

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: 4 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 4 Souza Avenue (Lot 2 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 2 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 2 is located on the south side of Souza Avenue east of the intersection with Belcher Road and is the second 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.

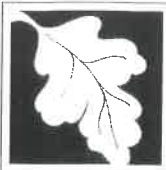
Very truly yours,

BAY COLONY GROUP, INC.

A handwritten signature in blue ink, appearing to read 'W. Buckley, Jr.', with a stylized flourish at the end.

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

encl.



WPA Form 1- Request for Determination of Applicability

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



A. General Information

Important:
When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



1. Applicant or Property Owner's Representative:

Bay Colony Group, Inc.

Name / Firm

4 School Street

Mailing Address

Foxborough

City/Town

508.543.3939

Phone Number

William Buckley, Jr.

Representative Name (if applicable)

MA

02035

State

Zip Code

billbuckley@baycolonygroup.com

Email Address

2. Property Owner (if different from Applicant):

River Ridge Holdings, LLC

Name

14 Camp Road

Mailing Address

Foxborough

City/Town

carrollcorp92@gmail.com

E-Mail Address / Phone Number

MA

02035

State

Zip Code

3. Foxborough Wetlands Protection Bylaw filing fee enclosed:

Single Family House: \$75 Industrial / Other: \$200 Habitat Restoration / Scout Project: \$0

B. Determinations

1. I request that Foxborough Conservation Commission make the following determination(s).

- a. whether the **area** depicted on plan(s) and/or map(s) referenced below is an area subject to the jurisdiction of the State Wetlands Protection Act.
- b. whether the **work** depicted on plan(s) referenced below is subject to the Wetlands Protection Act.
- c. whether the **area and/or work** depicted on plan(s) referenced below is subject to the jurisdiction of the Foxborough Wetlands Protection Bylaw.

C. Project Description

1. a. **Project Location** (use maps and plans to identify the location of the area subject to this request):

4 Souza Avenue
Street Address

Foxborough
Town

123
Assessors Map/Plat Number

008
Parcel/Lot Number

- b. **Area Description** (i.e. back yard, lawn, wooded area, conservation area, industrial, etc.):

A 21,002 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.)

Sewage Disposal System Design
Title

7/14/20
Date

Title

Date



WPA Form 1- Request for Determination of Applicability

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



C. Project Description *(continued)*

2. a. **Detailed Description of Proposed Work**, shown in the above plans:

Construction of a single family home, utilities and a driveway located partially within an isolated land subject to flooding (ILSF).

- b. Identify provisions *(if any)* of the MA Wetlands Protection Act or regulations which may exempt the applicant from having to file a Notice of Intent for all or part of the described work.

None

3. a. **Riverfront Requirements** *(if applicable)*

If the proposed project is located within 200 feet of a river, indicate the one classification below that best describes the project:

For lots recorded on or before 8/1/1996:

- 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 lots 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:



WPA Form 1- Request for Determination of Applicability

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



D. Signatures and Submittal Requirements

Name and Address of Property Owner:

River Ridge Holdings, LLC

Name

14 Camp Road

Mailing Address

Foxborough

City/Town

MA

State

02035

Zip Code

I hereby certify under the penalties of perjury that the foregoing Request for Determination of Applicability and accompanying plans, documents, and supporting data are true and complete to the best of my knowledge.

I further certify that the property owner, if different from the applicant, and the appropriate MassDEP Regional Office (*see below*) were sent a complete copy of this Request (*including all appropriate documentation*) simultaneously with the submittal of this Request to the Conservation Commission.

Failure by the applicant to send copies in a timely manner may result in dismissal of the Request for Determination of Applicability.

I also understand that notification of this Request will be placed in a local newspaper (*by the Conservation Office*) at my expense in accordance with Section 10.05(3)(b)(1) of the Wetlands Protection Act regulations.

Signatures:

[Handwritten Signature]

Signature of Applicant

9/30/20

Date

[Handwritten Signature]

Signature of Representative (if any)

9/30/20

Date

Tax Collector's Release and Signature: The above referenced applicant is applying for a permit from the Conservation Commission and is in good standing with respect to any taxes, fees, assessments, betterments or other municipal charges as recorded with the Foxborough Treasurer's Office.

