PROPOSED SITE PLAN
9 BOWLEY ROAD
EAST KINGSTON, N.H.
TAX MAP 11, BLK 2, LOT 11

CIVIL ENGINEERS:

BA BEALS ASSOCIATES, PLLC

70 PORTSMOUTH AVE,
THIRD FLOOR, SUITE 2
STRATHAM, N.H. 03885
PHONE: 603-583-4860,
FAX. 603-583-4863

STATE OF NEW HAMPSHIRE
CHRISTIAN O. SMITH
No. 9900
PROFESSIONAL ENGINEER

LAND SURVEYOR:

DOUCET SURVEY LLC

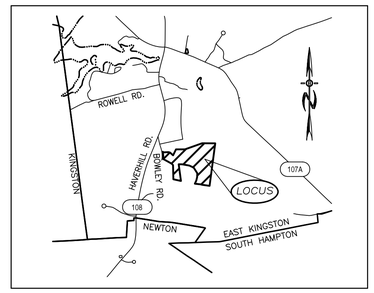
Serving Your Professional Surveying & Mapping Needs
102 Kent Place, Newmarket, NH 03857 (603) 659-6560
Offices in Bedford & Keene, NH and Kennebunk, ME
http://www.doucetsurvey.com

WETLAND CONSULTANT:

SEEKAMP ENVIRONMENTAL CONSULTING, INC.
129 ROUTE 125
KINGSTON, NH 03848
TEL. 603-642-8300

SOIL CONSULTANT:

MARC JACOBS
609 PORTSMOUTH AVENUE
GREENLAND, NH 03840
TEL. 603-686-5097



LOCATION MAP

PLAN SET LEGEND

5/8" REBAR	
DRILL HOLE	
CONC. BOUND	
UTILITY POLE	
PINES, ETC.	
MAPLES, ETC.	
SINGLE POST SIGN	
TEST PIT W/NO.	
OVERHEAD ELEC. LINE	OHE
DRAINAGE LINE	
STONE WALL	
TREE LINE	
ABUT. PROPERTY LINES	
EXIST. PROPERTY LINES	
BUILDING SETBACK LINES	
EXIST. CONTOUR	100
PROP. CONTOUR	
SOIL LINES	
SILT FENCING	

PLAN INDEX	SHEET #
TITLE SHEET	
RECORDED BOUNDARY PLAN BY OTHERS	
EXISTING CONDITIONS PLAN (DOUCET SURVEY)	1
OVERALL SITE PLAN	2
SITE, GRADING & DRAINAGE PLANS	3-4
CONSTRUCTION DETAILS	5
EROSION & SEDIMENTATION CONTROL DETAILS	6

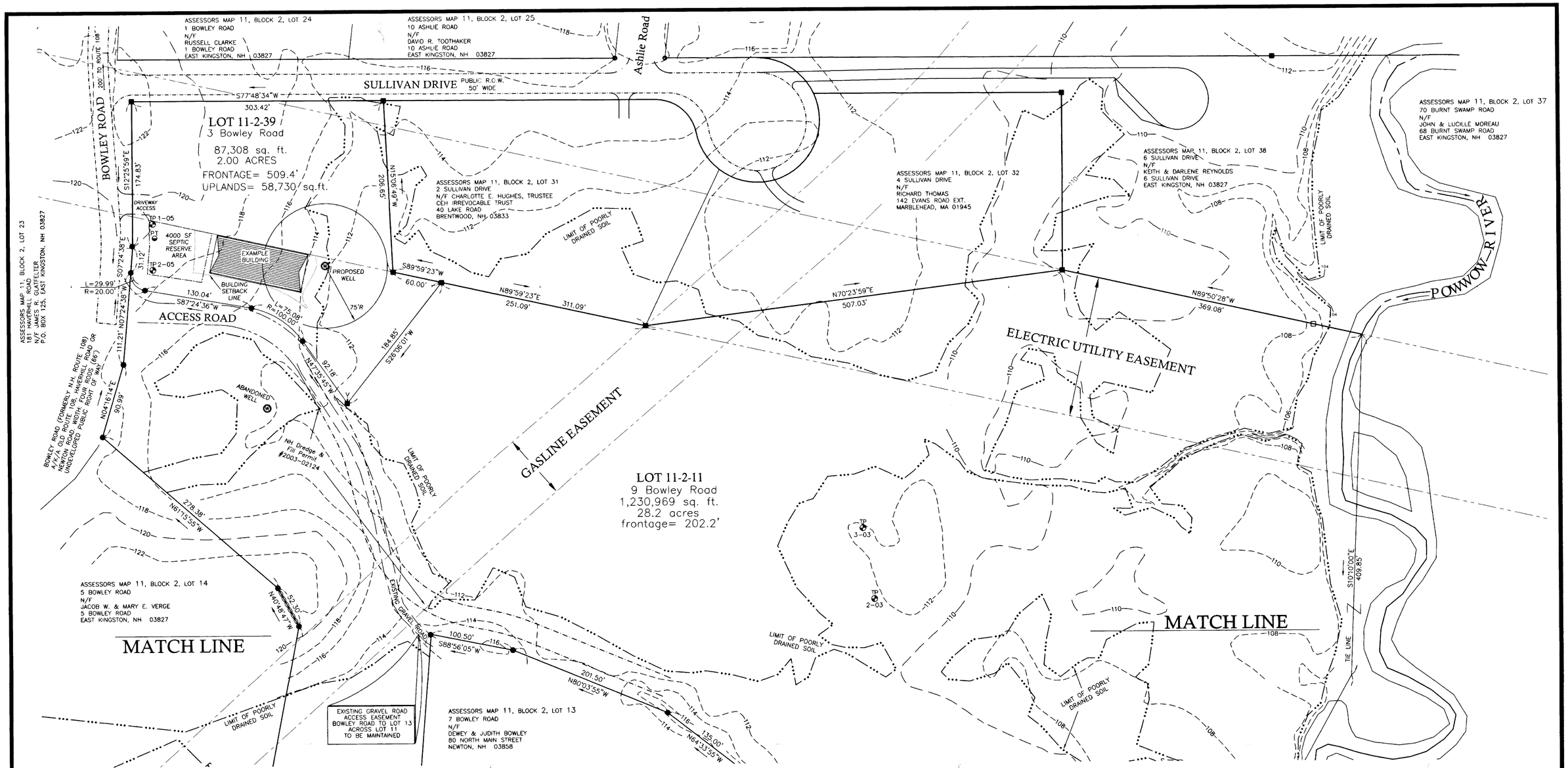
OWNER/APPLICANT:

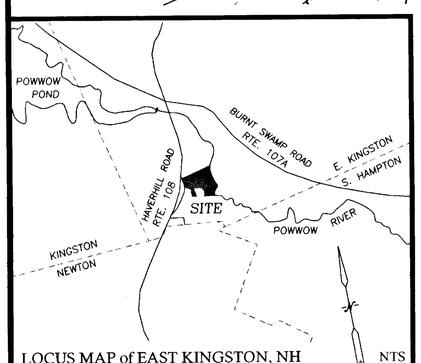
PETER BROWN
MIDNIGHT LEASING, LLC
1 JUPITER LANE
NEWTON, NH 03858

PLANNING BOARD APPROVAL BLOCK

REVISIONS:	DATE:
PER REVIEW ENGINEER COMMENTS	9-11-2023

2005 NOV -1 AM 11:33 080727





LOCUS MAP of EAST KINGSTON, NH NTS

LEGEND

- PROPERTY LINES
- EDGE OF PAVEMENT
- PROPOSED COMMERCIAL DRIVE
- APPROVED COMMERCIAL DRIVE
- WETLANDS BOUNDARY
- CONCRETE BOUND
- IRON ROD
- WELL
- WETLANDS

GRAPHIC SCALE

60 0 30 60 120 240

(IN FEET)
1 inch = 60 ft.

APPROVED BY TOWN OF EAST KINGSTON PLANNING BOARD

CHAIRMAN — DATE

A WAIVER FROM SECTION X, B.2. OF THE SUBDIVISION REGULATIONS WAS GRANTED BY THE PLANNING BOARD ON FEBRUARY 17, 2005.

I HEREBY CERTIFY THAT THIS SURVEY AND PLAT IS THE RESULT OF AN ACTUAL FIELD SURVEY. ERROR OF CLOSURE OBTAINED IS LESS THAN 1 PART IN 15,000.

STATE OF NEW HAMPSHIRE — NO. 818 — KEVIN L. CAMM — LICENSED LAND SURVEYOR — SIGNATURE — 10.19.05

KEVIN L. CAMM, L.L.S. #818 — DATE

GENERAL NOTES:

1. THE INTENT OF THIS PLAN IS TO SUBDIVIDE LOT 11-2-11 INTO TWO BUILDING LOTS. ONE 2 Ac.± COMMERCIAL LOT, AND ONE 28 Ac.± INDUSTRIAL DEVELOPMENT LOT. REFERENCE PREVIOUS SUBDIVISION APPROVAL SA2003004118.

2. THIS PLAN IS SHEET ONE OF TWO THAT ARE SUBMITTED FOR THIS SUBDIVISION AND BOTH SHEETS SHALL BE RECORDED IN THE ROCKINGHAM COUNTY REGISTRY OF DEEDS AND ON FILE WITH THE TOWN OF EAST KINGSTON PLANNING BOARD.

3. LAND IS DESCRIBED BY DEED OF FRANKLIN PARK, LLC AND IS RECORDED AT THE ROCKINGHAM COUNTY REGISTRY OF DEEDS (R.C.R.D.), BRENTWOOD, N.H. IN BOOK 4183 PAGE 2261 ON OCT. 21, 2003

4. NO PORTION OF THE PARCEL IS LOCATED IN THE FLOOD HAZARD AREA. AS SHOWN ON THE EAST KINGSTON FLOOD HAZARDS MAP PREPARED BY THE SOUTHEASTERN REGIONAL PLANNING COMMISSION IN 1982 FROM SOURCE: FEDERAL INSURANCE ADMIN. FLOOD HAZARD BOUNDARY MAPS.

5. WETLAND MAPPING IN OCTOBER 1997 ACCORDING TO THE METHODOLOGY OF THE CORPS OF ENGINEERS WETLANDS DELINEATION MANUAL (TECHNICAL REPORT Y-87-1 JAN. 1987). WAS PERFORMED BY JAMES LONG,CPSS, CSS OF NEW HAMPSHIRE SOIL CONSULTANTS INC., 202 KENT PLACE, NEWMARKET, NH 03857.
WETLAND FLAGS SURVEY LOCATED BY C.C.M.I., OCT. 1997.
WETLAND FLAGS RESET BY DENNIS QUINTAL, PE, CWS OF C.C.M.I., SPRING OF 2000

ASSESSORS MAP : MAP 11, BLOCK 2, LOT 11
PARCEL AREA : 1,318,199 SF (30.26 AC)
CURRENT OWNER : FRANKLIN PARK, LLC
73 BURNT SWAMP ROAD
EAST KINGSTON, NH 03827

ZONING : INDUSTRIAL
MIN LOT SIZE : 60,000 SF
FRONTAGE : 150 FEET
LOT WIDTH : 125 feet
SETBACKS :
FRONT – 75 feet from Street
SIDE – 30 feet
REAR – 30 feet

STATE SUBDIVISION # SA2005005909

STATE OF NEW HAMPSHIRE — DENNIS G. QUINTAL — No. 107 — CERTIFIED WETLAND SCIENTIST — 10-18-05

THE STATE OF NEW HAMPSHIRE — DENNIS G. QUINTAL — No. 8401 — LICENSED PROFESSIONAL ENGINEER — 10-18-05

SUBDIVISION PLAN OF LAND

TAX MAP 11, BLOCK 2, LOT 11

SITUATED IN THE TOWN OF

East Kingston, NH

Bowley Road & Sullivan Drive

APPLICANT: Franklin Park, LLC
73 Burnt Swamp Road
East Kingston, NH 03827

DESIGN BY:
Civil Construction Management Inc.
8 Merrimac Road, Box 475
Newton, NH 03858
Tel (603) 382-7650

DES. BY: J.D.Duval, Tech CHK BY: D.Quintal, P.E.
DRWN. BY: J.D.Duval, Tech DATE: January 2005

