RELEASE ABATEMENT MEASURE PLAN

FORMER BELLOFRAM AND
HIGH VOLTAGE SITES
BURLINGTON, MASSACHUSETTS 01803
MADEP RELEASE TRACKING NUMBER 3-0981

February 10, 2023

Prepared For:
3 VDG Owner LLC, LLC
1900 Crown Colony Drive, Suite 405
Quincy, MA 02169
Phone Number: (617) 934-2024
RP Contact Name: Paul Filtzer
RP Contact Email: pFiltzer@jumbocapital.com

Prepared by:
Tetra Tech, Inc.
100 Nickerson Rd
Marlborough, MA 01752
Phone Number: (978) 303-8533
Contact Name: Thomas Nunno
Contact Email: Thomas.Nunno@tetratech.com

TETRA TECH

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1 INTRODUCTION

On behalf of 3 VDG Owner, LLC, Tetra Tech, Inc. (Tetra Tech), has prepared this Release Abatement Measure (RAM) Plan for the risk reduction of offsite chlorinated solvent migration in Burlington, Massachusetts. A Site plan showing the location of the Site subject to this measure is provided in **Figure 1**. The focus of this RAM Plan is construction activities that will take place in the unoccupied area on the western corner of the 3 Van De Graaf Drive building. bordering the Sophos and Raytheon facilities. A complete description of the RAM activities is presented below. The following plan is intended to meet the requirements of 310 CMR 40.0444(1) (a) through (i) of the MCP.

Person Assuming Responsibility for Conducting the Release Abatement Measure

Responsible Party
3 VDG Owner, LLC
1900 Crown Colony Drive, Suite 405
Quincy, MA 02169
Telephone: 617 934-2024

Licensed Site Professional (LSP) Overseeing the Work
Thomas Nunno, LSP #2527
Tetra Tech, Inc.
100 Nickerson Road, 2nd Floor, Marlborough, MA
Telephone: 978 697-4909

Copies of the MassDEP transmittal forms (BWSC-106) accompany this RAM Plan on eDEP and are inherent to this submission.

Description of Release, Including Site Conditions and Surrounding Receptors

3 VDG Owner, LLC has been operating a combined bedrock groundwater pump and treatment system at the Van de Graaff Drive site since August 2021 to address chlorinated solvent contamination associated with the former Bellofram and High Voltage Engineering facilities. Historic Release Tracking Numbers (RTNs), 3-0981 and 3-0669 were officially linked in July 2009 under RTN 3-0981. As part of Temporary Solution Status activities under this RTN, 3 VDG Owner collects groundwater monitoring information in the vicinity of the pump and treatment system.

According to the MassDEP Priority Resource Map included as **Figure 2**, the Site is located upgradient and within one half-mile of a Potential Drinking Water Source Area (Zone II), as defined in the Massachusetts Contingency Plan (MCP). There are no private drinking water wells, vernal pools, Areas of Critical Environmental Concern, or Sole Source Aquifers within 500 feet of the Site. In addition, there are no public water supply wells within one-half mile of the Site. The figure does identify protected freshwater wetlands located just west of the site within 500 feet. To the east of the Site is the Surface Water Supply Watershed Boundary. Taxonomic groups found in Vine

Brook watershed include fish, reptiles, amphibians, dragonfly/damselfly and vascular plants.

The known site human receptors are principally the occupants of 4-10 Van de Graaff Drive. The principal site occupants are office employees. It should be noted that the majority (> 50%) of these employees are currently working remotely. Additionally, recent Substantial and Imminent Hazard calculations have concluded that neither condition exists at the site for on-site office workers (Tetra Tech, 2019).

Release Abatement Measure Objectives

Renovation and expansion projects are planned for the Site within the 3 Van De Graff Building which are intended to convert portions of the building to laboratory space. The objective of the release abatement measure at the Site is to excavate the existing foundation to place a new service elevator pit and pH testing pit to a depth no more than 10' in the 3 Van De Graff Drive building in the areas shown on **Figure 3**. Excavation will be completed by The Richmond Group whom will be responsible for the excavation of the two pits to the maximum depth of 10 feet below ground surface. Upon completion of excavation The Richmond Group will be pouring new concrete foundations of 1' wide surrounding the new excavation with added vapor barrier material.

Because the building was renovated in the 1990s to include a passive vapor barrier, the construction will take measures to maintain the integrity of the vapor barrier by repairing or replacing the polyethylene layer where construction activities penetrate the layer. This will include finding the edges of the vapor barrier and bonding new material to the edges of the existing vapor barrier and carrying them down to the bottom of the two pits. The new pits will accordingly be lined with new vapor barrier material.

