### Bay Colony Group, Inc.

Professional Civil Engineers & Land Surveyors

4 School Street, PO Box 9136
Foxborough, Massachusetts 02035
Telephone (508) 543-3939 • Fax (508) 543-8866
E-mail: mailbox@baycolonygroup.com

September 30, 2020

Mr. Robert W. Boette, Chairman Foxborough Conservation Commission 40 South Street Foxboro, MA 02035

RE: 8 Souza Avenue Foxborough, MA

Dear Mr. Boette,

On behalf of our client, River Ridge Holdings, LLC, we are submitting herewith a Request for Determination of Applicability pursuant to Chapter 131, S.40, Wetlands Protection Act and Chapter 267 Foxborough Wetlands Protection Bylaw for the construction of a 3 bedroom, single family home at 8 Souza Avenue (Lot 4 River Ridge). Enclosed please find 8 copies of the WPA Form 1 – Request for Determination of Applicability (RFDA), which includes the sewage disposal system design plan and a check in the amount of \$75 for the Town fee.

The property is Lot 4 in the River Ridge subdivision, which was reviewed and approved by the Commission under DEP file number SE 157-0576 and an Order of Conditions (OoC) was issued on November 25, 2019. Lot 4 is located on the south side of Souza Avenue east of the intersection with Belcher Road and is the fourth lot located on the right as you turn off Belcher Road. The Owner proposes to construct a single family home on the property along with the associated utilities, driveway and landscaping that will lie partially within an isolated land subject to flooding (ILSF). The DEP performance standards outlined in 310 CMR 10.57(4)(b) are listed below and our response is listed after the standard.

- b) Isolated Land Subject to Flooding. A proposed project in Isolated Land Subject to Flooding shall not result in the following:
- 1. Flood damage due to filling which causes lateral displacement of water that would otherwise be confined within said area

As part of the subdivision design already reviewed and approved by the commission we have added a headwall on the southern side of Souza Avenue on lot 4 and a culvert under Souza Avenue that will capture any lateral displacement of

water from the ILSF and convey it toward Wetland B, which is the current flow path from the ILSF.

2. An adverse effect on public and private water supply or ground water supply, where said area is underlain by pervious material.

The site is not within a Zone 2 and there are no private wells on or near the project.

3. An adverse effect on the capacity of said area to prevent pollution of the ground water, where the area is underlain by pervious material which in turn is covered by a mat of organic peat and muck.

The ILSF is not underlain by a mat of organic peat or muck.

4. An impairment of its capacity to provide wildlife habitat where said area is vernal pool habitat, as determined by procedures contained in 310 CMR 10.60.

The site is not a potential or certified vernal pool.

In light of this discussion, and the steps we have taken in the design, we believe that a negative determination would be appropriate in this instance.

Thank you for your consideration and please feel free to contact me should you have any questions or concerns that you would like addressed prior to the public hearing.

Very truly yours,

BAY COLONY GROUP, INC.

William R. Buckley, Jr., P.E.

1200 W/

Project Manager

encl.



#### Massachusetts Department of Environmental Protection Bureau of Resource Protection - Wetlands

### WPA Form 1- Request for Determination of Applicability

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40 Foxborough Wetlands Protection Bylaw, Chapter 267