Sheet: 1

JOB # 05002

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D-33201 Sheet 1 of 2

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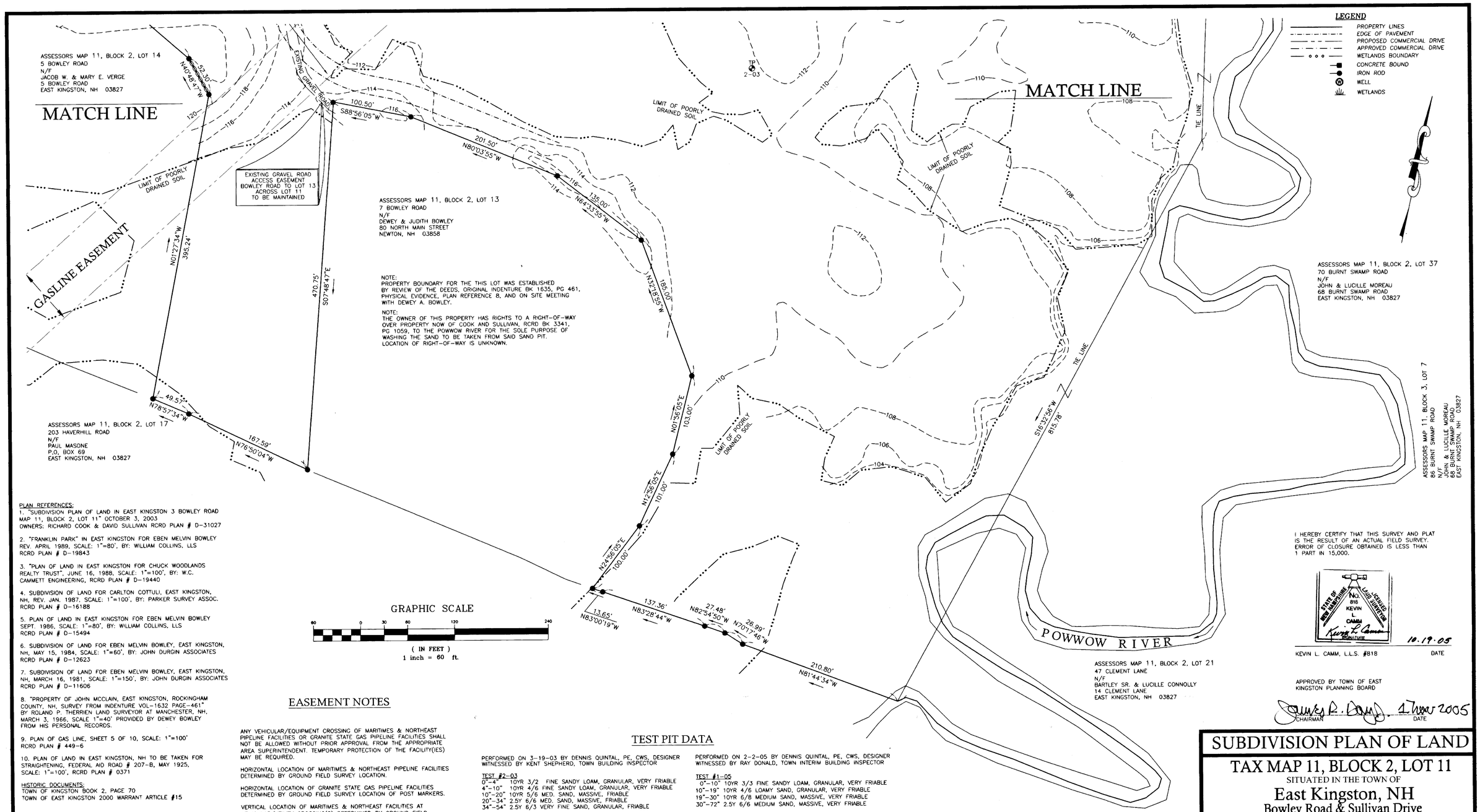

PLAN REFERENCES:

1. "SUBDIVISION PLAN OF LAND IN EAST KINGSTON 3 BOWLEY ROAD MAP 11, BLOCK 2, LOT 11" OCTOBER 3, 2003 OWNERS: RICHARD COOK & DAVID SULLIVAN RCRD PLAN # D-31027
2. "FRANKLIN PARK" IN EAST KINGSTON FOR EBEN MELVIN BOWLEY REV. APRIL 1989, SCALE: 1"=80', BY: WILLIAM COLLINS, LLS RCRD PLAN # D-19843
3. "PLAN OF LAND IN EAST KINGSTON FOR CHUCK WOODLANDS REALTY TRUST", JUNE 16, 1988, SCALE: 1"=100', BY: W.C. CAMMETT ENGINEERING, RCRD PLAN # D-19440
4. SUBDIVISION OF LAND FOR CARLTON COTTULI, EAST KINGSTON, NH, REV. JAN. 1987, SCALE: 1"=100', BY: PARKER SURVEY ASSOC. RCRD PLAN # D-16188
5. PLAN OF LAND IN EAST KINGSTON FOR EBEN MELVIN BOWLEY SEPT. 1986, SCALE: 1"=80', BY: WILLIAM COLLINS, LLS RCRD PLAN # D-15494
6. SUBDIVISION OF LAND FOR EBEN MELVIN BOWLEY, EAST KINGSTON, NH, MAY 15, 1984, SCALE: 1"=60', BY: JOHN DURGIN ASSOCIATES RCRD PLAN # D-12623
7. SUBDIVISION OF LAND FOR EBEN MELVIN BOWLEY, EAST KINGSTON, NH, MARCH 16, 1981, SCALE: 1"=150', BY: JOHN DURGIN ASSOCIATES RCRD PLAN # D-11606
8. "PROPERTY OF JOHN MCCLAIN, EAST KINGSTON, ROCKINGHAM COUNTY, NH, SURVEY FROM INDENTURE VOL-1632 PAGE-461" BY ROLAND P. THERRIEN LAND SURVEYOR AT MANCHESTER, NH, MARCH 3, 1966, SCALE 1"=40' PROVIDED BY DEWEY BOWLEY FROM HIS PERSONAL RECORDS.
9. PLAN OF GAS LINE, SHEET 5 OF 10, SCALE: 1"=100' RCRD PLAN # 449-6
10. PLAN OF LAND IN EAST KINGSTON, NH TO BE TAKEN FOR STRAIGHTENING, FEDERAL AID ROAD # 207-B, MAY 1925, SCALE: 1"=100', RCRD PLAN # 0371

HISTORIC DOCUMENTS:
TOWN OF KINGSTON BOOK 2, PAGE 70
TOWN OF EAST KINGSTON 2000 WARRANT ARTICLE #15

DEED REFERENCES:

RCRD BOOK 4183,	PAGE	2261
RCRD BOOK 3349,	PAGE	1059
RCRD BOOK 3295,	PAGE	65
RCRD BOOK 2870,	PAGE	1149
RCRD BOOK 2800,	PAGE	1290
RCRD BOOK 2668,	PAGE	2446
RCRD BOOK 2267,	PAGE	582
RCRD BOOK 1826,	PAGE	403
RCRD BOOK 1426,	PAGE	65
RCRD BOOK 1369,	PAGE	352
RCRD BOOK 837,	PAGE	296
RCRD BOOK 743,	PAGE	85
RCRD BOOK 692,	PAGE	408

EASEMENT NOTES

ANY VEHICULAR/EQUIPMENT CROSSING OF MARITIMES & NORTHEAST PIPELINE FACILITIES OR GRANITE STATE GAS PIPELINE FACILITIES SHALL NOT BE ALLOWED WITHOUT PRIOR APPROVAL FROM THE APPROPRIATE AREA SUPERINTENDENT. TEMPORARY PROTECTION OF THE FACILITY(IES) MAY BE REQUIRED.

HORIZONTAL LOCATION OF MARITIMES & NORTHEAST PIPELINE FACILITIES DETERMINED BY GROUND FIELD SURVEY LOCATION.

HORIZONTAL LOCATION OF GRANITE STATE GAS PIPELINE FACILITIES DETERMINED BY GROUND FIELD SURVEY LOCATION OF POST MARKERS.

VERTICAL LOCATION OF MARITIMES & NORTHEAST FACILITIES AT VEHICULAR/UTILITY CROSSING(S) DETERMINED BY GROUND FIELD SURVEY LOCATION.

VERTICAL LOCATION OF GRANITE STATE GAS FACILITIES AT VEHICULAR/UTILITY CROSSING(S) DETERMINED BY GROUND FIELD SURVEY LOCATION.

NO ACTIVITY WHATSOEVER MAY BE PERFORMED ON JOINT FACILITIES RIGHT-OF-WAY, OR NEAR JOINT FACILITIES FACILITIES, WITHOUT A M&N OPERATING COMPANY INSPECTOR ON THE SITE. M&N INSPECTORS MAY BE ARRANGED FOR BY CONTACTING MR. ROY TAYLOR, RICHMOND AREA SUPERINTENDENT, 1-207-737-8249, AT LEAST 72 HOURS IN ADVANCE OF THE WORK.

NO ACTIVITY WHATSOEVER MAY BE PERFORMED ON GRANITE STATE GAS RIGHT-OF-WAY, OR NEAR GRANITE STATE GAS FACILITIES, WITHOUT A GRANITE STATE GAS COMPANY INSPECTOR ON THE SITE. GRANITE STATE GAS INSPECTORS MAY BE ARRANGED FOR BY CONTACTING GRANITE STATE GAS TRANSMISSION, INC., 1-800-542-0967, AT LEAST 72 HOURS IN ADVANCE OF THE WORK.

TEST PIT DATA

PERFORMED ON 3-19-03 BY DENNIS QUINTAL, PE, CWS, DESIGNER WITNESSED BY KENT SHEPHERD, TOWN BUILDING INSPECTOR

TEST #2-03
0"-4" 10YR 3/2 FINE SANDY LOAM, GRANULAR, VERY FRIABLE
4"-10" 10YR 4/6 FINE SANDY LOAM, GRANULAR, VERY FRIABLE
10"-20" 10YR 5/6 MED. SAND, MASSIVE, FRIABLE
20"-34" 2.5Y 6/6 MED. SAND, MASSIVE, FRIABLE
34"-54" 2.5Y 6/3 VERY FINE SAND, GRANULAR, FRIABLE

ESHWT - 24" GROUNDWATER - 30"
NO REFUSAL PERC RATE: 2 MIN/INCH

TEST #3-03
0"-4" 10YR 3/2 FINE SANDY LOAM, GRANULAR, VERY FRIABLE
4"-12" 10YR 5/6 FINE SANDY LOAM, GRANULAR, VERY FRIABLE
12"-60" 2.5Y 6/6 MED. SAND, MASSIVE, FRIABLE

ESHWT - 26" GROUNDWATER - 36"
NO REFUSAL PERC RATE: 2 MIN/INCH

PERFORMED ON 2-2-05 BY DENNIS QUINTAL, PE, CWS, DESIGNER WITNESSED BY RAY DONALD, TOWN INTERIM BUILDING INSPECTOR

TEST #1-05
0"-10" 10YR 3/3 FINE SANDY LOAM, GRANULAR, VERY FRIABLE
10"-19" 10YR 4/6 LOAMY SAND, GRANULAR, VERY FRIABLE
19"-30" 10YR 6/8 MEDIUM SAND, MASSIVE, VERY FRIABLE
30"-72" 2.5Y 6/6 MEDIUM SAND, MASSIVE, VERY FRIABLE

ESHWT: 44" GROUNDWATER: 64"
NO REFUSAL PERC RATE: 2 MIN/INCH

TEST #2-05
0"- 6" 10YR 3/3 FINE SANDY LOAM, GRANULAR, VERY FRIABLE
6"-13" 10YR 4/6 LOAMY SAND, GRANULAR, VERY FRIABLE
13"-24" 10YR 6/6 MEDIUM SAND, MASSIVE, VERY FRIABLE
24"-66" 2.5Y 6/6 MEDIUM SAND, MASSIVE, VERY FRIABLE

ESHWT: 24" GROUNDWATER: 52"
NO REFUSAL PERC RATE: 2 MIN/INCH

NEW HAMPSHIRE Designer of Subsurface Disposal Systems
Dennis G. Quintal No. 840
Department of Environmental Services

STATE OF NEW HAMPSHIRE DENNIS G QUINTAL CERTIFIED WETLAND SCIENTIST No. 107
10-18-05

STATE OF NEW HAMPSHIRE DENNIS G QUINTAL No. 8401 LICENSED PROFESSIONAL ENGINEER
10-18-05

I HEREBY CERTIFY THAT THIS SURVEY AND PLAT IS THE RESULT OF AN ACTUAL FIELD SURVEY. ERROR OF CLOSURE OBTAINED IS LESS THAN 1 PART IN 15,000.