Additionally, an investigation of existing foundation depths will take place using a 26-inch boring drill where the contractor will drill alongside the foundation to determine existing depths of the foundation. The area for the investigative borings are shown on **Figure 4**. Preliminary borings just past the vapor barrier were conducted on February 9, 2023. This preliminary work showed that the vapor barrier is located beneath the surface slab on top of the original building slab. Photoionization Detector (PID) readings collected at the time of this preliminary work showed results of 0.0 parts per million by volume (ppmv).

Health and Safety

Tetra Tech has prepared a Health and Safety Plan addressing remedial response actions at the Site. The plan will be on-site during Site work outlined in the RAM Plan objectives.

2 REMEDIATION WASTE MANAGEMENT

This section describes procedures for the on-site management and off-site disposal of remediation waste generated during this RAM. Remediation waste management will be conducted in accordance with the applicable sections of the MCP, 310 CMR 30.00 and 310 CMR 40.0030.

On-Site Remediation Waste Management

Waste generated on-site will include concrete and fill material. These materials will be staged in separate piles. Plastic sheeting will be staged next to the excavation to contain fill material and concrete removed from the excavation in separate piles. The staging areas will be constructed with a berm to prevent any spillage or runoff

in the event of a heavy rain event. In the event the work needs to continue overnight the material piles will be covered with plastic sheeting and contained within a secure fenced-in area.

Off-Site Disposal

Remediation waste generated under the RAM, if any, is anticipated to be non-hazardous. Concrete and any fill material produced will be monitored for VOCs using a photo-ionization detector (PID) following the MassDEP Headspace Screening Method and further tested by a certified laboratory if results exceed the action levels of 5 ppmv via Mass DEP Headspace Method. Should any material exceed action levels (RC-S1 criteria) after laboratory testing, all impacted materials will be disposed of offsite to a facility certified to manage the waste soils/concrete.

Should no detections be made concrete will be recycled to concrete recycler such as Aggregate Industries in Peabody, Massachusetts.

3 ENVIRONMENTAL MONITORING

Qualified environmental personnel will be present during the excavation of the elevator and pH pits, as well as the foundation borings to conduct environmental monitoring as described herein. RAM-related management activities will be conducted during typical business hours.

Air Monitoring

On-site air monitoring for volatile organic compounds (VOCs) will be conducted to evaluate working conditions, in order to minimize exposures to workers and other surrounding receptors. Based on previously existing Site data, significant VOC emissions are not expected during remediation, but field monitoring of the breathing zone for VOCs using a PID will be conducted within the work area as a precaution. Summa Canisters will be deployed in the interior of the building to monitor any ambient air if PID readings greater than 5 ppmv are recorded.

Action Levels

Instrument readings from the breathing zone and excavation areas will be used to help evaluate the need for instituting additional safety measures, disposal of removed fill and/or upgrading personal protective equipment (PPE) levels. If nuisance conditions are found to exist, corrective actions will be implemented, which may include one or more of the following actions:

- Temporarily discontinuing or slowing work;
- Deploying Summa Canisters to monitor ambient air;
- Repairing, and patching vapor barrier; and
- Implementing engineering controls (i.e., ventilation).

Although the presence of VOCs is not anticipated, the action level will be 10 parts per million (ppm) within the breathing zone.

4 PERMITS AND APPROVALS

4.1 Federal Permits

No Federal permit requirements are anticipated.

4.2 State Permits

State permit requirements for the RAM activities, other than submission of the RAM Plan itself, include notification of DigSafe.

4.3 Local Permits

There are no known local permit requirements for the RAM activities.

