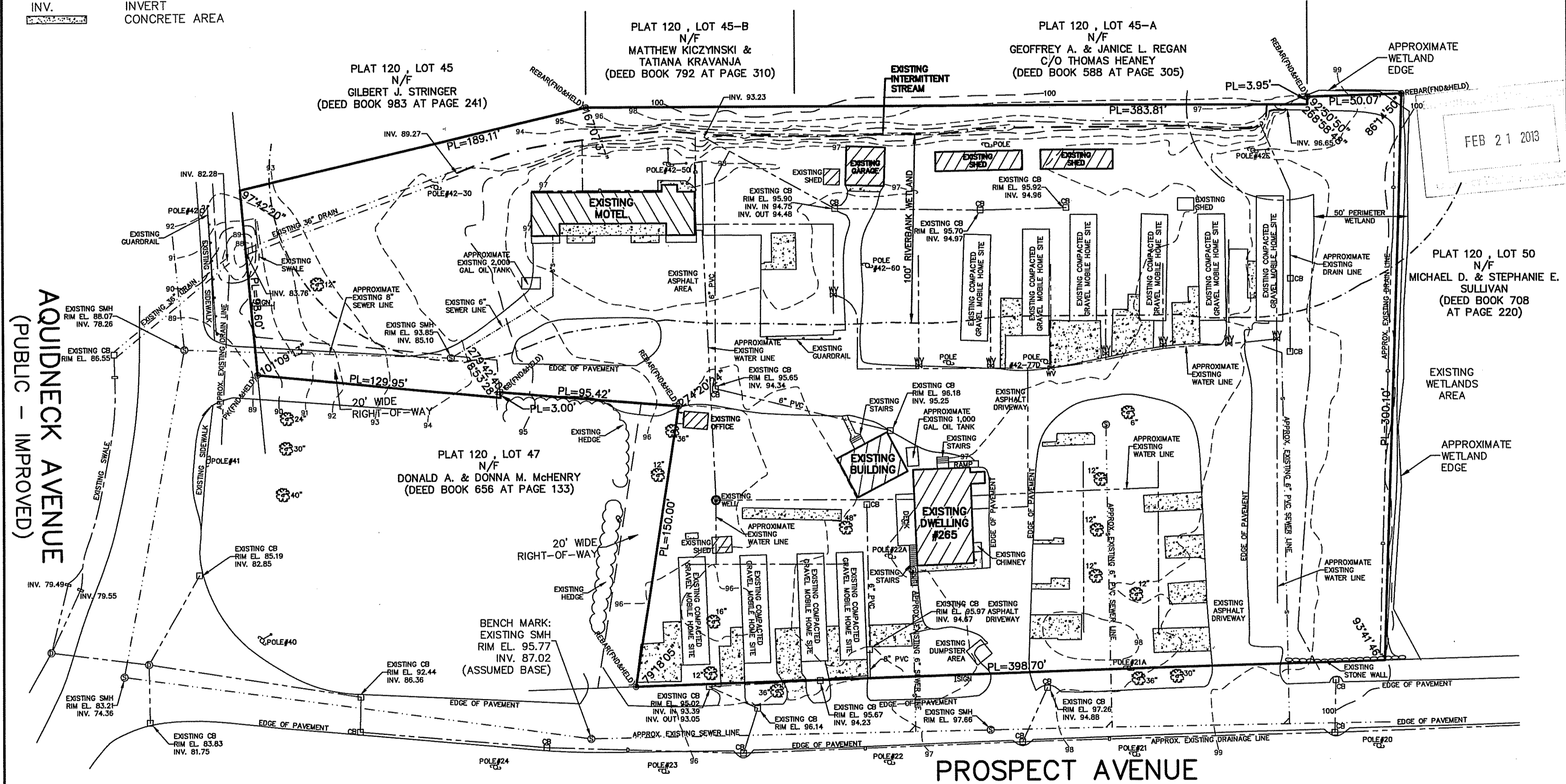
DRAWING NO:	2009_028	REVISION:	FEB. 14, 2013	SCALE:	AS NOTED
SHEET NO:	1 OF 12	DATE:	NOV. 5, 2012	DRAWN BY:	S.A.K.

**LEGEND**

- GB GRANITE BOUND
- PK PK NAIL
- FND FOUND
- PL PROPERTY LINE
- S.F. SQUARE FEET
- CB CATCH BASIN
- WV WATER VALVE
- OHV OVERHEAD WIRES
- WMP WATER METER PIT
- S----- SEWER LINE
- W----- WATER LINE
- D----- DRAINAGE LINE
- SMH SEWER MANHOLE
- TYP TYPICAL
- INV. INVERT
- CONCRETE AREA

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

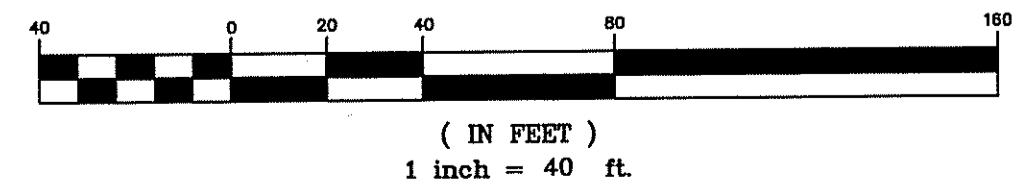
- NOTES:
1. THE PARCEL IS PLAT 120, LOT 46.
  2. THE TOTAL AREA OF THE PARCEL IS 146,665 S.F. OR 3.3670 ACRES.
  3. THE AREA IS ZONED: R-20A AND R-40.
  4. THE PARCEL IS LOCATED IN ZONE "X" AS SHOWN ON NATIONAL FLOOD INSURANCE RATE MAP 44005C0182H FOR THE COUNTY OF NEWPORT, EFFECTIVE DATE: APRIL 5, 2010.
  5. SEE DEED BOOK 573 AT PAGE 215 FOR TITLE REFERENCE.
  6. THE PROPERTY LINE INFORMATION SHOWN ON THIS PLAN WAS TAKEN FROM THE PLAN ENTITLED "PRELIMINARY MAJOR SUBDIVISION PLAN, HILLCREST ESTATE, PLAT 120, LOT 46, PROSPECT AVENUE, MIDDLETOWN, RHODE ISLAND 02842, SCALE: 1"=40', DATED: MARCH 8, 2007, BY NARRAGANSETT ENGINEERING, INC."
  7. THERE ARE NO EXISTING HISTORICAL BUILDINGS OR STRUCTURES ON SITE AT TIME OF SURVEY.
  8. THERE ARE NO EXISTING HISTORIC CEMETERIES ON OR IMMEDIATELY ADJACENT TO THE SITE AT TIME OF SURVEY.



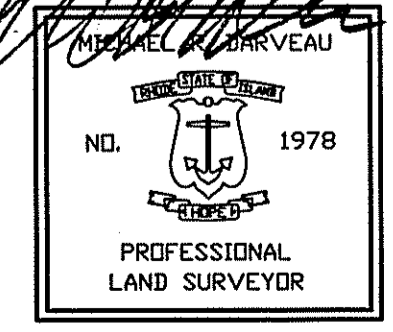
AQUIDNECK AVENUE  
(PUBLIC - IMPROVED)

**PROSPECT AVENUE**  
(PUBLIC - IMPROVED)

GRAPHIC SCALE



DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS  
AS SPECIFIED IN THE LETTER OF APPROVAL  
DATED 11/9/2009 FILE # \_\_\_\_\_  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE



I HEREBY CERTIFY THAT THIS SURVEY AND PLAN CONFORMS TO A CLASS 1 STANDARD AS ADOPTED BY THE RHODE ISLAND BOARD OF REGISTRATION FOR PROFESSIONAL LAND SURVEYORS.  
BY Michael R. Darveau 2/14/13 DATE  
MICHAEL R. DARVEAU, PLS#1978

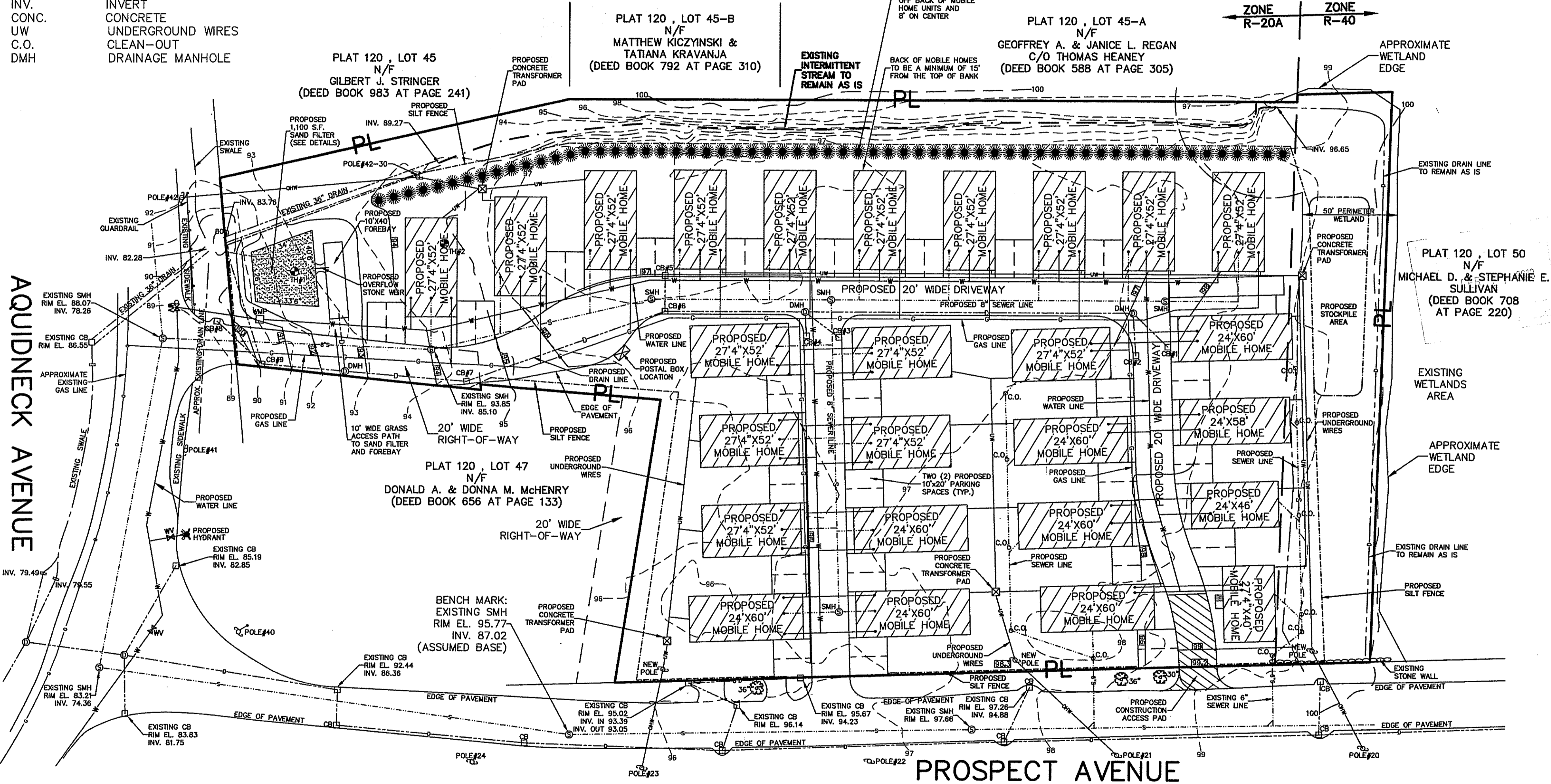
<b>DARVEAU LAND SURVEYING, INC.</b>	
P.O. BOX 7918 CUMBERLAND, R.I. 02864 PHONE 401-475-5700 E-MAIL: DARVEAUSURVEY@COX.NET	
EXISTING CONDITIONS PLAN FOR	<b>KARMIK, LLC.</b> PLAT 120, LOT 46 265 PROSPECT AVENUE MIDDLETOWN, RHODE ISLAND
DRAWING NO: 2009_028	SCALE: 1" = 40'
SHEET NO: 2 OF 12	REVISED FEB. 14, 2013
DATE: SEPT. 23, 2009	DRAWN BY: S.A.K.

**LEGEND**

- GB GRANITE BOUND
- PK PK NAIL
- FND FOUND
- PL PROPERTY LINE
- S.F. SQUARE FEET
- CB CATCH BASIN
- WV WATER VALVE
- OHW OVERHEAD WIRES
- WMP WATER METER PIT
- S--- SEWER LINE
- W--- WATER LINE
- D--- DRAINAGE LINE
- G--- GAS LINE
- SMH SEWER MANHOLE
- TYP TYPICAL
- INV. INVERT
- CONC. CONCRETE
- UW UNDERGROUND WIRES
- C.O. CLEAN-OUT
- DMH DRAINAGE MANHOLE

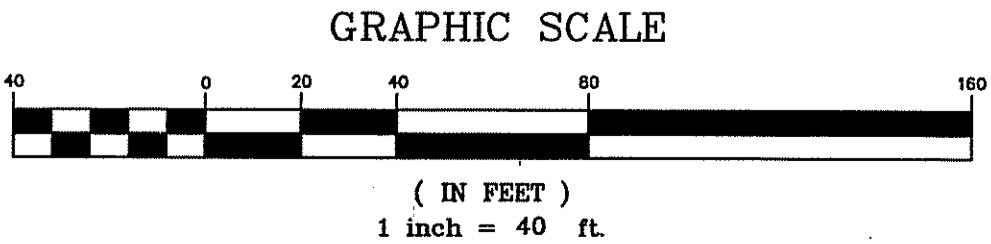
Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site.

- NOTES:
1. THE PARCEL IS PLAT 120, LOT 46.
  2. THE TOTAL AREA OF THE PARCEL IS 146,665 S.F. OR 3.3670 ACRES.
  3. THE AREA IS ZONED: R-20A AND R-40.
  4. THE PARCEL IS LOCATED IN ZONE "X" AS SHOWN ON NATIONAL FLOOD INSURANCE RATE MAP 44005C0182H FOR THE COUNTY OF NEWPORT, EFFECTIVE DATE: APRIL 5, 2010.
  5. SEE DEED BOOK 573 AT PAGE 215 FOR TITLE REFERENCE.
  6. THE PROPERTY LINE INFORMATION SHOWN ON THIS PLAN WAS TAKEN FROM THE PLAN ENTITLED "PRELIMINARY MAJOR SUBDIVISION PLAN, HILLCREST ESTATE, PLAT 120, LOT 46, PROSPECT AVENUE, MIDDLETOWN, RHODE ISLAND 02842, SCALE: 1"=40', DATED: MARCH 8, 2007, BY NARRAGANSETT ENGINEERING, INC."
  7. THERE ARE NO EXISTING HISTORICAL BUILDINGS OR STRUCTURES ON SITE AT TIME OF SURVEY.
  8. THERE ARE NO EXISTING HISTORIC CEMETERIES ON OR IMMEDIATELY ADJACENT TO THE SITE AT TIME OF SURVEY.
  9. THE FINAL DESIGN OF THE ELECTRIC, TELEPHONE, CABLE, ETC. TO BE PERFORMED BY NATIONAL GRID.



