

PERMITTING PLANS

FOR:

PARADISE PARK

A.P. 120, LOT 46
265 PROSPECT AVE
MIDDLETOWN, RHODE ISLAND



AERIAL IMAGE
SCALE: 1"=100'

PREPARED FOR:
KARMIK LLC

PREPARED BY:



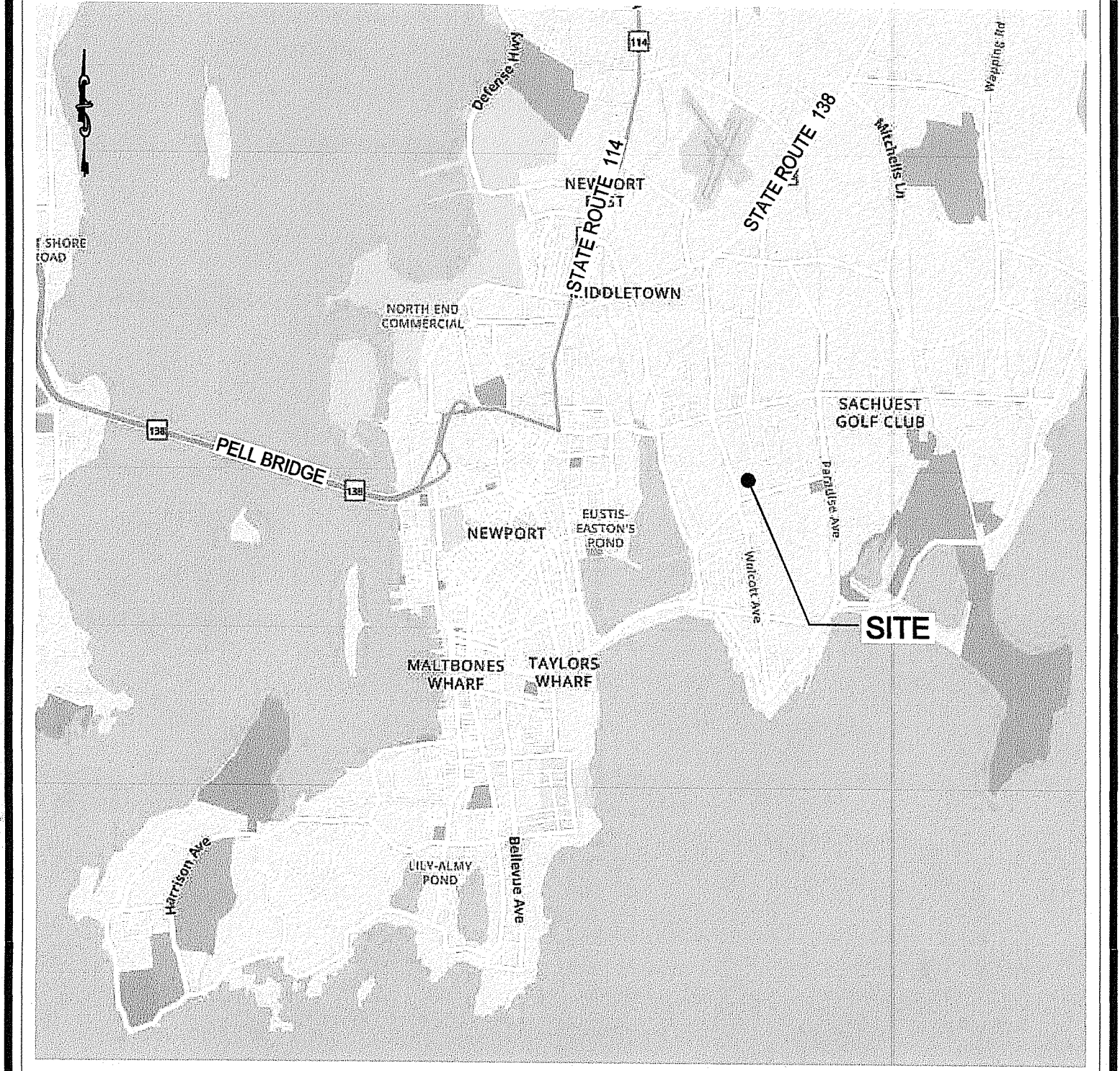
250 Centerville Road, Building E-12 790 Aquidneck Avenue, Building B
Warwick, Rhode Island 02886 Middletown, Rhode Island 02842

www.MillstoneEng.com
p. (401) 921-3344 f. (401) 921-3303

JUNE 2022

OWNER/APPLICANT:
KARMIK LLC
81 BEAGLE DRIVE
MIDDLETOWN, RI 02842
(401) 207-8706

ENGINEER:
MILLSTONE ENGINEERING, P.C.
250 CENTERVILLE ROAD, BLDG. E-12
WARWICK, RI 02866
(401) 921-3344



LOCUS
NOT TO SCALE

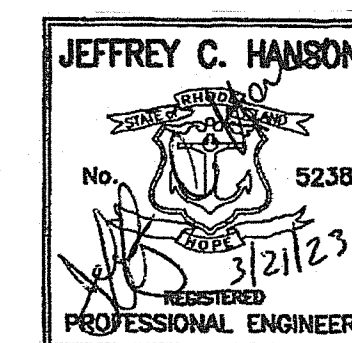
TABLE OF CONTENTS:

SHEET	DESCRIPTION	REVISED
1	COVER SHEET	3/21/2023
2	EXISTING CONDITIONS PLAN	3/21/2023
3	APPROVED SUBDIVISION PLAN (BY OTHERS)	
4	DEMOLITION AND SITE PREPARATION PLAN	3/21/2023
5	SITE LAYOUT PLAN	3/21/2023
6	GRADING & DRAINAGE PLAN	3/21/2023
7	UTILITY PLAN	3/21/2023
8	SOIL EROSION & SEDIMENT CONTROL PLAN	3/21/2023
9	NOTES AND DETAILS-1	3/21/2023
10	NOTES AND DETAILS-2	3/21/2023

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS AS
SPECIFIED IN THE LETTER OF APPROVAL
DATED: APR 07 2023 FILE #: 22-0411
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE
Nancy L. Freeman

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
NOTE PER DEM:
Kindly be advised that this Permit
is not equivalent to a
verification of the type or extent
of freshwater wetlands on site

RI Environmental Management
MAR 23 2023
Office of Water Resources



Drawn By: MBV/JSC

Checked By: BJC

Sheet

1

of 10

FILE NO.: 22.467.703

REFERENCES:
1. AERIAL PHOTOGRAPH TAKEN FROM RIDEM.
2. LOCUS MAP TAKEN FROM MAPQUEST.

NO.	DATE	REVISION
1	3/21/23	RIDEM COMMENTS, REVISED LAYOUT

COPYRIGHT 2022
THIS DRAWING IS COPYRIGHTED AND
SUBJECT TO COPYRIGHT PROTECTION.
FOR THE PROPERTY OF MILLSTONE
ENGINEERING, P.C. AND SHALL NOT BE
USED OR REPRODUCED WITHOUT THE
WRITTEN PERMISSION OF
MILLSTONE ENGINEERING, P.C.

REFERENCES:

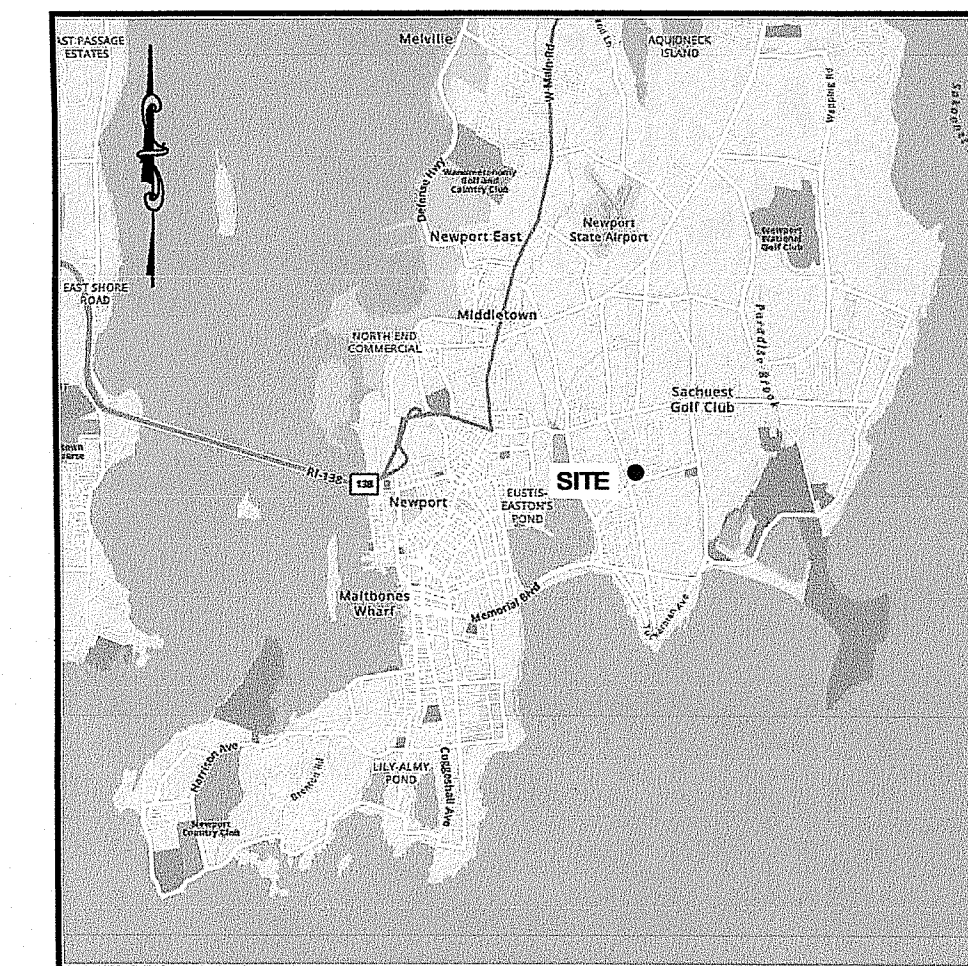
1. PLAN ENTITLED, "EXISTING CONDITIONS PLAN FOR KARMIK, LLC.; PLAT 120, LOT 46; 265 PROSPECT AVE; MIDDLETOWN, RHODE ISLAND" BY DARVEAU LAND SURVEYING, INC. DATED MAY 2011.
2. PLAN ENTITLED, "PROPOSED WATER LINE PLAN FOR KARMIK, LLC.; C/O FRANK PIMENTAL; AQUIDNECK AVENUE; MIDDLETOWN, RHODE ISLAND" BY DARVEAU & ASSOCIATES, INC. DATED MAY 2009.
3. CONCEPTUAL SUBDIVISION PLAN ENTITLED, "PROPOSED CONDITIONS PLAN" BY NARRAGANSETT ENGINEERING, INC. DATED MARCH 8, 2007.

NOTES:

1. LOCATION AND DEPTH OF EXISTING UTILITIES ARE APPROXIMATE AND HAVE BEEN PLOTTED FROM THE BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL CHECK AND VERIFY LOCATIONS OF ALL EXISTING UTILITIES BOTH UNDERGROUND AND OVERHEAD. ANY DAMAGE TO EXISTING UTILITIES AS SHOWN OR NOT SHOWN ON THE PLANS SHALL BE THE CONTRACTOR'S RESPONSIBILITY. COSTS OF SUCH DAMAGE SHALL BE BORNE BY THE CONTRACTOR. NO EXCAVATION SHALL BE DONE UNTIL ALL INVOLVED UTILITY COMPANIES ARE NOTIFIED 72-HOURS IN ADVANCE. THE CONTRACTOR SHALL BE RESPONSIBLE TO NOTIFY DIG-SAFE (1-888-344-7233) A MINIMUM OF 72 WORKING HOURS, EXCLUDING WEEKENDS AND HOLIDAYS, PRIOR TO THE START OF ANY EXCAVATION AND/OR BLASTING WORK. THE NAME OF THE COMPANY PERFORMING THE EXCAVATION AND/OR BLASTING WORK MUST BE SUPPLIED TO DIG-SAFE, IF IT IS DIFFERENT FROM THE CALLER.
2. VERTICAL DATUM: NAVD 1988.

FLOOD NOTE:

THE SUBJECT PROPERTIES ARE LOCATED WITHIN FLOOD ZONE X: AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN BASED UPON INFORMATION PROVIDED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAPS FOR NEWPORT COUNTY COMMUNITY PANEL NUMBER 4400SC01823, EFFECTIVE DATE: SEPTEMBER 4, 2013, AND COMMUNITY PANEL NUMBER 4400SC00944, EFFECTIVE DATE: APRIL 5, 2010.

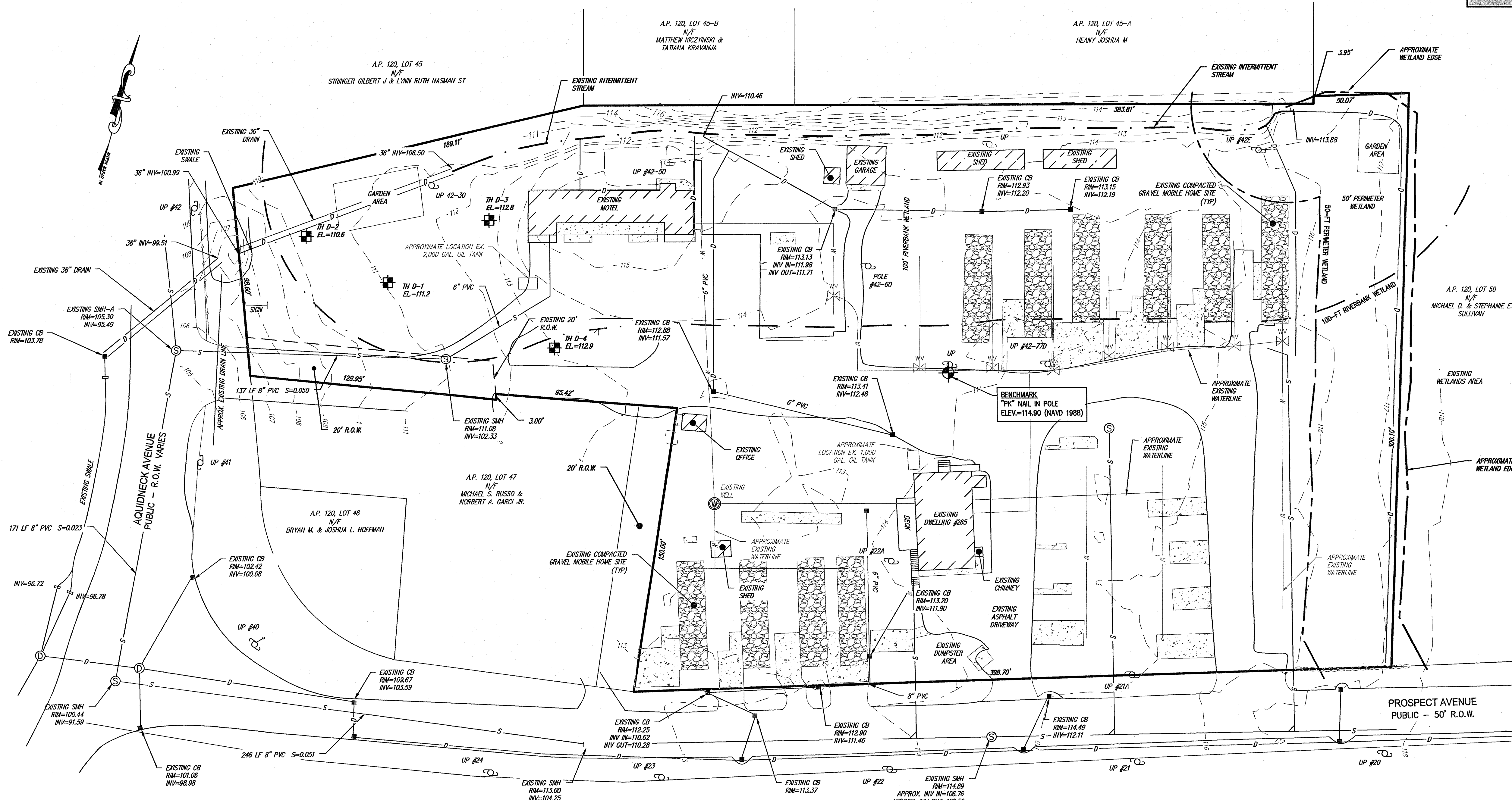


LOCATION MAP
NOT TO SCALE

RI Environmental Management
MAR 23 2023
Office of Water Resources

LEGEND:

- SUBJECT PROPERTY LINE
- ABUTTING PROPERTY LINE
- BUILDING SETBACK
- IRON ROD FOUND
- STREAM
- WETLAND EDGE (REF 1)
- 50' PERMETER WETLAND
- 100' RIVERBANK WETLAND SETBACK
- EXISTING EDGE OF PAVEMENT
- EXISTING BUILDING
- EXISTING CONCRETE
- EXISTING GRAVEL
- EXISTING CONTOUR
- EXISTING UTILITY POLE
- EXISTING SEWER MANHOLE
- EXISTING SEWER MAIN
- EXISTING CATCH BASIN
- EXISTING DRAIN MANHOLE
- EXISTING DRAIN LINE
- EXISTING WATER VALVE
- EXISTING HYDRANT
- EXISTING WATER LINE
- EXISTING STONE WALL
- EXISTING EDGE OF VEGETATION
- SOIL EVALUATION TEST HOLE
- PROJECT BENCHMARK



RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS AS
SPECIFIED IN THE LETTER OF APPROVAL
DATED: APR 17 2023 FILE #: 22-0411
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE
Nancy L. Freeman

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
NOTE PER DEM:
Kindly be advised that this Permit
is not equivalent to a
verification of the type or extent
of freshwater wetlands on site

OWNER/APPLICANT:

AP 120, LOT 46
KARMIK LLC
81 BEAGLE DRIVE
MIDDLETOWN, RI 02842

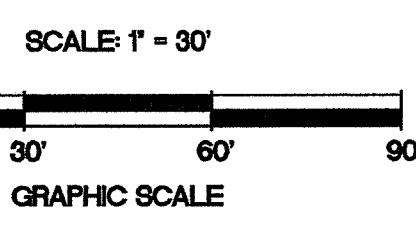
PLAT INDEX:

THIS PLAN SHALL BE INDEXED BY THE
FOLLOWING STREETS:
AQUIDNECK AVENUE
PROSPECT AVENUE

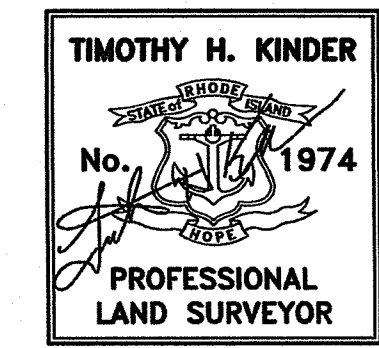
ZONING:

ZONE: R20A	REQUIRED	EXISTING
MINIMUM LOT AREA	20,000 S.F.	146,680± S.F.
MINIMUM LOT WIDTH AND FRONTAGE	120 FT.	98.6 FT. *
MINIMUM FRONT YARD SETBACK	40 FT.	58.3 FT.
MINIMUM REAR YARD SETBACK	50 FT.	N/A
MINIMUM SIDE YARD SETBACK	20 FT.	17.1 FT. *
MAXIMUM LOT COVERAGE	20%	3.3%
MAXIMUM BUILDING HEIGHT	35 FT.	<35 FT.

