TOWN OF RAYMOND

Planning Board Agenda
June 8, 2023
7 p.m. - Raymond High School
Media Center - 45 Harriman Hill

Public Announcement

*If this meeting is canceled or postponed for any reason the information can be found on our website, posted at Town Hall, Facebook Notification, and RCTV. **

1. **Pledge of Allegiance**

2. **Public Hearing-**

Application #2022-013- Earth Excavation Permit-Severino/Candia South Branch Brook: An application for an Earth Excavation Permit has been submitted by Candia South Branch Brook, LLC. The applicant is proposing the permitting of an existing excavation operation. The property is identified as Raymond Tax Map 38, Lot 34; 263 NH Route 27. (cont. 11/03/22, 11/10/22, 12/15/22, 02/16/23, and 05/04/23)

3. **Public Comment**

4. **Approval of Minutes**
   - 05/25/2023

5. **Other Business**
   - Staff Updates-
   - Board Member Updates
   - Any other business brought before the board-

* Note: If you require personal assistance for audio, visual or other special aid, please contact the Selectmen's Office at least 72 hours prior to the meeting. If this meeting is postponed for any reason, it will be held at a time TBD.

TOWN OF RAYMOND

Planning Board Agenda
June 8, 2023
7 p.m. - Raymond High School
Media Center - 45 Harriman Hill

6. Adjournment (NO LATER THAN 10:00 P.M.)

Planning Board 2023 Submittal and Meeting Dates

Submittal Deadline for Completed Application & Materials	**Planning Board Meeting Dates (1st & 3rd Thursdays of the Month)**
ADDED MEETING	June 8, 2023 **2022-013** Severino Excavation
May 18, 2023	June 15, 2023 **2022-015** White Rock LLA & **2022-008** Onyx Warehouse
June 01, 2023	July 06, 2023 **2023-003** Elated Canine LLC.
June 15, 2023	July 20, 2023
July 06, 2023	August 03, 2023
July 20, 2023	August 17, 2023
August 03, 2023	September 07, 2023
August 17, 2023	September 21, 2023
September 07, 2023	October 05, 2023
September 21, 2023	October 19, 2023
October 05, 2023	November 02, 2023
October 19, 2023	November 16, 2023
November 02, 2023	December 07, 2023
November 16, 2023	December 21, 2023

* Note: If you require personal assistance for audio, visual or other special aid, please contact the Selectmen's Office at least 72 hours prior to the meeting. If this meeting is postponed for any reason, it will be held at a time TBD.

ENVIRO NORTH AMERICAN
CONSULTING, LLC

Riverbend Professional Building
P.O. Box 1075 Alton, NH 03809
Ph. (603) 875-8100
Fax (603) 875-8101
www.environorthamerican.com

May 25, 2023
Project No. 1205-687

Thomas Severino, V.P.
Severino Trucking Company, Inc.
P.O. Box 202
512 Raymond Road
Candia, NH 03034

Re: Raymond Dennehy Pit
Tax Map 38, Lot 34: 22.37-Acres
Hydrogeologic and Environmental Evaluation

Dear Mr. Severino:

Enviro North American Consulting, LLC (ENAC) has prepared the enclosed Hydrogeologic and Environmental Evaluation for the above referenced property (the Property) noted as Tax Map 38, Lot 34 located in Raymond, NH. The Hydrogeologic and Environmental Evaluation was prepared for Severino Trucking Company, Inc. (Severino) and conducted under an approved work plan authorization. The enclosed evaluation was requested by the Town of Raymond's Planning Board as part of the application process for renewal of an excavation permit.

1.0 GROUNDWATER MONITORING WELL INSTALLATIONS

Four (4) groundwater monitoring wells were installed at the Property on April 6, 2023 by S.W. Cole Engineering, Inc. Soil boring and monitoring well construction logs were prepared for the 4-new well installations by S.W. Cole, and are attached to this report. As shown on attached boring logs, monitoring wells were installed to varying depths into the saturated unconsolidated fine sand and silt. The saturated unconsolidated sands were penetrated by advancing 4.5-inch diameter hollow stem augers (HSA) to penetrate the underlying saturated stratigraphy. Each of the four soil borings were finished as two-inch diameter polyvinyl chloride (PVC) monitoring wells. The PVC slotted well screen construction was designed to intercept the observed shallow water table. Filter sand was placed around the slotted screen well annulus, with placement of bentonite chips at depths above the slotted PVC well screen as a seal to protect groundwater from surface water runoff. The PVC monitoring wells were installed approximately 3-feet above grade with a protective stand-pipe road box with lock cover to prevent unauthorized access.

1.1 Monitoring Well Development and Sampling

After monitoring well installation, the four well network was developed by ENAC personnel on April 15, 2023. Well development included the use of dedicated polyethylene bailers for each well, where the bailer was allowed to sink to the bottom of PVC well. Each well bailer was deployed and recovered allowing removal of accumulated fine sands and silt mixed with ground water. Well development included removal of a minimum of 5-well volumes consistent with standard industry practices. A minimum of 10-gallons of well water was removed from each monitoring well during the phase of well development.

1.1.1 Groundwater Sampling April 20, 2023

After a two-week stabilization period following the well installations, groundwater samples were collected from the existing groundwater monitoring well network: MW-1, MW-2, MW-3 and MW-4 on April 20, 2023. Prior to water sample collection into laboratory prepared containers, static water levels were measured from the four-network monitoring wells using an electronic water level indicator. A minimum of three well volumes were purged prior to sample collection using dedicated polyethylene bailers. Water samples were collected by dedicated bailer and decanted into sampling containers for laboratory analyses of volatile organic compounds (VOCs) following EPA Method 8260C and polycyclic aromatic hydrocarbons (PAHs) following EPA Method 8270D. Upon collection the water samples were placed inside a cooler with ice and transported to a New England Laboratory Accredited Program (NELAP) and NH certified laboratory for the water analyses. Water samples were collected raw and non-filtered. The summary of VOC and PAH water sampling results are presented as Table 1.

1.1.2 Groundwater Sampling May 9, 2023

A second day of groundwater sampling was conducted at the Property by ENAC representatives on May 9, 2023. Prior to water sample collection into laboratory prepared containers, static water levels were measured from the four-network monitoring wells using an electronic water level indicator. A minimum of three-well volumes of water were purged prior to sample collection using dedicated polyethylene bailers. Water samples were collected by dedicated bailer and decanted into sampling containers for laboratory analyses of Per- and Polyfluoroalkyl Substances (PFAS) following EPA Method 537.1, 8-Resource Conservation and Recovery Act Metals (RCRA-8 Metals) following EPA Method 200.8, and for blasting series compounds including Nitrite, Nitrate, Ammonia, and Total Phosphorus following appropriate EPA Methods of detection. ENAC notes that water samples collected for RCRA-8 metals were field filtered with a 0.45-micron filter prior to placement in laboratory prepared water sample containers. The

remaining water samples were collected raw and non-filtered. The summary of PFAS, RCRA-8 metals, and blasting series compounds are presented as Table 1.

1.2 Groundwater Sampling Results

1.2.1 Table 1 – VOCs and PAHs

As shown in Table 1, concentrations of VOCs and PAHs were detected below applicable NHDES Ambient Groundwater Quality Standards (AGQS) or below laboratory reporting limits with the exception of one PAH compound, fluoranthene. Fluoranthene was detected slightly above the laboratory detection limit at 0.12-parts per billion (ppb), equivalent to micrograms per liter (µg/L). ENAC notes the laboratory detection limit for individual PAH compounds is 0.10-ppb and NHDES Ambient Groundwater Quality Standard (AGQS) for fluoranthene is 280-ppb. The AGQS is equivalent to the drinking water standards adopted by the NHDES for groundwater.

1.2.2 Table 1 – RCRA 8 Metals and Blasting Series Compounds

Laboratory results of RCRA-8 metals from water samples collected from the 4-monitoring well network included detections of arsenic and barium at low concentrations below the applicable AGQS, or drinking water standards established by the NHDES. In some cases, arsenic from MW-1 and MW-4 was not detected above laboratory reporting limits. The remaining metals cadmium, chromium, lead, mercury, selenium and silver were not detected above the laboratory reporting limits from the 4-monitoring well samples.

Laboratory results for the blasting series are presented in Table 1 and discussed below.

Nitrate

Nitrate as Nitrogen (N) was detected from a water sample collected from MW-3. Nitrate was not detected from the remaining monitoring well water samples. The detection of Nitrate from MW-3 was less than the AGQS.

Nitrite

Nitrite as N was not detected above the laboratory reporting limits in the water samples collected from the four monitoring well network.

Ammonia

Ammonia as N was detected from MW-3. Ammonia was not detected from the remaining monitoring well water samples. There is no current AGQS for ammonia regulated by the NHDES.

Total Phosphorus

Total phosphorus was detected from each of the water samples collected from the network of monitoring wells. There is no current AGQS for total phosphorus regulated by the NHDES. Monitoring well water sample MW-2 had a significant concentration elevated from the remaining monitoring well samples. This may be associated with a former septic or leach field sewage disposal system historically located in this area of the Property. ENAC notes this area of the Property contained building structures which have been razed and removed.

1.2.3 Groundwater Elevations and Inferred Flow

Severino personnel conducted a site survey of the newly installed network of four monitoring wells. Table 2 presents the top of PVC well survey elevations, depth to groundwater measured on April 20 and May 9, 2023 and the resulting April groundwater contour elevations. The attached Site Plan shows the depicted groundwater elevation contours and inferred groundwater flow direction. As shown on the attached Site Plan, groundwater flow is directed to the east-southeast with a radial component.

2.0 ENVIRONMENTAL SOIL EVALUATION

During property visits in April and May 2023, ENAC personnel observed stockpiles of reclaimed asphalt, concrete, and loam. Based on visual and olfactory observations, it did not appear existing stockpiles are significant sources for subsurface impacts to soil or groundwater quality. The Property has historically been used as an excavation source for sand and as an aggregate materials storage yard for nearby Severino projects.

2.1 Work Plan

As part of the excavation renewal permit application, Severino was asked by the Town of Raymond's Planning Board to provide soil analytical results from their onsite operations. A work plan was discussed with Severino to conduct the following soil testing:

1. Excavation at the toe of slope of existing reclaimed asphalt pile to expose underlying native sands, collect 3-discrete soil samples from native sands for analyses of RCRA-8

metals, PAHs, VOCs, and total petroleum hydrocarbons diesel range organics (TPH-DRO).

2. Composite soil samples collected from the existing reclaimed asphalt stockpile and loam stockpiles for testing of RCRA-8 metals, PAHs, VOCs, and TPH-DRO.

2.2 Soil Sample Collection

ENAC representatives conducted a Property visit on May 9, 2023 to conduct the soil sample collection outlined as the work plan.

Discrete Soil Samples
Three (3) discrete soil samples were collected from test pits advanced at the toe of slope of the existing reclaimed asphalt stockpile. Native sands were exposed beneath the active pit floor and discrete soil samples were collected from 3-test pit locations at depths ranging from 16- to 24-inches below grade. Discrete soil samples collected from toe of slope at subsurface locations are labeled as TS-1, TS-2, and TS-3 and shown on the attached Site Plan.

Composite Soil Samples
Two (2) composite soil samples were collected from the existing reclaimed asphalt stockpile (CS-1) and from two loam piles (CS-2). Composite soil samples were collected from 8-discrete locations at each stockpile, where soil from the stockpiles was exposed with a spade shovel, a soil sample collected and placed on polyvinyl chloride sheeting then mixed with a hand spade to create a representative composite soil sample.

Discrete and composite soil samples were collected with use of shovel and stainless-steel spade and samples placed in laboratory prepared containers then directly into coolers with ice. Composite and discrete soil samples were submitted to a NH certified laboratory for analyses following EPA Methods as listed: VOCs by method 8260, PAHs by method 8270, RCRA-8 metals by method 6020, and TPH-DRO by method 8015.

2.2.1 Table 3 Soil Analytical Summary

Laboratory soil analytical results for the discrete and composite soil samples are presented in attached Table 3.

RCRA-8 Metals
Arsenic was detected in the 3 discrete soil samples TS-1, TS-2 and TS-3 collected from test pits advanced to expose subsurface sand beneath the pit floor at depths between 16- and 24-inches. Arsenic was also detected from two composite soil samples collected from the reclaimed asphalt and loam stockpiles. The arsenic concentrations detected in 3-discrete and 1-composite soil samples exceed the NHDES Soil Remediation Standard (SRS) of 11 mg/kg equivalent to parts

per million (ppm). Remaining RCRA-8 metals were not detected in soil samples at concentrations above SRS.

PAHs and VOCs

Concentrations of individual PAHs and VOCs were detected from the composite soil sample CS-1 collected from the reclaimed asphalt stockpile. The VOC trichloroethene (TCE) was detected from CS-1 at a concentration below SRS. Two individual PAHs, benzo(a)pyrene and benzo(b)fluoranthene were detected from composite soil sample CS-1 above SRS, respectively. The presence of PAHs and VOCs were not detected from the 3-discrete soil samples TS-1, TS-2, or TS-3 or composite sample CS-2 (loam) above laboratory reporting limits (method detection limits).

TPH – DRO

Concentrations of TPH-DRO were not detected above laboratory reporting limits from the 3-discrete and 2-composite soil samples. ENAC notes the SRS for TPH is 10,000-ppm.

2.2.2 Table 3 - Background Arsenic Soil Samples

Due to detected arsenic in underlying native sand from the 3-subsurface discrete soil samples collected from test pits excavated beneath the toe of slope of reclaimed asphalt stockpile (TS-1, TS-2, and TS-3), ENAC revised the work plan to include soil sample collection from 8-additional locations across the Property at undisturbed areas. Laboratory results of background soil samples will help evaluate the arsenic in native soils at the Property.

ENAC representatives visited the Property on May 22, 2023 to collect additional discrete soil samples at undisturbed areas of the Property. Sampling tools were decontaminated prior to each sampling location by washing with an alconox-based detergent mixed with water and rinsed with separate deionized water.

The attached Site Plan shows 8-additional soil sample locations (BKG-1 through BKG-8) where discrete soil samples were collected for laboratory analyses of arsenic only. Discrete soil samples BKG-1, BKG-2, BKG-3, and BKG-7 were collected from above the active pit floor and within the exposed sand embankment. The exposed embankment is the visual limit of past excavation and onsite construction activity. Steel hand augering was advanced approximately 24-inches horizontally into the undisturbed sand embankment locations to collect a representative discrete soil sample for laboratory analysis of arsenic.

Discrete soil samples were also collected by advancement of a hand auger to vertical depths advanced below grade at locations BKG-4 (28-inches), BKG-5 (16-inches), BKG-6 (28-inches), and BKG-8 (13-inches). These 4-soil samples were collected from areas at, or beyond the limits of the disturbed area of the Property.

Background Arsenic Concentrations

Table 3 presents the results of background concentrations of arsenic detected from the additional 8-locations at the Property. Background arsenic concentrations range from 6.4 to 41 milligrams per kilogram (mg/kg) equivalent to parts per million (ppm). The background discrete soil samples collected and analyzed for arsenic support elevated background concentrations persist in shallow native underlying sands with presence of gravel.

3.0 BACKGROUND METALS STUDY NEW HAMPSHIRE SOILS

ENAC reviewed information presented in the study Development of Background Metals Concentrations Database for New Hampshire Soils / Background Metals Concentration Study New Hampshire Soils, dated November 19, 1998, and prepared by Sanborn, Head & Associates Consulting Engineers & Scientists (SHA)[1]. The SHA study was prepared for the New Hampshire Department of Environmental Services (NHDES). The purpose of the study was to assist the NHDES in further developing the database of background metals concentrations in New Hampshire soils. The focus of the study was to evaluate metals concentrations in urban developed areas compared to non-urban areas of the State.

Section 2.0 (page 2) of the study indicates that existing soil data (pre-1998) collected from the southeastern portion of the State may exhibit relatively high levels of several metals including arsenic. The SHA study describes collection of additional soil data during the study at locations across the State where composite soil samples were collected at relatively shallow soil depths and analyzed for the presence of metals including arsenic. Section 4.1 (page 5) of the SHA study indicates detected arsenic concentrations in soils from urban locations throughout NH range from 5.4 to 21 milligrams per kilogram (mg/kg). The SHA study sampling indicates that the 95th percentile for arsenic was determined to be 19.9 mg/kg.

Section 5.2 (page 6) of the SHA study indicates that on average the arsenic concentrations detected in soil samples collected by SHA during the study are significantly higher compared to pre-study concentrations found in the NHDES soil database. This variance was presumably related to the urban settings where soil sample data was collected during the SHA study. The NHDES database was referenced in the SHA study to include the 95th percentile for arsenic at 11 mg/kg, which has been the adopted SRS for arsenic by NHDES. Page 7 of the SHA study further reports that based on arsenic data collected during the study from composite soil samples, the 95th percentile concentration for arsenic is 19.9 mg/kg.

Section 6.0 (page 7) of the SHA study presents report conclusions and recommendations based on data collected from composite soil sample results. The SHA study references the 1998 version of the NHDES Risk Characterization and Management Policy (RCMP) which discusses the background concentrations for metals are generally consistent with the 95th percentile concentrations found during the study. Page 8 of the SHA study (Conclusions) indicates arsenic and mercury concentrations detected in urban soils analyzed during the study suggest

[1] Information from the 1998 SHA study included with discussions for arsenic detected in discrete subsurface soil samples collected at the Property (pages 2-8).

background levels are elevated in urban settings relative to non-urban settings. The SHA study recommends the NHDES may consider establishing urban background values for arsenic at 20 mg/kg. The 1998 SHA proposed urban value for arsenic is above the current adopted SRS of 11 mg/kg.

4.0 CONCLUSIONS

The 1998 SHA study establishes that urban settings in southeastern NH have elevated concentrations of arsenic detected in shallow soil. ENAC recommends the Town of Raymond's Planning Board consider the recent detected elevated arsenic in subsurface native sand at the Property is associated with naturally occurring arsenic at concentrations that persist above SRS. Discrete soil samples collected by ENAC during this environmental evaluation at subsurface locations met the SRS criteria for all tested compounds, with the exception of arsenic found in underlying native sands with the presence of gravel.

Two PAH compounds benzo(a)pyrene and benzo(b)fluoranthene were detected above SRS, from the composite soil sample CS-1 collected from the reclaimed asphalt stockpile. The reclaimed asphalt stockpile is targeted for processing and re-use at offsite locations and the PAH detections are not considered a significant source for contamination of subsurface soil or groundwater. ENAC notes that PAHs are persistent in asphalt products and soil that is in direct contact with asphalt.

Recent groundwater samples collected by ENAC from the Property's network of 4-monitoring wells indicate that RCRA-8 metals, VOCs, PAHs, PFAS and blasting series compounds meet the established NHDES drinking water quality standard criteria, also referenced as the AGQS.

It has been a pleasure to assist you with your needs for environmental consulting.

ENVIRO NORTH AMERICAN CONSULTING, LLC

Todd A. Greenwood, P.G.
President

Attachments: Site Plan
Table 1 – Summary of Groundwater Quality Data
Table 2 – Summary of Groundwater Elevation Data
Table 3 – Summary of Discrete & Composite Soil Analytical Data
Soil Boring and Monitoring Well Logs
Laboratory Results

APPROVED BY THE RAYMOND PLANNING BOARD
ON _____

CERTIFIED BY:

_____

_____

_____

_____

A BERM MUST BE MAINTAINED BETWEEN THE EXCAVATION AND THE DELINEATED WETLANDS.

TAX MAP 7, LOT 9
PAUL F. & MARGARET EDWARDS
PO BOX 478
RAYMOND, NH 03077
BK: 2027 PG: 219

TAX MAP 8, LOT 33
LEISURE VILLAGE ESTATES
15 NORTH STREET
MANCHESTER, NH 03104
BK: 2681 PG: 2609

TAX MAP 7, LOT 4B
IVY VERGOS, & GEORGE & EVELYN BAKER
8 HILLCREST DRIVE
ROCHESTER, NH 03867

Monitoring Well 3
N: 204134.567 ft
E: 1104141.318 ft
Top of Well: 230.804 ft
Grnd Elev: 228.104 ft
Grnd Water Elv: 207.14

Monitoring Well 1
N: 204151.911 ft
E: 1103729.107 ft
Top of Well: 224.202 ft
Grnd Elev: 221.502 ft
Grnd Water Elv: 205.71

Monitoring Well 2
N: 203583.611 ft
E: 1103986.350 ft
Top of Well: 234.000 ft
Grnd Elev: 231.000 ft
Grnd Water Elv: 204.95

Monitoring Well 4
N: 203697.669 ft
E: 1103570.662 ft
Top of Well: 228.635 ft
Grnd Elev: 225.935 ft
Grnd Water Elv: 204.89

T.B.M: 224.202 ft
Spike in Helmlock

BKG-1 BKG-2 BKG-3 BKG-4 BKG-5 BKG-6 BKG-7 BKG-8

TP1 TP5 TS-1 TS-2 TS-3

OBSERVATION WELL #1
OBSERVATION WELL #2

Loam Stockpile
MAP 7, LOT 4

Pavement Stockpile

Loam Stockpile

MAP 7, LOT 4A

APPROXIMATE WETLANDS BOUNDARIES

ESTIMATED SEASONAL HIGH WATER TABLE @ ELEVATION 198'

EDGE OF WETLAND

RECLAIMED AREA

EXISTING TREES TO REMAIN

SWALE

METAL GATE

PROPOSED SIGN W/PIT OPERATOR AND PERMIT NUMBER

HIGHWAY FENCE

50' PAVED APRON

℄ RTE 27

LIMIT OF EXCAVATION (TYP)

PROPOSED EDGE OF EXCAVATION

CONCRETE & REFUSE DISPOSAL AREA

CONCRETE RUBBLE REFUSE FILL AREA

CROSS SECTION ALIGNMENT #12
SEE SHEETS X-1 & X-2

EXISTING BUILDINGS TO BE RAZED

STOCKADE FENCE BARRIERS TO BE INSTALLED BETWEEN INITIATION OF EXCAVATION PERMIT AND EVENTUAL RAZING OF BUILDINGS.

AL1 AL2 AL3 AL4 AL5 AL6 AL7 AL8 AL9 AL10 AL11 AL12

50' NOTE #3

67' NOTE #3

MAGNETIC

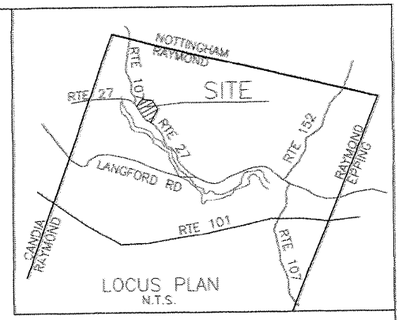
LEGEND

DIRECTION OF GROUND WATER FLOW

205 GROUND WATER CONTOURS 4/20/2023

220 EXISTING CONTOURS 5/22/2023

NOTES:
1. CURRENT CONDITIONS SHOWN IN GREEN AND ORANGE, OVERLAID UPON APPROVED EXCAVATION PLAN BY JONES AND BEACH ENGINEERS MAY OF 1998.
2. PLAN PRODUCED BY SEVERINO TRUCKING CO., INC.
4. ZONING: LOT IS SPLIT BETWEEN COMMERCIAL (C1) AND RESIDENTIAL/AGRICULTURAL (B).
5. NO BLASTING IS TO BE DONE ON PROJECT.
6. DUST CONTROL WHEN REQUIRED, SHALL BE PERFORMED BY USE OF A WATER TRUCK.
7. NO ONSITE FUELING OF EQUIPMENT AND TRUCKS.
9. NO BUILDINGS, STRUCTURES OR SEPTIC SYSTEMS EXIST WITHIN 200 FEET OF SITE BOUNDARY.



LOCUS PLAN
N.T.S.

