GRANITE STATE LANDFILL, LLC
1855 VT Route 100 • Hyde Park, VT 05655 **p.** 802.651.5454 **f.** 802.888.7931

February 6, 2024

Applicant Receipt
New Hampshire Department of Environmental Services
Wetlands Bureau Land Resources Management
Water Division
29 Hazen Drive, PO Box 95
Concord, NH 03302-0095

RE: Granite State Landfill, LLC
Proposed Lined Landfill - Dalton, New Hampshire
Wetlands Permit Application (File # 2023-3259)

Dear Applicant Receipt Center:

Granite State Landfill, LLC (GSL) writes to provide a response to the New Hampshire Department of Environmental Services Wetlands Bureau (NHDES) administratively incomplete correspondence received by email on December 21, 2023 regarding our Standard Dredge and Fill Wetlands Permit Application # 2023-3259 (Application). We have reiterated your comments in normal font below with our response in ***bold italic font***.

- Bullet 1: The application fee for the area of proposed impact to intermittent and perennial streams was not included in the $200,786.80 fee paid on December 14, 2023.

  The application fee did include the proposed impacts to intermittent and perennial streams. Since the intermittent and perennial streams to be impacted are within mapped wetland impact areas, they were included within the respective wetland impact area calculations and the associated filing fee of $200,786.80. Refer to Attachment 1 for the updated application fee calculation.

- Bullet 2 Part 1: Section 11 – Clear and consistent Impact Area identification (Env-Wt 311.04(g)) – page 5 of Section 8.2 in the Application describes the proposed wetland impacts as approximately 503,118 square feet in contradiction to the impact area of 501,967 square feet stated in the application form. This information is needed to determine if the fee is correct.

  Section 11 – To confirm: the total proposed wetland impacts are 501,967 square feet, which is the value stated Section 2.1, Table 8.1 in Section 8, Section 12.4, and the Wetland Impact Plans provided in Section 14.3 of the application.

As a point of clarification, the narrative on page 5 of Section 8.2 of the application was intended to provide approximate areas rounded to acres from square feet. The total impacts of 501,967 square feet indicated in the Application Form (Section 2.1 of the December 2023 Application and Attachment 1 of this letter) is correct.

- Bullet 2 Part 2: Section 12 – Correct Application Fee Calculation (RSA 482-A:3, I) – missing area of intermittent and perennial stream impact in calculation.

  As stated in Bullet 1, the square feet of linear stream impacts for intermittent and perennial streams were originally included within the wetland impact areas. The accompanying revised Section 11 of the Standard Dredge and Fill Wetlands Permit Application Form (Attachment 1), Existing Condition Plans (Attachment 2), Wetland Impact Plans (Attachment 3) and wetland impact summary tables (Attachment 4) serve to break-out the square feet of stream impacts. The perennial stream impacts were determined by calculating the square feet of impact from the delineated top of bank. The square foot impact for Intermittent streams was determined by assessing the width of the observed scoured channel.

- Bullet 3: The tax map, block, unit and lot number of each parcel in the subject property on one or more plan sheets as specified in Env-Wt 311.05(a)(3) and Env-Wt 311.05(c)(1)(a). NHDES could not locate this information on any of the submitted plans. Please provide a plan that meets the referenced rules.

  Please find attached two figures prepared by Horizons Engineering that provide the required information (Sheets A and B of the Wetland Impact Plans included in Attachment 3).

- Bullet 4: Dated and labeled color photographs of all proposed jurisdictional wetland impact areas as described in Env-Wt 311.06(b).

  Consistent with the requirements of Env-Wt 311.06, dated and labeled color photographs of each proposed jurisdictional wetland impact area are included as Attachment 5 of this letter. Two figures that identify the location of each photograph, and a table of coordinates for each photograph location are also included in Attachment 5. Photographs are provided for each wetland impact identification number (ID), based on the Wetland Impact Plans prepared by Horizons Engineering of Littleton, New Hampshire included in Section 14.3 of the application (also summarized in Table 8.1 of Section 8 of the application). The photographs are intended to be representative of the current conditions in each impact area. In some

instances, multiple photograph locations were included for a single wetland impact ID. The wetland impact IDs include proposed permanent, temporary, and after-the-fact impacted areas.

Should you have any further questions, please contact me at (802) 236-5973 or by email at john.gay@casella.com.

Sincerely,

GRANITE STATE LANDFILL, LLC

John Gay, EI
Permitting, Compliance, & Engineering

Encl. via email link
https://sanbornhead.sharefile.com/d-s8a4ded0de95846f2b3a4567f5bf1f981

Attachment 1 – Wetland Application Fee Determination
Attachment 2 – Existing Conditions Wetland Mapping Plans
Attachment 3 – Wetland Impact Plans
Attachment 4 – Wetland Impact Summary
Attachment 5 – Photograph Log

c. Douglas Ingerson, Jr., J.W. Chipping (via email)
Barry Keith, B.H. Keith Associates (via email)
Bethlehem Municipal Clerk/Conservation Commission (via hand deliver 2/8/24)
Dalton Municipal Clerk/Conservation Commission (via hand deliver 2/8/24)
Ammonoosuc River Local Advisory Committee (via ups mail)
NHDES Rivers Program (via email)

Attachment 1
Wetland Application Fee Determination

For intermittent and ephemeral streams, the linear footage of impact is measured along the thread of the channel. *Please note, installation of a stream crossing in an ephemeral stream may be undertaken without a permit per Rule Env-Wt 309.02(d), however other dredge or fill impacts should be included below.*

For perennial streams/rivers, the linear footage of impact is calculated by summing the lengths of disturbances to the channel and banks.

Permanent (PERM.) impacts are impacts that will remain after the project is complete (e.g., changes in grade or surface materials).

Temporary (TEMP.) impacts are impacts not intended to remain (and will be restored to pre-construction conditions) after the project is completed.

	JURISDICTIONAL AREA	PERM. SF	PERM. LF	PERM. ATF SF	TEMP. SF	TEMP. LF	TEMP. ATF	PERM. ATF LF
Wetlands	Forested Wetland	226,349		10,280	5,557			
	Scrub-shrub Wetland	159,444		22,794	14,508			
	Emergent Wetland	52,698		3,652	1,239			
	Wet Meadow							
	Vernal Pool	2,294						
	Designated Prime Wetland							
	Duly-established 100-foot Prime Wetland Buffer							
Surface	Intermittent / Ephemeral Stream	1,888	956	55				50
	Perennial Stream or River	1,094	909	115				180
	Lake / Pond							
	Docking - Lake / Pond							
	Docking - River							
Banks	Bank - Intermittent Stream							
	Bank - Perennial Stream / River							
	Bank / Shoreline - Lake / Pond							
Tidal	Tidal Waters							
	Tidal Marsh							
	Sand Dune							
	Undeveloped Tidal Buffer Zone (TBZ)							
	Previously-developed TBZ							
	Docking - Tidal Water							
	TOTAL	443,767	1,865	36,896	21,304			230

SECTION 12 - APPLICATION FEE (RSA 482-A:3, I)

☐ **MINIMUM IMPACT FEE**: Flat fee of $400.

☐ **NON-ENFORCEMENT RELATED, PUBLICLY-FUNDED AND SUPERVISED RESTORATION PROJECTS, REGARDLESS OF IMPACT CLASSIFICATION:** Flat fee of $400 (refer to RSA 482-A:3, 1(c) for restrictions).

■ **MINOR OR MAJOR IMPACT FEE:** Calculate using the table below:

Permanent and temporary (non-docking):	501,967 SF	× $0.40 =	$ $200,786.80
Seasonal docking structure:	SF	× $2.00 =	$
Permanent docking structure:	SF	× $4.00 =	$
Projects proposing shoreline structures (including docks) add $400 =			$
		Total =	$ $200,786.80

The application fee for minor or major impact is the above calculated total or $400, whichever is greater = $ $200,786.80

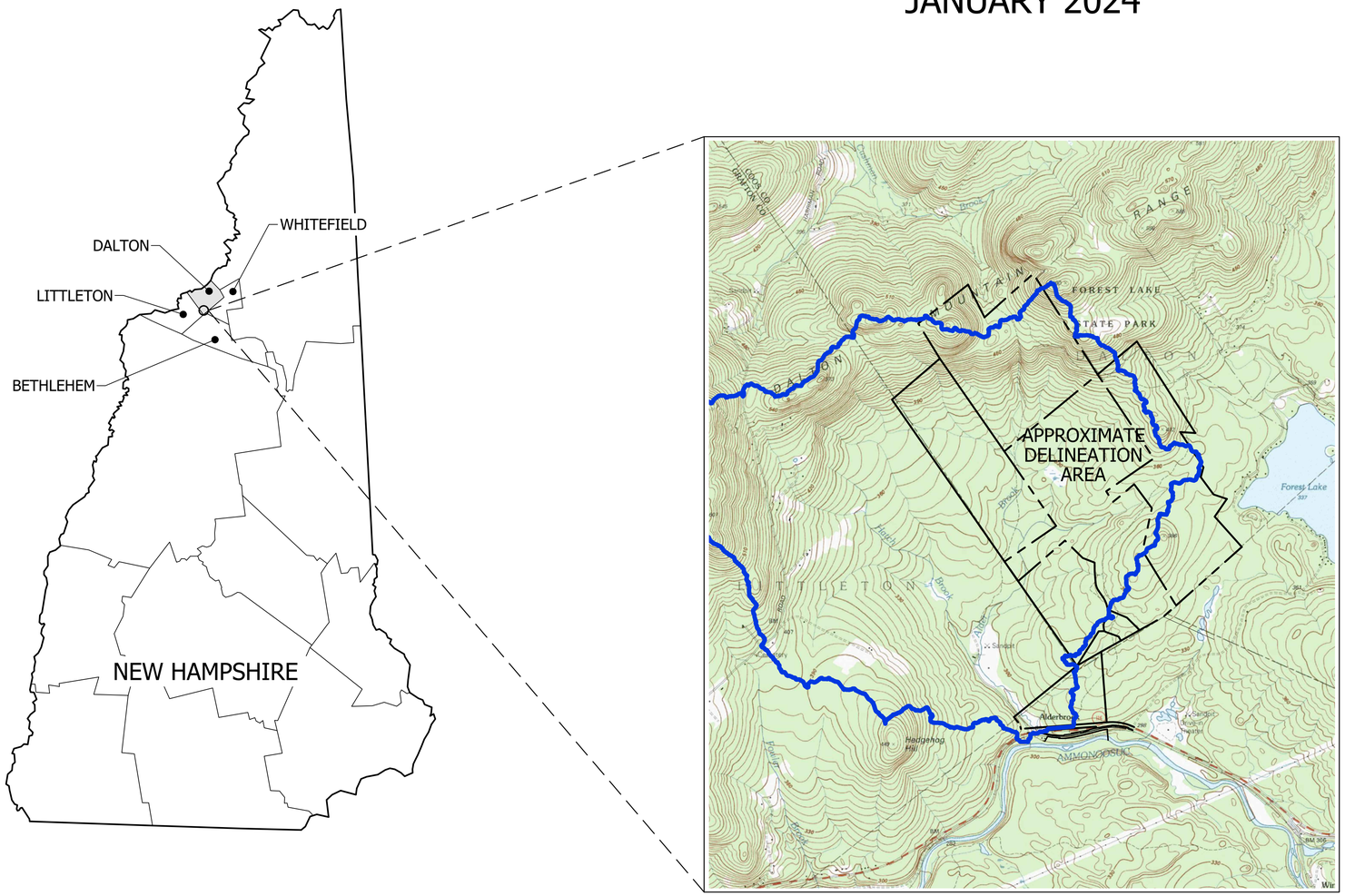
Attachment 2
Existing Conditions Wetland Mapping Plans
(Bound Separately)

GRANITE STATE LANDFILL, LLC

EXISTING CONDITIONS WETLAND MAPPING PLANS

DALTON, NEW HAMPSHIRE

JANUARY 2024



LOCATION PLAN

SCALE: 1" = 2000'

OWNER:

GRANITE STATE LANDFILL, LLC
1855 VT ROUTE 100
HYDE PARK, VT 05655
802.651.5454

WETLAND SCIENTIST:

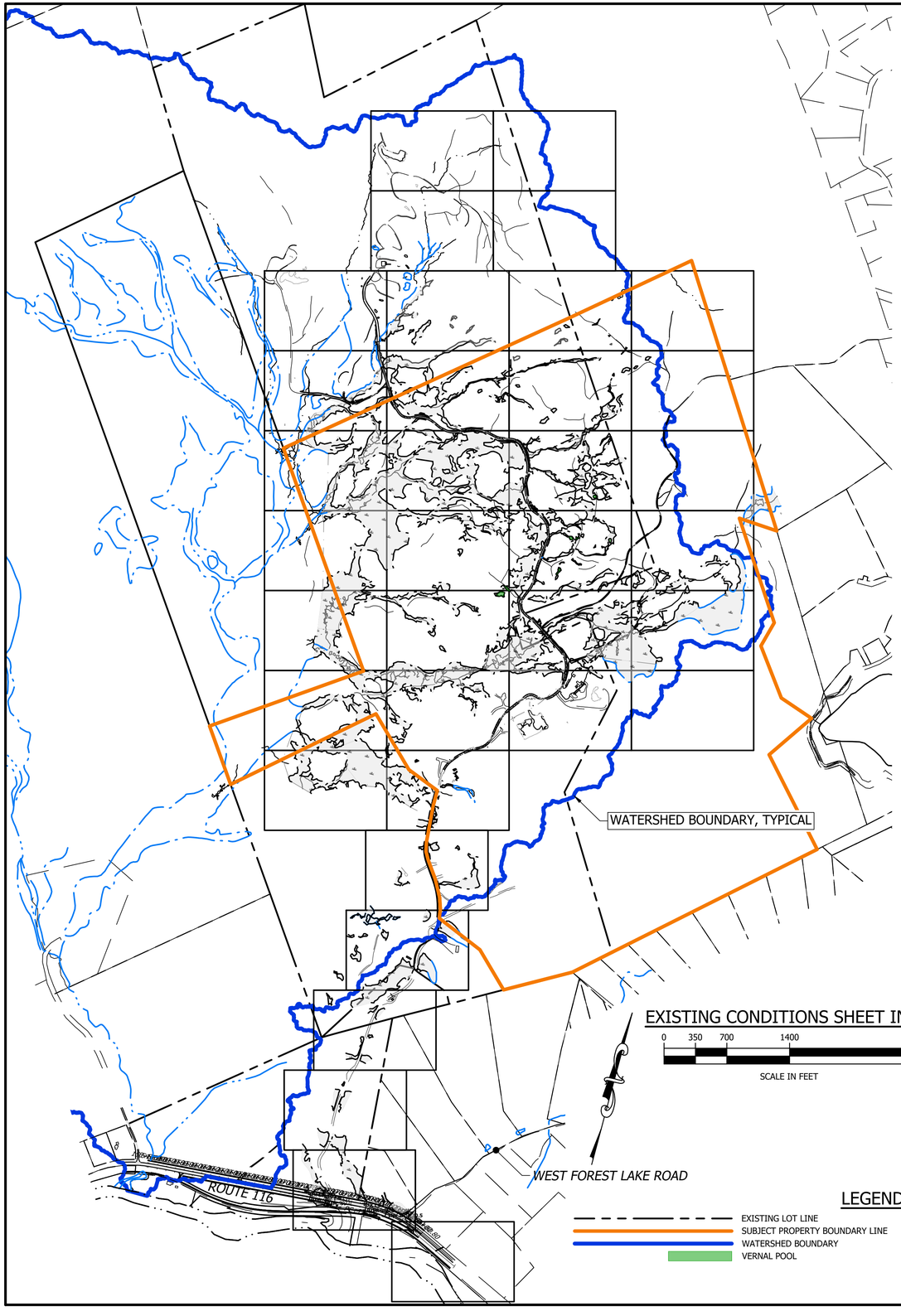
B.H.KEITH ASSOCIATES
11 ELM STREET
P.O. BOX 326
FREEDOM, NH 03836

STATE OF NEW HAMPSHIRE
BARRY H. KEITH
No. 087
CERTIFIED WETLAND SCIENTIST

SURVEYOR:

HORIZONS ENGINEERING, INC.
34 SCHOOL STREET
LITTLETON, NH 03561

DATE OF PRINT
FEBRUARY 01 2024
HORIZONS ENGINEERING



EXISTING CONDITIONS SHEET INDEX

0 350 700 1400 2800

SCALE IN FEET

LEGEND

- EXISTING LOT LINE
- SUBJECT PROPERTY BOUNDARY LINE
- WATERSHED BOUNDARY
- VERNAL POOL
- OHW — ORDINARY HIGH WATER MARK
- PERENNIAL STREAM
- INTERMITTENT STREAM
- EPHEMERAL FLOW
- FLOW DIRECTION
- WETLAND DELINEATION LINE
- P EM SS 1E — WETLAND CLASSIFICATION
- GRAVEL ROAD
- MINOR CONTOUR (2')
- MAJOR CONTOUR (10')
- APPROXIMATE LOCATIONS (NOT FLAGGED)
- WETLAND AREA
- PERENNIAL STREAM
- INTERMITTENT STREAM
- EPHEMERAL FLOW
- -X-X-X-X-X- BEAVER DAM
- U UPLAND
- GW SEEP GROUNDWATER SEEP
- 46-8—X AA-15X FLAG POINT AND ID # (STRING# & FLAG #)

WETLAND NOTES

STATE AND FEDERAL JURISDICTIONAL WETLANDS WERE DELINEATED DURING MAY 2018 THROUGH JULY 2023 BY N.H. CERTIFIED WETLAND SCIENTIST, BARRY H. KEITH WETLANDS MAPPING WAS DONE BY N.H. LICENSED LAND SURVEYORS, HORIZONS ENGINEERING, INC. USING GLOBAL POSITIONING SURVEY (GPS) METHODS AND IN ACCORDANCE WITH THE FOLLOWING GUIDANCE DOCUMENTS:

1. N.H. CODE OF ADMINISTRATIVE RULES (ENV-WT 406.01(a)) WITH THE TECHNIQUES OUTLINED IN THE 1987 "U.S. ARMY CORPS OF ENGINEERS WETLAND DELINEATION MANUAL, TECHNICAL REPORT Y-87-1."
2. U.S. ARMY CORPS OF ENGINEERS. 2012. "REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTHCENTRAL AND NORTHEAST REGION (VERSION 2.0). U.S. ARMY CORPS OF ENGINEERS RESEARCH AND DEVELOPMENT CENTER, ENVIRONMENTAL LABORATORY ERDC/EL TR-09-19."
3. U.S. ARMY CORPS OF ENGINEERS. 2016. "NATIONAL LIST OF PLANT SPECIES THAT OCCUR IN WETLANDS: "NORTHCENTRAL AND NORTHEAST REGION (VERSION 3.3)", U.S. ARMY CORPS OF ENGINEERS RESEARCH AND DEVELOPMENT CENTER, ENVIRONMENTAL LABORATORY.
4. U.S. FISH AND WILDLIFE SERVICE MANUAL FWS/OBS-79/31 ENTITLED "CLASSIFICATION OF WETLANDS AND DEEPWATER HABITATS OF THE UNITED STATES, COWARDIN ET AL, 1979."
5. U.S.G.S. FEDERAL GEOGRAPHIC DATA COMMITTEE, 2013, CLASSIFICATION OF WETLANDS AND DEEPWATER HABITATS OF THE UNITED STATES, WETLAND SUBCOMMITTEE, RESTON, VA.
6. NEW ENGLAND HYDRIC SOILS TECHNICAL COMMITTEE. 2017. 4th ED., "FIELD INDICATORS FOR IDENTIFYING HYDRIC SOILS IN NEW ENGLAND." NEW ENGLAND INTERSTATE WATER POLLUTION CONTROL COMMISSION, LOWELL, MA.
7. U.S. DEPARTMENT OF AGRICULTURE, NATURAL RESOURCE CONSERVATION SERVICE. 2010. "FIELD INDICATORS OF HYDRIC SOILS IN THE UNITED STATES, VERSION 7.0." L.M. VASILAS, G.W. HURT, AND C.V. NOBLE (EDS.). USDA, NRCS, IN COOPERATION WITH THE NATIONAL TECHNICAL COMMITTEE FOR HYDRIC SOILS.

SURVEY NOTES

THE WETLANDS FLAGS AS DELINEATED WERE FIELD SURVEYED BY REAL-TIME KINEMATIC GPS METHODS IN A BASE/ROVER CONFIGURATION WITH A BASE POSITION ESTABLISHED WITH THE ONLINE USER POSITIONING SERVICE, OR BY SUB-METER HANDHELD GPS METHODS USING A TRIMBLE GEOXH UNIT AND DIFFERENTIALLY CORRECTED WITH POST PROCESSING. ALL POSITIONS ARE BASED ON THE NEW HAMPSHIRE COORDINATE SYSTEM, NAD83 (GRID NORTH).

WETLAND CLASSIFICATION LEGEND

SYSTEM, CLASS, SUBCLASS, WATER REGIME

PFO1E - PALUSTRINE FORESTED BROAD-LEAVED DECIDUOUS, SEASONALLY FLOODED/SATURATED

PFO1/4E - PALUSTRINE FORESTED BROAD-LEAVED DECIDUOUS/NEEDLE-LEAVED EVERGREEN, SEASONALLY FLOODED/SATURATED

PFO4/1E - PALUSTRINE FORESTED NEEDLE-LEAVED EVERGREEN/BROAD-LEAVED DECIDUOUS, SEASONALLY FLOODED/SATURATED

PSS1E - PALUSTRINE SCRUB-SHRUB BROAD-LEAVED DECIDUOUS, SEASONALLY FLOODED/SATURATED

PSS/FO1E - PALUSTRINE SCRUB-SHRUB/FORESTED, BROAD-LEAVED DECIDUOUS, SEASONALLY FLOODED/SATURATED

PSS/FO1/4E - PALUSTRINE SCRUB-SHRUB/FORESTED, BROAD-LEAVED DECIDUOUS/NEEDLE-LEAVED EVERGREEN, SEASONALLY FLOODED/SATURATED

PSS/FO4/1E - PALUSTRINE SCRUB-SHRUB/FORESTED, NEEDLE-LEAVED EVERGREEN/BROAD-LEAVED DECIDUOUS, SEASONALLY FLOODED/SATURATED

PSS1/FO5E - PALUSTRINE SCRUB-SHRUB, BROAD-LEAVED DECIDUOUS/FORESTED, DEAD, SEASONALLY FLOODED/SATURATED

PEM1E - PALUSTRINE PERSISTENT EMERGENT, SEASONALLY FLOODED/SATURATED

PEM/SS1E - PALUSTRINE PERSISTENT EMERGENT/SCRUB-SHRUB, BROAD-LEAVED DECIDUOUS, SEASONALLY FLOODED/SATURATED

POW - PALUSTRINE OPEN WATER

R3UBH - RIVERINE UPPER PERENNIAL, UNCONSOLIDATED BOTTOM, PERMANENTLY FLOODED

R4UBJ - RIVERINE INTERMITTENT, UNCONSOLIDATED BOTTOM, INTERMITTENTLY FLOODED

U - UPLAND

SPECIAL MODIFIERS

d - PARTIALLY DRAINED/DITCHED
h - DIKED/IMPOUNDED
r - ARTIFICIAL SUBSTRATE
b - BEAVER
x - EXCAVATED

DATE OF PRINT
FEBRUARY 01 2024
HORIZONS ENGINEERING

NO.	DATE	REVISION DESCRIPTION	ENG	DWG

PROJECT #: 19045
DATE: JAN 2024
SURVEYED BY: HEI
ENGINEERED BY: BHK
DRAWN BY: SJB/BDD/KRP
CHECKED BY: ESP/BHK

STATE OF NEW HAMPSHIRE BARRY H. KEITH No. 087 CERTIFIED WETLAND SCIENTIST

horizons Engineering
Engineering - Land Surveying - Environmental
MAINE • NEW HAMPSHIRE • VERMONT
www.horizonsengineering.com

GRANITE STATE LANDFILL, LLC
DALTON, NEW HAMPSHIRE
EXISTING WETLAND PLANS

WETLAND CLASSIFICATIONS AND NOTES
SHEET INDEX

INDEX

MATCH LINE - SHEET 15

MATCH LINE - SHEET 14

MATCH LINE - SHEET 2

CP WEST PIT

AREA NOT DELINEATED

ACTIVE GRAVEL PIT AREA

DOUGLAS DRIVE
MAIN ACCESS ROAD

EX CULVERT
12'x40' HDPE
INV IN: 1135.60
INV OUT: 1133.31

PFO1E

R4UB3

R3UBH

R3UBH

PFO1E

OPEN R3UBH

U

LEGEND

- EXISTING LOT LINE
- SUBJECT PROPERTY BOUNDARY LINE
- WATERSHED BOUNDARY
- VERNAL POOL
- OHW — ORDINARY HIGH WATER MARK
- PERENNIAL STREAM
- INTERMITTENT STREAM
- EPHEMERAL FLOW
- FLOW DIRECTION
- WETLAND DELINEATION LINE
- P EM SS 1E — WETLAND CLASSIFICATION
- GRAVEL ROAD
- MINOR CONTOUR (2')
- MAJOR CONTOUR (10')

APPROXIMATE LOCATIONS (NOT FLAGGED)

- WETLAND AREA
- PERENNIAL STREAM
- INTERMITTENT STREAM
- EPHEMERAL FLOW

-X-X-X-X-X-X BEAVER DAM
U UPLAND
GW SEEP GROUNDWATER SEEP
46-8—X AA-15X FLAG POINT AND ID # (STRING# & FLAG #)

0 25 50 100 200
SCALE IN FEET

DATE OF PRINT
FEBRUARY 01 2024
HORIZONS ENGINEERING

NO.	DATE	REVISION DESCRIPTION	ENG	DWG

PROJECT #:	19045
DATE:	JAN 2024
SURVEYED BY:	HEI
ENGINEERED BY:	BHK
DRAWN BY:	SJB/BDD/KRP
CHECKED BY:	ESP/BHK

STATE OF NEW HAMPSHIRE · BARRY H. KEITH · No. 087 · CERTIFIED WETLAND SCIENTIST

horizons Engineering
Engineering · Land Surveying · Environmental
MAINE • NEW HAMPSHIRE • VERMONT
www.horizonsengineering.com

GRANITE STATE LANDFILL, LLC
DALTON, NEW HAMPSHIRE
EXISTING WETLAND PLANS

WETLAND MAPPING PLAN

SHEET 1

Z:\proj_2019\19045 NCES - Dalton\DWGS\Final\\19045_Wet_Layouts-21.dwg, 1, 2/1/2024 3:42:30 PM, KarenPhillbrick