* EXISTING NONCONFORMANCE



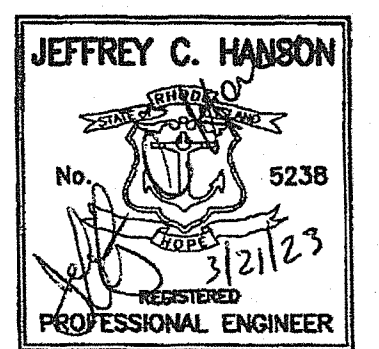
PERMIT SET
NOT FOR CONSTRUCTION



CERTIFICATION:

THIS SURVEY HAS BEEN CONDUCTED AND THE PLAN HAS BEEN PREPARED PURSUANT TO 435-RICR-00-00-1.9 OF THE RULES AND REGULATIONS ADOPTED BY THE RHODE ISLAND STATE BOARD OF REGISTRATION FOR PROFESSIONAL LAND SURVEYORS ON APRIL 28, 2018, AS FOLLOWS:
TYPE OF BOUNDARY SURVEY: MEASUREMENT SPECIFICATION:
COMPILATION MAP: IV
THE PURPOSE FOR THE CONDUCT OF THE SURVEY AND FOR THE PREPARATION OF THE PLAN IS AS FOLLOWS:
TO PROVIDE AN ACCURATE EXISTING CONDITIONS SURVEY PLAN.
BY: *TH Kinder* 3/21/2023 DATE
TIMOTHY H. KINDER, PLS LICENSE NO. 1974 COA. NO. A-534

NO.	DATE	REVISION
1	3/21/23	RIDEM COMMENTS, REVISED LAYOUT



ILLSTONE ENGINEERING, P.C.
CIVIL ENGINEERING • LAND PLANNING
250 Centerville Road, Building E-2
Warwick, Rhode Island 02886
www.illstoneeng.com
p. (401) 921-3344 f. (401) 921-3303

EXISTING CONDITIONS PLAN

PARADISE PARK

A.P. 120, LOT 46
265 PROSPECT AVENUE
MIDDLETOWN, RHODE ISLAND

PREPARED FOR:
KARMIK, LLC

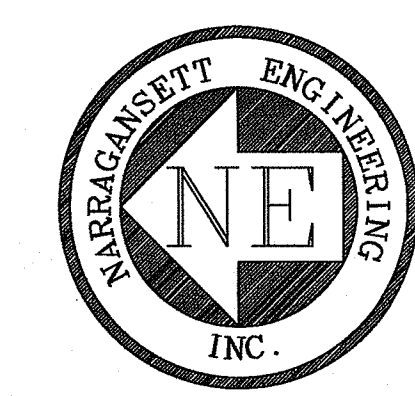
SCALE 1" = 30'
JUNE 2022

Drawn By: MBV/JSC
Checked By: BJC
Sheet

2
of 10

FILE NO.: 22.467.703

MAIN OFFICE
3102 EAST MAIN ROAD,
PORTSMOUTH, RI 02871
TEL : (401) 683-6630
FAX : (401) 683-6638
1162 C.A.R. HIGHWAY (ROUTE 6)
TOWN TERRACE UNIT 7
SWANSEA, MA 02777
TEL : (508) 730-1881
THE MEADOWS PROFESSIONAL
OFFICE PARK
1130 TEN ROD ROAD
SUITE E 206 C
NORTH KINGSTOWN, RI 02852
www.nei-cds.com



RI Environmental Management
MAR 8 3 2023
Office of Water Resources

SHEET TITLE

PROPOSED CONDITIONS PLAN

PROJECT APPLICANT
PIMENTAL, FRANCIS
265 PROSPECT AVENUE
MIDDLETOWN, RI 02842

OWNER OF RECORD
KARMIK LLC
265 PROSPECT AVENUE
MIDDLETOWN, RI 02842

LOCATION
PROSPECT AVENUE
MIDDLETOWN, RI 02842

PLAT : 120 LOT : 46

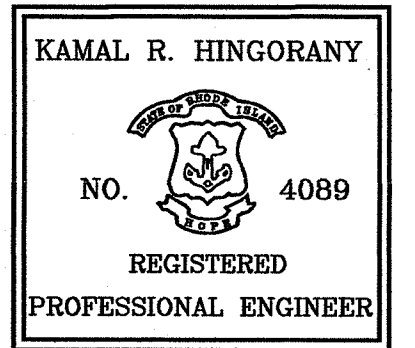
RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS AS
SPECIFIED IN THE LETTER OF APPROVAL
DATED: APR 07 2023 FILE #: 22-0411
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE
Nancy L. Freeman

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
NOTE PER DEM:

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

LEGEND:

- P — PROPERTY LINE
- — — — — EDGE OF PAVEMENT
- - - - - 114 EXISTING CONTOUR
- - - - - 114 PROPOSED CONTOUR
- — — — — EXISTING STONE WALL
- — — — — EXISTING FENCE
- — — — — EXISTING GUARDRAIL
- — — — — EDGE OF WETLAND
- — — — — 50' PERIMETER WETLAND
- — — — — ASSF
- — — — — EXISTING SANITARY LINE
- — — — — PROPOSED SANITARY LINE
- — — — — EXISTING SUBDRAIN
- — — — — UNMANAGED AREA
- — — — — ROAD SIGN
- REBAR FOUND/BENT
- BOUND FOUND
- ⊙ UTILITY POLE
- ⊙ TREE
- ⊙ WELL
- ⊙ CATCH BASIN
- ⊙ WHITE CEDAR TREE
- ⊙ SANITARY MANHOLE
- ⊙ DRAINAGE MANHOLE
- ↑ DRAINAGE FLOW PATH

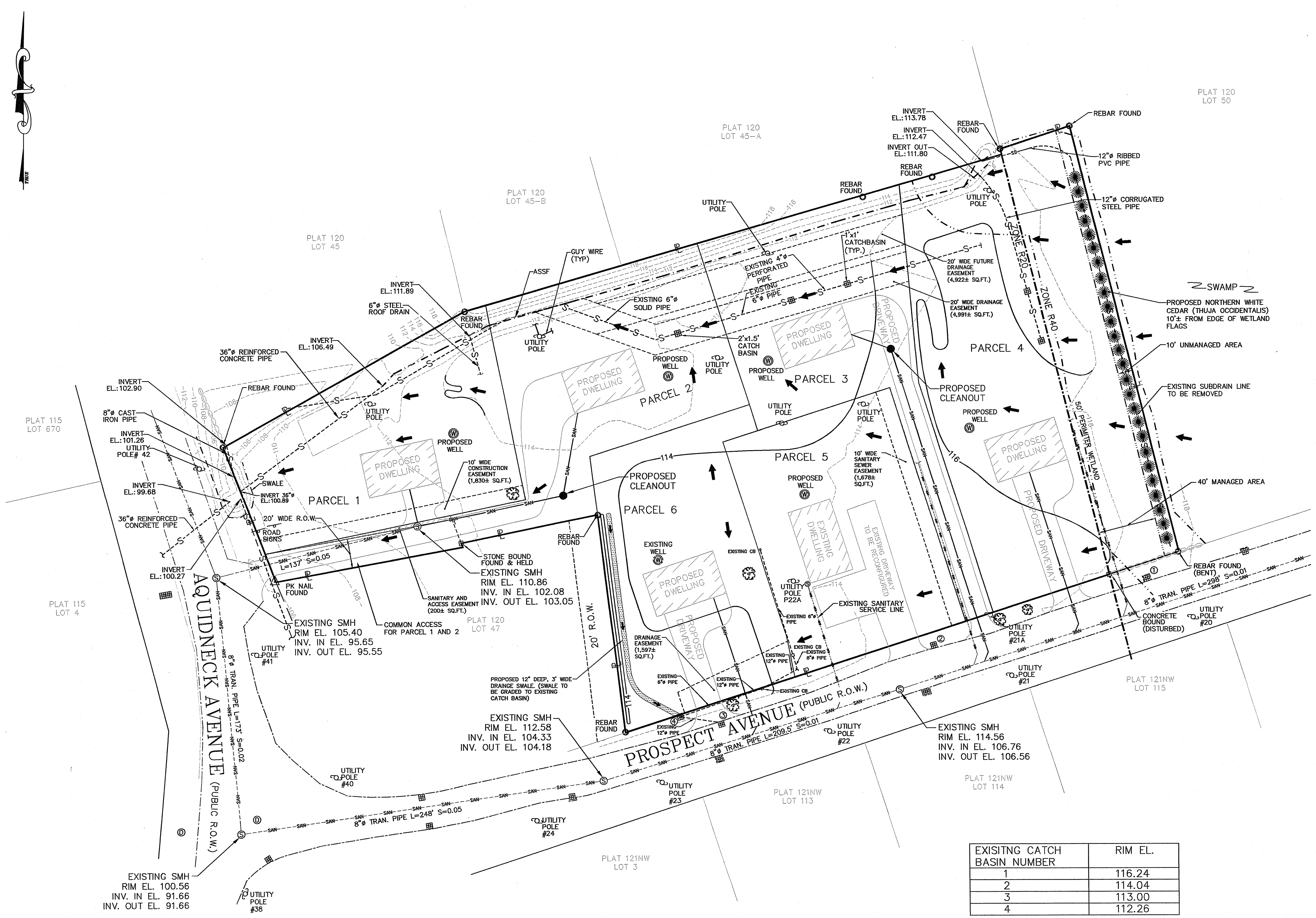
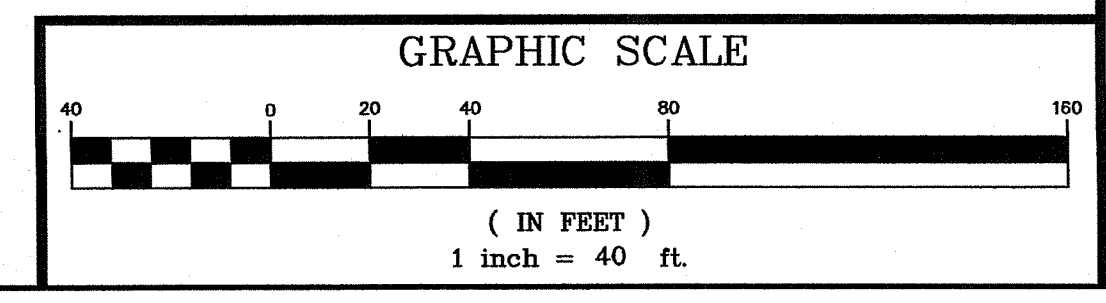


PROJECT #	DATE	DRAWN	CHECK
910216	03-08-07	HCP	KH

REVISIONS			
NO.	DATE	DESCRIPTION	BY
1	02-27-07	ADD NOTE AND REVISE ZONE	KH
2	03-27-07	PER PLANNING DEPARTMENT COMMENTS	HCP
3	05-04-07	PER CLIENTS COMMENTS	NKH/JMB
4	05-16-07	PER ATTY COMMENTS	JMB
5	12-04-07	REVISED PER TOWN COMMENTS	JMB

RIDEM Sheet 3 of 10

SHEET	SCALE
3 OF 4	1" = 40'



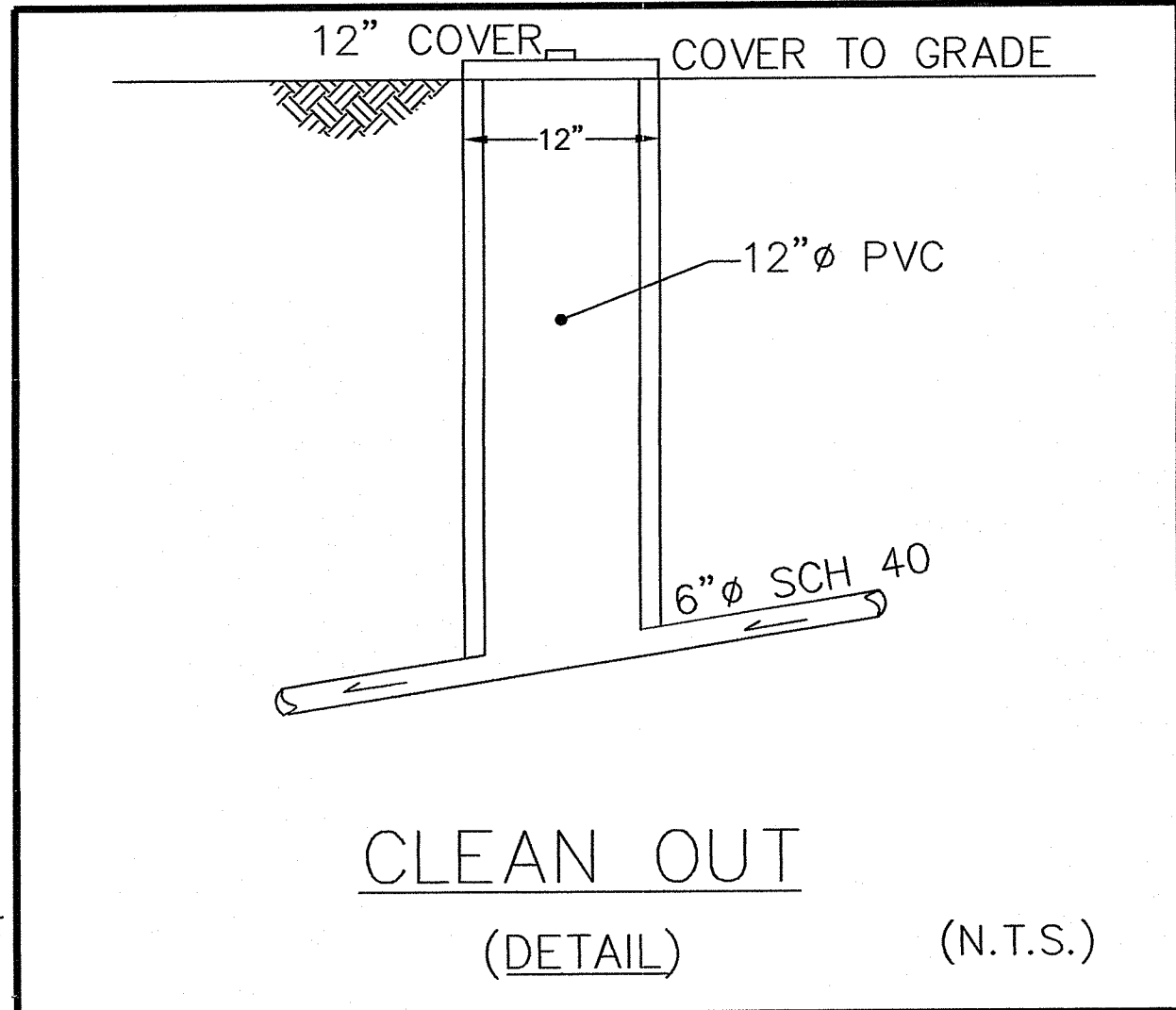
EXISTING CATCH BASIN NUMBER	RIM EL.
1	116.24
2	114.04
3	113.00
4	112.26

NOTES:

- ALL EXISTING SANITARY LINES ON THE PROPERTY TO BE ABANDONED OR REMOVED IF THEY IMPACT PROPOSED STRUCTURES AND UTILITIES.
- AT THE TIME OF DEVELOPMENT OF THE NEW BUILDING LOTS, EACH LOT OWNER IS REQUIRED TO COMPLY WITH THE PROVISIONS OF THE TOWN'S STORMWATER MANAGEMENT ORDINANCE (CHAPTER 153) AND CONSTRUCTION SITE RUNOFF AND EROSION CONTROL ORDINANCE (CHAPTER 151). APPROPRIATE PLANS MUST BE APPROVED BY THE TOWN PRIOR TO THE ISSUANCE OF A BUILDING PERMIT.
- THE TOWN HAS IMPLEMENTED DEVELOPMENT IMPACT FEES WHICH APPLY TO ANY NEW COMMERCIAL AND RESIDENTIAL DEVELOPMENT IN TOWN. IMPACT FEES AS SPECIFIED IN TOWN CODE CHAPTER 150 WILL BE ASSESSED AT THE TIME OF DEVELOPMENT OF THE PROPOSED BUILDING LOTS.

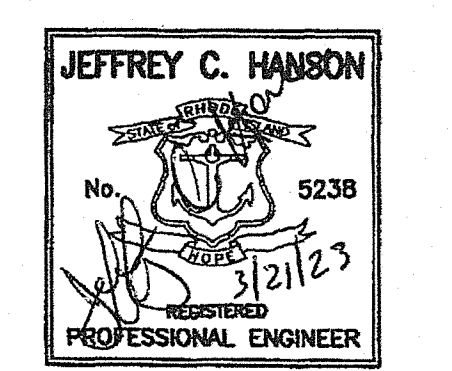
FLOOD ZONE:

—SUBJECT PROPERTY IS LOCATED IN FLOOD ZONE: "C" AS PER FEMA COMMUNITY PANEL NO: 445401 0002 D, DATED JUNE 16TH, 1992.
—WETLANDS DELINEATION PERFORMED BY ECOSYSTEM SOLUTIONS, INC. OF WEST WARWICK RI. ON MARCH 1, 2006.
—ALL EXISTING IMPERVIOUS AREAS SHOWN ON EXISTING CONDITION PLAN TO BE REMOVED UNLESS SHOWN OR NOTED ON THE PROPOSED CONDITION PLAN.