OPERATION NOTES:

1. PROPOSED EXCAVATION LOCATED WITHIN A STRATIFIED--DRIFT AQUIFER AS SHOWN ON MAPS WITHIN USGS OPEN--FILE REPORT 92--95 STRATIFIED--DRIFT AQUIFERS IN THE EXETER, LAMPREY, AND OYSTER RIVER BASINS. (SEE WELL #6)
2. AREA OF PROPOSED EXCAVATION: 13.27 ACRES, 578,000 SQUARE FEET
3. VOLUME OF MATERIAL: 220,000 CUBIC YARDS
4. PROJECT DURATION: ~~5 YEARS~~ 20 Years
5. ESTIMATED SEASONAL HIGH WATER TABLE DETERMINED TO BE AT ELEVATION 198' AT TEST HOLE #1. PROPOSED EXCAVATION IS A MINIMUM OF 13 FEET ABOVE ESHWT.
6. TRUCK TRAFFIC:
   A. TRIPS PER DAY: 100 LOADS PER DAY MAX.
   B. TYPE OF VEHICLES: 1--15 TRUCKS PER DAY
   C. WEIGHT LIMITS: 10 WHEELERS -- 65,000 LBS.
      TRAILER DUMP BODIES -- 100,000 LBS.
      TRI--AXLE -- 72,000 LBS.
7. HOURS OF OPERATION: WAIVER GRANTED JUNE 4, 1998.
   MACHINERY: 7:00AM -- 5:00PM
   MATERIAL REMOVAL: 7:00AM -- 5:00PM
   SATURDAY: 7:00AM -- 12:00 (NOON)
8. PERIMETER OF THE PIT SHALL BE SUITABLY POSTED WITH SIGNS AT A MAXIMUM 100 FOOT INTERVAL, NOTIFYING TRESPASSERS OF POTENTIAL DANGER.
9. THE PROPOSED MINIMUM DISTANCE FROM EXCAVATION TO A SIDE PROPERTY LINE IS 67 FEET. THE PROPOSED MINIMUM DISTANCE FROM EXCAVATION TO A FRONT RIGHT--OF--WAY LINE IS 50 FEET.
10. SITE SPECIFIC PERMIT #WPS--5001, JANUARY 28, 1998. **AMENDED MARCH 9, 2010**
11. TRUCKS WILL NOT QUE ONTO ROUTE 27 AND ARE NOT ALLOWED TO BACK OUT ONTO THE HIGHWAY. TRUCKS ARE ALSO PROHIBITED FROM BACKING FROM ROUTE 27 ONTO THE SITE.
12. **MONITORING WELLS INSTALLED 4/6/2023**

LEGEND

TP TEST PITS
HIGH CONTOURS
LOW CONTOURS
PROPERTY LINES
WETLAND BOUNDARIES
EDGE OF WOODS/TREE LINE
218 PROPOSED CONTOURS

GRAPHIC SCALE

50 0 25 50 100 200
(IN FEET)
1 inch = 50 ft.

OWNER OF RECORD
BRANCH BROOK HOLDINGS, LLC.
PO BOX 202
CANDIA, N.H.
BOOK 3919 - PAGE 1313

OPERATOR
SEVERINO TRUCKING CO., INC.
RONALD A. SEVERINO, PRESIDENT
PO BOX 202
CANDIA N.H.
PHONE (603)483--2133
FAX (603)483--2998

TOTAL AREA
22.37 AC

PROPOSED EXCAVATION
13.2 AC

REVISED: JUNE 8, 1998

MAP 7 LOTS 4 & 4A
NH RTE 27, RAYMOND, N.H.

SEVERINO TRUCKING CO., INC.
PROPOSED EXCAVATION PLAN
NH RTE 27, RAYMOND, N.H

JONES & BEACH ENGINEERS, INC.
85 PORTSMOUTH AVENUE
STRATHAM, N.H. 03885
PHONE 772--4746 FAX 772--0227

RANDALL R. JONES No. 5426 LICENSED PROFESSIONAL ENGINEER STATE OF NEW HAMPSHIRE

J/B

DRAWING NO. C2

SCALE :	DATE :	FILE :	REV.	SHEET NO.
1" = 50'	11/25/97	SEVERINO		-- OF --

2036.1

TABLE 1
SUMMARY OF GROUNDWATER QUALITY DATA
SEVERINO TRUCKING CO., INC. - DENNEHY PIT
RAYMOND, NH

COMPOUND	DATE	SITE MONITORING WELLS				NHDES AMBIENT GROUNDWATER QUALITY STANDARDS
VOCs by EPA Method 8260C/524.2		MW-1	MW-2	MW-3	MW-4	
Benzene						*5*
	4/20/2023	<1	<1	<1	<1	
Toluene						*1,000*
	4/20/2023	<1	<1	<1	<1	
Ethylbenzene						*700*
	4/20/2023	<1	<1	<1	<1	
Total Xylenes						*10,000*
	4/20/2023	<1	<1	<1	<1	
Naphthalene						*100*
	4/20/2023	<2	<2	<2	<2	
Isopropylbenzene						*800*
	4/20/2023	<1	<1	<1	<1	
n-Butylbenzene						*260*
	4/20/2023	<1	<1	<1	<1	
sec-Butylbenzene						*260*
	4/20/2023	<1	<1	<1	<1	
n-Propylbenzene						*260*
	4/20/2023	<1	<1	<1	<1	
p-Isopropyltoluene						*260*
	4/20/2023	<1	<1	<1	<1	
Trichloroethene (TCE)						*5*
	4/20/2023	<1	<1	<1	<1	
Tetrachloroethene (PCE)						*5*
	4/20/2023	<1	<1	<1	<1	
1,2,4-Trimethylbenzene						*330*
	4/20/2023	<1	<1	<1	<1	
1,3,5-Trimethylbenzene						*330*
	4/20/2023	<1	<1	<1	<1	

Notes: 1. Concentrations expressed in parts per billion (ppb) equivalent to micrograms per liter (µg/L).
2. <1 = Below laboratory detection/reporting limits, as shown.
3. Concentrations compared to NHDES AGQS, revised 1/1/2021.
4. Samples collected from groundwater monitoring wells as raw unfiltered.

TABLE 1
SUMMARY OF GROUNDWATER QUALITY DATA
SEVERINO TRUCKING CO., INC. - DENNEHY PIT
RAYMOND, NH

COMPOUND	DATE	SITE MONITORING WELLS				NHDES AMBIENT GROUNDWATER QUALITY STANDARDS
PAHS by EPA Method 8270D		MW-1	MW-2	MW-3	MW-4	
Acenaphthylene						***420***
	4/20/2023	<0.1	<0.1	<0.1	<0.1	
Acenaphthene						***420***
	4/20/2023	<0.1	<0.1	<0.1	<0.1	
Anthracene						***2,100***
	4/20/2023	<0.1	<0.1	<0.1	<0.1	
Benzo(a)anthracene						***0.1***
	4/20/2023	<0.1	<0.1	<0.1	<0.1	
Benzo(a)pyrene						***0.2***
	4/20/2023	<0.1	<0.1	<0.1	<0.1	
Benzo(b)fluoranthene						***0.1***
	4/20/2023	<0.1	<0.1	<0.1	<0.1	
Benzo(g,h,i)perylene						***210***
	4/20/2023	<0.1	<0.1	<0.1	<0.1	
Benzo(k)fluoranthene						***0.5***
	4/20/2023	<0.1	<0.1	<0.1	<0.1	
Chrysene						***5***
	4/20/2023	<0.1	<0.1	<0.1	<0.1	
Dibenz(a,h)anthracene						***0.1***
	4/20/2023	<0.1	<0.1	<0.1	<0.1	
Fluorene						***280***
	4/20/2023	<0.1	<0.1	<0.1	<0.1	
Fluoranthene						***280***
	4/20/2023	<0.1	<0.1	<0.1	0.12	
Phenanthrene						***210***
	4/20/2023	<0.1	<0.1	<0.1	<0.1	
Pyrene						***210***
	4/20/2023	<0.1	<0.1	<0.1	<0.1	
Indeno(1,2,3-cd)pyrene						***0.1***
	4/20/2023	<0.1	<0.1	<0.1	<0.1	
Naphthalene						***100***
	4/20/2023	<0.1	<0.1	<0.1	<0.1	
1-Methylnaphthalene						***160***
	4/20/2023	<0.1	<0.1	<0.1	<0.1	
2-Methylnaphthalene						***280***
	4/20/2023	<0.1	<0.1	<0.1	<0.1	

Notes: 1. Concentrations expressed in parts per billion (ppb) equivalent to micrograms per liter (µg/L).
2. <1 = Below laboratory detection/reporting limits, as shown.
3. Concentrations compared to NHDES AGQS, revised 1/1/21.
4. Samples collected from groundwater monitoring wells as raw unfiltered.

TABLE 1
SUMMARY OF GROUNDWATER QUALITY DATA
SEVERINO TRUCKING CO., INC. - DENNEHY PIT
RAYMOND, NH

COMPOUND	DATE	SITE MONITORING WELLS				NHDES AMBIENT GROUNDWATER QUALITY STANDARDS
RCRA-8 Metals and Nutrients		MW-1	MW-2	MW-3	MW-4	
Arsenic						***5***
	5/9/2023	<0.5	0.84	0.91	<0.5	
Barium						***2,000***
	5/9/2023	8.1	20	8	120	
Cadmium						***5***
	5/9/2023	<1	<1	<1	<1	
Chromium						***100***
	5/9/2023	<1	<1	<1	<1	
Lead						***15***
	5/9/2023	<1	<1	<1	<1	
Mercury						***2***
	5/9/2023	<0.1	<0.1	<0.1	<0.1	
Selenium						***50***
	5/9/2023	<1	<1	<1	<1	
Silver						***100***
	5/9/2023	<1	<1	<1	<1	
Nitrate-N						***10,000***
	5/9/2023	<100	<100	100	<100	
Nitrite-N						***1,000***
	5/9/2023	<500	<500	<500	<500	
Ammonia-N						***NSA***
	5/9/2023	<50	<50	100	<50	
Total Phosphorus						***NSA***
	5/9/2023	320	1,100	88	340	

Notes: 1. Concentrations expressed in parts per billon (ppb) equivalent to micrograms per liter (µg/L).
2. <1 = Below laboratory detection/reporting limits, as shown.
3. Concentrations compared to NHDES AGQS, revised 1/1/21.
4. RCRA-8 dissolved metal samples collected from groundwater monitoring wells with use of 0.45-micron field filter. Nutrient samples collected as raw water without field filtering for Nitrate, Nitrite, Ammonia, and Total Phosphorus.
5. NSA = No Standard (AGQS) Available

TABLE 1
SUMMARY OF GROUNDWATER QUALITY DATA
SEVERINO TRUCKING CO., INC. - DENNEHY PIT
RAYMOND, NH

COMPOUND	DATE	SITE MONITORING WELLS				NHDES AMBIENT GROUNDWATER QUALITY STANDARDS
PFAS Chemicals		MW-1	MW-2	MW-3	MW-4	
Perfluorobutane Sulfonic Acid (PFBS)	5/9/2023	0.72	<1.8	0.86	2.9 / 3.4*	NSA
Perfluorohexanoic Acid (PFHxA)	5/9/2023	<1.7	<1.8	0.99	2.7 / 4.5*	NSA
Perfluorohexane Sulfonic Acid (PFHxS)	5/9/2023	<1.7	<1.8	1.0	0.87 / <1.9*	18
Perfluoroheptanoic Acid (PFHpA)	5/9/2023	<1.7	<1.8	1.5	3.3 / 4.2*	NSA
Perfluorooctanoic Acid (PFOA)	5/9/2023	<1.7	<1.8	1.6	5.2 / 6.7*	12
Perfluorooctane Sulfonic Acid (PFOS)	5/9/2023	1.1	0.72	1.1	0.72 / <1.8*	15
Perfluorononanoic Acid (PFNA)	5/9/2023	<1.7	<1.8	<1.8	<1.9	11
Perfluorodecanoic Acid (PFDA)	5/9/2023	<1.7	<1.8	<1.8	<1.9	NSA
N-ethyl Perfluorooctanesulfonamido Acetic Acid (EtFOSAA)	5/9/2023	<1.7	<1.8	<1.8	<1.9	NSA
Perfluoroundecanoic Acid (PFUnA)	5/9/2023	<1.7	<1.8	<1.8	<1.9	NSA
N-methyl Perfluorooctanesulfonamido Acetic Acid (MeFOSAA)	5/9/2023	<1.7	<1.8	<1.8	<1.9	NSA
Perfluorododecanoic Acid (PFDoA)	5/9/2023	<1.7	<1.8	<1.8	<1.9[6]	NSA
Perfluorotridecanoic Acid (PFTrDA)	5/9/2023	<1.7	<1.8	<1.8	<1.9[6]	NSA
Perfluorotetradecanoic Acid (PFTA)	5/9/2023	<1.7	<1.8	<1.8	<1.9[6]	NSA
Hexafluoropropylene oxide dimer acid (HFPO-DA)	5/9/2023	<1.7	<1.8	<1.8	<1.9	NSA
11C1-PF3OUdS (F53B Major)	5/9/2023	<1.7	<1.8	<1.8	<1.9**	NSA
9C1-PF3ONS (F53B Minor)	5/9/2023	<1.7	<1.8	<1.8	<1.9	NSA
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	5/9/2023	<1.7	<1.8	<1.8	<1.9	NSA

Notes:
1. Concentrations expressed in parts per trllion (ppt) equivalent to nanograms per liter (ng/L).
2. <1 = Below laboratory detection/reporting limits, as shown.
3. Concentrations compared to NHDES AGQS, revised 1/1/21.
4. Samples collected from groundwater monitoring wells as raw unfiltered.
5. NSA = No Standard (AGQS) Available
6. Concentration results obtained in laboratory where fortified blank control sample recovery and duplicate recovery is outside of control limits. Reported value is likely to be biased on the low side.
7. ** concentration result where either laboratory fortified blank or laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. The reported concentration is between the two LFB/LCS results is within method specification criteria.
8. * Concentrations for MW-4 resulted with surrogate recovery outside of control limits. Re-extraction yielded different surrogate non-conformance. Both results reported for MW-4 analyses.

TABLE 2

SUMMARY OF GROUNDWATER ELEVATION DATA
SEVERINO TRUCKING COMPANY, INC. - DENNEHY PIT
RAYMOND, NH

WELL	DATE	WATER LEVEL (feet)	TOP OF PVC (feet)	GROUNDWATER ELEVATION (feet)
MW-1			224.202	
	5/9/2023	17.95		206.25
	4/20/2023	18.49		205.71
MW-2			234.000	
	5/9/2023	28.32		205.68
	4/20/2023	29.05		204.95
MW-3			230.804	
	5/9/2023	23.16		207.64
	4/20/2023	23.66		207.14
MW-4			228.635	
	5/9/2023	23.05		205.59
	4/20/2023	23.75		204.89

NOTES: 1. Well survey conducted by Severino Construction.
2. Site Survey Benchmark = Spike in Hemlock = 224.202 feet.
3. Monitoring wells installed 4/6/2023.

TABLE 3
SUMMARY OF DISCREET AND COMPOSITE SOIL ANALYTICAL DATA
SEVERINO TRUCKING COMPANY, INC. - DENNEHY PIT
RAYMOND, NH

COMPOUND	DATE	SOIL SAMPLE LOCATIONS					NHDES Soil Remediation Standards
		TS-1 (discrete sample, subsurface toe of slope 16-inches)	TS-2 (discrete sample, subsurface toe of slope 24-inches)	TS-3 (discrete sample, subsurface toe of slope 22-inches)	CS-1 (composite sample recycled asphalt)	CS-2 (composite sample loam piles)	
RCRA 8 Metals				***SOIL presented as mg/kg***			
Arsenic	5/9/2023	**22**	**16**	**15**	7.8	**16**	***11***
Barium	5/9/2023	36	15	14	40	24	***1,000***
Cadmium	5/9/2023	<0.5	<0.5	<0.5	<0.5	<0.5	***33***
Chromium	5/9/2023	13	5.3	5	18	8.9	***130****
Lead	5/9/2023	6	4	3.2	28	17	***400***
Mercury	5/9/2023	<0.1	<0.1	<0.1	0.16	<0.1	***7***
Selenium	5/9/2023	<0.5	<0.5	<0.5	<0.5	<0.5	***180***
Silver	5/9/2023	<0.5	<0.5	<0.5	<0.5	<0.5	***89***
PAHs 8270				***SOIL presented as mg/kg***			
Acenaphthene	5/9/2023	<0.07	<0.07	<0.07	<0.4	<0.08	***340***
Acenaphthylene	5/9/2023	<0.07	<0.07	<0.07	<0.4	<0.08	***490***
Anthracene	5/9/2023	<0.07	<0.07	<0.07	<0.4	<0.08	***1,000***
Benzo(a)anthracene	5/9/2023	<0.07	<0.07	<0.07	0.72	<0.08	***1***
Benzo(a)pyrene	5/9/2023	<0.07	<0.07	<0.07	**0.79**	<0.08	***0.7***
Benzo(b)fluoranthene	5/9/2023	<0.07	<0.07	<0.07	**1.2**	<0.08	***1***
Benzo(k)fluoranthene	5/9/2023	<0.07	<0.07	<0.07	0.43	<0.08	***12***
Benzo(g,h,i)perylene	5/9/2023	<0.07	<0.07	<0.07	<0.4	<0.08	***NSA***
Dibenz(a,h)anthracene	5/9/2023	<0.07	<0.07	<0.07	<0.4	<0.08	***0.7***
Chrysene	5/9/2023	<0.07	<0.07	<0.07	0.87	<0.08	***120***
Indeno(1,2,3-cd)pyrene	5/9/2023	<0.07	<0.07	<0.07	<0.4	<0.08	***1***
Fluorene	5/9/2023	<0.07	<0.07	<0.07	<0.4	<0.08	***77***
Fluoranthene	5/9/2023	<0.07	<0.07	<0.07	1.6	<0.08	***960***
Phenanthrene	5/9/2023	<0.07	<0.07	<0.07	0.61	<0.08	***NSA***
Naphthalene (8270D)	5/9/2023	<0.07	<0.07	<0.07	<0.4	<0.08	***5***
Pyrene	5/9/2023	<0.07	<0.07	<0.07	1.2	<0.08	***720***
1-Methylnaphthalene	5/9/2023	<0.07	<0.07	<0.07	<0.4	<0.08	***NSA***
2-Methylnaphthalene	5/9/2023	<0.07	<0.07	<0.07	<0.4	<0.08	***96***
VOCs 8260				***SOIL presented as mg/kg***			
Trichloroethene	5/9/2023	<0.05	<0.05	<0.05	0.12	<0.05	***0.8***
Total Petroleum Hydrocarbons DRO 8015				***SOIL presented as mg/kg***			
TPH as Diesel Range Organics	5/9/2023	<30	<30	<30	<200	<30	***10,000***

Notes:
1. Discreet soil samples TS-1, TS-2, TS-3 collected from toe of slope of recycled asphalt pile 15-inches below grade.
2. Composite soil sample CS-1 collected from 8-discreet locations across face of recycled apshalt pile.
3. Composite soil sample CS-2 collected from existing loam piles (8-discreet sample locations).
4. Laboratory soil data presented as milligrams per kilogram equivalent to parts per million (ppm).
5. Analytical soil results compared to NHDES Soil Remediation Standards published in Env-Or 600, Table 600-2.

TABLE 3
SUMMARY OF DISCREET AND COMPOSITE SOIL ANALYTICAL DATA
SEVERINO TRUCKING COMPANY, INC. - DENNEHY PIT
RAYMOND, NH

COMPOUND	DATE	DISCRETE BACKGROUND SOIL SAMPLE LOCATIONS								NHDES Soil Remediation Standard
		BKG-1 (embankment sample)	BKG-2 (embankment sample)	BKG-3 (embankment sample)	BKG-4 (native sand near wetland)	BKG-5 (native sand top of slope)	BKG-6 (native sand near wetland)	BKG-7 (embankment sample)	BKG-8 (near wetland)	
RCRA 8 Metals		*SOIL presented as mg/kg*								
Arsenic	5/22/2023	**15**	8.9	**13**	**22**	**41**	10	6.4	**13**	*11*

Notes: 1. Background soil samples BKG-1, BKG-2, BKG-3 and BKG-7 collected 2-feet into embankments at the limits of disturbance.
2. Background soil sample BKG-4 collected below ground surface at 28-inches, BKG-5 below grade at 16-inches.
3. Background soil sample BKG-6 collected below grade at 28-inches, and BKG-8 at 13-inches.

BORING LOG

S.W.COLE

CLIENT: Severino Trucking Co., Inc.
PROJECT: Dennehy Borrow Pit
LOCATION: Route 27, Raymond, New Hampshire

BORING NO.: MW-1
SHEET: 1 of 1
PROJECT NO. 23-0564
DATE START: 4/6/2023
DATE FINISH: 4/6/2023

Drilling Information

LOCATION: See Exploration Location Plan
ELEVATION (FT):
TOTAL DEPTH (FT): 22.0
LOGGED BY: Bryce Walker
DRILLING CO.: S. W. Cole Explorations, LLC
DRILLER: Jeff Lee
DRILLING METHOD: Solid Stem Auger
RIG TYPE: Track Mounted CME 850
AUGER ID/OD: N/A / 4 1/2 in
SAMPLER: Standard Split-Spoon
HAMMER TYPE: Automatic / N/A
HAMMER WEIGHT (lbs): 140
CASING ID/OD: N/A /N/A
CORE BARREL: N/A
HAMMER CORRECTION FACTOR: 1.44
HAMMER DROP (inch): 30
WATER LEVEL DEPTHS (ft): ▽ 16 ft Soils appear saturated below 16 feet.
GENERAL NOTES:

KEY TO NOTES AND SYMBOLS:
Water Level
▽ At time of Drilling
▼ At Completion of Drilling
▼ After Drilling
D = Split Spoon Sample
U = Thin Walled Tube Sample
R = Rock Core Sample
V = Field Vane Shear
Pen. = Penetration Length
Rec. = Recovery Length
bpf = Blows per Foot
mpf = Minute per Foot
WOR = Weight of Rods
WOH = Weight of Hammer
RQD = Rock Quality Designation
PID = Photoionization Detector
S_v = Field Vane Shear Strength, kips/sq.ft.
q_u = Unconfined Compressive Strength, kips/sq.ft.
Ø = Friction Angle (Estimated)
N/A = Not Applicable

Elev. (ft)	Depth (ft)	Casing Pen. (bpf)	SAMPLE INFORMATION: Sample No.	Type	Depth (ft)	Pen./ Rec. (in)	Blow Count or RQD	Field / Lab Test Data	Graphic Log	Sample Description & Classification	H_2O Depth
			1D	X	0-2	24/9	1-3-3-4			Loose, brown to light brown, gravelly silty SAND; frequent cobbles, boulders	
	5		2D	X	5-7	24/8	3-2-2-4				
										6.5 Loose to medium dense, light brown to tan, SAND some gravel some silt	
	10		3D	X	10-12	24/12	9-6-6-7				
	15		4D	X	15-17	24/18	7-6-9-5				▽
										16.0 Medium dense, light brown with orange staining, fine SAND some silt	
	20										

Well Diagram:
- Capped riser from -2.5 to 12 feet. Drill spoils from 0 to 10 feet.
- Bentonite chips from 10 to 11 feet.
- Filter sand from 11 to 22 feet. Water level observed at 16.5 feet after well installation. Capped screen from 12 to 22 feet.

Bottom of Exploration at 22.0 feet

Stratification lines represent approximate boundary between soil types, transitions may be gradual. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

BORING LOG

BORING NO.:	**MW-2**
SHEET:	1 of 1
PROJECT NO.	23-0564
DATE START:	4/6/2023
DATE FINISH:	4/6/2023

CLIENT: Severino Trucking Co., Inc.
PROJECT: Dennehy Borrow Pit
LOCATION: Route 27, Raymond, New Hampshire

Drilling Information

LOCATION: See Exploration Location Plan
ELEVATION (FT):
TOTAL DEPTH (FT): 30.0
LOGGED BY: Bryce Walker
DRILLING CO.: S. W. Cole Explorations, LLC
DRILLER: Jeff Lee
DRILLING METHOD: Hollow Stem Auger
RIG TYPE: Track Mounted CME 850
AUGER ID/OD: 2 1/4 in / 5 5/8 in
SAMPLER: Standard Split-Spoon
HAMMER TYPE: Automatic / N/A
HAMMER WEIGHT (lbs): 140
CASING ID/OD: N/A /N/A
CORE BARREL: N/A
HAMMER CORRECTION FACTOR: 1.44
HAMMER DROP (inch): 30
WATER LEVEL DEPTHS (ft): ▽ 25 ft Soils appear saturated below 25.5 feet.
GENERAL NOTES:

KEY TO NOTES AND SYMBOLS:
Water Level: ▽ At time of Drilling; ▼ At Completion of Drilling; ▼ After Drilling
D = Split Spoon Sample; U = Thin Walled Tube Sample; R = Rock Core Sample; V = Field Vane Shear
Pen. = Penetration Length; Rec. = Recovery Length; bpf = Blows per Foot; mpf = Minute per Foot
WOR = Weight of Rods; WOH = Weight of Hammer; RQD = Rock Quality Designation; PID = Photoionization Detector
S_v = Field Vane Shear Strength, kips/sq.ft.; q_U = Unconfined Compressive Strength, kips/sq.ft.; Ø = Friction Angle (Estimated); N/A = Not Applicable

Elev. (ft)	Depth (ft)	Casing Pen. (bpf)	SAMPLE INFORMATION: Sample No.	Type	Depth (ft)	Pen./ Rec. (in)	Blow Count or RQD	Field / Lab Test Data	Graphic Log	Sample Description & Classification	H_2O Depth
										No samples taken - drilling through leveling pad (Fill)	
	5		1D		5-7	24/14	5-6-6-7			5.0 Loose to medium dense, light brown with orange staining, gravelly SAND some silt; occasional fine sand seams	
	10		2D		10-12	24/15	4-4-6-6				
	15		3D		15-17	24/24	5-5-6-9			15.0 Medium dense to dense, light brown with orange staining, fine SAND some silt; occasional sand seams	
	20		4D		20-22	24/20	14-15-15-16				
	25		5D		25-27	24/18	8-9-9-11				▽

Well Diagram:
- Capped riser from -2.5 to 15 feet.
- Drill spoils from 0 to 15 feet.
- Bentonite chips from 15 to 16 feet.
- Filter sand from 16 to 30 feet.
- Capped screen from 20 to 30 feet. Water level observed at 25 feet after well installation.