5 CONCLUSIONS

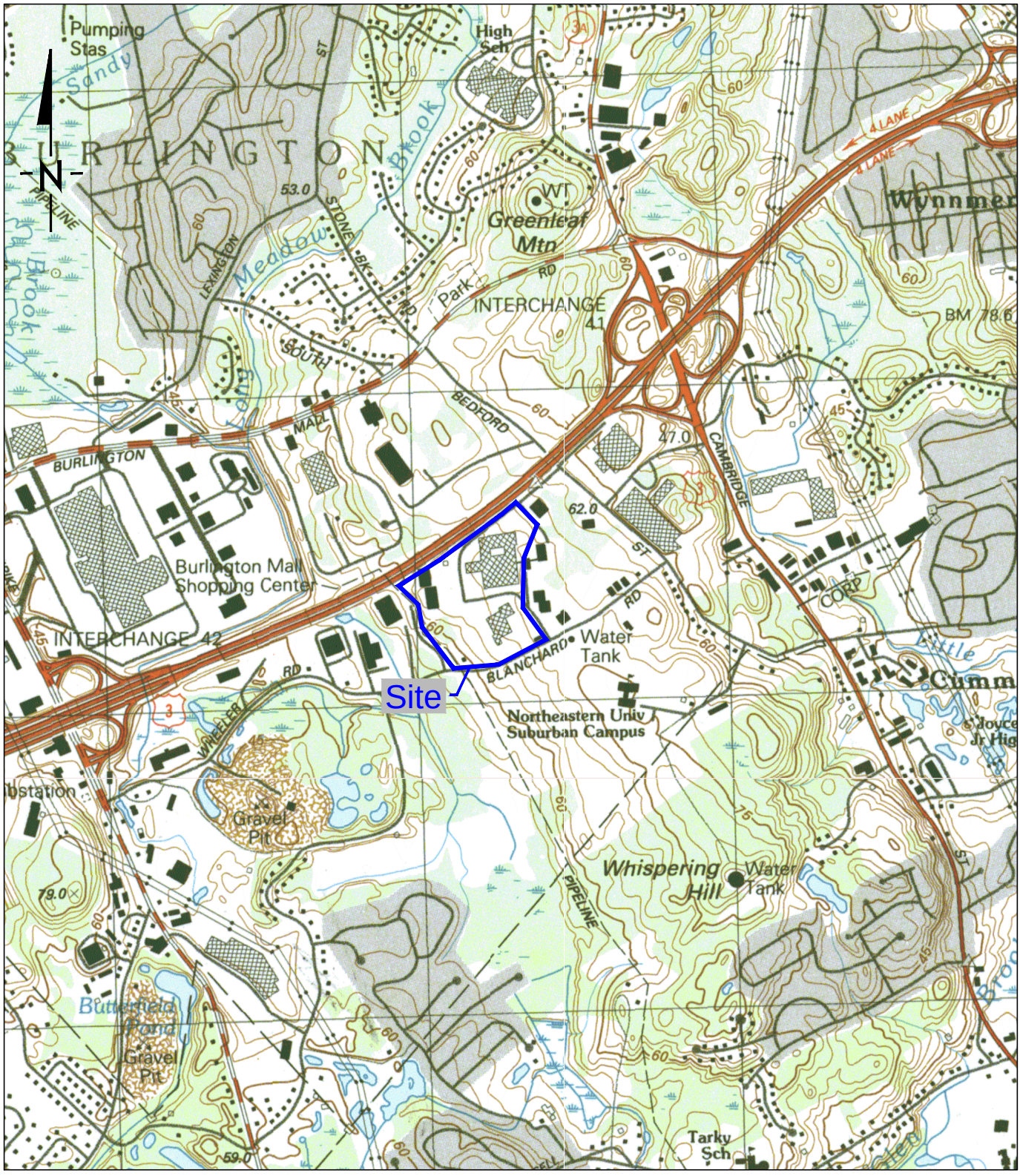
The RAM Plan was prepared in accordance with requirements of the Massachusetts Department of Environmental Protection. Copies of the Notification Letters are included in **Appendix A**.

6 LSP OPINION

The preceding report constitutes the LSP opinion. Language associated with the LSP Opinion certification is included in the eDEP Transmittal Forms for this RAM Plan.

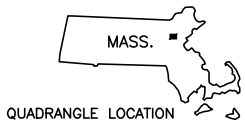
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FIGURES



Scanned USGS Quads by MassGIS

0 1,500
Scale in feet



QUADRANGLE LOCATION

G:\HIGHVOLT_2015\01-15-RPT\LOCUS.DWG

TITLE:

SITE LOCATION MAP

LOCATION:

Former HighVoltage/Bellofram Sites, Burlington, MA.

