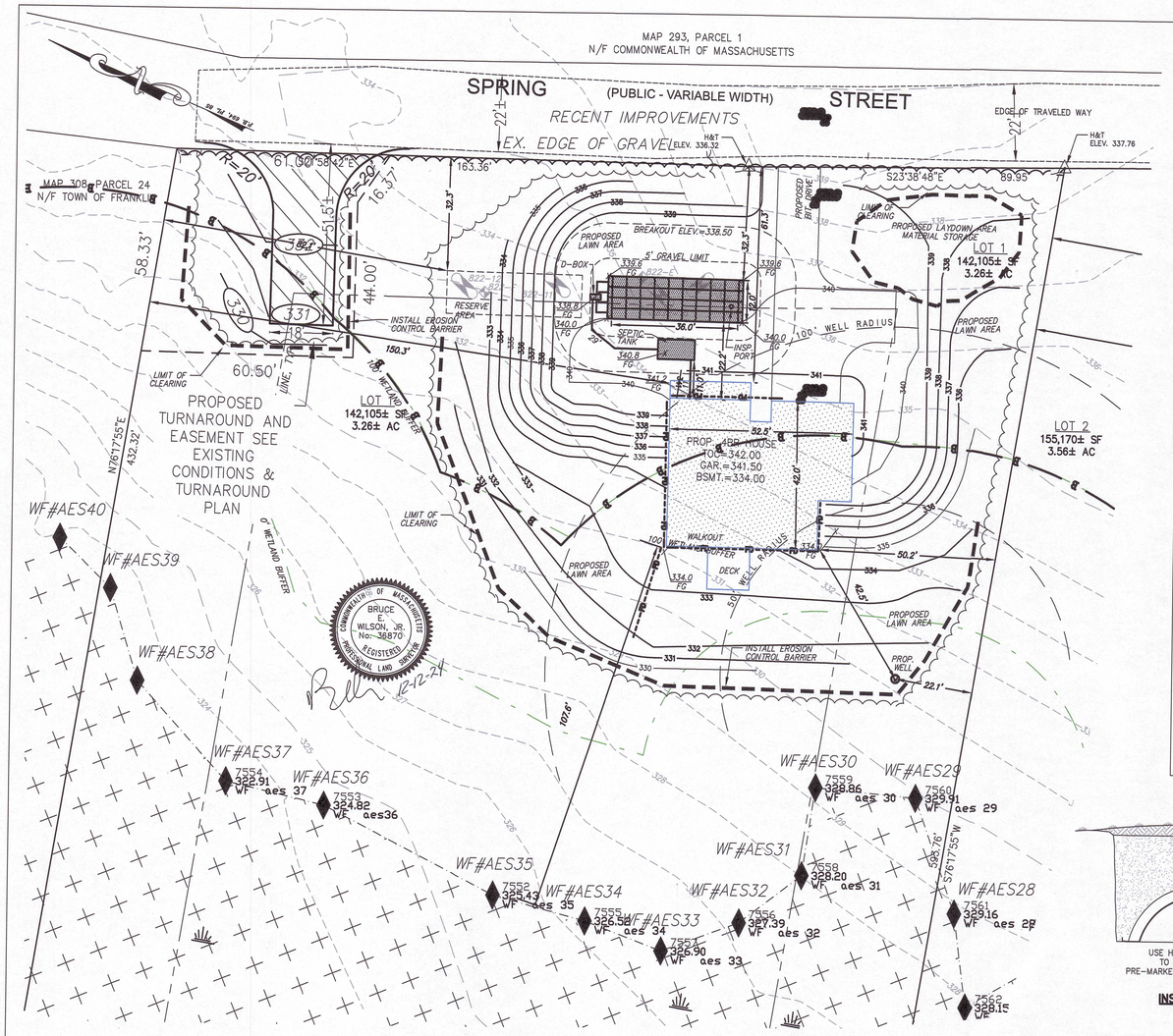
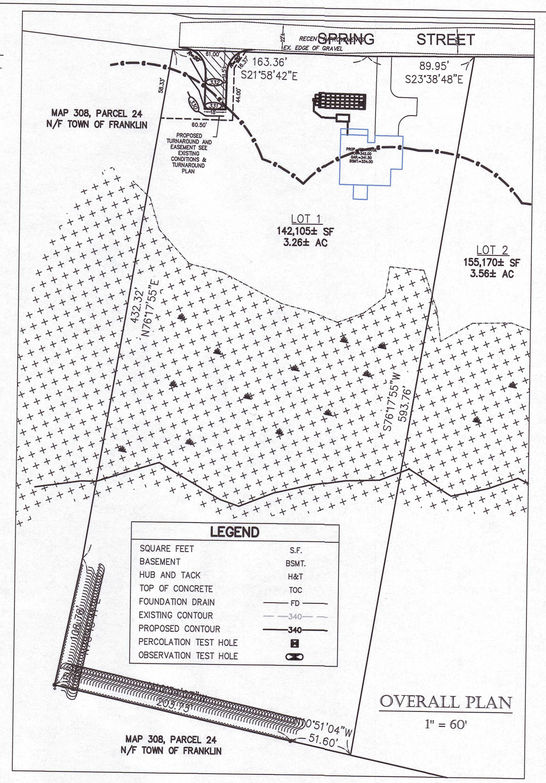