Stratification lines represent approximate boundary between soil types, transitions may be gradual. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

Bottom of Exploration at 30.0 feet

BORING NO.: MW-2

BORING / WELL 10-12-2022 23-0564.GPJ SWCE TEMPLATE.GDT 4/6/23

BORING LOG

S.W.COLE

CLIENT: Severino Trucking Co., Inc.
PROJECT: Dennehy Borrow Pit
LOCATION: Route 27, Raymond, New Hampshire

BORING NO.: MW-3
SHEET: 1 of 1
PROJECT NO. 23-0564
DATE START: 4/6/2023
DATE FINISH: 4/6/2023

Drilling Information

LOCATION: See Exploration Location Plan
ELEVATION (FT):
TOTAL DEPTH (FT): 26.0
LOGGED BY: Bryce Walker
DRILLING CO.: S. W. Cole Explorations, LLC
DRILLER: Jeff Lee
DRILLING METHOD: Solid Stem Auger
RIG TYPE: Track Mounted CME 850
AUGER ID/OD: N/A / 4 1/2 in
SAMPLER: Standard Split-Spoon
HAMMER TYPE: Automatic / N/A
HAMMER WEIGHT (lbs): 140
CASING ID/OD: N/A /N/A
CORE BARREL: N/A
HAMMER CORRECTION FACTOR: 1.44
HAMMER DROP (inch): 30
WATER LEVEL DEPTHS (ft): ▽ 21 ft Soils appear saturated below 21 feet.
GENERAL NOTES:

KEY TO NOTES AND SYMBOLS:
Water Level: ▽ At time of Drilling; ▼ At Completion of Drilling; ▼ After Drilling
D = Split Spoon Sample; U = Thin Walled Tube Sample; R = Rock Core Sample; V = Field Vane Shear
Pen. = Penetration Length; Rec. = Recovery Length; bpf = Blows per Foot; mpf = Minute per Foot
WOR = Weight of Rods; WOH = Weight of Hammer; RQD = Rock Quality Designation; PID = Photoionization Detector
S_v = Field Vane Shear Strength, kips/sq.ft.; q_u = Unconfined Compressive Strength, kips/sq.ft.; Ø = Friction Angle (Estimated); N/A = Not Applicable

Elev. (ft)	Depth (ft)	Casing Pen. (bpf)	SAMPLE INFORMATION: Sample No.	Type	Depth (ft)	Pen./ Rec. (in)	Blow Count or RQD	Field / Lab Test Data	Graphic Log	Sample Description & Classification	H_2O Depth
			1D		0-2	24/8	3-4-9-12			0.3 Medium dense, brown, SAND (Fill) Medium dense, light brown with orange staining, SAND some gravel trace silt	
	5		2D		5-7	24/2	7-8-7-7				
	10		3D		10-12	24/24	6-6-7-7			10.7 Loose to medium dense, light brown to tan, fine SAND some silt	
	15		4D		15-17	24/19	7-5-5-6				
	20		5D		20-22	24/24	6-4-5-6				▽
	25										

Well Diagram:
- Drill spoils from 0 to 13 feet. Capped riser from -2.5 to 16 feet.
- Bentonite chips from 13 to 14 feet.
- Filter sand from 14 to 26 feet.
- Capped screen from 16 to 26 feet. Water level observed at 21 feet after well installation.

Bottom of Exploration at 26.0 feet

Stratification lines represent approximate boundary between soil types, transitions may be gradual. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

BORING LOG

S.W.COLE

CLIENT:	Severino Trucking Co., Inc.
PROJECT:	Dennehy Borrow Pit
LOCATION:	Route 27, Raymond, New Hampshire

BORING NO.:	MW-4
SHEET:	1 of 1
PROJECT NO.	23-0564
DATE START:	4/6/2023
DATE FINISH:	4/6/2023

Drilling Information

LOCATION:	See Exploration Location Plan	**ELEVATION (FT):**		**TOTAL DEPTH (FT):**	25.0
LOGGED BY:	Bryce Walker				
DRILLING CO.:	S. W. Cole Explorations, LLC	**DRILLER:**	Jeff Lee	**DRILLING METHOD:**	Hollow Stem Auger
RIG TYPE:	Track Mounted CME 850	**AUGER ID/OD:**	2 1/4 in / 5 5/8 in	**SAMPLER:**	Standard Split-Spoon
HAMMER TYPE:	Automatic / N/A	**HAMMER WEIGHT (lbs):**	140	**CASING ID/OD:**	N/A /N/A
CORE BARREL:	N/A				
HAMMER CORRECTION FACTOR:	1.44	**HAMMER DROP (inch):**	30		

WATER LEVEL DEPTHS (ft): ▽ 20 ft Soils appear saturated below 20 feet.

GENERAL NOTES:

KEY TO NOTES AND SYMBOLS: Water Level: ▽ At time of Drilling; ▼ At Completion of Drilling; ▼ After Drilling

D = Split Spoon Sample; U = Thin Walled Tube Sample; R = Rock Core Sample; V = Field Vane Shear

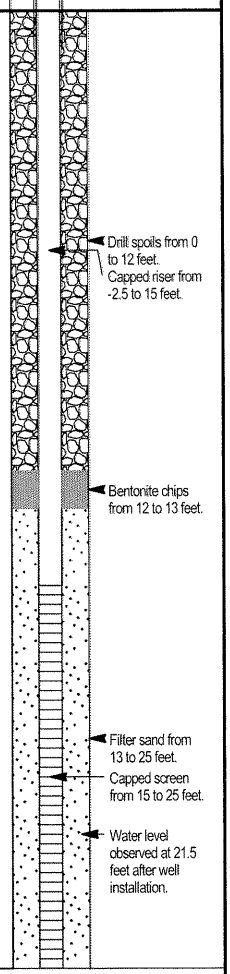
Pen. = Penetration Length; Rec. = Recovery Length; bpf = Blows per Foot; mpf = Minute per Foot

WOR = Weight of Rods; WOH = Weight of Hammer; RQD = Rock Quality Designation; PID = Photoionization Detector

S_x = Field Vane Shear Strength, kips/sq.ft.; q_u = Unconfined Compressive Strength, kips/sq.ft.; Ø = Friction Angle (Estimated); N/A = Not Applicable

Elev. (ft)	Depth (ft)	Casing Pen. (bpf)	SAMPLE INFORMATION: Sample No.	Type	Depth (ft)	Pen./ Rec. (in)	Blow Count or RQD	Field / Lab Test Data	Graphic Log	Sample Description & Classification	H_2O Depth
			1D		0-2	24/16	2-3-3-6			0.3 3" sandy Forest Duff 1.0 Loose, brown, gravelly silty SAND; asphalt chips (Fill) Loose to medium dense, light brown to tan, SAND some silt	
	5		2D		5-7	24/7	15-16-10-11			6.5 Loose, light brown with orange staining, gravelly SAND some silt	
	10		3D		10-12	24/18	4-4-5-6			10.5 Loose, light brown with orange staining, fine SAND trace silt; occasional sand seams	
	15		4D		15-17	24/17	5-5-4-6			16.0 Loose, light brown, fine to medium SAND some gravel trace silt	
	20		5D		20-22	24/20	4-4-5-4				▽
	25									Bottom of Exploration at 25.0 feet	

Well Diagram



Stratification lines represent approximate boundary between soil types, transitions may be gradual. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

BORING NO.: MW-4

Eastern Analytical, Inc.

professional laboratory and drilling services

Todd Greenwood
Enviro North American Consulting
PO Box 1075
Alton , NH 03809

Laboratory Report for:

Eastern Analytical, Inc. ID: 258982
Client Identification: SEVERINO PIT
Date Received: 4/20/2023

Enclosed are the analytical results per the Chain of Custody for sample(s) in the referenced project. All analyses were performed in accordance with our QA/QC Program, NELAP and other applicable state requirements. All quality control criteria was within acceptance criteria unless noted on the report pages. Results are for the exclusive use of the client named on this report and will not be released to a third party without consent.

The following information is contained within this report: Sample Conditions summary, Analytical Results/Data, Quality Control data (if requested) and copies of the Chain of Custody. This report may not be reproduced except in full, without the written approval of the laboratory.

The following standard abbreviations and conventions apply to all EAI reports:

< : "less than" followed by the reporting limit
> : "greater than" followed by the reporting limit
%R : % Recovery

Certifications:
Eastern Analytical, Inc. maintains certification in the following states: Connecticut (PH-0492), Maine (NH005), Massachusetts (M-NH005), New Hampshire/NELAP (1012), Rhode Island (269), Vermont (VT1012), New York (12072) and West Virginia (9910C). Please refer to our website at www.easternanalytical.com for a copy of our certificates and accredited parameters.

References:

- EPA 600/4-79-020, 1983
- Standard Methods for Examination of Water and Wastewater, 20th, 21st, 22nd & 23rd edition or noted revision year.
- Test Methods for Evaluating Solid Waste SW 846 3rd Edition including updates IVA and IVB
- Hach Water Analysis Handbook, 4th edition, 1992
- ASTM International

If you have any questions regarding the results contained within, please feel free to contact customer service. Unless otherwise requested, we will dispose of the sample(s) 6 weeks from the sample receipt date.

We appreciate this opportunity to be of service and look forward to your continued patronage.

Sincerely,

Lorraine Olashaw, Lab Director — 4.26.23 Date

SAMPLE CONDITIONS PAGE

EAI ID#: **258982**

Client: **Enviro North American Consulting**

Client Designation: **SEVERINO PIT**

Temperature upon receipt (°C): 2.7 **Received on ice or cold packs (Yes/No): Y**

Acceptable temperature range (°C): 0-6

Lab ID	Sample ID	Date Received	Date/Time Sampled		Sample Matrix	% Dry Weight	Exceptions/Comments (other than thermal preservation)
258982.01	MW-1	4/20/23	4/20/23	12:35	aqueous		Adheres to Sample Acceptance Policy
258982.02	MW-2	4/20/23	4/20/23	12:10	aqueous		Adheres to Sample Acceptance Policy
258982.03	MW-3	4/20/23	4/20/23	12:25	aqueous		Adheres to Sample Acceptance Policy
258982.04	MW-4	4/20/23	4/20/23	12:45	aqueous		Adheres to Sample Acceptance Policy
258982.05	Trip Blank	4/20/23	4/20/23	08:00	aqueous		Adheres to Sample Acceptance Policy

All results contained in this report relate only to the above listed samples.

Unless otherwise noted:

- *Hold times, preservation, container types, and sample conditions adhered to EPA Protocol.*
- *Solid samples are reported on a dry weight basis, unless otherwise noted. pH/Corrosivity, Flashpoint, Ignitability, Paint Filter, Conductivity and Specific Gravity are always reported on an "as received" basis.*
- *Analysis of pH, Total Residual Chlorine, Dissolved Oxygen and Sulfite were performed at the laboratory outside of the recommended 15 minute hold time.*
- *Samples collected by Eastern Analytical, Inc. (EAI) were collected in accordance with approved EPA procedures.*

LABORATORY REPORT

EAI ID#: **258982**

Client: **Enviro North American Consulting**

Client Designation: **SEVERINO PIT**

Sample ID:	MW-1	MW-2	MW-3	MW-4
Lab Sample ID:	258982.01	258982.02	258982.03	258982.04
Matrix:	aqueous	aqueous	aqueous	aqueous
Date Sampled:	4/20/23	4/20/23	4/20/23	4/20/23
Date Received:	4/20/23	4/20/23	4/20/23	4/20/23
Units:	ug/L	ug/L	ug/L	ug/L
Date of Analysis:	4/21/23	4/21/23	4/21/23	4/21/23
Analyst:	SG	SG	SG	SG
Method:	8260C	8260C	8260C	8260C
Dilution Factor:	1	1	1	1
Dichlorodifluoromethane	< 2	< 2	< 2	< 2
Chloromethane	< 2	< 2	< 2	< 2
Vinyl chloride	< 1	< 1	< 1	< 1
Bromomethane	< 2	< 2	< 2	< 2
Chloroethane	< 2	< 2	< 2	< 2
Trichlorofluoromethane	< 2	< 2	< 2	< 2
Diethyl Ether	< 2	< 2	< 2	< 2
Acetone	< 10	< 10	< 10	< 10
1,1-Dichloroethene	< 0.5	< 0.5	< 0.5	< 0.5
tert-Butyl Alcohol (TBA)	< 30	< 30	< 30	< 30
Methylene chloride	< 1	< 1	< 1	< 1
Carbon disulfide	< 2	< 2	< 2	< 2
Methyl-t-butyl ether(MTBE)	< 1	< 1	< 1	< 1
Ethyl-t-butyl ether(ETBE)	< 2	< 2	< 2	< 2
Isopropyl ether(DIPE)	< 2	< 2	< 2	< 2
tert-amyl methyl ether(TAME)	< 2	< 2	< 2	< 2
trans-1,2-Dichloroethene	< 1	< 1	< 1	< 1
1,1-Dichloroethane	< 1	< 1	< 1	< 1
2,2-Dichloropropane	< 1	< 1	< 1	< 1
cis-1,2-Dichloroethene	< 1	< 1	< 1	< 1
2-Butanone(MEK)	< 10	< 10	< 10	< 10
Bromochloromethane	< 1	< 1	< 1	< 1
Tetrahydrofuran(THF)	< 10	< 10	< 10	< 10
Chloroform	< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	< 1	< 1	< 1	< 1
Carbon tetrachloride	< 1	< 1	< 1	< 1
1,1-Dichloropropene	< 1	< 1	< 1	< 1
Benzene	< 1	< 1	< 1	< 1
1,2-Dichloroethane	< 1	< 1	< 1	< 1
Trichloroethene	< 1	< 1	< 1	< 1
1,2-Dichloropropane	< 1	< 1	< 1	< 1
Dibromomethane	< 1	< 1	< 1	< 1
Bromodichloromethane	< 0.5	< 0.5	< 0.5	< 0.5
1,4-Dioxane	< 50	< 50	< 50	< 50
4-Methyl-2-pentanone(MIBK)	< 10	< 10	< 10	< 10
cis-1,3-Dichloropropene	< 0.5	< 0.5	< 0.5	< 0.5
Toluene	< 1	< 1	< 1	< 1
trans-1,3-Dichloropropene	< 0.5	< 0.5	< 0.5	< 0.5
1,1,2-Trichloroethane	< 1	< 1	< 1	< 1
2-Hexanone	< 10	< 10	< 10	< 10
Tetrachloroethene	< 1	< 1	< 1	< 1
1,3-Dichloropropane	< 1	< 1	< 1	< 1
Dibromochloromethane	< 1	< 1	< 1	< 1
1,2-Dibromoethane(EDB)	< 0.5	< 0.5	< 0.5	< 0.5
Chlorobenzene	< 1	< 1	< 1	< 1
1,1,1,2-Tetrachloroethane	< 1	< 1	< 1	< 1

LABORATORY REPORT

EAI ID#: **258982**

Client: **Enviro North American Consulting**

Client Designation: **SEVERINO PIT**

Sample ID:	MW-1	MW-2	MW-3	MW-4
Lab Sample ID:	258982.01	258982.02	258982.03	258982.04
Matrix:	aqueous	aqueous	aqueous	aqueous
Date Sampled:	4/20/23	4/20/23	4/20/23	4/20/23
Date Received:	4/20/23	4/20/23	4/20/23	4/20/23
Units:	ug/L	ug/L	ug/L	ug/L
Date of Analysis:	4/21/23	4/21/23	4/21/23	4/21/23
Analyst:	SG	SG	SG	SG
Method:	8260C	8260C	8260C	8260C
Dilution Factor:	1	1	1	1
Ethylbenzene	< 1	< 1	< 1	< 1
mp-Xylene	< 1	< 1	< 1	< 1
o-Xylene	< 1	< 1	< 1	< 1
Styrene	< 1	< 1	< 1	< 1
Bromoform	< 2	< 2	< 2	< 2
IsoPropylbenzene	< 1	< 1	< 1	< 1
Bromobenzene	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	< 0.5	< 0.5	< 0.5	< 0.5
n-Propylbenzene	< 1	< 1	< 1	< 1
2-Chlorotoluene	< 1	< 1	< 1	< 1
4-Chlorotoluene	< 1	< 1	< 1	< 1
1,3,5-Trimethylbenzene	< 1	< 1	< 1	< 1
tert-Butylbenzene	< 1	< 1	< 1	< 1
1,2,4-Trimethylbenzene	< 1	< 1	< 1	< 1
sec-Butylbenzene	< 1	< 1	< 1	< 1
1,3-Dichlorobenzene	< 1	< 1	< 1	< 1
p-Isopropyltoluene	< 1	< 1	< 1	< 1
1,4-Dichlorobenzene	< 1	< 1	< 1	< 1
1,2-Dichlorobenzene	< 1	< 1	< 1	< 1
n-Butylbenzene	< 1	< 1	< 1	< 1
1,2-Dibromo-3-chloropropane	< 2	< 2	< 2	< 2
1,3,5-Trichlorobenzene	< 1	< 1	< 1	< 1
1,2,4-Trichlorobenzene	< 1	< 1	< 1	< 1
Hexachlorobutadiene	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	< 2	< 2	< 2	< 2
1,2,3-Trichlorobenzene	< 0.5	< 0.5	< 0.5	< 0.5
4-Bromofluorobenzene (surr)	**96 %R**	**97 %R**	**97 %R**	**97 %R**
1,2-Dichlorobenzene-d4 (surr)	**100 %R**	**100 %R**	**100 %R**	**100 %R**
Toluene-d8 (surr)	**97 %R**	**97 %R**	**95 %R**	**97 %R**
1,2-Dichloroethane-d4 (surr)	**101 %R**	**103 %R**	**106 %R**	**101 %R**

LABORATORY REPORT

EAI ID#: **258982**

Client: **Enviro North American Consulting**

Client Designation: **SEVERINO PIT**

Sample ID:	Trip Blank
Lab Sample ID:	258982.05
Matrix:	aqueous
Date Sampled:	4/20/23
Date Received:	4/20/23
Units:	ug/L
Date of Analysis:	4/22/23
Analyst:	SG
Method:	8260C
Dilution Factor:	1

Dichlorodifluoromethane	< 2
Chloromethane	< 2
Vinyl chloride	< 1
Bromomethane	< 2
Chloroethane	< 2
Trichlorofluoromethane	< 2
Diethyl Ether	< 2
Acetone	< 10
1,1-Dichloroethene	< 0.5
tert-Butyl Alcohol (TBA)	< 30
Methylene chloride	< 1
Carbon disulfide	< 2
Methyl-t-butyl ether(MTBE)	< 1
Ethyl-t-butyl ether(ETBE)	< 2
Isopropyl ether(DIPE)	< 2
tert-amyl methyl ether(TAME)	< 2
trans-1,2-Dichloroethene	< 1
1,1-Dichloroethane	< 1
2,2-Dichloropropane	< 1
cis-1,2-Dichloroethene	< 1
2-Butanone(MEK)	< 10
Bromochloromethane	< 1
Tetrahydrofuran(THF)	< 10
Chloroform	< 1
1,1,1-Trichloroethane	< 1
Carbon tetrachloride	< 1
1,1-Dichloropropene	< 1
Benzene	< 1
1,2-Dichloroethane	< 1
Trichloroethene	< 1
1,2-Dichloropropane	< 1
Dibromomethane	< 1
Bromodichloromethane	< 0.5
1,4-Dioxane	< 50
4-Methyl-2-pentanone(MIBK)	< 10
cis-1,3-Dichloropropene	< 0.5
Toluene	< 1
trans-1,3-Dichloropropene	< 0.5
1,1,2-Trichloroethane	< 1
2-Hexanone	< 10
Tetrachloroethene	< 1
1,3-Dichloropropane	< 1
Dibromochloromethane	< 1
1,2-Dibromoethane(EDB)	< 0.5
Chlorobenzene	< 1
1,1,1,2-Tetrachloroethane	< 1

LABORATORY REPORT

EAI ID#: **258982**

Client: **Enviro North American Consulting**

Client Designation: **SEVERINO PIT**

Sample ID:	Trip Blank
Lab Sample ID:	258982.05
Matrix:	aqueous
Date Sampled:	4/20/23
Date Received:	4/20/23
Units:	ug/L
Date of Analysis:	4/22/23
Analyst:	SG
Method:	8260C
Dilution Factor:	1
Ethylbenzene	< 1
mp-Xylene	< 1
o-Xylene	< 1
Styrene	< 1
Bromoform	< 2
IsoPropylbenzene	< 1
Bromobenzene	< 1
1,1,2,2-Tetrachloroethane	< 1
1,2,3-Trichloropropane	< 0.5
n-Propylbenzene	< 1
2-Chlorotoluene	< 1
4-Chlorotoluene	< 1
1,3,5-Trimethylbenzene	< 1
tert-Butylbenzene	< 1
1,2,4-Trimethylbenzene	< 1
sec-Butylbenzene	< 1
1,3-Dichlorobenzene	< 1
p-Isopropyltoluene	< 1
1,4-Dichlorobenzene	< 1
1,2-Dichlorobenzene	< 1
n-Butylbenzene	< 1
1,2-Dibromo-3-chloropropane	< 2
1,3,5-Trichlorobenzene	< 1
1,2,4-Trichlorobenzene	< 1
Hexachlorobutadiene	< 0.5
Naphthalene	< 2
1,2,3-Trichlorobenzene	< 0.5
4-Bromofluorobenzene (surr)	**98 %R**
1,2-Dichlorobenzene-d4 (surr)	**100 %R**
Toluene-d8 (surr)	**94 %R**
1,2-Dichloroethane-d4 (surr)	**104 %R**

LABORATORY REPORT

EAI ID#: **258982**

Client: **Enviro North American Consulting**

Client Designation: **SEVERINO PIT**

Sample ID:	MW-1	MW-2	MW-3	MW-4
Lab Sample ID:	258982.01	258982.02	258982.03	258982.04
Matrix:	aqueous	aqueous	aqueous	aqueous
Date Sampled:	4/20/23	4/20/23	4/20/23	4/20/23
Date Received:	4/20/23	4/20/23	4/20/23	4/20/23
Units:	ug/L	ug/L	ug/L	ug/L
Date of Extraction/Prep:	4/24/23	4/24/23	4/24/23	4/24/23
Date of Analysis:	4/26/23	4/26/23	4/26/23	4/26/23
Analyst:	JMR	JMR	JMR	JMR
Method:	8270E	8270E	8270E	8270E
Dilution Factor:	1	1	1	1
Naphthalene	< 0.1	< 0.1	< 0.1	< 0.1
2-Methylnaphthalene	< 0.1	< 0.1	< 0.1	< 0.1
1-Methylnaphthalene	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthylene	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthene	< 0.1	< 0.1	< 0.1	< 0.1
Fluorene	< 0.1	< 0.1	< 0.1	< 0.1
Phenanthrene	< 0.1	< 0.1	< 0.1	< 0.1
Anthracene	< 0.1	< 0.1	< 0.1	< 0.1
Fluoranthene	< 0.1	< 0.1	< 0.1	**0.12**
Pyrene	< 0.1	< 0.1	< 0.1	< 0.1
Benzo[a]anthracene	< 0.1	< 0.1	< 0.1	< 0.1
Chrysene	< 0.1	< 0.1	< 0.1	< 0.1
Benzo[b]fluoranthene	< 0.1	< 0.1	< 0.1	< 0.1
Benzo[k]fluoranthene	< 0.1	< 0.1	< 0.1	< 0.1
Benzo[a]pyrene	< 0.1	< 0.1	< 0.1	< 0.1
Indeno[1,2,3-cd]pyrene	< 0.1	< 0.1	< 0.1	< 0.1
Dibenz[a,h]anthracene	< 0.1	< 0.1	< 0.1	< 0.1
Benzo[g,h,i]perylene	< 0.1	< 0.1	< 0.1	< 0.1
p-Terphenyl-D14 (surr)	**79 %R**	**82 %R**	**78 %R**	**77 %R**

CHAIN-OF-CUSTODY RECORD

BOLD FIELDS REQUIRED. PLEASE CIRCLE REQUESTED ANALYSIS.