AQUIDNECK AVENUE

PROSPECT AVENUE



DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS  
AS SPECIFIED IN THE LETTER OF APPROVAL  
DATED MAR 19 2013 FILE #  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Michael P. DeFrancesco  
No. 9632  
REGISTERED PROFESSIONAL ENGINEER

Michael R. Darveau  
No. 1978  
PROFESSIONAL LAND SURVEYOR

I HEREBY CERTIFY THAT THIS SURVEY AND PLAN CONFORMS TO A CLASS 3 STANDARD AS ADOPTED BY THE RHODE ISLAND BOARD OF REGISTRATION FOR PROFESSIONAL LAND SURVEYORS.

Michael R. Darveau 2/14/13  
DATE

**DARVEAU LAND SURVEYING, INC.**  
P.O. BOX 7918  
CUMBERLAND, R.I. 02864  
PHONE 401-475-5700  
E-MAIL: DARVEAUSURVEY@COX.NET

MASTER SITE PLAN FOR  
**KARMIK, LLC.**  
PLAT 120, LOT 46  
265 PROSPECT AVENUE  
MIDDLETOWN, RHODE ISLAND

SCALE: 1" = 40'  
REVISED FEB. 14, 2013  
DRAWING NO: 2009\_028  
DATE: NOV. 5, 2012  
SHEET NO: 3 OF 12  
DRAWN BY: S.A.K.



**LEGEND**

- GB GRANITE BOUND
- PK PK NAIL
- FND FOUND
- PL PROPERTY LINE
- S.F. SQUARE FEET
- CB CATCH BASIN
- WV WATER VALVE
- OHW OVERHEAD WIRES
- WMP WATER METER PIT
- S--- SEWER LINE
- W--- WATER LINE
- D--- DRAINAGE LINE
- G--- GAS LINE
- SMH SEWER MANHOLE
- TYP TYPICAL
- INV. INVERT
- CONC. CONCRETE
- UW UNDERGROUND WIRES
- C.O. CLEAN-OUT
- DMH DRAINAGE MANHOLE



**PROPOSED SAND FILTER GENERAL NOTES:**

1. THE BOTTOM OF THE FILTERING SYSTEM MUST BE LOCATED AT OR ABOVE THE SEASONAL HIGH GROUNDWATER TABLE. THE TOP OF THE FILTERING SYSTEM MUST BE LOCATED AT LEAST THREE (3) FEET ABOVE THE SEASONAL HIGH GROUNDWATER TABLE.
2. A DENSE AND VIGOROUS VEGETATIVE COVER SHALL BE ESTABLISHED OVER THE CONTRIBUTING PERVIOUS DRAINAGE AREAS BEFORE RUNOFF CAN BE ACCEPTED INTO THE SAND FILTER.
3. THE SAND FILTER IS TO HAVE A GRASS COVER TO AID IN POLLUTANT ADSORPTION. THE GRASS SHOULD BE CAPABLE OF WITHSTANDING FREQUENT PERIODS OF INUNDATION AND DROUGHT.
4. THE VEGETATION OVER THE SAND FILTER IS TO CONSIST OF COMMERCIALY AVAILABLE PLANTS WHICH MEET THE RHODE ISLAND STORMWATER DESIGN AND INSTALLATIONS MANUAL REQUIREMENTS FOR SAND FILTERS.

**PROPOSED SAND FILTER MAINTENANCE NOTES:**

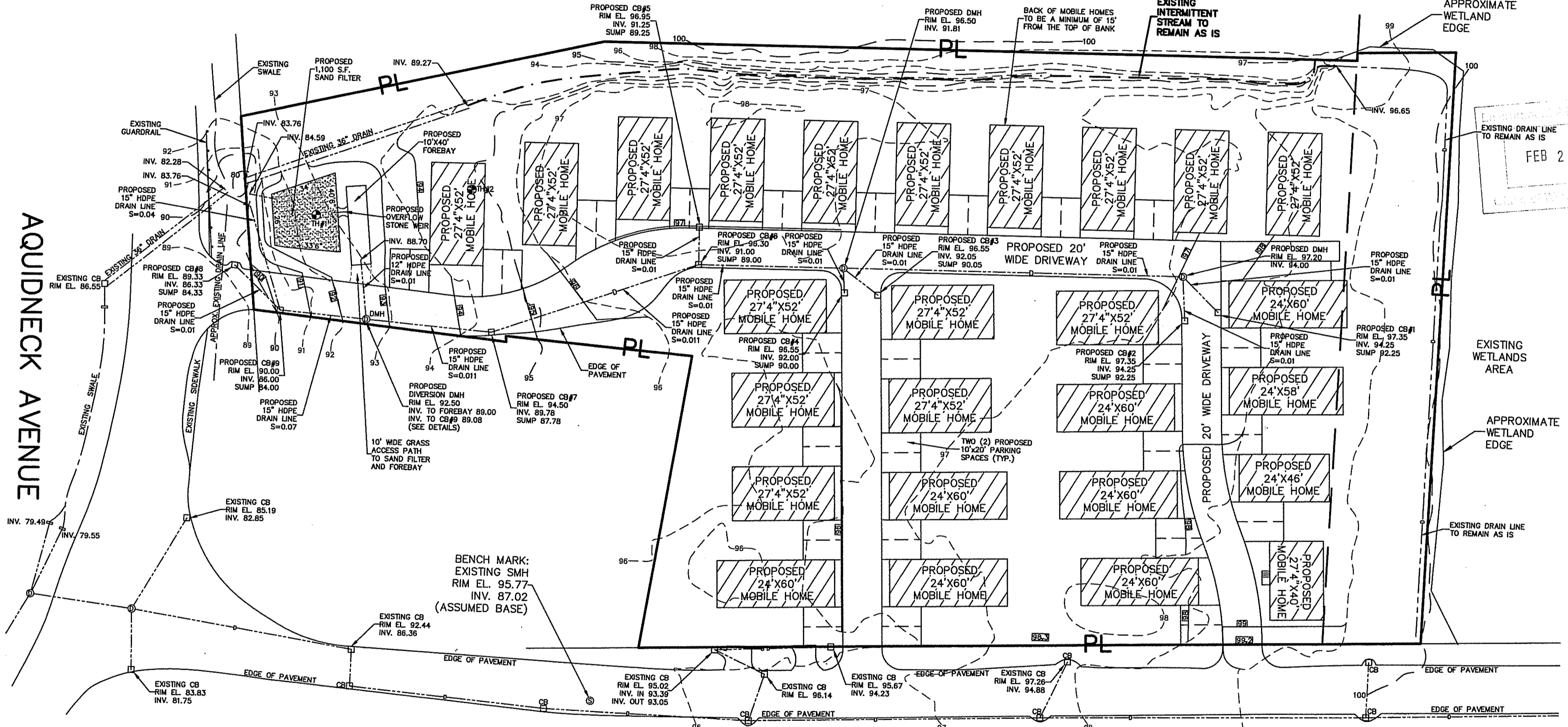
1. A LEGALLY BINDING AND ENFORCEABLE MAINTENANCE AGREEMENT SHALL BE EXECUTED BETWEEN THE FACILITY OWNER AND THE RESPONSIBLE AUTHORITY TO ENSURE THE FOLLOWING:
  - SEDIMENT SHALL BE CLEANED OUT OF THE SEDIMENT FOREBAY WHEN IT ACCUMULATES TO A DEPTH OF MORE THAN ONE-HALF THE DESIGN DEPTH. VEGETATION WITHIN THE SEDIMENT FOREBAY SHALL BE LIMITED TO A HEIGHT OF 18 INCHES. THE SEDIMENT CHAMBER OUTLET DEVICES SHALL BE CLEANED/REPAIRED WHEN DRAWDOWN TIMES EXCEED 36 HOURS. TRASH AND DEBRIS SHALL BE REMOVED AS NECESSARY.
  - SILT/SEDIMENT SHALL BE REMOVED FROM THE FILTER BED WHEN THE ACCUMULATION EXCEEDS ONE INCH. WHEN THE FILTERING CAPACITY OF THE FILTER DIMINISHES SUBSTANTIALLY (i.e. WHEN WATER PONDS ON THE SURFACE OF THE FILTER BED FOR MORE THAN 48 HOURS), THE TOP FEW INCHES OF DISCOLORED MATERIAL SHALL BE REMOVED AND SHALL BE REPLACED WITH FRESH MATERIAL. THE REMOVED SEDIMENTS SHALL BE DISPOSED IN AN ACCEPTABLE MANNER AT AN APPROVED AND PERMITTED LOCATION.
2. DURING THE SIX MONTHS IMMEDIATELY AFTER CONSTRUCTION, FILTER SHALL BE INSPECTED FOLLOWING AT LEAST THE FIRST TWO PRECIPITATION EVENTS OF AT LEAST 1.0 INCH TO ENSURE THAT THE SYSTEM IS FUNCTIONING PROPERLY. THEREAFTER, INSPECTIONS SHALL BE CONDUCTED ON AN ANNUAL BASIS AND AFTER STORM EVENTS OF GREATER THAN OR EQUAL THE 1-YEAR, 24-HOUR TYPE III PRECIPITATION EVENT.
3. SAND FILTERS WITH A GRASS COVER SHOULD BE MOWED A MINIMUM OF THREE TIMES PER GROWING SEASON TO MAINTAIN MAXIMUM GRASS HEIGHTS LESS THAN 12-INCHES.
4. SEDIMENT TESTING MAY BE REQUIRED PRIOR TO SEDIMENT DISPOSAL WHEN A LAND USE WITH HIGHER POTENTIAL POLLUTANT LOADS IS PRESENT.
5. MINOR SOIL EROSION GULLIES SHOULD BE REPAIRED WHEN THEY OCCUR.

**NOTES:**

1. THE PARCEL IS PLAT 120, LOT 46.
2. THE TOTAL AREA OF THE PARCEL IS 146,665 S.F. OR 3.3670 ACRES.
3. THE AREA IS ZONED: R-20A AND R-40.
4. THE PARCEL IS LOCATED IN ZONE "X" AS SHOWN ON NATIONAL FLOOD INSURANCE RATE MAP 44005C0182H FOR THE COUNTY OF NEWPORT, EFFECTIVE DATE: APRIL 5, 2010.
5. SEE DEED BOOK 573 AT PAGE 215 FOR TITLE REFERENCE.
6. THE PROPERTY LINE INFORMATION SHOWN ON THIS PLAN WAS TAKEN FROM THE PLAN ENTITLED "PRELIMINARY MAJOR SUBDIVISION PLAN, HILLCREST ESTATE, PLAT 120, LOT 46, PROSPECT AVENUE, MIDDLETOWN, RHODE ISLAND 02842, SCALE: 1"=40", DATED: MARCH 8, 2007, BY NARRAGANSETT ENGINEERING, INC."
7. THERE ARE NO EXISTING HISTORICAL BUILDINGS OR STRUCTURES ON SITE AT TIME OF SURVEY.
8. THERE ARE NO EXISTING HISTORIC CEMETERIES ON OR IMMEDIATELY ADJACENT TO THE SITE AT TIME OF SURVEY.
9. THE FINAL DESIGN OF THE ELECTRIC, TELEPHONE, CABLE, ETC., TO BE PERFORMED BY NATIONAL GRID.

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

ZONE R-20A      ZONE R-40



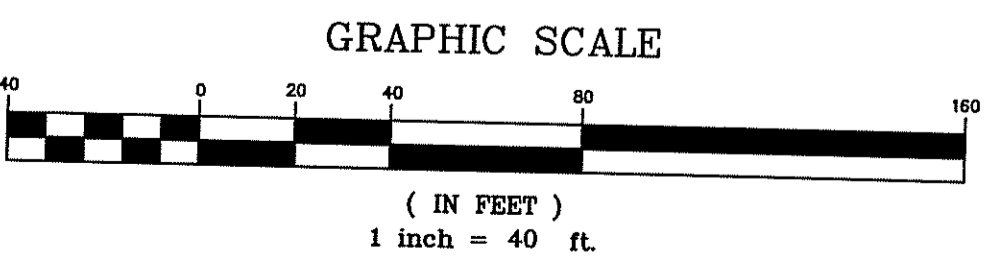
FEB 21 2013

AQUIDNECK AVENUE

PROSPECT AVENUE

**PROPOSED CATCH BASIN NOTE:**  
1. ALL PROPOSED CATCH BASINS ARE TO HAVE OIL/WATER SEPARATORS OR "HOODS" ON INLET AND OUTLET PIPES.

**PROPOSED SEDIMENT FOREBAY NOTES:**  
1. DIRECT ACCESS FOR APPROPRIATE MAINTENANCE EQUIPMENT NEEDS TO BE PROVIDED TO THE FOREBAY AND MAY INCLUDE A RAMP TO THE BOTTOM OF THE EMBANKMENT IF EQUIPMENT CANNOT REACH ALL POINTS WITHIN THE FOREBAY FROM THE TOP OF THE EMBANKMENT. THE FOREBAY CAN BE LINED WITH A CONCRETE PAD TO ALLOW EASY REMOVAL OF SEDIMENT AND TO MINIMIZE THE POSSIBILITY OF EXCAVATING SUBSURFACE SOILS OR UNDERCUTTING EMBANKMENTS DURING ROUTINE MAINTENANCE.  
2. A FIXED VERTICAL SEDIMENT DEPTH MARKER SHOULD BE INSTALLED IN THE FOREBAY TO MEASURE SEDIMENT DEPOSITION.  
3. THE BOTTOM OF THE FOREBAY MAY BE HARDENED (i.e. CONCRETE, ASPHALT, GROUTED RIP RAP) TO MAKE SEDIMENT REMOVAL EASIER.  
4. IN THE ABSENCE OF EVIDENCE OF CONTAMINATION, REMOVED DEBRIS MAY BE TAKEN TO A LANDFILL OR OTHER PERMITTED FACILITY OR HANDLED SIMILARLY TO CONTENTS FROM STREET SWEEPING ACTIVITIES.  
5. SEDIMENT TESTING MAY BE REQUIRED PRIOR TO SEDIMENT DISPOSAL WHEN A LAND USE WITH HIGHER POTENTIAL POLLUTANT LOADS IS PRESENT.



DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS  
AS SPECIFIED IN THE LETTER OF APPROVAL  
DATED MAR 19 2013 FILE #  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

*Michael P. DeFrancesco*  
MICHAEL P. DEFRANCESCO  
No. 6632  
REGISTERED PROFESSIONAL ENGINEER

*Michael R. Darveau*  
MICHAEL R. DARVEAU  
NO. 1978  
PROFESSIONAL LAND SURVEYOR

I HEREBY CERTIFY THAT THIS SURVEY AND PLAN CONFORMS TO A CLASS 3 STANDARD AS ADOPTED BY THE RHODE ISLAND BOARD OF REGISTRATION FOR PROFESSIONAL LAND SURVEYORS.  
BY: *Michael R. Darveau* 2/14/13 DATE  
MICHAEL R. DARVEAU, PLS#1978

**DARVEAU LAND SURVEYING, INC.**  
P.O. BOX 7918  
CUMBERLAND, R.I. 02864  
PHONE 401-475-5700  
E-MAIL: DARVEAUSURVEY@CDX.NET

**PROPOSED GRADING AND DRAINAGE PLAN FOR KARMIK, LLC.**  
PLAT 120, LOT 46  
265 PROSPECT AVENUE  
MIDDLETOWN, RHODE ISLAND

DRAWING NO:	2009_028	SCALE:	1" = 40'
REVISION:	FEB. 14, 2013	DRAWN BY:	S.A.K.
SHEET NO:	5 OF 12	DATE:	NOV. 5, 2012

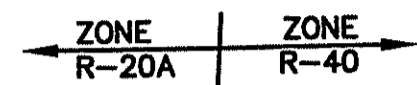
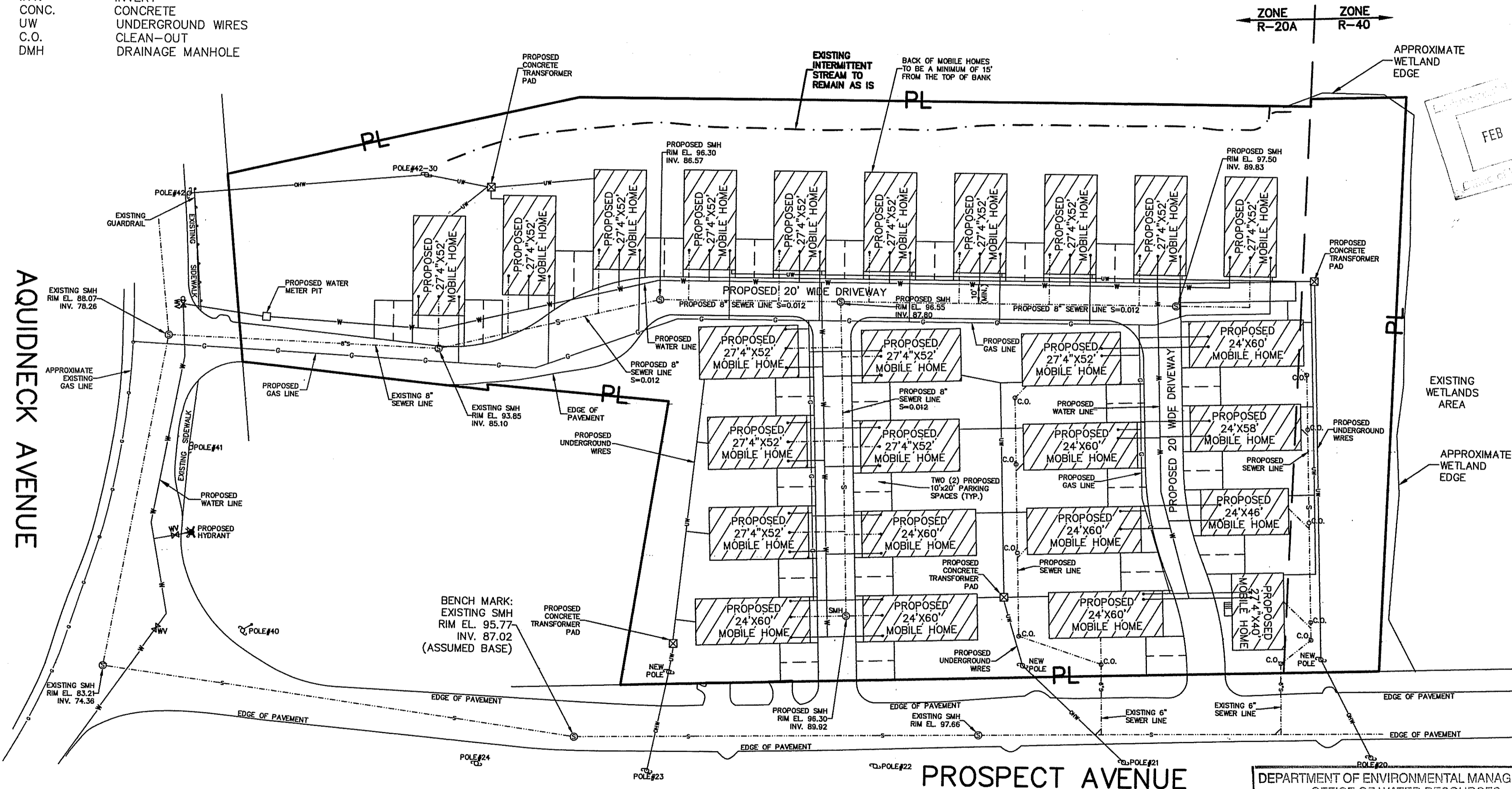
**LEGEND**

- GB GRANITE BOUND
- PK PK NAIL
- FND FOUND
- PL PROPERTY LINE
- S.F. SQUARE FEET
- CB CATCH BASIN
- WV WATER VALVE
- OHW OVERHEAD WIRES
- WMP WATER METER PIT
- S--- SEWER LINE
- W--- WATER LINE
- D--- DRAINAGE LINE
- G--- GAS LINE
- SMH SEWER MANHOLE
- TYP TYPICAL
- INV. INVERT
- CONC. CONCRETE
- UW UNDERGROUND WIRES
- C.O. CLEAN-OUT
- DMH DRAINAGE MANHOLE

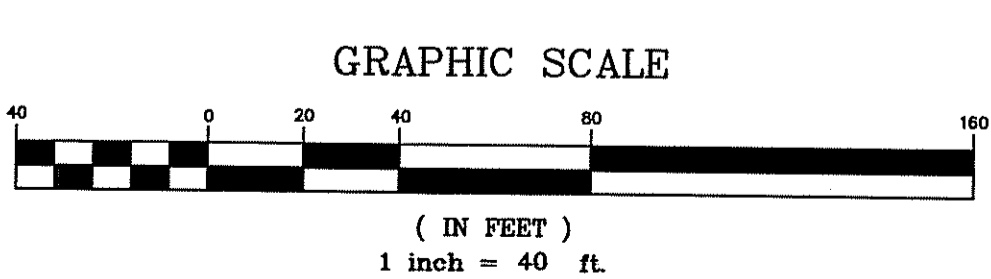
**NOTES:**

1. THE PARCEL IS PLAT 120, LOT 46.
2. THE TOTAL AREA OF THE PARCEL IS 146,665 S.F. OR 3.3670 ACRES.
3. THE AREA IS ZONED: R-20A AND R-40.
4. THE PARCEL IS LOCATED IN ZONE "X" AS SHOWN ON NATIONAL FLOOD INSURANCE RATE MAP 44005C0182H FOR THE COUNTY OF NEWPORT, EFFECTIVE DATE: APRIL 5, 2010.
5. SEE DEED BOOK 573 AT PAGE 215 FOR TITLE REFERENCE.
6. THE PROPERTY LINE INFORMATION SHOWN ON THIS PLAN WAS TAKEN FROM THE PLAN ENTITLED "PRELIMINARY MAJOR SUBDIVISION PLAN, HILLCREST ESTATE, PLAT 120, LOT 46, PROSPECT AVENUE, MIDDLETOWN, RHODE ISLAND 02842, SCALE: 1"=40', DATED: MARCH 8, 2007, BY NARRAGANSETT ENGINEERING, INC."
7. THERE ARE NO EXISTING HISTORICAL BUILDINGS OR STRUCTURES ON SITE AT TIME OF SURVEY.
8. THERE ARE NO EXISTING HISTORIC CEMETERIES ON OR IMMEDIATELY ADJACENT TO THE SITE AT TIME OF SURVEY.
9. THE FINAL DESIGN OF THE ELECTRIC, TELEPHONE, CABLE, ETC. TO BE PERFORMED BY NATIONAL GRID.

**AQUIDNECK AVENUE**



FEB 21 2013  
Office of Water Resources



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

REGISTERED PROFESSIONAL ENGINEER

PROFESSIONAL LAND SURVEYOR

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF WATER RESOURCES  
 FRESHWATER WETLANDS PROGRAM  
 APPROVED WITH CONDITIONS  
 AS SPECIFIED IN THE LETTER OF APPROVAL  
 DATED MAP 10 2012 FILE #  
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE

I HEREBY CERTIFY THAT THIS SURVEY AND PLAN CONFORMS TO A CLASS 3 STANDARD AS ADOPTED BY THE RHODE ISLAND BOARD OF REGISTRATION FOR PROFESSIONAL LAND SURVEYORS.  
 BY: 2/14/13 DATE  
 MICHAEL R. DARVEAU, PLS#1978

<b>DARVEAU LAND SURVEYING, INC.</b> P.O. BOX 7918 CUMBERLAND, R.I. 02864 PHONE 401-475-5700 E-MAIL: DARVEAUSURVEY@COX.NET	<b>PROPOSED UTILITIES PLAN FOR</b> <b>KARMIK, LLC.</b> PLAT 120, LOT 46 265 PROSPECT AVENUE MIDDLETOWN, RHODE ISLAND	SCALE: 1" = 40' DRAWN BY: S.A.K.	REVISED: FEB. 14, 2013 DATE: NOV. 5, 2012	DRAWING NO: 2009_028 SHEET NO: 6 OF 12
---	--	-------------------------------------	--	---

**LEGEND**

- GB GRANITE BOUND
- PK PK NAIL
- FND FOUND
- PL PROPERTY LINE
- S.F. SQUARE FEET
- CB CATCH BASIN
- WV WATER VALVE
- OHW OVERHEAD WIRES
- WMP WATER METER PIT
- S--- SEWER LINE
- W--- WATER LINE
- D--- DRAINAGE LINE
- G--- GAS LINE
- SMH SEWER MANHOLE
- TYP TYPICAL
- INV. INVERT
- CONC. CONCRETE
- UW UNDERGROUND WIRES
- C.O. CLEAN-OUT
- DMH DRAINAGE MANHOLE

**SEDIMENTATION AND EROSION CONTROL:**

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING ALL TEMPORARY SEDIMENTATION & EROSION CONTROL.
2. EMBANKMENT SLOPES & ALL DISTURBED AREAS ARE TO RECEIVE A LAYER OF TOPSOIL (LOAM) AND SEED.
3. IMMEDIATELY UPON COMPLETION OF THE CLEARING AND GRUBBING AND PRIOR TO ANY ROUGH GRADING, A TEMPORARY SILT FENCE OR HAY BALES SHALL BE PLACED AT THE LIMIT OF PERMANENT DISTURBANCE PER PLAN.
4. ALL EROSION & SEDIMENTATION CONTROL SHALL BE PERIODICALLY MAINTAINED DURING BUILDING CONSTRUCTION BY THE CONTRACTOR.

**EROSION & SOIL STABILIZATION PROGRAM:**

1. TEMPORARY TREATMENTS SHALL CONSIST OF A SILT FENCE, HAY BALES OR PROTECTIVE COVERS SUCH AS FABRIC MATS.
2. THE SILT FENCE OR TEMPORARY PROTECTION SHALL REMAIN IN PLACE UNTIL AN ACCEPTABLE STAND OF GRASS OR APPROVED COVER IS ESTABLISHED.
3. NORMAL ACCEPTABLE SEASONAL SEEDING DATES ARE APRIL 1 - OCT. 15.
4. ALL FILL, IF REQUIRED, SHALL BE CLEAN AND THOROUGHLY COMPACTED UPON PLACEMENT IN STRICT CONFORMANCE WITH RIDPW STANDARD SPECIFICATION SECTION 202.

**SEDIMENTATION CONTROL PROGRAM:**

1. A TEMPORARY SILT FENCE, HAY BALES OR PROTECTIVE COVER SHALL BE INSTALLED PRIOR TO CONSTRUCTION & SHALL BE MAINTAINED ON A REGULAR BASIS. IN ADDITION TO THE LINE OF THE SILT FENCE AT THE LIMIT OF PERMANENT DISTURBANCE, TEMPORARY BARRIERS SHALL BE CONSTRUCTED AT THE TOE OF THE DISTURBED (CUT OR FILL) SLOPES UNTIL VEGETATIVE COVER HAS BEEN ESTABLISHED.
2. DURING CONSTRUCTION THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ADEQUATE DRAINAGE FLOW DURING STORMS AND PERIODS OF RAINFALL.
3. SEDIMENTATION CONTROL DEVICES SHALL BE INSPECTED CLOSELY AND MAINTAINED PROMPTLY AFTER EACH RAINFALL.
4. BANKS AND SLOPES NOT RECEIVING RIP RAP PROTECTION SHALL BE SEEDED AND PROTECTED WITH A FIBER MULCH.

**SLOPE STABILIZATION AND VEGETATION:**

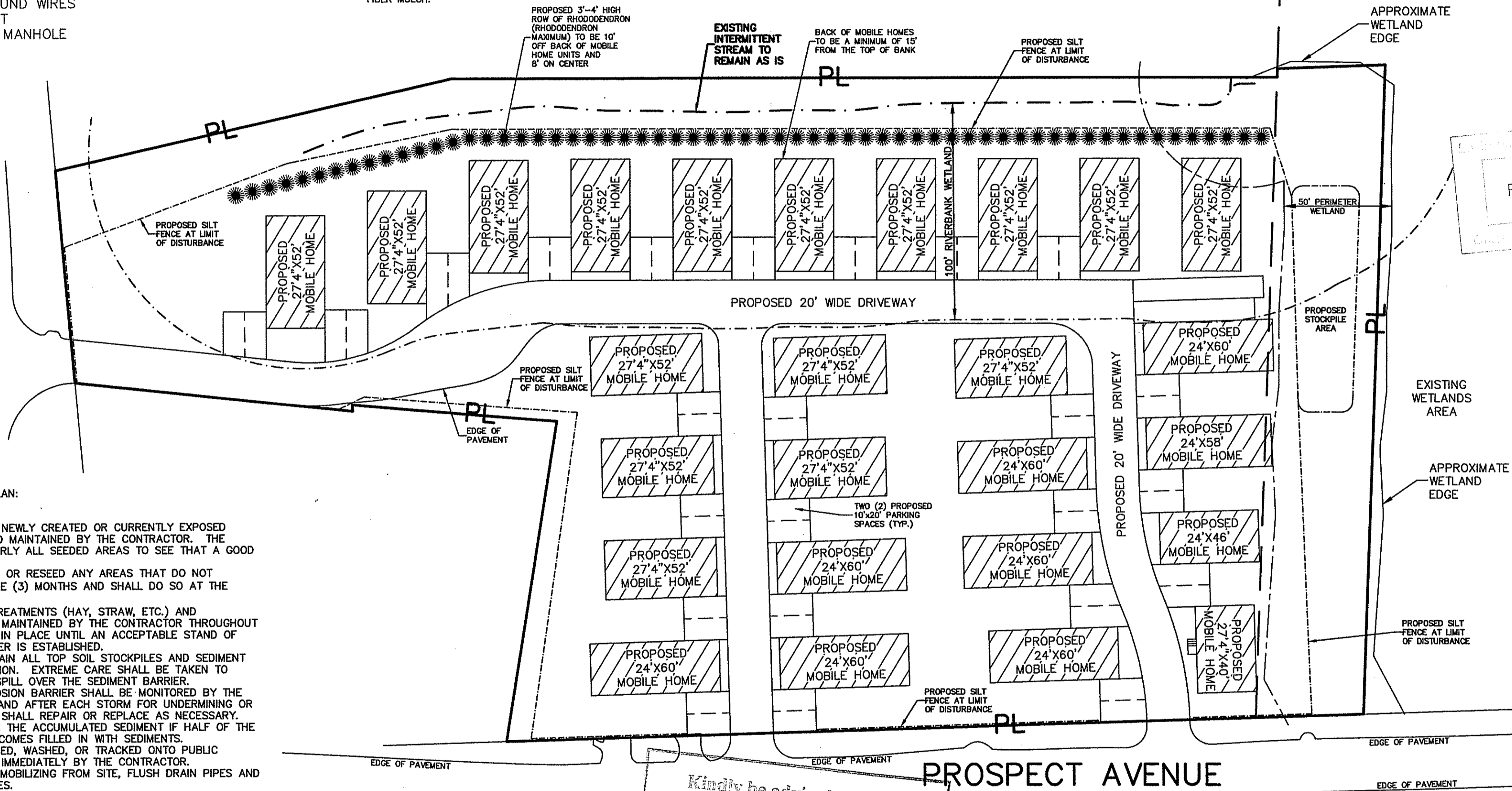
1. THE SILT FENCE OR HAY BALES SHALL BE PLACED AT THE TOE OF ALL DISTURBED SLOPES. THIS SHALL BE MAINTAINED AS A SEDIMENT BARRIER UNTIL THE SLOPES ARE STABILIZED WITH GRASS.
2. THE DISTURBED SLOPES (CUT OR FILL) SHALL BE IMMEDIATELY MULCHED AS AN EROSION PROTECTION MEASURE.
3. MAINTAIN MULCH UNTIL THE SLOPES ARE STABILIZED WITH A SATISFACTORY GROWTH OF GRASS.
4. VEGETATION REMOVED MAY BE SHREDED AND CHIPPED ON SITE FOR USE AS MULCH, OR IT MAY BE REMOVED FROM THE SITE AND DISPOSED OF IN A LEGAL MANNER.
5. THE RESEEDING OF THE DISTURBED SLOPES SHALL BE CONDUCTED WITH SEED MATERIALS SELECTED FOR PRODUCTION OF A QUICK COVER AND HARDY STAND. PARTICULARLY A CONSERVATION GRASS SEED OR COMPARABLE. THE SEEDING SHALL BE IN ACCORDANCE WITH COMMON NURSERY PRACTICE IN THE RHODE ISLAND AREA.
6. PROVIDED THAT THE PROVISIONS OF THE SEDIMENTATION & EROSION CONTROL PLAN ARE IMPLEMENTED, THERE WILL BE NO ADVERSE ENVIRONMENTAL EFFECTS FROM THE PROPOSED CONSTRUCTION.