STATE OF NEW HAMPSHIRE No. 818 KEVIN L. CAMM LICENSED LAND SURVEYOR
SIGNATURE
10.19.05
KEVIN L. CAMM, L.L.S. #818 DATE

APPROVED BY TOWN OF EAST KINGSTON PLANNING BOARD
CHAIRMAN DATE 17 Nov 2005

SUBDIVISION PLAN OF LAND

TAX MAP 11, BLOCK 2, LOT 11

SITUATED IN THE TOWN OF
East Kingston, NH
Bowley Road & Sullivan Drive

APPLICANT: Franklin Park, LLC
73 Burnt Swamp Road
East Kingston, NH 03827

DESIGN BY:
Civil Construction Management Inc.
8 Merrimac Road, Box 475
Newton, NH 03858
Tel (603) 382-7650

DES. BY: J.O.Duval, Tech CHK BY: D.Quintal, P.E.
DRWN. BY: J.O.Duval, Tech DATE: January 2005

Sheet: 2

JOB # 05002

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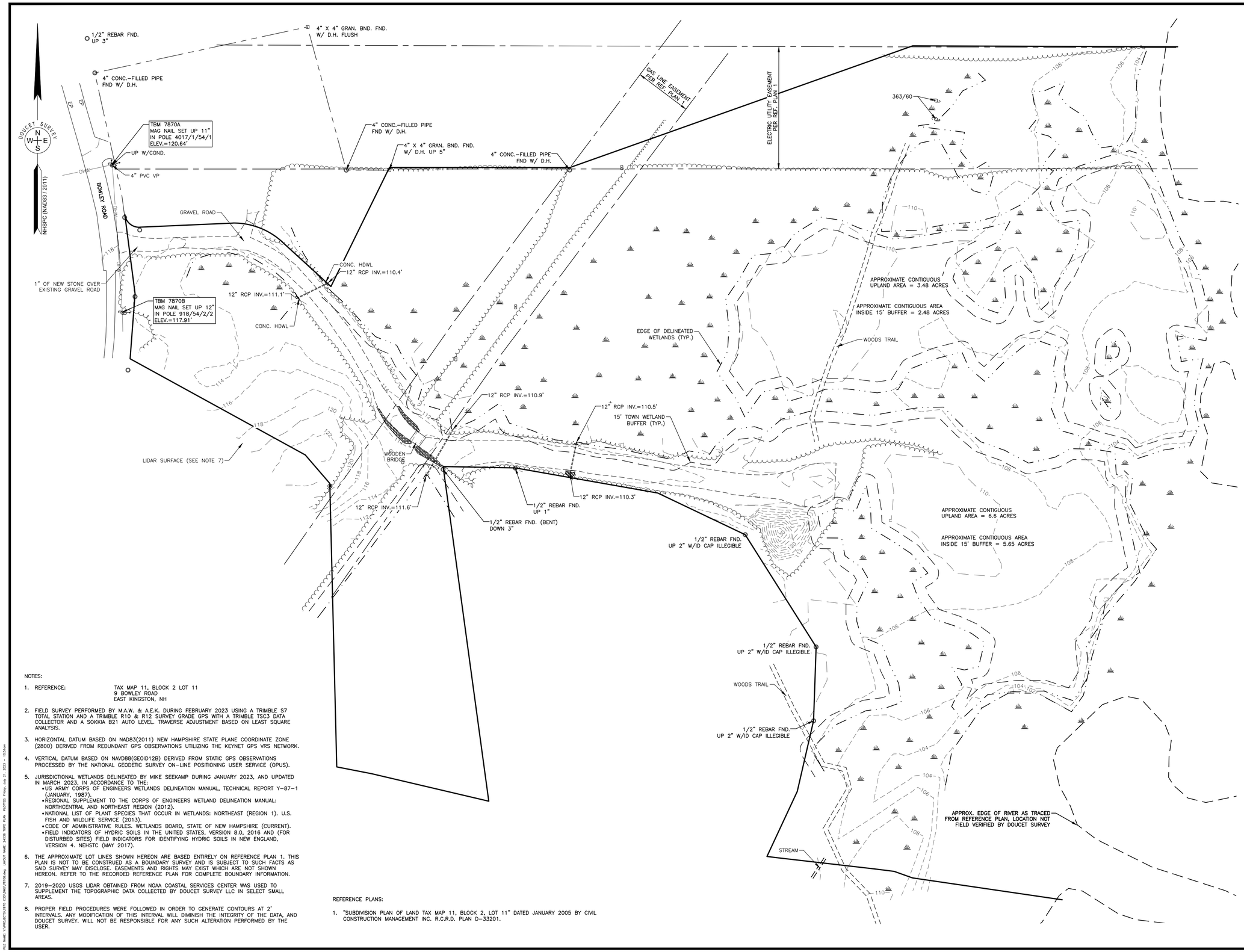
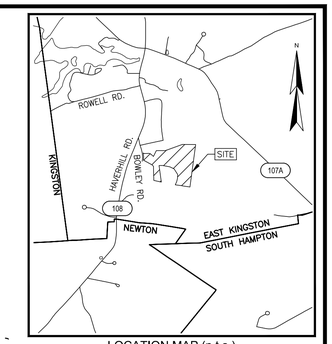
D-33201 sheet 2 of 2





LOCATION MAP (n.t.s.)

LEGEND

- APPROXIMATE LOT LINE (SEE NOTE 6)
- APPROXIMATE ABUTTERS LOT LINE
- EXISTING EASEMENT LINE
- 100 MAJOR CONTOUR LINE
- 98 MINOR CONTOUR LINE
- OHW OVERHEAD WIRE
- CULVERT
- TREE LINE
- SHRUB LINE
- EDGE OF DELINEATED WETLAND
- EDGE OF WATER
- WETLAND AREA
- CRUSHED STONE
- BOUND FOUND (BND. FND.)
- DRILL HOLE FOUND (D.H.F.)
- PIPE/ROD FOUND
- UTILITY POLE
- UTILITY POLE & GUY WIRE
- VENT PIPE
- GAS LINE MARKER POST

BND. FND.	BOUND FOUND
CONC.	CONCRETE
COND.	CONDUIT
D.H.	DRILL HOLE
I.P.F.	IRON PIPE FOUND
HDWL	HEADWALL
RCP	REINFORCED CONCRETE PIPE
PVC	POLYVINYL CHLORIDE PIPE
VP	VERTICAL PIPE
TYP.	TYPICAL

60 0 60 120

SCALE: 1 INCH = 60 FT.

NOTES:

1. REFERENCE: TAX MAP 11, BLOCK 2 LOT 11
   9 BOWLEY ROAD
   EAST KINGSTON, NH
2. FIELD SURVEY PERFORMED BY M.A.W. & A.E.K. DURING FEBRUARY 2023 USING A TRIMBLE S7 TOTAL STATION AND A TRIMBLE R10 & R12 SURVEY GRADE GPS WITH A TRIMBLE TSC3 DATA COLLECTOR AND A SOKKIA B21 AUTO LEVEL. TRAVERSE ADJUSTMENT BASED ON LEAST SQUARE ANALYSIS.
3. HORIZONTAL DATUM BASED ON NAD83(2011) NEW HAMPSHIRE STATE PLANE COORDINATE ZONE (2800) DERIVED FROM REDUNDANT GPS OBSERVATIONS UTILIZING THE KEYNET GPS VRS NETWORK.
4. VERTICAL DATUM BASED ON NAVD88(GEOID12B) DERIVED FROM STATIC GPS OBSERVATIONS PROCESSED BY THE NATIONAL GEODETIC SURVEY ON-LINE POSITIONING USER SERVICE (OPUS).
5. JURISDICTIONAL WETLANDS DELINEATED BY MIKE SEEKAMP DURING JANUARY 2023, AND UPDATED IN MARCH 2023, IN ACCORDANCE TO THE:
   - US ARMY CORPS OF ENGINEERS WETLANDS DELINEATION MANUAL, TECHNICAL REPORT Y-87-1 (JANUARY, 1987).
   - REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTHCENTRAL AND NORTHEAST REGION (2012).
   - NATIONAL LIST OF PLANT SPECIES THAT OCCUR IN WETLANDS: NORTHEAST (REGION 1). U.S. FISH AND WILDLIFE SERVICE (2013).
   - CODE OF ADMINISTRATIVE RULES. WETLANDS BOARD, STATE OF NEW HAMPSHIRE (CURRENT).
   - FIELD INDICATORS OF HYDRIC SOILS IN THE UNITED STATES, VERSION 8.0, 2016 AND (FOR DISTURBED SITES) FIELD INDICATORS FOR IDENTIFYING HYDRIC SOILS IN NEW ENGLAND, VERSION 4. NEHSTC (MAY 2017).
6. THE APPROXIMATE LOT LINES SHOWN HEREON ARE BASED ENTIRELY ON REFERENCE PLAN 1. THIS PLAN IS NOT TO BE CONSTRUED AS A BOUNDARY SURVEY AND IS SUBJECT TO SUCH FACTS AS SAID SURVEY MAY DISCLOSE. EASEMENTS AND RIGHTS MAY EXIST WHICH ARE NOT SHOWN HEREON. REFER TO THE RECORDED REFERENCE PLAN FOR COMPLETE BOUNDARY INFORMATION.
7. 2019-2020 USGS LIDAR OBTAINED FROM NOAA COASTAL SERVICES CENTER WAS USED TO SUPPLEMENT THE TOPOGRAPHIC DATA COLLECTED BY DOUCET SURVEY LLC IN SELECT SMALL AREAS.
8. PROPER FIELD PROCEDURES WERE FOLLOWED IN ORDER TO GENERATE CONTOURS AT 2' INTERVALS. ANY MODIFICATION OF THIS INTERVAL WILL DIMINISH THE INTEGRITY OF THE DATA, AND DOUCET SURVEY. WILL NOT BE RESPONSIBLE FOR ANY SUCH ALTERATION PERFORMED BY THE USER.

REFERENCE PLANS:

1. "SUBDIVISION PLAN OF LAND TAX MAP 11, BLOCK 2, LOT 11" DATED JANUARY 2005 BY CIVIL CONSTRUCTION MANAGEMENT INC. R.C.R.D. PLAN D-33201.

TOPOGRAPHIC PLAN
FOR
PETER BROWN
OF
TAX MAP 11, BLOCK 2, LOT 11
9 BOWLEY ROAD
EAST KINGSTON, NEW HAMPSHIRE

NO.	DATE	DESCRIPTION	BY
4	7/19/23	EDIT CONTOURS	J.F.K.
3	7/11/23	UPDATE ACCESS ROAD	A.K.H.
2	5/15/23	ADD NEW WET FLAGS LINES M & N	J.F.K.
1	4/3/23	ADD NEW WET FLAGS, REVISE AREAS	J.F.K.

DRAWN BY:	E.D.P.	DATE:	FEBRUARY 2023
CHECKED BY:	J.F.K.	DRAWING NO.	7870A
JOB NO.	7870	SHEET 1 OF	1

DOUCET SURVEY LLC
Serving Your Professional Surveying & Mapping Needs
102 Kent Place, Newmarket, NH 03857 (603) 659-6560
Offices in Bedford & Keene, NH and Kennebunk, ME
http://www.doucetsurvey.com

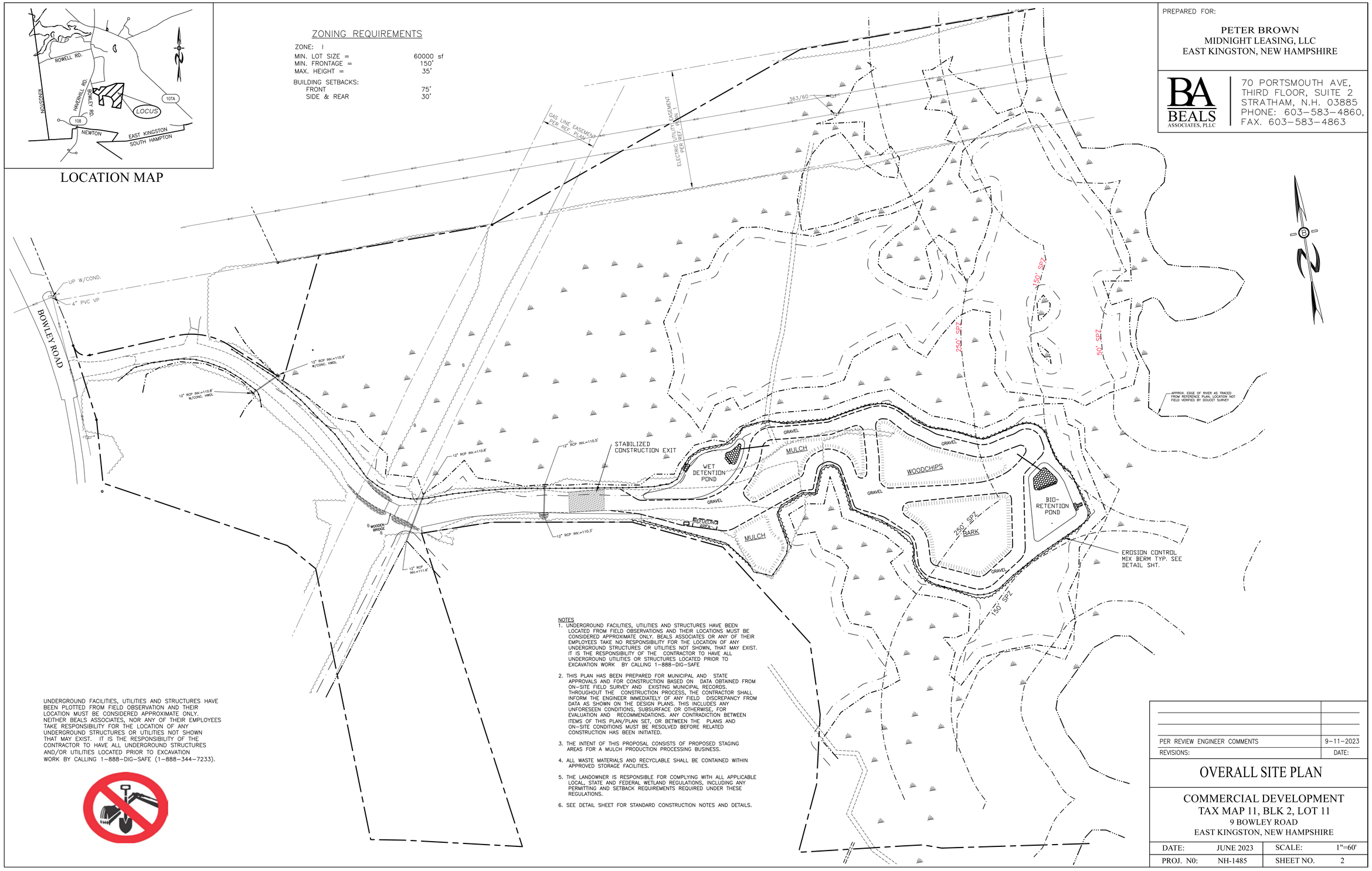
ELI MAIE Y:\PROJECTS\7870 120\DWG\7870B.dwg LAYOUT NAME: 24X36 SOUS PLAN PLOTTED: Friday, July 21, 2023 - 10:51am

LOCATION MAP

ZONING REQUIREMENTS

ZONE: I

MIN. LOT SIZE =	60000 sf
MIN. FRONTAGE =	150'
MAX. HEIGHT =	35'
BUILDING SETBACKS:	
FRONT	75'
SIDE & REAR	30'



UNDERGROUND FACILITIES, UTILITIES AND STRUCTURES HAVE BEEN PLOTTED FROM FIELD OBSERVATION AND THEIR LOCATION MUST BE CONSIDERED APPROXIMATE ONLY. NEITHER BEALS ASSOCIATES, NOR ANY OF THEIR EMPLOYEES TAKE RESPONSIBILITY FOR THE LOCATION OF ANY UNDERGROUND STRUCTURES OR UTILITIES NOT SHOWN THAT MAY EXIST. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE ALL UNDERGROUND STRUCTURES AND/OR UTILITIES LOCATED PRIOR TO EXCAVATION WORK BY CALLING 1-888-DIG-SAFE (1-888-344-7233).