NO.	DATE	REVISION
1	3/22/23	RIDEM COMMENTS, REVISED LAYOUT

RI Environmental Management
MAR 23 2023
Office of Water Resources



RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL
DATED: APR 07 2023 FILE #: 22-0411
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE
Nancy L. Freeman

OWNER/APPLICANT:
AP 120, LOT 46
KARMIK, LLC
81 BEAGLE DRIVE
MIDDLETOWN, RI 02842

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
NOTE PER DEM:
Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site

ILLSTONE ENGINEERING, P.C.
CIVIL ENGINEERING • LAND PLANNING
250 Centerville Road, Building E-12
Warwick, Rhode Island 02886
www.IllstoneEng.com
P. (401) 921-3344 F. (401) 921-3303

DEMOLITION AND SITE PREPARATION PLAN

PARADISE PARK

A.P. 120, LOT 46
265 PROSPECT AVENUE
MIDDLETOWN, RHODE ISLAND

PREPARED FOR:
KARMIK, LLC

SCALE 1" = 30'
JUNE 2022

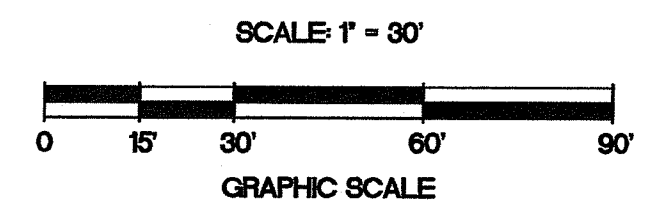
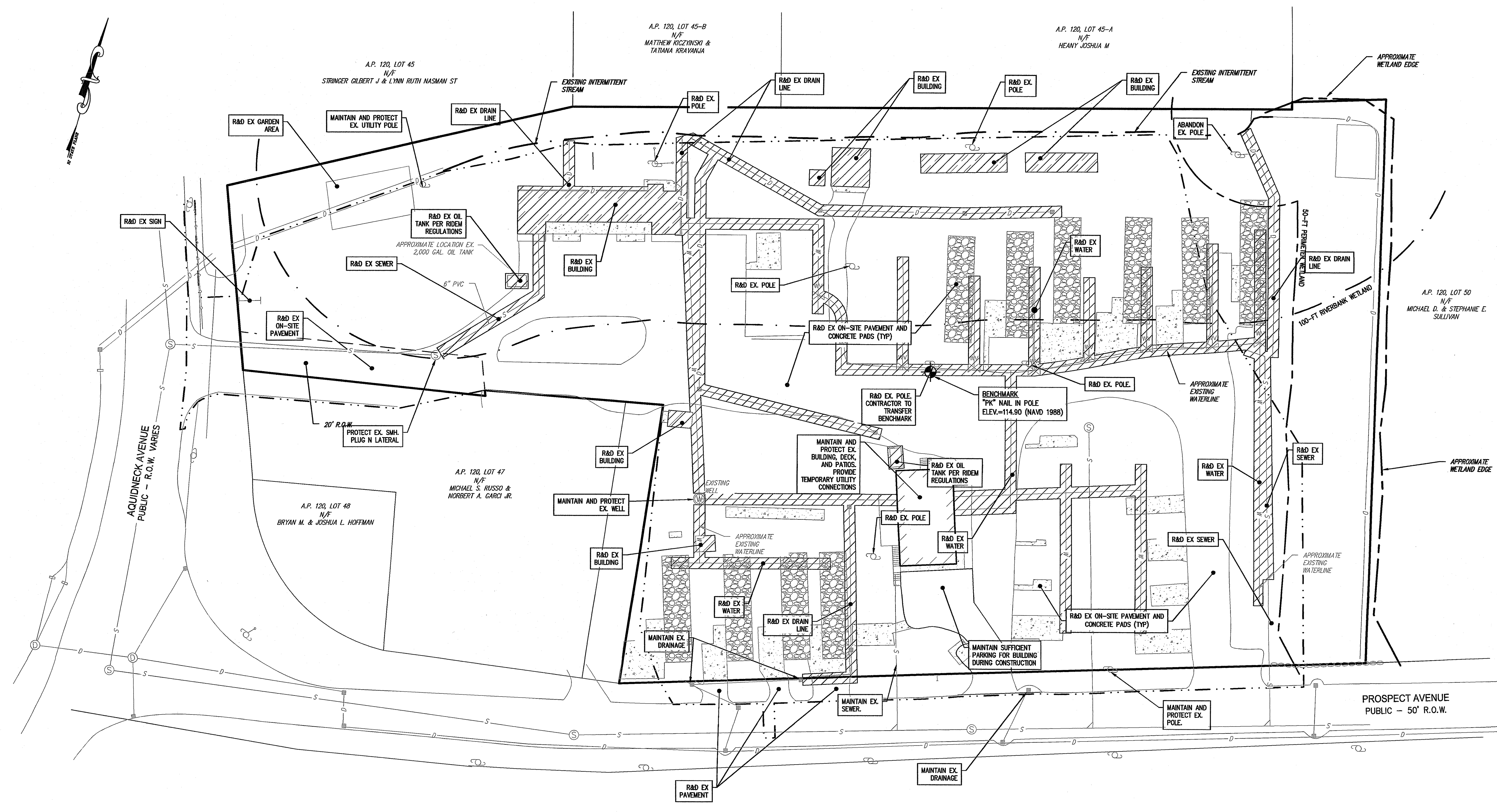
Drawn By: MBV/JSC

Checked By: BJC

Sheet

4
of 10

FILE NO.: 22.467.703



- NOTES:**
- LOCATION AND DEPTH OF EXISTING UTILITIES ARE APPROXIMATE AND HAVE BEEN PLOTTED FROM THE BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL CHECK AND VERIFY LOCATIONS OF ALL EXISTING UTILITIES BOTH UNDERGROUND AND OVERHEAD. ANY DAMAGE TO EXISTING UTILITIES AS SHOWN OR NOT SHOWN ON THE PLANS SHALL BE THE CONTRACTOR'S RESPONSIBILITY. COSTS OF SUCH DAMAGE SHALL BE BORNE BY THE CONTRACTOR. NO EXCAVATION SHALL BE DONE UNTIL ALL INVOLVED UTILITY COMPANIES ARE NOTIFIED 72-HOURS IN ADVANCE. THE CONTRACTOR SHALL BE RESPONSIBLE TO NOTIFY DIG-SAFE (1-888-344-7233) A MINIMUM OF 72 WORKING HOURS, EXCLUDING WEEKENDS AND HOLIDAYS, PRIOR TO THE START OF ANY EXCAVATION AND/OR BLASTING WORK. THE NAME OF THE COMPANY PERFORMING THE EXCAVATION AND/OR BLASTING WORK MUST BE SUPPLIED TO DIG-SAFE, IF IT IS DIFFERENT FROM THE CALLER.
 - CONTRACTOR TO COORDINATE WITH UTILITIES NATIONAL GRID, NEWPORT WATER DEPARTMENT, AND THE TOWN OF MIDDLETOWN.
 - CONTRACTOR TO PROVIDE UTILITY SERVICES TO BUILDING TO REMAIN THROUGHOUT CONSTRUCTION
 - CONTRACTOR TO COORDINATE WITH OWNER FOR PHASING.

LEGEND:

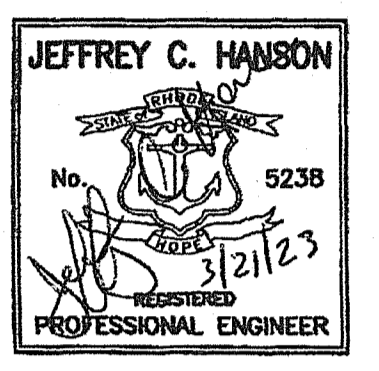
	SUBJECT PROPERTY LINE
	ABUTTING PROPERTY LINE
	STREAM
	WETLAND EDGE (REF 1)
	50' PERIMETER WETLAND
	100' RIVERBANK WETLAND SETBACK
	EXISTING EDGE OF PAVEMENT
	EXISTING BUILDING
	EXISTING CONCRETE
	EXISTING GRAVEL
	EXISTING CONTOUR
	EXISTING UTILITY POLE
	EXISTING SEWER MANHOLE
	EXISTING SEWER MAIN
	EXISTING CATCH BASIN
	EXISTING DRAIN MANHOLE
	EXISTING DRAIN LINE
	EXISTING WATER VALVE
	EXISTING HYDRANT
	EXISTING WATER LINE
	EXISTING STONE WALL
	EXISTING EDGE OF VEGETATION
	PROJECT BENCHMARK
	PROPOSED CONSTRUCTION ENTRANCE
	PROPOSED LIMIT OF DISTURBANCE
	PROPOSED SILT SOCK/SILT FENCE
	PROPOSED INLET PROTECTION

PERMIT SET
NOT FOR CONSTRUCTION

COPYRIGHT © 2023 ILLSTONE ENGINEERING, P.C. ALL RIGHTS RESERVED. THIS DRAWING IS THE PROPERTY OF ILLSTONE ENGINEERING, P.C. AND SHALL NOT BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT THE WRITTEN PERMISSION OF ILLSTONE ENGINEERING, P.C.

NO.	DATE	REVISION
1	3/21/23	RIDEM COMMENTS, REVISED LAYOUT

RI Environmental Management
MAR 23 2023
Office of Water Resources



ILLSTONE ENGINEERING, P.C.
CIVIL ENGINEERING • LAND PLANNING
250 Coxsackville Road, Building E-12
Warwick, Rhode Island 02886
www.IllstoneEng.com
p. (401) 921-3344

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL
DATED: APR 17 2023 FILE #: 22-0411
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE
Nancy L. Freeman

OWNER/APPLICANT:
AP 120, LOT 46
KARMIK LLC
81 BEAGLE DRIVE
MIDDLETOWN, RI 02842

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
NOTE PER DEM:
Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site

LEGEND:

	SUBJECT PROPERTY LINE
	ABUTTING PROPERTY LINE
	BUILDING SETBACK
	IRON ROD FOUND
	STREAM
	WETLAND EDGE (REF 1)
	50' PERIMETER WETLAND
	100' RIVERBANK WETLAND SETBACK
	EXISTING EDGE OF PAVEMENT
	EXISTING CONTOUR
	EXISTING UTILITY POLE
	EXISTING HYDRANT
	EXISTING STONE WALL
	EXISTING EDGE OF VEGETATION
	PROJECT BENCHMARK
	PROPOSED BUILDING
	PROPOSED EDGE OF PAVEMENT
	PROPOSED CONSTRUCTION ENTRANCE
	PROPOSED LIMIT OF DISTURBANCE
	PROPOSED SILT SOCK/SILT FENCE
	PROPOSED INLET PROTECTION

SITE LAYOUT PLAN

PARADISE PARK

A.P. 120, LOT 46
265 PROSPECT AVENUE
MIDDLETOWN, RHODE ISLAND

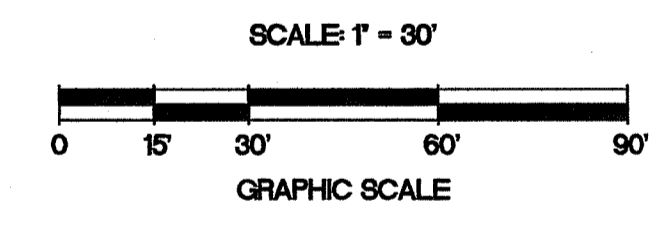
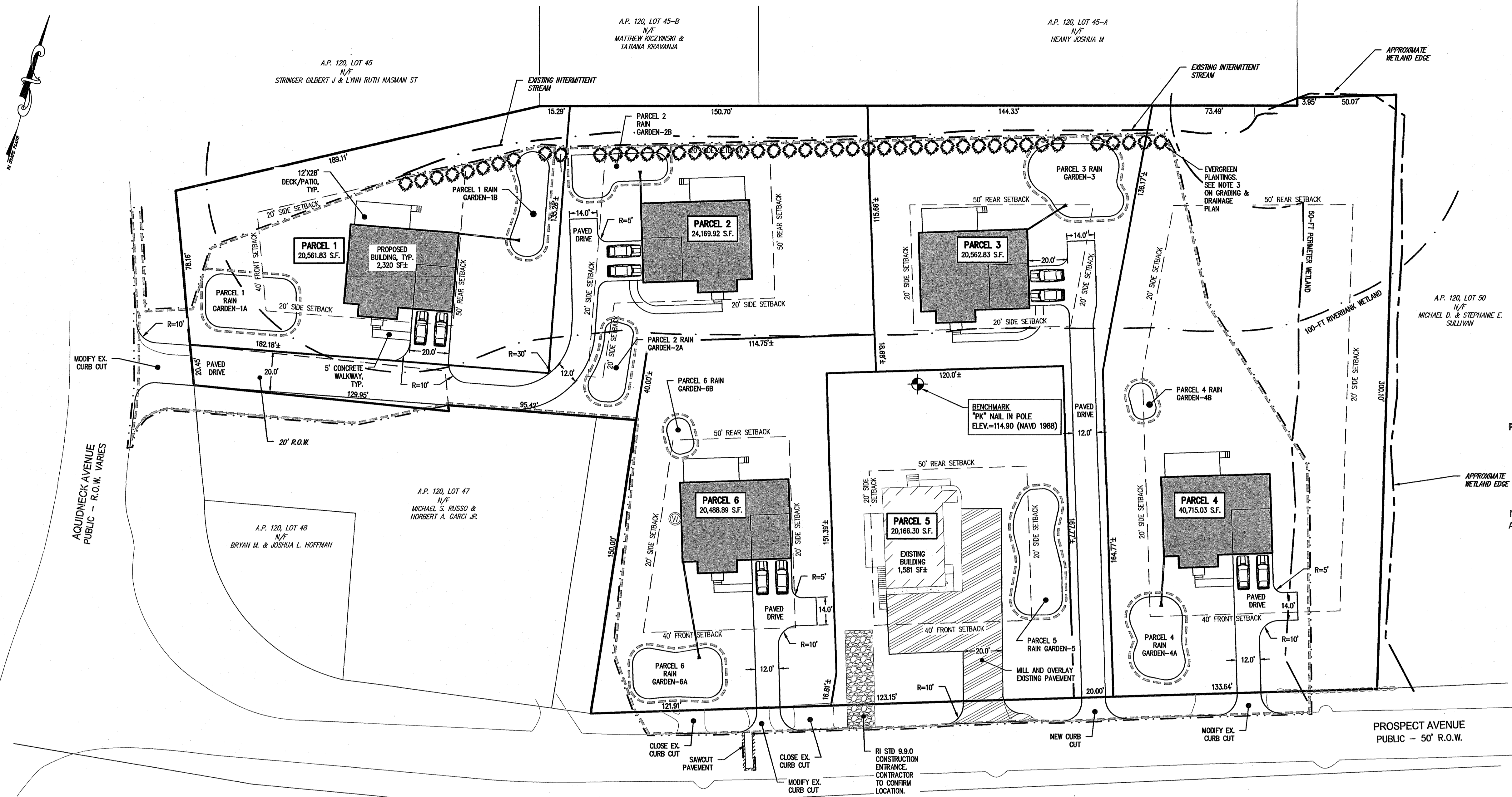
PREPARED FOR:
KARMIK, LLC

SCALE 1" = 30'
JUNE 2022

Drawn By: MBV/JSC
Checked By: BJC
Sheet

5
of 10

FILE NO.: 22.467.703



- NOTES:**
- LOCATION AND DEPTH OF EXISTING UTILITIES ARE APPROXIMATE AND HAVE BEEN PLOTTED FROM THE BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL CHECK AND VERIFY LOCATIONS OF ALL EXISTING UTILITIES BOTH UNDERGROUND AND OVERHEAD. ANY DAMAGE TO EXISTING UTILITIES AS SHOWN OR NOT SHOWN ON THE PLANS SHALL BE THE CONTRACTOR'S RESPONSIBILITY. COSTS OF SUCH DAMAGE SHALL BE BORNE BY THE CONTRACTOR. NO EXCAVATION SHALL BE DONE UNTIL ALL INVOLVED UTILITY COMPANIES ARE NOTIFIED 72-HOURS IN ADVANCE. THE CONTRACTOR SHALL BE RESPONSIBLE TO NOTIFY DIG-SAFE (1-888-344-7233) A MINIMUM OF 72 WORKING HOURS, EXCLUDING WEEKENDS AND HOLIDAYS, PRIOR TO THE START OF ANY EXCAVATION AND/OR BLASTING WORK. THE NAME OF THE COMPANY PERFORMING THE EXCAVATION AND/OR BLASTING WORK MUST BE SUPPLIED TO DIG-SAFE, IF IT IS DIFFERENT FROM THE CALLER.
 - VERTICAL DATUM: NAVD 1988.

ZONING:

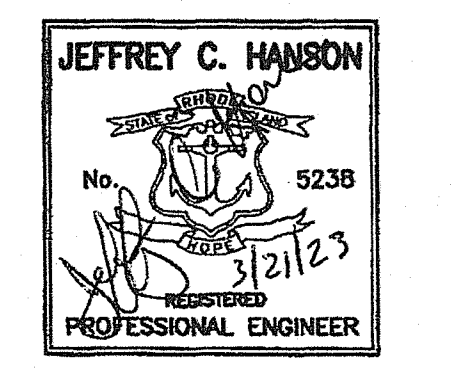
ZONE: R20A	REQUIRED	EXISTING	PROPOSED					
			PARCEL 1	PARCEL 2	PARCEL 3	PARCEL 4	PARCEL 5	PARCEL 6
MINIMUM LOT AREA	20,000 S.F.	146,660 S.F.±	20,561 S.F.±	24,170 S.F.±	20,563 S.F.±	40,715 S.F.±	20,166 S.F.±	20,489 S.F.±
MINIMUM LOT WIDTH AND FRONTAGE	120 FT	497.0 FT±	78.16 FT±*	20.45 FT±*	20.00 FT±*	133.64 FT±	123.15 FT±	121.91 FT±
MINIMUM FRONT YARD SETBACK	40 FT	58.3 FT±	>40 FT	>40 FT	>40 FT	>40 FT	58.3 FT±	>40 FT
MINIMUM REAR YARD SETBACK	50 FT	193.1 FT±	>50 FT	>50 FT	>50 FT	>50 FT	58.7 FT ±	>50 FT
MINIMUM SIDE YARD SETBACK	20 FT	128.2 FT±	>20 FT	>20 FT	>20 FT	>20 FT	26.0 FT±	>20 FT
MAXIMUM LOT COVERAGE	20%	3.3% ±	11.3% ±	9.6% ±	11.2% ±	5.7% ±	7.8% ±	11.3% ±
MAXIMUM BUILDING HEIGHT	35 FT	<35 FT.	<35 FT	<35 FT.	<35 FT.	<35 FT.	<35 FT.	<35 FT.

* APPROVED SUBDIVISION PLAN (SEE REFERENCE 3 ON SHEET 2 OF 10)

PERMIT SET
NOT FOR CONSTRUCTION

NO.	DATE	REVISION
1	3/2/23	RIDEM COMMENTS, REVISED LAYOUT

RI Department of Environmental Management
Office of Water Resources
MAR 8 2023



ILLSTONE ENGINEERING, P.C.
CIVIL ENGINEERING • LAND PLANNING
250 Centerville Road, Building E-12
Warwick, Rhode Island 02886
www.illstoneeng.com
P. (401) 921-3344 F. (401) 921-3303

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL
DATED: APR 07 2023 FILE #: 22-0411
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE
Nancy L. Freeman

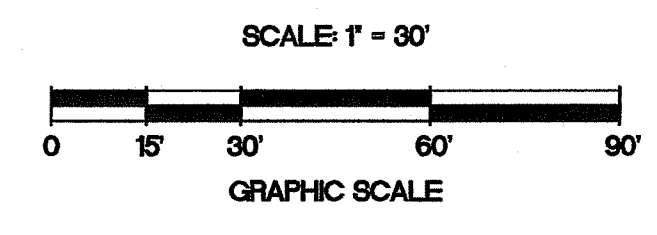
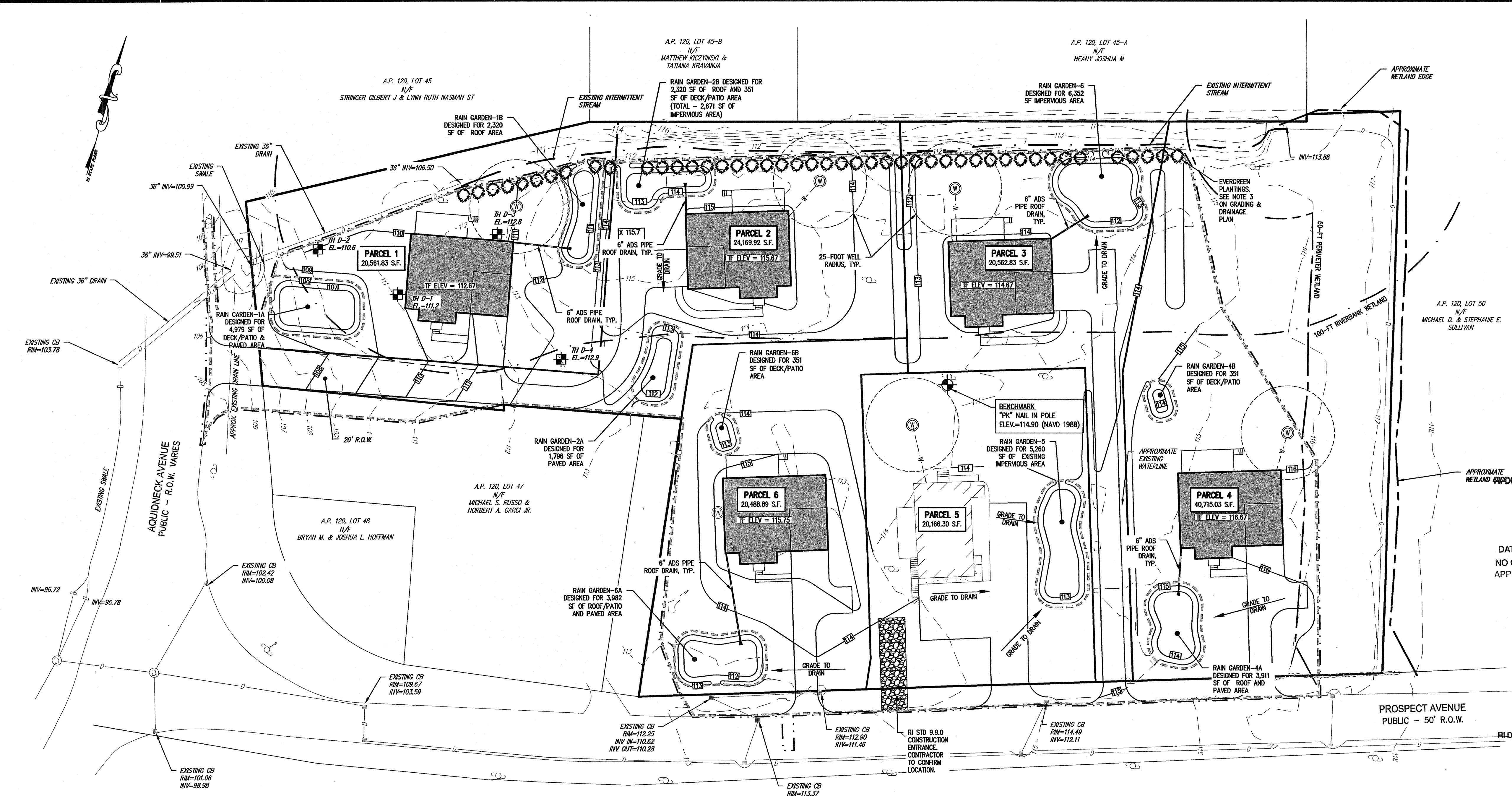
OWNER/APPLICANT:
AP 120, LOT 46
KARMIK LLC
81 BEAGLE DRIVE
MIDDLETOWN, RI 02842