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APPROVED	ABS
DRAFTED	RMK
PROJECT#	
DATE	FEB 2015

FIGURE 1

Figure 2: MassDEP Phase 1 Site Assessment Map

MassDEP - Bureau of Waste Site Cleanup

Phase 1 Site Assessment Map: 500 feet & 0.5 Mile Radii

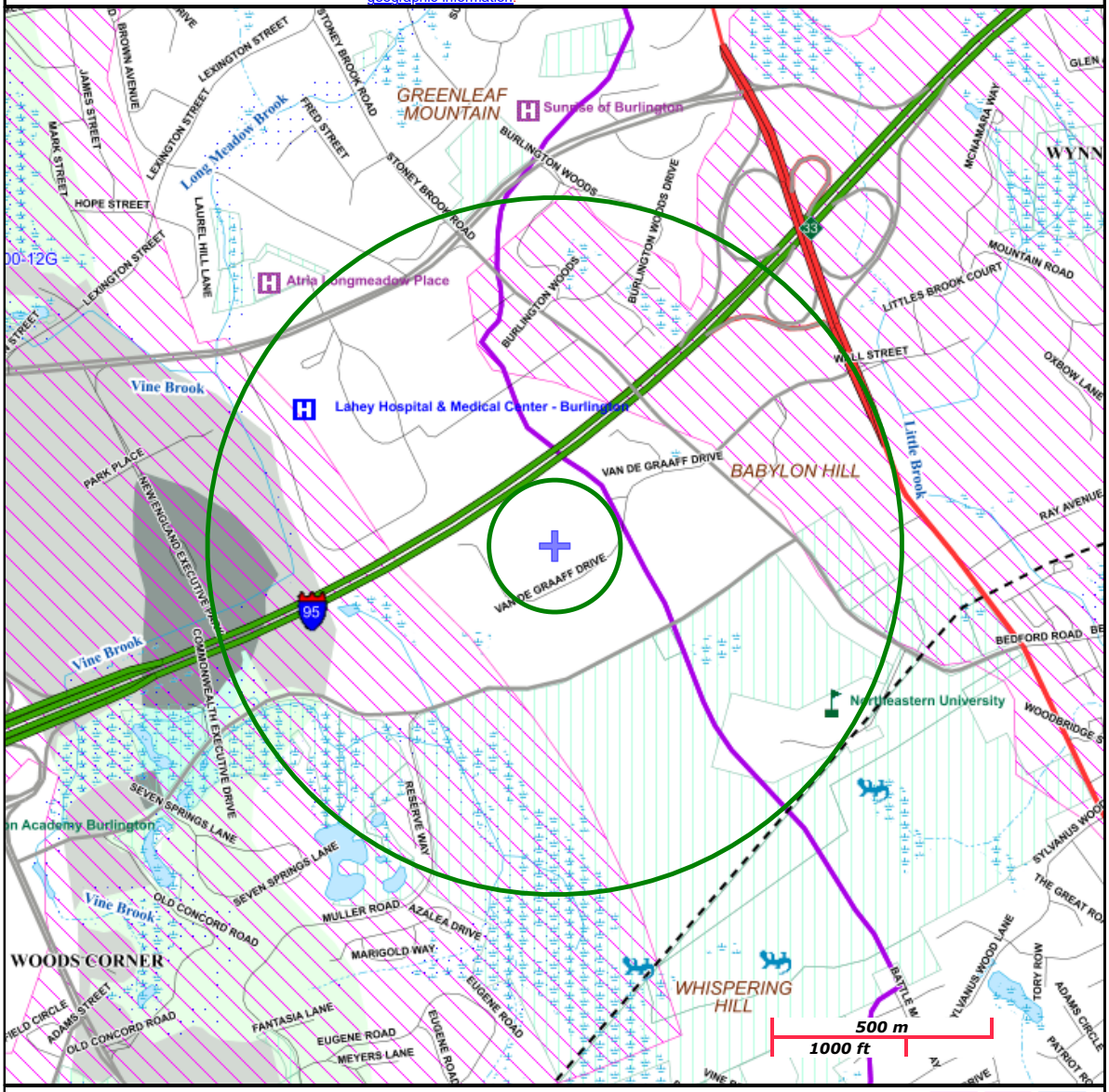
Site Information:

3 VAN DE GRAFF DR BURLINGTON, MA

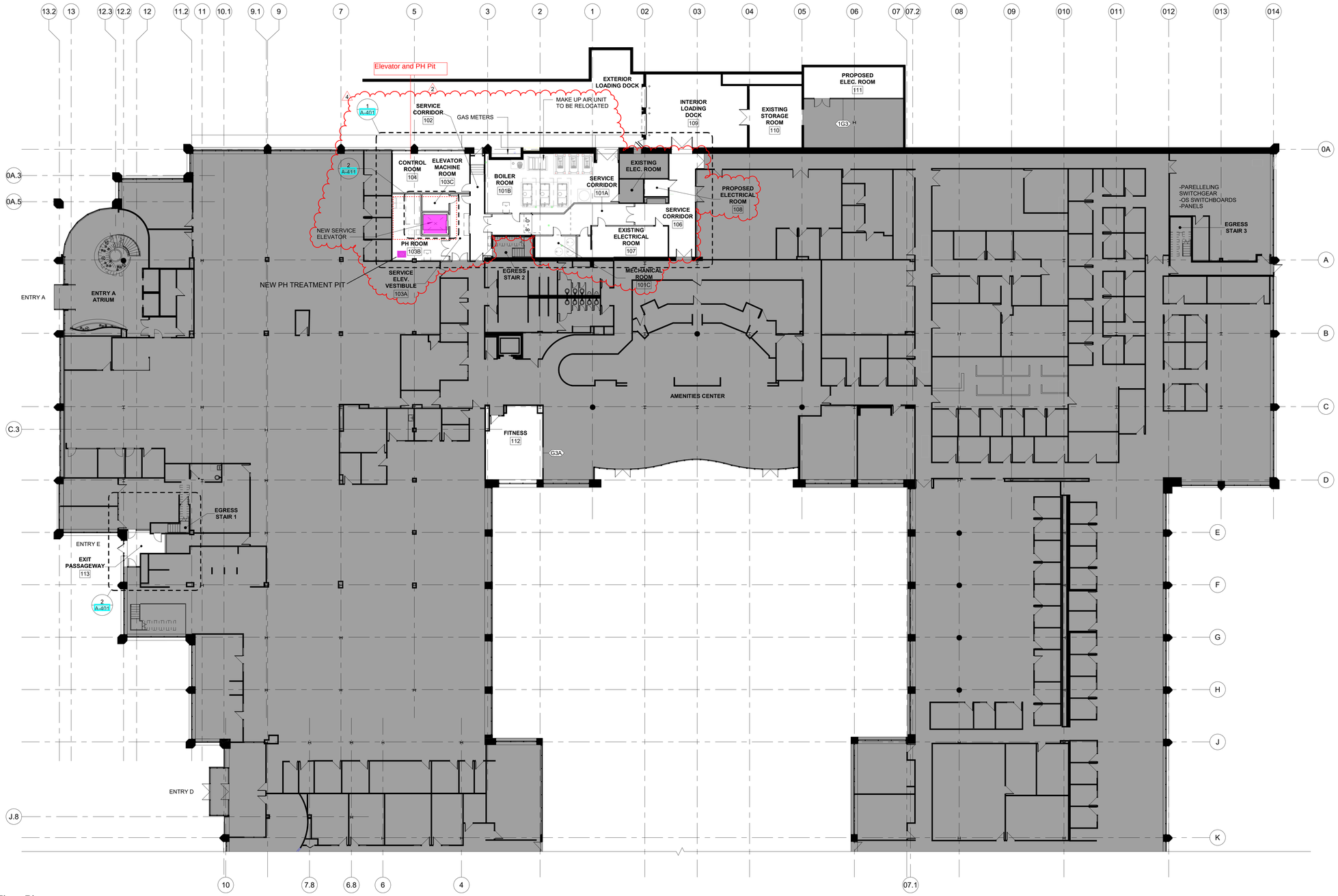
NAD83 UTM Meters:
4705643mN , 319298mE (Zone: 19)
February 10, 2023

The information shown is the best available at the date of printing. However, it may be incomplete. The responsible party and LSP are ultimately responsible for ascertaining the true conditions surrounding the site. Metadata for data layers shown on this map can be found at: https://www.mass.gov/orgs/massgis-bureau-of-geographic-information.

MassDEP
Commonwealth of Massachusetts
Department of Environmental Protection



Roads: Limited Access, Divided, Other Hwy, Major Road, Minor Road, Track, Trail
Boundaries: Town, County, DEP Region; Train; Powerline; Pipeline; Aqueduct
Basins: Major,PWS; Streams: Perennial, Intermittent, Man Made Shore, Dam
Aquifers: Medium Yield, High Yield, EPA Sole Source
Non Potential Drinking Water Source Area: Medium, High (Yield)
PWS Protection Areas: Zone II, IWPA, Zone A
Hydrography: Open Water, PWS Reservoir, Tidal Flat
Wetlands: Freshwater, Saltwater, Cranberry Bog
FEMA 100yr Floodplain; Protected Open Space; ACEC
NHESP Pri-Hab of Rare Species; Vernal Pool: Cert., Potential
Solid Waste Landfill; PWS: Com.GW,SW, Emerg., Non-Com.