**MISC. NOTES:**

1. ON-SITE VEGETATION MULCH OR HAY BALES ARE TO BE INSTALLED "TIGHT" AGAINST SILT FENCE. THOROUGHLY COMPACT EXCAVATED SOILS BACK INTO TRENCH AFTER INSTALLATION OF EROSION CONTROL DEVICES. SILT FENCE FABRIC SHALL NOT BE SUT-STD. 9.1 POST SHALL BE DRIVEN THROUGH SILT FENCE FABRIC. 2"x2"x4"-6" STAKE FOR SILT FENCE SHALL BE LOCATED 8"-0" ON CENTER (MAX.) IN WETLAND AREAS AND LOCATED 4"-0" ON CENTER (MAX.) IN WETLAND RAVINE, GULLY OR DROPOFF AREAS AS SHOWN IN R.I. STD. DETAIL 9.2 R.I. STD. DETAIL 9.6 IS TO BE USED FOR THIS SITE.

AQUIDNECK AVENUE

ZONE R-20A      ZONE R-40



**DRAINAGE SYSTEM MAINTENANCE PLAN:**

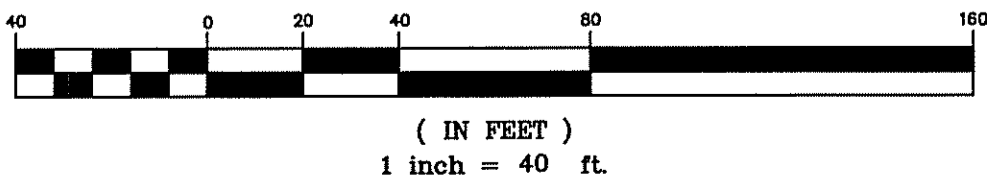
**SHORT TERM:**

1. ALL DISTURBED SLOPES EITHER NEWLY CREATED OR CURRENTLY EXPOSED SHALL BE SEEDED, PROTECTED, AND MAINTAINED BY THE CONTRACTOR. THE CONTRACTOR SHALL CHECK REGULARLY ALL SEEDED AREAS TO SEE THAT A GOOD STAND IS MAINTAINED.
2. THE CONTRACTOR MUST REPAIR OR RESEED ANY AREAS THAT DO NOT DEVELOP WITHIN A PERIOD OF THREE (3) MONTHS AND SHALL DO SO AT THE CONTRACTOR'S EXPENSE.
3. ALL HAY BALES, TEMPORARY TREATMENTS (HAY, STRAW, ETC.) AND TEMPORARY PROTECTION SHALL BE MAINTAINED BY THE CONTRACTOR THROUGHOUT CONSTRUCTION AND SHALL REMAIN IN PLACE UNTIL AN ACCEPTABLE STAND OF GRASS OR APPROVED GROUND COVER IS ESTABLISHED.
4. THE CONTRACTOR SHALL MAINTAIN ALL TOP SOIL STOCKPILES AND SEDIMENT BARRIERS THROUGHOUT CONSTRUCTION. EXTREME CARE SHALL BE TAKEN TO ENSURE THAT SEDIMENTS DO NOT SPILL OVER THE SEDIMENT BARRIER.
5. HAY BALES OR SILT FENCE EROSION BARRIER SHALL BE MONITORED BY THE CONTRACTOR ON A WEEKLY BASIS AND AFTER EACH STORM FOR UNDERMINING OR DETERIORATION. THE CONTRACTOR SHALL REPAIR OR REPLACE AS NECESSARY.
6. THE CONTRACTOR SHALL CLEAN THE ACCUMULATED SEDIMENT IF HALF OF THE ORIGINAL HEIGHT OF THE BALES BECOMES FILLED IN WITH SEDIMENTS.
7. ALL SEDIMENTS SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED IMMEDIATELY BY THE CONTRACTOR.
8. PRIOR TO SITE CONTRACTOR DEMOBILIZING FROM SITE, FLUSH DRAIN PIPES AND REMOVE SEDIMENT FROM STRUCTURES.

**LONG TERM:**

1. THE PROPERTY OWNER IS RESPONSIBLE FOR THE LONG-TERM MAINTENANCE OF THE DRAINAGE SYSTEM.
2. CATCH BASINS, SUMPS, MANHOLES, AND PIPES WILL BE FLUSHED AND CLEANED ON A YEARLY BASIS. SEDIMENT AND OIL REMOVED FROM THE CATCH BASINS IS TO BE DISPOSED OF IN ACCORDANCE WITH STATE REGULATIONS.
3. SWEEPING THE ROADWAY AFTER WINTER SHALL BE PERFORMED ANNUALLY.
4. REMOVE SEDIMENT BUILD-UP AT THE OUTFALL OF FLARED END SECTION.
5. AFTER THE FIRST SIX (6) MONTH INSPECTION, INSPECTIONS AND MAINTENANCE ARE TO OCCUR A LEAST ONCE PER YEAR PREFERABLY AFTER THE WINTER MONTHS. REMOVE ANY OIL AND SEDIMENT FOUND.
6. INSPECT THE CATCH BASINS IMMEDIATELY AFTER AN OIL, FUEL OR CHEMICAL SPILL.

**GRAPHIC SCALE**



**NOTES:**

1. THE PARCEL IS PLAT 120, LOT 46.
2. THE TOTAL AREA OF THE PARCEL IS 146,665 S.F. OR 3.3670 ACRES.
3. THE AREA IS ZONED: R-20A AND R-40.
4. THE PARCEL IS LOCATED IN ZONE "X" AS SHOWN ON NATIONAL FLOOD INSURANCE RATE MAP 44005C0182H FOR THE COUNTY OF NEWPORT, EFFECTIVE DATE: APRIL 5, 2010.
5. SEE DEED BOOK 573 AT PAGE 215 FOR TITLE REFERENCE.
6. THE PROPERTY LINE INFORMATION SHOWN ON THIS PLAN FROM THE PLAN ENTITLED "PRELIMINARY MAJOR SUBDIVISION PLAN, HILLCREST ESTATE, PLAT 120, LOT 46, PROSPECT AVENUE, MIDDLETOWN, RHODE ISLAND 02842, SCALE: 1"=40', DATED: MARCH 8, 2007, BY NARRAGANSETT ENGINEERING, INC."
7. THERE ARE NO EXISTING HISTORICAL BUILDINGS OR STRUCTURES ON SITE AT TIME OF SURVEY.
8. THERE ARE NO EXISTING HISTORIC CEMETERIES ON OR IMMEDIATELY ADJACENT TO THE SITE AT TIME OF SURVEY.
9. THE FINAL DESIGN OF THE ELECTRIC, TELEPHONE, CABLE, ETC. TO BE PERFORMED BY NATIONAL GRID.

Kindly be advised that this verification of the type or extent of freshwater wetlands on site.

MICHAEL P. DEFRANCESCO  
REGISTERED PROFESSIONAL ENGINEER  
No. 5632

MICHAEL R. DARVEAU  
PROFESSIONAL LAND SURVEYOR  
No. 1978

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS  
AS SPECIFIED IN THE LETTER OF APPROVAL  
DATED MAR 19 2013  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

I HEREBY CERTIFY THAT THIS SURVEY AND PLAN CONFORMS TO A CLASS 3 STANDARD AS ADOPTED BY THE RHODE ISLAND BOARD OF REGISTRATION FOR PROFESSIONAL LAND SURVEYORS.  
MICHAEL R. DARVEAU, PLS#1978      DATE 2/14/13

**DARVEAU LAND SURVEYING, INC.**  
 P.O. BOX 7918  
 CUMBERLAND, R.I. 02864  
 PHONE 401-475-5700  
 E-MAIL: DARVEAUSURVEY@COX.NET

**KARMIK, LLC.**  
 PLAT 120, LOT 46  
 265 PROSPECT AVENUE  
 MIDDLETOWN, RHODE ISLAND

PROPOSED SOIL EROSION CONTROL PLAN FOR

SCALE: 1" = 40'  
 REVISED: FEB. 14, 2013  
 DRAWING NO: 2009\_028  
 SHEET NO: 7 OF 12  
 DRAWN BY: S.A.K.  
 DATE: NOV. 5, 2012

# GENERAL CONSTRUCTION NOTES:

1. PRIOR TO COMMENCING CONSTRUCTION OR ANY NEW WORK, THE CONTRACTOR SHALL THOROUGHLY REVIEW THIS FULL SET OF PLANS PAYING PARTICULAR ATTENTION TO ALL ORDER OF PROCEDURES, GENERAL NOTES AND DETAILS.
2. TO ENSURE FULL COMPLIANCE, AT THE ONSET THE CONTRACTOR SHALL BECOME COMPLETELY FAMILIAR WITH THE ORDINANCES, RULES, REGULATIONS AND/OR STANDARDS OF THE PERMITTING/APPROVAL AGENCIES AND UTILITY COMPANIES INVOLVED WITH THIS PROJECT.
3. ALL EARTH AND SITE WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE MOST RECENT EDITION OF THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" INCLUDING ALL RELATED ADDENDA AS PUBLISHED BY THE RHODE ISLAND STATE OF RHODE ISLAND DEPARTMENT OF TRANSPORTATION, DIVISION OF PUBLIC WORKS. THESE SPECIFICATIONS ARE AVAILABLE THROUGH THE INTERNET AT THE FOLLOWING ADDRESS, "www.dot.state.ri.us".
4. THE CONTRACTOR WILL BE WORKING ADJACENT TO OCCUPIED UNITS. THEREFORE IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO INSTITUTE ANY AND ALL SAFETY MEASURES, AS NECESSARY, TO PROTECT PUBLIC SAFETY AND MINIMIZE ANY INCONVENIENCE DURING CONSTRUCTION. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO, SIGNS, BARRICADES, FENCES, POLICE, ETC. AS MAY BE DEEMED NECESSARY OR DIRECTED BY THE OWNER.
5. THE CONTRACTOR SHALL IMMEDIATELY REPORT TO THE OWNER AND ENGINEER ANY SIGNIFICANT VARIATIONS IN EXISTING SITE CONDITIONS. ANY PROPOSED REVISIONS OR DEVIATIONS FROM THESE PLANS, IF SO REQUIRED, SHALL NOT BE UNDERTAKEN UNTIL SUCH TIME THAT THE OWNER AND ENGINEER HAVE REVIEWED AND APPROVED THE CHANGE(S).
6. THE LOCATION, SIZE AND DEPTH OF ALL EXISTING UTILITY SERVICES, AS SHOWN, ARE APPROXIMATE AND HAVE BEEN PLOTTED FROM THE BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING AND FIELD VERIFYING THESE LOCATIONS AS WELL AS TO COORDINATE ALL WORK WITH THE APPROPRIATE UTILITY COMPANIES PRIOR TO TAPPING INTO, CONNECTING TO, EXTENDING OR CROSSING THEM. IN THE EVENT THE PROPOSED WORK PRESENTS A CONFLICT WITH ANY EXISTING UTILITIES, THE ENGINEER IS TO BE NOTIFIED PRIOR TO CONTINUING WITH THE WORK.
7. PRIOR TO ANY SITE DISTURBANCE OR CONSTRUCTION ACTIVITY, THE CONTRACTOR SHALL CONTACT "DIG SAFE", (1-800-225-4977) A MINIMUM OF 72 HOURS IN ADVANCE.
8. UTILITY TRENCHES SHALL BE BACK FILLED TO A MINIMUM DEPTH OF SIX INCHES (6") ABOVE THE TOP OF PIPE WITH CLEAN, BANK RUN GRAVEL HAVING NO STONE LARGER THAN THREE INCHES (3"). FILL SHALL BE PLACED IN TWELVE INCH (12") LIFTS MAXIMUM AND MECHANICALLY COMPACTED TO 95% MODIFIED PROCTOR DRY DENSITY MINIMUM.
9. IN ALL LOCATIONS WHERE A DRAIN PIPE OR CULVERT CROSSES A WATER MAIN THERE IS TO BE A MINIMUM TWELVE INCH (12") CLEAR SEPARATION BETWEEN THE TWO PIPES. WHERE A SEWER AND WATER MAIN CROSS AND THE SEPARATION DISTANCE IS LESS THAN EIGHTEEN INCHES (18") THE SEWER MAIN SHALL BE ENCASED IN CONCRETE TEN FEET (10') TO EITHER SIDE OF THE CROSSING.
10. NO LEDGE, BOULDERS OR OTHER UNYIELDING MATERIALS ARE TO BE LEFT WITHIN SIX INCHES (6") OF THE WATER AND SEWER MAINS IN THE TRENCH, NOR SHALL THEY BE USED IN THE BACK FILL FOR A MINIMUM HEIGHT OF TWELVE INCHES (12") ABOVE THE MAIN.
11. CATCH BASINS SHALL BE CONSTRUCTED FLUSH WITHOUT AN APRON STONE UNLESS NOTED OTHERWISE.
12. ALL MATERIALS AND PRODUCTS UTILIZED FOR CONSTRUCTION WITHIN ANY TRAVEL WAY LOCATION SHALL BE RATED FOR H-20 LOADING.
13. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE INTEGRITY OF ALL EXISTING UTILITY SERVICES, STRUCTURES AND ABUTTING PROPERTIES, ETC. ANY SUCH DAMAGE CAUSED AS A RESULT OF ACTION TAKEN BY THE CONTRACTOR OR HIS SUB-CONTRACTORS SHALL BE THE CONTRACTOR'S FULL RESPONSIBILITY. THE COST OF REPAIR OR REPLACEMENT SHALL BE BORNE SOLELY BY THE CONTRACTOR.
14. THE CONTRACTOR SHALL REGULARLY INSPECT THE GROUNDS AND PERIMETER OF THE PROPERTY TO CLEAN UP AND REMOVE ANY LOOSE CONSTRUCTION DEBRIS TO PREVENT SUCH MATERIAL(S) FROM LEAVING THE CONSTRUCTION SITE.
15. ALL LABOR, MATERIALS, EQUIPMENT AND UTILITIES NECESSARY TO COMPLETE THE WORK SHALL BE PROVIDED BY THE CONTRACTOR. LIKEWISE, IT SHALL ALSO BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE ANY SECURITY MEASURES WHICH MAY BE WARRANTED TO PROTECT THESE CONSTRUCTION MATERIALS AND EQUIPMENT WHILE ONSITE.
16. ALL WORK SHALL BE COMPLETED IN A SATISFACTORY, SAFE, WORKMANLIKE MANNER. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO OBEY ALL OSHA, LOCAL, STATE AND OTHER FEDERAL REGULATIONS.
17. THE CONTRACTOR SHALL ALSO COMPLETE ALL WORK IN STRICT COMPLIANCE WITH ALL APPLICABLE STATE AND FEDERAL ENVIRONMENTAL LAWS, REGULATIONS AND PROCEDURES. THE CONTRACTOR SHALL BE OBLIGATED FOR ALL COSTS AND REQUIRED REMEDIAL ACTION RELATIVE TO ANY FINES, CITATIONS, OR LOST PRODUCTION DUE TO WORK STOPPAGES CAUSED BY ANY VIOLATIONS IN THIS REGARD.
18. THE CONTRACTOR SHALL EMPLOY ANY AND ALL PRECAUTIONS AND CONTROLS, AS NECESSARY, TO PREVENT EROSION AND SEDIMENTATION. ALL WORK AND MATERIALS, IN ADDITION TO THAT SPECIFIED HEREIN, SHALL BE CONSISTENT WITH THE STANDARD PRACTICES AND ACCEPTABLE CONSTRUCTION METHODS COMMONLY UTILIZED IN THE INDUSTRY. THE CONTRACTOR SHALL ALSO TAKE APPROPRIATE MEASURES AS REQUIRED TO MINIMIZE AND CONTROL DUST.
19. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL QUANTITY TAKE-OFFS AND THE COMPUTING OF ANY ESTIMATES.