[Handwritten Signature]

Signature of Foxborough Tax Collector or Agent

10/2/2020

Date

Submittal Requirements:

For the Conservation Commission:

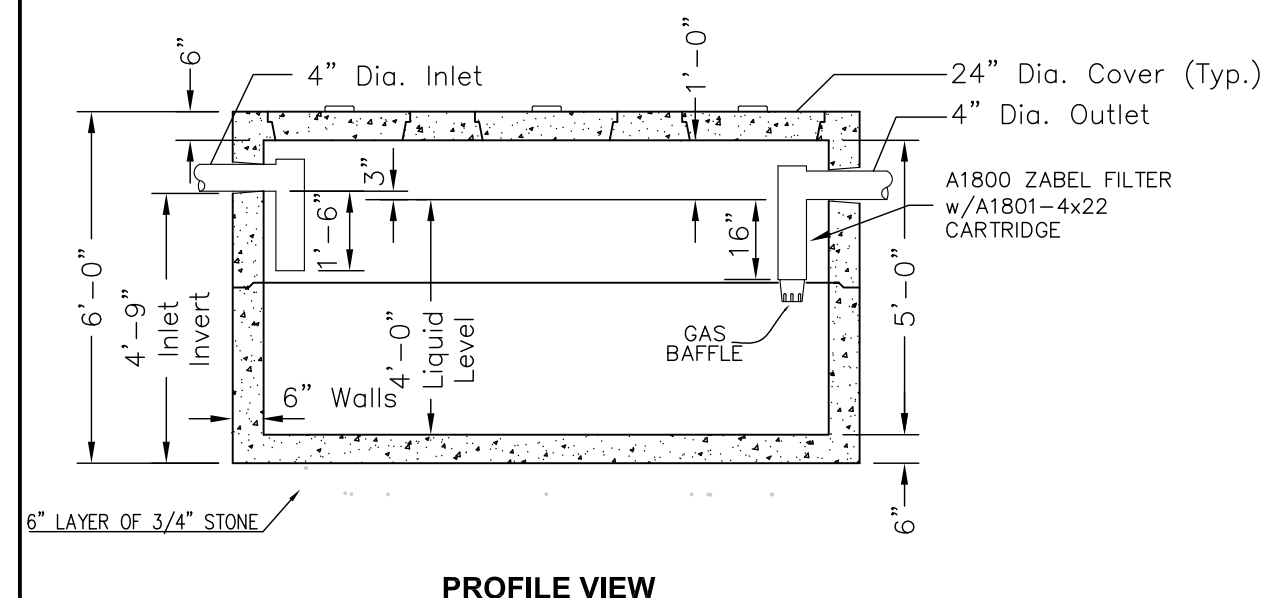
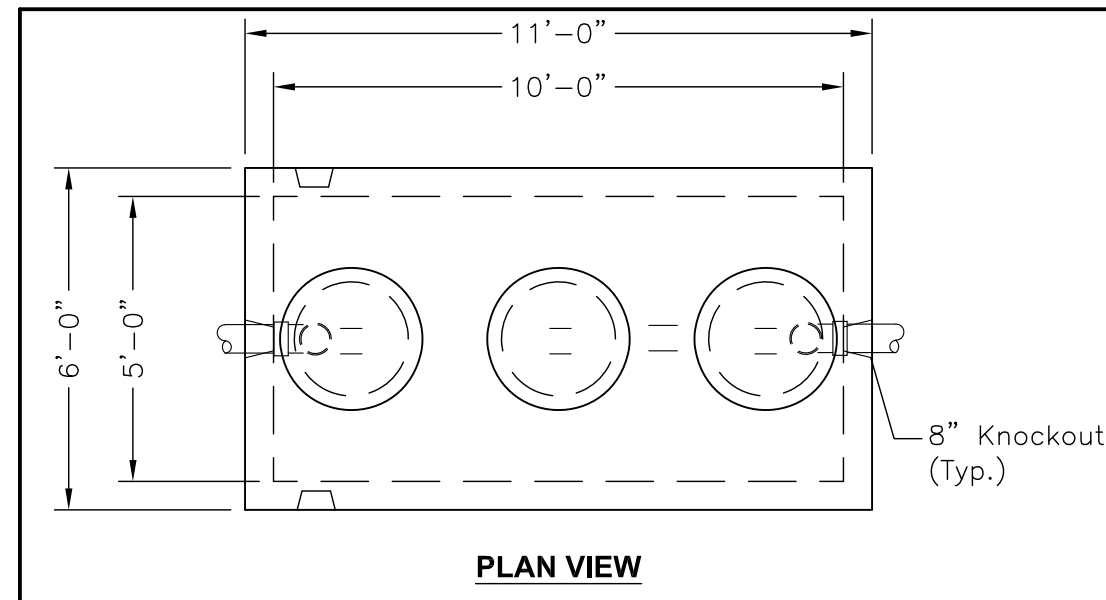
One (1) original and seven (7) copies of this completed Request (*including all plans, other documentation, and Town filing fee payment*), by mail or hand delivery to:

Foxborough Conservation Commission
40 South Street
Foxborough, MA 01035

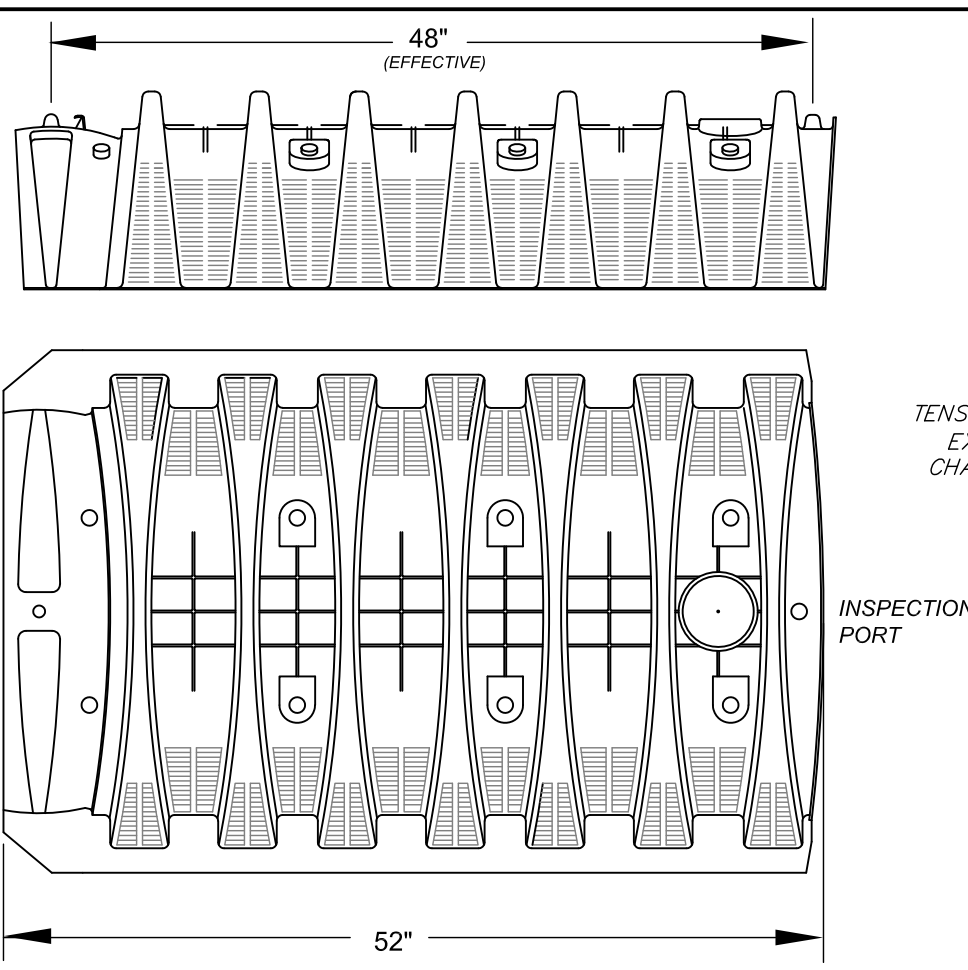
For MassDEP:

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

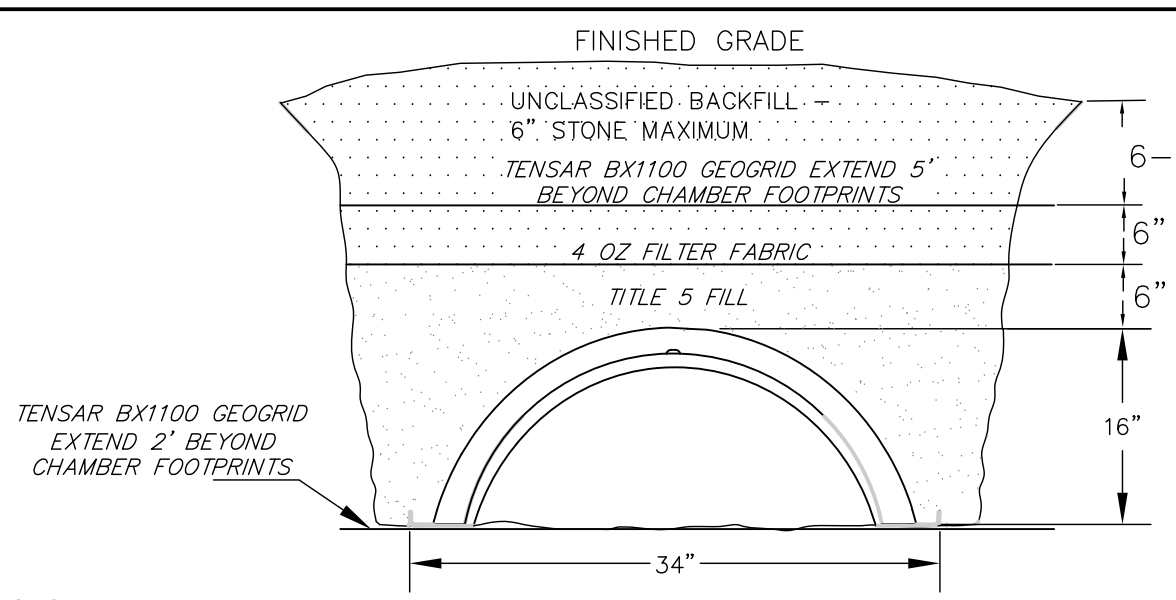
MassDEP, Southeast Regional Office
20 Riverside Drive
Lakeville, MA 02347



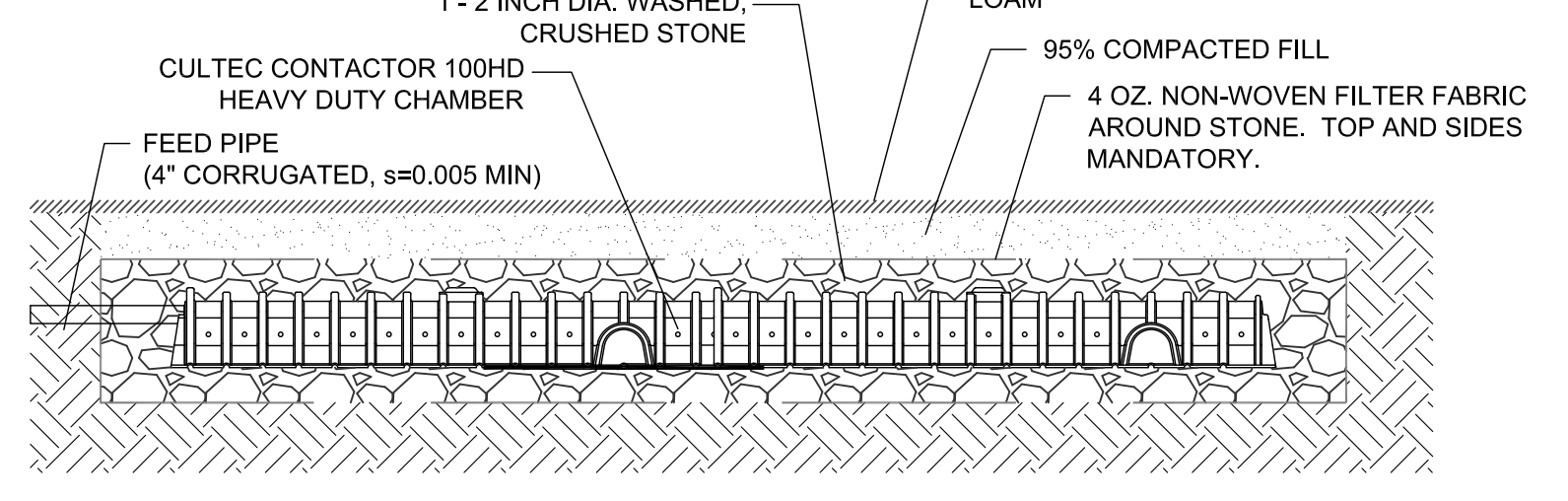
1,500 GALLON SEPTIC TANK
ROTONDO CST-1500 OR EQUIV