**Foxborough** 

#### A. General Information

Important: When filling out	1.	A	pplicant or 🗵 Pro	perty Owner's Repre	esentative:						
forms on the computer, use only the tab key		Bay Colony Group, Inc.				William Buckley Ir					
		Name				William Buckley, Jr. Representative Name (if applicable)					
to move your		4 Sch	ool Street				iamo (n'approaisio)				
cursor - do not			Address								
use the return key.		Foxbo	orough			MA	02035				
		City/To				State	Zip Code				
tab		508.5	43.3939			billbucklev@b	aycolonygroup.com				
		Phone	Number			Email Address					
return	2.	☐ Pr	Property Owner (if different from Applicant):								
		River	River Ridge Holdings, LLC			carrollcorp92@	@omail.com				
		Name	Name			E-Mail Address / Phone Number					
		14 Ca	ımp Road								
		Mailing	Address								
		Foxbo	rough			MA	02035				
		City/To	wn			State	Zip Code				
	3.	Foxbo	orough Wetlands F	Protection Bylaw filin	g fee enclosed:						
		⊠ Si	ngle Family House:	\$75 Industrial / C	Other: \$200 🔲 Hat	oitat Restoratio	on / Scout Project: \$0				
	B	Deta	erminations								
		. 500									
	1.	I reque	est that Foxborough	Conservation Comm	ission make the follo	owing determi	nation(s).				
		□ а.	whether the area jurisdiction of the S	depicted on plan(s) ar State Wetlands Protec	nd/or map(s) referent	ced below is a	an area subject to the				
		b.	whether the <b>work</b> Act.	depicted on plan(s) ref	ferenced below is su	bject to the W	etlands Protection				
		⊠ c.	whether the <b>area</b> a jurisdiction of the A	and/or work depicted oxborough Wetlands	on plan(s) referenc Protection Bylaw.	ed below is su	bject to the				
	C.	. Proi	ect Descripti	on							
	1.	a. Pro	oject Location (use	e maps and plans to id	lentify the location o	the area subject to this request): 008					
		8 9	Souza Avenue	Foxborough	123		800				
		Str	eet Address	Town	Assessors Map/	Plat Number	Parcel/Lot Number				
		b. Are	ea Description (i.e.	back vard lawn woo	ded area conserva	tion area indu	istrial etc ).				
		b. Area Description (i.e. back yard, lawn, wooded area, conservation area, industrial, etc.):									
		Wi	A 20,720 sf parcel of land located on the south side of Souza Avenue and east of the intersection with Belcher Road								
		c. Plan and/or Map Reference (Hint: hand-draw your proposed project onto an Assessor's map, Google map or MassGIS aerial photo.)									
			ewage Disposal Sys		1.7	_ ,	7/14/20				
		Titl		g			Date				
		Titl	Α				Data				
		1111	•				Date				



### **Massachusetts Department of Environmental Protection**

Bureau of Resource Protection - Wetlands

# WPA Form 1- Request for Determination of Applicability

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40 Foxborough Wetlands Protection Bylaw, Chapter 267



**Foxborough** 

C.	P	roje	ect Description (continued)							
2.	a.	Deta	Detailed Description of Proposed Work, shown in the above plans:							
		Cons	struction of a single family home, utilities and a driveway located partially within an isolated subject to flooding (ILSF).							
	b.	Iden appli	tify provisions (if any) of the MA Wetlands Protection Act or regulations which may exempt the icant from having to file a Notice of Intent for all or part of the described work.							
3.	a.	Rive	rfront Requirements (if applicable)							
		If the	proposed project is located within 200 feet of a river, indicate the one classification below best describes the project:							
		For I	ots recorded on or before 8/1996:							
			Single family house on a lot recorded on or before 8/1/96							
			Project, other than a single family house or public project, where the applicant owned the lot before 8/7/96							
		For I	ots recorded after 8/1/96:							
			Single family house on a lot recorded after 8/1/96							
			Expansion of an existing structure on a lot recorded after 8/1/96							
		Other Projects:								
			Municipal project							
			District, county, state, or federal government project							
			Public project where funds were appropriated prior to 8/7/96							
			Residential subdivision; institutional, industrial, or commercial project							
			Project on a lot shown on an approved, definitive subdivision plan where there is a recorded deed restriction limiting total alteration of the Riverfront Area for the entire subdivision							
			New agriculture or aquaculture project							
			Project required to evaluate off-site alternatives in more than one municipality for an Environmental Impact Report under MEPA or in an alternatives analysis pursuant to an application for a 404 permit from the U.S. ACOE or 401 Water Quality Certification from the MassDEP.							

b. Provide evidence (e.g., record of date subdivision lot was recorded) supporting one of the classifications above (use additional paper and/or attach appropriate documents, if necessary).

Evidence:



# **Massachusetts Department of Environmental Protection**

Bureau of Resource Protection - Wetlands

Name and Address of Property Owner:

### WPA Form 1- Request for Determination of Applicability

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40 Foxborough Wetlands Protection Bylaw, Chapter 267



**Foxborough** 

#### D. Signatures and Submittal Requirements

River Ridge Holdings, LLC			
Name			
14 Camp Road	Foxborough	MA	02035
Mailing Address	City/Town	State	Zip Code
I hereby certify under the penalties of pe Applicability and accompanying plans, do best of my knowledge.	rjury that the foregoing Re ocuments, and supporting	quest for Determin data are true and o	ation of complete to the
I further certify that the property owner, it Regional Office (see below) were sent a documentation) simultaneously with the	complete copy of this Req	uest (including all	appropriate
Failure by the applicant to send copies ir Determination of Applicability.	n a timely manner may res	ult in dismissal of t	he Request for
I also understand that notification of this Conservation Office) at my expense in a Protection Act regulations.  Signatures:	Request will be placed in a ccordance with Section 10	.05(3)(b)(1) of the	Wetlands
Signature of Applicant Signature of Representative (If any)		9/30/1 Date 9/34 Date	Izp
Tax Collector's Release and Signature: The Conservation Commission and is in good betterments or other municipal charges a	good standing with respect	to any taxes, fees rough Treasurer's	, assessments,
Signature of Foxborough Tax Collector or Age	ent	Date	12020