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

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

LEGEND:

	SUBJECT PROPERTY LINE
	ABUTTING PROPERTY LINE
	STREAM
	WETLAND EDGE (REF 1)
	50' PERIMETER WETLAND
	100' RIVERBANK WETLAND SETBACK
	EXISTING EDGE OF PAVEMENT
	EXISTING CONTOUR
	EXISTING UTILITY POLE
	EXISTING CATCH BASIN
	EXISTING DRAIN MANHOLE
	EXISTING DRAIN LINE
	EXISTING HYDRANT
	EXISTING STONE WALL
	EXISTING EDGE OF VEGETATION
	PROJECT BENCHMARK
	PROPOSED BUILDING
	PROPOSED EDGE OF PAVEMENT
	PROPOSED CONTOUR
	PROPOSED ROOF DRAIN
	PROPOSED STORMWATER BMP
	PROPOSED CONSTRUCTION ENTRANCE
	PROPOSED LIMIT OF DISTURBANCE
	PROPOSED SILT SOCK/SILT FENCE



- NOTES:**
- LOCATION AND DEPTH OF EXISTING UTILITIES ARE APPROXIMATE AND HAVE BEEN PLOTTED FROM THE BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL CHECK AND VERIFY LOCATIONS OF ALL EXISTING UTILITIES BOTH UNDERGROUND AND OVERHEAD. ANY DAMAGE TO EXISTING UTILITIES AS SHOWN OR NOT SHOWN ON THE PLANS SHALL BE THE CONTRACTOR'S RESPONSIBILITY. COSTS OF SUCH DAMAGE SHALL BE BORNE BY THE CONTRACTOR. NO EXCAVATION SHALL BE DONE UNTIL ALL INVOLVED UTILITY COMPANIES ARE NOTIFIED 72-HOURS IN ADVANCE. THE CONTRACTOR SHALL BE RESPONSIBLE TO NOTIFY DIG-SAFE (1-888-344-7233) A MINIMUM OF 72 WORKING HOURS, EXCLUDING WEEKENDS AND HOLIDAYS, PRIOR TO THE START OF ANY EXCAVATION AND/OR BLASTING WORK. THE NAME OF THE COMPANY PERFORMING THE EXCAVATION AND/OR BLASTING WORK MUST BE SUPPLIED TO DIG-SAFE, IF IT IS DIFFERENT FROM THE CALLER.
 - VERTICAL DATUM: NAVD 1988.
 - BALLED AND BURLAPPED OR TRANSPLANTED EVERGREEN SPECIES MUST BE PLACED IN A CONTINUOUS LINE 8- FEET ON CENTER, 3-5 FEET TALL AFTER PLANTING, ALONG NORTHERN EDGE OF PROPERTY AS SHOWN ON PLAN. SPECIES SHOULD INCLUDE AT LEAST ONE OF THE FOLLOWING:
EASTERN RED CEDAR, JUNIPERUS VIRGINIANA;
WHITE SPRUCE, PICEA GLAUCIA AND/OR
NORTHERN WHITE CEDAR, THUJA OCCIDENTALIS
 - ALL DOWN SPOUTS AND ROOF LEADERS ARE TO BE CONNECTED TO RAIN GARDENS AS SHOWN ON THE PLANS.

TEST HOLE DATA

TEST HOLE	EXISTING GRADE	DEPTH TO SHGWT	SHGWT ELEV.	DEPTH TO LEDGE	LEDGE ELEV.	HOLE DEPTH	BOTTOM ELEV.
TH-D1	111.2	6.5'	104.7	N/A	N/A	8.0'	103.2
TH-D2	110.6	6.7'	103.9	N/A	N/A	8.0'	102.6
TH-D3	112.8	5.1'	107.7	N/A	N/A	7.0'	105.8
TH-D4	112.9	4.0'	108.9	N/A	N/A	8.0'	104.9

PERMIT SET
NOT FOR CONSTRUCTION

COPYRIGHT 2023
THIS DRAWING IS COPYRIGHTED AND SUBJECT TO COPYRIGHT PROTECTION. FOR THE PROTECTION OF ALL RIGHTS, ALL INFORMATION CONTAINED HEREIN IS UNCLASSIFIED AND MAY BE USED OR COPIED WITHOUT THE EXPRESS WRITTEN CONSENT OF ILLSTONE ENGINEERING, P.C.

GRADING AND DRAINAGE PLAN

PARADISE PARK

A.P. 120, LOT 46
265 PROSPECT AVENUE
MIDDLETOWN, RHODE ISLAND

PREPARED FOR:
KARMIK, LLC

SCALE 1" = 30'
FEBRUARY 2023

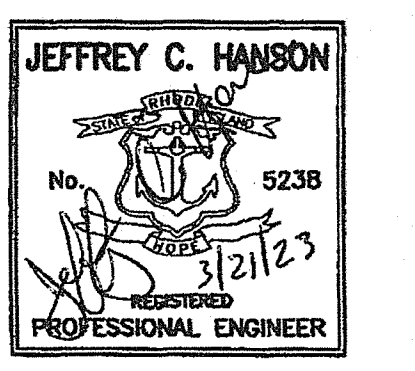
Drawn By: MBV/JSC
Checked By: BJC
Sheet

6
of 10

FILE NO.: 22.467.703

NO.	DATE	REVISION
1	3/23/23	RIDEM COMMENTS, REVISED LAYOUT

RI Department of Environmental Management
 Office of Water Resources
 MAR 23 2023



RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
 FRESHWATER WETLANDS PROGRAM
 APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL
 DATED: APR 17 2023 FILE #: 22-0411
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Nancy L. Freeman

OWNER/APPLICANT:
 AP 120, LOT 46
 KARMIK LLC
 81 BEAGLE DRIVE
 MIDDLETOWN, RI 02842

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

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

ILLSTONE ENGINEERING, P.C.
 CIVIL ENGINEERING • LAND PLANNING
 250 Centerville Road, Building E-12
 Warwick, Rhode Island 02886
 www.IllstoneEng.com
 P. (401) 921-3344 F. (401) 921-3303

UTILITY PLAN

PARADISE PARK

A.P. 120, LOT 46
 265 PROSPECT AVENUE
 MIDDLETOWN, RHODE ISLAND

PREPARED FOR:
 KARMIK, LLC

SCALE 1" = 30'
 JUNE 2022

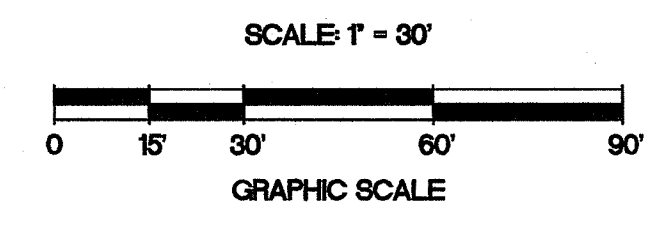
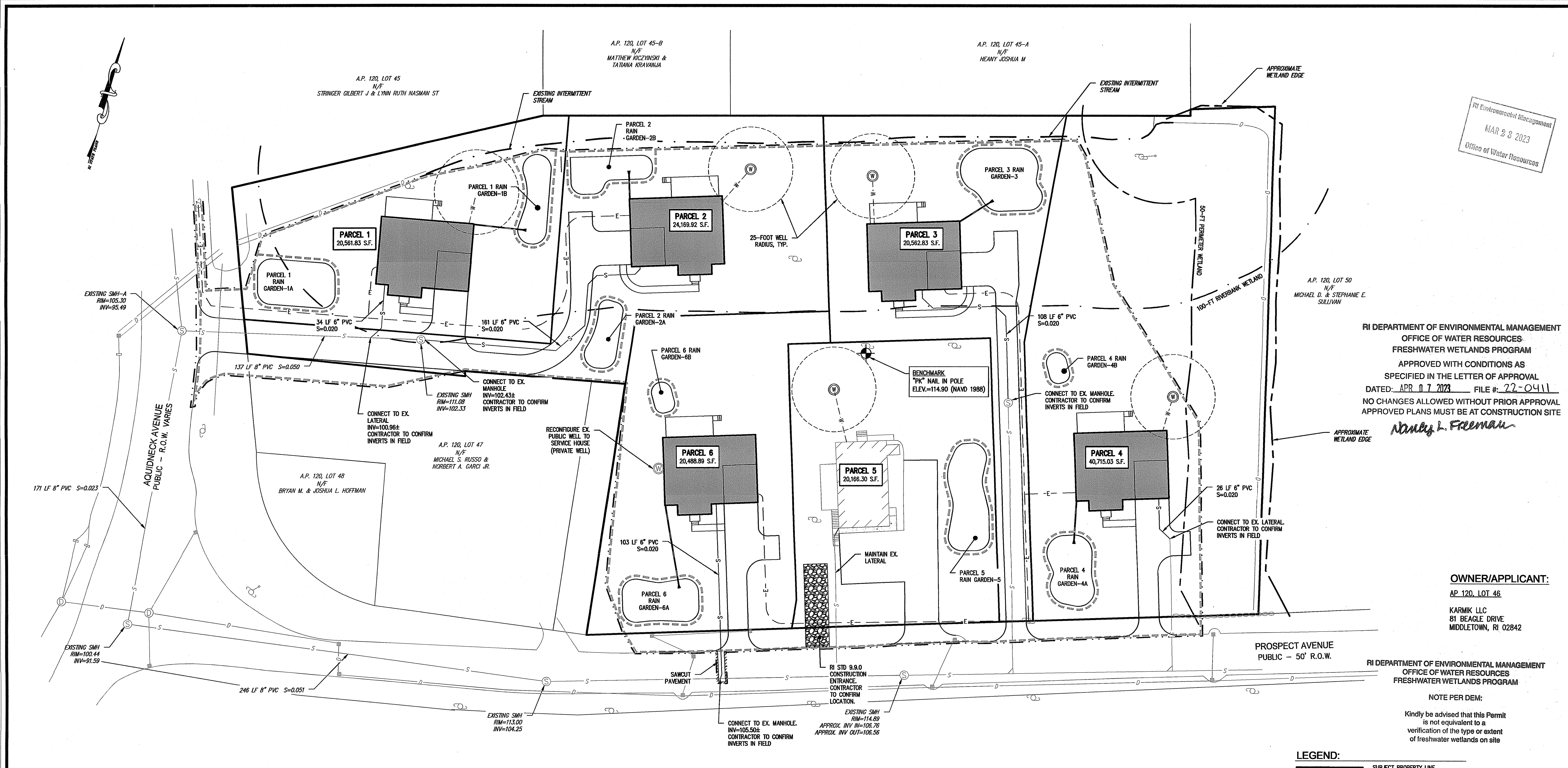
Drawn By: MBV/JSC

Checked By: BJC

Sheet

7
 of 10

FILE NO.: 22.467.703



- NOTES:**
- LOCATION AND DEPTH OF EXISTING UTILITIES ARE APPROXIMATE AND HAVE BEEN PLOTTED FROM THE BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL CHECK AND VERIFY LOCATIONS OF ALL EXISTING UTILITIES BOTH UNDERGROUND AND OVERHEAD. ANY DAMAGE TO EXISTING UTILITIES AS SHOWN OR NOT SHOWN ON THE PLANS SHALL BE THE CONTRACTOR'S RESPONSIBILITY. COSTS OF SUCH DAMAGE SHALL BE BORNE BY THE CONTRACTOR. NO EXCAVATION SHALL BE DONE UNTIL ALL INVOLVED UTILITY COMPANIES ARE NOTIFIED 72-HOURS IN ADVANCE. THE CONTRACTOR SHALL BE RESPONSIBLE TO NOTIFY DIG-SAFE (1-888-344-7233) A MINIMUM OF 72 WORKING HOURS, EXCLUDING WEEKENDS AND HOLIDAYS, PRIOR TO THE START OF ANY EXCAVATION AND/OR BLASTING WORK. THE NAME OF THE COMPANY PERFORMING THE EXCAVATION AND/OR BLASTING WORK MUST BE SUPPLIED TO DIG-SAFE, IF IT IS DIFFERENT FROM THE CALLER.
 - VERTICAL DATUM: NAVD 1988.

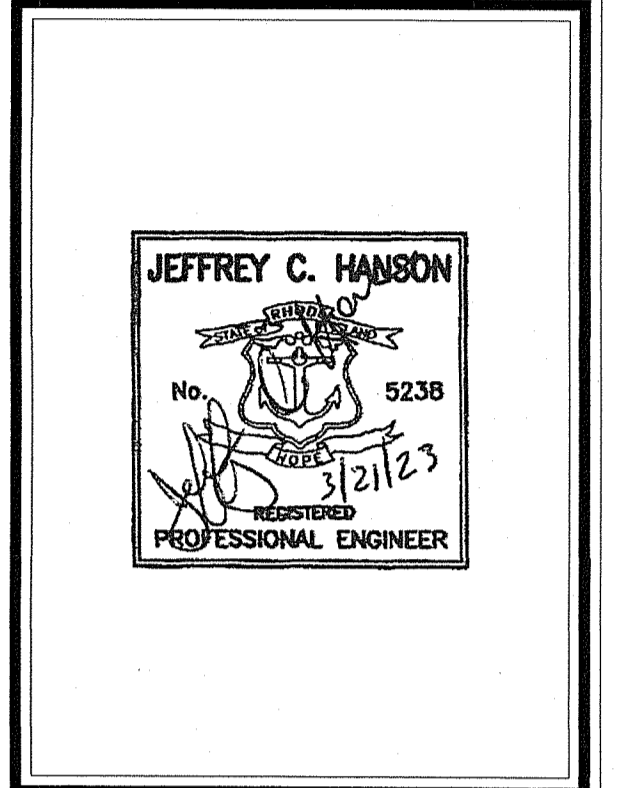
LEGEND:

	SUBJECT PROPERTY LINE
	ABUTTING PROPERTY LINE
	STREAM
	WETLAND EDGE (REF 1)
	50' PERIMETER WETLAND
	100' RIVERSHANK WETLAND SETBACK
	EXISTING EDGE OF PAVEMENT
	EXISTING UTILITY POLE
	EXISTING CATCH BASIN
	EXISTING DRAIN MANHOLE
	EXISTING DRAIN LINE
	EXISTING HYDRANT
	EXISTING STONE WALL
	EXISTING EDGE OF VEGETATION
	PROJECT BENCHMARK
	PROPOSED BUILDING
	PROPOSED EDGE OF PAVEMENT
	PROPOSED CONTOUR
	PROPOSED STORMWATER BMP
	PROPOSED SEWER
	PROPOSED SEWER MANHOLE
	PROPOSED SEWER CLEANOUT
	PROPOSED HYDRANT
	PROPOSED ELECTRIC/TELECOM
	PROPOSED CONSTRUCTION ENTRANCE
	PROPOSED LIMIT OF DISTURBANCE
	PROPOSED SILT SOCK/SILT FENCE

PERMIT SET
 NOT FOR CONSTRUCTION

COPYRIGHT 2022
 THIS DRAWING IS COPYRIGHTED AND NOT BE LOANED, REPRODUCED, COPIED, OR USED IN ANY MANNER WITHOUT THE WRITTEN PERMISSION OF ILLSTONE ENGINEERING, P.C.

NO.	DATE	REVISION
1	3/2/23	RIDEM COMMENTS, REVISED LAYOUT



ILLSTONE ENGINEERING, P.C.
 CIVIL ENGINEERING • LAND PLANNING
 250 Cranville Road, Building 542
 Warwick, Rhode Island 02886
 www.IllstoneEng.com
 P. (401) 921-3344
 F. (401) 921-3344

SOIL EROSION AND
 SEDIMENT CONTROL
 PLAN - 1

PARADISE PARK

A.P. 120, LOT 46
 265 PROSPECT AVENUE
 MIDDLETOWN, RHODE ISLAND

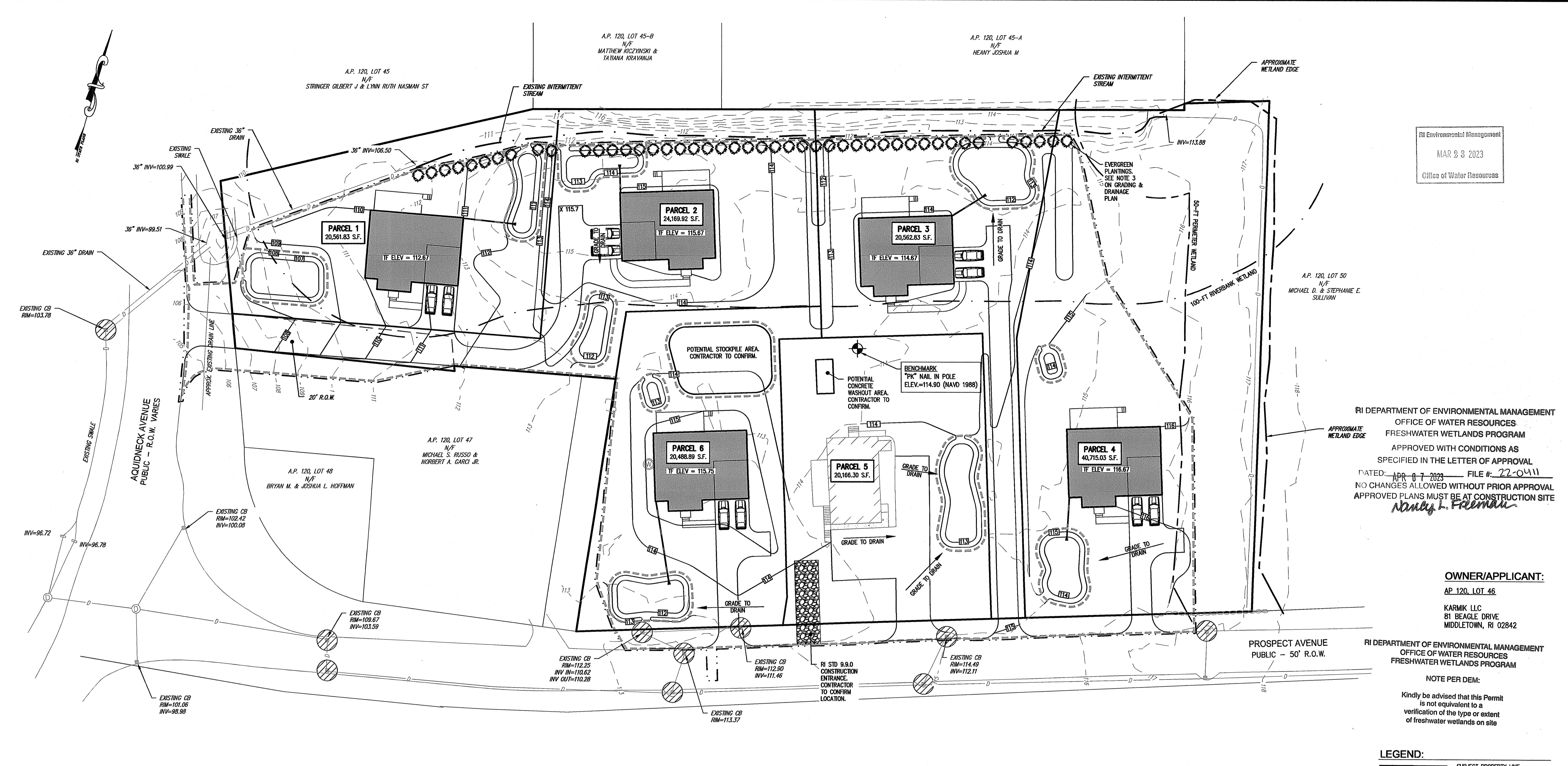
PREPARED FOR:
KARMIK, LLC

SCALE 1" = 30'
 JUNE 2022

Drawn By: MBV/JSC
 Checked By: BJC
 Sheet

8
 of 10

FILE NO.: 22.467.703



RI Environmental Management
 MAR 23 2023
 Office of Water Resources

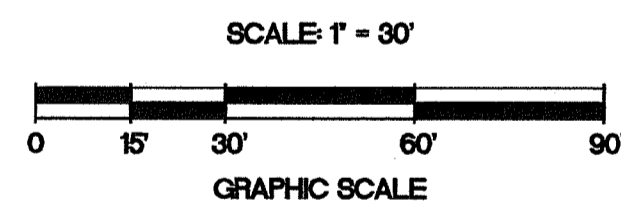
RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
 FRESHWATER WETLANDS PROGRAM
 APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL
 DATED: APR 07 2023 FILE #: 22-0411
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE
Nancy Freeman