1 Level 1A Floor Plan
1/16" = 1'-0"

2

Partition Notes

1. REFER TO GENERAL CONDITIONS, SPECIFICATIONS AND SCHEDULES FOR ALL WORK.
2. DRAWINGS LISTED UNDER THE 'DRAWING LIST' MUST BE READ IN CONJUNCTION WITH THIS DRAWING FOR COMPLETE INFORMATION.
3. CONFIRM WITH ARCHITECT THAT THESE DRAWINGS ARE THE MOST CURRENT ISSUE BEFORE BEGINNING LAYOUT AND CONSTRUCTION.
4. CONTRACTOR MUST GIVE ARCHITECT (4) WORKING DAYS NOTICE TO REVIEW PARTITIONS, FLOOR OUTLETS AND FURNITURE PANEL SYSTEM LAYOUT AT 'CHALK LINE' STAGE. TRACK AND STUD WORK SHALL NOT BEGIN BEFORE ARCHITECT HAS REVIEWED ENTIRE LAYOUT.
5. FOR DOOR AND HARDWARE INFORMATION REFER TO DOOR AND HARDWARE SHEET.
6. INTERIOR DETAILS ARE KEYED TO THE PLANS AT TYPICAL LOCATIONS. THE DETAILS APPLY TO ALL LOCATIONS THAT ARE NOT KEYED - IN AN AREA OF THE SAME CONSTRUCTION AND SCOPE OF WORK. THE CONTRACTOR AND SUBCONTRACTORS ARE RESPONSIBLE TO COORDINATE THE LOCATION OF ALL TYPICAL DETAILS AND INSTALL THE WORK INDICATED. IF DISCREPANCIES EXIST OR QUALIFICATION IS REQUIRED THE CONTRACTOR IS TO NOTIFY THE ARCHITECT TO OBTAIN CLARIFICATION.
7. REFER TO DRAWING SERIES - FINISH PLANS FOR INTERIOR FINISH MATERIALS, FINISH LEGEND AND LOCATION OF FINISHES.
8. REFER TO DRAWING SERIES - INTERIOR MILLWORK ELEVATIONS AND ENLARGED PLAN AREAS.
9. ALL VERTICAL AND HORIZONTAL DUCTS, PIPE, CONDUIT, ETC. (WHETHER SHOWN OR NOT) IN FINISHED ROOMS SHALL BE FURRED IN AND FINISHED TO MATCH ADJACENT FINISHED SURFACES AND ANY REQUIRED WALL OR CEILING RATINGS.

Partition Legend

SEE PARTITION TYPES FOR ADDITIONAL INFORMATION.

SYMBOL	DEFINITION
	NOT IN CONTRACT (N.I.C.)
	EXISTING PARTITION AND DOOR TO REMAIN
	NEW PARTITION AND DOOR OPENING SHALL BE 6" FROM CORNER UNLESS OTHERWISE NOTED
	NEW GLAZING PARTITION AND DOOR OPENING SHALL BE 6" FROM CORNER UNLESS OTHERWISE NOTED
	PROVIDE FIRE TREATED IN-WALL BLOCKING FOR MOUNTED TELEVISION CENTERED AT 60" AFF UNLESS OTHERWISE NOTED ON ELEVATIONS OR AV DRAWINGS. COORDINATE EXACT AREA OF BLOCKING WITH AV EQUIPMENT / VENDOR.
	UPPER CASEWORK - SEE ELEVATIONS FOR ADDITIONAL INFORMATION, PROVIDE CONTINUOUS 2x FIRE TREATED IN-WALL BLOCKING TO SUPPORT CASEWORK.

Partition Keynotes

P1	ALL STRUCTURAL ELEMENTS REVIEWED IN FIELD BASED ON EXISTING CONDITIONS. BIM MODEL PROVIDEDE BY LANDLORD.
P2	LOCATION OF NEW BOTTLE FILLER, SEE ENGINERRING DRAWINGS FOR REQUIREMENTS

4/8/2022 5:33:40 PM

TETRA TECH

SOURCE : SGA-ARCH
200 HIGH ST, BOSTON, MA 02110
857.300.2610 | SGA-ARCH.COM

PROJECT TEAM:

CONSTRUCTOR
THE RICHMOND GROUP
77 Maine Street, #8
Hopkinton, MA 01748
508-435-9700

DEVELOPER
JUMBO CAPITAL MANAGEMENT
1900 Crowne Colony Drive, Ste 405
Quincy, MA 02169