#### **Submittal Requirements:**

#### For the Conservation Commission:

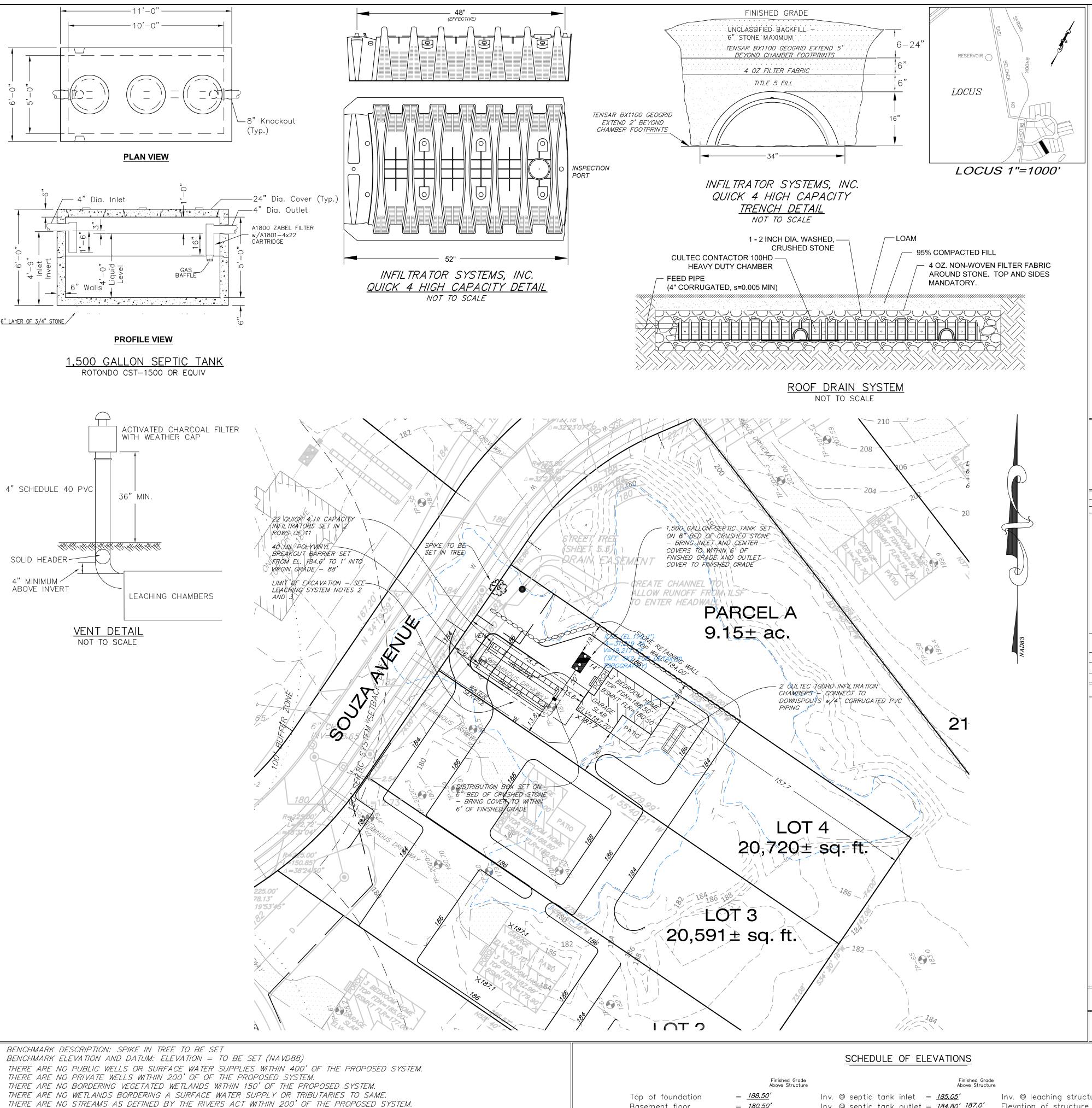
One (1) original and seven (7) copies of this completed Request (including all plans, other documentation, and Town filing fee payment), by mail or hand delivery to:

> Foxborough Conservation Commission 40 South Street Foxborough, MA 01035

#### For MassDEP:

One (1) copy of the completed Request (including all documentation; no State filing fee is required) by certified mail or hand delivery to:

> MassDEP, Southeast Regional Office 20 Riverside Drive Lakeville, MA 02347

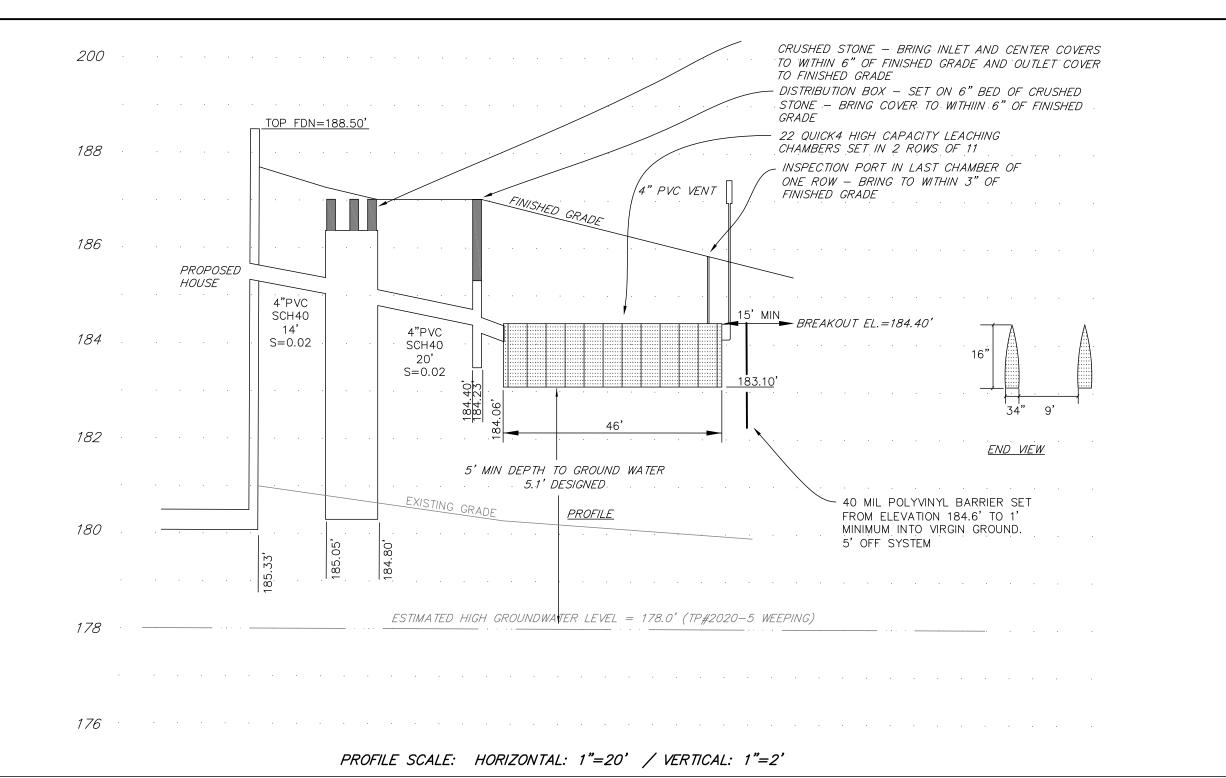


THERE ARE NO OPEN, SURFACE OR SUBSURFACE DRAINS THAT INTERCEPT HIGH GROUND WATER ON THE LOT.

THE SITE DOES NOT LIE WITHIN A REGULATORY FLOODWAY NOR WITHIN A 100 YEAR FLOOD ZONE.

THERE ARE NO OTHER OPEN, SURFACE OR SUBSURFACE DRAINS ON THE LOT.

WASTEWATER FROM THE PROPERTY WILL CONSIST OF DOMESTIC WASTE ONLY.