MATCH LINE - SHEET 1

MATCH LINE - SHEET 13

MATCH LINE - SHEET 3

APPROXIMATE LIMITS OF DELINEATION

AREA NOT DELINEATED

APPROXIMATE LIMITS OF DELINEATION

MAIN ACCESS ROAD

15" METAL PIPE

15" HDPE PIPE

12" MP

EX CULVERT

CLVRT frm 29-1

29-1 CLVRT

29-51 TIE 29-1

OLD BEAVER DAM

R3UBH

R4UBJ

PEM1E

PFO1E

PFO1/4E

PSS1E xd

P SS FO 1/4E

P SS FO 1E 5b

P EM SS 1E

P SS FO 1E

LEGEND

- EXISTING LOT LINE
- SUBJECT PROPERTY BOUNDARY LINE
- WATERSHED BOUNDARY
- VERNAL POOL
- OHW — ORDINARY HIGH WATER MARK
- PERENNIAL STREAM
- INTERMITTENT STREAM
- EPHEMERAL FLOW
- FLOW DIRECTION
- WETLAND DELINEATION LINE
- P EM SS 1E — WETLAND CLASSIFICATION
- GRAVEL ROAD
- MINOR CONTOUR (2')
- MAJOR CONTOUR (10')

APPROXIMATE LOCATIONS (NOT FLAGGED)

- WETLAND AREA
- PERENNIAL STREAM
- INTERMITTENT STREAM
- EPHEMERAL FLOW

-X-X-X-X-X-X BEAVER DAM

U UPLAND

GW SEEP GROUNDWATER SEEP

46-8—X AA-15X FLAG POINT AND ID # (STRING# & FLAG #)

0 25 50 100 200

SCALE IN FEET

DATE OF PRINT
FEBRUARY 01 2024
HORIZONS ENGINEERING

NO.	DATE	REVISION DESCRIPTION	ENG	DWG
.	JUNE 2022	ADDITIONAL SOIL DELINEATIONS / CLASSIFICATION UPDATES	MC	KRP

PROJECT #:	19045
DATE:	JAN 2024
SURVEYED BY:	HEI
ENGINEERED BY:	BHK
DRAWN BY:	SJB/BDD/KRP
CHECKED BY:	ESP/BHK

BARRY H. KEITH No. 087 CERTIFIED PWS LAND

horizons Engineering
Engineering - Land Surveying - Environmental
MAINE • NEW HAMPSHIRE • VERMONT
www.horizonsengineering.com

GRANITE STATE LANDFILL, LLC
DALTON, NEW HAMPSHIRE
EXISTING WETLAND PLANS

WETLAND MAPPING PLAN

SHEET 2

Z:\proj_2019\19045 NCES - Dalton\DWGS\Final\19045_Wet_Layouts-21.dwg, 2, 2/1/2024 3:42:44 PM, KarenPhilbrick

MATCH LINE - SHEET 2

MATCH LINE - SHEET 12

MATCH LINE - SHEET 4

ACTIVE BEAVER DAM

PFO1/4E

A132-2 OPEN

A132-3 OPEN

A148 END OPEN

A126 TIE 138

GW SEEP

R3UBH

P EM SS 1E

OLD BEAVER DAM

PSS1E

APPROXIMATE LIMITS OF DELINEATION

OLD BEAVER DAM

AREA NOT DELINEATED

P EM SS 1/4E

C1 OPEN

K 125 TIE K 1

CP T6

APPROXIMATE LIMITS OF DELINEATION

LEGEND

- EXISTING LOT LINE
- SUBJECT PROPERTY BOUNDARY LINE
- WATERSHED BOUNDARY
- VERNAL POOL
- OHW — ORDINARY HIGH WATER MARK
- PERENNIAL STREAM
- INTERMITTENT STREAM
- EPHEMERAL FLOW
- FLOW DIRECTION
- WETLAND DELINEATION LINE
- P EM SS 1E — WETLAND CLASSIFICATION
- GRAVEL ROAD
- MINOR CONTOUR (2')
- MAJOR CONTOUR (10')

APPROXIMATE LOCATIONS (NOT FLAGGED)

- WETLAND AREA
- PERENNIAL STREAM
- INTERMITTENT STREAM
- EPHEMERAL FLOW

-X-X-X-X-X- BEAVER DAM
U UPLAND
GW SEEP GROUNDWATER SEEP
46-8 AA-15 FLAG POINT AND ID # (STRING# & FLAG #)

0 25 50 100 200
SCALE IN FEET

DATE OF PRINT
FEBRUARY 01 2024
HORIZONS ENGINEERING

NO.	DATE	REVISION DESCRIPTION	ENG	DWG

PROJECT #: 19045
DATE: JAN 2024
SURVEYED BY: HEI
ENGINEERED BY: BHK
DRAWN BY: SJB/BDD/KRP
CHECKED BY: ESP/BHK

horizons Engineering
Engineering - Land Surveying - Environmental
MAINE • NEW HAMPSHIRE • VERMONT
www.horizonsengineering.com

GRANITE STATE LANDFILL, LLC
DALTON, NEW HAMPSHIRE
EXISTING WETLAND PLANS

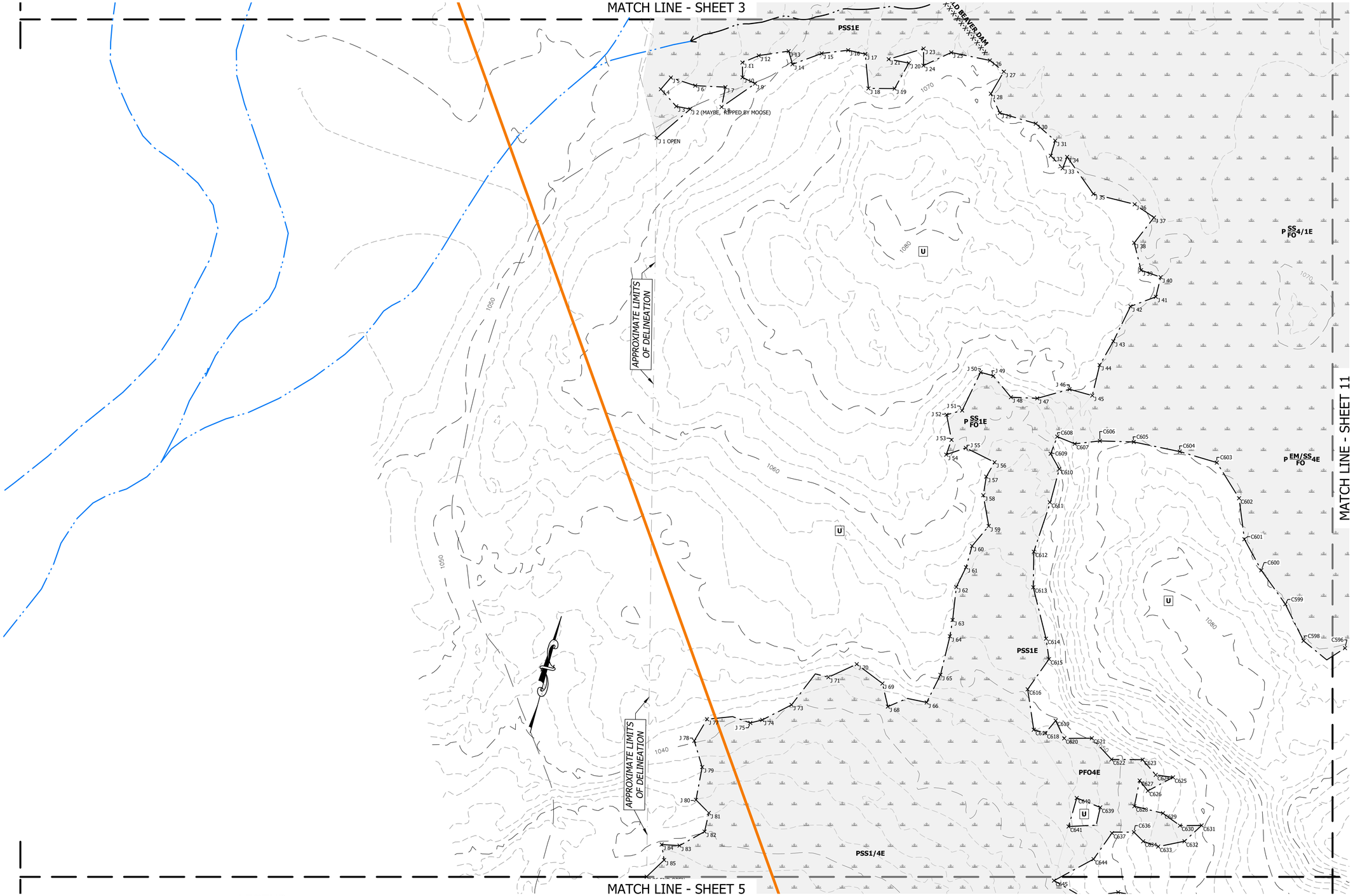
WETLAND MAPPING PLAN

SHEET 3

MATCH LINE - SHEET 3

MATCH LINE - SHEET 11

MATCH LINE - SHEET 5



LEGEND

- EXISTING LOT LINE
- SUBJECT PROPERTY BOUNDARY LINE
- WATERSHED BOUNDARY
- VERNAL POOL
- OHW — ORDINARY HIGH WATER MARK
- PERENNIAL STREAM
- INTERMITTENT STREAM
- EPHEMERAL FLOW
- FLOW DIRECTION
- WETLAND DELINEATION LINE
- PSS 1E — WETLAND CLASSIFICATION
- GRAVEL ROAD
- MINOR CONTOUR (2')
- MAJOR CONTOUR (10')

APPROXIMATE LOCATIONS (NOT FLAGGED)

- WETLAND AREA
- PERENNIAL STREAM
- INTERMITTENT STREAM
- EPHEMERAL FLOW

-X-X-X-X-X- BEAVER DAM
U UPLAND
GW SEEP GROUNDWATER SEEP
46-8 AA-15 FLAG POINT AND ID # (STRING# & FLAG #)

0 25 50 100 200
SCALE IN FEET

DATE OF PRINT
FEBRUARY 01 2024
HORIZONS ENGINEERING

NO.	DATE	REVISION DESCRIPTION	ENG	DWG

PROJECT #: 19045
DATE: JAN 2024
SURVEYED BY: HEI
ENGINEERED BY: BHK
DRAWN BY: SJB/BDD/KRP
CHECKED BY: ESP/BHK

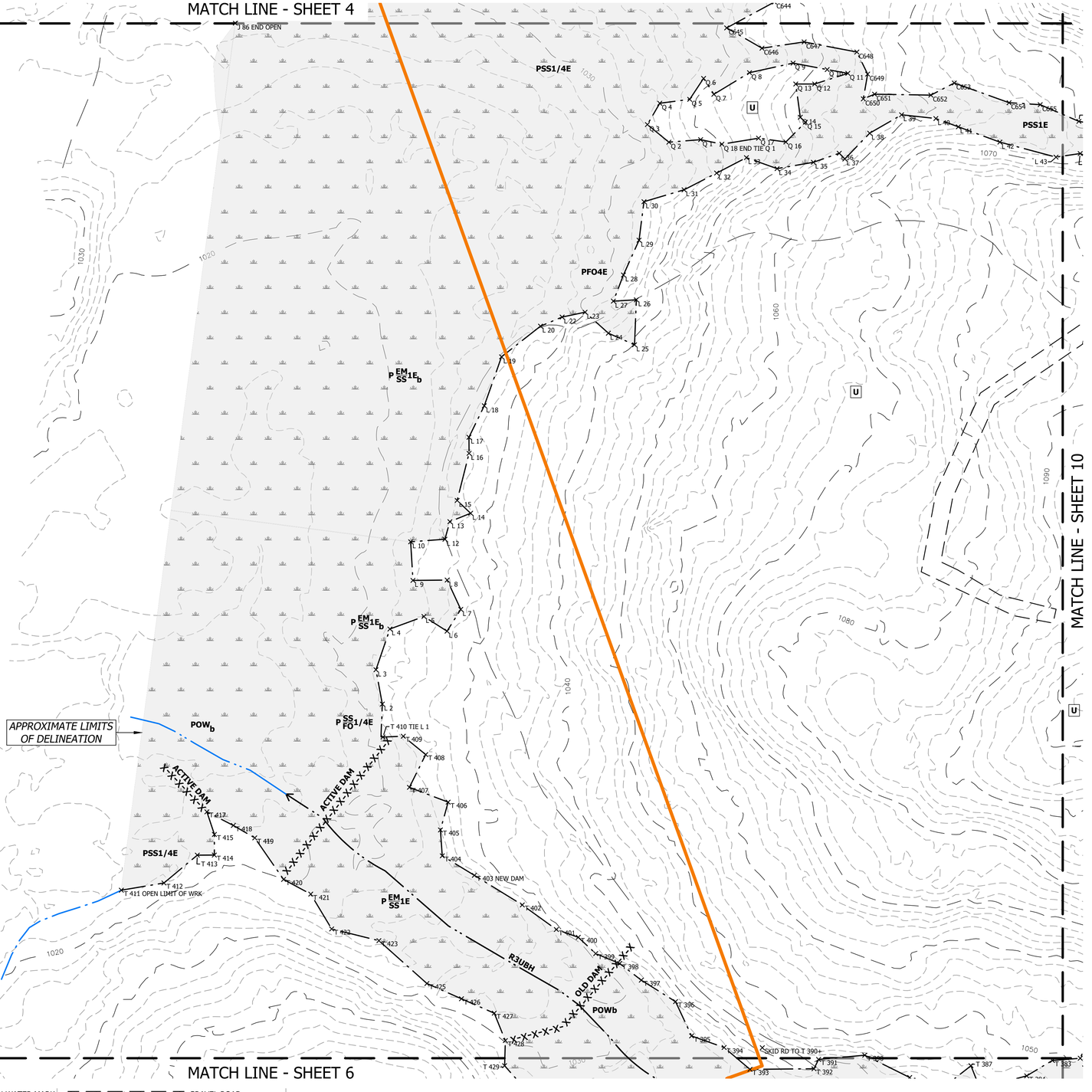
horizons Engineering
Engineering - Land Surveying - Environmental
MAINE • NEW HAMPSHIRE • VERMONT
www.horizonsengineering.com