OWNER/APPLICANT:
 AP. 120, LOT 46
 KARMIK LLC
 81 BEAGLE DRIVE
 MIDDLETOWN, RI 02842

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
 FRESHWATER WETLANDS PROGRAM
 NOTE PER DEM:
 Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site

LEGEND:

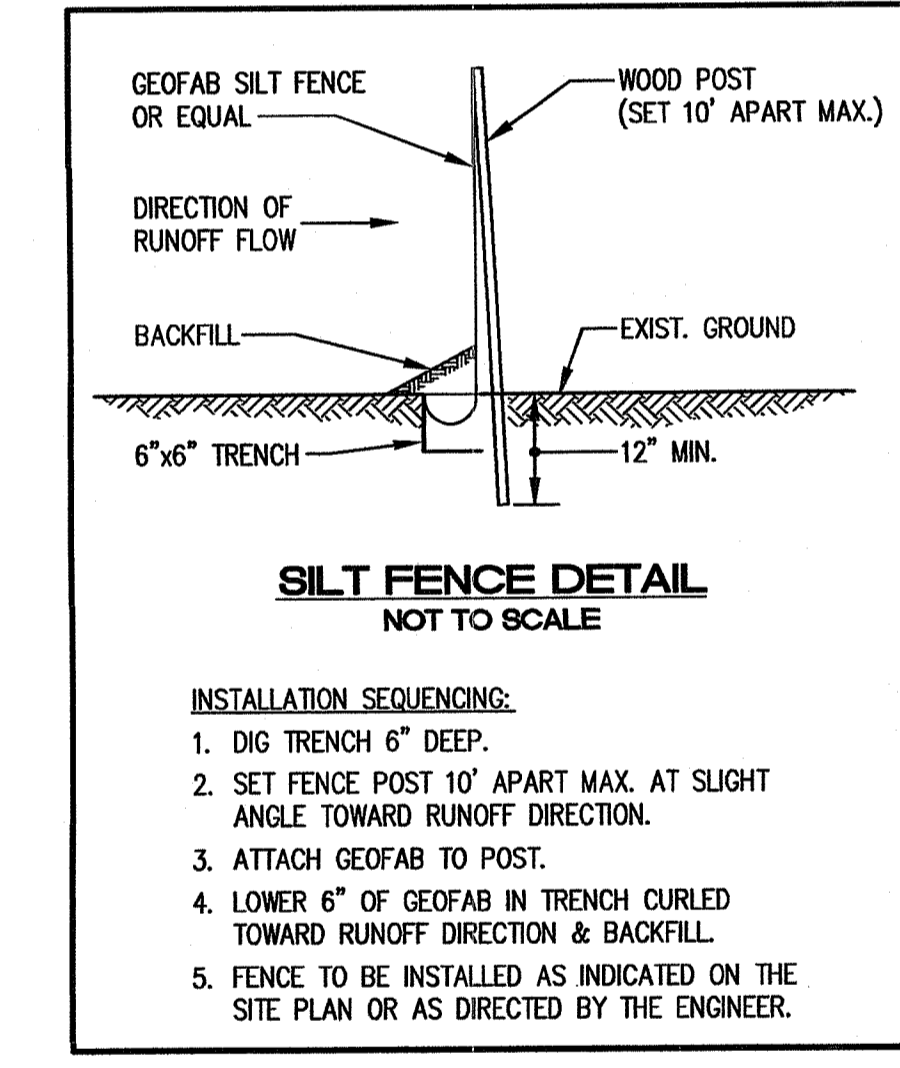
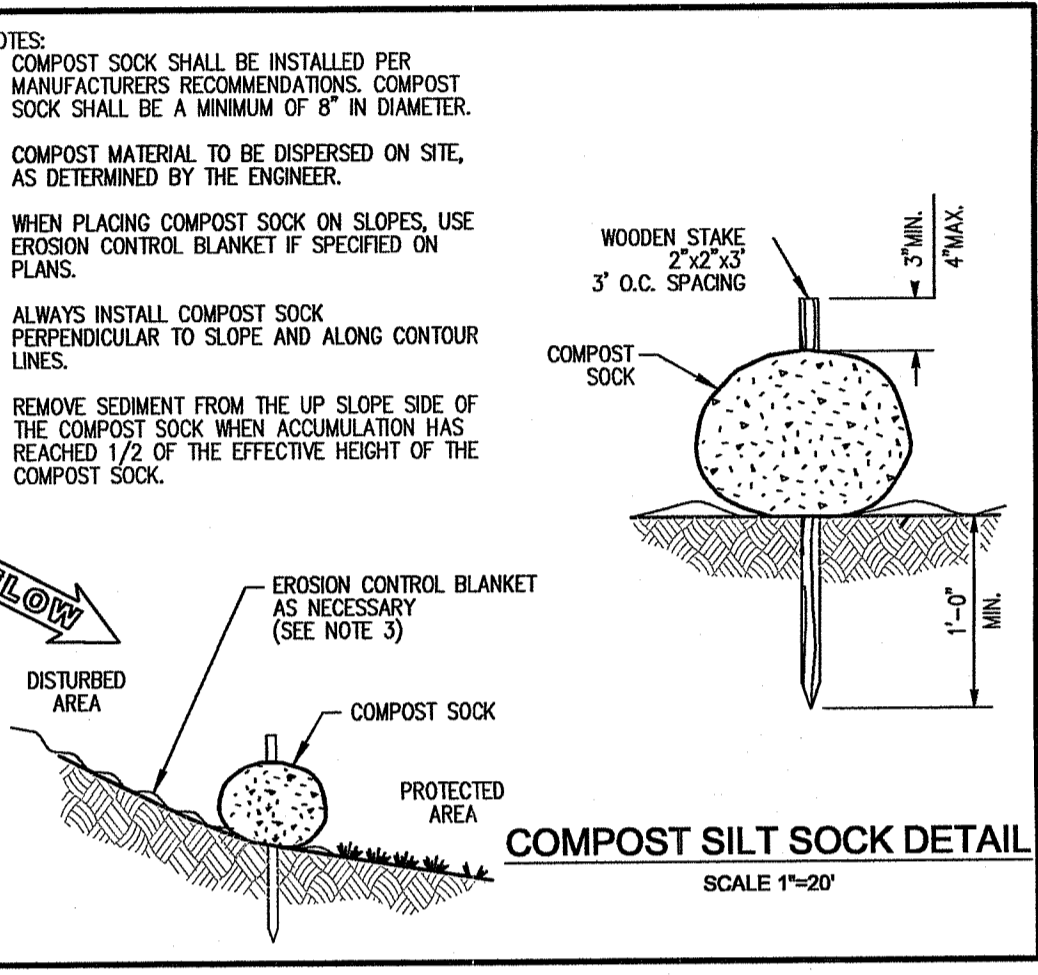
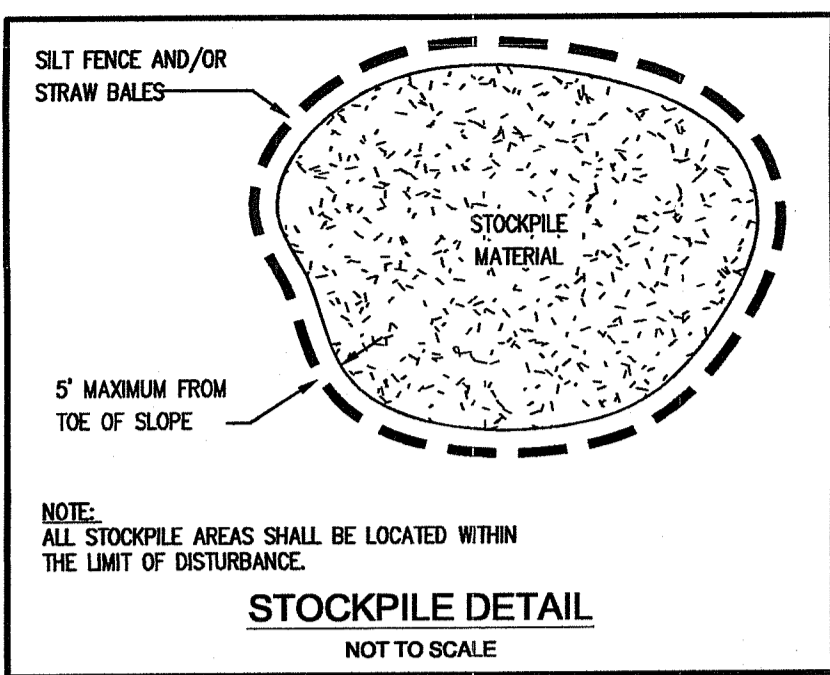
---	SUBJECT PROPERTY LINE
---	ABUTTING PROPERTY LINE
---	STREAM
---	WETLAND EDGE (REF 1)
---	50' PERIMETER WETLAND
---	100' RIVERBANK WETLAND SETBACK
---	EXISTING EDGE OF PAVEMENT
---	EXISTING CONTOUR
---	EXISTING UTILITY POLE
---	EXISTING CATCH BASIN
---	EXISTING DRAIN MANHOLE
---	EXISTING DRAIN LINE
---	EXISTING HYDRANT
---	EXISTING STONE WALL
---	EXISTING EDGE OF VEGETATION
---	PROJECT BENCHMARK
---	PROPOSED BUILDING
---	PROPOSED EDGE OF PAVEMENT
---	PROPOSED CONTOUR
---	PROPOSED ROOF DRAIN
---	PROPOSED STORMWATER BMP
---	PROPOSED CONSTRUCTION ENTRANCE
---	PROPOSED LIMIT OF DISTURBANCE
---	PROPOSED SILT SOCK/SILT FENCE
---	PROPOSED INLET PROTECTION



- NOTES:**
1. LOCATION AND DEPTH OF EXISTING UTILITIES ARE APPROXIMATE AND HAVE BEEN PLOTTED FROM THE BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL CHECK AND VERIFY LOCATIONS OF ALL EXISTING UTILITIES BOTH UNDERGROUND AND OVERHEAD. ANY DAMAGE TO EXISTING UTILITIES AS SHOWN OR NOT SHOWN ON THE PLANS SHALL BE THE CONTRACTOR'S RESPONSIBILITY. COSTS OF SUCH DAMAGE SHALL BE BORNE BY THE CONTRACTOR. NO EXCAVATION SHALL BE DONE UNTIL ALL INVOLVED UTILITY COMPANIES ARE NOTIFIED 72-HOURS IN ADVANCE. THE CONTRACTOR SHALL BE RESPONSIBLE TO NOTIFY DIG-SAFE (1-888-344-7233) A MINIMUM OF 72 WORKING HOURS, EXCLUDING WEEKENDS AND HOLIDAYS, PRIOR TO THE START OF ANY EXCAVATION AND/OR BLASTING WORK. THE NAME OF THE COMPANY PERFORMING THE EXCAVATION AND/OR BLASTING WORK MUST BE SUPPLIED TO DIG-SAFE, IF IT IS DIFFERENT FROM THE CALLER.
 2. VERTICAL DATUM: NAVD 1988.
 3. SEE SHEET 9 OF 10 FOR SESC NOTES AND DETAILS.

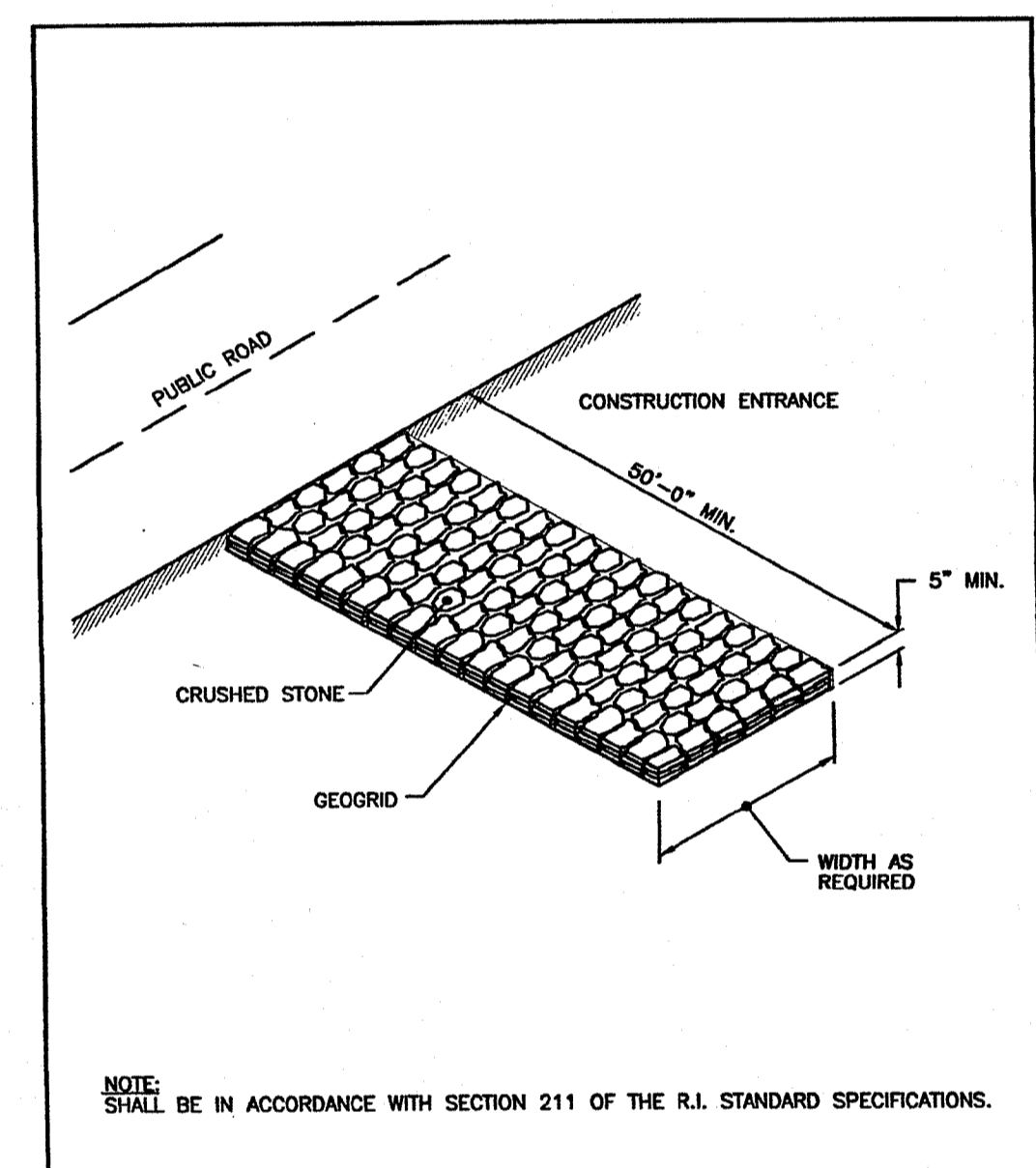
PERMIT SET
 NOT FOR CONSTRUCTION

COPYRIGHT © 2022
 THIS DRAWING IS COPYRIGHTED AND NOT BE LOANED, REPRODUCED, COPIED, OR USED IN ANY MANNER WITHOUT THE WRITTEN PERMISSION OF ILLSTONE ENGINEERING, P.C.



SEDIMENTATION CONTROL PROGRAM:

- EXTREME CARE SHALL BE EXERCISED SO AS TO PREVENT ANY UNSUITABLE MATERIAL FROM ENTERING DOWNSTREAM WATERCOURSES AND STORMWATER DRAINAGE SYSTEMS.
- DURING CONSTRUCTION, THE CONTRACTOR AND/OR DEVELOPER SHALL BE RESPONSIBLE FOR MAINTAINING DRAINAGE AND RUNOFF FLOW DURING STORMS AND PERIODS OF RAINFALL.
- SEDIMENTATION CONTROL DEVICES SHALL BE INSPECTED CLOSELY AND MAINTAINED PROMPTLY AFTER EACH RAINFALL.
- CARE SHALL BE TAKEN SO AS NOT TO PLACE "REMOVED SEDIMENTS" WITHIN THE PATH OF EXISTING, NEWLY CREATED (BOTH TEMPORARY AND PERMANENT) OR PROPOSED WATERCOURSES OR THOSE AREAS SUBJECTED TO STORMWATER FLOWAGE.
- SEDIMENTATION TRAPS SHALL BE PROVIDED AT ALL DRAINAGE STRUCTURES DURING CONSTRUCTION.
- EROSION AND SEDIMENTATION CONTROLS SHALL BE INSTALLED AT THE SITE PRIOR TO THE START OF CONSTRUCTION AND BE PROPERLY MAINTAINED UNTIL ALL DISTURBED AREAS ARE STABILIZED INCLUDING:
 - THE INSTALLATION OF A CONTINUOUS LINE OF STAKED STRAWBALES, SILT FENCE, OR SIMILAR IN ALL LOCATIONS SHOWN ON THE APPROVED SITE PLANS AND WHERE OTHERWISE NECESSARY TO PREVENT SEDIMENTS FROM ENTERING DOWNSTREAM WATERCOURSES AND STORMWATER DRAINAGE SYSTEMS.
 - ALL DISTURBED AREAS SHALL BE PERMANENTLY STABILIZED WITH APPROVED GROUND COVER PRIOR TO THE COMPLETION OF THE PROJECT. AREAS EXPOSED FOR EXTENDED PERIODS ARE TO BE COMPLETELY COVERED WITH SPREAD HAY MULCH.
 - CATCH BASINS SHALL BE PROTECTED WITH STRAWBALE OR SILT SACK FILTERS THROUGHOUT THE CONSTRUCTION PERIOD AND UNTIL ALL DISTURBED AREAS ARE THOROUGHLY STABILIZED. SUMPS ARE TO BE CLEANED IMMEDIATELY FOLLOWING INSTALLATION OF PERMANENT PAVEMENT.
 - OUTFALLS SHALL BE PROTECTED BY STRAWBALE FILTERS UNTIL DISTURBED AREAS ARE PERMANENTLY STABILIZED WITH APPROVED GROUND COVER.
 - ALL CONTROL MEASURES SHALL BE MAINTAINED IN EFFECTIVE CONDITION THROUGHOUT THE CONSTRUCTION PERIOD.
- THE LIMITS OF ALL CLEARING, GRADING AND DISTURBANCE SHALL BE KEPT TO A MINIMUM WITHIN THE PROPOSED AREA OF CONSTRUCTION. ALL AREAS OUTSIDE OF THE LIMITS OF DISTURBANCE SHALL REMAIN TOTALLY UNDISTURBED.