NOTES

1. UNDERGROUND FACILITIES, UTILITIES AND STRUCTURES HAVE BEEN LOCATED FROM FIELD OBSERVATIONS AND THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. BEALS ASSOCIATES OR ANY OF THEIR EMPLOYEES TAKE NO RESPONSIBILITY FOR THE LOCATION OF ANY UNDERGROUND STRUCTURES OR UTILITIES NOT SHOWN, THAT MAY EXIST. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE ALL UNDERGROUND UTILITIES OR STRUCTURES LOCATED PRIOR TO EXCAVATION WORK BY CALLING 1-888-DIG-SAFE
2. THIS PLAN HAS BEEN PREPARED FOR MUNICIPAL AND STATE APPROVALS AND FOR CONSTRUCTION BASED ON DATA OBTAINED FROM ON-SITE FIELD SURVEY AND EXISTING MUNICIPAL RECORDS. THROUGHOUT THE CONSTRUCTION PROCESS, THE CONTRACTOR SHALL INFORM THE ENGINEER IMMEDIATELY OF ANY FIELD DISCREPANCY FROM DATA AS SHOWN ON THE DESIGN PLANS. THIS INCLUDES ANY UNFORESEEN CONDITIONS, SUBSURFACE OR OTHERWISE, FOR EVALUATION AND RECOMMENDATIONS. ANY CONTRADICTION BETWEEN ITEMS OF THIS PLAN/PLAN SET, OR BETWEEN THE PLANS AND ON-SITE CONDITIONS MUST BE RESOLVED BEFORE RELATED CONSTRUCTION HAS BEEN INITIATED.
3. THE INTENT OF THIS PROPOSAL CONSISTS OF PROPOSED STAGING AREAS FOR A MULCH PRODUCTION PROCESSING BUSINESS.
4. ALL WASTE MATERIALS AND RECYCLABLE SHALL BE CONTAINED WITHIN APPROVED STORAGE FACILITIES.
5. THE LANDOWNER IS RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL WETLAND REGULATIONS, INCLUDING ANY PERMITTING AND SETBACK REQUIREMENTS REQUIRED UNDER THESE REGULATIONS.
6. SEE DETAIL SHEET FOR STANDARD CONSTRUCTION NOTES AND DETAILS.

PREPARED FOR:

PETER BROWN
MIDNIGHT LEASING, LLC
EAST KINGSTON, NEW HAMPSHIRE

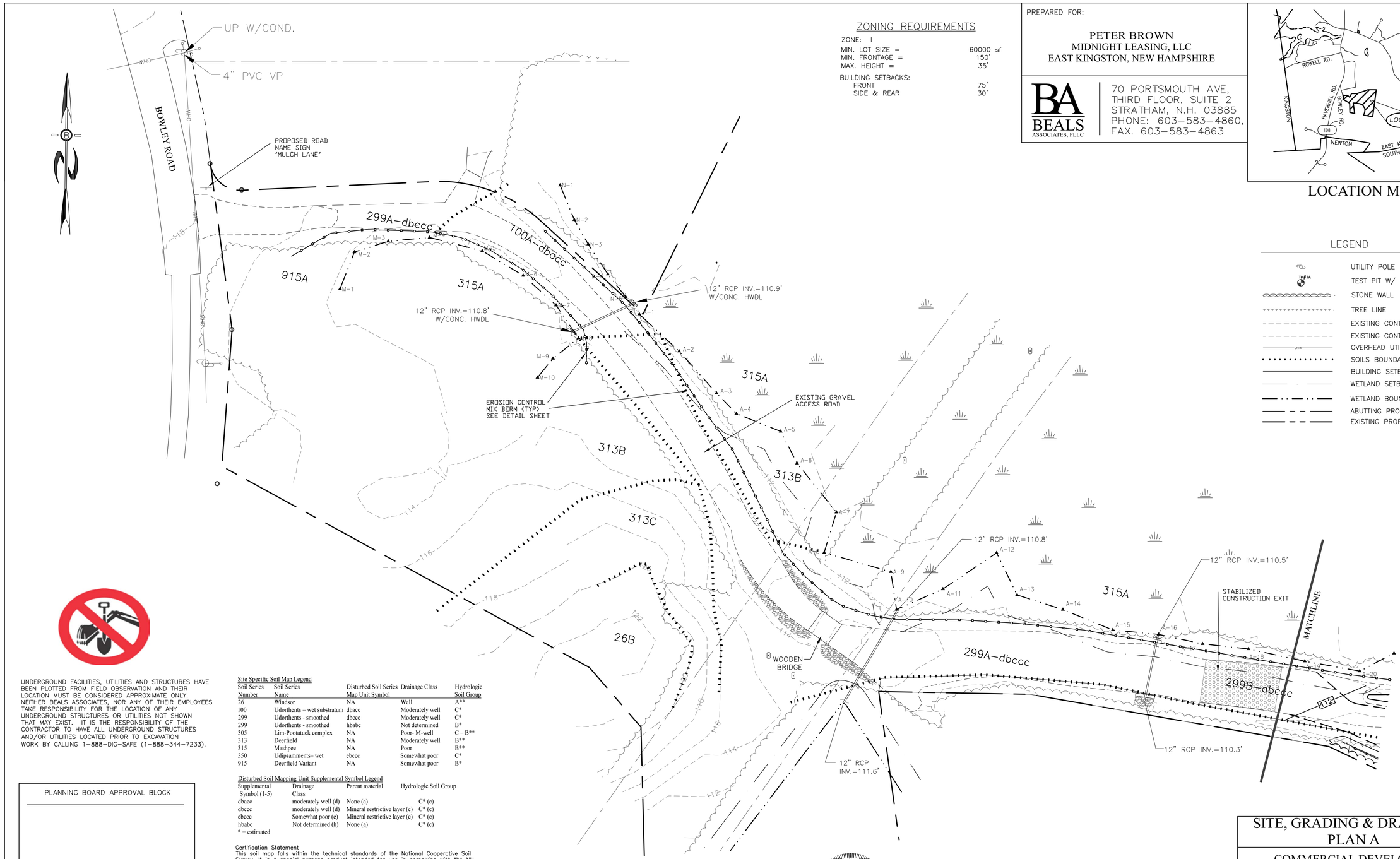
BA BEALS ASSOCIATES, PLLC
70 PORTSMOUTH AVE,
THIRD FLOOR, SUITE 2
STRATHAM, N.H. 03885
PHONE: 603-583-4860,
FAX. 603-583-4863

REVISIONS:	DATE:
PER REVIEW ENGINEER COMMENTS	9-11-2023

OVERALL SITE PLAN

COMMERCIAL DEVELOPMENT
TAX MAP 11, BLK 2, LOT 11
9 BOWLEY ROAD
EAST KINGSTON, NEW HAMPSHIRE

DATE:	JUNE 2023	SCALE:	1"=60'
PROJ. N0:	NH-1485	SHEET NO.	2



ZONING REQUIREMENTS

ZONE: I

MIN. LOT SIZE =	60000 sf
MIN. FRONTAGE =	150'
MAX. HEIGHT =	35'
BUILDING SETBACKS:	
FRONT	75'
SIDE & REAR	30'

PREPARED FOR:

PETER BROWN
MIDNIGHT LEASING, LLC
EAST KINGSTON, NEW HAMPSHIRE

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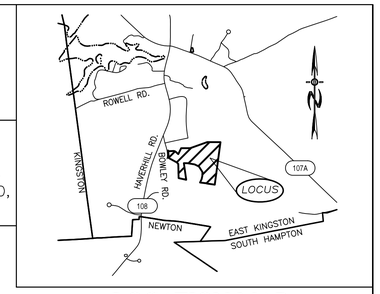


LOCATION MAP

LEGEND

- UTILITY POLE
- TEST PIT W/ NO.
- STONE WALL
- TREE LINE
- EXISTING CONTOUR – 10'
- EXISTING CONTOUR – 2'
- OVERHEAD UTILITIES
- SOILS BOUNDARY LINE
- BUILDING SETBACK LINE
- WETLAND SETBACK LINE
- WETLAND BOUNDARY
- ABUTTING PROPERTY LINE
- EXISTING PROPERTY LINE

UNDERGROUND FACILITIES, UTILITIES AND STRUCTURES HAVE BEEN PLOTTED FROM FIELD OBSERVATION AND THEIR LOCATION MUST BE CONSIDERED APPROXIMATE ONLY. NEITHER BEALS ASSOCIATES, NOR ANY OF THEIR EMPLOYEES TAKE RESPONSIBILITY FOR THE LOCATION OF ANY UNDERGROUND STRUCTURES OR UTILITIES NOT SHOWN THAT MAY EXIST. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE ALL UNDERGROUND STRUCTURES AND/OR UTILITIES LOCATED PRIOR TO EXCAVATION WORK BY CALLING 1-888-DIG-SAFE (1-888-344-7233).

PLANNING BOARD APPROVAL BLOCK

Site Specific Soil Map Legend

Soil Series Number	Soil Series Name	Disturbed Soil Series Map Unit Symbol	Drainage Class	Hydrologic Soil Group
26	Windsor	NA	Well	A**
100	Udorthents – wet substratum	dbacc	Moderately well	C*
299	Udorthents - smoothed	dbccc	Moderately well	C*
299	Udorthents - smoothed	hbabc	Not determined	B*
305	Lim-Pootatuck complex	NA	Poor- M-well	C – B**
313	Deerfield	NA	Moderately well	B**
315	Mashpee	NA	Poor	B**
350	Udipsamments- wet	ebccc	Somewhat poor	C*
915	Deerfield Variant	NA	Somewhat poor	B*

Disturbed Soil Mapping Unit Supplemental Symbol Legend

Supplemental Symbol (1-5)	Drainage Class	Parent material	Hydrologic Soil Group
dbacc	moderately well (d)	None (a)	C* (c)
dbccc	moderately well (d)	Mineral restrictive layer (c)	C* (c)
ebccc	Somewhat poor (e)	Mineral restrictive layer (c)	C* (c)
hbabc	Not determined (h)	None (a)	C* (c)

* = estimated

Certification Statement
This soil map falls within the technical standards of the National Cooperative Soil Survey. It is a special purpose product intended for use in complying with the NH Alteration of Terrain (AoT) Regulations (Env-Wq 1500). It was produced by Marc Jacobs, Certified Soil Scientist #038, based upon field investigations conducted in March and April 2023 and is not a product of the USDA Natural Resources Conservation Service. The site-specific soil survey was conducted according to Site-Specific Soil Mapping Standards for New Hampshire and Vermont, Special Publication No. 3, Version 7.0, dated July 2021 as published, maintained and amended by the Society of Soil Scientists of Northern New England (SSSNNE). Copies of the soil survey map that have been reviewed by the scientist(s) are individually stamped, signed and dated. There is a report that accompanies this map.