# WATER MAIN ORDER OF PROCEDURE:

1. NOTIFY THE CITY OF NEWPORT WATER DEPARTMENT, TOWN OF MIDDLETOWN ENGINEER, R.I. DOT AND ENGINEER OF RECORD ONCE THE WATER LINE CONSTRUCTION HAS BEEN SCHEDULED. MINIMUM NOTICE IS FIVE (5) WORKING DAYS.
2. PRIOR TO INSTALLATION, ALL FITTINGS AND PIPE SHALL BE SWABBED WITH AN APPROVABLE CHLORINE SOLUTION.
3. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONDUCT THE TESTING AND CHLORINATION AND SHALL BRING IN ENOUGH WATER TO FLUSH, CLEAN AND CHLORINATE THE SUBJECT MAIN. CHLORINATION SHALL BE IN STRICT ACCORDANCE WITH AMERICAN WATER WORKS ASSOCIATION MANUAL #20, CHAPTER 5. TABLET CHLORINATION SHALL NOT BE PERMITTED. SAMPLES SHALL BE TESTED BY AN INDEPENDENT LABORATORY AND CERTIFIED TEST RESULTS SHALL BE PROVIDED TO THE CITY OF NEWPORT WATER DEPARTMENT, TOWN OF MIDDLETOWN ENGINEER, R.I. DOT AND ENGINEER OF RECORD.
4. IN THE EVENT A LEAK IS ENCOUNTERED, THE CONTRACTOR SHALL HAVE THE MAIN DRAINED AND REPAIRED FOLLOWED BY A REPEAT OF THE TESTING AND DISINFECTION PROGRAMS.
5. THE CONTRACTOR SHALL TEST, CHLORINATE AND/OR HAVE THE WATER MAIN INSPECTED AS MANY TIMES AS NECESSARY UNTIL IT SATISFACTORILY CONFORMS WITH THE ACCEPTABLE DRINKING WATER STANDARDS.
6. UPON COMPLETION AND SATISFACTORY TEST RESULTS HAVE BEEN ACHIEVED, THE CONTRACTOR SHALL HAVE THE WATER LINE COMPLETED DRAINED AND BLOWN OUT.

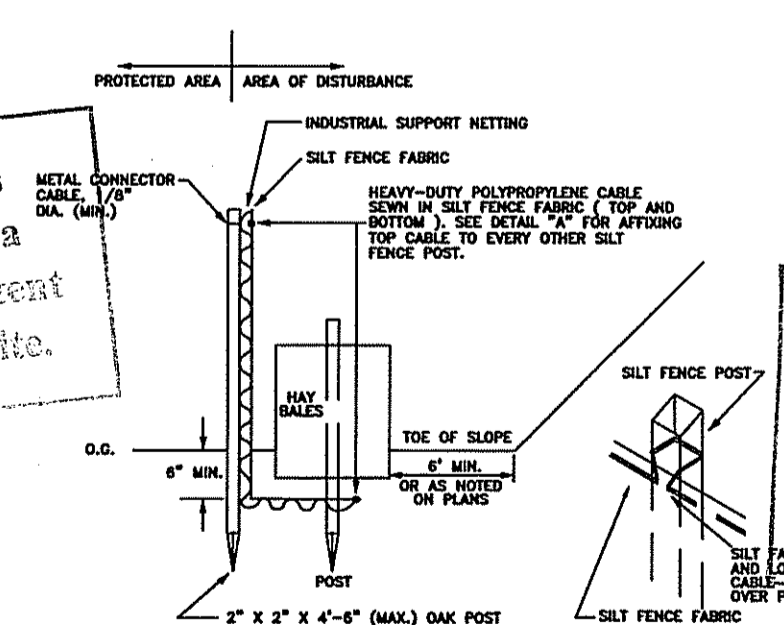
Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site.

# SEWER MAIN CONSTRUCTION NOTES:

1. FOR GENERAL SPECIFICATIONS REGARDING ALL CONSTRUCTION AS WELL AS THE SANITARY SEWERS THE CONTRACTOR SHALL REFERENCE THE TOWN OF MIDDLETOWN AND/OR R.I. DOT GUIDELINES, RULES, REGULATIONS AND OTHER APPLICABLE LAWS, INCLUDING ANNEX "A" DESIGN OF SEWERS (PROMULGATED 8/15/02), REGARDING SANITARY SEWER CONSTRUCTION, THE CONTRACTOR SHALL SPECIFICALLY REFERENCE THE TECHNICAL RELEASE #16 GUIDE FOR THE DESIGN OF WASTEWATER TREATMENT WORKS (PUBLISHED BY THE N.E. INTERSTATE WATER POLLUTION CONTROL COMMISSION).
2. ALL SANITARY SEWER CONSTRUCTION SHALL BE SUBJECT TO INSPECTION BY THE TOWN OF MIDDLETOWN AND/OR R.I. DOT.
3. NO PERSON SHALL MAKE ANY CONNECTION OF ROOF DOWNSPOUTS, FLOOR DRAINS, SUMP PUMPS, EXTERIOR FOUNDATION DRAINS, AREAWAY DRAINS, OR OTHER SOURCES OF SURFACE RUNOFF OR GROUNDWATER TO ANY COMPONENT OF THE SANITARY SEWER SYSTEM.
4. GRAVITY SEWER PIPE SHALL BE ASTM RIGID SCHEDULE 40 OR HEAVIER PVC PIPE AND CONFORM TO ASTM SPECIFICATIONS D-3034. ALL PIPE SHALL HAVE COMPRESSION JOINTS WITH AN ELASTOMETRIC GASKET TYPE SEAL CONFORMING TO ASTM D-3212.
5. ALL SANITARY SEWER CONNECTIONS SHALL BE MADE GAS TIGHT.
6. SEWER MAINS AND LATERALS SHALL HAVE FOUR FEET (4') OF COVER MINIMUM.
7. SEWER LATERALS SHALL BE 4" PVC SCHEDULE 40 (MIN.) AND BE INSTALLED AT THE MINIMUM SLOPE OF 2 %. ALL PIPE SHALL HAVE COMPRESSION JOINTS.
8. MINIMUM BEDDING REQUIREMENTS FOR SEWER PIPE INSTALLATION SHALL BE CLASS "B" AS DESCRIBED IN ASTM C-12.
9. BACKFILL UNDER AND BESIDE THE PIPE SHALL BE COMPACTED EVENLY ON BOTH SIDED OF THE PIPE IN LAYERS SO THAT THE PIPE REMAINS ALIGNED AND TRUE. THE LAYERS SHALL BE NO MORE THAN 8" THICK AFTER COMPACTION AND SHALL BE COMPACTED TO NOT LESS THAN 95% OF MAXIMUM DRY DENSITY ACCORDING TO AASHTO T180. DEBRIS, FROZEN MATERIAL, LARGE CLODS, STONES, ORGANIC MATTER, OR UNSUITABLE MATERIALS FOR BACKFILL SHALL BE PROHIBITED. FOR ADDITIONAL BACKFILL DETAILS, SEE CITY STANDARDS CR-10/S-1 WHICH ARE AVAILABLE IN THE DIVISION OF ENGINEERING.

# WATER MAIN CONSTRUCTION NOTES:

1. THE EXISTING WATER DISTRIBUTION SYSTEM, FOLLOWING THE MASTER METER, IS TO BE A PRIVATE SYSTEM.
2. PIPING SHALL MEET THE REQUIREMENTS OF THE CITY OF NEWPORT WATER DEPARTMENT, TOWN OF MIDDLETOWN AND/OR R.I. DOT.
3. DEPTH OF WATER MAIN SHALL BE AT A MINIMUM OF FOUR FEET (4') BELOW FINISHED GRADE THROUGHOUT THE INSTALLATION.
4. TRENCH SHALL BE IN ACCORDANCE WITH THE AMERICAN WATER WORKS ASSOCIATION TYPE 5 TRENCH.
5. A PRESSURE TEST SHALL BE PERFORMED ON THE COMPLETED WATER LINE PRIOR TO ACCEPTANCE. REFERENCE NOTE #4 UNDER WATER MAIN "ORDER OF PROCEDURE".
6. TEST PRESSURE SHALL BE ONE AND ONE HALF (1-1/2) TIMES THE MAXIMUM WORKING PRESSURE OF THE SYSTEM BUT NOT LESS THAN 150 P.S.I.
7. PRIOR TO PRESSURE TESTING AND/OR CHLORINATION THE ENGINEER OF RECORD SHALL BE NOTIFIED TWO (2) DAYS PRIOR TO THE DATE OF THE TEST.
8. RECORD DRAWINGS OF THE PROGRESS OF WORK SHALL BE MAINTAINED ON THE JOB SITE AND AVAILABLE FOR REVIEW BY THE CITY NEWPORT WATER DEPARTMENT, TOWN OF MIDDLETOWN, R.I. DOT AND/OR ENGINEER OF RECORD.
9. THE WATER SERVICE SHALL BE FLUSHED, CLEANED AND CHLORINATED IN ACCORDANCE WITH CHAPTER 5, DISTRIBUTION SYSTEM CHLORINATION, AMERICAN WATER WORKS ASSOCIATION MANUAL #20. CHLORINATION TABLETS SHALL NOT BE ALLOWED.



NOTES:  
 1. STD. 9.1 IS INSTALLED "TIGHT" AGAINST SILT FENCE. THOROUGHLY COMPACT EXCAVATED SOILS BACK INTO TRENCH AFTER INSTALLATION OF EROSION CONTROL DEVICES. SILT FENCE FABRIC SHALL NOT BE SLIT. STD. 9.1 POST SHALL BE DRIVEN THROUGH SILT FENCE FABRIC. 2"x2" (MAX.) OAK POST FOR SILT FENCE SHALL BE LOCATED ON 8'-0" (MAX.) CENTER IN WETLAND AREAS AND LOCATED ON 4'-0" (MAX.) CENTER IN WETLAND REVEINE, GULLY OR DROPOFF AREAS AS SHOWN ON PLANS.  
 2. R.I. STD. 9.1 AND SILT FENCE WILL BE PAID FOR UNDER THE APPROPRIATE PAY ITEMS, COMPLETE IN-PLACE.

R.I. STD. 9.1 WITH SILT FENCE  
 NOT TO SCALE

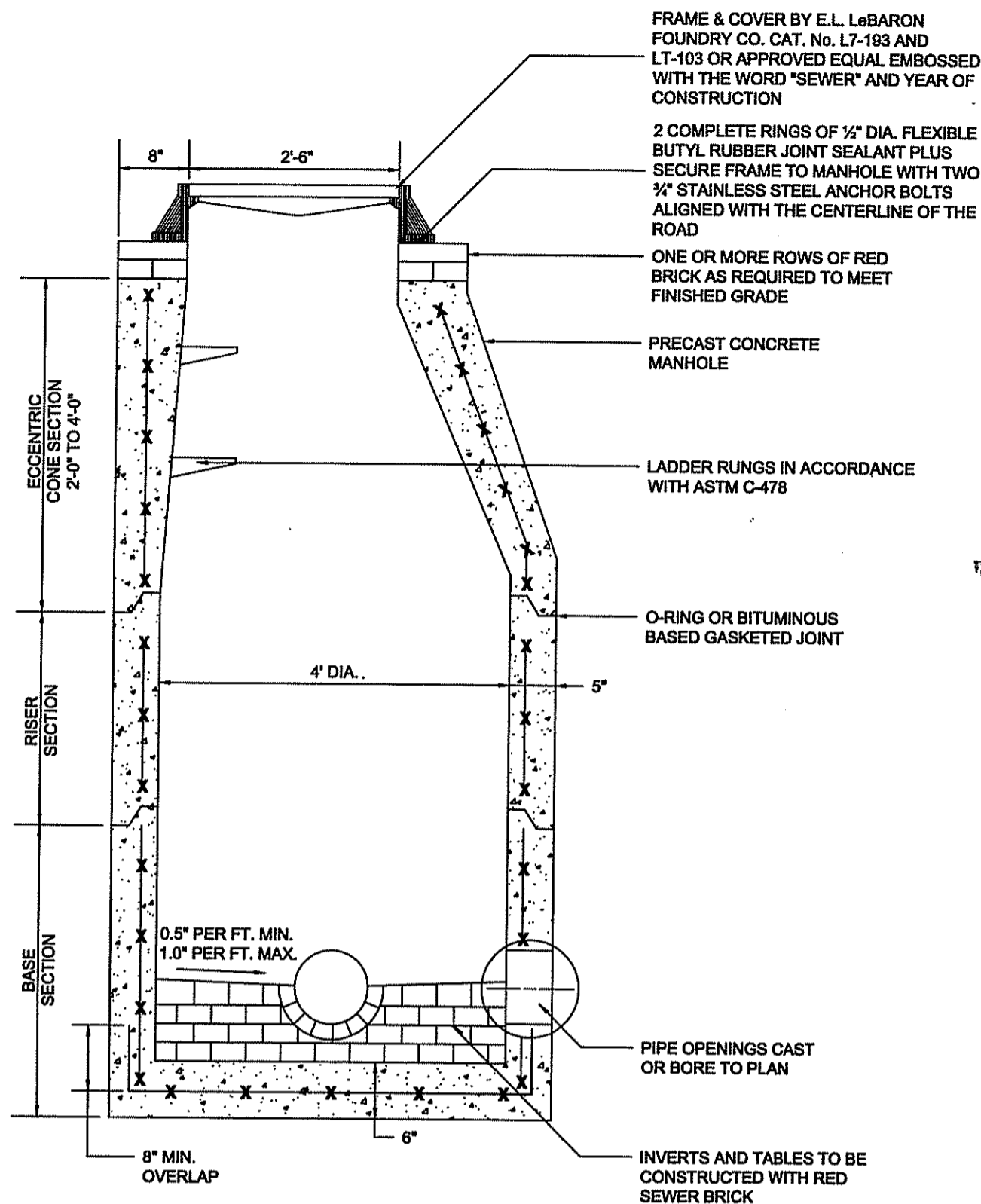
Professional Engineer Seal for Michael P. DeFrancesco, No. 9632, State of Rhode Island.