2. SEPTIC TANK SIZE: AVERAGE DAILY FLOW = 330 x 200% = 660 GALLONS SEPTIC TANK PROVIDED =  $\underline{1500}$  GALLONS. 5. DESIGN HYDRAULIC LOADING =  $\underline{730}$  SF  $\times \underline{0.74}$  GPD/SF =  $\underline{540}$  GPD 3. DESIGN PERCOLATION RATE = <u>5</u> M.P.I. 6. REQUIRED HYDRAULIC LOADING = 330 GAL/DAY SOIL CLASS = / EFFLUENT LOADING RATE = 0.74 GPD/SF DESIGN HYDRAULIC LOADING = <u>540</u> GAL/DAY 
 SOIL
 TEST DATA:
 TEST PIT #2020-5

 DATE:
 4.21.2020 GND ELEV: 181.31' TOP WELL EL
 NO A OR B LAYER NO A OR B LAYER 42" (177.8') 48" *(177.2')* 

SOIL EVALUATOR:

WITNESS:

RICHARD LESLIE

KEVIN DUQUETTE

1. ESTIMATED HYDRAULIC LOADING: 3 BEDROOMS AT 110 GAL/DAY = 330 G.P.D.

SEWAGE DISPOSAL SYSTEM <u>NOT</u> DESIGNED FOR GARBAGE DISPOSAL.

PERCOLATION TESTS TEST PIT No.2020-5 TEST PIT No.2020-6 TEST PIT No. DATE: 7.1.2020 DATE: 7.1.2020 DATE: DEPTH OF PERC START PRESOAK 0955 END PRESOAK 1010 TIME @ 12" 1010 C SAND; 2.5Y4/4; COARSE, SAND; 2.5Y5/4; COARSE, TIME @ 9" 1019 GRAVELLY, COBBLY GRAVELLY, COBBLY TIME @ 6" 1032 TIME (9"-6")120" (171.3') 120" (171.2') CALC. RATE 5 MPI WEEPING @ 40" (178.0') WEEPING @ 42"(177.7') DESIGN RATE 2 MPI 5 MPI COULD NOT SOAK BASIS OF GNDWTR | SOIL MORPHOLOGY BASIS OF GNDWTR SOIL MORPHOLOGY ADJUSTMENT: ADJUSTMENT: PITS, SAND AND GRAVEL PITS, SAND AND GRAVEL SCS SOIL TYPE: SCS SOIL TYPE:

### CONSTRUCTION NOTES:

RICHARD LESLIE

KEVIN DUQUETTE

SOIL EVALUATOR:

WITNESS:

DESIGN DATA:

### GENERAL CONSTRUCTION NOTES:

shall be placed over all components.

1. All work shall conform to the latest edition of the Commonwealth of Massachusetts regulations 4. If vents are required, the header invert shall be above the invert of the distribution piping. An governing the installation of subsurface sewage disposal systems, as published in the Code of Massachusetts Regulations and referred to as "Title 5", and any additional requirements of the

2. Both the Contractor and Designer must certify construction and prepare as—built plans showing locations and elevations. Contractor shall coordinate his work with the Designer to allow inspection and collection of elevations and loations of the system components, including an open hole inspection of the foundation excavation. Components shall not be backfilled until inspection and approval is obtained from the Board of Health, Designer and Owner. Vehicular traffic, parking of vehicles, stockpiling of materials, and storage of equipment over leaching area prohibited at all times. System shall be staked and flagged or otherwise barricaded from time of installation until Certificate of Compliance is issued. Magnetic tape

LEACHING SYSTEM NOTES: 1. Contractor shall strip and stockpile A and B horizons and any other unsuitable material. Excavated material shall remain on site and be used as required for final grading. Excess material shall be removed from the site.

2. Contractor shall provide certified Title 5 fill material as required to replace topsoil, subsoil, contaminated soil to a depth of  $\_$  and other unsuitable material if found in or within 5' of the leaching area. Any required fill for the leaching area shall conform to the requirements of Title 5 as repeated below:

Fill for systems constructed in fill shall consist of select on-site or imported material. The fill | 4. Tank shall be constructed of reinforced watertight precast concrete and shall be comprised of clean granular sand, free from organic matter and deleterious substances. shall have manufacturers quality control seal affixed thereon. Mixtures and layers of different classes of soils 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 sample may be retained on the sieve. Sieve analysis shall also be performed on the fraction of the fill passing the #4 sieve, such analysis must demonstrate that the material meets the specifications in 310 CMR 15.255(3) and a plot of the sieve analysis shall fall on or between the lines shown in 310 CMR

3. Fill shall be placed gradually in layers and compacted as required to achieve an in place density acceptable to the Board of Health and Engineer. Fill shall only be placed when the excavation is dry. The bottom of the excavation shall be scarified prior to placement of fill. After the fill is in place, the owner will collect at least one sample and have a sieve analysis performed. If the fill does not pass the analysis, the contractor shall remove all fill and replace with appropriate material at no additional cost to the owner.

activated carbon filter with exchangable container shall be provided on the header. The vent shall be backfilled to prevent seepage of water in to the system and shall be constructed to prevent precipitation or animal access. Vent shall slope upward to outlet.