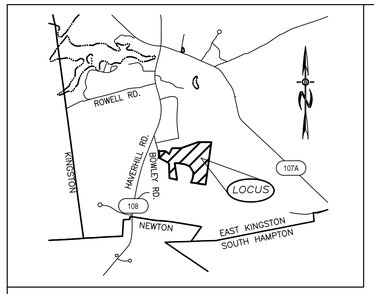
STATE OF NEW HAMPSHIRE
CHRISTIAN O. SMITH
No.9900
LICENSED
PROFESSIONAL ENGINEER

PER REVIEW ENGINEER COMMENTS	9-11-2023
REVISIONS:	DATE:

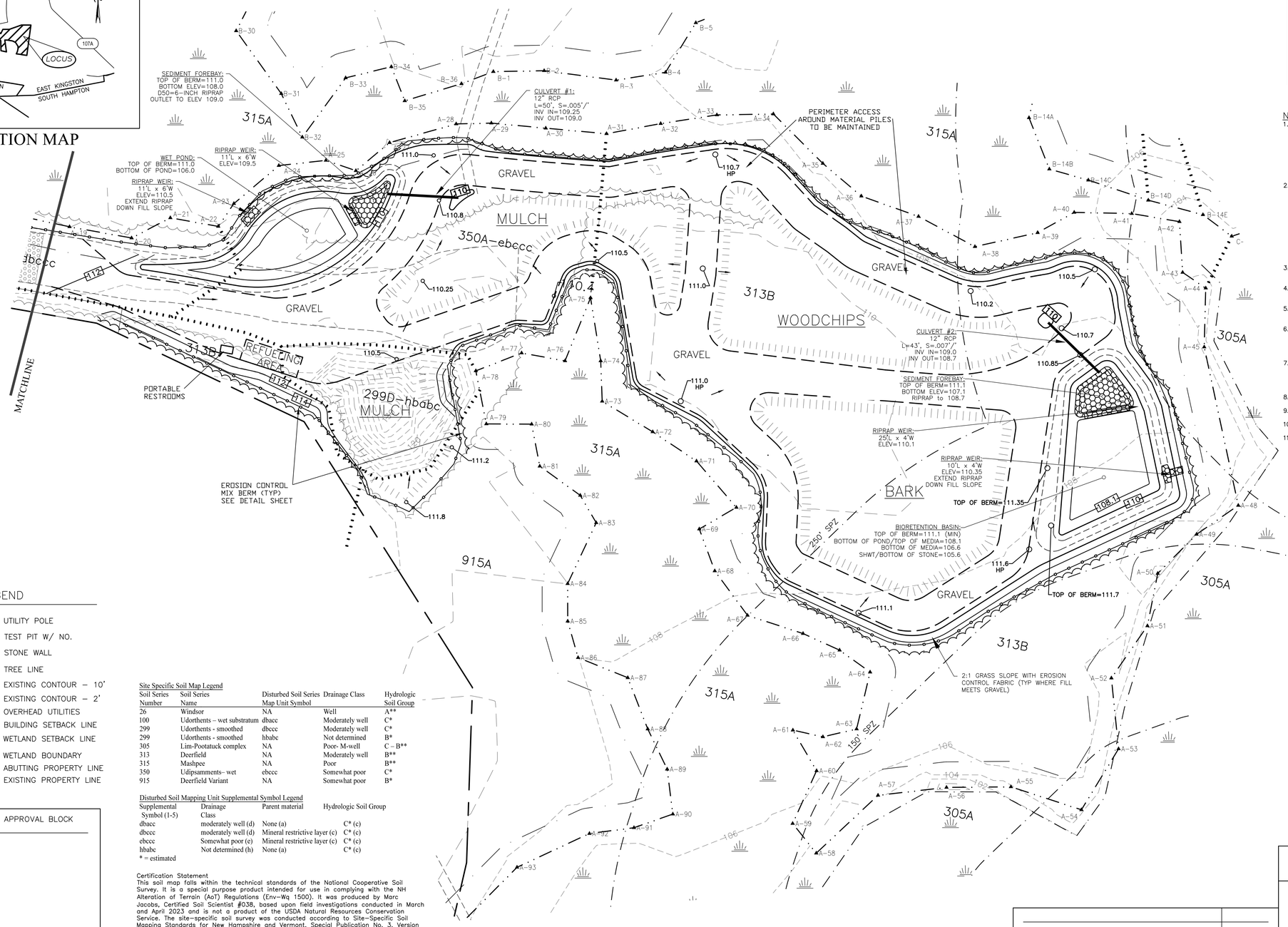
SITE, GRADING & DRAINAGE PLAN A

COMMERCIAL DEVELOPMENT
TAX MAP 11, BLK 2, LOT 11
9 BOWLEY ROAD
EAST KINGSTON, NEW HAMPSHIRE

DATE:	JUNE 2023	SCALE:	1"=30'
PROJ. NO:	NH-1485	SHEET NO.	3



LOCATION MAP



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PREPARED FOR:

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NOTES

1. UNDERGROUND FACILITIES, UTILITIES AND STRUCTURES HAVE BEEN LOCATED FROM FIELD OBSERVATIONS AND THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. BEALS ASSOCIATES OR ANY OF THEIR EMPLOYEES TAKE NO RESPONSIBILITY FOR THE LOCATION OF ANY UNDERGROUND STRUCTURES OR UTILITIES NOT SHOWN, THAT MAY EXIST. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE ALL UNDERGROUND UTILITIES OR STRUCTURES LOCATED PRIOR TO EXCAVATION WORK BY CALLING 1–888–DIG–SAFE
2. THIS PLAN HAS BEEN PREPARED FOR MUNICIPAL AND STATE APPROVALS AND FOR CONSTRUCTION BASED ON DATA OBTAINED FROM ON–SITE FIELD SURVEY AND EXISTING MUNICIPAL RECORDS. THROUGHOUT THE CONSTRUCTION PROCESS, THE CONTRACTOR SHALL INFORM THE ENGINEER IMMEDIATELY OF ANY FIELD DISCREPANCY FROM DATA AS SHOWN ON THE DESIGN PLANS. THIS INCLUDES ANY UNFORESEEN CONDITIONS, SUBSURFACE OR OTHERWISE, FOR EVALUATION AND RECOMMENDATIONS. ANY CONTRADICTION BETWEEN ITEMS OF THIS PLAN/PLAN SET, OR BETWEEN THE PLANS AND ON–SITE CONDITIONS MUST BE RESOLVED BEFORE RELATED CONSTRUCTION HAS BEEN INITIATED.
3. ALL BENCHMARKS AND TOPOGRAPHY SHOULD BE FIELD VERIFIED BY THE CONTRACTOR.
4. ALL ROAD AND DRAINAGE WORK TO CONFORM TO TOWN STANDARD SPECIFICATIONS FOR CONSTRUCTION.
5. ALL PROPOSED SIGNS SHALL CONFORM TO THE TOWN ZONING REGULATIONS.
6. IF, DURING CONSTRUCTION, IT BECOMES APPARENT THAT DEFICIENCIES EXIST IN THE APPROVED DESIGN DRAWINGS, THE CONTRACTOR SHALL BE REQUIRED TO CORRECT THE DEFICIENCIES TO MEET THE REQUIREMENTS OF THE REGULATIONS AT NO EXPENSE TO THE TOWN
7. THE LANDOWNER IS RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL WETLAND REGULATIONS, INCLUDING ANY PERMITTING AND SETBACK REQUIREMENTS REQUIRED UNDER THESE REGULATIONS.
8. SEE DETAIL SHEET FOR STANDARD CONSTRUCTION NOTES AND DETAILS.
9. ALTERATION OF TERRIAN PERMIT RSA 485:A–17 IS NOT REQUIRED.
10. THIS SITE IS PARTIALLY LOCATED IN THE 100 YEAR FLOOD ZONE.
11. REQUIRED EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY DISTURBANCE OF THE SITE AND SHALL BE MAINTAINED THROUGH THE COMPLETION OF ALL CONSTRUCTION ACTIVITIES. IF, DURING CONSTRUCTION, IT BECOMES APPARENT THAT ADDITIONAL EROSION CONTROL MEASURES ARE REQUIRED TO STOP ANY EROSION ON THE CONSTRUCTION SITE DUE TO ACTUAL SITE CONDITIONS, THE OWNER SHALL BE REQUIRED TO INSTALL THE NECESSARY EROSION PROTECTION AT NO EXPENSE TO THE TOWN.

STATE OF NEW HAMPSHIRE
CHRISTIAN O. SMITH
No.9900
PROFESSIONAL ENGINEER

REVISIONS:	DATE:
PER REVIEW ENGINEER COMMENTS	9–11–2023

SITE, GRADING & DRAINAGE PLAN B

COMMERCIAL DEVELOPMENT
TAX MAP 11, BLK 2, LOT 11
9 BOWLEY ROAD
EAST KINGSTON, NEW HAMPSHIRE

DATE:	JUNE 2023	SCALE:	1"=30'
PROJ. NO:	NH-1485	SHEET NO.	4

SEEDING GUIDE

USE	SEEDING MIXTURE 1/	DROUGHTY	WELL DRAINED	MODERATELY WELL DRAINED	POORLY DRAINED
STEEP CUTS AND FILLS, BORROW AND DISPOSAL AREAS	A	FAIR	GOOD	GOOD	FAIR
	B	POOR	GOOD	FAIR	FAIR
	C	POOR	GOOD	EXCELLENT	GOOD
	D	FAIR	FAIR	GOOD	EXCELLENT
	E	FAIR	EXCELLENT	EXCELLENT	POOR
WATERWAYS, EMERGENCY SPILLWAYS, AND OTHER CHANNELS WITH FLOWING WATER.	A	GOOD	GOOD	GOOD	FAIR
	C	GOOD	EXCELLENT	EXCELLENT	FAIR
	D	GOOD	EXCELLENT	EXCELLENT	FAIR
LIGHTLY USED PARKING LOTS, ODD AREAS, UNUSED LANDS, AND LOW INTENSITY USE RECREATION SITES.	A	GOOD	GOOD	GOOD	FAIR
	B	GOOD	GOOD	FAIR	POOR
	C	GOOD	EXCELLENT	EXCELLENT	FAIR
	D	FAIR	GOOD	GOOD	EXCELLENT
PLAY AREAS AND ATHLETIC FIELDS. (TOPSOIL IS ESSENTIAL FOR GOOD TURF.)	F	FAIR	EXCELLENT	EXCELLENT	2/
	G	FAIR	EXCELLENT	EXCELLENT	2/

GRAVEL PIT, SEE NH-PM-24 IN APPENDIX FOR RECOMMENDATION REGARDING RECLAMATION OF SAND AND GRAVEL PITS.

1/ REFER TO SEEDING MIXTURES AND RATES IN TABLE 7-36. (PREFERED MIX INDICATED WITH AN ASTERISK)
2/ POORLY DRAINED SOILS ARE NOT DESIRABLE FOR USE AS PLAYING AREA AND ATHLETIC FIELDS.

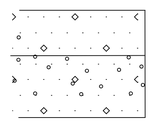
NOTE: TEMPORARY SEED MIX FOR STABILIZATION OF TURF SHALL BE WINTER RYE OR OATS AT A RATE OF 2.5 LBS. PER 1000 S.F. AND SHALL BE PLACED PRIOR TO OCT. 15, IF PERMANENT SEEDING NOT YET COMPLETE.

SEEDING RATES

MIXTURE	POUNDS PER ACRE	POUNDS PER 1,000 Sq. Ft.
A. TALL FESCUE	20	0.45
CREEPING RED FESCUE	20	0.45
RED TOP	2	0.05
TOTAL	42	0.95
B. TALL FESCUE	15	0.35
CREEPING RED FESCUE	10	0.25
CROWN VETCH	15	0.35
OR		
FLAT PEA	30	0.75
TOTAL	40 OR 55	0.95 OR 1.35
C. TALL FESCUE	20	0.45
CREEPING RED FESCUE	20	0.45
BIRDS FOOT TREFOIL	8	0.20
TOTAL	48	1.10
D. TALL FESCUE	20	0.45
FLAT PEA	30	0.75
TOTAL	50	1.20
E. CREEPING RED FESCUE 1/	50	1.15
KENTUCKY BLUEGRASS 1/	50	1.15
TOTAL	100	2.30
F. TALL FESCUE 1	150	3.60

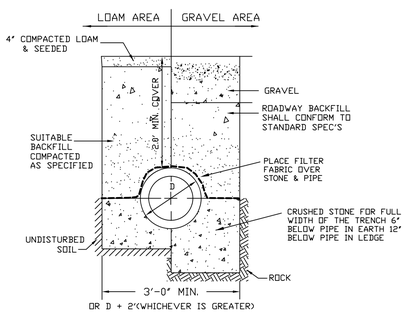
1/ FOR HEAVY USE ATHLETIC FIELDS CONSULT THE UNIVERSITY OF NEW HAMPSHIRE COOPERATIVE EXTENSION TURF SPECIALIST FOR CURRENT VARIETIES AND SEEDING RATES.

TABLE 7-36



NOTE: IN AREAS OF ROCK EXCAVATION, MINIMUM 9" BANK RUN GRAVEL SHALL BE PLACED

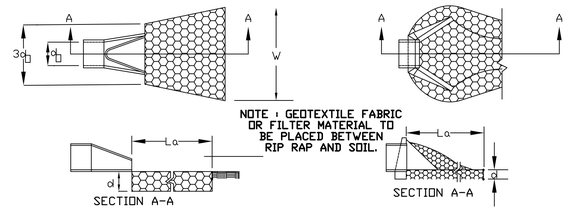
TYPICAL GRAVEL SECTION
NEW ASPHALT – NTS



NOTE:
1. PAVEMENT REPAIR IN EXISTING ROADWAYS SHALL CONFORM TO STREET OPENING REGULATIONS.
2. NEW ROADWAY CONSTRUCTION SHALL CONFORM TO SUBDIVISION SPEC'S.
BACKFILL MATERIALS SHALL BE SCREENED GRAVEL WITH NO STONES LARGER THAN 6".