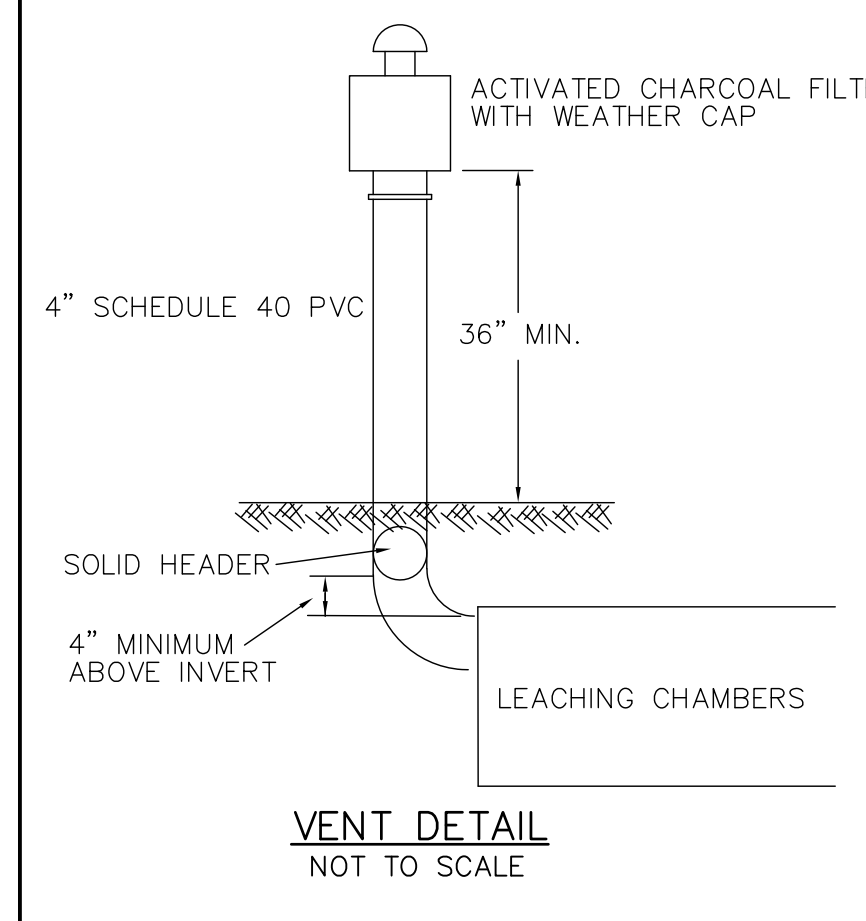
INFILTRATOR SYSTEMS, INC.
QUICK 4 HIGH CAPACITY DETAIL
NOT TO SCALE



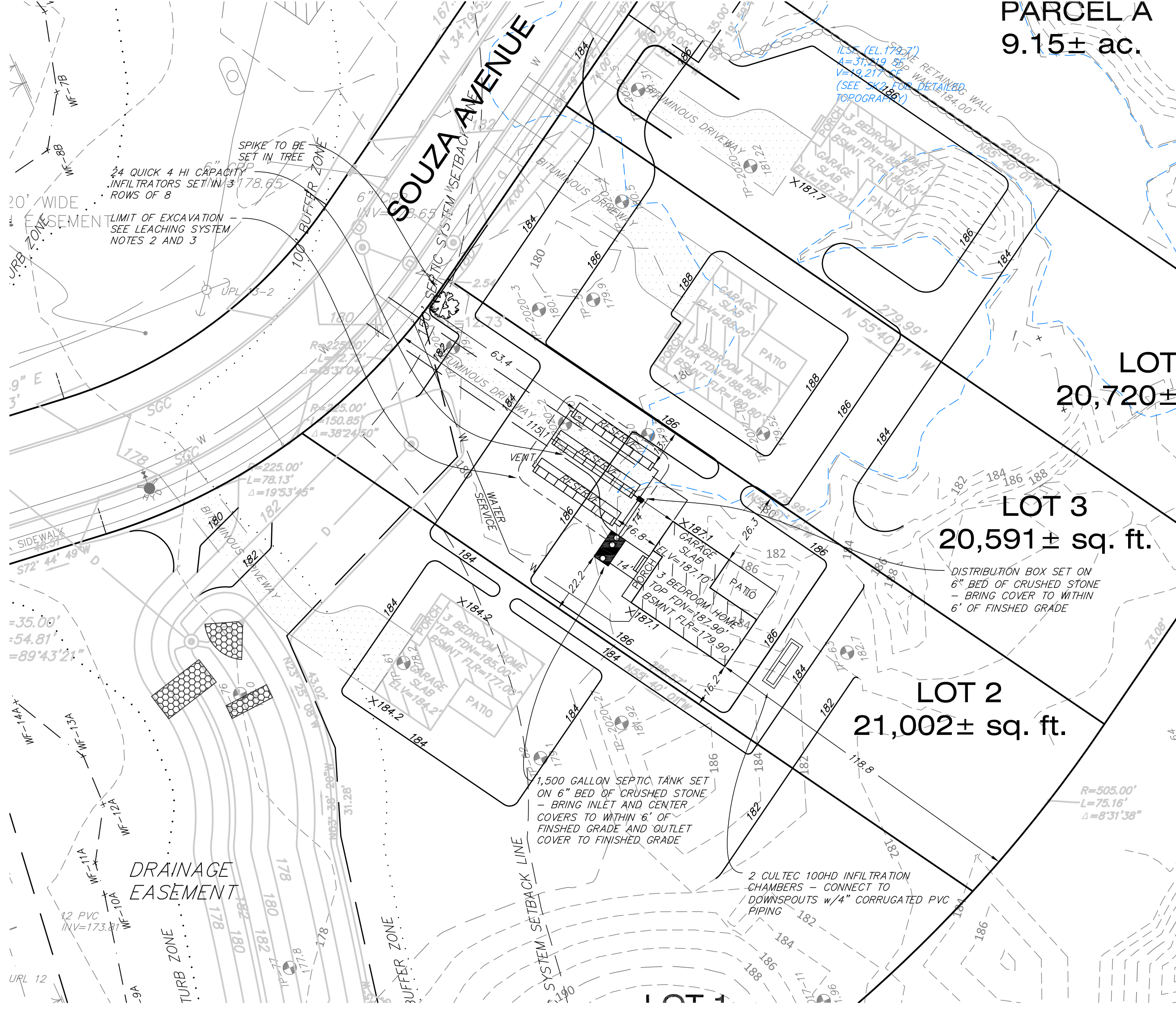
INFILTRATOR SYSTEMS, INC.
QUICK 4 HIGH CAPACITY
TRENCH DETAIL
NOT TO SCALE



ROOF DRAIN SYSTEM
NOT TO SCALE



VENT DETAIL
NOT TO SCALE



PARCEL A
9.15± ac.