QUICK4 HI-CAPACITY CHAMBERS =  $\underline{7.93}$  SF/LF x  $\underline{22}$  CHAMBERS x  $\underline{4}$  LF/CHAMBER =  $\underline{698}$  SF

QUICK 4 ENDCAPS =  $\underline{7.93}$  SF/LF x  $\underline{4}$  END CAPS x  $\underline{1.0}$ LF/END CAP =  $\underline{32}$  SF

TOTAL LEACHING AREA = 730 SF

All soil absorption systems shall have a minimum of one (1) inspection port consisting of a perforated four (4) inch pipe placed vertically down into the stone to the naturally occurring soil or sand fill below the stone. The pipe shall be capped with a screw type cap and accessible to within three (3) inches of finish grade.

### Distribution box shall be watertight precast concrete with an influent baffle and watertight,

removable cover. Unused outlets shall be plugged for future use. <sup>2.</sup> A minimum 6" sump below outlet invert and minimum 12" inside dimensions shall be provided.

 $^3$ . Distribution box shall be set level on 6" of 3/4" stone. Verify by filling distribution box with water and observe that all outlets are at same elevation. SEPTIC TANK NOTES:

Septic tank shall be watertight, 1,500 gallon capacity. Tank shall be set level on 6" of 3/4" stone.

3. Inside length to width ratio shall be equal to or greater than 1.5, with a

ratio of 2:1 preferred.

The outlet tee shall be equipped with A1800 Zabel filter (or engineer approved equivalent).

DESIGNER NOTES: No variations from this plan shall be made without written direction from the Designer, Owner and Board of Health Agent.

The contractor shall notify the Designer of any discrepancies between the plan and actual site conditions, should they exist, before installation of the system.

PROPERTY ADDRESS: #8 SOUZA AVENUE FOXBOROUGH, MA

ASSESSORS MAP/PARCEL: MAP 123, PARCEL 008

These plans are meant to be used by a contractor with an in-depth knowledge of 310 CMR 15.00 (Title 5) and are not meant as stand-alone documents.

Notwithstanding anything shown or not shown on these drawings, the Owner and Contractor are responsible for complying with the current edition of the Massachusetts Building Code regarding foundation drainage, backfilling and waterproofing and are responsible for ensuring that water does not enter the basement through the walls or floor.

### SEWAGE DISPOSAL SYSTEM DESIGN

PREPARED FOR: RIVER RIDGE HOLDINGS, LLC 508.954.4804

THIS SEWAGE DISPOSAL SYSTEM WAS DESIGNED IN ACCORDANCE WITH THE COMMONWEALTH OF MASSACHUSETTS ENVIRONMENTAL CODE OF

14 CAMP ROAD FOXBORO, MA 02035

# REGULATIONS (TITLE 5) AND THE BOARD OF HEALTH REGULATIONS OF THE TOWN/CITY OF

*FOXBOROUGH* NITROGEN SENSITIVE AREA ?: NO BUILDING SET-BACKS:

FRONT: <u>35'</u> SIDE: <u>15'</u> REAR: <u>30'</u>

BAY COLONY GROUP, INC. FOUR SCHOOL STREÉT FOXBOROUGH, MA 02035 (508) 543-3939

Scale: 1"=30' JULY 14, 2020 Checked by: WBJ Designed by: CHG Drawn by: CHG JOB NUMBER 20-0113 FILE NUMBER 06-0150E-S

Inv. @ dist. box inlet = <u>184.40</u>' Inv. @ dist. box outlet = <u>184.23</u>' <u>187.0'</u>

= <u>180.50</u>°

Inv. of pipe @ foundation = <u>185.33</u>' <u>187.7'</u>

Inv. @ leaching structure(in) = <u>184.06'</u> <u>\_186.9'</u> Inv. @ septic tank outlet = <u>184.80'</u> <u>187.0'</u> Elevation of structure bottom = <u>183.10'</u>

ZONE CLASSIFICATION: R-40