LEGEND

SQUARE FEET	S.F.
BASEMENT	BSMT.
HUB AND TACK	H&T
TOP OF CONCRETE	TOC
FOUNDATION DRAIN	FD
EXISTING CONTOUR	340
PROPOSED CONTOUR	340
PERCOLATION TEST HOLE	
OBSERVATION TEST HOLE	

OVERALL PLAN
1" = 60'

SEPTIC TANK NOTES:

–SEPTIC TANK SHALL BE A PRECAST, REINFORCED CONCRETE TANK MADE WATERTIGHT. CONSTRUCTION MATERIALS AND DIMENSIONS SHALL CONFORM TO TITLE 5 AND AASHTO HS 10 REQUIREMENTS AND PLACED ON A STABLE MECHANICALLY COMPACTED LEVEL BASE.
–TANK/ SYSTEM TO BE VENTED THROUGH THE BUILDING PLUMBING SYSTEM AS REQUIRED BY BUILDING CODE.
–TANK SHOULD BE INSPECTED, MAINTAINED AND BE PUMPED OUT WHEN SLUDGE DEPTH IN THE BOTTOM EXCEEDS ONE FOURTH OF THE TOTAL LIQUID DEPTH.
–SEPTIC TANKS SHALL BE FITTED WITH CONCRETE COLLARS 24" MINIMUM INSIDE DIAMETER AS NECESSARY TO BRING AT LEAST ONE ACCESS COVER TO WITHIN NOT MORE THAN 12" BELOW FINISHED GRADE.
–INVERT OUT OF SEPTIC TANK SHALL BE A MINIMUM OF 12" ABOVE GROUNDWATER.

"D" BOX NOTES:

–"D" BOX TO BE MADE WATERTIGHT. CONSTRUCTION MATERIALS AND DIMENSIONS SHALL CONFORM TO TITLE 5 AND AASHTO HS 10 REQUIREMENTS AND PLACED ON A STABLE MECHANICALLY COMPACTED LEVEL BASE.
–"D" BOX OUTLETS SHALL BE INSTALLED LEVEL ("BUILT UP" INVERTS, NOT PERMITTED.
–FIRST 2' (MIN.) OF OUTLETS SHALL BE INSTALLED LEVEL TO EQUALIZE FLOW.
–THE MINIMUM INSIDE DIMENSIONS OF THE "D" BOX TO BE 12" AND THE MINIMUM WALL THICKNESS TO BE 2".
–WHEN INLET PIPE SLOPE EXCEEDS 8%–PVC INLET TEE REQUIRED. CUT LOW END 1" ABOVE OUTLET INVERT.
–"D" BOX COVER TO BE SEALED WITH BITUMEN.
–DISTRIBUTION BOXES BURIED GREATER THAN 9 INCHES BELOW GRADE SHALL BE EQUIPPED WITH RISERS.