Fc 258982

SAMPLE I.D.	SAMPLING DATE/TIME *IF COMPOSITE, INDICATE BOTH START & FINISH DATE/TIME	MATRIX (SEE BELOW)	GRAB/*COMPOSITE	VOC: 524.2 MTBE ONLY; 524.2 (8260) VTICG; 624; 1,4 DIOXANE; 8021; 8015 GRO; MAVPH	SVOC: (8270) 625 ABN; PAH; EDB; DBCP; TPH8100; L1; L2; 8015 DRO; MAEPH; PEST 608; PCB 608; PEST 8081; PCB 8082; OIL & GREASE 1664; TPH 1664	TCLP: TCLP 1311; ABN; METALS; VOC; PEST; HERB	INORGANICS: BOD; CBOD; TS; TSS; TDS; BR; CL; F; SO4; NO2; NO3; NO2,NO3; TKN; NH3; TN; T. PHOS.; O. PHOS.; PH; T. RES. CHLORINE; SPEC. CON.; T. ALK.; COD; PHENOLS; TOC; DOC; TOTAL CYANIDE; TOTAL SULFIDE; REACTIVE CYANIDE; REACTIVE SULFIDE; FLASHPOINT; IGNITABILITY	MICRO: TOTAL COLIFORM; E. COLI; FECAL COLIFORM; ENTEROCOCCI; HETEROTROPHIC PLATE COUNT	METALS: DISSOLVED METALS (LIST BELOW); TOTAL METALS (LIST BELOW)	OTHER	# OF CONTAINERS	NOTES MEOH VIAL #
MW-1	4/20/23 12:35	GW	G	✓	✓							3	
MW-2	4/20/23 12:10	GW	G	✓	✓							3	
MW-3	4/20/23 12:25	GW	G	✓	✓							3	
MW-4	4/20/23 12:45	GW	G	✓	✓							3	
TRIP BLANK	4/20/23 8:00	L	L	✓								2	

MATRIX: A-AIR; S-SOIL; GW-GROUND WATER; SW-SURFACE WATER; DW-DRINKING WATER; WW-WASTE WATER

PRESERVATIVE: H-HCL; N-HNO_3; S-H_2SO_4; Na-NaOH; M-MEOH

PROJECT MANAGER: TODD GREENWOOD

COMPANY: ENAC

ADDRESS: P.O. Box 1075

CITY: ALTON STATE: NH ZIP: 03809

PHONE: 603-875-8100 EXT.:

E-MAIL: tag@metrocast.net

SITE NAME: SEVERINO PIT

PROJECT #:

STATE: (NH) MA ME VT OTHER:

REGULATORY PROGRAM: NPDES: RGP POTW STORMWATER OR GWP, OIL FUND, BROWNFIELD OR OTHER:

QUOTE #: PO #:

QA/QC REPORTING

A B C

MA MCP

TEMP. 2.7 °C

ICE? (YES) NO

REPORTING OPTIONS

PRELIMS: YES OR NO

ELECTRONIC OPTIONS

(PDF) EXCEL

EQUIS

OTHER

TURN AROUND TIME

24hr* 48hr*

3-4 Days*

5 Day 7 Day

10 Day

*Pre-approval Required

SAMPLER(S): DENA J. WUNSCH

RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:
Dena J Wunsch	4/20/23	15:47	

METALS: 8 RCRA 13 PP FE, MN PB, CU

OTHER METALS:

SAMPLES FIELD FILTERED? ☐ YES ☑ NO

NOTES: (IE: SPECIAL DETECTION LIMITS, BILLING INFO, IF DIFFERENT)

BOTTLE ORDER # 4988

4-DAY T-A-T!

SITE HISTORY:

SUSPECTED CONTAMINATION:

FIELD READINGS:

Eastern Analytical, Inc.
professional laboratory and drilling services
51 Antrim Avenue | CONCORD, NH 03301 | TEL: 603.228.0525 | 1.800.287.0525 | E-MAIL: CUSTOMERSERVICE@EASTERNANALYTICAL.COM | WWW.EASTERNANALYTICAL.COM

(WHITE: Lab Copy GREEN: Customer Copy)

Eastern Analytical, Inc.
professional laboratory and drilling services

Todd Greenwood
Enviro North American Consulting
PO Box 1075
Alton , NH 03809

Laboratory Report for:

Eastern Analytical, Inc. ID:	259978
Client Identification:	SEVERINO PIT
Date Received:	5/9/2023
Report revision/reissue:	Revision, replaces report dated 5/16/2023
Revision information:	Per customers request, NO2 and NO3 have been reported separately.

Enclosed are the analytical results per the Chain of Custody for sample(s) in the referenced project. All analyses were performed in accordance with our QA/QC Program, NELAP and other applicable state requirements. All quality control criteria was within acceptance criteria unless noted on the report pages. Results are for the exclusive use of the client named on this report and will not be released to a third party without consent.

The following information is contained within this report: Sample Conditions summary, Analytical Results/Data, Quality Control data (if requested) and copies of the Chain of Custody. This report may not be reproduced except in full, without the written approval of the laboratory.

The following standard abbreviations and conventions apply to all EAI reports:

< : "less than" followed by the reporting limit
> : "greater than" followed by the reporting limit
%R : % Recovery

Certifications:
Eastern Analytical, Inc. maintains certification in the following states: Connecticut (PH-0492), Maine (NH005), Massachusetts (M-NH005), New Hampshire/NELAP (1012), Rhode Island (269), Vermont (VT1012), New York (12072) and West Virginia (9910C). Please refer to our website at www.easternanalytical.com for a copy of our certificates and accredited parameters.

References:

- EPA 600/4-79-020, 1983
- Standard Methods for Examination of Water and Wastewater, 20th, 21st, 22nd & 23rd edition or noted revision year.
- Test Methods for Evaluating Solid Waste SW 846 3rd Edition including updates IVA and IVB
- Hach Water Analysis Handbook, 4th edition, 1992

If you have any questions regarding the results contained within, please feel free to contact customer service. Unless otherwise requested, we will dispose of the sample(s) 6 weeks from the sample receipt date.

We appreciate this opportunity to be of service and look forward to your continued patronage.

Sincerely,

Lorraine Olashaw, Lab Director — Date 5.18.23

SAMPLE CONDITIONS PAGE

EAI ID#: **259978**

Client: **Enviro North American Consulting**

Client Designation: **SEVERINO PIT**

Temperature upon receipt (°C): 4.7 **Received on ice or cold packs (Yes/No): Y**

Acceptable temperature range (°C): 0-6

Lab ID	Sample ID	Date Received	Date/Time Sampled		Sample Matrix	% Dry Weight	Exceptions/Comments (other than thermal preservation)
259978.01	MW-1	5/9/23	5/9/23	11:43	aqueous		Adheres to Sample Acceptance Policy
259978.02	MW-2	5/9/23	5/9/23	12:00	aqueous		Adheres to Sample Acceptance Policy
259978.03	MW-3	5/9/23	5/9/23	12:15	aqueous		Adheres to Sample Acceptance Policy
259978.04	MW-4	5/9/23	5/9/23	11:25	aqueous		Adheres to Sample Acceptance Policy
259978.05	TS-1	5/9/23	5/9/23	14:10	soil	92.5	Adheres to Sample Acceptance Policy
259978.06	TS-2	5/9/23	5/9/23	15:00	soil	95.9	Adheres to Sample Acceptance Policy
259978.07	TS-3	5/9/23	5/9/23	15:15	soil	94.5	Adheres to Sample Acceptance Policy
259978.08	CS-1	5/9/23	5/9/23	15:30	soil	96.1	Adheres to Sample Acceptance Policy
259978.09	CS-2	5/9/23	5/9/23	15:45	soil	91.4	Adheres to Sample Acceptance Policy
259978.1	Trip Blank	5/9/23	5/9/23	08:00	soil	100.0	Adheres to Sample Acceptance Policy

All results contained in this report relate only to the above listed samples.

Unless otherwise noted:

- *Hold times, preservation, container types, and sample conditions adhered to EPA Protocol.*
- *Solid samples are reported on a dry weight basis, unless otherwise noted. pH/Corrosivity, Flashpoint, Ignitability, Paint Filter, Conductivity and Specific Gravity are always reported on an "as received" basis.*
- *Analysis of pH, Total Residual Chlorine, Dissolved Oxygen and Sulfite were performed at the laboratory outside of the recommended 15 minute hold time.*
- *Samples collected by Eastern Analytical, Inc. (EAI) were collected in accordance with approved EPA procedures.*

LABORATORY REPORT

EAI ID#: **259978**

Client: **Enviro North American Consulting**

Client Designation: **SEVERINO PIT**

Sample ID:	TS-1	TS-2	TS-3	CS-1
Lab Sample ID:	259978.05	259978.06	259978.07	259978.08
Matrix:	soil	soil	soil	soil
Date Sampled:	5/9/23	5/9/23	5/9/23	5/9/23
Date Received:	5/9/23	5/9/23	5/9/23	5/9/23
Units:	mg/kg	mg/kg	mg/kg	mg/kg
Date of Analysis:	5/11/23	5/11/23	5/11/23	5/11/23
Analyst:	JAK	JAK	JAK	JAK
Method:	8260C	8260C	8260C	8260C
Dilution Factor:	1	1	1	1
Dichlorodifluoromethane	< 0.1	< 0.1	< 0.1	< 0.1
Chloromethane	< 0.1	< 0.1	< 0.1	< 0.1
Vinyl chloride	< 0.02	< 0.02	< 0.02	< 0.02
Bromomethane	< 0.1	< 0.1	< 0.1	< 0.1
Chloroethane	< 0.1	< 0.1	< 0.1	< 0.1
Trichlorofluoromethane	< 0.1	< 0.1	< 0.1	< 0.1
Diethyl Ether	< 0.05	< 0.05	< 0.05	< 0.05
Acetone	< 2	< 2	< 2	< 2
1,1-Dichloroethene	< 0.05	< 0.05	< 0.05	< 0.05
tert-Butyl Alcohol (TBA)	< 2	< 2	< 2	< 2
Methylene chloride	< 0.1	< 0.1	< 0.1	< 0.1
Carbon disulfide	< 0.1	< 0.1	< 0.1	< 0.1
Methyl-t-butyl ether(MTBE)	< 0.1	< 0.1	< 0.1	< 0.1
Ethyl-t-butyl ether(ETBE)	< 0.1	< 0.1	< 0.1	< 0.1
Isopropyl ether(DIPE)	< 0.1	< 0.1	< 0.1	< 0.1
tert-amyl methyl ether(TAME)	< 0.1	< 0.1	< 0.1	< 0.1
trans-1,2-Dichloroethene	< 0.05	< 0.05	< 0.05	< 0.05
1,1-Dichloroethane	< 0.05	< 0.05	< 0.05	< 0.05
2,2-Dichloropropane	< 0.05	< 0.05	< 0.05	< 0.05
cis-1,2-Dichloroethene	< 0.05	< 0.05	< 0.05	< 0.05
2-Butanone(MEK)	< 0.5	< 0.5	< 0.5	< 0.5
Bromochloromethane	< 0.05	< 0.05	< 0.05	< 0.05
Tetrahydrofuran(THF)	< 0.5	< 0.5	< 0.5	< 0.5
Chloroform	< 0.05	< 0.05	< 0.05	< 0.05
1,1,1-Trichloroethane	< 0.05	< 0.05	< 0.05	< 0.05
Carbon tetrachloride	< 0.05	< 0.05	< 0.05	< 0.05
1,1-Dichloropropene	< 0.05	< 0.05	< 0.05	< 0.05
Benzene	< 0.05	< 0.05	< 0.05	< 0.05
1,2-Dichloroethane	< 0.05	< 0.05	< 0.05	< 0.05
Trichloroethene	< 0.05	< 0.05	< 0.05	**0.12**
1,2-Dichloropropane	< 0.05	< 0.05	< 0.05	< 0.05
Dibromomethane	< 0.05	< 0.05	< 0.05	< 0.05
Bromodichloromethane	< 0.05	< 0.05	< 0.05	< 0.05
1,4-Dioxane	< 1	< 1	< 1	< 1
4-Methyl-2-pentanone(MIBK)	< 0.5	< 0.5	< 0.5	< 0.5
cis-1,3-Dichloropropene	< 0.05	< 0.05	< 0.05	< 0.05
Toluene	< 0.05	< 0.05	< 0.05	< 0.05
trans-1,3-Dichloropropene	< 0.05	< 0.05	< 0.05	< 0.05
1,1,2-Trichloroethane	< 0.05	< 0.05	< 0.05	< 0.05
2-Hexanone	< 0.1	< 0.1	< 0.1	< 0.1
Tetrachloroethene	< 0.05	< 0.05	< 0.05	< 0.05
1,3-Dichloropropane	< 0.05	< 0.05	< 0.05	< 0.05
Dibromochloromethane	< 0.05	< 0.05	< 0.05	< 0.05
1,2-Dibromoethane(EDB)	< 0.02	< 0.02	< 0.02	< 0.02
Chlorobenzene	< 0.05	< 0.05	< 0.05	< 0.05
1,1,1,2-Tetrachloroethane	< 0.05	< 0.05	< 0.05	< 0.05

LABORATORY REPORT

EAI ID#: **259978**

Client: **Enviro North American Consulting**

Client Designation: **SEVERINO PIT**

Sample ID:	TS-1	TS-2	TS-3	CS-1
Lab Sample ID:	259978.05	259978.06	259978.07	259978.08
Matrix:	soil	soil	soil	soil
Date Sampled:	5/9/23	5/9/23	5/9/23	5/9/23
Date Received:	5/9/23	5/9/23	5/9/23	5/9/23
Units:	mg/kg	mg/kg	mg/kg	mg/kg
Date of Analysis:	5/11/23	5/11/23	5/11/23	5/11/23
Analyst:	JAK	JAK	JAK	JAK
Method:	8260C	8260C	8260C	8260C
Dilution Factor:	1	1	1	1
Ethylbenzene	< 0.05	< 0.05	< 0.05	< 0.05
mp-Xylene	< 0.05	< 0.05	< 0.05	< 0.05
o-Xylene	< 0.05	< 0.05	< 0.05	< 0.05
Styrene	< 0.05	< 0.05	< 0.05	< 0.05
Bromoform	< 0.05	< 0.05	< 0.05	< 0.05
IsoPropylbenzene	< 0.05	< 0.05	< 0.05	< 0.05
Bromobenzene	< 0.05	< 0.05	< 0.05	< 0.05
1,1,2,2-Tetrachloroethane	< 0.05	< 0.05	< 0.05	< 0.05
1,2,3-Trichloropropane	< 0.05	< 0.05	< 0.05	< 0.05
n-Propylbenzene	< 0.05	< 0.05	< 0.05	< 0.05
2-Chlorotoluene	< 0.05	< 0.05	< 0.05	< 0.05
4-Chlorotoluene	< 0.05	< 0.05	< 0.05	< 0.05
1,3,5-Trimethylbenzene	< 0.05	< 0.05	< 0.05	< 0.05
tert-Butylbenzene	< 0.05	< 0.05	< 0.05	< 0.05
1,2,4-Trimethylbenzene	< 0.05	< 0.05	< 0.05	< 0.05
sec-Butylbenzene	< 0.05	< 0.05	< 0.05	< 0.05
1,3-Dichlorobenzene	< 0.05	< 0.05	< 0.05	< 0.05
p-Isopropyltoluene	< 0.05	< 0.05	< 0.05	< 0.05
1,4-Dichlorobenzene	< 0.05	< 0.05	< 0.05	< 0.05
1,2-Dichlorobenzene	< 0.05	< 0.05	< 0.05	< 0.05
n-Butylbenzene	< 0.05	< 0.05	< 0.05	< 0.05
1,2-Dibromo-3-chloropropane	< 0.05	< 0.05	< 0.05	< 0.05
1,3,5-Trichlorobenzene	< 0.05	< 0.05	< 0.05	< 0.05
1,2,4-Trichlorobenzene	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobutadiene	< 0.05	< 0.05	< 0.05	< 0.05
Naphthalene	< 0.1	< 0.1	< 0.1	< 0.1
1,2,3-Trichlorobenzene	< 0.05	< 0.05	< 0.05	< 0.05
4-Bromofluorobenzene (surr)	**82 %R**	**83 %R**	**82 %R**	**84 %R**
1,2-Dichlorobenzene-d4 (surr)	**100 %R**	**100 %R**	**101 %R**	**100 %R**
Toluene-d8 (surr)	**93 %R**	**92 %R**	**93 %R**	**93 %R**
1,2-Dichloroethane-d4 (surr)	**96 %R**	**95 %R**	**96 %R**	**96 %R**

LABORATORY REPORT

EAI ID#: **259978**

Client: **Enviro North American Consulting**

Client Designation: **SEVERINO PIT**

Sample ID:	CS-2	Trip Blank
Lab Sample ID:	259978.09	259978.1
Matrix:	soil	soil
Date Sampled:	5/9/23	5/9/23
Date Received:	5/9/23	5/9/23
Units:	mg/kg	mg/kg
Date of Analysis:	5/11/23	5/10/23
Analyst:	JAK	JAK
Method:	8260C	8260C
Dilution Factor:	1	1
Dichlorodifluoromethane	< 0.1	< 0.1
Chloromethane	< 0.1	< 0.1
Vinyl chloride	< 0.02	< 0.02
Bromomethane	< 0.1	< 0.1
Chloroethane	< 0.1	< 0.1
Trichlorofluoromethane	< 0.1	< 0.1
Diethyl Ether	< 0.05	< 0.05
Acetone	< 2	< 2
1,1-Dichloroethene	< 0.05	< 0.05
tert-Butyl Alcohol (TBA)	< 2	< 2
Methylene chloride	< 0.1	< 0.1
Carbon disulfide	< 0.1	< 0.1
Methyl-t-butyl ether(MTBE)	< 0.1	< 0.1
Ethyl-t-butyl ether(ETBE)	< 0.1	< 0.1
Isopropyl ether(DIPE)	< 0.1	< 0.1
tert-amyl methyl ether(TAME)	< 0.1	< 0.1
trans-1,2-Dichloroethene	< 0.05	< 0.05
1,1-Dichloroethane	< 0.05	< 0.05
2,2-Dichloropropane	< 0.05	< 0.05
cis-1,2-Dichloroethene	< 0.05	< 0.05
2-Butanone(MEK)	< 0.5	< 0.5
Bromochloromethane	< 0.05	< 0.05
Tetrahydrofuran(THF)	< 0.5	< 0.5
Chloroform	< 0.05	< 0.05
1,1,1-Trichloroethane	< 0.05	< 0.05
Carbon tetrachloride	< 0.05	< 0.05
1,1-Dichloropropene	< 0.05	< 0.05
Benzene	< 0.05	< 0.05
1,2-Dichloroethane	< 0.05	< 0.05
Trichloroethene	< 0.05	< 0.05
1,2-Dichloropropane	< 0.05	< 0.05
Dibromomethane	< 0.05	< 0.05
Bromodichloromethane	< 0.05	< 0.05
1,4-Dioxane	< 1	< 1
4-Methyl-2-pentanone(MIBK)	< 0.5	< 0.5
cis-1,3-Dichloropropene	< 0.05	< 0.05
Toluene	< 0.05	< 0.05
trans-1,3-Dichloropropene	< 0.05	< 0.05
1,1,2-Trichloroethane	< 0.05	< 0.05
2-Hexanone	< 0.1	< 0.1
Tetrachloroethene	< 0.05	< 0.05
1,3-Dichloropropane	< 0.05	< 0.05
Dibromochloromethane	< 0.05	< 0.05
1,2-Dibromoethane(EDB)	< 0.02	< 0.02
Chlorobenzene	< 0.05	< 0.05
1,1,1,2-Tetrachloroethane	< 0.05	< 0.05

LABORATORY REPORT

EAI ID#: **259978**

Client: **Enviro North American Consulting**

Client Designation: **SEVERINO PIT**

Sample ID:	CS-2	Trip Blank
Lab Sample ID:	259978.09	259978.1
Matrix:	soil	soil
Date Sampled:	5/9/23	5/9/23
Date Received:	5/9/23	5/9/23
Units:	mg/kg	mg/kg
Date of Analysis:	5/11/23	5/10/23
Analyst:	JAK	JAK
Method:	8260C	8260C
Dilution Factor:	1	1
Ethylbenzene	< 0.05	< 0.05
mp-Xylene	< 0.05	< 0.05
o-Xylene	< 0.05	< 0.05
Styrene	< 0.05	< 0.05
Bromoform	< 0.05	< 0.05
IsoPropylbenzene	< 0.05	< 0.05
Bromobenzene	< 0.05	< 0.05
1,1,2,2-Tetrachloroethane	< 0.05	< 0.05
1,2,3-Trichloropropane	< 0.05	< 0.05
n-Propylbenzene	< 0.05	< 0.05
2-Chlorotoluene	< 0.05	< 0.05
4-Chlorotoluene	< 0.05	< 0.05
1,3,5-Trimethylbenzene	< 0.05	< 0.05
tert-Butylbenzene	< 0.05	< 0.05
1,2,4-Trimethylbenzene	< 0.05	< 0.05
sec-Butylbenzene	< 0.05	< 0.05
1,3-Dichlorobenzene	< 0.05	< 0.05
p-Isopropyltoluene	< 0.05	< 0.05
1,4-Dichlorobenzene	< 0.05	< 0.05
1,2-Dichlorobenzene	< 0.05	< 0.05
n-Butylbenzene	< 0.05	< 0.05
1,2-Dibromo-3-chloropropane	< 0.05	< 0.05
1,3,5-Trichlorobenzene	< 0.05	< 0.05
1,2,4-Trichlorobenzene	< 0.05	< 0.05
Hexachlorobutadiene	< 0.05	< 0.05
Naphthalene	< 0.1	< 0.1
1,2,3-Trichlorobenzene	< 0.05	< 0.05
4-Bromofluorobenzene (surr)	**84 %R**	**88 %R**
1,2-Dichlorobenzene-d4 (surr)	**100 %R**	**98 %R**
Toluene-d8 (surr)	**93 %R**	**94 %R**
1,2-Dichloroethane-d4 (surr)	**96 %R**	**92 %R**

LABORATORY REPORT

EAI ID#: **259978**

Client: **Enviro North American Consulting**

Client Designation: **SEVERINO PIT**

Sample ID:	TS-1	TS-2	TS-3	CS-1
Lab Sample ID:	259978.05	259978.06	259978.07	259978.08
Matrix:	soil	soil	soil	soil
Date Sampled:	5/9/23	5/9/23	5/9/23	5/9/23
Date Received:	5/9/23	5/9/23	5/9/23	5/9/23
Units:	mg/kg	mg/kg	mg/kg	mg/kg
Date of Extraction/Prep:	5/10/23	5/10/23	5/10/23	5/10/23
Date of Analysis:	5/11/23	5/11/23	5/11/23	5/11/23
Analyst:	JMR	JMR	JMR	JMR
Method:	8270E	8270E	8270E	8270E
Dilution Factor:	1	1	1	5
Naphthalene	< 0.07	< 0.07	< 0.07	< 0.4
2-Methylnaphthalene	< 0.07	< 0.07	< 0.07	< 0.4
1-Methylnaphthalene	< 0.07	< 0.07	< 0.07	< 0.4
Acenaphthylene	< 0.07	< 0.07	< 0.07	< 0.4
Acenaphthene	< 0.07	< 0.07	< 0.07	< 0.4
Fluorene	< 0.07	< 0.07	< 0.07	< 0.4
Phenanthrene	< 0.07	< 0.07	< 0.07	**0.61**
Anthracene	< 0.07	< 0.07	< 0.07	< 0.4
Fluoranthene	< 0.07	< 0.07	< 0.07	**1.6**
Pyrene	< 0.07	< 0.07	< 0.07	**1.2**
Benzo[a]anthracene	< 0.07	< 0.07	< 0.07	**0.72**
Chrysene	< 0.07	< 0.07	< 0.07	**0.87**
Benzo[b]fluoranthene	< 0.07	< 0.07	< 0.07	**1.2**
Benzo[k]fluoranthene	< 0.07	< 0.07	< 0.07	**0.43**
Benzo[a]pyrene	< 0.07	< 0.07	< 0.07	**0.79**
Indeno[1,2,3-cd]pyrene	< 0.07	< 0.07	< 0.07	< 0.4
Dibenz[a,h]anthracene	< 0.07	< 0.07	< 0.07	< 0.4
Benzo[g,h,i]perylene	< 0.07	< 0.07	< 0.07	< 0.4
p-Terphenyl-D14 (surr)	**68 %R**	**70 %R**	**71 %R**	**86 %R**

CS-1: Detection limits elevated due to higher than normal final extract volume.