TYPICAL DRAINAGE TRENCH DETAIL

GENERAL NOTES:
1. INSTALL ALL TEMPORARY EROSION CONTROL MEASURES (IN ACCORDANCE WITH Env-Wq 1500) PRIOR TO THE START OF ANY CONSTRUCTION OPERATION THAT MAY CAUSE ANY SEDIMENTATION OR SILTATION AT THE SITE.
2. INSTALL STORM DRAIN INLET PROTECTION TO PREVENT CLOGGING OF THE STORM SEWER AND SEDIMENT LOADS TO DOWNSTREAM STORM WATER FACILITIES OR WATERBODIES.
3. IF THE STORMWATER BMP IS BEING DESIGNED TO SERVE AS A TEMPORARY SEDIMENT BASIN, GRADE THE BMP TO WITHIN THREE (3) FEET OF FINAL GRADE TO PROTECT THE UNDERLYING MATERIAL FROM CLOGGING. ONCE CONSTRUCTION IN THE CONTRIBUTING DRAINAGE AREA HAS BEEN COMPLETED AND THE SITE IS STABILIZED, EXCAVATE THE BASIN TO FINAL GRADE AND COMPLETE CONSTRUCTION OF THE BMP.
4. GRADING OF THE BASIN SHALL BE ACCOMPLISHED USING LOW-IMPACT EARTH-MOVING EQUIPMENT TO PREVENT COMPACTION OF THE UNDERLYING SOILS. SMALL TRACKED DOZERS AND BOBCATS WITH RUNNER TRACKS ARE RECOMMENDED.
5. EXCAVATE THE BASIN TO THE SPECIFIED DEPTH (ELEVATION). IT IS RECOMMENDED THAT ALL SUB MATERIAL BELOW THE SPECIFIED ELEVATION SHALL BE LEFT UNDISTURBED, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
6. GRADE TO THE DEPTH (ELEVATION) SPECIFIED IN THE CONSTRUCTION DOCUMENTS UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
7. IN THE EVENT THAT SEDIMENT IS INTRODUCED INTO THE BMP DURING OR IMMEDIATELY FOLLOWING EXCAVATION, THIS MATERIAL WILL NEED TO BE REMOVED FROM THE BASIN PRIOR TO INITIATING THE NEXT STEP IN THE CONSTRUCTION PROCESS. SEDIMENT THAT HAS BEEN WASHED INTO THE BASIN DURING THE EXCAVATION PROCESS CAN SEAL THE PERMEABLE MATERIAL, SIGNIFICANTLY REDUCING THE INFILTRATION CAPACITY OF THE SOILS.
8. SEEDING AND INSTALLATION OF EROSION CONTROL BLANKET IF REQUIRED SHALL BE COMPLETED WITHIN 48 HOURS OF FINAL GRADING.
9. AREA SHALL BE STAKED OFF DURING CONSTRUCTION TO RESTRICT HEAVY EQUIPEMENT TRAFFIC FROM COMPACTING NATIVE SOILS.



PIPE OUTLET TO FLAT AREA WITH NO DEFINED CHANNEL

PIPE OUTLET TO WELL-DEFINED CHANNEL

CONSTRUCTION SPECIFICATIONS
1. THE SUB GRADE FOR THE FILTER MATERIAL, GEOTEXTILE FABRIC, AND RIP RAP SHALL BE PREPARED TO THE LINES AND GRADES SHOWN ON THE PLANS.
2. THE ROCK OR GRAVEL USED FOR FILTER OF RIP RAP SHALL CONFORM TO THE SPECIFIED GRADATION. 3. GEOTEXTILE FABRICS SHALL BE PROTECTED FROM PUNCTURE OR TEARING DURING THE PLACEMENT OF THE ROCK RIP RAP. DAMAGED AREAS IN THE FABRIC SHALL BE REPAIRED BY PLACING A PIECE OF FABRIC OVER THE DAMAGED AREA OR BY COMPLETE REPLACEMENT OF THE FABRIC. ALL OVERLAPS REQUIRED FOR REPAIRS OR JOINING TWO PIECES OF FABRIC SHALL BE A MINIMUM OF 12 INCHES.
4. STONE FOR THE RIP RAP MAY BE PLACED BY EQUIPMENT AND SHALL BE CONSTRUCTED TO THE FULL LAYER THICKNESS IN ONE OPERATION AND IN SUCH A MANNER AS TO PREVENT SEGREGATION OF THE STONE SIZES.
5. STONE FOR RIRAP SHALL BE ANGULAR OR SUBANGULAR. THE STONES SHOULD BE SHAPED SO THAT THE LEAST DIMENSION OF THE STONE FRAGMENT SHALL BE NOT LESS THAN ONE-THIRD OF THE GREATEST DIMENSION OF THE FRAGMENT.
6. FLAT ROCKS SHALL NOT USED FOR RIP RAP. VOIDS IN THE ROCK RIPRAP SHOULD BE FILLED WITH SPALLS AND SMALLER ROCKS.

MAINTENANCE
1. THE OUTLET PROTECTION SHOULD BE CHECKED AT LEAST ANNUALLY AND AFTER EVERY MAJOR STORM. IF THE RIP RAP HAS BEEN DISPLACED, UNDERMINED OR DAMAGED, IT SHOULD BE REPAIRED IMMEDIATELY. THE CHANNEL IMMEDIATELY BELOW THE OUTLET SHOULD BE CHECKED TO SEE THAT EROSION IS NOT OCCURRING. THE DOWNSTREAM CHANNEL SHOULD BE KEPT CLEAR OF OBSTRUCTIONS SUCH AS FALLEN TREES, DEBRIS, AND SEDIMENT THAT COULD CHANGE FLOW PATTERNS AND/OR TAILWATER DEPTHS ON THE PIPES. REPAIRS MUST BE CARRIED OUT IMMEDIATELY TO AVOID ADDITIONAL DAMAGE TO OUTLET PROTECTION.

PIPE OUTLET PROTECTION

PREPARED FOR:

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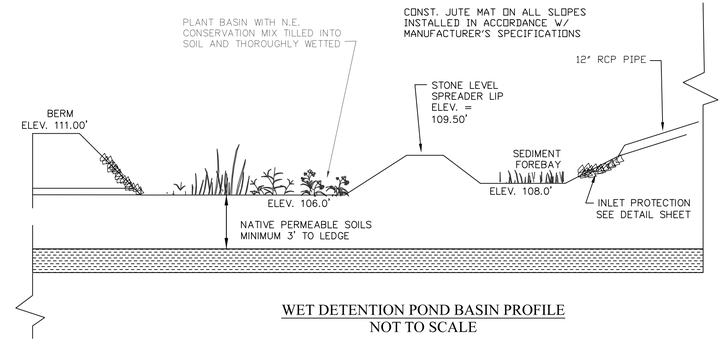
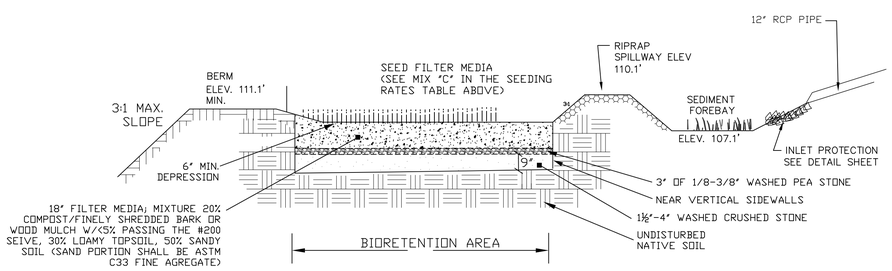
PIPE OUTLET PROTECTION

TABLE 7-24-RECOMMENDED RIP RAP GRADATION RANGES		
d50 SIZE= 0.25 FEET 3 INCHES		
% OF WEIGHT SMALLER THAN THE GIVEN d50 SIZE	SIZE OF STONE(INCHES) FROM	TO
100%	5	6
85%	4	5
50%	3	5
15%	1	2

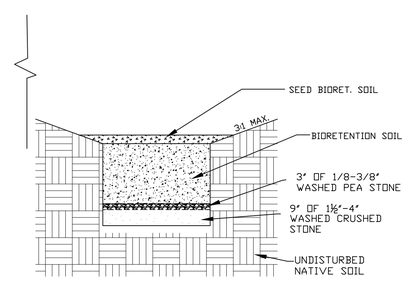


WET DETENTION POND BASIN PROFILE
NOT TO SCALE



NOTES:
1. SCARIFY SIDES AND BOTTOM OF BIORETENTION AREA TO FACILITATE NATURAL INFILTRATION RATES.
2. POND SURFACE TO BE FINISHED WITH 3" BARK MULCH OR 4" LOAM & SEED

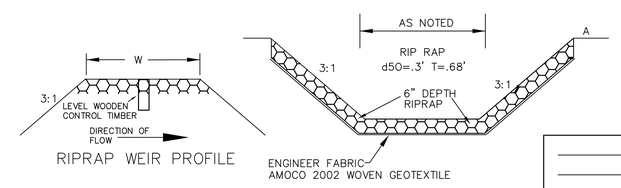
BIORETENTION POND PROFILE DETAIL
NOT TO SCALE



NOTE: UD PIPE TO BE ENVELOPED IN A MIN. OF 4" WASHED STONE AS SHOWN.

NOTES:
1. DO NOT TRAFFIC EXPOSED SOIL SURFACE WITH CONSTRUCTION EQUIPMENT. IF FEASIBLE, PERFORM EXCAVATION WITH EQUIPMENT POSITIONED OUTSIDE THE LIMITS OF THE INFILTRATION COMPONENTS OF THE SYSTEM.
2. DO NOT PLACE SYSTEM INTO SERVICE UNTIL THE BMP HAS BEEN PLANTED AND ITS CONTRIBUTING AREAS HAVE BEEN FULLY STABILIZED.
3. DO NOT DISCHARGE SEDIMENT-LADEN WATERS FROM CONSTRUCTION ACTIVITIES (RUNOF, WATER FROM EXCAVATIONS) TO THE BIO-RETENTION AREA DURING ANY STAGE OF CONSTRUCTION.

BIORETENTION SECTION
NOT TO SCALE



RIPRAP WEIR PROFILE

RIPRAP SPILLWAY DETAILS
WHERE SPECIFIED

Table 4-13. Gradation of Stone for Level Spreader Berm

Sieve Designation	Percent by Weight Passing Square Mesh Sieve
12-inch	100%
6-inch	84% - 100%
3-inch	68% - 83%
1-inch	42% - 55%
No. 4	8% - 12%

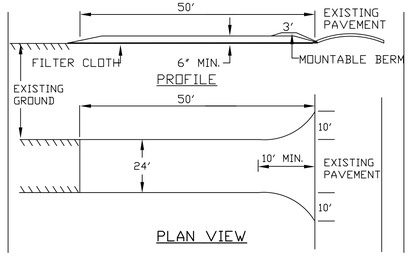
STATE OF NEW HAMPSHIRE
CHRISTIAN G. SMITH
No.9900
PROFESSIONAL ENGINEER

REVISIONS:	DATE:
PER REVIEW ENGINEER COMMENTS	9-11-2023

CONSTRUCTION DETAILS

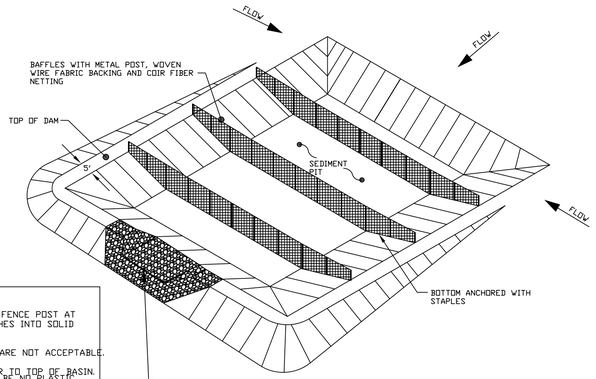
COMMERCIAL DEVELOPMENT
TAX MAP 11, BLK 2, LOT 11
9 BOWLEY ROAD
EAST KINGSTON, NEW HAMPSHIRE

DATE:	JULY 2023	SCALE:	NTS
PROJ. N0:	NH-1485	SHEET NO.	5



1. STONE FOR A STABILIZED CONSTRUCTION ENTRANCE SHALL BE 3 INCH STONE, RECLAIMED STONE, OR RECYCLED CONCRETE EQUIVALENT.
2. THE LENGTH OF THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 50 FEET, EXCEPT FOR A SINGLE RESIDENTIAL LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY.
3. THE THICKNESS OF THE STONE FOR THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 6 INCHES.
4. THE WIDTH OF THE ENTRANCE SHALL NOT BE LESS THAN THE FULL WIDTH OF THE ENTRANCE WHERE INGRESS OR EGRESS OCCURS OR 10 FEET, WHICH EVER IS GREATER. 5. GEOTEXTILE FILTER CLOTH SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING THE STONE. FILTER CLOTH IS NOT REQUIRED FOR A SINGLE FAMILY RESIDENCE LOT.
6. ALL SURFACE WATER THAT IS FLOWING TO OR DIVERTED TOWARD THE CONSTRUCTION ENTRANCE SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A BERM WITH 5:1 SLOPES THAT CAN BE CROSSED BY VEHICLES MAY BE SUBSTITUTED FOR THE PIPE.
7. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEAN OUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, WASHED, OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED PROMPTLY.