GRANITE STATE LANDFILL, LLC
DALTON, NEW HAMPSHIRE
EXISTING WETLAND PLANS

WETLAND MAPPING PLAN

SHEET 4

MATCH LINE - SHEET 4



MATCH LINE - SHEET 10

MATCH LINE - SHEET 6

LEGEND

- EXISTING LOT LINE
- SUBJECT PROPERTY BOUNDARY LINE
- WATERSHED BOUNDARY
- VERNAL POOL
- OHW ORDINARY HIGH WATER MARK
- PERENNIAL STREAM
- INTERMITTENT STREAM
- EPHEMERAL FLOW
- FLOW DIRECTION
- WETLAND DELINEATION LINE
- P EM SS 1E — WETLAND CLASSIFICATION
- GRAVEL ROAD
- MINOR CONTOUR (2')
- MAJOR CONTOUR (10')

APPROXIMATE LOCATIONS (NOT FLAGGED)

- WETLAND AREA
- PERENNIAL STREAM
- INTERMITTENT STREAM
- EPHEMERAL FLOW

-X-X-X-X-X- BEAVER DAM
U UPLAND
GW SEEP GROUNDWATER SEEP
46-8—X AA-15X FLAG POINT AND ID # (STRING# & FLAG #)

0 25 50 100 200
SCALE IN FEET

DATE OF PRINT
FEBRUARY 01 2024
HORIZONS ENGINEERING

NO.	DATE	REVISION DESCRIPTION	ENG	DWG

PROJECT #: 19045
DATE: JAN 2024
SURVEYED BY: HEI
ENGINEERED BY: BHK
DRAWN BY: SJB/BDD/KRP
CHECKED BY: ESP/BHK

STATE OF NEW HAMPSHIRE BARRY H. KEITH No. 087 CERTIFIED WETLAND SCIENTIST

horizons Engineering
Engineering - Land Surveying - Environmental
MAINE • NEW HAMPSHIRE • VERMONT
www.horizonsengineering.com

GRANITE STATE LANDFILL, LLC
DALTON, NEW HAMPSHIRE
EXISTING WETLAND PLANS

WETLAND MAPPING PLAN

SHEET 5

Z:\proj_2019\19045 NCES - Dalton\DWGS\Finall\19045_Wet_Layouts-21.dwg, 5, 2/1/2024 3:43:22 PM, KarenPhillbrick

MATCH LINE - SHEET 5

MATCH LINE - SHEET 9

MATCH LINE - SHEET 7

APPROXIMATE LIMITS OF DELINEATION

SAND & GRAVEL AREA / OLD LOG LANDING

SKID RD TO T 390+

X 1 START OPEN

X 460 OPEN

WF X374 OPEN

X 347 OPEN

WF X368 OPEN

LEGEND

- EXISTING LOT LINE
- SUBJECT PROPERTY BOUNDARY LINE
- WATERSHED BOUNDARY
- VERNAL POOL
- OHW — ORDINARY HIGH WATER MARK
- PERENNIAL STREAM
- INTERMITTENT STREAM
- EPHEMERAL FLOW
- FLOW DIRECTION
- WETLAND DELINEATION LINE
- P FM SS 1E — WETLAND CLASSIFICATION
- GRAVEL ROAD
- MINOR CONTOUR (2')
- MAJOR CONTOUR (10')

APPROXIMATE LOCATIONS (NOT FLAGGED)

- WETLAND AREA
- PERENNIAL STREAM
- INTERMITTENT STREAM
- EPHEMERAL FLOW

-X-X-X-X-X-X BEAVER DAM
U UPLAND
GW SEEP GROUNDWATER SEEP
46-8—X AA-15X FLAG POINT AND ID # (STRING# & FLAG #)

0 25 50 100 200
SCALE IN FEET

DATE OF PRINT
FEBRUARY 01 2024
HORIZONS ENGINEERING

NO.	DATE	REVISION DESCRIPTION	ENG	DWG

PROJECT #: 19045
DATE: JAN 2024
SURVEYED BY: HEI
ENGINEERED BY: BHK
DRAWN BY: SJB/BDD/KRP
CHECKED BY: ESP/BHK

horizons Engineering
Engineering - Land Surveying - Environmental
MAINE • NEW HAMPSHIRE • VERMONT
www.horizonsengineering.com

GRANITE STATE LANDFILL, LLC
DALTON, NEW HAMPSHIRE
EXISTING WETLAND PLANS

WETLAND MAPPING PLAN

SHEET 6

MATCH LINE - SHEET 6

MATCH LINE - SHEET 8

MATCH LINE - SHEET 31

APPROXIMATE LIMITS OF DELINEATION

APPROXIMATE LIMITS OF DELINEATION

APPROXIMATE LIMITS OF DELINEATION

AREA NOT DELINEATED

EX. CULVERT

WF Z2 OLD WOODS RD

X 319 STAR OPEN

X 318 END OPEN

X 292 OPEN

X 293 OPEN

X 266 OPEN LIMIT OF WRK

X 267 TIE X 266

X 250 OPEN

X 249 OPEN LIMIT OF WRK

AA 2 DITCH

AA 52 TIE AA 1

Z 74 TIE Z 1

LEGEND

- EXISTING LOT LINE
- SUBJECT PROPERTY BOUNDARY LINE
- WATERSHED BOUNDARY
- VERNAL POOL
- OHW — ORDINARY HIGH WATER MARK
- PERENNIAL STREAM
- INTERMITTENT STREAM
- EPHEMERAL FLOW
- FLOW DIRECTION
- WETLAND DELINEATION LINE
- P FM SS 1E — WETLAND CLASSIFICATION
- GRAVEL ROAD
- MINOR CONTOUR (2')
- MAJOR CONTOUR (10')

APPROXIMATE LOCATIONS (NOT FLAGGED)

- WETLAND AREA
- PERENNIAL STREAM
- INTERMITTENT STREAM
- EPHEMERAL FLOW
- -X-X-X-X-X-X — BEAVER DAM
- U — UPLAND
- GW SEEP — GROUNDWATER SEEP
- 46-8—X AA-15X — FLAG POINT AND ID # (STRING# & FLAG #)

0 25 50 100 200

SCALE IN FEET

DATE OF PRINT
FEBRUARY 01 2024
HORIZONS ENGINEERING

NO.	DATE	REVISION DESCRIPTION	ENG	DWG

PROJECT #: 19045
DATE: JAN 2024
SURVEYED BY: HEI
ENGINEERED BY: BHK
DRAWN BY: SJB/BDD/KRP
CHECKED BY: ESP/BHK

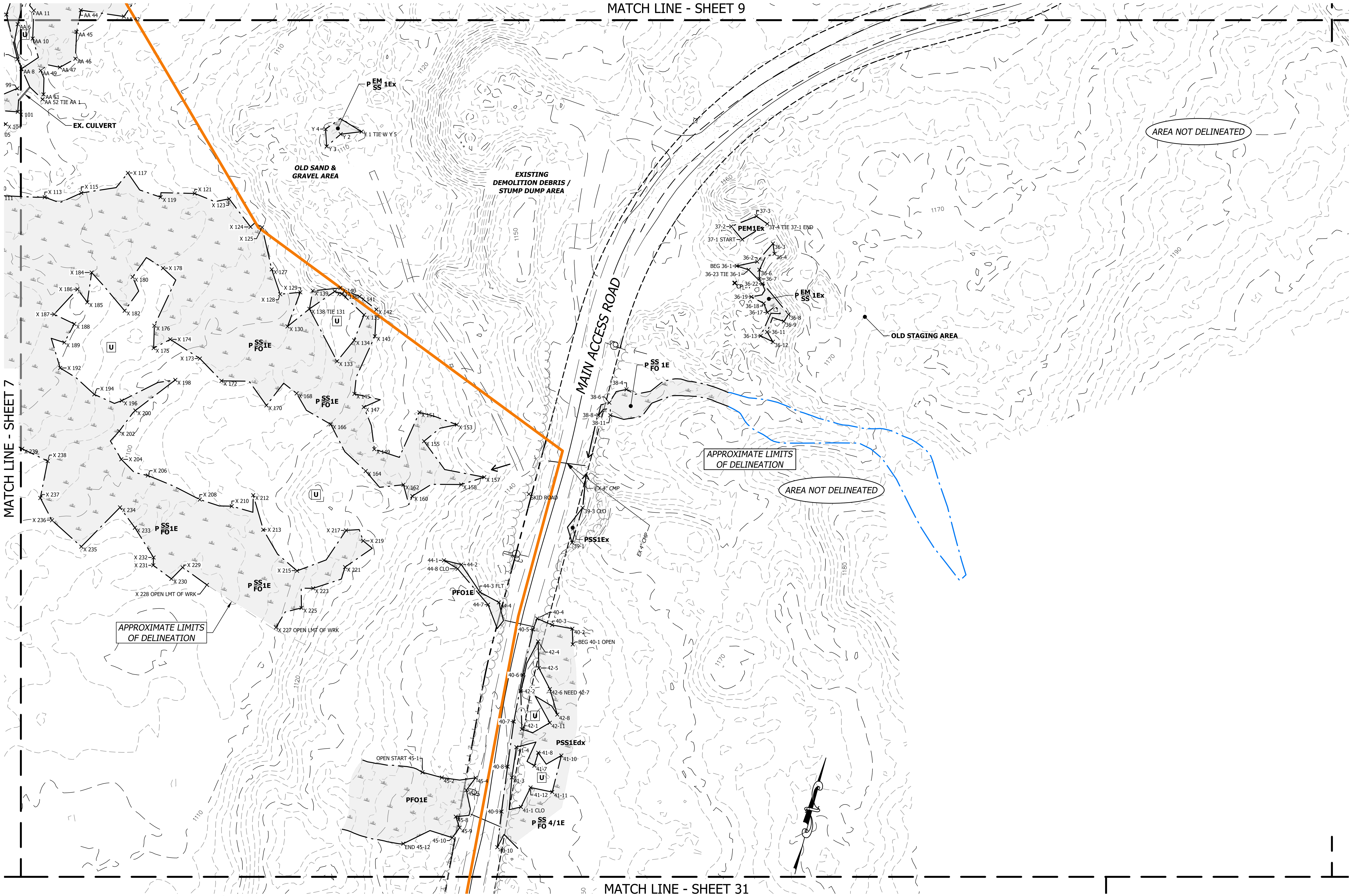
I HEREBY CERTIFY THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER IN THE STATE OF NEW HAMPSHIRE — BARRY H. KEITH — No. 087 — CERTIFIED PROFESSIONAL ENGINEER

horizons Engineering
Engineering - Land Surveying - Environmental
MAINE • NEW HAMPSHIRE • VERMONT
www.horizonsengineering.com

GRANITE STATE LANDFILL, LLC
DALTON, NEW HAMPSHIRE
EXISTING WETLAND PLANS

WETLAND MAPPING PLAN

SHEET 7



LEGEND

	EXISTING LOT LINE
	SUBJECT PROPERTY BOUNDARY LINE
	WATERSHED BOUNDARY
🟩	VERNAL POOL
OHW	ORDINARY HIGH WATER MARK
	PERENNIAL STREAM
	INTERMITTENT STREAM
	EPHEMERAL FLOW
	FLOW DIRECTION
	WETLAND DELINEATION LINE
P EM/SS 1E	WETLAND CLASSIFICATION
	GRAVEL ROAD
	MINOR CONTOUR (2')
	MAJOR CONTOUR (10')
APPROXIMATE LOCATIONS	(NOT FLAGGED)
	WETLAND AREA
	PERENNIAL STREAM
	INTERMITTENT STREAM
	EPHEMERAL FLOW
-X-X-X-X-X-X	BEAVER DAM
U	UPLAND
GW SEEP	GROUNDWATER SEEP
46-8 AA-15	FLAG POINT AND ID # (STRING# & FLAG #)

0 25 50 100 200

SCALE IN FEET

DATE OF PRINT

FEBRUARY 01 2024

HORIZONS ENGINEERING

NO.	DATE	REVISION DESCRIPTION	ENG	DWG

PROJECT #:	19045
DATE:	JAN 2024
SURVEYED BY:	HEI
ENGINEERED BY:	BHK
DRAWN BY:	SJB/BDD/KRP
CHECKED BY:	ESP/BHK

STATE OF NEW HAMPSHIRE BARRY H. KEITH No. 087 CERTIFIED WETLAND SCIENTIST

horizons Engineering

Engineering - Land Surveying - Environmental

MAINE • NEW HAMPSHIRE • VERMONT

www.horizonsengineering.com

GRANITE STATE LANDFILL, LLC

DALTON, NEW HAMPSHIRE

EXISTING WETLAND PLANS

WETLAND MAPPING PLAN

SHEET 8

Z:\proj_2019\19045 NCES - Dalton\DWGS\Final\19045_Wet_Layouts-21.dwg, 8, 2/1/2024 3:43:55 PM, KarenPhilbrick

MATCH LINE - SHEET 10

MATCH LINE - SHEET 6

MATCH LINE - SHEET 24

MATCH LINE - SHEET 8

PEM1Eb
POWb
PSS1E
R3UBH
OLD DAM
P SS 1E FO
P SS 4E FO1
P SS 1E FO
P EM SS 1E
PSS1B
UPLAND
U
MAIN ACCESS ROAD

LEGEND

- EXISTING LOT LINE
- SUBJECT PROPERTY BOUNDARY LINE
- WATERSHED BOUNDARY
- VERNAL POOL
- OHW ORDINARY HIGH WATER MARK
- PERENNIAL STREAM
- INTERMITTENT STREAM
- EPHEMERAL FLOW
- FLOW DIRECTION
- WETLAND DELINEATION LINE
- P EM SS 1E WETLAND CLASSIFICATION
- GRAVEL ROAD
- MINOR CONTOUR (2')
- MAJOR CONTOUR (10')