LABORATORY REPORT

EAI ID#: **259978**

Client: **Enviro North American Consulting**

Client Designation: **SEVERINO PIT**

Sample ID:	CS-2
Lab Sample ID:	259978.09
Matrix:	soil
Date Sampled:	5/9/23
Date Received:	5/9/23
Units:	mg/kg
Date of Extraction/Prep:	5/10/23
Date of Analysis:	5/11/23
Analyst:	JMR
Method:	8270E
Dilution Factor:	1
Naphthalene	< 0.08
2-Methylnaphthalene	< 0.08
1-Methylnaphthalene	< 0.08
Acenaphthylene	< 0.08
Acenaphthene	< 0.08
Fluorene	< 0.08
Phenanthrene	< 0.08
Anthracene	< 0.08
Fluoranthene	**0.16**
Pyrene	**0.13**
Benzo[a]anthracene	< 0.08
Chrysene	**0.085**
Benzo[b]fluoranthene	**0.13**
Benzo[k]fluoranthene	< 0.08
Benzo[a]pyrene	**0.088**
Indeno[1,2,3-cd]pyrene	< 0.08
Dibenz[a,h]anthracene	< 0.08
Benzo[g,h,i]perylene	< 0.08
p-Terphenyl-D14 (surr)	**64 %R**

LABORATORY REPORT

EAI ID#: **259978**

Client: **Enviro North American Consulting**

Client Designation: **SEVERINO PIT**

Sample ID:	TS-1	TS-2	TS-3	CS-1
Lab Sample ID:	259978.05	259978.06	259978.07	259978.08
Matrix:	soil	soil	soil	soil
Date Sampled:	5/9/23	5/9/23	5/9/23	5/9/23
Date Received:	5/9/23	5/9/23	5/9/23	5/9/23
Units:	mg/kg	mg/kg	mg/kg	mg/kg
Date of Extraction/Prep:	5/10/23	5/10/23	5/10/23	5/10/23
Date of Analysis:	5/10/23	5/10/23	5/10/23	5/10/23
Analyst:	MB	MB	MB	MB
Method:	8015CDRO	8015CDRO	8015CDRO	8015CDRO
Dilution Factor:	1	1	1	5
DRO (Diesel Range C10-C28)	< 30	< 30	< 30	< 200
p-Terphenyl-D14 (surr)	**84 %R**	**79 %R**	**84 %R**	**98 %R**

CS-1: Detection limits elevated due to higher than normal final extract volume.

LABORATORY REPORT

EAI ID#: **259978**

Client: **Enviro North American Consulting**

Client Designation: **SEVERINO PIT**

Sample ID:	CS-2
Lab Sample ID:	259978.09
Matrix:	soil
Date Sampled:	5/9/23
Date Received:	5/9/23
Units:	mg/kg
Date of Extraction/Prep:	5/10/23
Date of Analysis:	5/10/23
Analyst:	MB
Method:	8015CDRO
Dilution Factor:	1
DRO (Diesel Range C10-C28)	< 30
p-Terphenyl-D14 (surr)	**87 %R**

LABORATORY REPORT

EAI ID#: **259978**

Client: **Enviro North American Consulting**

Client Designation: **SEVERINO PIT**

Sample ID:	MW-1	MW-2	MW-3	MW-4					
Lab Sample ID:	259978.01	259978.02	259978.03	259978.04					
Matrix:	aqueous	aqueous	aqueous	aqueous					
Date Sampled:	5/9/23	5/9/23	5/9/23	5/9/23		**Analysis**			
Date Received:	5/9/23	5/9/23	5/9/23	5/9/23	**Units**	**Date**	**Time**	**Method**	**Analyst**
Ammonia-N	< 0.05	< 0.05	**0.10**	< 0.05	mg/L	5/12/23	14:53	TM NH3-001	GRS
Total Phosphorus-P	**0.32**	**1.1**	**0.088**	**0.34**	mg/L	5/11/23	14:24	365.1	PMC
Nitrite-N	< 0.5	< 0.5	< 0.5	< 0.5	mg/L	5/10/23	13:19	353.2	ALM
Nitrate-N	< 0.5	**6.0**	< 0.5	< 0.5	mg/L	5/10/23	13:19	353.2	ALM

LABORATORY REPORT

EAI ID#: **259978**

Client: **Enviro North American Consulting**

Client Designation: **SEVERINO PIT**

Sample ID:	MW-1	MW-2	MW-3	MW-4					
Lab Sample ID:	259978.01	259978.02	259978.03	259978.04					
Matrix:	aqueous	aqueous	aqueous	aqueous					
Date Sampled:	5/9/23	5/9/23	5/9/23	5/9/23	**Analytical Matrix**	**Units**	**Date of Analysis**	**Method**	**Analyst**
Date Received:	5/9/23	5/9/23	5/9/23	5/9/23					
Arsenic	< 0.0005	**0.00084**	**0.00091**	< 0.0005	AqDis	mg/L	5/11/23	200.8	DS
Barium	**0.0081**	**0.020**	**0.0080**	**0.12**	AqDis	mg/L	5/11/23	200.8	DS
Cadmium	< 0.001	< 0.001	< 0.001	< 0.001	AqDis	mg/L	5/11/23	200.8	DS
Chromium	< 0.001	< 0.001	< 0.001	< 0.001	AqDis	mg/L	5/11/23	200.8	DS
Lead	< 0.001	< 0.001	< 0.001	< 0.001	AqDis	mg/L	5/11/23	200.8	DS
Mercury	< 0.0001	< 0.0001	< 0.0001	< 0.0001	AqDis	mg/L	5/11/23	200.8	DS
Selenium	< 0.001	< 0.001	< 0.001	< 0.001	AqDis	mg/L	5/11/23	200.8	DS
Silver	< 0.001	< 0.001	< 0.001	< 0.001	AqDis	mg/L	5/11/23	200.8	DS

LABORATORY REPORT

EAI ID#: **259978**

Client: **Enviro North American Consulting**

Client Designation: **SEVERINO PIT**

Sample ID:	TS-1	TS-2	TS-3	CS-1					
Lab Sample ID:	259978.05	259978.06	259978.07	259978.08					
Matrix:	soil	soil	soil	soil					
Date Sampled:	5/9/23	5/9/23	5/9/23	5/9/23	**Analytical Matrix**	**Units**	**Date of Analysis**	**Method**	**Analyst**
Date Received:	5/9/23	5/9/23	5/9/23	5/9/23					
Arsenic	**22**	**16**	**15**	**7.8**	SolTotDry	mg/kg	5/11/23	6020A	DS
Barium	**36**	**15**	**14**	**40**	SolTotDry	mg/kg	5/11/23	6020A	DS
Cadmium	< 0.5	< 0.5	< 0.5	< 0.5	SolTotDry	mg/kg	5/11/23	6020A	DS
Chromium	**13**	**5.3**	**4.5**	**18**	SolTotDry	mg/kg	5/11/23	6020A	DS
Lead	**6.0**	**4.1**	**3.2**	**28**	SolTotDry	mg/kg	5/11/23	6020A	DS
Mercury	< 0.1	< 0.1	< 0.1	**0.16**	SolTotDry	mg/kg	5/11/23	6020A	DS
Selenium	< 0.5	< 0.5	< 0.5	< 0.5	SolTotDry	mg/kg	5/11/23	6020A	DS
Silver	< 0.5	< 0.5	< 0.5	< 0.5	SolTotDry	mg/kg	5/11/23	6020A	DS

Sample ID:	CS-2							
Lab Sample ID:	259978.09							
Matrix:	soil							
Date Sampled:	5/9/23	**Analytical Matrix**	**Units**	**Date of Analysis**	**Method**	**Analyst**		
Date Received:	5/9/23							
Arsenic	**16**	SolTotDry	mg/kg	5/11/23	6020A	DS		
Barium	**24**	SolTotDry	mg/kg	5/11/23	6020A	DS		
Cadmium	< 0.5	SolTotDry	mg/kg	5/11/23	6020A	DS		
Chromium	**8.9**	SolTotDry	mg/kg	5/11/23	6020A	DS		
Lead	**17**	SolTotDry	mg/kg	5/11/23	6020A	DS		
Mercury	< 0.1	SolTotDry	mg/kg	5/11/23	6020A	DS		
Selenium	< 0.5	SolTotDry	mg/kg	5/11/23	6020A	DS		
Silver	< 0.5	SolTotDry	mg/kg	5/11/23	6020A	DS		

CHAIN-OF-CUSTODY RECORD

BOLD FIELDS REQUIRED. PLEASE CIRCLE REQUESTED ANALYSIS.

FOR 259978

SAMPLE I.D.	SAMPLING DATE/TIME *IF COMPOSITE, INDICATE BOTH START & FINISH DATE/TIME	MATRIX (SEE BELOW)	GRAB/*COMPOSITE	VOC: 524.2 / 524.2 MTBE ONLY / 624 / VTICS / 1,4 DIOXANE / 8021 / 8015 GRO / MAVPH	SVOC: 625 / 8270 / ABN / EDB / DBCP / PAH / TPH8100 / L1 / L2 / 8015 DRO / MAEPH / PEST 608 / PEST 8081 / PCB 608 / PCB 8082 / OIL & GREASE 1664 / TPH 1664	TCLP: TCLP 1311 / VOC / SVOC / ABN / PEST / HERB / METALS	INORGANICS: BOD / CBOD / TS / TSS / TDS / BR / CL / NO3 / F / SO4 / NO2,NO3 / TKN / TN / O. PHOS. / T. PHOS. / pH / SPEC. CON. / T. RES. CHLORINE / T. ALK. / COD / PHENOLS / TOC / DOC / TOTAL CYANIDE / TOTAL SULFIDE / REACTIVE CYANIDE / REACTIVE SULFIDE / FLASHPOINT / IGNITABILITY	MICRO: TOTAL COLIFORM / E. COLI / FECAL COLIFORM / ENTEROCOCCI / HETEROTROPHIC PLATE COUNT	METALS: DISSOLVED METALS (LIST BELOW) / TOTAL METALS (LIST BELOW)	OTHER: RCRA 8 METALS	# OF CONTAINERS	NOTES MEOH VIAL #
MW-1	5/9/23 11:43	GW	G				✓ ✓	✓	3
MW-2	5/9/23 12:00	GW	G				✓ ✓	✓	3
MW-3	5/9/23 12:15	GW	G				✓ ✓	✓	3
MW-4	5/9/23 11:25	GW	G				✓ ✓	✓	3
TS-1	5/9/23 14:10	S	G	✓	✓ ✓			✓	2
TS-2	5/9/23 15:00	S	G	✓	✓ ✓			✓	2
TS-3	5/9/23 15:15	S	G	✓	✓ ✓			✓	2
CS-1	5/9/23 15:30	S	C	✓	✓ ✓			✓	2
CS-2	5/9/23 15:45	S	C	✓	✓ ✓			✓	2
TRIP BLANK	5/9/23 8:00	L	L	✓					1

MATRIX: A-AIR; S-SOIL; GW-GROUND WATER; SW-SURFACE WATER; DW-DRINKING WATER; WW-WASTE WATER

PRESERVATIVE: H-HCL; N-HNO_3; S-H_2SO_4; Na-NaOH; M-MEOH

PROJECT MANAGER: TODD GREENWOOD

COMPANY: ENAC

ADDRESS: 291 MAIN ST P.O. BOX 1075

CITY: ALTON STATE: NH ZIP: 03809

PHONE: 603-875-8100 EXT.:

E-MAIL: tag@metrocast.net

SITE NAME: SEVERINO PIT

PROJECT #:

STATE: (NH) MA ME VT OTHER:

REGULATORY PROGRAM: NPDES: RGP POTW STORMWATER OR GWP, OIL FUND, BROWNFIELD OR OTHER:

QUOTE #: PO #:

QA/QC REPORTING

A B C

MA MCP

TEMP. 4.7 °C

ICE? (YES) NO

REPORTING OPTIONS

PRELIMS: YES OR NO

ELECTRONIC OPTIONS

(PDF) EXCEL

EQUIS

OTHER

TURN AROUND TIME

24hr* 48hr*

3-4 Days*

5 Day 7 Day

10 Day

*Pre-approval Required

SAMPLER(S): DENA J. WUNSCH

RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:
Dena J Wunsch	5/9/23	1630	
RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:
RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:

METALS: (8 RCRA) 13 PP FE, MN PB, CU

OTHER METALS:

SAMPLES FIELD FILTERED? ☑ YES ☐ NO

NOTES: (IE: SPECIAL DETECTION LIMITS, BILLING INFO, IF DIFFERENT)

GW SAMPLES FIELD FILTERED FOR RCRA 8 METALS

SITE HISTORY:

SUSPECTED CONTAMINATION:

FIELD READINGS:

Eastern Analytical, Inc.
professional laboratory and drilling services
51 Antrim Avenue | CONCORD, NH 03301 | TEL: 603.228.0525 | 1.800.287.0525 | E-MAIL: CUSTOMERSERVICE@EASTERNANALYTICAL.COM | WWW.EASTERNANALYTICAL.COM

(WHITE: Lab Copy GREEN: Customer Copy)

con-test®
A Pace Analytical® Laboratory

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

May 22, 2023

Todd Greenwood
Environmental N. American Consulting
Po Box 1075
Alton, NH 03809

Project Location: Raymond, NH
Client Job Number:
Project Number: [none]
Laboratory Work Order Number: 23E1290

Enclosed are results of analyses for samples as received by the laboratory on May 9, 2023. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jordan Z. Ross

Jordan Zoe Ross
Project Manager

Table of Contents

con-test®
A Pace Analytical® Laboratory

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Environmental N. American Consulting
Po Box 1075
Alton, NH 03809
ATTN: Todd Greenwood

REPORT DATE: 5/22/2023

PURCHASE ORDER NUMBER:

PROJECT NUMBER: [none]

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 23E1290

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: Raymond, NH

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
MW-1	23E1290-01	Ground Water		EPA 537.1	
MW-2	23E1290-02	Ground Water		EPA 537.1	
MW-3	23E1290-03	Ground Water		EPA 537.1	
MW-4	23E1290-04	Ground Water		EPA 537.1	

con-test®
A Pace Analytical® Laboratory

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

EPA 537.1

Qualifications:

L-04

Laboratory fortified blank/laboratory control sample recovery and duplicate recovery are outside of control limits. Reported value for this compound is likely to be biased on the low side.

Analyte & Samples(s) Qualified:

Perfluorododecanoic acid (PFDoA)
23E1290-04[MW-4], B339913-BS1, B339913-BSD1

Perfluorotetradecanoic acid (PFTA)
23E1290-04[MW-4], B339913-BS1, B339913-BSD1

Perfluorotridecanoic acid (PFTrDA)
23E1290-04[MW-4], B339913-BS1, B339913-BSD1

L-07

Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.

Analyte & Samples(s) Qualified:

11Cl-PF3OUdS (F53B Major)
23E1290-04[MW-4], B339913-BSD1

PF-02B

Surrogate recovery is outside of control limits. Re-extraction yielded different surrogate non-conformance. Both results reported.

Analyte & Samples(s) Qualified:

13C-PFDA
23E1290-04[MW-4]

13C-PFHxA
23E1290-04RE1[MW-4]

M3HFPO-DA
23E1290-04RE1[MW-4]

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Meghan E. Kelley
Reporting Specialist

con-test®
A Pace Analytical® Laboratory
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Raymond, NH
Sample Description:
Work Order: 23E1290

Date Received: 5/9/2023

Field Sample #: MW-1
Sampled: 5/9/2023 10:40

Sample ID: 23E1290-01

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanesulfonic acid (PFBS)	0.72	1.7	0.69	ng/L	1	J	EPA 537.1	5/16/23	5/17/23 12:50	JR2
Perfluorohexanoic acid (PFHxA)	ND	1.7	0.82	ng/L	1		EPA 537.1	5/16/23	5/17/23 12:50	JR2
Perfluorohexanesulfonic acid (PFHxS)	ND	1.7	0.78	ng/L	1		EPA 537.1	5/16/23	5/17/23 12:50	JR2
Perfluoroheptanoic acid (PFHpA)	ND	1.7	0.87	ng/L	1		EPA 537.1	5/16/23	5/17/23 12:50	JR2
Perfluorooctanoic acid (PFOA)	ND	1.7	0.90	ng/L	1		EPA 537.1	5/16/23	5/17/23 12:50	JR2
Perfluorooctanesulfonic acid (PFOS)	1.1	1.7	0.66	ng/L	1	J	EPA 537.1	5/16/23	5/17/23 12:50	JR2
Perfluorononanoic acid (PFNA)	ND	1.7	0.80	ng/L	1		EPA 537.1	5/16/23	5/17/23 12:50	JR2
Perfluorodecanoic acid (PFDA)	ND	1.7	0.84	ng/L	1		EPA 537.1	5/16/23	5/17/23 12:50	JR2
N-EtFOSAA (NEtFOSAA)	ND	1.7	0.58	ng/L	1		EPA 537.1	5/16/23	5/17/23 12:50	JR2
Perfluoroundecanoic acid (PFUnA)	ND	1.7	0.66	ng/L	1		EPA 537.1	5/16/23	5/17/23 12:50	JR2
N-MeFOSAA (NMeFOSAA)	ND	1.7	0.65	ng/L	1		EPA 537.1	5/16/23	5/17/23 12:50	JR2
Perfluorododecanoic acid (PFDoA)	ND	1.7	0.63	ng/L	1		EPA 537.1	5/16/23	5/17/23 12:50	JR2
Perfluorotridecanoic acid (PFTrDA)	ND	1.7	0.64	ng/L	1		EPA 537.1	5/16/23	5/17/23 12:50	JR2
Perfluorotetradecanoic acid (PFTA)	ND	1.7	0.73	ng/L	1		EPA 537.1	5/16/23	5/17/23 12:50	JR2
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.7	1.1	ng/L	1		EPA 537.1	5/16/23	5/17/23 12:50	JR2
11Cl-PF3OUdS (F53B Major)	ND	1.7	0.58	ng/L	1		EPA 537.1	5/16/23	5/17/23 12:50	JR2
9Cl-PF3ONS (F53B Minor)	ND	1.7	0.71	ng/L	1		EPA 537.1	5/16/23	5/17/23 12:50	JR2
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.7	0.77	ng/L	1		EPA 537.1	5/16/23	5/17/23 12:50	JR2

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C-PFHxA	84.3	70-130		5/17/23 12:50
M3HFPO-DA	97.3	70-130		5/17/23 12:50
13C-PFDA	129	70-130		5/17/23 12:50
D5-NEtFOSAA	102	70-130		5/17/23 12:50

con-test®
A Pace Analytical® Laboratory

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Raymond, NH | Sample Description: | Work Order: 23E1290

Date Received: 5/9/2023

Field Sample #: MW-2 | Sampled: 5/9/2023 10:50

Sample ID: 23E1290-02

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanesulfonic acid (PFBS)	ND	1.8	0.72	ng/L	1		EPA 537.1	5/16/23	5/17/23 12:04	JR2
Perfluorohexanoic acid (PFHxA)	ND	1.8	0.86	ng/L	1		EPA 537.1	5/16/23	5/17/23 12:04	JR2
Perfluorohexanesulfonic acid (PFHxS)	ND	1.8	0.82	ng/L	1		EPA 537.1	5/16/23	5/17/23 12:04	JR2
Perfluoroheptanoic acid (PFHpA)	ND	1.8	0.91	ng/L	1		EPA 537.1	5/16/23	5/17/23 12:04	JR2
Perfluorooctanoic acid (PFOA)	ND	1.8	0.95	ng/L	1		EPA 537.1	5/16/23	5/17/23 12:04	JR2
Perfluorooctanesulfonic acid (PFOS)	0.72	1.8	0.70	ng/L	1	J	EPA 537.1	5/16/23	5/17/23 12:04	JR2
Perfluorononanoic acid (PFNA)	ND	1.8	0.85	ng/L	1		EPA 537.1	5/16/23	5/17/23 12:04	JR2
Perfluorodecanoic acid (PFDA)	ND	1.8	0.88	ng/L	1		EPA 537.1	5/16/23	5/17/23 12:04	JR2
N-EtFOSAA (NEtFOSAA)	ND	1.8	0.61	ng/L	1		EPA 537.1	5/16/23	5/17/23 12:04	JR2
Perfluoroundecanoic acid (PFUnA)	ND	1.8	0.70	ng/L	1		EPA 537.1	5/16/23	5/17/23 12:04	JR2
N-MeFOSAA (NMeFOSAA)	ND	1.8	0.68	ng/L	1		EPA 537.1	5/16/23	5/17/23 12:04	JR2
Perfluorododecanoic acid (PFDoA)	ND	1.8	0.66	ng/L	1		EPA 537.1	5/16/23	5/17/23 12:04	JR2
Perfluorotridecanoic acid (PFTrDA)	ND	1.8	0.67	ng/L	1		EPA 537.1	5/16/23	5/17/23 12:04	JR2
Perfluorotetradecanoic acid (PFTA)	ND	1.8	0.77	ng/L	1		EPA 537.1	5/16/23	5/17/23 12:04	JR2
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.8	1.1	ng/L	1		EPA 537.1	5/16/23	5/17/23 12:04	JR2
11Cl-PF3OUdS (F53B Major)	ND	1.8	0.61	ng/L	1		EPA 537.1	5/16/23	5/17/23 12:04	JR2
9Cl-PF3ONS (F53B Minor)	ND	1.8	0.75	ng/L	1		EPA 537.1	5/16/23	5/17/23 12:04	JR2
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.8	0.81	ng/L	1		EPA 537.1	5/16/23	5/17/23 12:04	JR2

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C-PFHxA	77.8	70-130		5/17/23 12:04
M3HFPO-DA	91.9	70-130		5/17/23 12:04
13C-PFDA	113	70-130		5/17/23 12:04
D5-NEtFOSAA	104	70-130		5/17/23 12:04

con-test®
A Pace Analytical® Laboratory

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Raymond, NH | Sample Description: | Work Order: 23E1290

Date Received: 5/9/2023

Field Sample #: MW-3 | Sampled: 5/9/2023 11:05

Sample ID: 23E1290-03

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanesulfonic acid (PFBS)	0.86	1.8	0.73	ng/L	1	J	EPA 537.1	5/16/23	5/17/23 12:57	JR2
Perfluorohexanoic acid (PFHxA)	0.99	1.8	0.86	ng/L	1	J	EPA 537.1	5/16/23	5/17/23 12:57	JR2
Perfluorohexanesulfonic acid (PFHxS)	1.0	1.8	0.83	ng/L	1	J	EPA 537.1	5/16/23	5/17/23 12:57	JR2
Perfluoroheptanoic acid (PFHpA)	1.5	1.8	0.92	ng/L	1	J	EPA 537.1	5/16/23	5/17/23 12:57	JR2
Perfluorooctanoic acid (PFOA)	1.6	1.8	0.95	ng/L	1	J	EPA 537.1	5/16/23	5/17/23 12:57	JR2
Perfluorooctanesulfonic acid (PFOS)	1.1	1.8	0.70	ng/L	1	J	EPA 537.1	5/16/23	5/17/23 12:57	JR2
Perfluorononanoic acid (PFNA)	ND	1.8	0.85	ng/L	1		EPA 537.1	5/16/23	5/17/23 12:57	JR2
Perfluorodecanoic acid (PFDA)	ND	1.8	0.89	ng/L	1		EPA 537.1	5/16/23	5/17/23 12:57	JR2
N-EtFOSAA (NEtFOSAA)	ND	1.8	0.61	ng/L	1		EPA 537.1	5/16/23	5/17/23 12:57	JR2
Perfluoroundecanoic acid (PFUnA)	ND	1.8	0.70	ng/L	1		EPA 537.1	5/16/23	5/17/23 12:57	JR2
N-MeFOSAA (NMeFOSAA)	ND	1.8	0.69	ng/L	1		EPA 537.1	5/16/23	5/17/23 12:57	JR2
Perfluorododecanoic acid (PFDoA)	ND	1.8	0.66	ng/L	1		EPA 537.1	5/16/23	5/17/23 12:57	JR2
Perfluorotridecanoic acid (PFTrDA)	ND	1.8	0.67	ng/L	1		EPA 537.1	5/16/23	5/17/23 12:57	JR2
Perfluorotetradecanoic acid (PFTA)	ND	1.8	0.77	ng/L	1		EPA 537.1	5/16/23	5/17/23 12:57	JR2
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.8	1.1	ng/L	1		EPA 537.1	5/16/23	5/17/23 12:57	JR2
11Cl-PF3OUdS (F53B Major)	ND	1.8	0.61	ng/L	1		EPA 537.1	5/16/23	5/17/23 12:57	JR2
9Cl-PF3ONS (F53B Minor)	ND	1.8	0.75	ng/L	1		EPA 537.1	5/16/23	5/17/23 12:57	JR2
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.8	0.81	ng/L	1		EPA 537.1	5/16/23	5/17/23 12:57	JR2