CONSTRUCTION MANAGER
THE RICHMOND GROUP
77 Maine Street, #8
Hopkinton, MA 01748
508-435-9700

MEP FP ENGINEERS
AHA ENGINEERS
24 Hartwell Avenue
Lexington, MA 02421

STRUCTURAL ENGINEERS
H+O STRUCTURAL ENGINEERING
100 Summer Street, Ste 1600
Boston, MA 02110

CODE ENGINEERS
ARUP
60 State Street
Boston, MA 02109

ENVIRONMENTAL ENGINEERS
TETRA TECH, INC.
100 Nickerson Road
Marlborough, MA 01752

NOT FOR CONSTRUCTION

SEAL / SIGNATURE

© Spagnolo Gisness & Associates, Inc.
12/09/2021

PROJECT:

3 Van De Graaff Repositioning

3 Van De Graaff Drive
Burlington, MA 01803
SOURCE:
The Richmond Group
MODIFIED BY: TETRA TECH, INC.

REVISIONS:

No.	Date	Description
2	01/04/22	Addendum 2
4	04/08/22	Addendum 5
5	02/10/2023	Tetra Tech Additions

SUBMISSIONS:

Date	Issued For:
07/13/21	ISSUE FOR BUDGETING
08/13/21	SCHEMATIC DESIGN
11/10/21	DESIGN DEVELOPMENT
12/03/21	DEMO SET
12/09/21	CONSTRUCTION DOCUMENTS
2/10/2023	MassDEP RAM Plan

SCALE	**As indicated**
DATE ISSUED	**02/10/2023**
PROJECT NO	**117- 9029001**
DRAWN BY	**AWS**
CHECKED BY	**MRT**

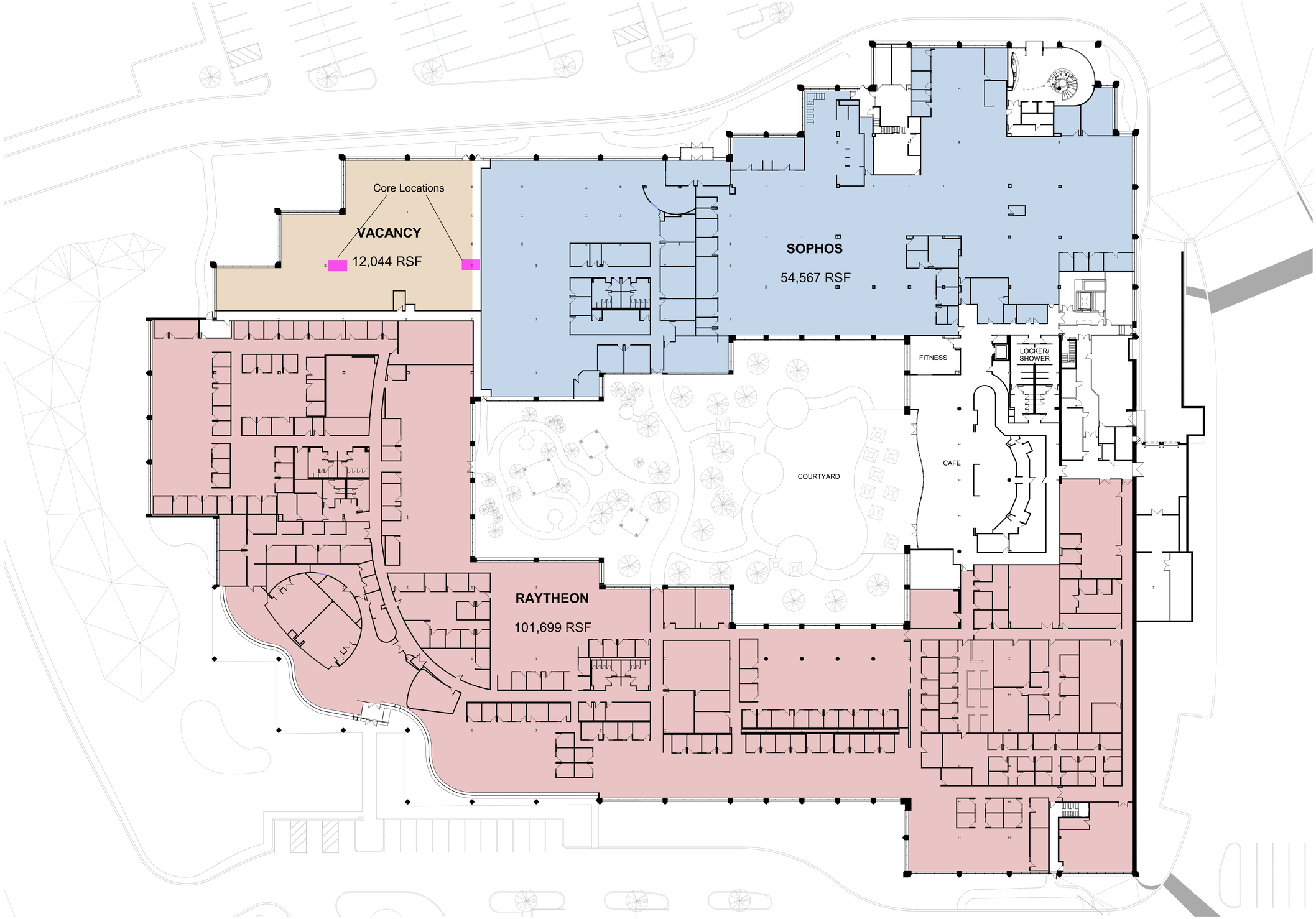
SHEET TITLE:

RAM Plan Excavation Areas

Figure 3

Figure 4 - RAM Plan Core Locations

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3 Van De Graaff Repositioning | A-01

3/64" = 1'-0" | 08/02/22

Project Number 005313.00

Figure 5: Vapor Barrier Details

Bonding Strip
Old Vapor Barrier
New Vapor Barrier
Lower Foundation Slab

#5@12" O.C. EW,EF BUT NOT LESS THAN WALL REINF ABOVE
PH PIT. SEE ARCH FOR MORE INFO.
REFER TO ARCH AND ELEVATOR DWGS
ELEVATOR ENCLOSURE. SEE ARCH FOR MORE INFO.
1ST FLOOR EL
#4@12" O.C. DOWELS
SEE PLAN FOR REINFORCING
1' - 0"
ELEV. SLAB ELEV
COORDINATE PIT DEPTH WITH ELEVATOR SUB
DOWELS TO MATCH VERTICAL REINFORCEMENT SIZE & SPACING
WATERSTOP
SEE PLAN
0' - 10"
SUMP PIT REINF WITH #4@12" OC EF, EW (COORD. WITH ELEVATOR SUB AND ARCH)
PT PIT SLAB ELEV
SEE PLAN FOR REINF

APPENDICES

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APPENDIX A

PUBLIC NOTIFICATION LETTERS

TETRA TECH

P.N. 117-9029001

February 10, 2023

Mrs. Susan Lumenello
Director, Burlington Board of Health
Town Hall
61 Center Street
Burlington, MA 01803

Via email and regular mail Due to Covid-19 Considerations

Re: Notification of Conduct of Release Abatement Measure
3 Van De Graaf Drive, Burlington, MA 01803
RTN 3-981

Dear Mrs. Lumenello,

On behalf of 3 Van De Graff, LLC, Tetra Tech, Inc. (Tetra Tech) is providing this notification that a Release Abatement Measure (RAM) is being conducting at the above referenced Disposal Site. This notification is provided to fulfill the requirements of the Massachusetts Contingency Plan (MCP) 310 CMR 40.1403(3)(d).

The RAM is being conducted in order to allow excavation for a new service elevator and pH pits in the 3 Van De Graff building. The excavation and construction of these pits will result in the removal of excess soils and concrete. Excavated material may require disposal at an RCS1 Landfill, as there is no use for fill at the property.

If you have any questions regarding this submittal, please feel free to call Thomas Nunno at 978-697-4909.

Sincerely,
Tetra Tech, Inc.



Thomas J. Nunno, LSP

cc. Paul Filtzer
Nick Trocki
Paul Sagarino, Burlington Town Administrator

TETRA TECH
Three Lan Drive, Suite 100, Westford, MA 01886
Tel 978.303.8533 Fax 978.952.0122 www.tetratech.com

TETRA TECH

P.N. 117-9029001

February 10, 2023

Paul F. Sagarino, Jr.
Town Administrator
Town Hall
29 Center Street
Burlington, MA 01803

Via email and regular mail Due to Covid-19 Considerations

Re: Notification of Conduct of Release Abatement Measure
3 Van De Graaf Drive, Burlington, MA 01803
RTN 3-981

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Sincerely,
Tetra Tech, Inc.



Thomas J. Nunno, LSP

cc. Paul Filtzer
Nick Trocki
Susan Lumenello, Burlington Board of Health

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Three Lan Drive, Suite 100, Westford, MA 01886
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