APPROXIMATE LOCATIONS (NOT FLAGGED)

- WETLAND AREA
- PERENNIAL STREAM
- INTERMITTENT STREAM
- EPHEMERAL FLOW

-X-X-X-X-X-X BEAVER DAM
U UPLAND
GW SEEP GROUNDWATER SEEP
46-8—X— AA-15X FLAG POINT AND ID # (STRING# & FLAG #)

0 25 50 100 200
SCALE IN FEET

DATE OF PRINT
FEBRUARY 01 2024
HORIZONS ENGINEERING

NO.	DATE	REVISION DESCRIPTION	ENG	DWG

PROJECT #: 19045
DATE: JAN 2024
SURVEYED BY: HEI
ENGINEERED BY: BHK
DRAWN BY: SJB/BDD/KRP
CHECKED BY: ESP/BHK

BARRY H. KEITH No. 087 CERTIFIED WETLAND SCIENTIST STATE OF NEW HAMPSHIRE

horizons Engineering
Engineering - Land Surveying - Environmental
MAINE • NEW HAMPSHIRE • VERMONT
www.horizonsengineering.com

GRANITE STATE LANDFILL, LLC
DALTON, NEW HAMPSHIRE
EXISTING WETLAND PLANS

WETLAND MAPPING PLAN

SHEET 9

Z:\proj\ 2019\19045 NCES - Dalton\DWGS\Final\19045_Wet_Layouts-21.dwg, 9, 2/1/2024 3:44:12 PM, KarenPhilbrick

MATCH LINE - SHEET 11

MATCH LINE - SHEET 5

MATCH LINE - SHEET 23

MATCH LINE - SHEET 9

EXISTING WOODS ROAD

PSS1E

PFO4/1E

PFO1E

PSS1/4E FO

PEM1Eb

POWb

PSS1E

PF01E

PSS1 Eb FOS

R3UBH

VP-1

U 1 START VRNL POOL

U 13 TIE U 17

C 760 RD FILL

C 759 DRN ACRSS RD NO CLVT OBS

C 787 RD FILL

L 47 END TIE W 750

80 RD FILL TIE W C777

R 1 RD FILL TIE R 54

R 54 RD FILL TIE W R51

80-11 END TIE 80-1

80-1 START

V 1 START V 15 END TIE V 1

LEGEND

- EXISTING LOT LINE
- SUBJECT PROPERTY BOUNDARY LINE
- WATERSHED BOUNDARY
- VERNAL POOL
- OHW — ORDINARY HIGH WATER MARK
- PERENNIAL STREAM
- INTERMITTENT STREAM
- EPHEMERAL FLOW
- FLOW DIRECTION
- WETLAND DELINEATION LINE
- P EM SS 1E — WETLAND CLASSIFICATION
- GRAVEL ROAD
- MINOR CONTOUR (2')
- MAJOR CONTOUR (10')
- APPROXIMATE LOCATIONS (NOT FLAGGED)
- WETLAND AREA
- PERENNIAL STREAM
- INTERMITTENT STREAM
- EPHEMERAL FLOW
- -X-X-X-X-X- BEAVER DAM
- U UPLAND
- GW SEEP GROUNDWATER SEEP
- 46-8—X AA-15X FLAG POINT AND ID # (STRING# & FLAG #)

0 25 50 100 200

SCALE IN FEET

DATE OF PRINT
FEBRUARY 01 2024
HORIZONS ENGINEERING

NO.	DATE	REVISION DESCRIPTION	ENG	DWG

PROJECT #: 19045
DATE: JAN 2024
SURVEYED BY: HEI
ENGINEERED BY: BHK
DRAWN BY: SJB/BDD/KRP
CHECKED BY: ESP/BHK

horizons Engineering
Engineering - Land Surveying - Environmental
MAINE • NEW HAMPSHIRE • VERMONT
www.horizonsengineering.com

GRANITE STATE LANDFILL, LLC
DALTON, NEW HAMPSHIRE
EXISTING WETLAND PLANS

WETLAND MAPPING PLAN

SHEET 10

MATCH LINE - SHEET 12

MATCH LINE - SHEET 4

MATCH LINE - SHEET 22

MATCH LINE - SHEET 10

EXISTING WOODS ROAD

SKID ROAD TO

PFO1/4E

PFO1E

PFO4E

PSS1E

PFO4E PEM1E SS

PEM1/SS1E

VP-2

U 1 START VRNL POOL
U 13 TIE U 17

T 262

F-MWELL-K

LEGEND

- EXISTING LOT LINE
- SUBJECT PROPERTY BOUNDARY LINE
- WATERSHED BOUNDARY
- VERNAL POOL
- OHW — ORDINARY HIGH WATER MARK
- PERENNIAL STREAM
- INTERMITTENT STREAM
- EPHEMERAL FLOW
- FLOW DIRECTION
- WETLAND DELINEATION LINE
- P EM SS 1E — WETLAND CLASSIFICATION
- GRAVEL ROAD
- MINOR CONTOUR (2')
- MAJOR CONTOUR (10')
- APPROXIMATE LOCATIONS (NOT FLAGGED)
- WETLAND AREA
- PERENNIAL STREAM
- INTERMITTENT STREAM
- EPHEMERAL FLOW
- -X-X-X-X-X- BEAVER DAM
- U — UPLAND
- GW SEEP — GROUNDWATER SEEP
- 46-8 AA-15X — FLAG POINT AND ID # (STRING# & FLAG #)

0 25 50 100 200

SCALE IN FEET

DATE OF PRINT
FEBRUARY 01 2024
HORIZONS ENGINEERING

NO.	DATE	REVISION DESCRIPTION	ENG	DWG

PROJECT #: 19045
DATE: JAN 2024
SURVEYED BY: HEI
ENGINEERED BY: BHK
DRAWN BY: SJB/BDD/KRP
CHECKED BY: ESP/BHK

horizons Engineering
Engineering - Land Surveying - Environmental
MAINE • NEW HAMPSHIRE • VERMONT
www.horizonsengineering.com

GRANITE STATE LANDFILL, LLC
DALTON, NEW HAMPSHIRE
EXISTING WETLAND PLANS

WETLAND MAPPING PLAN

SHEET 11

MATCH LINE - SHEET 13

MATCH LINE - SHEET 3

MATCH LINE - SHEET 21

MATCH LINE - SHEET 11

PFO1/4E
PFO4/1E
PFO1E
PEM1E
PSS 1/4E FO
PFO 1/4E
DITCH FLOW
R4UBJ
R3UBH
CHANGE FROM R4UBJ TO R3UBH
U
P SS FO 1E
P SS FO 1E
P EM SS 1E
P SS FO 1E
P SS FO 1E
P SS FO 1E
P EM SS 1E b
P-MWELL-F

LEGEND

- EXISTING LOT LINE
- SUBJECT PROPERTY BOUNDARY LINE
- WATERSHED BOUNDARY
- VERNAL POOL
- OHW — ORDINARY HIGH WATER MARK
- PERENNIAL STREAM
- INTERMITTENT STREAM
- EPHEMERAL FLOW
- FLOW DIRECTION
- WETLAND DELINEATION LINE
- P EM SS 1E — WETLAND CLASSIFICATION
- GRAVEL ROAD
- MINOR CONTOUR (2')
- MAJOR CONTOUR (10')
- APPROXIMATE LOCATIONS (NOT FLAGGED)
- WETLAND AREA
- PERENNIAL STREAM
- INTERMITTENT STREAM
- EPHEMERAL FLOW
- -X-X-X-X-X- BEAVER DAM
- U — UPLAND
- GW SEEP — GROUNDWATER SEEP
- 46-8—X AA-15X — FLAG POINT AND ID # (STRING# & FLAG #)

0 25 50 100 200

SCALE IN FEET

DATE OF PRINT
FEBRUARY 01 2024
HORIZONS ENGINEERING

NO.	DATE	REVISION DESCRIPTION	ENG	DWG
.	JUNE 2022	ADDITIONAL SOIL DELINEATIONS / CLASSIFICATION UPDATES	MC	KRP

PROJECT #: 19045
DATE: JAN 2024
SURVEYED BY: HEI
ENGINEERED BY: BHK
DRAWN BY: SJB/BDD/KRP
CHECKED BY: ESP/BHK

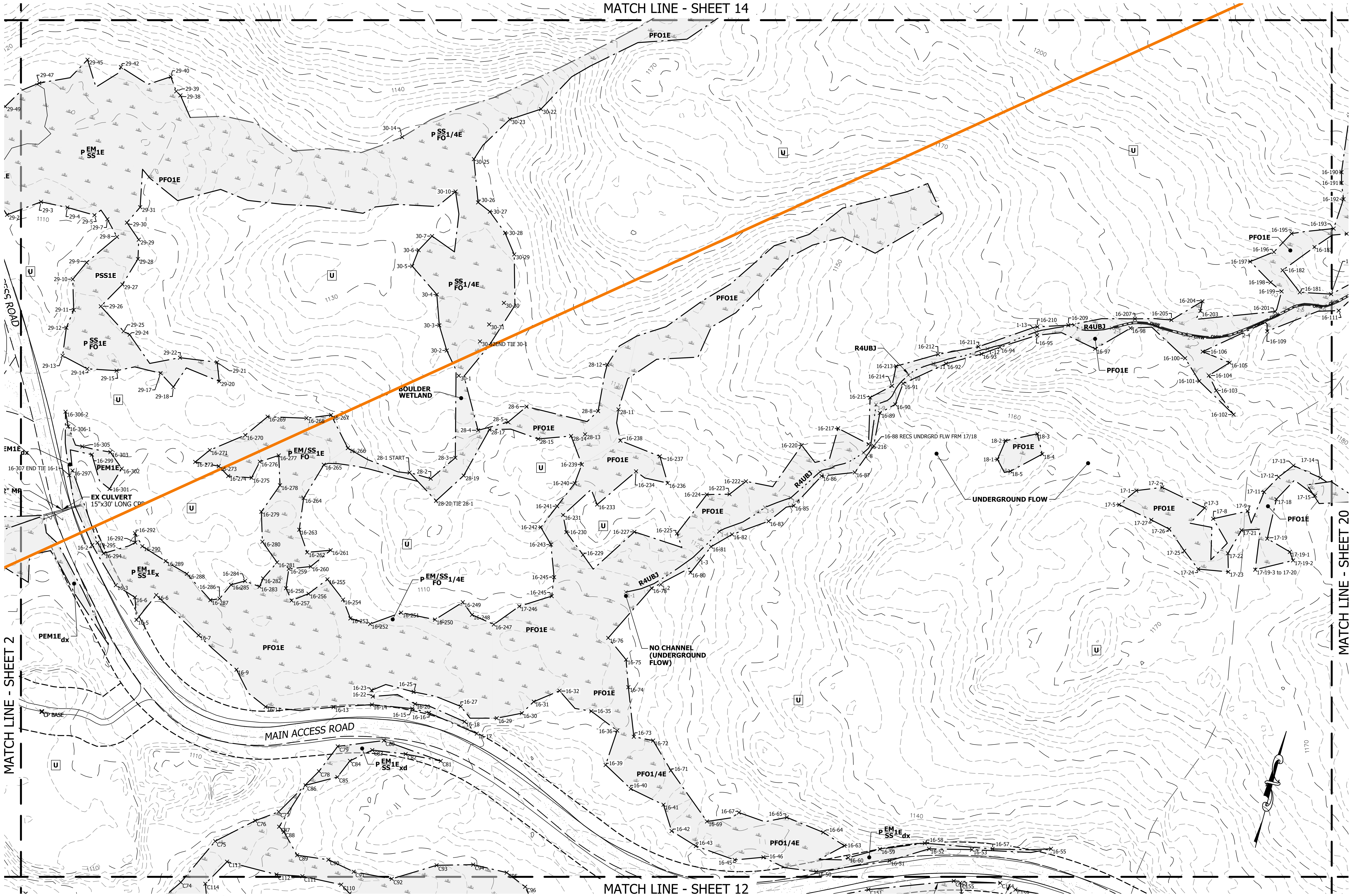
BARRY H. KEITH No. 087 CERTIFIED WETLAND SCIENTIST

horizons engineering
Engineering - Land Surveying - Environmental
MAINE • NEW HAMPSHIRE • VERMONT
www.horizonsengineering.com

GRANITE STATE LANDFILL, LLC
DALTON, NEW HAMPSHIRE
EXISTING WETLAND PLANS

WETLAND MAPPING PLAN

SHEET 12



LEGEND

— — —	EXISTING LOT LINE
🟧	SUBJECT PROPERTY BOUNDARY LINE
🟦	WATERSHED BOUNDARY
🟩	VERNAL POOL
OHW	ORDINARY HIGH WATER MARK
	PERENNIAL STREAM
	INTERMITTENT STREAM
	EPHEMERAL FLOW
←	FLOW DIRECTION
	WETLAND DELINEATION LINE
P EM/SS 1E	WETLAND CLASSIFICATION
	GRAVEL ROAD
	MINOR CONTOUR (2')
	MAJOR CONTOUR (10')

APPROXIMATE LOCATIONS (NOT FLAGGED)

	WETLAND AREA
	PERENNIAL STREAM
	INTERMITTENT STREAM
	EPHEMERAL FLOW
-X-X-X-X-X-X	BEAVER DAM
U	UPLAND
GW SEEP	GROUNDWATER SEEP
46-8—X AA-15X	FLAG POINT AND ID # (STRING# & FLAG #)