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C-PFHxA	70.0	70-130		5/17/23 12:57
M3HFPO-DA	90.1	70-130		5/17/23 12:57
13C-PFDA	110	70-130		5/17/23 12:57
D5-NEtFOSAA	86.0	70-130		5/17/23 12:57

con-test®
A Pace Analytical® Laboratory

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Raymond, NH | Sample Description: | Work Order: 23E1290

Date Received: 5/9/2023

Field Sample #: MW-4 | Sampled: 5/9/2023 10:30

Sample ID: 23E1290-04

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanesulfonic acid (PFBS)	3.4	1.8	0.73	ng/L	1		EPA 537.1	5/11/23	5/16/23 15:02	DRL
Perfluorobutanesulfonic acid (PFBS)	2.9	1.9	0.75	ng/L	1		EPA 537.1	5/16/23	5/17/23 12:19	JR2
Perfluorohexanoic acid (PFHxA)	4.5	1.8	0.86	ng/L	1		EPA 537.1	5/11/23	5/16/23 15:02	DRL
Perfluorohexanoic acid (PFHxA)	2.7	1.9	0.89	ng/L	1		EPA 537.1	5/16/23	5/17/23 12:19	JR2
Perfluorohexanesulfonic acid (PFHxS)	0.87	1.8	0.83	ng/L	1	J	EPA 537.1	5/11/23	5/16/23 15:02	DRL
Perfluorohexanesulfonic acid (PFHxS)	ND	1.9	0.85	ng/L	1		EPA 537.1	5/16/23	5/17/23 12:19	JR2
Perfluoroheptanoic acid (PFHpA)	4.2	1.8	0.92	ng/L	1		EPA 537.1	5/11/23	5/16/23 15:02	DRL
Perfluoroheptanoic acid (PFHpA)	3.3	1.9	0.95	ng/L	1		EPA 537.1	5/16/23	5/17/23 12:19	JR2
Perfluorooctanoic acid (PFOA)	6.7	1.8	0.95	ng/L	1		EPA 537.1	5/11/23	5/16/23 15:02	DRL
Perfluorooctanoic acid (PFOA)	5.2	1.9	0.99	ng/L	1		EPA 537.1	5/16/23	5/17/23 12:19	JR2
Perfluorooctanesulfonic acid (PFOS)	ND	1.8	0.70	ng/L	1		EPA 537.1	5/11/23	5/16/23 15:02	DRL
Perfluorooctanesulfonic acid (PFOS)	0.72	1.9	0.72	ng/L	1	J	EPA 537.1	5/16/23	5/17/23 12:19	JR2
Perfluorononanoic acid (PFNA)	ND	1.8	0.85	ng/L	1		EPA 537.1	5/11/23	5/16/23 15:02	DRL
Perfluorononanoic acid (PFNA)	ND	1.9	0.88	ng/L	1		EPA 537.1	5/16/23	5/17/23 12:19	JR2
Perfluorodecanoic acid (PFDA)	ND	1.8	0.88	ng/L	1		EPA 537.1	5/11/23	5/16/23 15:02	DRL
Perfluorodecanoic acid (PFDA)	ND	1.9	0.91	ng/L	1		EPA 537.1	5/16/23	5/17/23 12:19	JR2
N-EtFOSAA (NEtFOSAA)	ND	1.8	0.61	ng/L	1		EPA 537.1	5/11/23	5/16/23 15:02	DRL
N-EtFOSAA (NEtFOSAA)	ND	1.9	0.63	ng/L	1		EPA 537.1	5/16/23	5/17/23 12:19	JR2
Perfluoroundecanoic acid (PFUnA)	ND	1.8	0.70	ng/L	1		EPA 537.1	5/11/23	5/16/23 15:02	DRL
Perfluoroundecanoic acid (PFUnA)	ND	1.9	0.72	ng/L	1		EPA 537.1	5/16/23	5/17/23 12:19	JR2
N-MeFOSAA (NMeFOSAA)	ND	1.8	0.69	ng/L	1		EPA 537.1	5/11/23	5/16/23 15:02	DRL
N-MeFOSAA (NMeFOSAA)	ND	1.9	0.71	ng/L	1		EPA 537.1	5/16/23	5/17/23 12:19	JR2
Perfluorododecanoic acid (PFDoA)	ND	1.8	0.66	ng/L	1	L-04	EPA 537.1	5/11/23	5/16/23 15:02	DRL
Perfluorododecanoic acid (PFDoA)	ND	1.9	0.68	ng/L	1		EPA 537.1	5/16/23	5/17/23 12:19	JR2
Perfluorotridecanoic acid (PFTrDA)	ND	1.8	0.67	ng/L	1	L-04	EPA 537.1	5/11/23	5/16/23 15:02	DRL
Perfluorotridecanoic acid (PFTrDA)	ND	1.9	0.70	ng/L	1		EPA 537.1	5/16/23	5/17/23 12:19	JR2
Perfluorotetradecanoic acid (PFTA)	ND	1.8	0.77	ng/L	1	L-04	EPA 537.1	5/11/23	5/16/23 15:02	DRL
Perfluorotetradecanoic acid (PFTA)	ND	1.9	0.80	ng/L	1		EPA 537.1	5/16/23	5/17/23 12:19	JR2
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.8	1.1	ng/L	1		EPA 537.1	5/11/23	5/16/23 15:02	DRL
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.9	1.2	ng/L	1		EPA 537.1	5/16/23	5/17/23 12:19	JR2
11Cl-PF3OUdS (F53B Major)	ND	1.9	0.63	ng/L	1		EPA 537.1	5/16/23	5/17/23 12:19	JR2
11Cl-PF3OUdS (F53B Major)	ND	1.8	0.61	ng/L	1	L-07	EPA 537.1	5/11/23	5/16/23 15:02	DRL
9Cl-PF3ONS (F53B Minor)	ND	1.8	0.75	ng/L	1		EPA 537.1	5/11/23	5/16/23 15:02	DRL
9Cl-PF3ONS (F53B Minor)	ND	1.9	0.78	ng/L	1		EPA 537.1	5/16/23	5/17/23 12:19	JR2
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.8	0.81	ng/L	1		EPA 537.1	5/11/23	5/16/23 15:02	DRL
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.9	0.84	ng/L	1		EPA 537.1	5/16/23	5/17/23 12:19	JR2

Surrogates	% Recovery		Recovery Limits	Flag/Qual	
13C-PFHxA	78.2		70-130		5/16/23 15:02
13C-PFHxA	**48.5**	*	70-130	PF-02B	5/17/23 12:19
M3HFPO-DA	88.6		70-130		5/16/23 15:02
M3HFPO-DA	**64.2**	*	70-130	PF-02B	5/17/23 12:19
13C-PFDA	**138**	*	70-130	PF-02B	5/16/23 15:02
13C-PFDA	116		70-130		5/17/23 12:19

con-test®
A Pace Analytical® Laboratory

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Raymond, NH
Sample Description:
Work Order: 23E1290

Date Received: 5/9/2023

Field Sample #: MW-4
Sampled: 5/9/2023 10:30

Sample ID: 23E1290-04

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Surrogates		**% Recovery**		**Recovery Limits**		**Flag/Qual**				
D5-NEtFOSAA		83.5		70-130					5/16/23 15:02	
D5-NEtFOSAA		107		70-130					5/17/23 12:19	

con-test®
A Pace Analytical® Laboratory

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Sample Extraction Data

Prep Method:EPA 537.1 **Analytical Method:EPA 537.1**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23E1290-04 [MW-4]	B339913	271	1.00	05/11/23

Prep Method:EPA 537.1 **Analytical Method:EPA 537.1**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23E1290-01RE1 [MW-1]	B340328	287	1.00	05/16/23
23E1290-02RE1 [MW-2]	B340328	272	1.00	05/16/23
23E1290-03RE1 [MW-3]	B340328	271	1.00	05/16/23
23E1290-04RE1 [MW-4]	B340328	262	1.00	05/16/23

con-test®
A Pace Analytical® Laboratory

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B339913 - EPA 537.1											
Blank (B339913-BLK1)				Prepared: 05/11/23 Analyzed: 05/16/23							
Perfluorobutanesulfonic acid (PFBS)	ND	1.8	ng/L								
Perfluorohexanoic acid (PFHxA)	ND	1.8	ng/L								
Perfluorohexanesulfonic acid (PFHxS)	ND	1.8	ng/L								
Perfluoroheptanoic acid (PFHpA)	ND	1.8	ng/L								
Perfluorooctanoic acid (PFOA)	ND	1.8	ng/L								
Perfluorooctanesulfonic acid (PFOS)	ND	1.8	ng/L								
Perfluorononanoic acid (PFNA)	ND	1.8	ng/L								
Perfluorodecanoic acid (PFDA)	ND	1.8	ng/L								
N-EtFOSAA (NEtFOSAA)	ND	1.8	ng/L								
Perfluoroundecanoic acid (PFUnA)	ND	1.8	ng/L								
N-MeFOSAA (NMeFOSAA)	ND	1.8	ng/L								
Perfluorododecanoic acid (PFDoA)	ND	1.8	ng/L								
Perfluorotridecanoic acid (PFTrDA)	ND	1.8	ng/L								
Perfluorotetradecanoic acid (PFTA)	ND	1.8	ng/L								
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.8	ng/L								
11Cl-PF3OUdS (F53B Major)	ND	1.8	ng/L								
9Cl-PF3ONS (F53B Minor)	ND	1.8	ng/L								
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.8	ng/L								
Surrogate: 13C-PFHxA	*41.9*		ng/L	36.0		116		70-130			
Surrogate: M3HFPO-DA	*37.0*		ng/L	36.0		103		70-130			
Surrogate: 13C-PFDA	*35.7*		ng/L	36.0		99.1		70-130			
Surrogate: D5-NEtFOSAA	*123*		ng/L	144		85.2		70-130			
LCS (B339913-BS1)				Prepared: 05/11/23 Analyzed: 05/16/23							
Perfluorobutanesulfonic acid (PFBS)	1.47	1.8	ng/L	1.60		92.0		50-150			J
Perfluorohexanoic acid (PFHxA)	1.53	1.8	ng/L	1.80		84.5		50-150			J
Perfluorohexanesulfonic acid (PFHxS)	1.48	1.8	ng/L	1.65		90.0		50-150			J
Perfluoroheptanoic acid (PFHpA)	1.41	1.8	ng/L	1.80		77.9		50-150			J
Perfluorooctanoic acid (PFOA)	1.36	1.8	ng/L	1.80		75.4		50-150			J
Perfluorooctanesulfonic acid (PFOS)	1.52	1.8	ng/L	1.67		91.0		50-150			J
Perfluorononanoic acid (PFNA)	1.46	1.8	ng/L	1.80		80.8		50-150			J
Perfluorodecanoic acid (PFDA)	1.51	1.8	ng/L	1.80		83.7		50-150			J
N-EtFOSAA (NEtFOSAA)	1.20	1.8	ng/L	1.80		66.3		50-150			J
Perfluoroundecanoic acid (PFUnA)	1.13	1.8	ng/L	1.80		62.7		50-150			J
N-MeFOSAA (NMeFOSAA)	1.26	1.8	ng/L	1.80		69.9		50-150			J
Perfluorododecanoic acid (PFDoA)	0.849	1.8	ng/L	1.80		**47.1**	*	50-150			L-04, J
Perfluorotridecanoic acid (PFTrDA)	0.676	1.8	ng/L	1.80		**37.5**	*	50-150			L-04, J
Perfluorotetradecanoic acid (PFTA)	0.712	1.8	ng/L	1.80		**39.5**	*	50-150			L-04, J
Hexafluoropropylene oxide dimer acid (HFPO-DA)	1.46	1.8	ng/L	1.80		81.1		50-150			J
11Cl-PF3OUdS (F53B Major)	0.855	1.8	ng/L	1.70		50.3		50-150			J
9Cl-PF3ONS (F53B Minor)	1.34	1.8	ng/L	1.68		79.8		50-150			J
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	1.48	1.8	ng/L	1.70		86.6		50-150			J
Surrogate: 13C-PFHxA	*40.6*		ng/L	36.1		112		50-150			
Surrogate: M3HFPO-DA	*37.5*		ng/L	36.1		104		50-150			
Surrogate: 13C-PFDA	*37.3*		ng/L	36.1		103		50-150			
Surrogate: D5-NEtFOSAA	*138*		ng/L	144		95.8		50-150			

con-test®
A Pace Analytical® Laboratory

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B339913 - EPA 537.1											
LCS Dup (B339913-BSD1)				Prepared: 05/11/23 Analyzed: 05/16/23							
Perfluorobutanesulfonic acid (PFBS)	1.29	1.8	ng/L	1.59		81.2		50-150	12.9	50	J
Perfluorohexanoic acid (PFHxA)	1.51	1.8	ng/L	1.80		84.0		50-150	1.17	50	J
Perfluorohexanesulfonic acid (PFHxS)	1.47	1.8	ng/L	1.64		89.3		50-150	1.25	50	J
Perfluoroheptanoic acid (PFHpA)	1.53	1.8	ng/L	1.80		85.4		50-150	8.69	50	J
Perfluorooctanoic acid (PFOA)	1.49	1.8	ng/L	1.80		82.8		50-150	8.93	50	J
Perfluorooctanesulfonic acid (PFOS)	1.45	1.8	ng/L	1.67		86.9		50-150	5.10	50	J
Perfluorononanoic acid (PFNA)	1.53	1.8	ng/L	1.80		85.2		50-150	4.89	50	J
Perfluorodecanoic acid (PFDA)	1.44	1.8	ng/L	1.80		80.3		50-150	4.52	50	J
N-EtFOSAA (NEtFOSAA)	1.11	1.8	ng/L	1.80		61.8		50-150	7.56	50	J
Perfluoroundecanoic acid (PFUnA)	1.21	1.8	ng/L	1.80		67.2		50-150	6.46	50	J
N-MeFOSAA (NMeFOSAA)	1.21	1.8	ng/L	1.80		67.4		50-150	4.03	50	J
Perfluorododecanoic acid (PFDoA)	0.849	1.8	ng/L	1.80		**47.3**	*	50-150	0.0107	50	L-04, J
Perfluorotridecanoic acid (PFTrDA)	0.639	1.8	ng/L	1.80		**35.6**	*	50-150	5.49	50	L-04, J
Perfluorotetradecanoic acid (PFTA)	0.643	1.8	ng/L	1.80		**35.8**	*	50-150	10.1	50	L-04, J
Hexafluoropropylene oxide dimer acid (HFPO-DA)	1.49	1.8	ng/L	1.80		83.0		50-150	1.80	50	J
11Cl-PF3OUdS (F53B Major)	0.664	1.8	ng/L	1.69		**39.2**	*	50-150	25.2	50	L-07, J
9Cl-PF3ONS (F53B Minor)	1.32	1.8	ng/L	1.68		78.7		50-150	1.86	50	J
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	1.43	1.8	ng/L	1.70		84.3		50-150	3.24	50	J
Surrogate: 13C-PFHxA	*39.4*		ng/L	35.9		110		50-150			
Surrogate: M3HFPO-DA	*36.1*		ng/L	35.9		101		50-150			
Surrogate: 13C-PFDA	*37.3*		ng/L	35.9		104		50-150			
Surrogate: D5-NEtFOSAA	*132*		ng/L	144		91.9		50-150			
Batch B340328 - EPA 537.1											
Blank (B340328-BLK1)				Prepared: 05/16/23 Analyzed: 05/17/23							
Perfluorobutanesulfonic acid (PFBS)	ND	2.0	ng/L								
Perfluorohexanoic acid (PFHxA)	ND	2.0	ng/L								
Perfluorohexanesulfonic acid (PFHxS)	ND	2.0	ng/L								
Perfluoroheptanoic acid (PFHpA)	ND	2.0	ng/L								
Perfluorooctanoic acid (PFOA)	ND	2.0	ng/L								
Perfluorooctanesulfonic acid (PFOS)	ND	2.0	ng/L								
Perfluorononanoic acid (PFNA)	ND	2.0	ng/L								
Perfluorodecanoic acid (PFDA)	ND	2.0	ng/L								
N-EtFOSAA (NEtFOSAA)	ND	2.0	ng/L								
Perfluoroundecanoic acid (PFUnA)	ND	2.0	ng/L								
N-MeFOSAA (NMeFOSAA)	ND	2.0	ng/L								
Perfluorododecanoic acid (PFDoA)	ND	2.0	ng/L								
Perfluorotridecanoic acid (PFTrDA)	ND	2.0	ng/L								
Perfluorotetradecanoic acid (PFTA)	ND	2.0	ng/L								
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	2.0	ng/L								
11Cl-PF3OUdS (F53B Major)	ND	2.0	ng/L								
9Cl-PF3ONS (F53B Minor)	ND	2.0	ng/L								
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	2.0	ng/L								
Surrogate: 13C-PFHxA	*41.1*		ng/L	40.3		102		70-130			
Surrogate: M3HFPO-DA	*39.4*		ng/L	40.3		97.8		70-130			
Surrogate: 13C-PFDA	*36.4*		ng/L	40.3		90.4		70-130			
Surrogate: D5-NEtFOSAA	*172*		ng/L	161		107		70-130			

con-test®
A Pace Analytical® Laboratory

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B340328 - EPA 537.1										
LCS (B340328-BS1)				Prepared: 05/16/23 Analyzed: 05/17/23						
Perfluorobutanesulfonic acid (PFBS)	1.51	2.0	ng/L	1.78		84.6	50-150			J
Perfluorohexanoic acid (PFHxA)	1.46	2.0	ng/L	2.01		72.7	50-150			J
Perfluorohexanesulfonic acid (PFHxS)	1.60	2.0	ng/L	1.83		87.5	50-150			J
Perfluoroheptanoic acid (PFHpA)	1.48	2.0	ng/L	2.01		73.7	50-150			J
Perfluorooctanoic acid (PFOA)	1.72	2.0	ng/L	2.01		85.7	50-150			J
Perfluorooctanesulfonic acid (PFOS)	1.53	2.0	ng/L	1.86		82.4	50-150			J
Perfluorononanoic acid (PFNA)	2.70	2.0	ng/L	2.01		135	50-150			
Perfluorodecanoic acid (PFDA)	1.60	2.0	ng/L	2.01		79.9	50-150			J
N-EtFOSAA (NEtFOSAA)	1.45	2.0	ng/L	2.01		72.4	50-150			J
Perfluoroundecanoic acid (PFUnA)	1.63	2.0	ng/L	2.01		81.3	50-150			J
N-MeFOSAA (NMeFOSAA)	1.17	2.0	ng/L	2.01		58.3	50-150			J
Perfluorododecanoic acid (PFDoA)	1.36	2.0	ng/L	2.01		67.7	50-150			J
Perfluorotridecanoic acid (PFTrDA)	1.43	2.0	ng/L	2.01		71.4	50-150			J
Perfluorotetradecanoic acid (PFTA)	1.42	2.0	ng/L	2.01		70.8	50-150			J
Hexafluoropropylene oxide dimer acid (HFPO-DA)	1.14	2.0	ng/L	2.01		57.0	50-150			J
11Cl-PF3OUdS (F53B Major)	1.38	2.0	ng/L	1.89		73.1	50-150			J
9Cl-PF3ONS (F53B Minor)	1.48	2.0	ng/L	1.87		79.1	50-150			J
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	1.35	2.0	ng/L	1.90		71.4	50-150			J
Surrogate: 13C-PFHxA	*36.8*		ng/L	40.1		91.6	70-130			
Surrogate: M3HFPO-DA	*32.7*		ng/L	40.1		81.5	70-130			
Surrogate: 13C-PFDA	*35.1*		ng/L	40.1		87.4	70-130			
Surrogate: D5-NEtFOSAA	*162*		ng/L	160		101	70-130			
LCS Dup (B340328-BSD1)				Prepared: 05/16/23 Analyzed: 05/17/23						
Perfluorobutanesulfonic acid (PFBS)	1.71	2.1	ng/L	1.86		91.9	50-150	12.7	50	J
Perfluorohexanoic acid (PFHxA)	1.69	2.1	ng/L	2.10		80.7	50-150	14.8	50	J
Perfluorohexanesulfonic acid (PFHxS)	1.67	2.1	ng/L	1.92		87.1	50-150	3.89	50	J
Perfluoroheptanoic acid (PFHpA)	1.70	2.1	ng/L	2.10		80.9	50-150	13.7	50	J
Perfluorooctanoic acid (PFOA)	2.43	2.1	ng/L	2.10		116	50-150	34.4	50	
Perfluorooctanesulfonic acid (PFOS)	1.60	2.1	ng/L	1.94		82.2	50-150	4.07	50	J
Perfluorononanoic acid (PFNA)	1.88	2.1	ng/L	2.10		89.6	50-150	35.9	50	J
Perfluorodecanoic acid (PFDA)	1.26	2.1	ng/L	2.10		60.2	50-150	23.9	50	J
N-EtFOSAA (NEtFOSAA)	1.66	2.1	ng/L	2.10		79.3	50-150	13.4	50	J
Perfluoroundecanoic acid (PFUnA)	1.90	2.1	ng/L	2.10		90.6	50-150	15.1	50	J
N-MeFOSAA (NMeFOSAA)	1.45	2.1	ng/L	2.10		69.1	50-150	21.2	50	J
Perfluorododecanoic acid (PFDoA)	1.63	2.1	ng/L	2.10		77.8	50-150	18.2	50	J
Perfluorotridecanoic acid (PFTrDA)	1.69	2.1	ng/L	2.10		80.5	50-150	16.4	50	J
Perfluorotetradecanoic acid (PFTA)	1.54	2.1	ng/L	2.10		73.5	50-150	8.14	50	J
Hexafluoropropylene oxide dimer acid (HFPO-DA)	1.42	2.1	ng/L	2.10		67.8	50-150	21.6	50	J
11Cl-PF3OUdS (F53B Major)	1.49	2.1	ng/L	1.98		75.3	50-150	7.37	50	J
9Cl-PF3ONS (F53B Minor)	1.77	2.1	ng/L	1.96		90.3	50-150	17.6	50	J
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	1.66	2.1	ng/L	1.98		83.8	50-150	20.2	50	J
Surrogate: 13C-PFHxA	*38.8*		ng/L	41.9		92.5	70-130			
Surrogate: M3HFPO-DA	*35.9*		ng/L	41.9		85.5	70-130			
Surrogate: 13C-PFDA	*34.3*		ng/L	41.9		81.7	70-130			
Surrogate: D5-NEtFOSAA	*172*		ng/L	168		103	70-130			

con-test®
A Pace Analytical® Laboratory

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).
L-04	Laboratory fortified blank/laboratory control sample recovery and duplicate recovery are outside of control limits. Reported value for this compound is likely to be biased on the low side.
L-07	Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.
PF-02B	Surrogate recovery is outside of control limits. Re-extraction yielded different surrogate non-conformance. Both results reported.