Professional Land Surveyor Seal for William R. Darveau, No. 1978, State of Rhode Island.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF WATER RESOURCES  
 FRESHWATER WETLANDS PROGRAM  
 APPROVED WITH CONDITIONS  
 AS SPECIFIED IN THE LETTER OF APPROVAL  
 DATED MAR 19 2013 FILE #  
 NO CHANGES ALLOWED WITHOUT PROPER APPROVAL  
 APPROVED PLANS MUST BE A CONSTRUCTION SET

RECEIVED  
 FEB 21 2013  
 Office of Water Resources

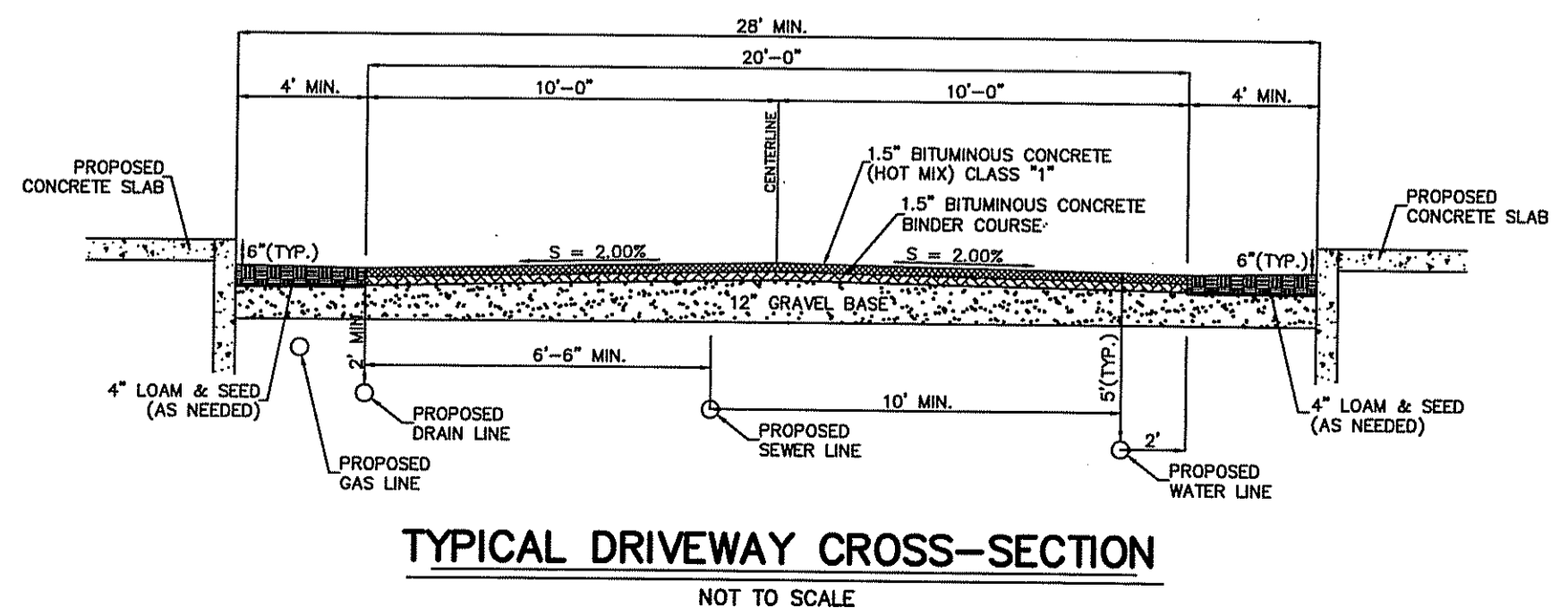
DRAWING NO: 2009_028	SCALE: AS NOTED	REVISIONS: REVISED FEB. 14, 2013	DATE: NOV. 5, 2012	DRAWN BY: S.A.K.	SHEET NO: 8 OF 12	DARVEAU LAND SURVEYING, INC. P.O. BOX 7918 CUMBERLAND, R.I. 02864 PHONE 401-475-5700 E-MAIL: DARVEAUSURVEY@COX.NET
	DETAIL SHEET FOR KARMIK, LLC PLAT 120, LOT 46 265 PROSPECT AVENUE MIDDLETOWN, RHODE ISLAND					



- NOTES:
1. MANHOLES SHALL BE CONSTRUCTED OF PRECAST REINFORCED CONCRETE, ASTM DESIGNATION C-478, LATEST EDITION.
  2. MANHOLE TO BE PLACED ON 12" BEDDING OF COMPACTED STONE.
  3. ALL JOINTS, LIFT HOLES AND PINHOLES SHALL BE PARGED FROM THE INSIDE AND OUTSIDE WITH A NON-SHRINK GROUT THEN A BITUMINOUS COATING SHALL BE APPLIED TO THE FULL EXTERIOR.
  4. PIPES SHALL BE JOINED AT THE MANHOLE WITH A GASKETED, FLEXIBLE WATERTIGHT BOOT CONNECTION TO ALLOW OR DIFFERENTIAL SETTLEMENT.
  5. SEWER BRICK SHALL BE WELL CEMENTED BELOW AND ON TOP, AND BETWEEN EACH OTHER. HOWEVER THE OUTSIDE FACES OF THE BRICK SHALL NOT BE COVERED WITH CEMENT OR MORTAR.
  6. LADDER RUNGS AND MANHOLE TOP SHALL BE INSTALLED ALIGNED FOR EASY ENTRY.
  7. ALL FRAMES AND COVERS SHALL HAVE MACHINED BEARING SURFACES AND SHALL RECEIVE A FACTORY PAINTING OF A MANUFACTURER RECOMMENDED BLACK ASPHALTUM. THE BITUMASTIC COATING SHALL BE SMOOTH AND DURABLE WITH NO TENDENCY TO CHIP OFF.

**SANITARY MANHOLE DETAIL**

N.T.S.



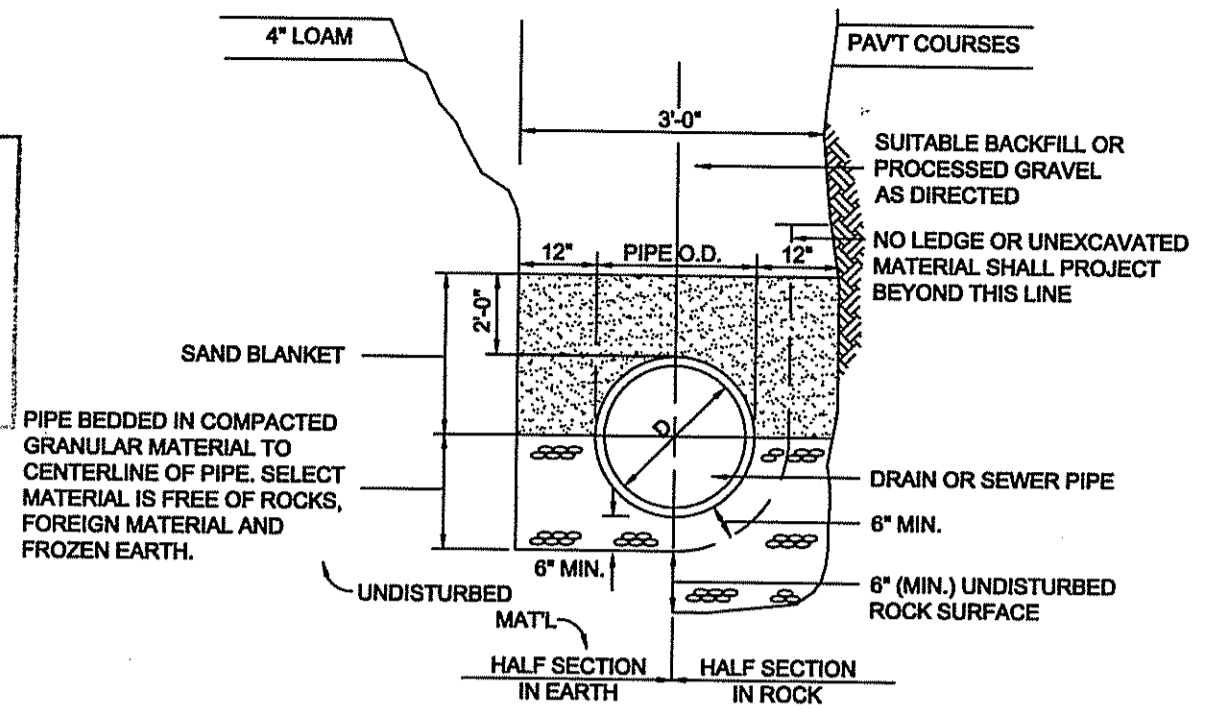
**TYPICAL DRIVEWAY CROSS-SECTION**

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.

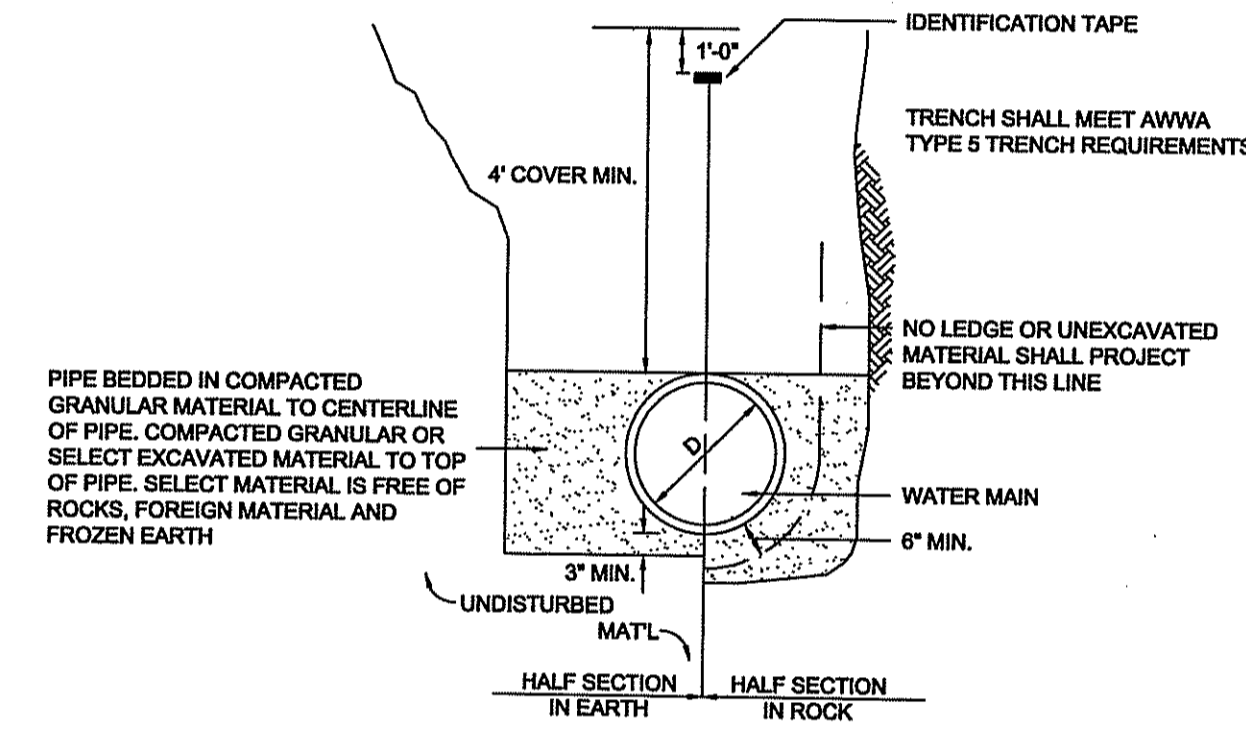
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS  
AS SPECIFIED IN THE LETTER OF APPROVAL  
DATED **MAR 19 2013** FILE #  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

*Michael P. DeFrancisco*



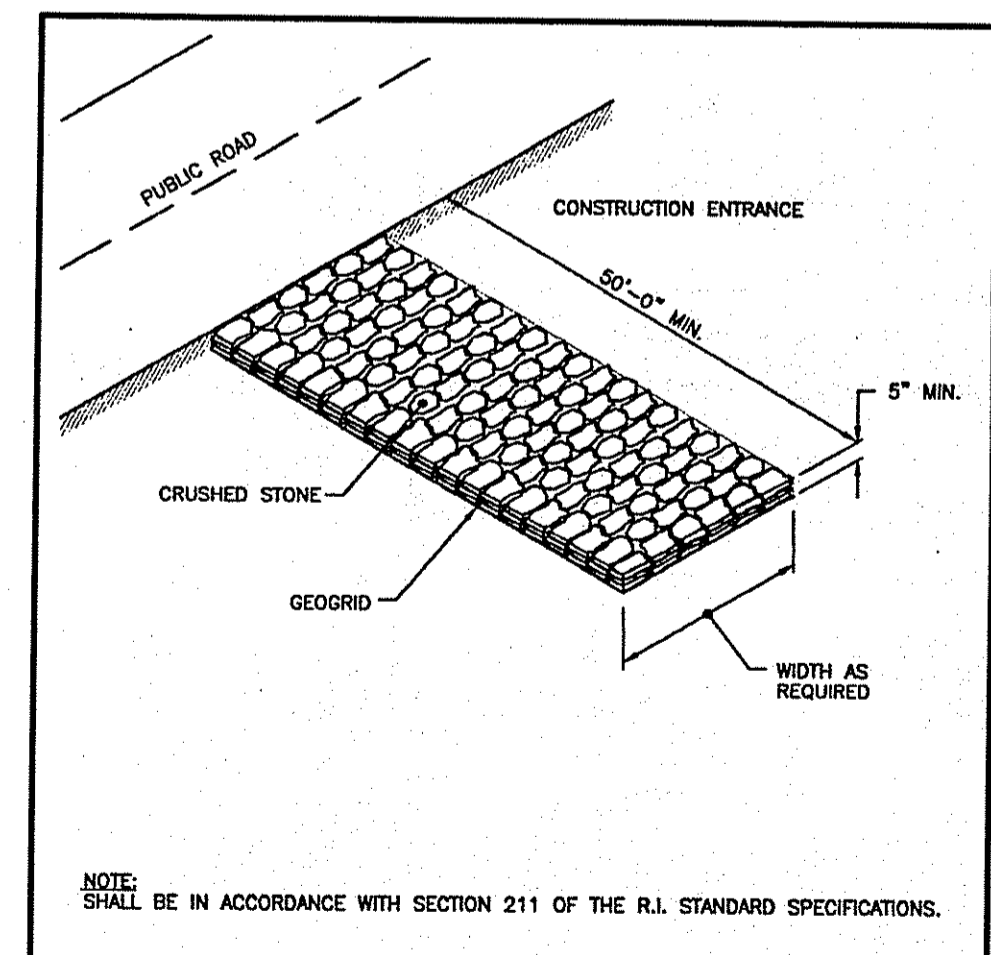
**TYPICAL SEWER LINE TRENCH DETAIL**

N.T.S.