STABILIZED CONSTRUCTION ENTRANCE



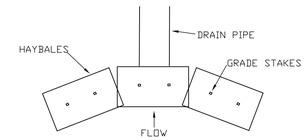
NOTES:

1. DRIVE STEEL FENCE POST AT LEAST 18 INCHES INTO SOLID GROUND.
2. WOOD POSTS ARE NOT ACCEPTABLE.
3. DIRECT WATER TO TOP OF BASIN.
4. THERE SHALL BE NO PLASTIC, MULTI-FILAMENT OR MONOFILAMENT POLYPROPYLENE NETTING OR MESH WITH AN OPENING SIZE GREATER THAN 1/8" MATERIAL UTILIZED.

TEMPORARY SEDIMENT BASIN

SPECIFICATIONS

SEDIMENT BARRIERS SHOULD BE INSTALLED PRIORTO ANY SOIL DISTURBANCE OF THE CONTRIBUTING DRAINAGE AREA ABOVE THEM.
BALES SHOULD BE PLACED IN A SINGLE ROW, LENGTHWISE ON THE CONTOUR, WITH ENDS OF ADJACENT BALES TIGHTLY ABUTTING ONE ANOTHER. THE ENDS OF THE BARRIER SHOULD BE FLARED UP SLOPE.
BARRIERS SHOULD NOT BE CONSTRUCTED MORE THAN ONE BALE HIGH.
ALL BALES SHOULD BE EITHER WIRE-BOUND OR STRING-TIED. BALES SHOULD BE INSTALLED SO THAT BINDINGS ARE ORIENTED AROUND THE SIDES, PARALLEL TO THE GROUND SURFACE TO PREVENT DETERIORATION OF THE BINDINGS.
THE BARRIER SHOULD BE ENTRENCHED AND BACKFILLED. A TRENCH SHOULD BE EXCAVATED THE WIDTH OF A BALE AND THE LENGTH OF THE PROPOSED BARRIER TO A MINIMUM DEPTH OF 4 INCHES.
AFTER THE BALES ARE STAKED AND CHINKED, THE EXCAVATED SOIL SHOULD BE BACKFILLED AGAINST THE BARRIER. BACKFILL SOIL SHOULD CONFORM TO THE GROUND LEVEL ON THE DOWNHILL SIDE AND SHOULD BE BUILT UP 4 INCHES AGAINST THE UPHILL SIDE OF THE BARRIER. IDEALLY, BALES SHOULD BE PLACED 10 FEET AWAY FROM THE TOE OF SLOPE.
AT LEAST TWO STAKES DRIVEN THROUGH THE BALE AND PENETRATING AT LEAST 18 INCHES INTO THE GROUND, SHOULD SECURELY ANCHOR EACH BALE.
THE FIRST STAKE IN EACH BALE SHOULD BE DRIVEN TOWARD THE PREVIOUSLY LAID BALE TO FORCE THE BALES TOGETHER. STAKES SHOULD BE DRIVEN DEEP ENOUGH INTO THE GROUND TO SECURELY ANCHOR THE BALES.
THE GAPS BETWEEN BALES SHOULD BE CHINKED (FILLED BY WEDGING) WITH HAY TO PREVENT WATER FROM ESCAPING BETWEEN THE BALES.
INSPECTION SHOULD BE FREQUENT AND REPAIR OR REPLACEMENT SHOULD BE MADE PROMPTLY AS NEEDED. BALE BARRIERS SHOULD BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS, BUT NOT BEFORE THE UPSLOPE AREAS HAVE BEEN PERMANENTLY STABILIZED.



PIPE INLET PROTECTION

PREPARED FOR:

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MIDNIGHT LEASING, LLC
EAST KINGSTON, NEW HAMPSHIRE

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STATE OF NEW HAMPSHIRE CHRISTIAN O. SMITH No.9900 PROFESSIONAL ENGINEER

TEMPORARY EROSION CONTROL MEASURES

1. THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION, BUT NO MORE THAN 5 ACRES OF LAND SHALL BE EXPOSED BEFORE DISTURBED AREAS ARE STABILIZED*. LIMIT EXPOSURE OF UNSTABILIZED SOIL TO 45-DAYS OR LESS.
   - PERIMETER CONTROLS MUST BE INSTALLED PRIOR TO EARTH MOVING OPERATIONS.
   - STORMWATER PONDS, INFILTRATION BASINS AND SWALES MUST BE INSTALLED BEFORE ROUGH GRADING THE SITE.
   - RUNOFF MUST BE DIRECTED TO TEMPORARY PRACTICES UNTIL STORMWATER BMPS ARE STABILIZED.
   - STORMWATER PONDS, INFILTRATION BASINS AND SWALES MUST BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.
   - EROSION CONTROL PRACTICES ARE TO BE INSPECTED WEEKLY AND AFTER 0.5, OF RAINFALL.
   - CUT AND FILL SLOPES MUST BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
   - ROADWAYS AND PARKING AREAS MUST BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
2. EROSION, SEDIMENT AND DETENTION MEASURES SHALL BE INSTALLED AS SHOWN ON THE PLANS AND AT LOCATIONS AS REQUIRED OR DIRECTED BY THE ENGINEER ALL DISTURBED AREAS SHALL BE RETURNED TO ORIGINAL GRADES AND ELEVATIONS.
3. DISTURBED AREAS SHALL BE LOAMED WITH A MINIMUM OF 4" OF LOAM AND SEEDED WITH NOT LESS THAN 1.10 POUNDS OF SEED PER 1000 SQUARE FEET OF AREA. (48 POUNDS PER ACRE) SEE SEED SPECIFICATIONS THIS SHEET.
4. SILT FENCES AND OTHER EROSION CONTROLS SHALL BE INSPECTED WEEKLY AND AFTER EVERY RAIN EVENT GREATER THAN 0.5" DURING THE LIFE OF THE PROJECT. ALL DAMAGED AREAS SHALL BE REPAIRED, SEDIMENT DEPOSITS SHALL PERIODICALLY BE REMOVED AND DISPOSED OF.
5. AFTER ALL DISTURBED AREAS HAVE BEEN STABILIZED, THE TEMPORARY EROSION CONTROL MEASURES ARE TO BE REMOVED AND THE AREA DISTURBED BY THE REMOVAL SMOOTHED AND RE-VEGETATED.
6. AREAS MUST BE SEEDED AND MULCHED WITHIN 3 DAYS OF FINAL GRADING, PERMANENTLY STABILIZED WITHIN 15 DAYS OF FINAL GRADING, OR TEMPORARILY STABILIZED WITHIN 30 DAYS OF INITIAL DISTURBANCE OF SOIL.

* AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
- IN AREAS TO BE PAVED, BASE COURSE GRAVELS MEETING THE REQUIREMENTS OF NHDOT STANDARD FOR ROAD AND BRIDGE CONSTRUCTION, 2016, ITEM 304.2 HAVE BEEN INSTALLED.
- A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED.
- A MINIMUM OF 3 INCHES OF NON-EROSIVE MATERIAL SUCH AS RIPRAP HAS BEEN INSTALLED.
- EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.

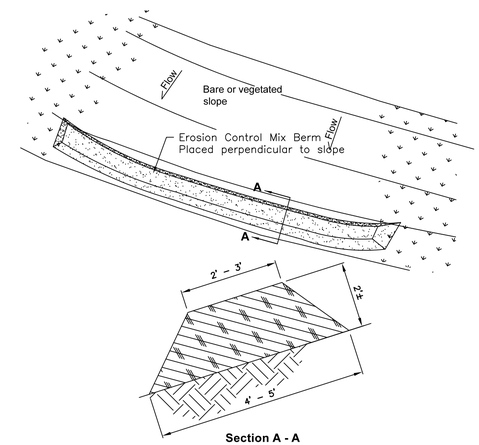
WINTER MAINTENANCE

1. ALL DISTURBED AREAS THAT DO NOT HAVE AT LEAST 85% VEGETATIVE COVERAGE PRIOR TO OCTOBER 15TH, SHALL BE STABILIZED BY APPLYING MULCH AT A RATE OF 3-4 TONS PER ACRE. ALL SIDE SLOPES, STEEPER THAN 4:1, THAT ARE NOT DIRECTED TO SWALES OR DETENTION BASINS, SHALL BE LINED WITH BIODEGRADABLE/PHOTODEGRADABLE "JUTE MATTING" (EXCELSIOR'S CURLEX II OR EQUAL). ALL OTHER SLOPES SHALL BE MULCHED AND TACKED AT A RATE OF 3-4 TONS PER ACRE. THE APPLICATION OF MULCH AND/OR JUTE MATTING SHALL NOT OCCUR OVER EXISTING SNOW COVER. IF THE SITE IS ACTIVE AFTER NOVEMBER 15TH, ANY SNOW THAT ACCUMULATES ON DISTURBED AREAS SHALL BE REMOVED. PRIOR TO SPRING THAW ALL AREAS WILL BE STABILIZED, AS DIRECTED ABOVE.

2. ALL SWALES THAT DO NOT HAVE FULLY ESTABLISHED VEGETATION SHALL BE EITHER LINED WITH TEMPORARY JUTE MATTING OR TEMPORARY STONE CHECK DAMS (APPROPRIATELY SPACED). STONE CHECK DAMS WILL BE MAINTAINED THROUGHOUT THE WINTER MONTHS. IF THE SWALES ARE TO BE MATTED WITH PERMANENT LINERS OR RIPRAP WITH ENGINEERING FABRIC, THIS SHALL BE COMPLETED PRIOR TO WINTER SHUTDOWN OR AS SOON AS THEY ARE PROPERLY GRADED AND SHAPED.

3. PRIOR TO OCT. 15TH ALL ROADWAY AND PARKING AREAS SHALL BE BROUGHT UP TO AND THROUGH THE BANK RUN GRAVEL APPLICATION. IF THESE AREAS' ELEVATIONS ARE PROPOSED TO REMAIN BELOW THE PROPOSED SUBGRADE ELEVATION, THE SUBGRADE MATERIAL SHALL BE ROUGHLY CROWNED AND A 3" LAYER OF CRUSHED GRAVEL SHALL BE PLACED AND COMPACTED. THIS WILL ALLOW THE SUBGRADE TO SHED RUNOFF AND WILL REDUCE ROADWAY EROSION. THIS CRUSHED GRAVEL DOES NOT HAVE TO CONFORM TO NH DOT 304.3, BUT SHALL HAVE BETWEEN 15-25% PASSING THE #200 SIEVE AND THE LARGEST STONE SIZE SHALL BE 2". IF THE SITE IS ACTIVE AFTER NOVEMBER 15TH, ANY ACCUMULATED SNOW SHALL BE REMOVED FROM ALL ROADWAY AND PARKING AREAS.

4. AFTER OCTOBER 15TH, THE END OF NEW HAMPSHIRE'S AVERAGE GROWING SEASON, NO ADDITIONAL LOAM SHALL BE SPREAD ON SIDE SLOPES AND SWALES. THE STOCKPILES THAT WILL BE LEFT UNDISTURBED UNTIL SPRING SHALL BE SEEDED BY THIS DATE. AFTER OCTOBER 15TH, ANY NEW OR DISTURBED PILES SHALL BE MULCHED AT A RATE OF 3-4 TONS PER ACRE. ALL STOCKPILES THAT WILL REMAIN THROUGHOUT THE WINTER SHALL BE SURROUNDED WITH SILT FENCING.



Section A - A

Mix material should consist of 30-50% large (1-3") particles. The organic matter content should be 25%-65%, dry weight basis. The organic matter may originate from a variety of vegetative sources, but needs to be fibrous and elongated. The mix shall be free of silt, clay, fine sand, refuse and contaminants or any material toxic to plant growth.

Erosion Control Mix berms are effective filters for overland flow conditions and should not be used to filter concentrated flow such as that found in drainage ditchs, streams, etc.