0 25 50 100 200

SCALE IN FEET

DATE OF PRINT
FEBRUARY 01 2024
HORIZONS ENGINEERING

NO.	DATE	REVISION DESCRIPTION	ENG	DWG
.	JUNE 2022	ADDITIONAL SOIL DELINEATIONS / CLASSIFICATION UPDATES	MC	KRP

PROJECT #:	19045
DATE:	JAN 2024
SURVEYED BY:	HEI
ENGINEERED BY:	BHK
DRAWN BY:	SJB/BDD/KRP
CHECKED BY:	ESP/BHK

STATE OF NEW HAMPSHIRE BARRY H. KEITH No. 087 CERTIFIED WETLAND SCIENTIST

horizons Engineering
Engineering - Land Surveying - Environmental
MAINE • NEW HAMPSHIRE • VERMONT
www.horizonsengineering.com

GRANITE STATE LANDFILL, LLC
DALTON, NEW HAMPSHIRE
EXISTING WETLAND PLANS

WETLAND MAPPING PLAN

SHEET 13

MATCH LINE - SHEET 15

MATCH LINE - SHEET 18

MATCH LINE - SHEET 1

MATCH LINE - SHEET 19

MATCH LINE - SHEET 13

WASH BASIN

WASH BASIN

GRAVEL PIT AREA

AREA NOT DELINEATED

AREA NOT DELINEATED

AREA NOT DELINEATED

APPROXIMATE LIMITS OF DELINEATION

PFO1E

PFO1E

PFO1E

PFO1E

PFO1E

PFO1E

PFO1E

PFO1E

PFO1E

R3UBH

BOLDER RAVINE

MWELL 17 CONC
MWELL 17 CASE
MWELL 17 CONC

U

U

LEGEND

- EXISTING LOT LINE
- SUBJECT PROPERTY BOUNDARY LINE
- WATERSHED BOUNDARY
- VERNAL POOL
- OHW ORDINARY HIGH WATER MARK
- PERENNIAL STREAM
- INTERMITTENT STREAM
- EPHEMERAL FLOW
- FLOW DIRECTION
- WETLAND DELINEATION LINE
- P EM SS 1E WETLAND CLASSIFICATION
- GRAVEL ROAD
- MINOR CONTOUR (2')
- MAJOR CONTOUR (10')

APPROXIMATE LOCATIONS (NOT FLAGGED)

- WETLAND AREA
- PERENNIAL STREAM
- INTERMITTENT STREAM
- EPHEMERAL FLOW

-X-X-X-X-X-X BEAVER DAM
U UPLAND
GW SEEP GROUNDWATER SEEP
46-8 AA-15 FLAG POINT AND ID # (STRING# & FLAG #)

0 25 50 100 200
SCALE IN FEET

DATE OF PRINT
FEBRUARY 01 2024
HORIZONS ENGINEERING

NO.	DATE	REVISION DESCRIPTION	ENG	DWG
.	JUNE 2022	ADDITIONAL SOIL DELINEATIONS / CLASSIFICATION UPDATES	MC	KRP

PROJECT #:	19045
DATE:	JAN 2024
SURVEYED BY:	HEI
ENGINEERED BY:	BHK
DRAWN BY:	SJB/BDD/KRP
CHECKED BY:	ESP/BHK

BARRY H. KEITH No. 087 CERTIFIED WETLAND SCIENTIST STATE OF NEW HAMPSHIRE

horizons Engineering
Engineering - Land Surveying - Environmental
MAINE • NEW HAMPSHIRE • VERMONT
www.horizonsengineering.com

GRANITE STATE LANDFILL, LLC
DALTON, NEW HAMPSHIRE
EXISTING WETLAND PLANS

WETLAND MAPPING PLAN

SHEET 14

Z:\proj_2019\19045 NCES - Dalton\DWGS\Final\19045_Wet_Layouts-21.dwg, 14, 2/1/2024 3:45:34 PM, KarenPhilbrick

MATCH LINE - SHEET 16

MATCH LINE - SHEET 18

MATCH LINE - SHEET 18

MATCH LINE - SHEET 1

MATCH LINE - SHEET 14

AREA NOT DELINEATED

AREA NOT DELINEATED

AREA NOT DELINEATED

GRAVEL PIT AREA

OF T2

LEGEND

- EXISTING LOT LINE
- SUBJECT PROPERTY BOUNDARY LINE
- WATERSHED BOUNDARY
- VERNAL POOL
- OHW — ORDINARY HIGH WATER MARK
- PERENNIAL STREAM
- INTERMITTENT STREAM
- EPHEMERAL FLOW
- FLOW DIRECTION
- WETLAND DELINEATION LINE
- P SS 1E / EM — WETLAND CLASSIFICATION
- GRAVEL ROAD
- MINOR CONTOUR (2')
- MAJOR CONTOUR (10')

APPROXIMATE LOCATIONS (NOT FLAGGED)

- WETLAND AREA
- PERENNIAL STREAM
- INTERMITTENT STREAM
- EPHEMERAL FLOW

-X-X-X-X-X-X BEAVER DAM

U UPLAND

GW SEEP GROUNDWATER SEEP

46-8—X AA-15X FLAG POINT AND ID # (STRING# & FLAG #)

0 25 50 100 200

SCALE IN FEET

DATE OF PRINT

FEBRUARY 01 2024

HORIZONS ENGINEERING

NO.	DATE	REVISION DESCRIPTION	ENG	DWG

PROJECT #: 19045

DATE: JAN 2024

SURVEYED BY: HEI

ENGINEERED BY: BHK

DRAWN BY: SJB/BDD/KRP

CHECKED BY: ESP/BHK

STATE OF NEW HAMPSHIRE BARRY H. KEITH No. 087 CERTIFIED WETLAND SCIENTIST

horizons Engineering
Engineering - Land Surveying - Environmental
MAINE • NEW HAMPSHIRE • VERMONT
www.horizonsengineering.com

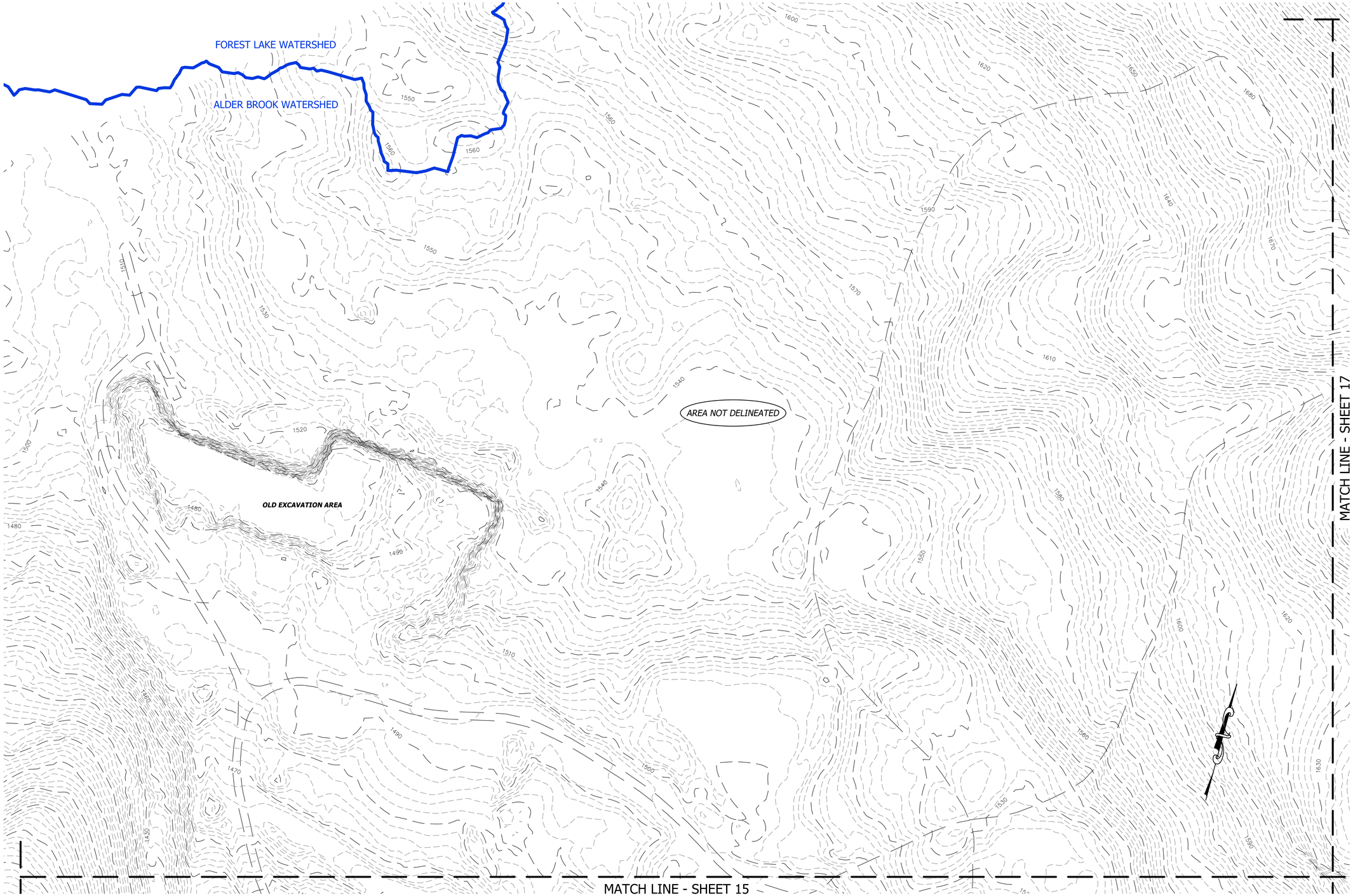
GRANITE STATE LANDFILL, LLC

DALTON, NEW HAMPSHIRE

EXISTING WETLAND PLANS

WETLAND MAPPING PLAN

SHEET 15



LEGEND

- EXISTING LOT LINE
- SUBJECT PROPERTY BOUNDARY LINE
- WATERSHED BOUNDARY
- VERNAL POOL
- OHW — ORDINARY HIGH WATER MARK
- PERENNIAL STREAM
- INTERMITTENT STREAM
- EPHEMERAL FLOW
- FLOW DIRECTION
- WETLAND DELINEATION LINE
- P EM SS 1E — WETLAND CLASSIFICATION
- GRAVEL ROAD
- MINOR CONTOUR (2')
- MAJOR CONTOUR (10')

APPROXIMATE LOCATIONS (NOT FLAGGED)

- WETLAND AREA
- PERENNIAL STREAM
- INTERMITTENT STREAM
- EPHEMERAL FLOW

-X-X-X-X-X-X BEAVER DAM
U UPLAND
GW SEEP GROUNDWATER SEEP
46-8–X AA-15X FLAG POINT AND ID # (STRING# & FLAG #)

0 25 50 100 200
SCALE IN FEET

DATE OF PRINT
FEBRUARY 01 2024
HORIZONS ENGINEERING

NO.	DATE	REVISION DESCRIPTION	ENG	DWG

PROJECT #:	19045
DATE:	JAN 2024
SURVEYED BY:	HEI
ENGINEERED BY:	BHK
DRAWN BY:	SJB/BDD/KRP
CHECKED BY:	ESP/BHK

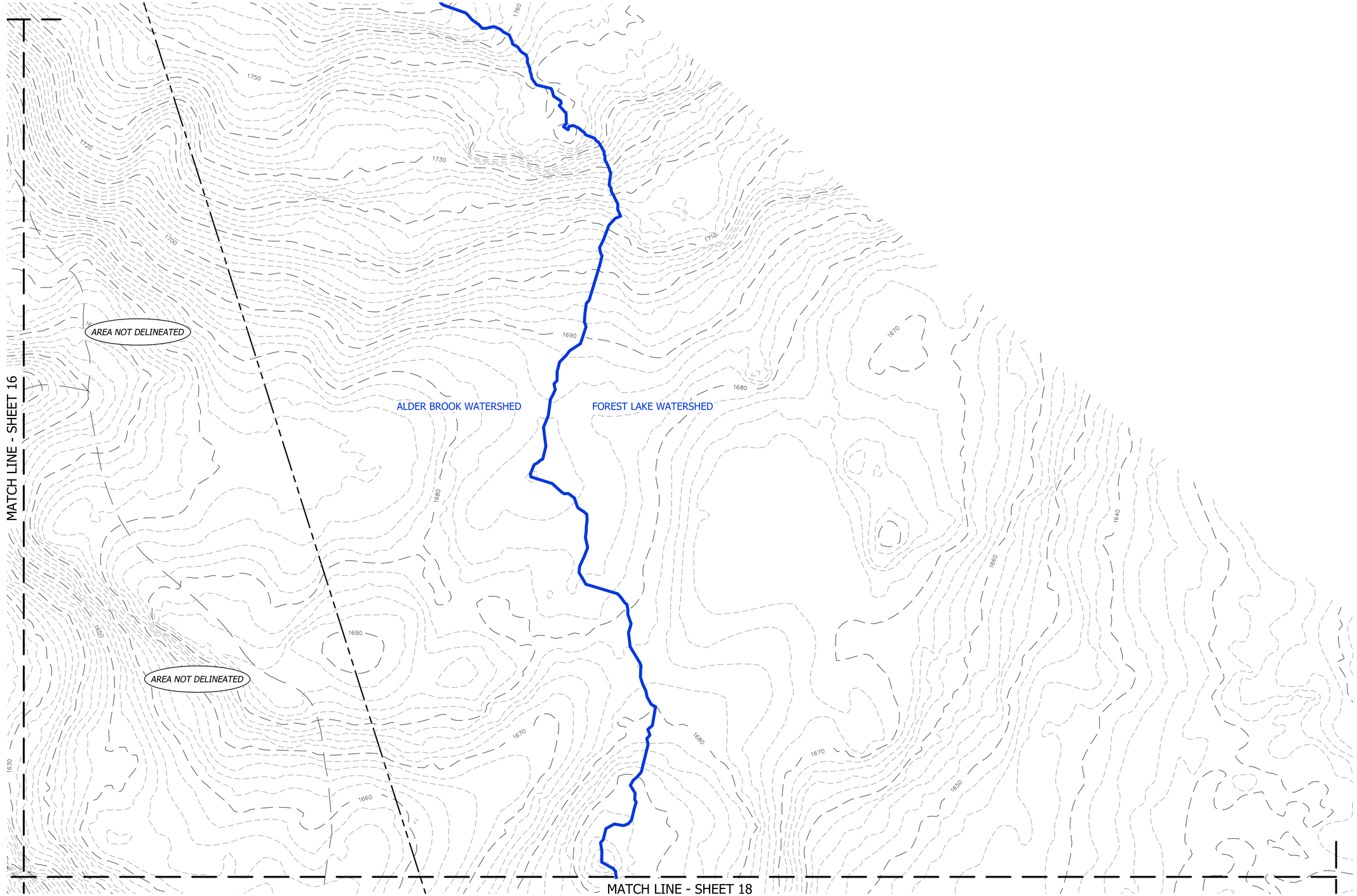
STATE OF NEW HAMPSHIRE BARRY H. KEITH No. 087 CERTIFIED WETLAND SCIENTIST

horizons Engineering
Engineering - Land Surveying - Environmental
MAINE • NEW HAMPSHIRE • VERMONT
www.horizonsengineering.com