LEACH AREA NOTES:

–ALL LOAM, LARGE BOULDERS OR FOREIGN MATERIAL ENCOUNTERED DURING EXCAVATION ARE TO BE REMOVED FROM THE LEACHING AREA.
–GRAVEL FILL IS REQUIRED. ALL TOP (A) & SUBSOIL (B) AND ORGANIC MATERIAL SHALL BE REMOVED FROM AREA TO BE FILLED. FILL SHALL BE COMPACTED TO MINIMIZE SETTLEMENT AND SHALL BE CLEAN GRANULAR MATERIAL, FREE FROM FINES AND ORGANIC MATERIALS, AND SHALL BE IN ACCORDANCE WITH 310 CMR 15.255(3).
–ALL DISTURBED AREAS ARE TO BE LOAMED, SEEDED AND MAINTAINED TO PREVENT EROSION.
–AREAS ABOVE THE SOIL ABSORPTION SYSTEM SHALL REMAIN PERVIOUS UNLESS UNAVOIDABLE. IN SUCH CASES THE SYSTEM SHALL BE VENTED.
–THE SOIL ABSORPTION SYSTEM SHALL BE COVER BY A MINIMUM OF 12" AND A MAXIMUM OF 36" OF CLEAN BACKFILL MATERIAL, FREE OF STONES AND BOULDERS GREATER THAN 6" IN SIZE.

GENERAL NOTES:

–ALL SYSTEM COMPONENTS SHALL BE MARKED WITH MAGNETIC MARKING TAPE OR A COMPARABLE MEANS IN ORDER TO LOCATE THEM ONCE BURIED.
SYSTEM IS DESIGNED TO ACCOMMODATE SANITARY SEWAGE ASSOCIATED WITH NORMAL DOMESTIC USE AND CONSISTING OF WATER CARRIED PUTRESCIBLE WASTE ONLY.
ALL COMPONENTS OF THE SEWAGE DISPOSAL SYSTEM SHALL BE COVERED BY A MAXIMUM OF 36" OF CLEAN BACKFILL MATERIAL, FREE OF STONES AND BOULDERS GREATER THAN 6" IN SIZE.
OWNER SHALL VERIFY EFFECTIVE ZONING REGULATIONS PRIOR TO CONSTRUCTION.
PLAN SHOWS ONLY THOSE FEATURES THAT WERE VISUALLY APPARENT ON DATE OF TOPOGRAPHY, AND THE ABSENCE OF SUBSURFACE STRUCTURES, UTILITIES, ETC. IS NOT INTENDED OR IMPLIED.
ALL PIPING SHALL BE LAID TRUE TO LINE, GRADE AND INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
THE DESIGN ENGINEER SHALL BE NOTIFIED PROMPTLY OF ANY PLAN DEFICIENCIES FOUND DUE TO UNFORESEEN SUBSURFACE CONDITIONS OR OTHER REASONS THAT MIGHT AFFECT THE FUNCTION OF THIS DESIGNED SYSTEM.
DEVIATIONS IN DESIGN OR CONSTRUCTION FROM THIS PLAN OR ANY OF THE CONDITIONS RELATING TO THE USE OR MAINTENANCE OF THE PROPOSED SYSTEM SHALL BE DEEMED TO VOID ANY CERTIFICATION OR REPRESENTATION MADE RELATIVE TO THIS SUBSURFACE SEWAGE DISPOSAL SYSTEM.
CONTRACTOR SHALL NOTIFY "DIG SAFE" PRIOR TO ANY EXCAVATION. 1–888–DIG–SAFE (344–7233)
PRIOR TO ANY CONSTRUCTION A BENCHMARK SHALL BE SET WITHIN 50–75' OF THE PROPOSED SEWAGE DISPOSAL SYSTEM.
–HYDRAULIC CEMENT IS REQUIRED TO SEAL ALL CONNECTIONS AT THE SEPTIC TANK, "D" BOX AND WHEN REQUIRED, THE PUMP CHAMBER.
–WATER SOFTENERS ARE NOT TO BE CONNECTED TO SEPTIC SYSTEM.
–SUBSURFACE DRAINAGE, EXCLUDING FOOTING DRAINS, IS NOT TO BE LOCATED CLOSER THAN THE FOLLOWING DISTANCES:
–IN AREAS NOT TRIBUTARY TO SURFACE WATER SUPPLIES OR ZONE OF PUBLIC WELLS
SEPTIC TANK 25 FEET
LEACHING FIELD 25 FEET
–IN AREAS TRIBUTARY TO SURFACE WATER SUPPLIES OR ZONE OF PUBLIC WELLS
SEPTIC TANK 100 FEET
LEACHING FIELD 100 FEET