LOT 20,720±

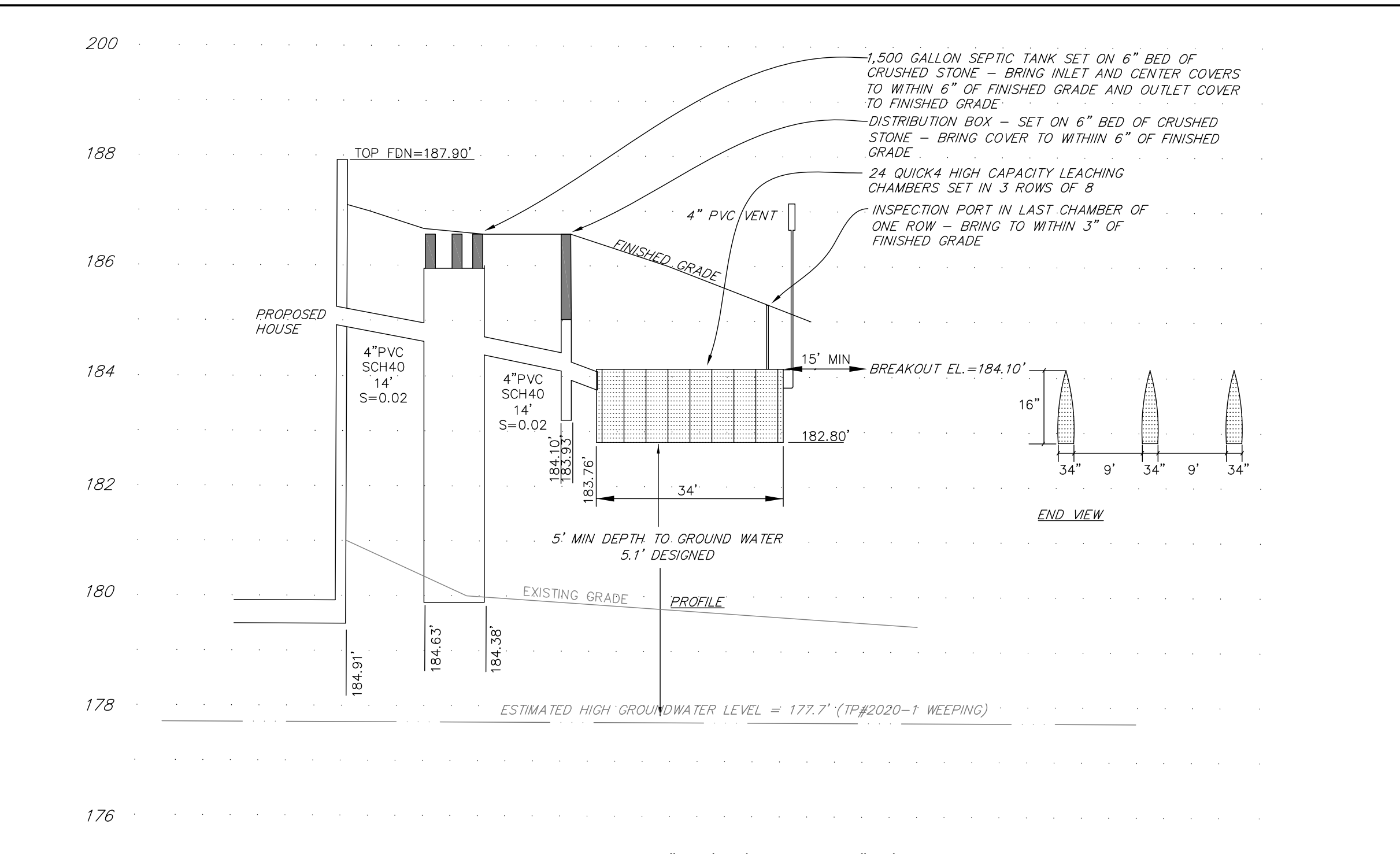
LOT 3
20,591± sq. ft.

LOT 2
21,002± sq. ft.

BENCHMARK DESCRIPTION: SPIKE IN TREE TO BE SET
BENCHMARK ELEVATION AND DATUM: ELEVATION = TO BE SET (NAVD88)
THERE ARE NO PUBLIC WELLS OR SURFACE WATER SUPPLIES WITHIN 400' OF THE PROPOSED SYSTEM.
THERE ARE NO PRIVATE WELLS WITHIN 200' OF THE PROPOSED SYSTEM.
THERE ARE NO BORDERING VEGETATED WETLANDS WITHIN 150' OF THE PROPOSED SYSTEM.
THERE ARE NO WETLANDS BORDERING A SURFACE WATER SUPPLY OR TRIBUTARIES TO SAME.
THERE ARE NO STREAMS AS DEFINED BY THE RIVERS ACT WITHIN 200' OF THE PROPOSED SYSTEM.
THERE ARE NO OPEN, SURFACE OR SUBSURFACE DRAINS THAT INTERCEPT HIGH GROUND WATER ON THE LOT.
THERE ARE NO OTHER OPEN, SURFACE OR SUBSURFACE DRAINS ON THE LOT.
THE SITE DOES NOT LIE WITHIN A REGULATORY FLOODWAY NOR WITHIN A 100 YEAR FLOOD ZONE.
WASTEWATER FROM THE PROPERTY WILL CONSIST OF DOMESTIC WASTE ONLY.

SCHEDULE OF ELEVATIONS

Finished Grade Above Structure	Finished Grade Above Structure	Finished Grade Above Structure
Top of foundation = 187.90'	Inv. @ septic tank inlet = 184.63'	Inv. @ leaching structure(in) = 183.76' 186.6'
Basement floor = 179.90'	Inv. @ septic tank outlet = 184.38' 186.6'	Elevation of structure bottom = 182.80'
Inv. of pipe @ foundation = 184.91' 187.1'	Inv. @ dist. box inlet = 184.10'	
	Inv. @ dist. box outlet = 183.93' 186.6'	



PROFILE SCALE: HORIZONTAL: 1"=20' / VERTICAL: 1"=2'