GRANITE STATE LANDFILL, LLC
DALTON, NEW HAMPSHIRE
EXISTING WETLAND PLANS

WETLAND MAPPING PLAN

SHEET 16



LEGEND

- EXISTING LOT LINE
- SUBJECT PROPERTY BOUNDARY LINE
- WATERSHED BOUNDARY
- VERNAL POOL
- OHW — ORDINARY HIGH WATER MARK
- PERENNIAL STREAM
- INTERMITTENT STREAM
- EPHEMERAL FLOW
- FLOW DIRECTION
- WETLAND DELINEATION LINE
- P EM SS 1E — WETLAND CLASSIFICATION
- GRAVEL ROAD
- MINOR CONTOUR (2')
- MAJOR CONTOUR (10')
- APPROXIMATE LOCATIONS (NOT FLAGGED)
- WETLAND AREA
- PERENNIAL STREAM
- INTERMITTENT STREAM
- EPHEMERAL FLOW
- -X-X-X-X-X- BEAVER DAM
- U UPLAND
- GW SEEP GROUNDWATER SEEP
- 46-8—X AA-15X FLAG POINT AND ID # (STRING# & FLAG #)

0 25 50 100 200
SCALE IN FEET

DATE OF PRINT
FEBRUARY 01 2024
HORIZONS ENGINEERING

NO.	DATE	REVISION DESCRIPTION	ENG	DWG

PROJECT #:	19045
DATE:	JAN 2024
SURVEYED BY:	HEI
ENGINEERED BY:	BHK
DRAWN BY:	SJB/BDD/KRP
CHECKED BY:	ESP/BHK

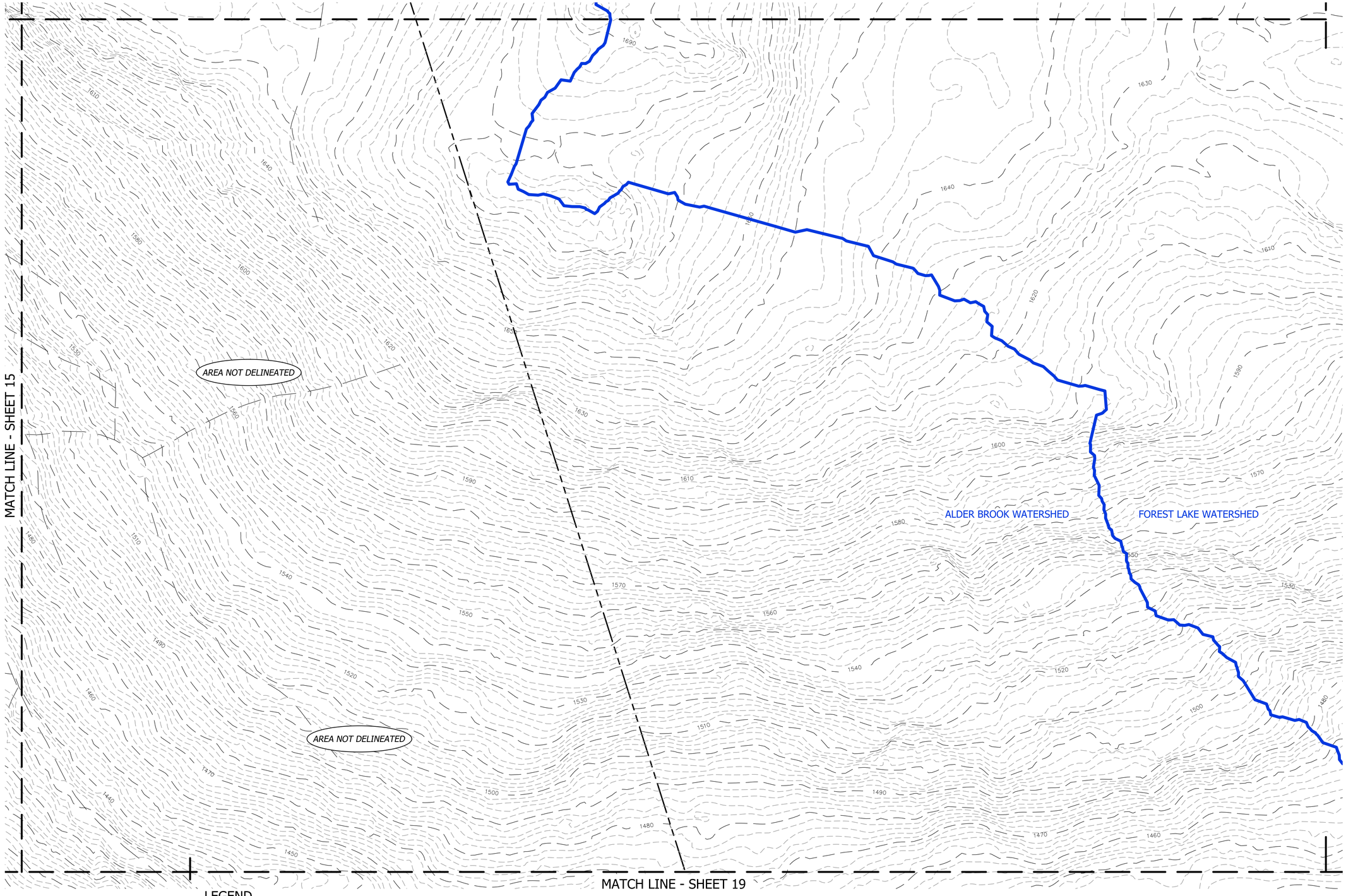
STATE OF NEW HAMPSHIRE BARRY H. KEITH No. 087 CERTIFIED WETLAND SCIENTIST

horizons Engineering
Engineering - Land Surveying - Environmental
MAINE • NEW HAMPSHIRE • VERMONT
www.horizonsengineering.com

GRANITE STATE LANDFILL, LLC
DALTON, NEW HAMPSHIRE
EXISTING WETLAND PLANS

WETLAND MAPPING PLAN

SHEET 17



LEGEND

- EXISTING LOT LINE
- SUBJECT PROPERTY BOUNDARY LINE
- WATERSHED BOUNDARY
- VERNAL POOL
- OHW — ORDINARY HIGH WATER MARK
- PERENNIAL STREAM
- INTERMITTENT STREAM
- EPHEMERAL FLOW
- FLOW DIRECTION
- WETLAND DELINEATION LINE
- P EM SS 1E — WETLAND CLASSIFICATION
- GRAVEL ROAD
- MINOR CONTOUR (2')
- MAJOR CONTOUR (10')
- APPROXIMATE LOCATIONS (NOT FLAGGED)
- WETLAND AREA
- PERENNIAL STREAM
- INTERMITTENT STREAM
- EPHEMERAL FLOW
- -X-X-X-X-X- BEAVER DAM
- U — UPLAND
- GW SEEP — GROUNDWATER SEEP
- 46-8–X AA-15X — FLAG POINT AND ID # (STRING# & FLAG #)

0 25 50 100 200
SCALE IN FEET

DATE OF PRINT
FEBRUARY 01 2024
HORIZONS ENGINEERING

NO.	DATE	REVISION DESCRIPTION	ENG	DWG

PROJECT #:	19045
DATE:	JAN 2024
SURVEYED BY:	HEI
ENGINEERED BY:	BHK
DRAWN BY:	SJB/BDD/KRP
CHECKED BY:	ESP/BHK

BARRY H. KEITH No. 087 CERTIFIED WETLAND SCIENTIST

horizons Engineering
Engineering - Land Surveying - Environmental
MAINE • NEW HAMPSHIRE • VERMONT
www.horizonsengineering.com

GRANITE STATE LANDFILL, LLC
DALTON, NEW HAMPSHIRE
EXISTING WETLAND PLANS

WETLAND MAPPING PLAN

SHEET 18

MATCH LINE - SHEET 18

MATCH LINE - SHEET 14

MATCH LINE - SHEET 30

MATCH LINE - SHEET 20

OLD WOODS ROAD

NOW OR FORMERLY
STATE OF NEW HAMPSHIRE
DALTON TAX MA 408, LOT 6

AREA NOT DELINEATED

AREA NOT DELINEATED

AREA NOT DELINEATED

SUBJECT PROPERTY BOUNDARY LINE, TYPICAL

ALDER BROOK WATERSHED

FOREST LAKE WATERSHED

APPROXIMATE LIMITS OF DELINEATION

OLD WOODS ROAD

GW SEEP

34-1
34-2
34-3
34-4
34-5 END OPEN
PFO1E

35-1
35-2
35-3
35-4
PFO1E

PFO1E

PFO1E

21-1
21-2
21-3 END TIE 21-1
PFO1E

82-1
82-2
82-3 END
PFO1E

U

20-2
20-3
20-4
20-5
20-6
PFO1E

27-1
27-2
27-3
27-4 TIE 21-1
PFO1E

1450 1440 1430 1420 1410 1400 1390 1380 1370 1360 1350 1340 1330 1320 1310 1300 1290 1280 1270 1260 1250 1240

LEGEND

- EXISTING LOT LINE
- SUBJECT PROPERTY BOUNDARY LINE
- WATERSHED BOUNDARY
- VERNAL POOL
- OHW — ORDINARY HIGH WATER MARK
- PERENNIAL STREAM
- INTERMITTENT STREAM
- EPHEMERAL FLOW
- FLOW DIRECTION
- WETLAND DELINEATION LINE
- PFO1E — WETLAND CLASSIFICATION
- GRAVEL ROAD
- MINOR CONTOUR (2')
- MAJOR CONTOUR (10')

APPROXIMATE LOCATIONS (NOT FLAGGED)

- WETLAND AREA
- PERENNIAL STREAM
- INTERMITTENT STREAM
- EPHEMERAL FLOW

-X-X-X-X-X-X BEAVER DAM
U UPLAND
GW SEEP GROUNDWATER SEEP
46-8—X AA-15X FLAG POINT AND ID # (STRING# & FLAG #)