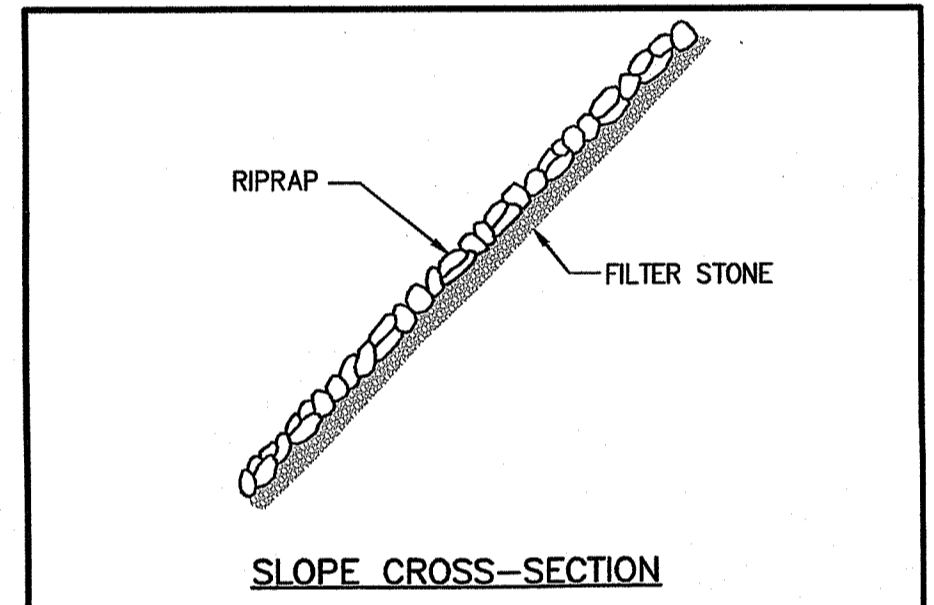
NO.	BY	DATE

APPROVED: *[Signature]* JUN 15, 1998
R.I. STANDARD 9.9.0

EROSION CONTROL AND SOIL STABILIZATION PROGRAM:

- DENUDED SLOPES SHALL NOT BE LEFT EXPOSED FOR EXCESSIVE PERIODS OF TIME, SUCH AS THE INACTIVE WINTER SEASONS.
- TEMPORARY TREATMENTS SHALL CONSIST OF STRAW, FIBER MULCH OR PROTECTIVE COVERS SUCH AS A MAT OR FIBER LINING (BURLAP, JUTE, FIBERGLASS NETTING, EXCELSIOR BLANKETS). THEY SHALL BE INCORPORATED INTO THE WORK AS WARRANTED OR AS ORDERED BY THE ENGINEER.
- STRAW APPLICATIONS SHOULD BE IN THE AMOUNT OF 2000 LBS/ACRE.
- ALL STRAWBALES OR TEMPORARY PROTECTION SHALL REMAIN IN-PLACE UNTIL AN ACCEPTABLE STAND OF GRASS, RIP-RAP OR APPROVED GROUND COVER IS ESTABLISHED.
- THE TOPSOIL SHALL HAVE A SANDY LOAM TEXTURE RELATIVELY FREE OF SUBSOIL MATERIAL, STONES, ROOTS, LIMBS OF SOIL, TREE LIMBS, TRASH OR CONSTRUCTION DEBRIS AND SHALL CONFORM WITH RHODE ISLAND STANDARD SPECIFICATION M.18.02.
- THE DESIGN MIX UTILIZED IN ALL DISTURBED AREAS TO BE SEEDED SHALL BE COMPRISED OF THE FOLLOWING:

TYPE	% BY WEIGHT
CREeping RED FESCUE	70
ASTORA BENTGRASS	5
BIRFOOT TREEFOIL	15
PERENNIAL RYEGRASS	10
APPLICATION RATE	100 LBS/ACRE
- THE CONTRACTOR MUST REPAIR AND/OR RESEED ANY AREAS THAT DO NOT DEVELOP WITHIN THE PERIOD OF ONE YEAR, AND SHALL DO SO AT NO ADDITIONAL EXPENSE.
- THE NORMAL ACCEPTABLE SEASONAL SEEDING DATES ARE APRIL 1ST THROUGH OCTOBER 15TH.
- STABILIZATION OF ONE FORM OR ANOTHER AS DESCRIBED ABOVE SHALL BE ACHIEVED WITHIN FIFTEEN (15) DAYS OF FINAL GRADING.
- STOCKPILES OF TOPSOIL AND EARTH MATERIALS SHALL NOT BE LOCATED NEAR WATERWAYS. THEY SHALL HAVE SIDE SLOPES NO GREATER THAN THIRTY PERCENT (30%), SHALL ALSO BE SEEDED AND/OR STABILIZED AND SHALL BE COMPLETELY ENCIRCLED WITH STAKED HAY BALES AND/OR SILT FENCE. (SEE DETAIL)
- ON BOTH STEEP AND LONG SLOPES, CONSIDERATION SHOULD BE GIVEN TO "CRIMPING" OR "TRACKING" TO TACK DOWN MULCH APPLICATIONS.
- TREES TO BE RETAINED SHALL BE FENCED OR ROPED OFF TO PROTECT THEM FROM CONSTRUCTION EQUIPMENT.
- ALL PROPOSED PLANTINGS AND PLACEMENT OF RIP-RAP MUST BE ACCOMPLISHED AS EARLY AS POSSIBLE UPON COMPLETION OF GRADING AND CONSTRUCTION, AND AT LEAST PRIOR TO ANY ON-SITE OCCUPANCY.
- ALL DISTURBED AREAS MUST BE SEEDED, PLANTED OR RIP-RAPPED WITHIN THE CONSTRUCTION SEASON.
- TEMPORARY SEEDED MUST BE COMPLETED WITHIN ONE (1) MONTH AFTER DISTURBANCE.
- ALL DISTURBED AREAS MUST BE PERMANENTLY SEEDED, PLANTED OR RIP-RAPPED BEFORE OCTOBER 1ST, IF NOT THEY MUST BE TEMPORARILY SEEDED.

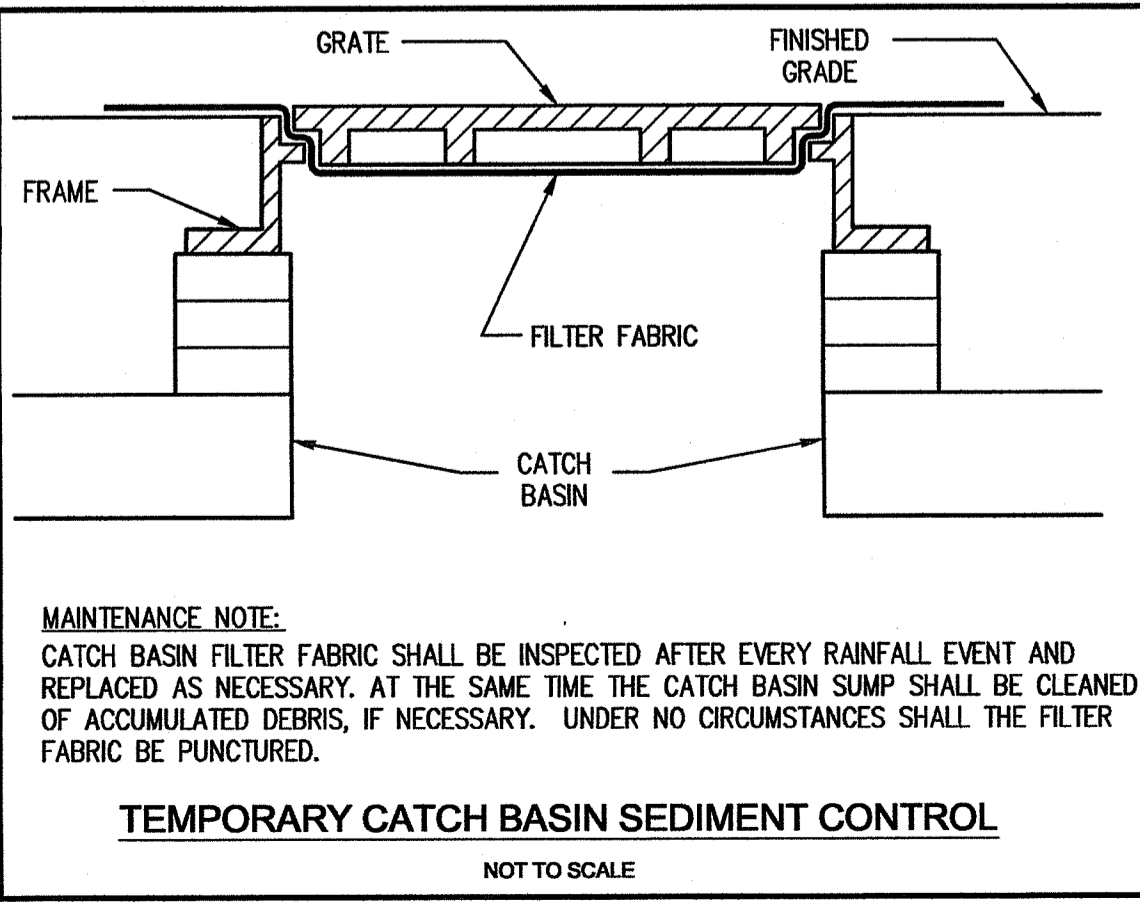


- NOTES:
1. SEE SITE PLAN FOR CLASS OF RIP-RAP TO BE USED
2. SEE FILTER STONE CHART FOR APPROPRIATE FILTER STONE TYPE AND DEPTH
3. DIMENSIONS MAY BE MODIFIED BY ENGINEER TO MEET FIELD CONDITIONS.
4. UNLESS OTHERWISE SPECIFIED, DUMPED RIP-RAP SHALL BE USED.

ROCKFILL RIP-RAP
NOT TO SCALE

RIPRAP	FILTER STONE	DEPTH
R-1	FS-1	6"
R-2	FS-2	6"
R-3	FS-2	6"
R-4	FS-3	7.5"
R-5	FS-3	7.5"
R-6	FS-2 and R-2	6" / 6"
R-7	FS-3 and R-4	7.5" / 21"
R-8	FS-3 and R-4	7.5" / 21"

FILTER STONE CHART



BMP CONSTRUCTION SEQUENCES:

- GENERAL:
GREAT CARE SHALL BE GIVEN TO THE DESIGNATED RAIN GARDEN AREAS SHOWN ON THE SITE PLANS DURING CONSTRUCTION. NO RAIN GARDEN SHALL BE CONSTRUCTED NOR ACCEPTED UNTIL ALL UP-GRADED AREAS OF THE WATERSHED HAVE BEEN BUILT AND FULLY STABILIZED, TO AVOID THE POTENTIAL FOR SEDIMENT OR SILT DEPOSITION. ALSO, ONCE THE ENTIRE SITE IS STABILIZED ALL SESS MEASURES SHALL BE REMOVED.
- THE DESIGN SEED MIX FOR ALL PERMANENT STORMWATER BASINS SHALL BE COMPRISED OF THE FOLLOWING AND PLANTED IN A MINIMUM OF A 6" DEPTH OF SANDY LOAM FREE OF SUBSOIL MATERIAL, STONES, ROOTS, LUMPS OF SOIL, TREE LIMBS, TRASH OR CONSTRUCTION DEBRIS:
- | TYPE | % BY WEIGHT |
|---------------------|--------------|
| CREeping RED FESCUE | 70 |
| KENTUCKY BLUEGRASS | 15 |
| TALL FESCUE | 15 |
| APPLICATION RATE | 100 LBS/ACRE |

- RAIN GARDENS:
1. EXCAVATE TO THE LINES AND GRADES OF THE DESIGN
2. INSTALL 5" SOIL EXCAVATED SOIL AND 50% ORGANIC COMPOST
3. INSTALL 3" SHREDED MULCH ON TOP OF SOIL MIXTURE
4. PLANT GARDEN PER DETAILS

CONSTRUCTION MAINTENANCE:

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSPECTION, MAINTENANCE AND REPAIR TO ALL DRAINAGE STRUCTURES AND RELATED APPURTENANCES ON THE SITE DURING CONSTRUCTION AND FOR A MAXIMUM OF ONE (1) YEAR FOLLOWING COMPLETION OF CONSTRUCTION, AT WHICH TIME THE DRAINAGE STRUCTURES AND APPURTENANCES ARE TO BE ACCEPTED BY THE ENGINEER AND THE OWNER, AS FOLLOWS:
- ALL CATCH BASINS AND STORM DRAIN PIPES SHALL BE CLEANED OF SEDIMENT.
 - INSPECTION OF THE BASINS AND ALL INLET AND OUTLET STRUCTURES SHALL BE PERFORMED ON A WEEKLY BASIS, PREFERABLY DURING A STORM EVENT TO INSPECT FOR PROPER FUNCTIONALITY OF THE FACILITY.
 - SEDIMENTS SHALL BE REMOVED FROM DRAINAGE STRUCTURES IMMEDIATELY FOLLOWING SITE STABILIZATION AND DURING THE FIRST (INITIAL) YEAR OF OPERATION.
 - ALL COSTS INCURRED FOR MAINTENANCE, CLEANING, AND INSPECTION ARE THE RESPONSIBILITY OF THE CONTRACTOR DURING CONSTRUCTION AND THE PROPERTY OWNER UPON ACCEPTANCE.
 - ANY INADVERTENT OR DELIBERATE DISCHARGE OF WASTE OIL OR ANY OTHER POLLUTANT TO THE STORMWATER DISPOSAL SYSTEM REQUIRES IMMEDIATE NOTIFICATION OF THE RIDEM.
 - ALL TRASH AND LITTER AND OTHER DEBRIS SHALL BE REMOVED FROM ANY STORMWATER FACILITY DAILY, INCLUDING INLET AND OUTLET STRUCTURES.
 - REPAIRS OR REPLACEMENT OF INLET/OUTLET STRUCTURES, RIP-RAP CHANNELS, FENCES, OR OTHER ELEMENTS OF THE FACILITY DURING CONSTRUCTION SHALL BE DONE WITHIN 30 DAYS OF DEFICIENCY REPORTS.
 - WATER SHALL BE USED TO MOISTEN EXPOSED SOIL SURFACES PERIODICALLY. AN ADEQUATE AMOUNT SHOULD BE USED TO CONTROL DUST.

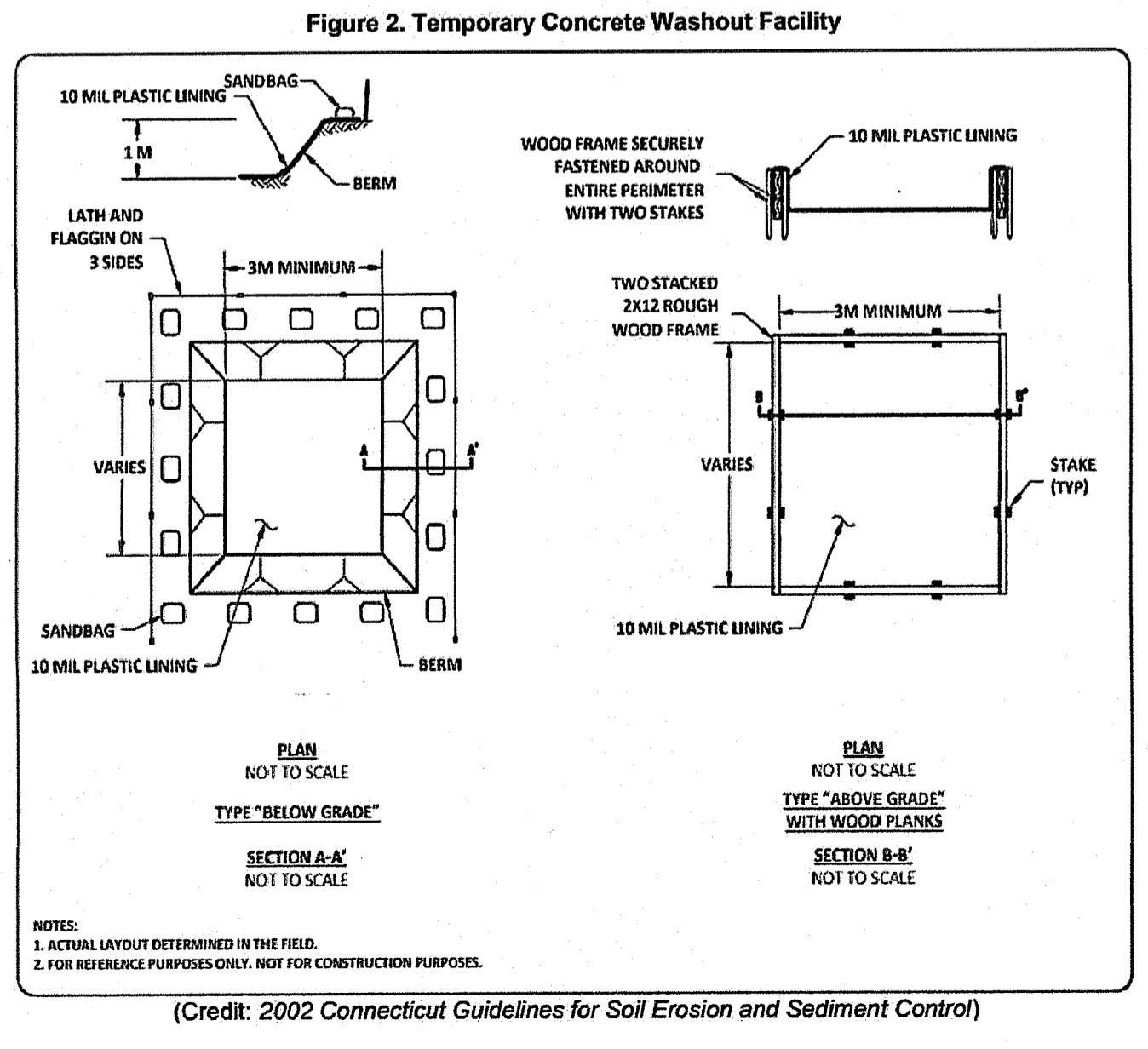
POLLUTION PREVENTION PLAN:

- GENERAL:
LONG-TERM MANAGEMENT OF THE POLLUTION PREVENTION PLAN SHALL BE THE RESPONSIBILITY OF THE OWNER / OPERATOR.
- OWNER: KARMIK LLC
81 BEAGLE DRIVE
MIDDLETOWN, RI 02842
- CONTRACTOR: TBD
LANDSCAPE MANAGEMENT:
• ANY LANDSCAPE MANAGEMENT REQUIRED SHALL BE THAT TYPICALLY REQUIRED FOR SINGLE FAMILY RESIDENTIAL CONSTRUCTION.