Erosion Control Mix Berm

SEEDING RATES

MIXTURE	POUNDS PER ACRE	POUNDS PER 1,000 Sq. Ft.
A. TALL FESCUE	20	0.45
CREEPING RED FESCUE	20	0.45
RED TOP	2	0.05
TOTAL	42	0.95
B. TALL FESCUE	15	0.35
CREEPING RED FESCUE	10	0.25
CROWN VETCH	15	0.35
OR		
FLAT PEA	30	0.75
TOTAL	40 OR 55	0.95 OR 1.35
C. TALL FESCUE	20	0.45
CREEPING RED FESCUE	20	0.45
BIRDS FOOT TREFOIL	8	0.20
TOTAL	48	1.10
D. TALL FESCUE	20	0.45
FLAT PEA	30	0.75
TOTAL	50	1.20
E. CREEPING RED FESCUE 1/	50	1.15
KENTUCKY BLUEGRASS 1/	50	1.15
TOTAL	100	2.30
F. TALL FESCUE 1	150	3.60

CONSTRUCTION SPECIFICATIONS

1. STRUCTURES SHALL BE INSTALLED ACCORDING TO THE DIMENSIONS SHOWN ON THE PLANS AT THE APPROPRIATE SPACING.
2. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER SO THAT EROSION AND AIR AND WATER POLLUTION WILL BE MINIMIZED.
3. WHEN TIMBER STRUCTURES ARE USED, THE TIMBER SHALL EXTEND AT LEAST 18" INTO THE SOIL.
4. STRAW BALES SHALL BE ANCHORED INTO THE SOIL USING 2" X 2" STAKES DRIVEN THROUGH THE BALES AND AT LEAST 18 INCHES IN TO THE SOIL.
5. SEEDING, FERTILIZING, AND MULCHING SHALL CONFORM TO THE RECOMMENDATIONS IN THE APPROPRIATED VEGETATIVE BMP.
6. STRUCTURES SHALL BE REMOVED FROM THE CHANNEL WHEN THEIR USEFUL LIFE HAS BEEN COMPLETED.
7. THROUGHOUT THE DURATION OF CONSTRUCTION ACTIVITIES THE CONTRACTOR SHALL TAKE PRECAUTIONS AND INSTRUCTIONS FROM THE PLANNING DEPARTMENT IN ORDER TO PREVENT, ABATE AND CONTROL THE EMISSION OF FUGITIVE DUST INCLUDING BUT NOT LIMITED TO WETTING, COVERING, SHIELDING, OR VACUUMING.
8. THE NH COMMISSIONER OF AGRICULTURE PROHIBITS THE COLLECTION, POSSESSION, IMPORTATION, TRANSPORTATION, SALE, PROPAGATION, TRANSPLANTATION, OR CULTIVATION OF PLANTS BANNED BY NH LAW RSA 430:53 AND NH CODE ADMINISTRATIVE RULES AGR 3800. THE PROJECT SHALL MEET ALL REQUIREMENTS AND THE INTENT OF . RSA 430:53 AND AGR 3800 RELATIVE TO INVASIVE SPECIES
9. IN THE EVENT THAT GREATER THAN ONE ACRE OF CONTIGUOUS DISTURBANCE OCCURS, THE CONSTRUCTION SITE OPERATOR AND OWNER SHALL SUBMIT A NOTICE OF INTENT (NOI) TO USEPA, WASHINGTON, DC, STORMWATER NOTICE PROCESSING CENTER AT LEAST FOURTEEN DAYS PRIOR TO COMMENCEMENT OF WORK ON SITE. EPA WILL POST THE NOI AT http://cfpub1.epa.gov/npdes/stormwater/noi/noisearch.cfm. AUTHORIZATION IS GRANTED UNDER THE PERMIT ONCE THE NOI IS SHOWN IN "ACTIVE STATUS".

CONSTRUCTION SEQUENCE

1. CUT AND REMOVE TREES IN CONSTRUCTION AREAS AS REQUIRED OR DIRECTED.
2. CONSTRUCT AND/OR INSTALL TEMPORARY AND PERMANENT SEDIMENT EROSION AND DETENTION CONTROL FACILITIES AS REQUIRED. EROSION, SEDIMENT AND DETENTION CONTROL FACILITIES SHALL BE INSTALLED AND STABILIZED PRIOR TO ANY EARTH MOVING OPERATION AND PRIOR TO DIRECTING RUNOFF TO THEM.
3. CLEAR, CUT, GRUB AND DISPOSE OF DEBRIS IN APPROVED FACILITIES. STUMPS AND DEBRIS ARE TO BE REMOVED FROM SITE AND DISPOSED OF PER STATE AND LOCAL REGULATIONS.
4. EXCAVATE AND STOCKPILE TOPSOIL /LOAM. ALL AREAS SHALL BE STABILIZED IMMEDIATELY AFTER GRADING.
5. CONSTRUCT TEMPORARY CULVERTS AS REQUIRED OR DIRECTED.
6. CONSTRUCT THE ROADWAY AND ITS ASSOCIATED DRAINAGE STRUCTURES. ALL ROADWAYS, AND CUT/FILL SLOPES SHALL BE STABILIZED AND/OR LOAMED AND SEEDED WITHIN 72-HOURS OF ACHIEVING FINISH GRADE AS APPLICABLE.
7. INSTALL PIPE AND CONSTRUCTION ASSOCIATED APPURTENANCES AS REQUIRED OR DIRECTED. ALL DISTURBED AREAS SHALL STABILIZED IMMEDIATELY AFTER GRADING.
8. BEGIN PERMANENT AND TEMPORARY SEEDING AND MULCHING. ALL CUT AND FILL SLOPES AND DISTURBED AREAS SHALL BE SEEDED OR MULCHED AS REQUIRED, OR DIRECTED.
9. DAILY OR AS REQUIRED, CONSTRUCT TEMPORARY BERMS, DRAINAGE CHECK DAMS, DITCHES, SEDIMENT TRAPS, ETC. TO PREVENT EROSION ON THE SITE AND PREVENT ANY SILTATION OF ABUTTING WATERS OR PROPERTY.
10. INSPECT AND MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES DURING CONSTRUCTION
11. COMPLETE PERMANENT SEEDING AND LANDSCAPING
12. REMOVE TEMPORARY EROSION CONTROL MEASURES AFTER SEEDING AREAS HAVE ESTABLISHED THEMSELVES AND SITE IMPROVEMENTS ARE COMPLETE. SMOOTH AND REVEGETATE ALL DISTURBED AREAS.
13. ALL SWALES AND DRAINAGE STRUCTURES WILL BE CONSTRUCTED AND STABILIZED PRIOR TO HAVING RUNOFF DIRECTED TO THEM.
14. FINISH PAVING ALL ROADWAYS.
15. LOT DISTURBANCE OTHER THAN THAT SHOWN ON THE APPROVED PLANS SHALL NOT COMMENCE UNTIL THE ROADWAY HAS THE CRUSHED STONE COURSE TO DESIGN ELEVATION/REQUIRED COMPACTION AND THE ASSOCIATED DRAINAGE IS COMPLETE AND STABLE.

SEEDING SPECIFICATIONS

1. GRADING AND SHAPING
   A. SLOPES SHALL NOT BE STEEPER THAN 2:1;3:1 SLOPES OR FLATTER ARE PREFERRED. WHERE MOWING WILL BE DONE, 3:1 SLOPES OR FLATTER ARE RECOMMENDED.
2. SEEDBED PREPARATION
   A. SURFACE AND SEEPAGE WATER SHOULD BE DRAINED OR DIVERTED FROM THE SITE TO PREVENT DROWNING OR WINTER KILLING OF THE PLANTS.
   B. STONES LARGER THAN 4 INCHES AND TRASH SHOULD BE REMOVED BECAUSE THEY INTERFERE WITH SEEDING AND FUTURE MAINTENANCE OF THE AREA. WHERE FEASIBLE, THE SOIL SHOULD BE TILLED TO A DEPTH OF ABOUT 4 INCHES TO PREPARE A SEEDBED AND MIX FERTILIZER AND LIME INTO THE SOIL. THE SEEDBED SHOULD BE LEFT IN REASONABLY FIRM AND SMOOTH CONDITION. THE LAST TILLAGE OPERATION SHOULD BE PERFORMED ACROSS THE SLOPE WHEREVER PRACTICAL.
3. ESTABLISHING A STAND
   A. LIME AND FERTILIZER SHOULD BE APPLIED PRIOR TO OR AT THE TIME OF SEEDING AND INCORPORATED INTO THE SOIL KINDS AND AMOUNTS OF LIME AND FERTILIZER SHOULD BE BASED ON AN EVALUATION OF SOIL TESTS. WHEN A SOIL TEST IS NOT AVAILABLE, THE FOLLOWING MINIMUM AMOUNTS SHOULD BE APPLIED:
   AGRICULTURAL LIMESTONE, 2 TONS PER ACRE OR 100 LBS PER 1,000 SQ. FT..
   NITROGEN(N), 50 LBS PER ACRE OR 1. 1 LBS PER 1,000 SQ.FT.
   PHOSPHATE(P2O5), 100 LBS PER ACRE OR 2. 2 LBS PER 1,000 SQ.FT.
   POTASH(K2O), 100 LBS PER ACRE OR 2. 2 LBS PER 1,000 SQ.FT.
   (NOTE: THIS IS THE EQUIVALENT OF 500 LBS PER ACRE OF 10-20-20 FERTILIZER OR 1,000 LBS PER ACRE OF 5-10-10)
   B. SEED SHOULD BE SPREAD UNIFORMLY BY THE METHOD MOST APPROPRIATE FOR THE SITE. METHODS INCLUDE BROADCASTING, DRILLING AND HYDROSEEDING. WHERE BROADCASTING IS USED, COVER SEED WITH .25 INCH OF SOIL OR LESS, BY CULTIPACKING OR RAKING.
   C. REFER TO TABLE(G-E1 THIS SHEET) FOR APPROPRIATE SEED MIXTURES AND TABLE(H-E1 THIS SHEET) FOR RATES OF SEEDING. ALL LEGUMES (CROWN VETCH, BIRDS FOOT TREFOIL, AND FLAT PEA) MUST BE INOCULATED WITH THEIR SPECIFIC INOCULANT.
   D. WHEN SEEDED AREAS ARE MULCHED, PLANTINGS MAY BE MADE FROM EARLY SPRING TO EARLY OCTOBER. WHEN SEEDED AREAS ARE NOT MULCHED, PLANTINGS SHOULD BE MADE FROM EARLY SPRING TO MAY 20 OR FROM AUGUST 10 TO SEPTEMBER 1.
4. MULCH
   A. HAY, STRAW, OR OTHER MULCH, WHEN NEEDED, SHOULD BE APPLIED IMMEDIATELY AFTER SEEDING.
   B. MULCH WILL BE HELD IN PLACE USING APPROPRIATE TECHNIQUES FROM THE BEST MANAGEMENT PRACTICE FOR MULCHING. HAY OR STRAW MULCH SHALL BE PLACED AT A RATE OF 90 LBS PER 1000 SQ. FT.
5. MAINTENANCE TO ESTABLISH A STAND
   A. PLANTED AREA SHOULD BE PROTECTED FROM DAMAGE BY FIRE, GRAZING, TRAFFIC, AND DENSE WEED GROWTH.
   B. FERTILIZATION NEEDS SHOULD BE DETERMINED BY ONSITE INSPECTIONS. SUPPLEMENTAL FERTILIZER IS USUALLY THE KEY TO FULLY COMPLETE THE ESTABLISHMENT OF THE STAND BECAUSE MOST PERENNIAL STAKE 2 TO 3 YEARS TO BECOME ESTABLISHED.
   C. IN WATERWAYS, CHANNELS, OR SWALES WHERE UNIFORM FLOW CONDITIONS ARE ANTICIPATED, OCCASIONAL MOWING MAY BE NECESSARY TO CONTROL GROWTH OF WOODY VEGETATION.

SEEDING GUIDE

USE	SEEDING MIXTURE 1/	DROUGHTY	WELL DRAINED	MODERATELY WELL DRAINED	POORLY DRAINED
STEEP CUTS AND FILLS, BORROW AND DISPOSAL AREAS	A	FAIR	GOOD	GOOD	FAIR
	B	POOR	GOOD	FAIR	FAIR
	C	POOR	GOOD	EXCELLENT	GOOD
	D	FAIR	FAIR	GOOD	EXCELLENT
	E	FAIR	EXCELLENT	EXCELLENT	POOR
WATERWAYS, EMERGENCY SPILLWAYS, AND OTHER CHANNELS WITH FLOWING WATER.	A	GOOD	GOOD	GOOD	FAIR
	C	GOOD	EXCELLENT	EXCELLENT	FAIR
	D	GOOD	EXCELLENT	EXCELLENT	FAIR
LIGHTLY USED PARKING LOTS, ODD AREAS, UNUSED LANDS, AND LOW INTENSITY USE RECREATION SITES.	A	GOOD	GOOD	GOOD	FAIR
	B	GOOD	GOOD	FAIR	POOR
	C	GOOD	EXCELLENT	EXCELLENT	FAIR
	D	FAIR	GOOD	GOOD	EXCELLENT
PLAY AREAS AND ATHLETIC FIELDS. (TOPSOIL IS ESSENTIAL FOR GOOD TURF.)	F	FAIR	EXCELLENT	EXCELLENT	2/
	G	FAIR	EXCELLENT	EXCELLENT	2/

GRAVEL PIT, SEE NH-PM-24 IN APPENDIX FOR RECOMMENDATION REGARDING RECLAMATION OF SAND AND GRAVEL PITS.

1/ REFER TO SEEDING MIXTURES AND RATES IN TABLE 7-36.
2/ POORLY DRAINED SOILS ARE NOT DESIRABLE FOR USE AS PLAYING AREA AND ATHLETIC FIELDS.

NOTE: TEMPORARY SEED MIX FOR STABILIZATION OF TURF SHALL BE WINTER RYE OR OATS AT A RATE OF 2.5 LBS. PER 1000 S.F. AND SHALL BE PLACED PRIOR TO OCT. 15, IF PERMANENT SEEDING NOT YET COMPLETE.

PER REVIEW ENGINEER COMMENTS	9-11-2023
REVISIONS:	DATE:

EROSION & SEDIMENTATION CONTROL DETAILS

COMMERCIAL DEVELOPMENT
TAX MAP 11, BLK 2, LOT 11
9 BOWLEY ROAD
EAST KINGSTON, NEW HAMPSHIRE

DATE:	JULY, 2023	SCALE:	NTS
PROJ. N0:	NH-1485	SHEET NO.	6