0 25 50 100 200
SCALE IN FEET

DATE OF PRINT
FEBRUARY 01 2024
HORIZONS ENGINEERING

NO.	DATE	REVISION DESCRIPTION	ENG	DWG
.	JUNE 2022	ADDITIONAL SOIL DELINEATIONS / CLASSIFICATION UPDATES	MC	KRP

PROJECT #:	19045
DATE:	JAN 2024
SURVEYED BY:	HEI
ENGINEERED BY:	BHK
DRAWN BY:	SJB/BDD/KRP
CHECKED BY:	ESP/BHK

STATE OF NEW HAMPSHIRE
BARRY H. KEITH
No. 087
CERTIFIED WETLAND SCIENTIST

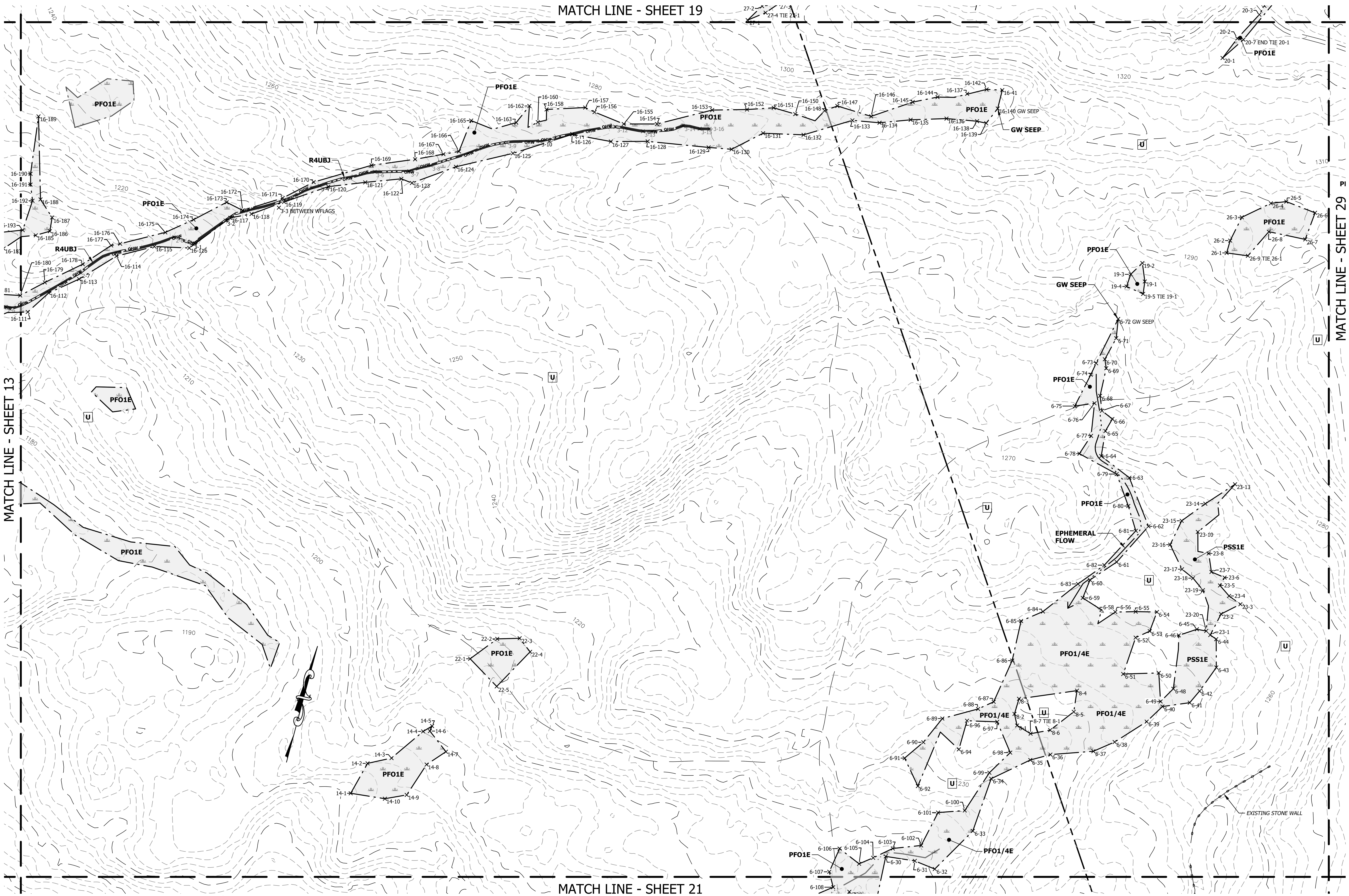
horizons Engineering
Engineering - Land Surveying - Environmental
MAINE • NEW HAMPSHIRE • VERMONT
www.horizonsengineering.com

GRANITE STATE LANDFILL, LLC
DALTON, NEW HAMPSHIRE
EXISTING WETLAND PLANS

WETLAND MAPPING PLAN

SHEET 19

Z:\proj_2019\19045 NCES - Dalton\DWGS\Final\19045_Wet_Layouts-21.dwg, 19, 2/1/2024 3:46:16 PM, KarenPhilbrick



LEGEND

— - — - —	EXISTING LOT LINE
🟧	SUBJECT PROPERTY BOUNDARY LINE
🟦	WATERSHED BOUNDARY
🟩	VERNAL POOL
—— OHW ——	ORDINARY HIGH WATER MARK
	PERENNIAL STREAM
	INTERMITTENT STREAM
	EPHEMERAL FLOW
←	FLOW DIRECTION
	WETLAND DELINEATION LINE
P EM/SS 1E	WETLAND CLASSIFICATION
	GRAVEL ROAD
	MINOR CONTOUR (2')
	MAJOR CONTOUR (10')

APPROXIMATE LOCATIONS (NOT FLAGGED)

	WETLAND AREA
	PERENNIAL STREAM
	INTERMITTENT STREAM
	EPHEMERAL FLOW
-X-X-X-X-X-X	BEAVER DAM
U	UPLAND
GW SEEP	GROUNDWATER SEEP
46-8—X AA-15X	FLAG POINT AND ID # (STRING# & FLAG #)

0 25 50 100 200
SCALE IN FEET

DATE OF PRINT
FEBRUARY 01 2024
HORIZONS ENGINEERING

NO.	DATE	REVISION DESCRIPTION	ENG	DWG
.	JUNE 2022	ADDITIONAL SOIL DELINEATIONS / CLASSIFICATION UPDATES	MC	KRP

PROJECT #:	19045
DATE:	JAN 2024
SURVEYED BY:	HEI
ENGINEERED BY:	BHK
DRAWN BY:	SJB/BDD/KRP
CHECKED BY:	ESP/BHK

STATE OF NEW HAMPSHIRE
BARRY H. KEITH
No. 087
CERTIFIED WETLAND SCIENTIST

horizons Engineering
Engineering - Land Surveying - Environmental
MAINE • NEW HAMPSHIRE • VERMONT
www.horizonsengineering.com

GRANITE STATE LANDFILL, LLC
DALTON, NEW HAMPSHIRE
EXISTING WETLAND PLANS

WETLAND MAPPING PLAN

SHEET 20

MATCH LINE - SHEET 20

MATCH LINE - SHEET 12

MATCH LINE - SHEET 28

MATCH LINE - SHEET 22

15" HDPE

PEM1E$_{xd}$

PSS1E

PFO1E

EPHEMERAL FLOW

PEM1E$_{dx}$

PSS1E$_{dx}$

DITCH

PFO1/4E

PSS1E$_{dx}$

15" HDPE

GLVRT BURIED

P SS 1E FO

P EM SS 1E dx

PFO1E

PSS1E$_{dx}$

P SS 1E FO

PFO1E

PSS1E

PFO1E

PFO1/4E

P SS 1E FO

PSS1E

PFO1E

P EM/SS 1/4E FO

PFO1E

P EM SS 1E

PSS1E

PFO1E

PSS1E

PFO1E

PFO1/4E

GW SEED

P EM/SS 1/4E FO

PFO1E

PSS1E

PFO1E

P SS 1/4E FO

PSS1E

P EM SS 1E

VP-7

POTENTIAL VERNAL POOL
(NOTE - CONTINUE TO MONITOR)

PSS1E

PFO1E

EXISTING STONE WALL

EXISTING STONE WALL

LEGEND

- EXISTING LOT LINE
- SUBJECT PROPERTY BOUNDARY LINE
- WATERSHED BOUNDARY
- VERNAL POOL
- ORDINARY HIGH WATER MARK
- PERENNIAL STREAM
- INTERMITTENT STREAM
- EPHEMERAL FLOW
- FLOW DIRECTION
- WETLAND DELINEATION LINE
- WETLAND CLASSIFICATION (P EM SS 1E)
- GRAVEL ROAD
- MINOR CONTOUR (2')
- MAJOR CONTOUR (10')
- APPROXIMATE LOCATIONS (NOT FLAGGED)
- WETLAND AREA
- PERENNIAL STREAM
- INTERMITTENT STREAM
- EPHEMERAL FLOW
- -X-X-X-X-X- BEAVER DAM
- U UPLAND
- GW SEEP GROUNDWATER SEEP
- 46-8—X AA-15X FLAG POINT AND ID # (STRING# & FLAG #)

0 25 50 100 200

SCALE IN FEET

DATE OF PRINT
FEBRUARY 01 2024
HORIZONS ENGINEERING

NO.	DATE	REVISION DESCRIPTION	ENG	DWG
.	JUNE 2022	ADDITIONAL SOIL DELINEATIONS / CLASSIFICATION UPDATES	MC	KRP

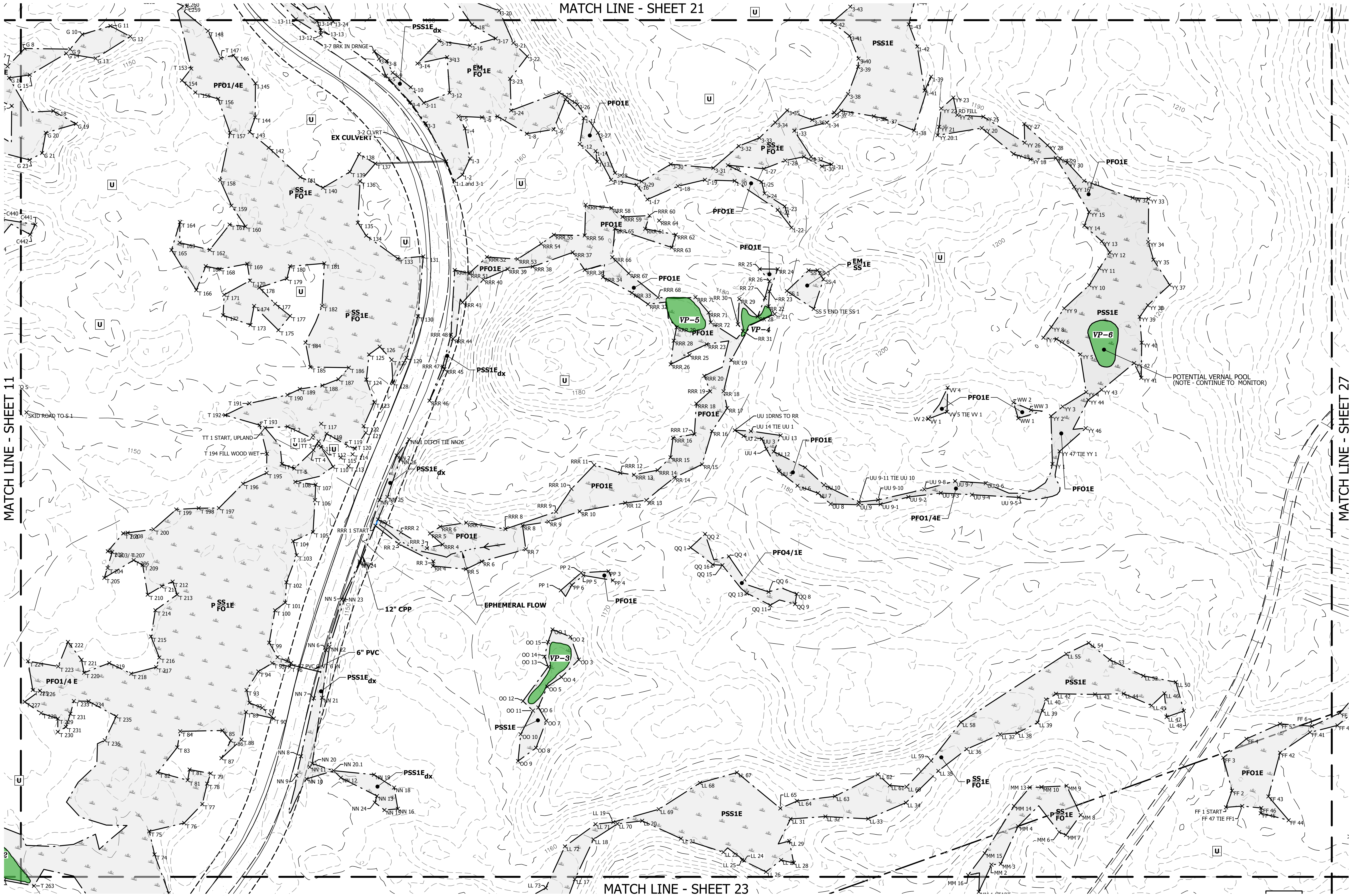
PROJECT #: 19045
DATE: JAN 2024
SURVEYED BY: HEI
ENGINEERED BY: BHK
DRAWN BY: SJB/BDD/KRP
CHECKED BY: ESP/BHK

horizons Engineering
Engineering - Land Surveying - Environmental
MAINE • NEW HAMPSHIRE • VERMONT
www.horizonsengineering.com

GRANITE STATE LANDFILL, LLC
DALTON, NEW HAMPSHIRE
EXISTING WETLAND PLANS

WETLAND MAPPING PLAN

SHEET 21



LEGEND

- EXISTING LOT LINE
- SUBJECT PROPERTY BOUNDARY LINE
- WATERSHED BOUNDARY
- VERNAL POOL
- OHW — ORDINARY HIGH WATER MARK
- PERENNIAL STREAM
- INTERMITTENT STREAM
- EPHEMERAL FLOW
- FLOW DIRECTION
- WETLAND DELINEATION LINE
- P EM/SS 1E — WETLAND CLASSIFICATION
- GRAVEL ROAD
- MINOR CONTOUR (2')
- MAJOR CONTOUR (10')

APPROXIMATE LOCATIONS (NOT FLAGGED)

- WETLAND AREA
- PERENNIAL STREAM
- INTERMITTENT STREAM
- EPHEMERAL FLOW
- -X-X-X-X-X-X BEAVER DAM
- U — UPLAND
- GW SEEP — GROUNDWATER SEEP
- 46-8—X AA-15X — FLAG POINT AND ID # (STRING# & FLAG #)

0 25 50 100 200

SCALE IN FEET

DATE OF PRINT
FEBRUARY 01 2024
HORIZONS ENGINEERING

NO.	DATE	REVISION DESCRIPTION	ENG	DWG
.	JUNE 2022	ADDITIONAL SOIL DELINEATIONS / CLASSIFICATION UPDATES	MC	KRP

PROJECT #:	19045
DATE:	JAN 2024
SURVEYED BY:	HEI
ENGINEERED BY:	BHK
DRAWN BY:	SJB/BDD/KRP
CHECKED BY:	ESP/BHK

STATE OF NEW HAMPSHIRE — BARRY H. KEITH — No. 087 — CERTIFIED WETLAND SCIENTIST

horizons Engineering
Engineering - Land Surveying - Environmental
MAINE • NEW HAMPSHIRE • VERMONT
www.horizonsengineering.com

GRANITE STATE LANDFILL, LLC

DALTON, NEW HAMPSHIRE

EXISTING WETLAND PLANS

WETLAND MAPPING PLAN

SHEET 22

Z:\proj_2019\19045 NCES - Dalton\DWGS\Final\19045_Wet_Layouts-21.dwg, 22, 2/1/2024 3:47:10 PM, KarenPhilbrick