**TYPICAL WATER LINE TRENCH DETAIL**

N.T.S.



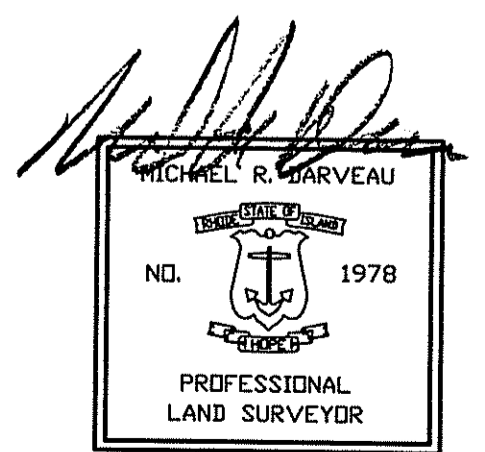
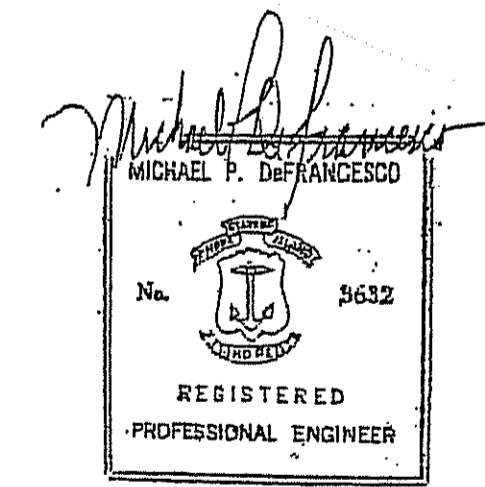
NOTE: SHALL BE IN ACCORDANCE WITH SECTION 211 OF THE R.I. STANDARD SPECIFICATIONS.

REVISIONS		
NO.	BY	DATE

RHODE ISLAND DEPARTMENT OF TRANSPORTATION  
**CONSTRUCTION ACCESS**

*James L. Capelli* CHIEF ENGINEER  
*Edward M. Roberts* CHIEF DESIGN ENGINEER  
JUNE 15, 1998

R.I. STANDARD 9.9.0



FEB 21 2013

**DARVEAU LAND SURVEYING, INC.**  
P.O. BOX 7918  
CUMBERLAND, R.I. 02864  
PHONE 401-475-5700  
E-MAIL: DARVEAUSURVEY@CIX.NET

DETAIL SHEET FOR  
**KARMIK, LLC**  
PLAT 120, LOT 46  
265 PROSPECT AVENUE  
MIDDLETOWN, RHODE ISLAND

SCALE: AS NOTED  
REVISED: FEB. 14, 2013  
DRAWING NO: 2009\_028  
DATE: NOV. 5, 2012  
SHEET NO: 9 OF 12  
DRAWN BY: S.A.K.

RHODE ISLAND DEPARTMENT OF TRANSPORTATION  
 DIVISION OF PUBLIC WORKS  
**ROCK FILL RIP-RAP AT FLARED END SECTIONS**

STANDARD 2.12

FLARED END SECTION

WIDTH OF FLARED END SECTION + 10'

SECTION C-C

WIDTH OF FLARED END SECTION + 6'

SECTION B-B

WIDTH OF FLARED END SECTION + 2'

SECTION A-A

NOTES:

1. CLASS OF RIP-RAP AND BEDDING TO BE SPECIFIED IN CONTRACT DOCUMENTS
2. DIMENSIONS MAY BE MODIFIED BY ENGINEER TO MEET FIELD CONDITIONS
3. UNLESS OTHERWISE SPECIFIED, DUMPED RIP-RAP SHALL BE USED

Supervising Civil Eng. Road Design  
 Chief Design Eng. Public Works  
 Chief Engineer Dept. of Transportation

RHODE ISLAND DEPARTMENT OF TRANSPORTATION

**SQUARE FRAME AND GRATE**

R.I. STANDARD 6.3.0

JUNE 15, 1998  
 ISSUE DATE

4TH FLANGE WHEN ORDERED

SECTION A-A

SECTION B-B

NOTE: FRAME AND GRATE SHALL CONFORM TO SECTION M.04 OF THE R.I. STANDARD SPECIFICATIONS.

REVISIONS

NO.	BY	DATE

RHODE ISLAND DEPARTMENT OF TRANSPORTATION

**BRICK/SOLID BLOCK OR PRECAST TYPE "D" SQUARE CATCH BASIN**

R.I. STANDARD 3.3.0

JUNE 15, 1998  
 ISSUE DATE

PLAN

SECTION A-A

SECTION B-B

NOTES:

1. SHALL BE IN ACCORDANCE WITH SECTION 702 OF THE R.I. STANDARD SPECIFICATIONS.
2. 1/2" CEMENT MORTAR PLASTER REQUIRED ON ALL INSIDE AND OUTSIDE SURFACES.
3. USE 8" WALLS UP TO 6'-0" DEPTH AND 1'-0" WALLS UP TO 8'-0" DEPTH.

REVISIONS

NO.	BY	DATE

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 MAY 6 1 2013 FILE #    
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE

MICHAEL P. DeFRANCESCO  
 REGISTERED PROFESSIONAL ENGINEER  
 No. 9622

MICHAEL R. DARVEAU  
 PROFESSIONAL LAND SURVEYOR  
 No. 1978

DARVEAU LAND SURVEYING, INC.  
 P.O. BOX 7918  
 CUMBERLAND, R.I. 02864  
 PHONE 401-475-5700  
 E-MAIL: DARVEAUSURVEY@CDX.NET

DETAIL SHEET FOR  
**KARMIK, LLC**  
 PLAT 120, LOT 46  
 265 PROSPECT AVENUE  
 MIDDLETOWN, RHODE ISLAND

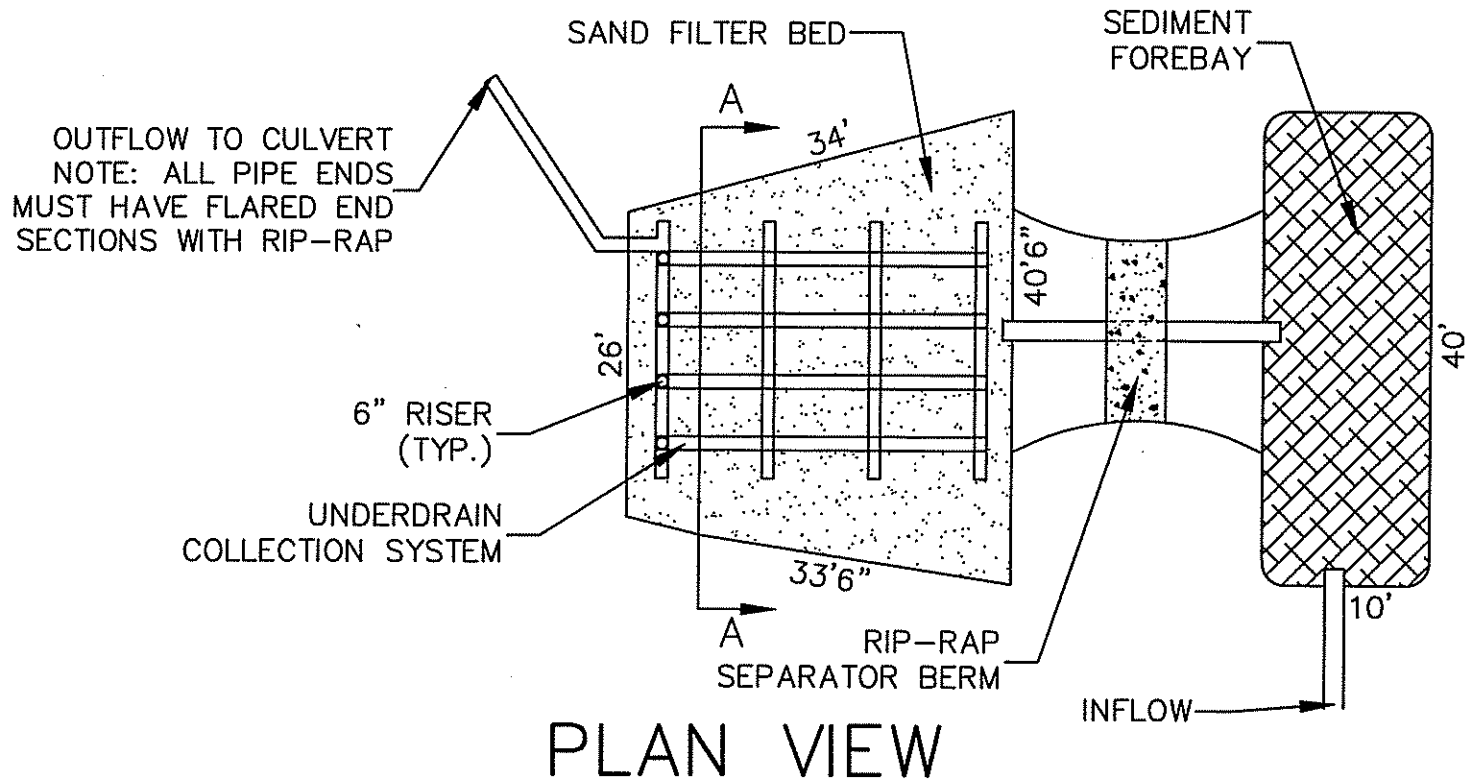
DRAWING NO: 2009\_028  
 SHEET NO: 10 OF 12

REVISIONS

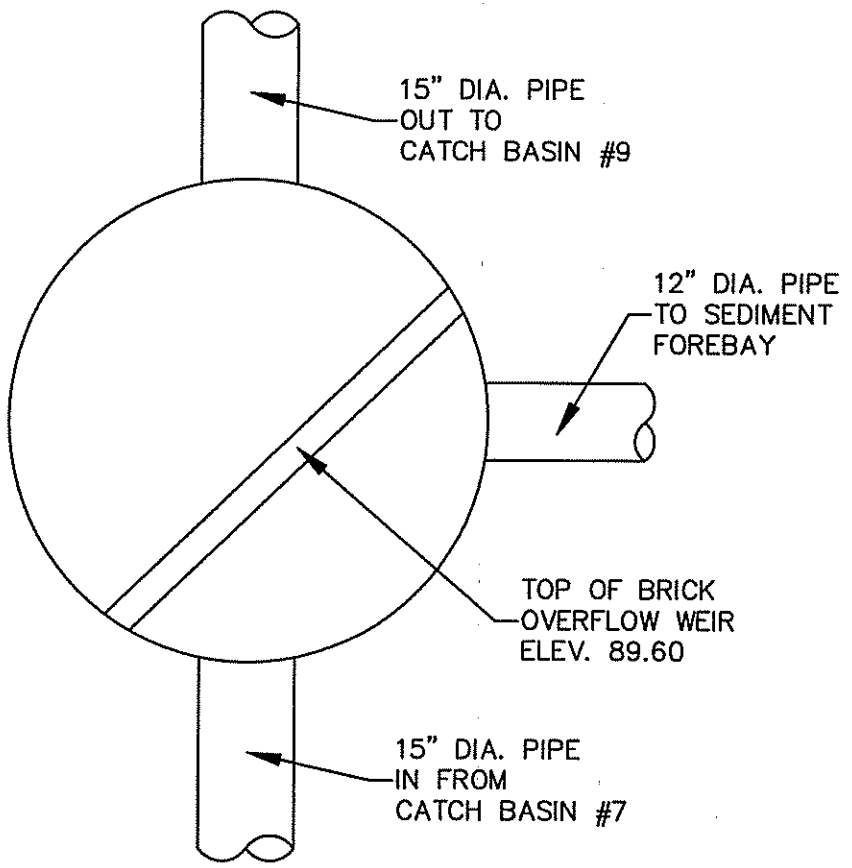
NO.	DATE	BY
REVISED	FEB. 14, 2013	AS NOTED
DATE:	NOV. 5, 2012	DRAWN BY: S.A.K.

SCALE: AS NOTED

**PROPOSED SAND FILTER**

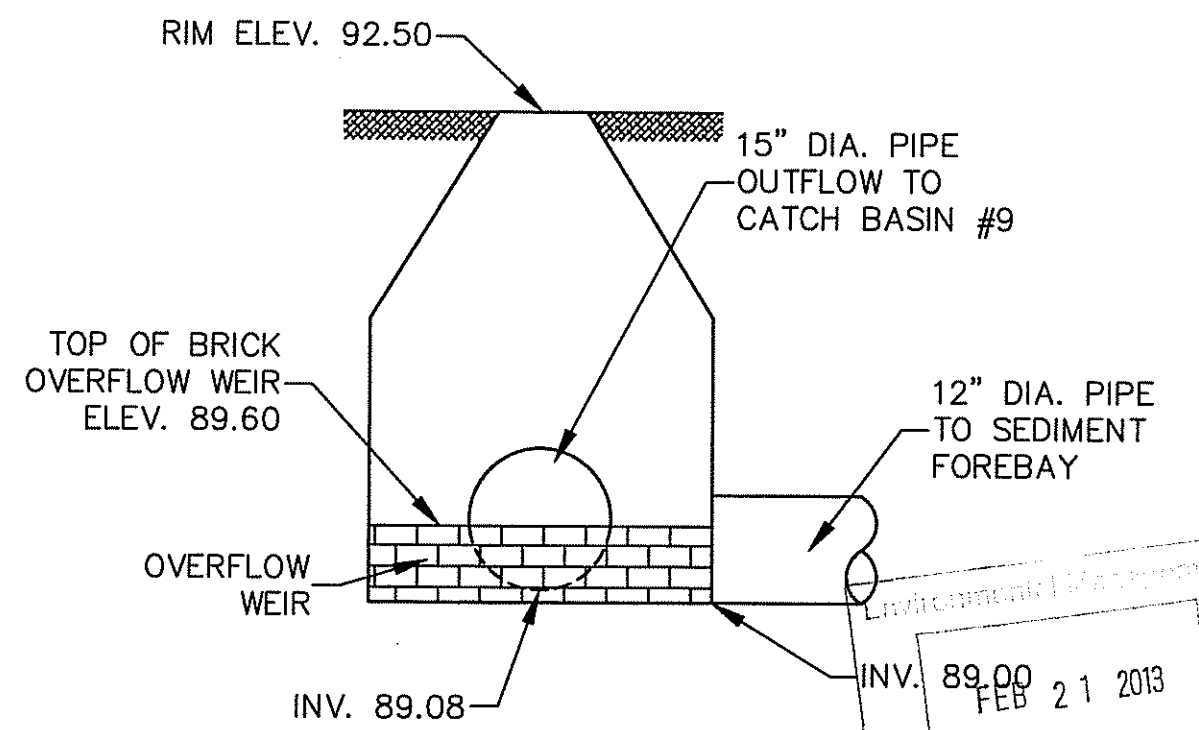


**PLAN VIEW**



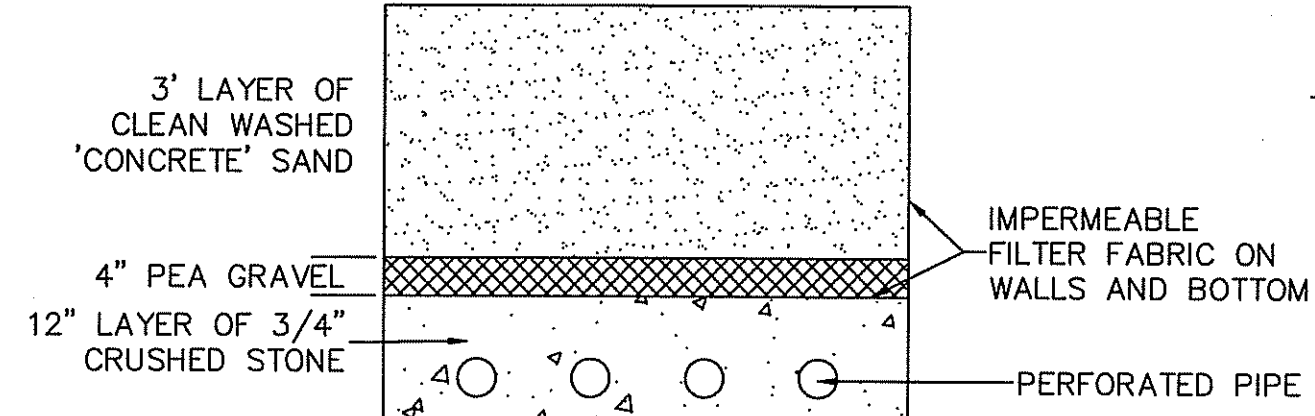
**FLOW SPLITTER MANHOLE DETAIL - PLAN VIEW**