SITE SPECIFIC NOTES:

–THERE ARE NO EXISTING WELLS WITHIN 100' OF THE PROPOSED SEWAGE DISPOSAL SYSTEM. (50' OF THE SEPTIC TANK.)
–THERE ARE NO EXISTING SEWAGE DISPOSAL SYSTEMS WITHIN 100' OF THE PROPOSED WELL.
–ALL KNOWN WELLS WITHIN 200' OF THE PROPOSED PRIMARY AND EXPANSION LEACH AREAS ARE SHOWN.ALL KNOWN SEPTIC SYSTEMS WITHIN 150 FEET OF THE PROPOSED SEPTIC ARE SHOWN.
–NO PUBLIC WATER SUPPLY WELLS EXIST ON SITE.
–KNOWN WETLANDS WITHIN 200' OF THE PROPOSED WORK AREA ARE SHOWN.
–PROJECT DOES NOT FALL WITHIN THE ESTABLISHED FLOOD HAZARD AREA ZONE AS SHOWN ON –PANEL #25027C0304E, EFFECTIVE JULY 17, 2012.
–WATER LINES SHALL BE A MINIMUM OF 10' FROM ANY SYSTEM COMPONENT.
–FOUNDATION DRAINS SHALL BE PROVIDED AND SHALL DISCHARGE BY GRAVITY OR MECHANICAL –MEANS IN COMPLIANCE WITH THE APPLICABLE BUILDING AND PLUMBING CODES.
–THERE ARE NO KNOWN WATER SUPPLIES OR TRIBUTARIES WITHIN 400' OF THE SEWAGE –DISPOSAL SYSTEM. THE SITE IS DESIGNATED AS A NITROGEN SENSITIVE AREA AND THE NITROGEN LOADING LIMITATIONS HAVE BEEN MET AND DO NOT EXCEED 440 GALLONS OF DESIGN FLOW PER DAY PER ACRE.
–THE SITE DOES NOT FALL WITHIN AN AQUIFER PROTECTION OVERLAY DISTRICT.
–EXISTING PROPERTY LINE INFORMATION TAKEN FROM PLAN ENTITLED "PLAN OF LAND OF 60 –SPRING STREET, FRANKLIN, MASSACHUSETTS OWNED BY LEWIS STREET REALTY TRUST" DATED JUNE 24, 2022, PREPARED BY GW SITE SOLUTIONS.
–EXISTING TOPOGRAPHIC INFORMATION PREPARED BY SETH L. LAJOIE & ASSOCIATES AND VERIFIED BY TURNING POINT ENGINEERING.
–WETLAND DELINEATION PERFORMED BY APPLIED ECOLOGICAL SCIENCES ON JUNE 28, 2023.
–CONTRACTOR TO PROVIDE SAFETY BARRIERS/MEASURES AS NECESSARY TO ENSURE VEHICULAR AND PEDESTRIAN SAFETY.
–AFTER CHECKING ON THE MASSDEP/MASS GIS THERE ARE NO POTENTIAL VERNAL POOL SITES LOCATED ON LOT 1 SPRING STREET.
– PER SECTION 7.11.2 THE APPLICANT HAS DESIGNED THE LOT TO HAVE THE LEAST IMPACT TO THE BUFFER ZONE AND THE WETLANDS BY PROPOSING THE SEPTIC SYSTEM IN FRONT OF THE PROPOSED HOUSE, PROPOSING A FRONT ENTRY GARAGE TO MINIMIZE THE IMPERVIOUS AREA AND MINIMIZING THE LAWN ARE ON THE LOT. THE FRANKLIN DPW REQUESTED THE TURNAROUND AREA FOR SPRING STREET AND THE PROPOSED LOCATION WAS AGREED ON BY THE DPW AND THE FIRE DEPARTMENT.