LONG-TERM MAINTENANCE SCHEDULE (O&M):

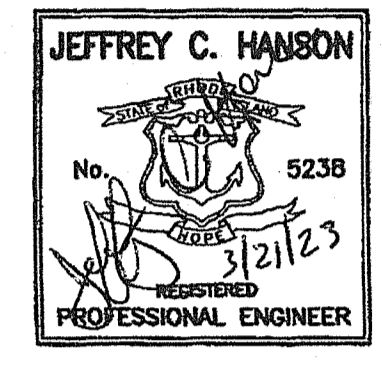
- LONG-TERM MAINTENANCE OF THE DRAINAGE SYSTEM SHALL BE COMPLETED BY THE APPLICANT/OPERATOR UNDER A LEGALLY BINDING AND ENFORCEABLE MAINTENANCE AGREEMENT. THE TOWN OF MIDDLETOWN IS NOT RESPONSIBLE FOR MAINTENANCE OF THE BMPs.
- OWNER: KARMIK LLC
81 BEAGLE DRIVE
MIDDLETOWN, RI 02842
- THE CONTRACTOR / OPERATOR SHALL MAINTAIN ALL DRAINAGE COMPONENTS DURING AND DIRECTLY AFTER CONSTRUCTION. ALL OPERATIONAL MAINTENANCE REQUIREMENTS WILL BE RECORDED ON THE TITLE.
- OPERATOR / CONTRACTOR: DEFAULTS TO OWNER UNTIL HOMEOWNERS' ASSOCIATION HAS BEEN CREATED
- THE STORMWATER SYSTEM WILL BE CONSTRUCTED AS EACH INDIVIDUAL LOT IS DEVELOPED. DURING CONSTRUCTION OF EACH LOT, THE RAIN GARDENS SHALL BE INSPECTED THROUGHOUT AND ANY ISSUES SHALL BE REPORTED ON THE CONSTRUCTION INSPECTION REPORTING FORMS.
- ALL INSPECTIONS REPORTS SHALL BE KEPT ON FILE WITH THE STORMWATER MANAGEMENT OPERATION AND MAINTENANCE PLAN.

- RAIN GARDENS:
• RAIN GARDENS SHALL BE INSPECTED FOLLOWING AT LEAST THE FIRST TWO PRECIPITATION EVENTS OF AT LEAST ONE INCH TO ENSURE THEY ARE FUNCTIONING PROPERLY.
• THE RAIN GARDENS SHALL BE MONITORED AND MAINTAINED TO ASSURE PROPER FUNCTIONING, PLANT GROWTH AND SURVIVAL.
• PLANTS SHALL BE REPLACED ON AN AS-NEEDED BASIS DURING THE GROWING SEASON.
• SILT/SEDIMENT SHALL BE REMOVED FROM THE RAIN GARDENS WHEN THE ACCUMULATION EXCEEDS ONE INCH OR WHEN WATER POUNDS ON THE SURFACE FOR MORE THAN 48 HOURS. THE TOP FEW INCHES OF MATERIAL SHALL BE REMOVED AND REPLACED WITH FRESH SOIL MIXTURE AND MULCH.
• PRUNING AND REPLACEMENT OF WOODY VEGETATION SHALL OCCUR WHEN DEAD OR DYING VEGETATION IS OBSERVED.
• SOIL EROSION GULLIES SHALL BE REPAIRED WHEN THEY OCCUR.
• FERTILIZER OR PESTICIDES SHALL NOT BE APPLIED TO PLANTS WITHIN RAIN GARDENS.
• PERENNIAL PLANTS AND GROUND COVERS SHALL BE REPLACED AS NECESSARY TO MAINTAIN AN ADEQUATE VEGETATED GROUND COVER. ANNUAL PLANTS MAY ALSO BE USED TO MAINTAIN GROUND COVER.



NO.	DATE	REVISION
1	3/23/23	RIDEM COMMENTS, REVISED LAYOUT

RI Environmental Management
MAR 23 2023
Office of Water Resources



MILLSTONE ENGINEERING, P.C.
CIVIL ENGINEERING • LAND PLANNING

780 Aquidneck Avenue, Building B
Middletown, Rhode Island 02842
www.MillstoneEng.com
p. (401) 921-3344 f. (401) 921-3303

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

APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL DATED APR 07 2023 FILE #: 22-0411

CHANGES ALLOWED WITHOUT PRIOR APPROVAL. APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Nancy L. Freeman

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

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

NOTES AND DETAILS-1

PARADISE PARK

A.P. 120, LOT 46
265 PROSPECT AVENUE
MIDDLETOWN, RHODE ISLAND

PREPARED FOR:
KARMIK, LLC

SCALE AS NOTED
JUNE 2022

Drawn By: MBV/JSC
Checked By: BJC
Sheet

OWNER/APPLICANT:
AP 120, LOT 46
KARMIK LLC
81 BEAGLE DRIVE
MIDDLETOWN, RI 02842

9 of 10
FILE NO.: 22.467.703

GENERAL NOTES:

- THE MOST CURRENT EDITION OF THE STATE OF RHODE ISLAND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND THE RHODE ISLAND STANDARD DETAILS ARE MADE A PART HEREOF AS FULLY AND COMPLETELY AS IF ATTACHED HERETO. THE CURRENT VERSION OF THE STANDARD SPECIFICATIONS MAY BE OBTAINED AT THE RHODE ISLAND DEPARTMENT OF TRANSPORTATION, DIVISION OF PUBLIC WORKS. IN ADDITION, THE TOWN OF MIDDLETOWN STANDARD SPECIFICATIONS ARE MADE A PART HEREOF AS FULLY AND COMPLETELY AS IF ATTACHED HERETO.
- ALL REQUIRED SITE IMPROVEMENTS SHALL BE INSPECTED BY THE TOWN ENGINEER TO ENSURE SATISFACTORY COMPLETION. IN NO CASE SHALL THE INSTALLATION OF ANY IMPROVEMENTS BE STARTED UNTIL PRIOR NOTIFICATION IS GIVEN TO THE TOWN ENGINEER. AT LEAST A 48-HOUR NOTICE SHALL BE GIVEN TO THE TOWN ENGINEER PRIOR TO ANY SUCH START OF CONSTRUCTION. A FINAL INSPECTION OF ALL SITE IMPROVEMENTS, UTILITIES AND GRADING WILL BE MADE TO DETERMINE WHETHER THE WORK IS SATISFACTORY AND IN SUBSTANTIAL AGREEMENT WITH THE APPROVED FINAL CONSTRUCTION DRAWING AND THE TOWN SPECIFICATIONS.
- LOCATION AND DEPTH OF EXISTING UTILITIES ARE APPROXIMATE AND HAVE BEEN PLOTTED FROM THE BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL CHECK AND VERIFY LOCATIONS OF ALL EXISTING UTILITIES BOTH UNDERGROUND AND OVERHEAD. ANY DAMAGE TO EXISTING UTILITIES AS SHOWN OR NOT SHOWN ON THE PLANS SHALL BE THE CONTRACTOR'S RESPONSIBILITY. COSTS OF SUCH DAMAGE SHALL BE BORNE BY THE CONTRACTOR. NO EXCAVATION SHALL BE DONE UNTIL ALL INVOLVED UTILITY COMPANIES ARE NOTIFIED 72-HOURS IN ADVANCE. THE CONTRACTOR SHALL BE RESPONSIBLE TO NOTIFY DIG-SAFE (1-888-344-7233) A MINIMUM OF 72 WORKING HOURS, EXCLUDING WEEKENDS AND HOLIDAYS, PRIOR TO THE START OF ANY EXCAVATION AND/OR BLASTING WORK. THE NAME OF THE COMPANY PERFORMING THE EXCAVATION AND/OR BLASTING WORK MUST BE SUPPLIED TO DIG-SAFE, IF IT IS DIFFERENT FROM THE CALLER.
- IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO OBTAIN ANY AND ALL PERMITS REQUIRED BY THE STATE OF RHODE ISLAND, FEDERAL GOVERNMENT, AND THE TOWN OF MIDDLETOWN PRIOR TO COMMENCING ANY WORK.
- CONTRACTOR TO EXCAVATE TEST PITS TO CONFIRM LOCATION AND ELEVATION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION. ANY DISCREPANCY SHALL BE REPORTED TO THE ENGINEER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING ALL TEMPORARY SEDIMENTATION AND EROSION CONTROLS.
- STOCKPILES OF EARTH MATERIALS SHALL NOT BE LOCATED NEAR WATERWAYS, WETLANDS, OR ADJACENT TO DRAINAGE STRUCTURES.
- ALL MATERIAL FOR FILL SHALL BE CLEAN AND FREE OF MATTER WHICH COULD POLLUTE ANY DOWN STREAM WATERCOURSE.
- FILL MATERIAL SHALL BE COMPACTED IN ONE FOOT (MAXIMUM) LIFTS TO AT LEAST 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED IN ACCORDANCE WITH ASTM D-1557 (MODIFIED PROCTOR TEST).
- THERE ARE NO SPECIAL FLOOD HAZARD AREAS LOCATED ON THE SITE. THIS SITE LIES ENTIRELY WITHIN ZONE "X" - AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN AS SHOWN ON THE NATIONAL FLOOD INSURANCE RATE MAPS (FIRM), NEWPORT COUNTY, RHODE ISLAND MAP NUMBERS 44005C0094H, REVISED APRIL 5, 2010, AND 44005C0182L, REVISED SEPTEMBER 4, 2013.
- VERTICAL DATUM: NAVD 1983.
- WORK SHOWN ON THE PLANS FOR WHICH THERE ARE NO PARTICULAR DETAILS OR SPECIFICATIONS DOES NOT RELIEVE THE CONTRACTOR FROM FINISHING AND INSTALLING THE WORK. THE CONTRACTOR SHALL THOROUGHLY EXAMINE THE CONTRACT DOCUMENTS AND PLANS AND INSPECT THE SITE. THE BID PRICE SHALL INCLUDE ALL SERVICES AND MATERIALS AS NECESSARY TO COMPLETE THE PROJECT. ANY CHANGES TO THE PROJECT OR THE INSTALLATION OF AN ITEM FOR WHICH NO PARTICULAR DETAIL OR SPECIFICATION WAS PROVIDED MUST BE REVIEWED BY AND ACCEPTABLE TO THE ENGINEER.
- CONTRACTOR SHALL RECORD AND PROVIDE AS-BUILT DRAWINGS IN ACCORDANCE WITH LOCAL UTILITY REQUIREMENTS FOR ALL NEW INFRASTRUCTURE AND PROVIDE THE TOWN OF MIDDLETOWN WITH AS-BUILTS OF THE STORMWATER MANAGEMENT SYSTEM, SEWER SYSTEM, AND WATER SYSTEM.

SEWER NOTES:

- ALL SANITARY SEWER CONSTRUCTION SHALL BE IN COMPLETE CONFORMANCE WITH THE STANDARD SANITARY SEWER REQUIREMENTS FOR THE TOWN OF MIDDLETOWN PUBLIC WORKS DEPARTMENT AND THE NEWPORT POLLUTION CONTROL FACILITY.
- ALL GRAVITY SEWER PIPE AND FITTINGS SHALL MEET THE REQUIREMENTS OF ASTM SPECIFICATION D3034, SDR 35.
- ALL SYSTEM COMPONENTS AND CONSTRUCTION METHODS, SUCH AS VALVES, PIPES, PUMPS, GUIDE RAILS, VAULTS, HATCHES AND CONTROLS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO PURCHASE AND INSTALLATION. THIS SUBMISSION SHALL INCLUDE MANUFACTURER'S LITERATURE, SHOP DRAWINGS, PROPOSED CONSTRUCTION METHODS, ETC.
- CONTRACTOR SHALL PROVIDE OWNER WITH AS-BUILT PLANS AND ELECTRONIC DATA OF SEWER SYSTEM IN ACCORDANCE WITH THE TOWN OF MIDDLETOWN PUBLIC WORKS DEPARTMENT.

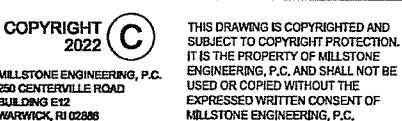
CONSTRUCTION SEQUENCE / NARRATIVE

- CONSTRUCTION WILL BE PERFORMED AS EACH LOT IS DEVELOPED INDIVIDUALLY. THE FOLLOWING IS THE GENERAL PROCESS REQUIRED TO DEVELOP EACH LOT.
- OBTAIN APPLICABLE PERMITS.
- NOTIFY ALL APPROPRIATE STATE, REGIONAL AND TOWN DEPARTMENTS PRIOR TO THE START OF CONSTRUCTION.
- BEGIN CONSTRUCTION.
- CONSTRUCT R1 STD 9.9.0 CONSTRUCTION ACCESS.
- INSTALL SILT FENCE / SILT SOCK / STAKED STRAWBALE LINE.
- CLEAN, GRUB, AND STOCKPILE TOPSOIL (IF REQUIRED).
- EXCAVATE / PLACE COMPACTED FILL IN ACCORDANCE WITH THE GRADING PLAN.
- INSTALL PROPOSED RAIN GARDENS, WORK DOWNSTREAM TO UPSTREAM. PLACE INLET PROTECTION WHERE REQUIRED.
- INSTALL UTILITIES IN ACCORDANCE WITH THE UTILITY PLAN.
- INSTALL FOUNDATIONS.
- INSTALL PAVEMENT FOR DRIVEWAYS AND WALKWAYS.
- FINE GRADE, SPREAD TOPSOIL, SEED AND STABILIZE EXPOSED EARTH.
- CLEAN / FLUSH STORM DRAINAGE SYSTEM (AS NEEDED) FOR LOTS WHERE THE STORM DRAINAGE SYSTEM IS LOCATED OR BORDERING THE LOT.
- ONCE SEEDS GERMINATE AND EARTH IS STABILIZED, REMOVE SILT FENCE / STRAW BALE LINE AND INLET PROTECTION.
- END CONSTRUCTION.

OWNER/APPLICANT:

AP 120, LOT 46
KARMIK LLC
81 BEAGLE DRIVE
MIDDLETOWN, RI 02842

**PERMIT SET
NOT FOR
CONSTRUCTION**



Department of Environmental Management
Division of Water Resources (DWR)
**SEWER LINE/WATER LINE SEPARATION POLICY
FOR DESIGN OF SANITARY SEWERS**

A. Lateral placement of sewers and water lines¹

Sewers shall be laid at least 10 feet horizontally from any existing or proposed water line. The distance shall be measured edge-to-edge. There is no minimum vertical separation required provided the 10 foot horizontal separation is maintained. Structures, other than pipelines or conduits, through which sanitary wastewater flows such as, but not limited to, manholes, valve vaults, meter pits and pump station wet wells shall also be constructed at least 10 feet horizontally from any existing or proposed water line, measured edge-to-edge.

- In cases where it is not possible to maintain a 10 foot horizontal separation, the DWR may allow deviation on a case-by-case basis, if supported by data from the design engineer. Such deviation may allow installation of the sewer pipelines and/or structures closer to a water line, provided that:
- The sewer pipeline and/or structures and water line are laid in separate trenches, or
 - The sewer pipeline and/or structures and water line may be installed in the same trench with the water line placed on a bench of undisturbed earth, and
 - In either case, the crown of the sewer pipeline shall be at least 18 inches below the invert of the water line.

In situations where it is impossible to obtain proper horizontal and vertical separation as stipulated above, the following protection shall be provided:

- Encasement of the sewer pipeline in concrete (min. 6 inch thickness) or a carrier pipe for at least 10 feet either side of the area not complying with the minimum horizontal and vertical separation, or
- The design and construction of the sewer pipeline must meet the requirements applicable to water lines (any AWWA-approved material for potable water conveyance), and pressure tested in accordance with AWWA specifications, or
- In instances of conflict with sanitary wastewater structures mentioned above, relocate the water line to achieve either a 10 foot horizontal or 18 inch vertical separation.

B. Sewers crossing water lines

Sewers crossing over water lines should be avoided, but if conditions warrant this situation, then adequate structural support shall be provided for the sewer to maintain line and grade. Sewers crossing under water lines shall be laid to provide a minimum vertical separation of 18 inches between the invert of the water line and the crown of the sewer. Relocation of an existing water line may be necessary to achieve this vertical separation. Relocated water lines shall be constructed of an AWWA-approved material for potable water conveyance and designed for the required water service pressure for a distance of 10 feet on each side of the crossing, measured perpendicular to the sewer. The crossing shall be arranged so that the sewer joints will be equidistant and as far as possible from the water line joints.

Where conditions prevent an 18 inch vertical separation from being maintained, the following methods shall be specified:

- The design and construction of the sewer must meet the requirements applicable to water lines (any AWWA-approved material for potable water conveyance) for a distance of 10 feet on each side of the crossing, measured perpendicular to the water line and pressure tested in accordance with AWWA specifications, or
- Either the water line or the sewer may be encased in concrete (min. 6 inch thickness) or a carrier pipe for a distance of 10 feet on each side of the crossing, measured perpendicular to the water line. The carrier pipe shall be designed and constructed of materials which are satisfactory to the DWR, or
- Any other methods, if supported by data from the design engineer, which ensure adequate watertightness and are satisfactory to the DWR.

¹ Water lines shall be defined as any conduits or pipelines that convey potable water.

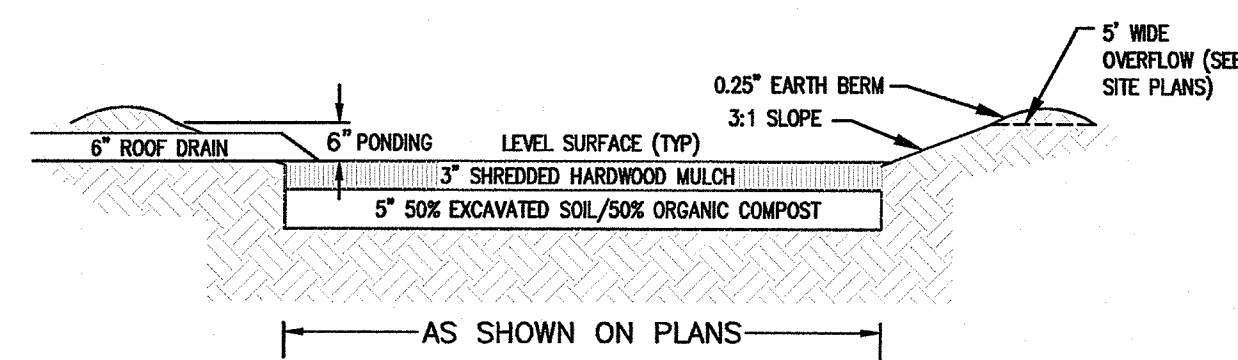
10/96 (rev. 5/01)

NOTES:

- RAIN GARDEN AMENDED SOIL SHALL CONTAIN 50% EXCAVATED SOIL AND 50% ORGANIC COMPOST.
- EACH RAIN GARDEN SHALL HAVE A BOTTOM AREA AS SHOWN ON THE PLAN.
- RAIN GARDEN SUGGESTED PLANT LIST:

KEY	BOTANICAL NAME	COMMON NAME	SIZE
AC	ACHILLEA 'CORONATION GOLD'	YELLOW YARROW	#1
AM	AMELANCHIER CAMMERS	SHAWBUSH	5'-8' B&B
AS	AMELANCHIER STOLONIFERA	(RUNNING SERVICEBERRY)	#3
AP	ASTER PUNICEUS	(SWAMP ASTER)	#1
BP	BETULA POPULIFOLIA	(GRAY BIRCH)	5'-8' B&B
IV	IRIS VERSICOLOR	(BLUE FLAG IRIS)	#1
PA	PANICUM AMARUM 'DREWY BLUE'	(SWITCH GRASS)	#1
QA	QUERCUS ALBA	(WHITE OAK)	1"-1.5" B&B
SL	SPirea LATIFOLIA	(MEADOWSWEET)	#3

- EACH RAIN GARDEN SHALL BE NO CLOSER THAN 10' TO BUILDING FOUNDATIONS AND 25' TO THE PRIVATE WELL.
- ALL ROOF LEADERS / DOWNSPOUTS SHALL BE CONNECTED TO A RAIN GARDEN AS INDICATED ON THE PLANS.
- RAIN GARDEN SIZING PERTAINS TO IMPERVIOUS AREAS SHOWN ON THE PLANS. THE RAIN GARDENS MAY REQUIRE RESIZING WITH THE DEVELOPMENT OF THE INDIVIDUAL LOTS.