NOT TO SCALE



**FLOW SPLITTER MANHOLE DETAIL - SECTION VIEW**

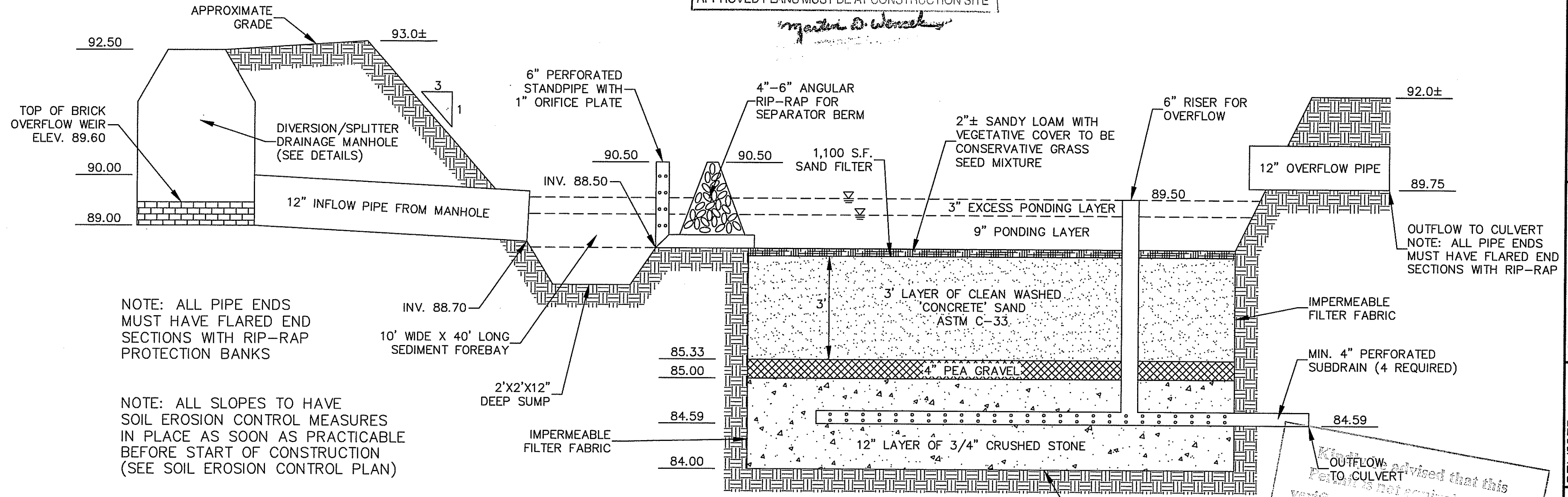
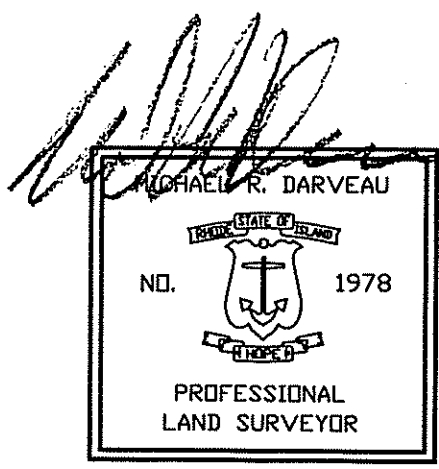
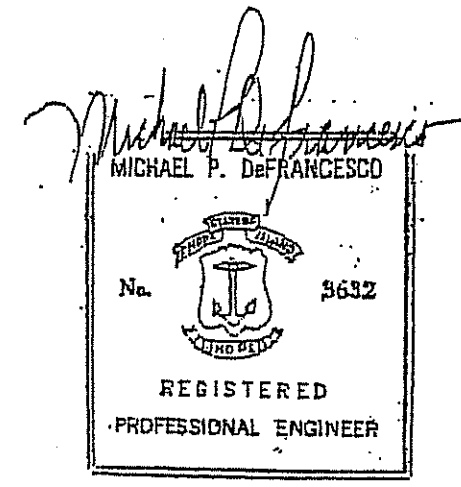
NOT TO SCALE



**SECTION A-A**

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS  
AS SPECIFIED IN THE LETTER OF APPROVAL  
DATED MAR 19 2013 FILE #  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

*Michael P. DeFrancesco*



**PROPOSED SAND FILTER DETAIL**

NOT TO SCALE

*Kindly advised that this plan is not compliant to a verification of the type or amount of freshwater wetlands on site.*

**DARVEAU LAND SURVEYING, INC.**  
P.O. BOX 7918  
CUMBERLAND, R.I. 02864  
PHONE 401-475-5700  
E-MAIL: DARVEAUSURVEY@COX.NET

DETAIL SHEET FOR  
**KARMIK, LLC**  
PLAT 120, LOT 46  
265 PROSPECT AVENUE  
MIDDLETOWN, RHODE ISLAND

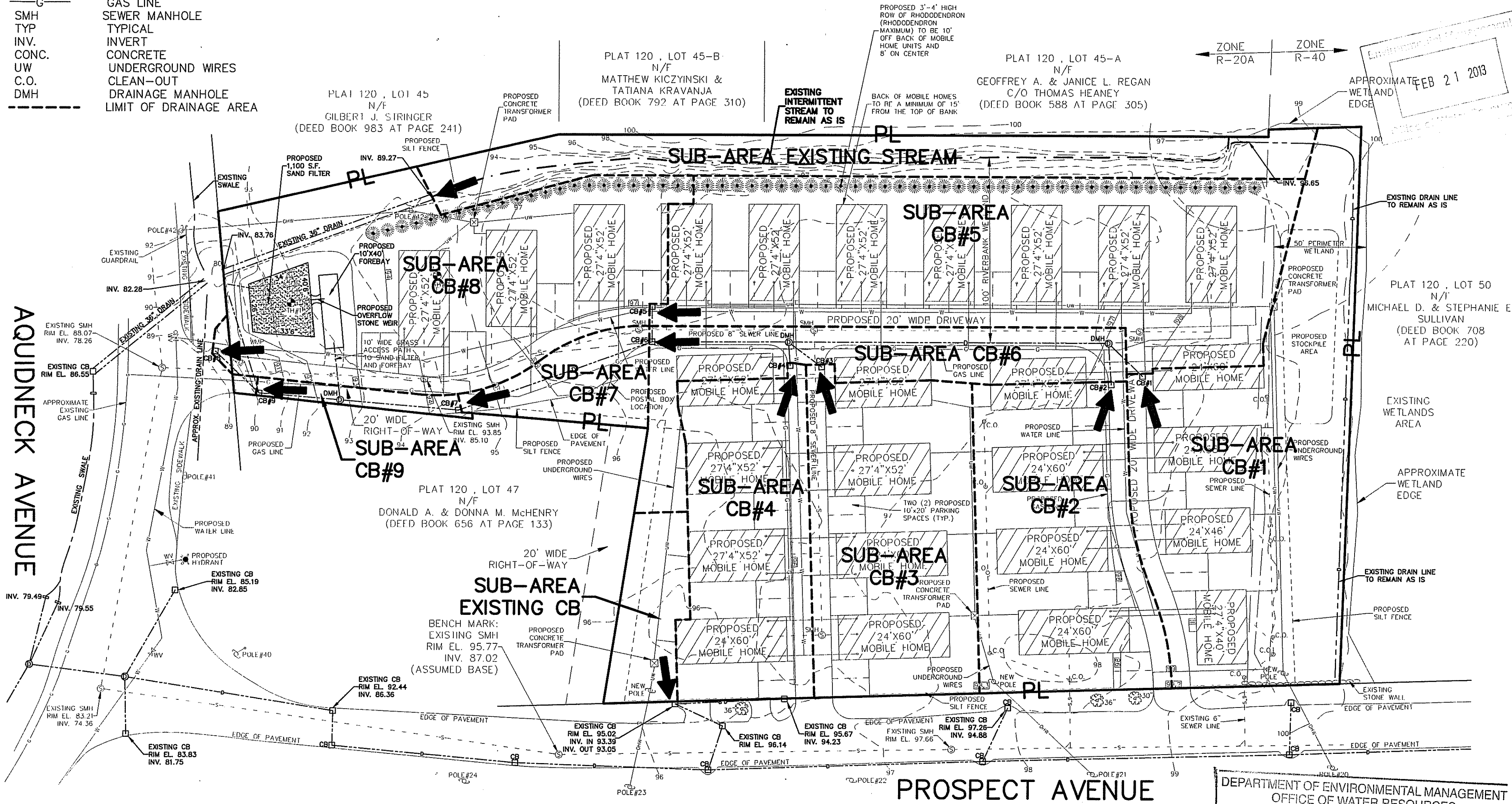
DRAWING NO:	2009_028	REVISION:	FEB. 14, 2013
SHEET NO:	11 OF 12	SCALE:	AS NOTED
DRAWN BY:	S.A.K.	DATE:	NOV. 5, 2012

**LEGEND**

GB	GRANITE BOUND
PK	PK NAIL
FND	FOUND
PL	PROPERTY LINE
S.F.	SQUARE FEET
CB	CATCH BASIN
WV	WATER VALVE
OHW	OVERHEAD WIRES
WMP	WATER METER PIT
S	SEWER LINE
W	WATER LINE
D	DRAINAGE LINE
G	GAS LINE
SMH	SEWER MANHOLE
TYP	TYPICAL
INV.	INVERT
CONC.	CONCRETE
UW	UNDERGROUND WIRES
C.O.	CLEAN-OUT
DMH	DRAINAGE MANHOLE
---	LIMIT OF DRAINAGE AREA

**NOTES:**

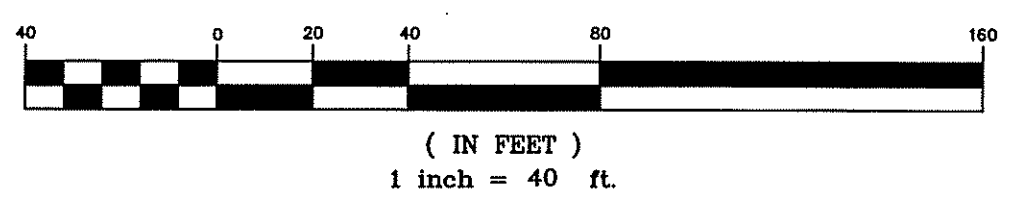
1. THE PARCEL IS PLAT 120, LOT 46.
2. THE TOTAL AREA OF THE PARCEL IS 146,665 S.F. OR 3.3670 ACRES.
3. THE AREA IS ZONED: R-20A AND R-40.
4. THE PARCEL IS LOCATED IN ZONE "X" AS SHOWN ON NATIONAL FLOOD INSURANCE RATE MAP 44005C0182H FOR THE COUNTY OF NEWPORT, EFFECTIVE DATE: APRIL 5, 2010.
5. SEE DEED BOOK 573 AT PAGE 215 FOR TITLE REFERENCE.
6. THE PROPERTY LINE INFORMATION SHOWN ON THIS PLAN WAS TAKEN FROM THE PLAN ENTITLED "PRELIMINARY MAJOR SUBDIVISION PLAN, HILLCREST ESTATE, PLAT 120, LOT 46, PROSPECT AVENUE, MIDDLETOWN, RHODE ISLAND 02842, SCALE: 1"=40', DATED: MARCH 8, 2007, BY NARRAGANSETT ENGINEERING, INC."
7. THERE ARE NO EXISTING HISTORICAL BUILDINGS OR STRUCTURES ON SITE AT TIME OF SURVEY.
8. THERE ARE NO EXISTING HISTORIC CEMETERIES ON OR IMMEDIATELY ADJACENT TO THE SITE AT TIME OF SURVEY.
9. THE FINAL DESIGN OF THE ELECTRIC, TELEPHONE, CABLE, ETC. TO BE PERFORMED BY NATIONAL GRID.



AQUIDNECK AVENUE

PROSPECT AVENUE

**GRAPHIC SCALE**



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

*Michael P. DeFrancesco*  
MICHAEL P. DEFRANCESCO  
No. 9652  
REGISTERED PROFESSIONAL ENGINEER

*Michael R. Darveau*  
MICHAEL R. DARVEAU  
No. 1978  
PROFESSIONAL LAND SURVEYOR

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS  
AS SPECIFIED IN THE LETTER OF APPROVAL  
DATED MAR 19 2013 FILE #  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

I HEREBY CERTIFY THAT THIS SURVEY AND PLAN CONFORMS TO A CLASS 3 STANDARD AS ADOPTED BY THE RHODE ISLAND BOARD OF REGISTRATION FOR PROFESSIONAL LAND SURVEYORS.  
*Michael R. Darveau* 2/14/13  
MICHAEL R. DARVEAU, PLS#1978 DATE

**DARVEAU LAND SURVEYING, INC.**  
 P.O. BOX 7918  
 CUMBERLAND, R.I. 02864  
 PHONE 401-475-5700  
 E-MAIL: DARVEAUSURVEY@CDX.NET

PROPOSED DRAINAGE AREA MAP FOR  
**KARMIK, LLC.**  
 PLAT 120, LOT 46  
 265 PROSPECT AVENUE  
 MIDDLETOWN, RHODE ISLAND

DRAWING NO:	2009_028
SHEET NO:	12 OF 12
SCALE:	1" = 40'
REVISED:	FEB. 14, 2013
DATE:	NOV. 5, 2012
DRAWN BY:	S.A.K.