OBSERVATION TEST HOLE DATA
PERFORMED BY: SETH LAJOIE / SE#1304
WITNESSED BY: STEVEN DONATELLI (8/10/22)

822–9 (ELEV. = 336.0)

0"–8"	Ap	FINE SANDY LOAM
8"–32"	Bw	LOAMY SAND
32"–120"	C	LOAMY SAND

MOTTLING OBSERVED @ 36" (ELEV. 333.0)
NO GROUNDWATER OBSERVED
E.S.H.W.T. = 36"
NO REFUSAL

822–10 (ELEV. = 335.3)

0"–8"	Ap	FINE SANDY LOAM
8"–32"	Bw	LOAMY SAND
32"–120"	C	LOAMY SAND

MOTTLING OBSERVED @ 36" (ELEV. 332.3)
NO GROUNDWATER OBSERVED
E.S.H.W.T. = 36"
NO REFUSAL

822–11 (ELEV. = 333.7)

0"–10"	Ap	FINE SANDY LOAM
10"–36"	Bw	LOAMY SAND
36"–120"	C	LOAMY SAND

MOTTLING OBSERVED @ 36" (ELEV. 330.7)
NO GROUNDWATER OBSERVED
E.S.H.W.T. = 36"
NO REFUSAL

822–12 (ELEV. = 333.0)

0"–10"	Ap	FINE SANDY LOAM
10"–36"	Bw	LOAMY SAND
36"–120"	C	LOAMY SAND

MOTTLING OBSERVED @ 36" (ELEV. 330.0)
NO GROUNDWATER OBSERVED
E.S.H.W.T. = 36"
NO REFUSAL

DESIGN CRITERIA

PERC. TESTS: PERFORMED BY: SETH LAJOIE / SE#1304
WITNESSED BY: STEVE DONATELLI

PERC. #	RATE (M/I)	ELEVATION	DEPTH	DATE
822–E	3 MPI	335.3	66"–84"	8/10/22
822–F	7 MPI	333.0	61"–79"	8/10/22

LOADING RATE: 0.68 GPD/SQ.FT.

FLOWS: 4 BEDROOMS AT 110 GPD = 440 GPD (330 GPD MIN.)

SEPTIC TANK REQUIRED: (1,500 GAL. MIN.)
440 GPD X 3.0 = 1,320 GAL. TANK

LEACHING AREA PROVIDED:
A. BASIS 7 MIN./IN. PERCOLATION RATE

INFILTRATOR SIZING

UNIT DIMENSIONS 34"(W) x 48"(L) x 12"(H)
EFFECTIVE LEACHING AREA = 4.73 S.F./LF
440 GPD/0.68 GPD/S.F. = 648 S.F.
648 S.F./4.73 S.F./LF = 137 LF
137 LF/4' PER UNIT = 34.25 UNITS – USE 36 UNITS
USE 12' x 36' FIELD CONFIGURATION

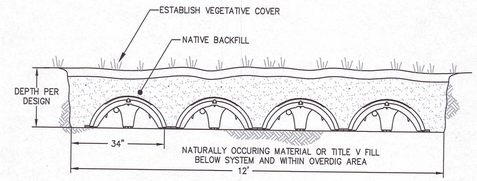
SCHEDULE OF ELEVATIONS

EXISTING GROUND ELEVATION	336.5
DEPTH TO GROUNDWATER	– 3.0'
GROUNDWATER ELEVATION	333.5
GROUNDWATER OFFSET	+ 4'
BOTTOM OF SYSTEM (MIN.)	337.50

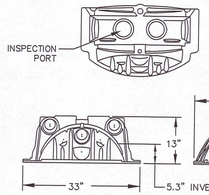
SYSTEM IN FILL ☒ REQUIRED ☐ NOT REQUIRED

IF ANY PORTION OF THE PROPOSED LEACHING AREA IS LOCATED ABOVE EXISTING GRADE OR WITHIN TOPSOIL, PEAT OR OTHER UNSUITABLE OR IMPERVIOUS SOIL LAYER, THEN THE PLACEMENT OF FILL IS REQUIRED. PRIOR TO THE PLACEMENT OF FILL, ALL UNSUITABLE OR IMPERMEABLE SOILS SHALL BE EXCAVATED TO A MINIMUM OF FIVE FEET LATERALLY IN ALL DIRECTIONS BEYOND THE OUTER PERIMETER OF THE SOIL ABSORPTION SYSTEM TO THE DEPTH OF NATURALLY OCCURRING PERVIOUS MATERIAL. FILL MATERIAL SHALL BE SELECT, ON–SITE OR IMPORTED SOIL, CONSISTING OF CLEAN GRANULAR SAND, FREE FROM ORGANIC MATTER AND OTHER DELETERIOUS SUBSTANCES. MIXTURES AND LAYERS OF DIFFERENT SOIL CLASSES SHALL NOT BE USED. THE FILL SHALL NOT CONTAIN ANY MATERIAL LARGER THAN 2 INCHES. A SIEVE ANALYSIS USING A #4 SIEVE, SHALL BE PERFORMED ON A REPRESENTATIVE SAMPLE OF THE FILL UP TO 45% BY WEIGHT OF THE FILL SAMPLE MAY BE RETAINED IN THE #4 SIEVE. SIEVE ANALYSES SHALL ALSO BE PERFORMED ON THE FRACTION OF FILL SAMPLE PASSING THE #4 SIEVE. SUCH ANALYSES MUST DEMONSTRATE THAT THE MATERIAL MEETS EACH OF THE FOLLOWING SPECIFICATIONS:

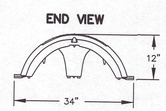
SIEVE SIZE	EFFECTIVE PARTICLE SIZE	% THAT MUST PASS SIEVE
# 4	4.75 MM	100%
# 50	0.30 MM	10%–100%
#100	0.15 MM	0%–20%
#200	0.075 MM	0%–5%

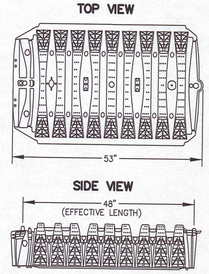


INFILTRATOR QUICK4 PLUS STANDARD BED CROSS SECTION DETAIL

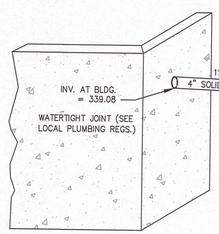


INFILTRATOR QUICK4 PLUS ALL–IN–ONE END CAP
(NOT TO SCALE)

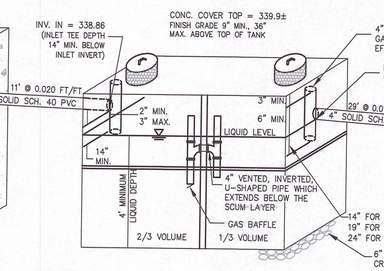




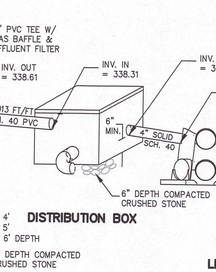
INFILTRATOR QUICK4 PLUS STANDARD PROFILE CHAMBER DETAIL
(NOT TO SCALE)



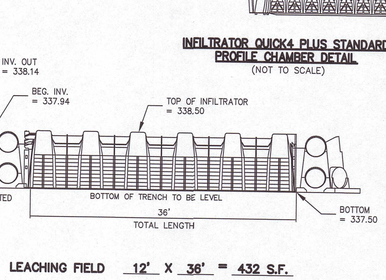
FOUNDATION



1,500 GALLON TWO–COMPARTMENT SEPTIC TANK

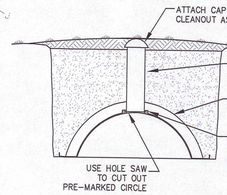


DISTRIBUTION BOX

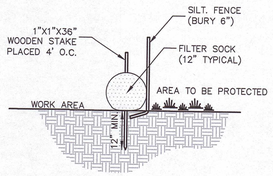


LEACHING FIELD 12' X 36' = 432 S.F.

INFILTRATOR QUICK4 PLUS STANDARD CHAMBER



INSPECTION PORT SECTION
(NOT TO SCALE)



SECTION

EROSION CONTROL BARRIER
(NOT TO SCALE)

CONSTRUCTION SEQUENCE

1. Install compost sock Erosion Control / Siltation Barrier for the project areas which are the Single Family House construction and the proposed turnaround area and call for inspection.
2. Remove any trees necessary, stump and grub to prepare site for excavation in both areas.
3. Remove the top and subsoil in the location of the proposed house and septic system and the turnaround area.
4. Construct proposed house, septic system, proposed turnaround area and drill well and back fill with clean fill according to the site plan. Call for inspections and as-builts as needed.
5. Pave driveway.
6. Final grade, loam and seed and landscape any disturbed areas prepare and submit as-builts and request a certificate of compliance.