con-test®
A Pace Analytical® Laboratory

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA 537.1 in Drinking Water	
Perfluorobutanesulfonic acid (PFBS)	VT-DW,NJ,CT,ME,PA,MI,MA,NY,NH,OH
Perfluorohexanoic acid (PFHxA)	VT-DW,NJ,CT,ME,PA,MI,MA,NY,NH,OH
Perfluorohexanesulfonic acid (PFHxS)	VT-DW,NJ,CT,ME,PA,MI,MA,NY,NH,OH
Perfluoroheptanoic acid (PFHpA)	VT-DW,NJ,CT,ME,PA,MI,MA,NY,NH,OH
Perfluorooctanoic acid (PFOA)	VT-DW,NJ,CT,ME,PA,MI,MA,NY,NH,OH
Perfluorooctanesulfonic acid (PFOS)	VT-DW,NJ,CT,ME,PA,MI,MA,NY,NH,OH
Perfluorononanoic acid (PFNA)	VT-DW,NJ,CT,ME,PA,MI,MA,NY,NH,OH
Perfluorodecanoic acid (PFDA)	VT-DW,NJ,CT,ME,PA,MI,MA,NY,NH,OH
N-EtFOSAA (NEtFOSAA)	VT-DW,NJ,CT,ME,PA,MI,MA,NY,NH,OH
Perfluoroundecanoic acid (PFUnA)	VT-DW,NJ,CT,ME,PA,MI,MA,NY,NH,OH
N-MeFOSAA (NMeFOSAA)	VT-DW,NJ,CT,ME,PA,MI,MA,NY,NH,OH
Perfluorododecanoic acid (PFDoA)	VT-DW,NJ,CT,ME,PA,MI,MA,NY,NH,OH
Perfluorotridecanoic acid (PFTrDA)	VT-DW,NJ,CT,ME,PA,MI,MA,NY,NH,OH
Perfluorotetradecanoic acid (PFTA)	VT-DW,NJ,CT,ME,PA,MI,MA,NY,NH,OH
Hexafluoropropylene oxide dimer acid (HFPO-DA)	VT-DW,NJ,CT,ME,PA,MI,MA,NY,NH,OH
11Cl-PF3OUdS (F53B Major)	VT-DW,NJ,CT,ME,PA,MI,MA,NY,NH,OH
9Cl-PF3ONS (F53B Minor)	VT-DW,NJ,CT,ME,PA,MI,MA,NY,NH,OH
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	VT-DW,NJ,CT,ME,PA,MI,MA,NY,NH,OH

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
MA	Massachusetts DEP	M-MA100	06/30/2024
CT	Connecticut Department of Public Health	PH-0821	12/31/2024
NY	New York State Department of Health	10899 NELAP	04/1/2024
NH	New Hampshire Environmental Lab	2516 NELAP	02/5/2024
NJ	New Jersey DEP	MA007 NELAP	06/30/2023
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2023
ME	State of Maine	MA00100	06/9/2023
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2023
MI	Dept. of Env, Great Lakes, and Energy	9100	06/30/2023
OH	Ohio Environmental Protection Agency	87781	04/1/2024

ALIA IX U LN

Pace Analytical®

Phone: 413-525-2332
Fax: 413-525-6405
Access COC's and Support Requests

http://www.pacelabs.com

CHAIN OF CUSTODY RECORD

Doc # 381 Rev 5_07/13/2021

39 Spruce Street
East Longmeadow, MA 01028

Page 1 of 1

Company Name:	ENAC
Address:	291 MAIN ST, P.O. BOX 135 ALTON, NH
Phone:	603-875-8100
Project Name:	SEVERINO PIT
Project Location:	RAYMOND, NH
Project Number:	
Project Manager:	TODD GREENWOOD
Pace Quote Name/Number:	
Invoice Recipient:	
Sampled By:	DJW

Requested Turnaround Time:
7-Day ☐ 10-Day ☐
PFAS 10-Day (std) ☑ Due Date:

Rush Approval Required:
1-Day ☐ 3-Day ☐
2-Day ☐ 4-Day ☐

Data Deliverables:
Format: PDF ☑ EXCEL ☐
Other:
CLP Like Data Pkg Required: ☐
Email To: tag@metrocast.net
Fax To #:

Dissolved Samples:
○ Field Filtered
○ Lab to Filter

Other Preservative Samples:
○ Field Filtered
○ Lab to Filter

PCB ONLY
SOXHLET ☐
NON SOXHLET ☐

ANALYSIS REQUESTED

PFAS - 537.1 24 COMPOUND LIST

Pace Work Order*	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	COMP/GRAB	Matrix Code	Conc Code	VIALS	GLASS	PLASTIC	BACTERIA	ENCORE	PFAS
1	MW-1	5/9/23	10:40	GRAB	GW	U			3			✓
2	MW-2	5/9/23	10:50	GRAB	GW	U			3			✓
3	MW-3	5/9/23	11:05	GRAB	GW	U			3			✓
4	MW-4	5/9/23	10:30	GRAB	GW	U			3			✓

Preservation Code
Courier Use Only
Fedex Next Day
UPS
USPS
Client
Commercial
Pace Courier

Glassware in the fridge? Y / N
Glassware in freezer? Y / N
Prepackaged Cooler? Y / N
*Pace Analytical is not responsible for missing samples from prepacked coolers

[1] Matrix Codes:
GW = Ground Water
WW = Waste Water
DW = Drinking Water
A = Air
S = Soil
SL = Sludge
SOL = Solid
O = Other (please define)

[2] Preservation Codes:
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define)

Relinquished by: (signature)	Dena J Wunsch	Date/Time: 5/9/23 13:45
Received by: (signature)		Date/Time: 5-9-23 13:45
Relinquished by: (signature)		Date/Time: 5-9-23 17:05
Received by: (signature)	FedEx NW 3.0	Date/Time: 5/9/23 1705
Relinquished by: (signature)		Date/Time:
Received by: (signature)		Date/Time:
Relinquished by: (signature)		Date/Time:
Received by: (signature)		Date/Time:

Client Comments:

Detection Limit Requirements:
MA
GW1
SW1

Regulatory Requirements:
☐ MA MCP Required
MCP Certification Form Required
☐ CT RCP Required
RCP Certification Form Required
☐ MA State DW Required
PWSID #

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

NELAC and AIHA-LAP, LLC Accredited

Project Entity
Government ☐ Municipality ☐ MWRA ☐ WRTA ☐
Federal ☐ 21 J ☐ School ☐
City ☐ Brownfield ☐ MBTA ☐

Other
☐ Chromatogram
☐ AIHA-LAP,LLC

Lab Comments:

Disclaimer: Pace Analytical is not responsible for any omitted information on the Chain of Custody. The Chain of Custody is a legal document that must be complete and accurate and is used to determine what analyses the laboratory will perform. Any missing information is not the laboratory's responsibility. Pace Analytical values your partnership on each project and will try to assist with missing information, but will not be held accountable.

39 Spruce St.
East Longmeadow, MA. 01028
P: 413-525-2332
F:413-525-6405
www.pacelabs.com

Log In Back-Sheet

Login Sample Receipt Checklist – (Rejection Criteria Listing – Using Acceptance Policy) Any False statement will be brought to the attention of the Client – True or False

Pace
PEOPLE ADVANCING SCIENCE

Client ENAC
Project Seven Pt
MCP/RCP Required no
Deliverable Package Req. none
Location Raymond, NH
PWSID# (When Applicable) n/a
Arrival Method:
Courier ☑ Fed Ex ☐ Walk In ☐ Other ☐
Received By / Date / Time ER 5/9/23 1205
Back-Sheet By / Date / Time MCM 5/9/23 1749
Temperature Method Gun # 5
Temp ☑ < 6° C Actual Temperature 3.0
Rush Samples: Yes / No Notify No
Short Hold: Yes / No Notify No

	True	False
Received on Ice	☑	☐
Received in Cooler	☑	☐
Custody Seal: DATE TIME	☐	☑
COC Relinquished	☑	☐
COC/Samples Labels Agree	☑	☐
All Samples in Good Condition	☑	☐
Samples Received within Holding Time	☑	☐
Is there enough Volume	☑	☐
Proper Media/Container Used	☑	☐
Splitting Samples Required	☐	☑
MS/MSD	☐	☑
Trip Blanks	☐	☑
Lab to Filters	☐	☑
COC Legible	☑	☐

COC Included: (Check all included)
Client ☑ Analysis ☑ Sampler Name ☑
Project ☑ IDs ☑ Collection Date/Time ☑

All Samples Proper pH: (N/A) ☐ ☐

Notes regarding Samples/COC outside of SOP:

Container (Circle when applicable)	UnP	HCl	HNO3	H2SO4	NaOH	Trizma	NaS2O3	Other Preservative
1L Amber Plastic								
500 mL Amber Plastic								
250 mL Amber (Plastic)						12		
Other Amber Clear Plastic								
16oz Amber Clear								
8oz Amber Clear								
4oz Amber Clear								
2oz Amber Clear								
Col/Bacteria								
Flashpoint								
Plastic Bag								
SOC Kit								
Perchlorate								
Encore								
Frozen								

	Proper Headspace	UnP	HCl	MeOH	Bisulfate	DI	Thiosulfate	Sulfuric	Other
Vials									

Eastern Analytical, Inc.

professional laboratory and drilling services

Todd Greenwood
Enviro North American Consulting
PO Box 1075
Alton , NH 03809

Laboratory Report for:

Eastern Analytical, Inc. ID: 260617
Client Identification: SEVERINO PIT
Date Received: 5/22/2023

Enclosed are the analytical results per the Chain of Custody for sample(s) in the referenced project. All analyses were performed in accordance with our QA/QC Program, NELAP and other applicable state requirements. All quality control criteria was within acceptance criteria unless noted on the report pages. Results are for the exclusive use of the client named on this report and will not be released to a third party without consent.

The following information is contained within this report: Sample Conditions summary, Analytical Results/Data, Quality Control data (if requested) and copies of the Chain of Custody. This report may not be reproduced except in full, without the written approval of the laboratory.

The following standard abbreviations and conventions apply to all EAI reports:

< : "less than" followed by the reporting limit
> : "greater than" followed by the reporting limit
%R : % Recovery

Certifications:
Eastern Analytical, Inc. maintains certification in the following states: Connecticut (PH-0492), Maine (NH005), Massachusetts (M-NH005), New Hampshire/NELAP (1012), Rhode Island (269), Vermont (VT1012), New York (12072) and West Virginia (9910C). Please refer to our website at www.easternanalytical.com for a copy of our certificates and accredited parameters.

References:

- EPA 600/4-79-020, 1983
- Standard Methods for Examination of Water and Wastewater, 20th, 21st, 22nd & 23rd edition or noted revision year.
- Test Methods for Evaluating Solid Waste SW 846 3rd Edition including updates IVA and IVB
- Hach Water Analysis Handbook, 4th edition, 1992
- ASTM International

If you have any questions regarding the results contained within, please feel free to contact customer service. Unless otherwise requested, we will dispose of the sample(s) 6 weeks from the sample receipt date.

We appreciate this opportunity to be of service and look forward to your continued patronage.

Sincerely,

Lorraine Olashaw, Lab Director — 5.25.23 Date

SAMPLE CONDITIONS PAGE

EAI ID#: **260617**

Client: **Enviro North American Consulting**

Client Designation: **SEVERINO PIT**

Temperature upon receipt (°C): 3.0 **Received on ice or cold packs (Yes/No): Y**

Acceptable temperature range (°C): 0-6

Lab ID	Sample ID	Date Received	Date/Time Sampled	Sample Matrix	% Dry Weight	Exceptions/Comments (other than thermal preservation)
260617.01	BKG-1	5/22/23	5/22/23 09:45	solid	97.1	Adheres to Sample Acceptance Policy
260617.02	BKG-2	5/22/23	5/22/23 10:00	solid	87.7	Adheres to Sample Acceptance Policy
260617.03	BKG-3	5/22/23	5/22/23 10:15	solid	94.7	Adheres to Sample Acceptance Policy
260617.04	BKG-4	5/22/23	5/22/23 10:45	solid	89.3	Adheres to Sample Acceptance Policy
260617.05	BKG-5	5/22/23	5/22/23 11:00	solid	95.0	Adheres to Sample Acceptance Policy
260617.06	BKG-6	5/22/23	5/22/23 11:10	solid	81.7	Adheres to Sample Acceptance Policy
260617.07	BKG-7	5/22/23	5/22/23 11:20	solid	94.1	Adheres to Sample Acceptance Policy
260617.08	BKG-8	5/22/23	5/22/23 11:30	solid	86.2	Adheres to Sample Acceptance Policy

All results contained in this report relate only to the above listed samples.

Unless otherwise noted:

- *Hold times, preservation, container types, and sample conditions adhered to EPA Protocol.*
- *Solid samples are reported on a dry weight basis, unless otherwise noted. pH/Corrosivity, Flashpoint, Ignitability, Paint Filter, Conductivity and Specific Gravity are always reported on an "as received" basis.*
- *Analysis of pH, Total Residual Chlorine, Dissolved Oxygen and Sulfite were performed at the laboratory outside of the recommended 15 minute hold time.*
- *Samples collected by Eastern Analytical, Inc. (EAI) were collected in accordance with approved EPA procedures.*

LABORATORY REPORT

EAI ID#: **260617**

Client: **Enviro North American Consulting**

Client Designation: **SEVERINO PIT**

Sample ID:	BKG-1	BKG-2	BKG-3	BKG-4					
Lab Sample ID:	260617.01	260617.02	260617.03	260617.04					
Matrix:	solid	solid	solid	solid					
Date Sampled:	5/22/23	5/22/23	5/22/23	5/22/23	**Analytical Matrix**	**Units**	**Date of Analysis**	**Method**	**Analyst**
Date Received:	5/22/23	5/22/23	5/22/23	5/22/23					
Arsenic	**15**	**8.9**	**13**	**22**	SolTotDry	mg/kg	5/25/23	6020A	DS

Sample ID:	BKG-5	BKG-6	BKG-7	BKG-8					
Lab Sample ID:	260617.05	260617.06	260617.07	260617.08					
Matrix:	solid	solid	solid	solid					
Date Sampled:	5/22/23	5/22/23	5/22/23	5/22/23	**Analytical Matrix**	**Units**	**Date of Analysis**	**Method**	**Analyst**
Date Received:	5/22/23	5/22/23	5/22/23	5/22/23					
Arsenic	**41**	**10**	**6.4**	**13**	SolTotDry	mg/kg	5/25/23	6020A	DS

CHAIN-OF-CUSTODY RECORD

BOLD FIELDS REQUIRED. PLEASE CIRCLE REQUESTED ANALYSIS.

260617

SAMPLE I.D.	SAMPLING DATE/TIME *IF COMPOSITE, INDICATE BOTH START & FINISH DATE/TIME	MATRIX (SEE BELOW)	GRAB/*COMPOSITE	VOC: 524.2 / 524.2 MTBE ONLY	VOC: 8260 624 VTICS / 1, 4 DIOXANE	VOC: 8021	VOC: 8015 GRO MAPH	SVOC: 8270 625 ABN PAH EDB DBCP	SVOC: TPH8100 LI L2	SVOC: 8015 DRO MAEPH	SVOC: PEST 608 PEST 8081 PCB 608 PCB 8082	SVOC: OIL & GREASE 1664 TPH 1664	TCLP: TCLP 1311 VOC ABN PEST METALS HERB	INORGANICS: BOD TS CBOD TSS TDS	INORGANICS: Br NO2 Cl NO3 F SO4 NO2NO3	INORGANICS: TKN NH3 T. PHOS. TN O. PHOS.	INORGANICS: pH SPEC. CON. T. RES. CHLORINE T. ALK.	INORGANICS: COD PHENOLS TOC DOC	INORGANICS: TOTAL CYANIDE TOTAL SULFIDE	INORGANICS: REACTIVE CYANIDE REACTIVE SULFIDE FLASHPOINT IGNITABILITY	MICRO: TOTAL COLIFORM E. COLI FECAL COLIFORM ENTEROCOCCI HETEROTROPHIC PLATE COUNT	METALS: DISSOLVED METALS (LIST BELOW)	METALS: TOTAL METALS (LIST BELOW)	OTHER: ARSENIC	OTHER	OTHER	OTHER	# OF CONTAINERS	NOTES MEOH VIAL #
BKG-1	5/22/23 9:45	S	G																						✓				1	
BKG-2	5/22/23 10:00	S	G																						✓				1	
BKG-3	5/22/23 10:15	S	G																						✓				1	
BKG-4	5/22/23 10:45	S	G																						✓				1	
BKG-5	5/22/23 11:00	S	G																						✓				1	
BKG-6	5/22/23 11:10	S	G																						✓				1	
BKG-7	5/22/23 11:20	S	G																						✓				1	
BKG-8	5/22/23 11:30	S	G																						✓				1	

MATRIX: A-AIR; S-SOIL; GW-GROUND WATER; SW-SURFACE WATER; DW-DRINKING WATER; WW-WASTE WATER

PRESERVATIVE: H-HCL; N-HNO_3; S-H_2SO_4; Na-NaOH; M-MEOH

PROJECT MANAGER: TODD GREENWOOD

COMPANY: ENAC

ADDRESS: P.O. BOX 1075

CITY: ALTON STATE: NH ZIP: 03809

PHONE: 603-875-8100 EXT.:

E-MAIL: tag@metrocast.net, denawunsch@metrocast.net

SITE NAME: SEVERINO PIT

PROJECT #:

STATE: (NH) MA ME VT OTHER:

REGULATORY PROGRAM: NPDES: RGP POTW STORMWATER OR GWP, OIL FUND, BROWNFIELD OR OTHER:

QUOTE #: PO #:

QA/QC REPORTING

A B C

MA MCP

TEMP. 3.0 °C

ICE? (YES) NO

REPORTING OPTIONS

PRELIMS: YES OR NO

ELECTRONIC OPTIONS

(PDF) EXCEL

EQUIS

OTHER

TURN AROUND TIME

24hr* 48hr*

(3-4 Days*)

5 Day 7 Day

10 Day

*Pre-approval Required

SAMPLER(S): DENA J. WUNSCH

RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:
Dena J Wunsch	5/22/23	12:25	NH

METALS: 8 RCRA 13 PP FE, MN PB, CU

OTHER METALS: Arsenic only

SAMPLES FIELD FILTERED? ☐ YES ☐ NO

NOTES: (IE: SPECIAL DETECTION LIMITS, BILLING INFO, IF DIFFERENT)

3 DAY TAT PLEASE!

SITE HISTORY:

SUSPECTED CONTAMINATION:

FIELD READINGS:

Eastern Analytical, Inc.
professional laboratory and drilling services
51 Antrim Avenue | CONCORD, NH 03301 | TEL: 603.228.0525 | 1.800.287.0525 | E-MAIL: CUSTOMERSERVICE@EASTERNANALYTICAL.COM | WWW.EASTERNANALYTICAL.COM

(WHITE: Lab Copy GREEN: Customer Copy)

Dennehy Pit

DATE	SOURCE	MATERIAL	Yards
6/1/22	Nashua Middle School	raw loam	125
6/2/22	"	"	75
6/7/22	Flat Rock Rd. Pit	raw stonebase	75
6/8/22	"	"	100
"	Dennet Rd.	raw loam	18
6/10/22	Flat Rock Rd. Pit	raw stonebase	75
"	Nashua Middle School	raw loam	25
6/13/22	Flat Rock Rd. Pit	raw stonebase	61
"	Slate @ Merrimack	rocks	14
"	Dennet Rd.	raw loam	18
6/14/22	Flat Rock Rd. Pit	raw stonebase	43
6/15/22	"	"	57
6/16/22	"	"	32
"	Dennet Rd.	raw loam	25
6/17/22	Flat Rock Rd. Pit	raw stonebase	25
6/20/22	"	"	43
"	Dennet Rd.	raw loam	50
"	Procon GTE	"	54
6/21/22	Stevens Mill Redev.	concrete	18
"	Dennet Rd.	raw loam	25
6/22/22	Flat Rock Rd. Pit	raw stonebase	25
"	Stevens Mill Redev.	ledge	18
"	Copart	spoil	18
6/23/22	Flat Rock Rd. Pit	raw stonebase	25
"	Lorden Common	raw loam	18
"	Stevens Mill Redev.	old asphalt	18
6/24/22	Vitex	raw loam	18
6/27/22	Flat Rock Rd. Pit	raw stonebase	50
"	Vitex	raw loam	18
6/28/22	Pruven Pit	erosion stone	50
"	Flat Rock Rd. Pit	raw stonebase	36
"	Parson Woods	old asphalt	14
"	Vitex	raw loam	18
"	Lorden Common	"	18
6/29/22	Flat Rock Rd. Pit	raw stonebase	79
"	Stevens Mill Redev.	raw loam	18
6/30/22	Flat Rock Rd. Pit	raw stonebase	68
"	Contel	big rock	154
7/5/22	Flat Rock Rd. Pit	raw stonebase	50
"	Aviation Drive	fill	18
"	"	concrete	36
"	"	old asphalt	18
7/6/22	Flat Rock Rd. Pit	raw stonebase	25
"	Stevens Mill Redev.	rubble	18
"	Contel	big rock	14
7/7/22	Parson Woods	raw loam	36
7/8/22	Stevens Mill Redev.	concrete	36

DATE	SOURCE	MATERIAL	Yards
7/8/22	Slate @ Merrimack	raw loam	18
7/11/22	Flat Rock Rd. Pit	raw stonebase	50
"	Stevens Mill Redev.	concrete	18
"	Dennet Rd.	spoil	25
"	Plaistow Self Storage	old asphalt	110
7/12/22	Flat Rock Rd. Pit	raw stonebase	25
"	Stevens Mill Redev.	concrete	18
"	Slate @ Merrimack	raw loam	14
"	Vitex	concrete	18
7/13/22	Flat Rock Rd. Pit	raw stonebase	25
"	Stevens Mill Redev.	concrete	43
"	Contel	ledge	50
"	Vitex	concrete	18
"	Peter Chivers	stump grindings	154
"	"	spoil	70
7/14/22	Flat Rock Rd. Pit	raw stonebase	43
"	Slate @ Merrimack	raw loam	14
"	Sagamore Ave.	ledge	18
"	Parson Woods	raw loam	18
"	Vitex	ledge	18
7/15/22	Flat Rock Rd. Pit	raw stonebase	25
"	Slate @ Merrimack	concrete	14
"	Vitex	fill	25
7/18/22	Flat Rock Rd. Pit	raw stonebase	43
"	Slate @ Merrimack	loam	14
"	Vitex	old asphalt	18
7/19/22	Flat Rock Rd. Pit	raw stonebase	43
7/20/22	"	"	43
"	Vitex	ledge	54
7/21/22	Flat Rock Rd. Pit	raw stonebase	50
"	"	3/4" stone	25
7/22/22	Flat Rock Rd. Pit	raw stonebase	175
"	Evroks (Allenstown)	rocks	14
7/25/22	Flat Rock Rd. Pit	raw stonebase	50
"	Auburn Cliffs	"	192
"	Stevens Mill Dev.	old asphalt	18
"	Evroks (Huse Rd.)	"	36
"	Contel	oversize rock	18
7/26/22	Auburn Cliffs	raw stonebase	97
"	"	1 1/2" stone	18
7/27/22	Flat Rock Rd. Pit	raw stonebase	25
"	Vitex	ledge	18
7/28/22	Flat Rock Rd. Pit	raw stonebase	25
"	Vitex	ledge	18
8/1/22	"	concrete	18
8/2/22	"	"	18
8/3/22	"	"	18

Dennehy Pit

DATE	SOURCE	MATERIAL	Yards
8/4/22	Stevens Mill Redev.	concrete	18
"	"	old asphalt	18
8/5/22	Vitex	concrete	18
8/8/22	"	"	18
8/9/22	Slate @ Merrimack	old asphalt	14
"	Vitex	concrete	18
8/10/22	Flat Rock Rd. Pit	raw stonebase	18
"	Rte. 33 stkyd.	ledge	18
8/11/22	Lady Isle	raw loam	18
"	Vitex	concrete	18
8/12/22	Evroks (Huse Rd.)	"	18
"	Vitex	"	18
8/15/22	Stevens Mill Redev.	"	14
"	Evroks (Huse Rd.)	concrete slabs	1 ld.
8/15/22	Lady Isle	fill	14
8/16/22	Rte. 33 stkyd.	ledge	14
"	Vitex	concrete	18
8/17/22	Stevens Mill Redev.	"	18
"	Tom Sev (Adams Rd.)	rock	14
8/18/22	Stevens Mill Redev.	concrete	18
"	Slate @ Merrimack	"	14
8/19/22	Stevens Mill Redev.	"	18
8/22/22	Flat Rock Rd. Pit	raw stonebase	18
"	Rte. 33 stkyd.	old asphalt	18
"	Vitex	concrete	18
8/23/22	Flat Rock Rd. Pit	raw stonebase	18
"	Stevens Mill Redev.	concrete	18
"	Lady Isle	spoil	108
"	"	fill	36
"	"	ledge	36
"	Vitex	concrete	18
8/24/22	"	"	18
8/25/22	Flat Rock Rd. Pit	raw stonebase	18
"	Stevens Mill Redev.	concrete	18
"	Dennet Rd.	stonedust	18
"	Vitex	concrete	18
8/26/22	Dennet Rd.	stonedust	18
"	Vitex	raw loam	18
8/29/22	6 Industrial Way	"	25
8/30/22	Stevens Mill Redev.	concrete	14
"	6 Industrial Way	raw loam	25
"	Dennet Rd.	"	18
"	Vitex	concrete	18
8/31/22	Stevens Mill Redev.	"	18
"	Vitex	"	18
9/1/22	Stevens Mill Redev.	"	18
"	Rte. 33 stkyd.	old asphalt	18