DESIGN DATA:
 1. ESTIMATED HYDRAULIC LOADING: 3 BEDROOMS AT 110 GAL/DAY = 330 G.P.D.
 SEWAGE DISPOSAL SYSTEM NOT DESIGNED FOR GARBAGE DISPOSAL.
 2. SEPTIC TANK SIZE: AVERAGE DAILY FLOW = 330 x 200% = 660 GALLONS
 SEPTIC TANK PROVIDED = 1500 GALLONS.
 3. DESIGN PERCOLATION RATE = 7 M.P.I. SOIL CLASS = I
 EFFLUENT LOADING RATE = 0.68 GPD/SF

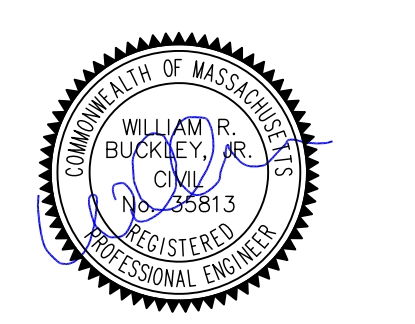
SOIL TEST DATA: TEST PIT #2020-2		TEST PIT #60		PERCOLATION TESTS		
DATE: 4.21.2020	GND ELEV: 180.7'	DATE: 2.11.2008	GND ELEV: 179.5'	TEST PIT No. 2020-2	TEST PIT No. 60	TEST PIT No.
Depth (Elevation)	Soil Description	Depth (Elevation)	Soil Description	DATE: 4.21.2020	DATE: 2.11.2008	DATE:
NO A OR B LAYER		NO A OR B LAYER		DEPTH OF PERC	20"	6"
FILL LAYER				START PRESOAK	0928	1218
20" (179.0')				END PRESOAK	0943	
				TIME @ 12"	0943	
				TIME @ 9"	0958	
				TIME @ 6"	1019	
				TIME (9"-6")	21	
				CALC. RATE	7 MPI	2 MPI
				DESIGN RATE	7 MPI	2 MPI
				NOTES		COULD NOT SOAK

CONSTRUCTION NOTES:
GENERAL CONSTRUCTION NOTES:
 1. All work shall conform to the latest edition of the Commonwealth of Massachusetts regulations 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 Board of Health.
 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 locations 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.
 3. 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 shall be placed over all components.
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 20" 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 shall be comprised of clean granular sand, free from organic matter and deleterious substances. 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 4% 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 15.255(3).
 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.
 4. If vents are required, the header invert shall be above the invert of the distribution piping. An activated carbon filter with exchangeable 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.
 5. 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 NOTES:
 1. Distribution box shall be watertight precast concrete with an influent baffle and watertight, removable cover. Unused outlets shall be plugged for future use.
 2. 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:
 1. Septic tank shall be watertight, 1,500 gallon capacity.
 2. 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.
 4. Tank shall be constructed of reinforced watertight precast concrete and shall have manufacturer's quality control seal affixed thereon.
 5. The outlet tee shall be equipped with A1800 Zabel filter (or engineer approved equivalent).
DESIGNER NOTES:
 1. No variations from this plan shall be made without written direction from the Designer, Owner and Board of Health Agent.
 2. The contractor shall notify the Designer of any discrepancies between the plan and actual site conditions, should they exist, before installation of the system.
 3. 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.
 4. 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
 14 CAMP ROAD FOXBORO, MA 02035
 PROPERTY ADDRESS: #4 SOUZA AVENUE FOXBOROUGH, MA
 ASSESSORS MAP/PARCEL: MAP 123, PARCEL 008

THIS SEWAGE DISPOSAL SYSTEM WAS DESIGNED IN ACCORDANCE WITH THE COMMONWEALTH OF MASSACHUSETTS ENVIRONMENTAL CODE OF REGULATIONS (TITLE 5) AND THE BOARD OF HEALTH REGULATIONS OF THE TOWN/CITY OF FOXBOROUGH
 ZONE CLASSIFICATION: R-40
 NITROGEN SENSITIVE AREA?: NO
 BUILDING SET-BACKS:
 FRONT: 35' SIDE: 15' REAR: 30'



BAY COLONY GROUP, INC.
 FOUR SCHOOL STREET
 FOXBOROUGH, MA 02035
 (508) 543-3939
 Date: JULY 14, 2020 Scale: 1"=30'
 Designed by: CHG Drawn by: CHG Checked by: WBJ
 Revisions:
 JOB NUMBER: 20-0113
 FILE NUMBER: 06-0150E-SS