RAIN GARDEN SIZING:

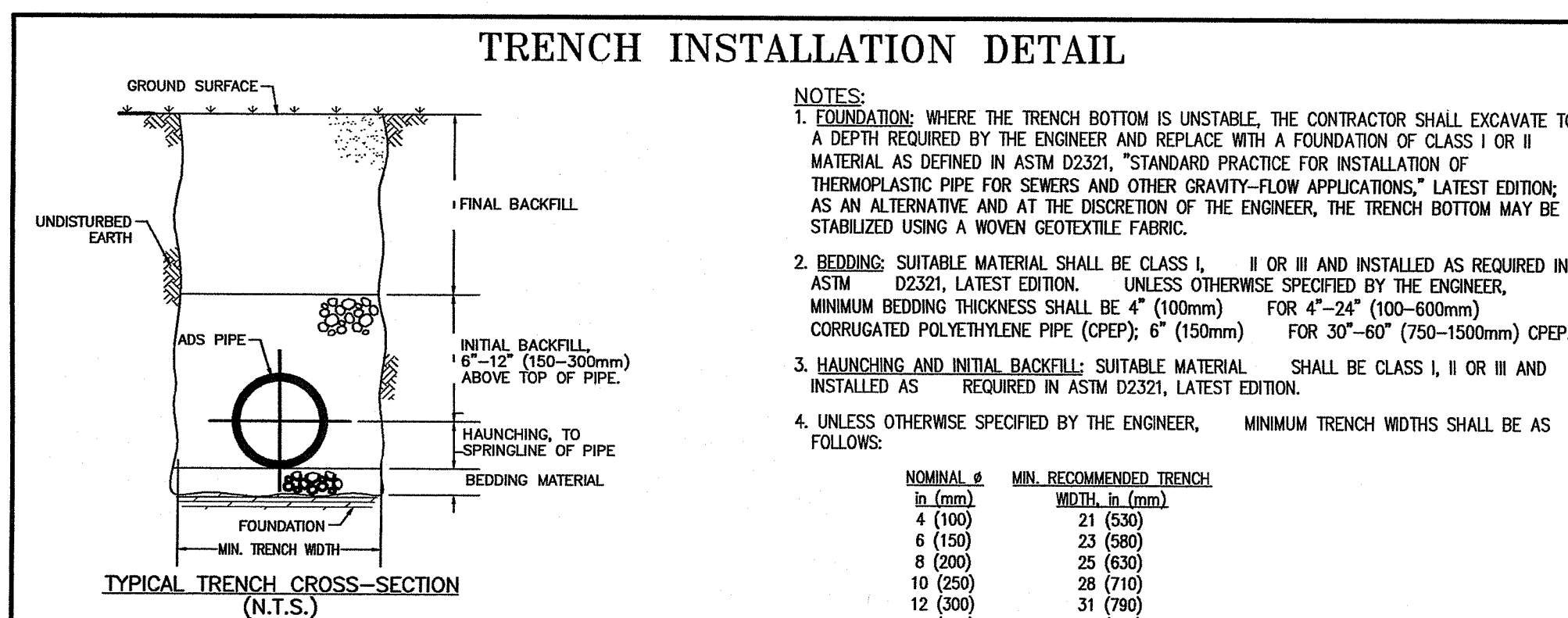
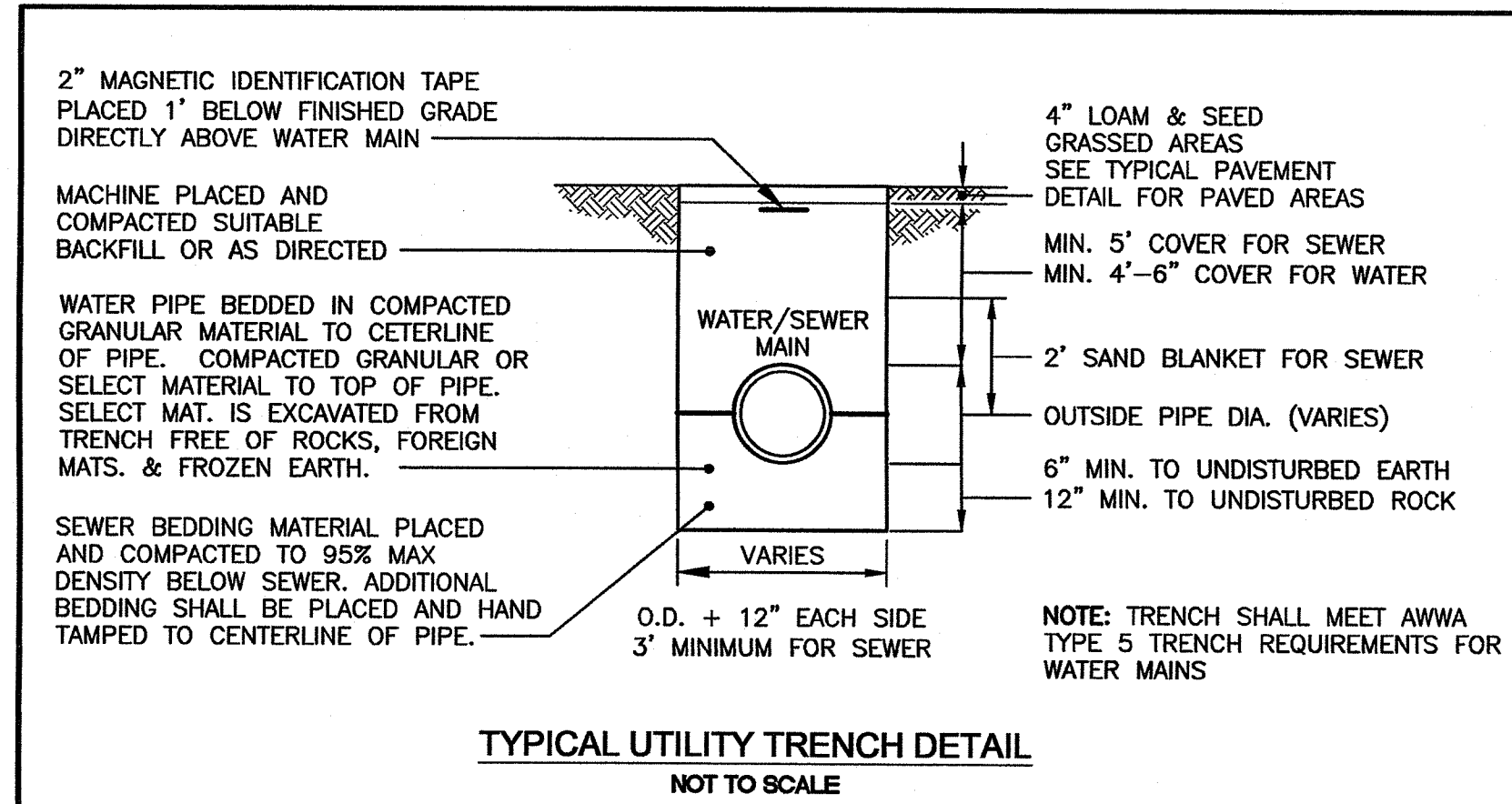
BASED UPON THE RIDEM/CRMC DOCUMENT ENTITLED "STATE OF RI STORMWATER MANAGEMENT GUIDANCE FOR INDIVIDUAL SINGLE-FAMILY RESIDENTIAL DEVELOPMENT", FOR EACH 100 SQUARE FEET (SF) OF IMPERVIOUS SURFACE DRAINING TO A RAIN GARDEN (RG), A MINIMUM SURFACE AREA (SA) IS REQUIRED DEPENDING UPON THE DEPTH OF THE RAIN GARDEN AND THE SOIL TYPE - SANDY vs SILTY: (from Web Soil Survey - Silt loam)

FOR SILTY SOILS AS RECORDED ON-SITE	DEPTH OF RG	SA / 100 SF
0 AN 8" DEEP DESIGN DEPTH	8"	16 SF

THE GARDEN SIZE REQUIRED IS: IMPERVIOUS SURFACE AREA / 100x16

Parcel ID	BMP ID	Type of Impervious Area	Impervious Area (SF)	Surface Area Required (SF)	Surface Area Provided (SF)
1	Rain Garden - 1A	Deck/Patio & Paved	4,979	797	814
1	Rain Garden - 1B	Roof	2,320	371	402
2	Rain Garden - 2A	Paved	1,796	287	300
2	Rain Garden - 2B	Deck/Patio & Roof	2,671	427	442
3	Rain Garden - 3	Deck/Patio, Paved & Roof	6,352	1,060	1,060
4	Rain Garden - 4A	Roof & Paved	3,911	626	639
4	Rain Garden - 4B	Deck/Patio	351	56	68
5	Rain Garden - 5	Deck/Patio, Paved & Roof	5,260	842	864
6	Rain Garden - 6A	Roof & Paved	3,982	637	694
6	Rain Garden - 6B	Deck/Patio	351	56	68

**RAIN GARDEN DETAILS
NOT TO SCALE**



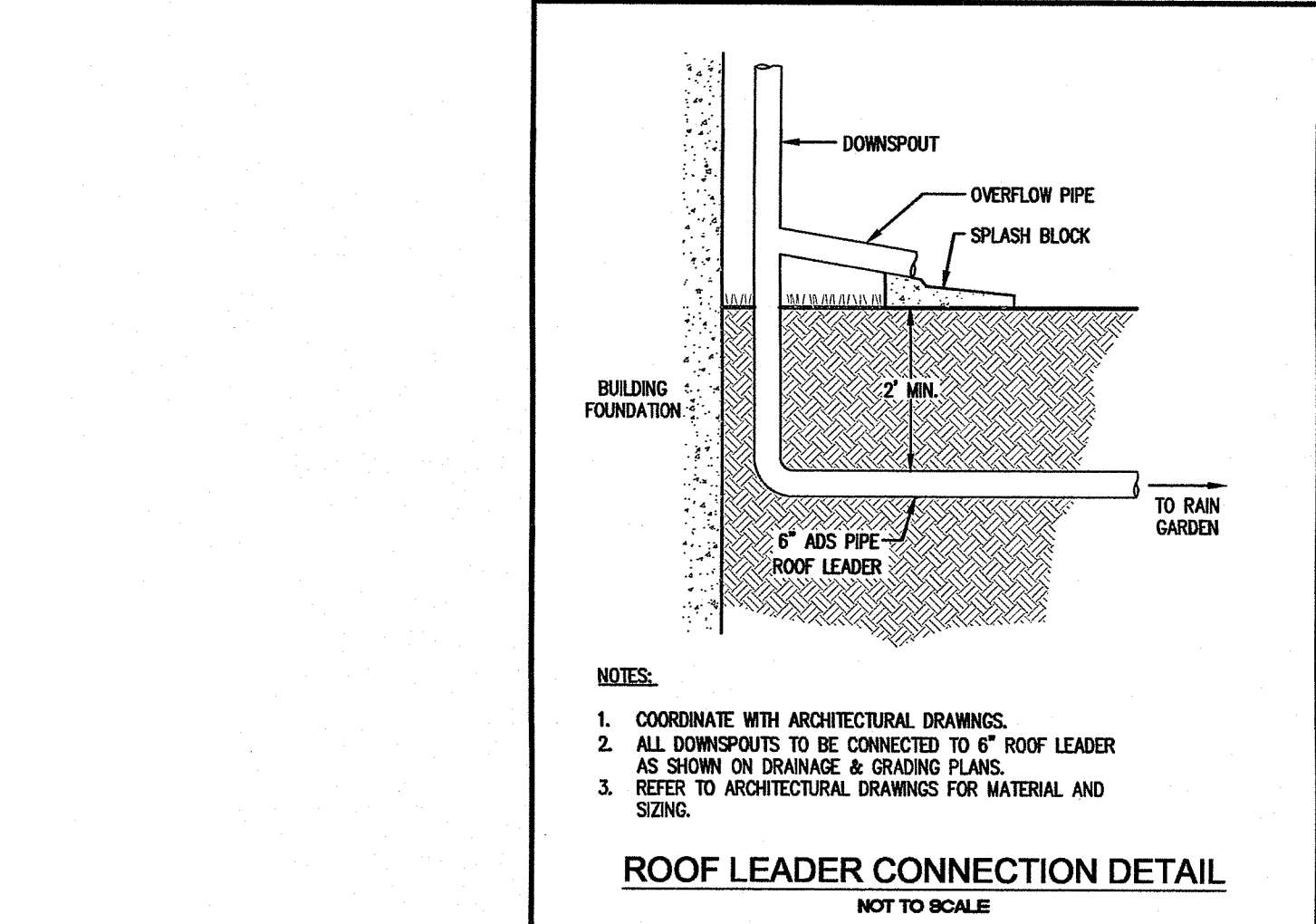
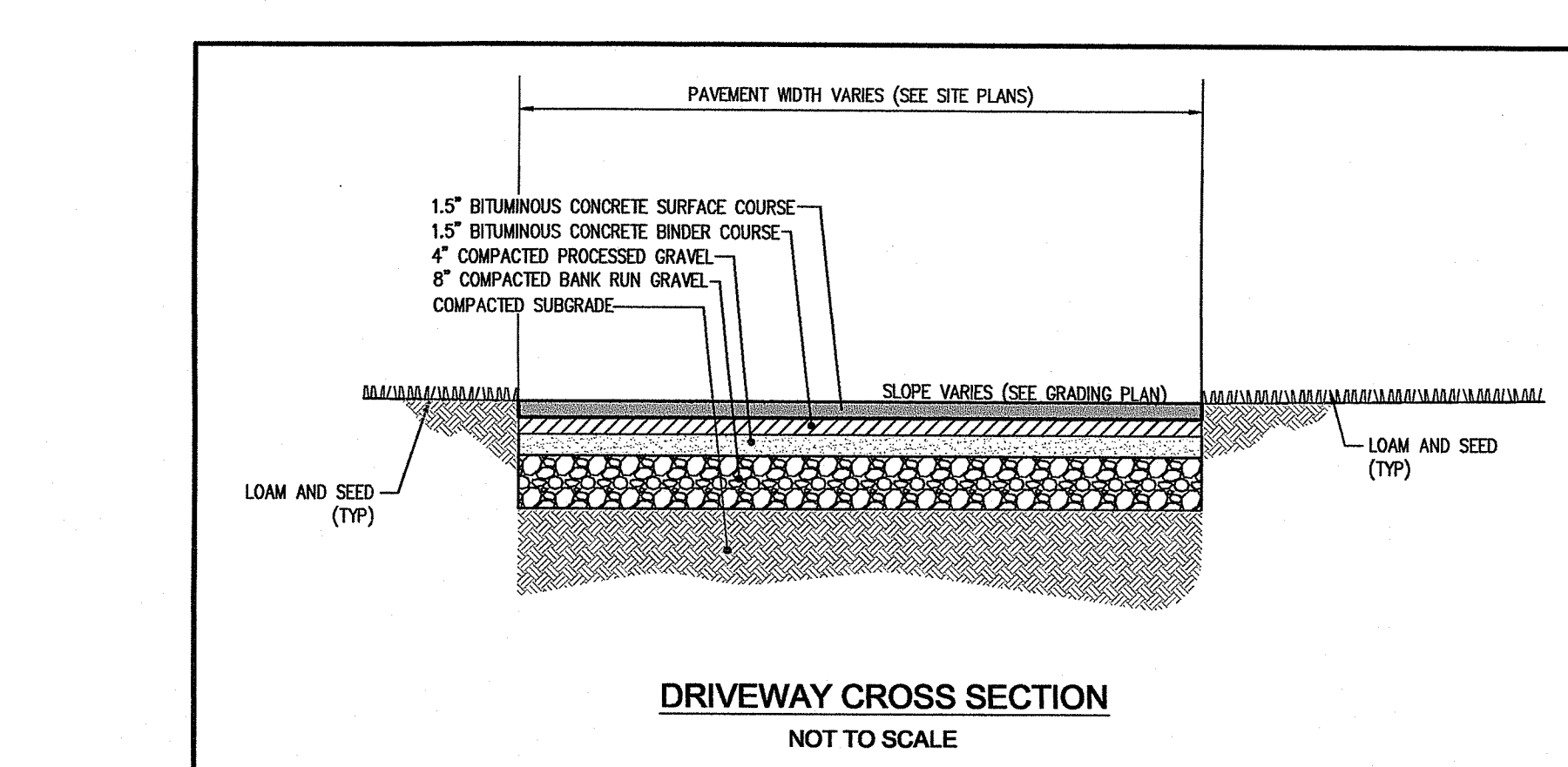
NOTE TO THE ENGINEER: WHEN THIS DETAIL IS TO BE INCORPORATED INTO CONTRACT DOCUMENTS, PLEASE REFERENCE SECTION 4-2, "RECOMMENDATIONS FOR INCORPORATION INTO CONTRACT DOCUMENTS" OF ASTM SPECIFICATION D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY-FLOW APPLICATIONS" SO THAT APPROPRIATE MODIFICATIONS CAN BE MADE TO ACCOMMODATE SITE SPECIFIC NEEDS.

NOMINAL Ø	MIN. RECOMMENDED TRENCH WIDTH
4 (100)	21 (530)
6 (150)	23 (580)
8 (200)	25 (630)
10 (250)	28 (710)
12 (300)	31 (790)
15 (375)	34 (860)
18 (450)	39 (990)
24 (600)	48 (1220)
30 (750)	65 (1650)
36 (900)	78 (1980)
42 (1050)	83 (2110)
48 (1200)	88 (2240)
60 (1500)	102 (2590)

MINIMUM COVER: MINIMUM RECOMMENDED DEPTHS OF COVER FOR VARIOUS LIVE LOADING CONDITIONS ARE SUMMARIZED IN THE FOLLOWING TABLE. UNLESS OTHERWISE NOTED, ALL DIMENSIONS ARE TAKEN FROM THE TOP OF PIPE TO THE GROUND SURFACE.

SURFACE LIVE LOADING CONDITION	MINIMUM RECOMMENDED COVER, in. (mm) *
H25 (FLEXIBLE PAVEMENT)	12 (300), 24 (600) FOR 60" (1500) PIPE
H25 (RIGID PAVEMENT)	12 (300), 24 (600) FOR 60" (1500) PIPE
E80 (RAILWAY)	24 (600)
HEAVY CONSTRUCTION	48 (1200)

*TOP OF PIPE TO BOTTOM OF BITUMINOUS PAVEMENT SECTION



**ROOF LEADER CONNECTION DETAIL
NOT TO SCALE**

RI Environmental Management
MAR 2 3 2023
Office of Water Resources

JEFFREY C. HANSON
No. 5236
3/21/23
PROFESSIONAL ENGINEER

ILLSTONE ENGINEERING, P.C.
CIVIL ENGINEERING • LAND PLANNING
780 Aquidneck Avenue, Building B
Middletown, Rhode Island 02842
www.IllstoneEng.com
t. (401) 921-3303
f. (401) 921-3344

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

APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL
DATED: APR 07 2023 FILE #: 22-0411
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Nancy L. Freeman

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

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

NOTES AND DETAILS-2

PARADISE PARK

A.P. 120, LOT 46
265 PROSPECT AVENUE
MIDDLETOWN, RHODE ISLAND

PREPARED FOR:
KARMIK, LLC

SCALE AS NOTED
JUNE 2022

Drawn By: MBV/JSC
Checked By: BJC
Sheet

10
of 10

FILE NO.: 22.467.703

RHODE ISLAND DEPARTMENT OF TRANSPORTATION
TRANSVERSE PAVEMENT CUT AND MATCH
JUNE 15, 1998
R.I. STANDARD 47.1