All work will be performed by Lobisser building Corp. and the proposed project will take 1 year from start of project.

Contact information: The applicant for the project is Lobisser Building Corp., with a place of business located at 1 Charlesview Road, Hopedale MA 01747 with a phone number 508-478-6235. The owner of the land is Lewis Street Realty Trust with a place of business located at 28 Tia Place in Franklin. Trustee Anthony Marinella phone number 508-962-1965 Engineering Company: D&L Design Group, Inc. located at 115 water street Milford MA phone number 508-408-2577.

NEW ENGLAND WETLAND PLANTS, INC
14 Pearl Lane South Hadley, MA 01075
PHONE: 413-548-8000 FAX 413-549-4000
EMAIL: INFO@NEWP.COM WEB ADDRESS: WWW.NEWP.COM

New England Conservation/Wildlife Mix

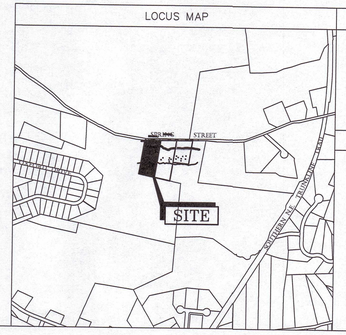
Botanical Name	Common Name	Indicator
Elymus virginicus	Virginia Wild Rye	FACW-
Schizachyrium scoparium	Little Bluestem	FACU
Andropogon gerardii	Big Bluestem	FAC
Festuca rubra	Red Fescue	FACU
Sorghastrum nutans	Indian Grass	UPL
Panicum virgatum	Switch Grass	FAC
Chamaecrista fasciculata	Partridge Pea	FACU
Desmodium canadense	Showy Tick Trefoil	FAC
Asclepias tuberosa	Butterfly Milkweed	NI
Bidens frondosa	Beggar Ticks	FACW
Eupatorium purpureum (Eutrochium maculatum)	Purple Joe Pye Weed	FAC
Rudbeckia hirta	Black Eyed Susan	FACU-
Aster pilosus (Symphyotrichum pilosum)	Heath (or Hairy) Aster	UPL
Solidago puncta	Early Goldenrod	FACW

APPLY 25 LBS/ACRE (.5750 oz/ft/ft)

The New England Conservation/Wildlife Mix provides a permanent cover of grasses, wildflowers, and legumes For both good erosion control and wildlife habitat value. The mix is designed to be a no maintenance seeding, and is appropriate for cut and fill slopes, detention basin side slopes, and disturbed areas adjacent to commercial and residential projects.
New England Wetland Plants, Inc. may modify seed mixes at any time depending upon seed availability. The design criteria and ecological function of the mix will remain unchanged. Price is $/bulk pound, FOB warehouse, Plus $H and applicable taxes.

SEWAGE DISPOSAL SYSTEM DESIGN
(LOT 1) #60 SPRING STREET
FRANKLIN, MA
A.P.O. MAP 310 PARCEL 2

LOCUS MAP



ZONING SUMMARY

ZONE: RURAL RESIDENTIAL–1
MIN. AREA: 40,000 S.F.
MIN. FRONTAGE: 200'
MIN. SETBACKS: FRONT – 40'
SIDE – 40'
REAR – 40'

GRAPHIC SCALE

20 0 10 20 40
(IN FEET)
1 inch = 20 feet

STAMP

COMMONWEALTH OF MASSACHUSETTS
MICHAEL DEAN CIVIL No. 48265
REGISTERED PROFESSIONAL ENGINEER
12-12-24

REVISIONS

NO.	DATE	DESCRIPTION
1	12/12/24	REVISED PLAN.

CAD FILE	
DRAWN BY	
CHECKED BY	MD
DATE	SEPTEMBER 25, 2024
PROJECT NO.	TPE–1136
PLAN NO.	J–177

APPLICANT:
LOBISSER BUILDING CORP.
1 CHARLESVIEW ROAD
HOPEDALE, MA

OWNER/APPLICANT:
LEWIS STREET REALTY TRUST
28 TIA PLACE
FRANKLIN, MA 02038

D&L Design Group
Civil Engineering & Land Surveying
115 Water Street • Milford, MA 01757
P:(508) 408-2577
www.dandldesigngroup.com