DATE	SOURCE	MATERIAL	Yards
9/1/22	Vitex	concrete	18
9/2/22	"	"	18
9/6/22	"	"	18
9/7/22	"	"	18
9/8/22	Sunningdale	"	18
9/13/22	Vitex	concrete	18
"	Sunningdale	old asphalt	18
9/14/22	"	"	18
9/16/22	Dennet Rd.	stonedust	25
9/19/22	Rte. 33 stkyd.	old asphalt	18
"	Dennet Rd.	stonedust	25
"	Sagamore	old asphalt	18
9/20/22	Dennet Rd.	stonedust	25
"	Sagamore	old asphalt	18
"	Bluebird Storage	raw loam	18
9/21/22	Sagamore	old asphalt	18
"	Vitex	"	18
"	Landing Way	"	36
9/22/22	Rte. 33 stkyd.	"	72
"	"	ledge	72
"	Candia Irving	fill	28
9/23/22	Rte. 33 stkyd.	ledge	18
"	Candia Irving	fill	28
"	"	old asphalt	14
9/24/22	140 Exeter Rd.	spoil	416
"	"	fill	90
9/26/22	Vitex	ledge	18
"	Aviation Drive	concrete	14
"	"	fill	28
"	"	old asphalt	14
9/27/22	Vitex	ledge	18
9/28/22	"	ledge/concrete	25
9/29/22	Vitex	rock/concrete	25
"	"	ledge/fill	18
10/3/22	Slate @ Merrimack	old asphalt	14
"	Landing Way Pond	raw loam	18
"	"	pond scum	18
10/6/22	Slate @ Merrimack	old asphalt	14
10/7/22	Sagamore Ave.	"	18
10/10/22	Rte. 33 stkyd.	"	43
"	Contel	raw loam	144
"	"	screened loam	18
"	Vitex	concrete	18
10/11/22	Sagamore Ave.	old asphalt	18
10/12/22	Stevens Mill Redev.	raw loam	18
"	Slate @ Merrimack	spoil	18
"	Sagamore Ave.	old asphalt	25

Dennehy Pit

DATE	SOURCE	MATERIAL	Yards
10/13/22	Stevens Mill Redev.	concrete	18
"	Slate @ Merrimack	spoil	18
"	Sagamore Ave.	old asphalt	18
10/17/22	Auburn Cliffs	stonedust	225
"	Rte. 33 stkyd.	old asphalt	18
"	Slate @ Merrimack	concrete	14
"	Landing Way	raw loam	25
10/18/22	Stevens Mill Redev.	"	18
"	Rte. 33 stkyd.	old asphalt	36
10/19/22	"	spoil	18
10/21/22	Auburn Cliffs	stonedust	36
10/25/22	"	"	25
"	Sagamore Ave.	ledge	18
"	Auburn Self Storage	spoil	14
"	"	concrete	18
10/26/22	Stevens Mill Redev.	ledge	18
"	Sagamore Ave.	"	18
"	Auburn Self Storage	spoil	28
"	"	concrete	36
10/27/22	Auburn Cliffs	stonedust	25
10/28/22	"	"	42
10/31/22	Evroks (Huse Rd.)	concrete	18
"	Northgate Apts.	"	18
11/1/22	Stevens Mill Redev.	"	18
11/2/22	Evroks (Huse Rd.)	old asphalt	18
"	Auburn Self Storage	concrete	14
"	"	spoil	14
11/4/22	Stevens Mill Redev.	concrete	14
11/7/22	Evroks (Huse Rd.)	spoil	18
11/8/22	Auburn Cliffs	raw stonebase	150
11/9/22	Parson Woods	raw loam	18
11/10/22	Auburn Cliffs	raw stonebase	557
"	Parson Woods	raw loam	25
11/11/22	Pruven Pit	screened sand	286
"	Auburn Cliffs	raw stonebase	373
11/12/22	"	"	567
11/14/22	Evroks (Huse Rd.)	old asphalt	18
"	Vitex	"	14
11/15/22	Milton Pit	sand	25
"	Evroks (Huse Rd.)	old asphalt	14
"	"	concrete	28
"	Vitex	"	14
11/16/22	Evroks (Huse Rd.)	old asphalt	146
11/17/22	"	fill	36
"	"	concrete	18
"	Auburn Self Storage	old asphalt	36
11/18/22	"	"	36

DATE	SOURCE	MATERIAL	Yards
11/19/22	6 Industrial Way	raw loam	50
11/21/22	"	"	36
11/23/22	"	"	36
"	Constructors 31	ledge	18
11/28/22	Stevens Mill Redev.	concrete	14
"	6 Industrial Way	raw loam	18
"	Evroks (Huse Rd.)	loam	18
"	"	old asphalt	18
"	Auburn Cliffs	"	14
11/29/22	"	3/4" stone	14
"	6 Industrial Way	raw loam	36
"	Auburn Self Storage	old asphalt	32
11/30/22	Milton Pit	screened sand	150
"	Constructors 31	ledge	18
"	Evroks (Huse Rd.)	old asphalt	14
"	Auburn Self Storage	"	36
12/1/22	Milton Pit	screened sand	75
"	Auburn Cliffs	raw stonebase	18
"	Constructors 31	ledge	18
"	Evroks (Huse Rd.)	old asphalt	28
"	Auburn Cliffs	"	14
"	Auburn Self Storage	"	18
12/2/22	Milton Pit	screened sand	100
"	"	raw stonebase	18
"	Stevens Mill Redev.	concrete	14
"	Evroks (Huse Rd.)	old asphalt	36
"	Auburn Self Storage	raw loam	18
12/5/22	Milton Pit	screened sand	100
"	Evroks (Huse Rd.)	concrete	14
"	Vitex	frost/crush	14
12/6/22	Stevens Mill Redev.	concrete	14
"	Evroks (Huse Rd.)	old asphalt	78
"	"	fill	18
12/7/22	6 Industrial Way	old asphalt	18
"	Evroks (Huse Rd.)	"	42
12/8/22	Milton Pit	screened sand	25
"	6 Industrial Way	old asphalt	18
"	Evroks (Huse Rd.)	"	14
"	Slate @ Merrimack	"	14
"	Contel	fill	28
12/9/22	Milton Pit	screened sand	75
"	New. Maint. Facility	raw loam	18
12/12/22	Milton Pit	screened sand	61
"	Auburn Cliffs	3/4" stone	14
"	"	1 1/2" stone	25
"	Evroks (Huse Rd.)	old asphalt	14
12/13/22	Milton Pit	screened sand	50

Dennehy Pit

DATE	SOURCE	MATERIAL	Yards
12/13/22	Auburn Cliffs	raw stonebase	25
"	Stevens Mill Redev.	concrete	14
"	6 Industrial Way	old asphalt	18
"	Evroks (Huse Rd.)	"	14
12/14/22	Milton Pit	screened sand	125
"	Evroks (Huse Rd.)	fill	14
"	"	curbing	14
"	Lady Isle	ledge/fill	18
"	Moore School	old asphalt	68
12/15/22	Milton Pit	screened sand	75
"	Evroks (Huse Rd.)	spoil	14
"	Moore School	old asphalt	18
12/19/22	Auburn Cliffs	raw stonebase	125
"	Evroks (Huse Rd.)	millings	162
12/20/22	Constructors 31	ledge	18
12/21/22	"	"	18
12/22/22	"	"	18
12/26/22	"	"	18
12/28/22	"	"	18

DATE	SOURCE	MATERIAL	Yards

Dennehy Pit

DATE	SOURCE	MATERIAL	Yards
1/3/23	Milton Pit	screened sand	50
"	Contel	spoil	98
1/4/23	Vitex	fill	18
"	Contel	spoil	56
1/5/23	Milton Pit	screened sand	100
"	Vitex	old asphalt	18
"	Queen City Bridge	concrete	256
1/9/23	Auburn Cliffs	3/4" stone	25
"	Evroks (Huse Rd.)	old asphalt	18
1/10/23	Milton Pit	screened sand	25
1/13/23	Stevens Mill Redev.	concrete	18
1/17/23	Vitex	old asphalt	18
1/18/23	Stevens Mill Redev.	concrete	18
1/19/23	6 Industrial Way	stump grindings	270
1/24/23	Milton Pit	screened sand	50
"	6 Industrial Way	stump grindings	216
"	McNabb Properties	spoil	18
1/25/23	Milton Pit	screened sand	25
"	6 Industrial Way	stump grindings	198
"	Vitex	fill	18
1/26/23	Milton Pit	screened sand	25
"	Vitex	fill	18
1/27/23	"	"	18
1/31/23	Milton Pit	screened sand	25
2/1/23	"	"	25
2/2/23	Flat Rock Rd. Pit	1 1/2" stone	25
2/6/23	Milton Pit	screened sand	43
"	Constructors 381	ledge	36
2/7/23	Milton Pit	screened sand	61
"	6 Industrial Way	stump grindings	90
2/8/23	Milton Pit	screened sand	18
"	6 Industrial Way	stump grindings	90
2/10/23	Vitex	concrete	75
2/13/23	Milton Pit	screened sand	25
"	Canterbury Commons	old asphalt	14
2/14/23	Parson Woods	concrete	25
2/21/23	Milton Pit	screened sand	18
"	"	sand	25
"	Landing Way	ledge	96
2/22/23	Milton Pit	sand	25
"	Vitex	concrete	18
2/27/23	Stevens Mill Redev.	"	18
3/2/23	Milton Pit	screened gravel	18
"	Stevens Mill Redev.	"	18
3/3/23	Milton Pit	pipe sand	18
"	"	sand	18
3/6/23	"	"	18

DATE	SOURCE	MATERIAL	Yards
3/6/23	Milton Pit	pipe sand	18
"	Stevens Mill Redev.	"	18
3/7/23	Milton Pit	"	18
3/8/23	"	"	18
3/10/23	Vitex	concrete	18
3/16/23	Milton Pit	sand	18
3/17/23	"	"	18
"	GMC Dealership	old asphalt	18
3/20/23	"	"	36
3/22/23	Stevens Mill Redev.	concrete	18
3/23/23	Milton Pit	sand	18
3/27/23	"	pipe sand	43
"	Nashua Middle School	erosion stone	50
3/28/23	Raymond Dist. Pit	1 1/2" stone	18
"	Stevens Mill Redev.	concrete	18
3/29/23	Milton Pit	sand	25
"	Vitex	concrete	18
"	Turnpike Maint. Facility	spoil	25
3/30/23	Evroks (Allenstown)	concrete	126
3/31/23	"	"	90
4/1/23	Stevens Mill Redev.	"	36
4/3/23	Evroks (Allenstown)	loam	18
4/4/23	Stratham Surgical	old asphalt	18
4/6/23	Vitex	concrete	18
4/7/23	Aggregate (Raymond)	3/8" stone	14
"	Raymond Dist. Pit	3/4" stone	14
"	Evroks (Allenstown)	fill	18
4/11/23	Litchfield S&G	1/2" stone	75
"	Evroks (Allenstown)	loam	18
4/12/23	Litchfield S&G	1/2" stone	50
"	Raymond Dist. Pit	3/4" stone	90
"	Evroks (Allenstown)	loam	36
4/13/23	Sagamore Ave.	old asphalt	18
"	Auburn Self Storage	concrete	54
4/14/23	GMC Dealership	old asphalt	25
"	Auburn Self Storage	"	18
4/17/23	Sagamore Ave.	"	18
4/18/23	Nashua Middle School	stump grindings	14
4/19/23	Auburn Self Storage	"	36
4/20/23	Nashua Middle School	raw loam	32
4/21/23	"	"	18
"	"	rip rap	14
"	Dennet Rd.	old asphalt	18
4/24/23	Nashua Middle School	raw loam	32
"	Sagamore Ave.	ledge	18
4/25/23	6 Industrial Way	concrete	18
4/26/23	Raymond Dist. Pit	1 1/2" stone	182

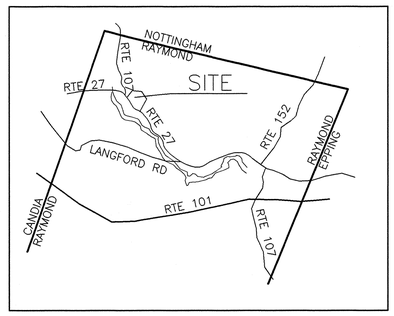
Dennehy Pit

DATE	SOURCE	MATERIAL	Yards
4/26/23	Nashua Middle School	rip rap	14
4/27/23	"	raw loam	14
4/28/23	Milton Pit	gravel	18
5/1/23	Sagamore Ave.	ledge	18
"	Dennet Rd.	old asphalt	18
5/2/23	Stevens Mill Redev.	concrete	18
5/3/23	"	fill	18
"	6 Industrial Way	concrete	18
"	"	2" stone	54
5/4/23	Vitex	fill	18
"	Dennet Rd.	old asphalt	36
"	6 Industrial Way	concrete	36
"	"	erosion stone	18
5/5/23	Raymond Dist. Pit	1 1/2" stone	168
"	"	crushed gravel	18
"	Stevens Mill Redev.	fill	25
"	Nashua Middle School	concrete	14
"	Vitex	fill	18

DATE	SOURCE	MATERIAL	Yards

PROPOSED EXCAVATION
MAP 7 LOTS 4 & 4A
RTE 27, RAYMOND, N.H.

SHEET INDEX



LOCUS PLAN
N.T.S.

APPROVED BY THE RAYMOND PLANNING BOARD
ON _____

CERTIIFIED BY:

_____

_____

_____

_____

OPERATOR

SEVERINO TRUCKING CO. INC.
RONALD SEVERINO, PRESIDENT
PO BOX 202, CANDIA, N.H. 03034
PHONE: 603–483–2133
FAX: 603–483–2998

ENGINEER: RANDALL B. JONES, P.E.

JONES & BEACH ENGINEERS, INC.
P.O. BOX 219
85 PORTSMOUTH AVE.
STRATHAM, N.H. 03885
PHONE: 603–772–4746
FAX: 603–772–0227

STATE OF NEW HAMPSHIRE
RANDALL B. JONES No. 5406
LICENSED PROFESSIONAL ENGINEER

#97155

SEVERINO TRUCKING SAND AND GRAVEL PIT
RAYMOND, N.H. - JUNE 8, 1998

2036

PLAN REFERENCES:

"SURVEY PLAN PREPARED FOR RONALD SEVERINO
ASSESSORS MAP 17 LOTS 4 & 4A"
BY JAMES FRANKLIN DATED MAY 25, 1995, R.C.R.D. PLAN #23985

ELEVATIONS BASED ON U.S.G.S. DATUM
BENCHMARK E30 DISK NORTH END
OF EAST ABUTMENT RTE 101 IN BRIDGE OVER
LAMPREY RIVER .3 MI WEST OF JCT
101 AND 107 . ELEV. 211.07

TAX MAP 8, LOT 33
LEISURE VILLAGE ESTATES
15 NORTH STREET
MANCHESTER, NH 03104
BK: 2691 PG: 2609

TAX MAP 7, LOT 9
PAUL F. & MARGARET EDWARDS
PO BOX 478
RAYMOND, NH 03077
BK: 2027 PG: 219

BEARING TIES
N30°55'20"W 482.95'
N66°21'40"W 129.43'
S86°59'20"E 88.04'
S63°30'50"E 366.68'
S60°57'20"E 180.82'
S40°18'40"W 351.06'
S40°40'00"W 735.26'
S02°10'10"W 121.54'
N11°49'40"E 127.75'
687.09'
N23°50'20"W
50'
25'
351.27'
S47°28'00"E
R=1112.98' L=73.88'

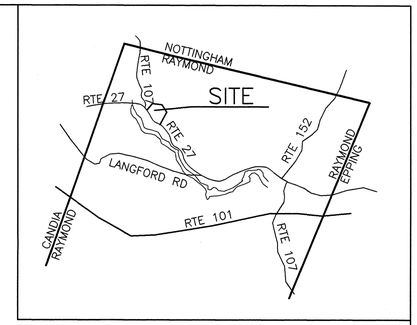
EXISTING SILTFENCE
POND
EDGE OF WETLAND
TBM 1–SPIKE
IN 12" HEMLOCK
ELEV. 218.38'
TBM 2
SPIKE IN 10" PINE
ELEV 237.22
RECLAIMED AREA
HAUL ROAD
APPROXIMATE
WETLANDS
BOUNDARY
CONCRETE AND REFUSE
DISPOSAL AREA

MAP 7, LOT 4
MAP 7, LOT 4A

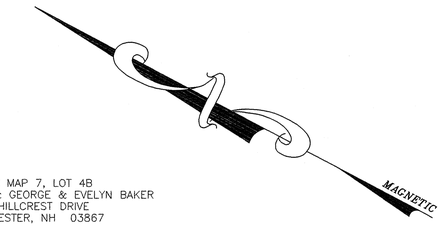
TAX MAP 7, LOT 4C
TOWN OF RAYMOND
4 EPPING STREET
RAYMOND, NH 03077
BK: 2984 PG: 780

TAX MAP 7, LOT 4B
IVY VERGOS, & GEORGE & EVELYN BAKER
8 HILLCREST DRIVE
ROCHESTER, NH 03867

N.H. ROUTE 27



LOCUS PLAN
N.T.S.



LEGEND

- UTILITY POLE
- TP TEST PITS
- 220 HIGH CONTOURS
- 218 LOW CONTOURS
- PROPERTY LINES
- WETLAND BOUNDARIES
- EDGE OF WOODS

OWNER OF RECORD
RONALD A. SEVERINO
PO BOX 202
CANDIA N.H.
BOOK 3032 PG 81 R.C.R.D.

OPERATOR
SEVERINO TRUCKING CO., INC.
RONALD A. SEVERINO, PRESIDENT
PO BOX 202
CANDIA N.H.
PHONE (603)483–2133
FAX (603)483–2998

TOTAL AREA
22.37 AC

GRAPHIC SCALE
60 0 30 60 120 240
(IN FEET)
1 inch = 60 ft.

NO.	DATE	REVISION	
0	11/26/97	ISSUED FOR APPROVAL	DSW
	KAB DESIGNED	JSR CHECKED	RBJ APPROVED / RBJ DRAWN

REVISED: MAY 11, 1998

MAP 7 LOTS 4 & 4A
N.H. RTE 27, RAYMOND, N.H.

SEVERINO TRUCKING CO INC
EXISTING CONDITIONS PLAN

STATE OF NEW HAMPSHIRE
RANDALL R. JONES No. 6408
LICENSED PROFESSIONAL ENGINEER

J/B

JONES & BEACH ENGINEERS, INC.
85 PORTSMOUTH AVENUE
STRATHAM, N.H. 03885
PHONE 772–4746 FAX 772–0227

DRAWING NO. C1

SCALE :	DATE :	FILE :	REV.	SHEET NO.
1" = 60'	11/25/97	97155	0	1 OF 6

2036.1

APPROVED BY THE RAYMOND PLANNING BOARD
ON _____

CERTIIFIED BY:

_____

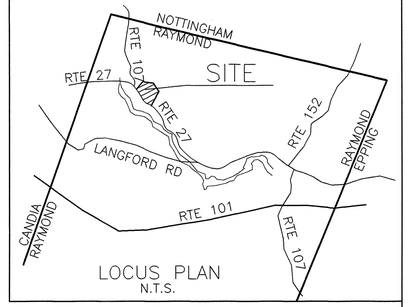
_____

_____

_____

TAX MAP 8, LOT 33
LEISURE VILLAGE ESTATES
15 NORTH STREET
MANCHESTER, NH 03104
BK: 2691 PG: 2609

MAGNETIC



LOCUS PLAN
N.T.S.

A BERM MUST BE MAINTAINED BETWEEN THE EXCAVATION AND THE DELINEATED WETLANDS.

EXISTING SILTFENCE

OBSERVATION WELL #3

TAX MAP 7, LOT 9
PAUL F. & MARGARET EDWARDS
PO BOX 478
RAYMOND, NH 03077
BK: 2027 PG: 219

2T2

TP3

TP4

TP5

TP2

TP1

MAP 7, LOT 4

MAP 7, LOT 4A

TAX MAP 7, LOT 4B
IVY VERGOS, & GEORGE & EVELYN BAKER
8 HILLCREST DRIVE
ROCHESTER, NH 03867

OBSERVATION WELL #1

A BERM MUST BE MAINTAINED BETWEEN THE EXCAVATION AND THE DELINEATED WETLANDS.

APPROXIMATE WETLANDS BOUNDARIES

LIMIT OF EXCAVATION (TYP)

CONCRETE & REFUSE DISPOSAL AREA

OBSERVATION WELL #2

ESTIMATED SEASONAL HIGH WATER TABLE @ ELEVATION 198'

CROSS SECTION ALIGNMENT #12
SEE SHEETS X-1 & X-2

RECLAIMED AREA

CONCRETE RUBBLE REFUSE FILL AREA

EXISTING TREES TO REMAIN

EDGE OF WETLAND

SWALE

METAL GATE

PROPOSED SIGN W/PIT OPERATOR AND PERMIT NUMBER

HIGHWAY FENCE

LIMIT OF EXCAVATION (TYP)

PROPOSED EDGE OF EXCAVATION

EXISTING BUILDINGS TO BE RAZED

STOCKADE FENCE BARRIERS TO BE INSTALLED BETWEEN INITIATION OF EXCAVATION PERMIT AND EVENTUAL RAZING OF BUILDINGS.

50' PAVED APRON

℄ RTE 27

AL1 AL2 AL3 AL4 AL5 AL6 AL7 AL8 AL9 AL10 AL11 AL12

OPERATION NOTES:

1. PROPOSED EXCAVATION LOCATED WITHIN A STRATIFIED-DRIFT AQUIFER AS SHOWN ON MAPS WITHIN USGS OPEN-FILE REPORT 92-95 STRATIFIED-DRIFT AQUIFERS IN THE EXETER, LAMPREY, AND OYSTER RIVER BASINS. (SEE WELL #6)
2. AREA OF PROPOSED EXCAVATION: 13.27 ACRES, 578,000 SQUARE FEET
3. VOLUME OF MATERIAL: 220,000 CUBIC YARDS
4. PROJECT DURATION: 5 YEARS
5. ESTIMATED SEASONAL HIGH WATER TABLE DETERMINED TO BE AT ELEVATION 198' AT TEST HOLE #1. PROPOSED EXCAVATION IS A MINIMUM OF 13 FEET ABOVE ESHWT.
6. TRUCK TRAFFIC:
   A. TRIPS PER DAY: 100 LOADS PER DAY MAX.
   B. TYPE OF VEHICLES: 1-15 TRUCKS PER DAY
   C. WEIGHT LIMITS: 10 WHEELERS - 65,000 LBS.
      TRAILER DUMP BODIES - 100,000 LBS.
      TRI-AXLE - 72,000 LBS.
7. HOURS OF OPERATION: WAIVER GRANTED JUNE 4, 1998.
   MACHINERY: 7:00AM - 5:00PM
   MATERIAL REMOVAL: 7:00AM - 5:00PM
   SATURDAY: 7:00AM - 12:00 (NOON)
8. PERIMETER OF THE PIT SHALL BE SUITABLY POSTED WITH SIGNS AT A MAXIMUM 100 FOOT INTERVAL, NOTIFYING TRESPASSERS OF POTENTIAL DANGER.
9. THE PROPOSED MINIMUM DISTANCE FROM EXCAVATION TO A SIDE PROPERTY LINE IS 67 FEET. THE PROPOSED MINIMUM DISTANCE FROM EXCAVATION TO A FRONT RIGHT-OF-WAY LINE IS 50 FEET.
10. SITE SPECIFIC PERMIT #WPS-5001, JANUARY 28, 1998.
11. TRUCKS WILL NOT QUE ONTO ROUTE 27 AND ARE NOT ALLOWED TO BACK OUT ONTO THE HIGHWAY. TRUCKS ARE ALSO PROHIBITED FROM BACKING FROM ROUTE 27 ONTO THE SITE.

LEGEND

- TP — TEST PITS
- HIGH CONTOURS
- LOW CONTOURS
- PROPERTY LINES
- WETLAND BOUNDARIES
- EDGE OF WOODS/TREE LINE
- 216 — PROPOSED CONTOURS

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

OWNER OF RECORD
RONALD A. SEVERINO
PO BOX 202
CANDIA N.H.
BOOK 3032 PG 81 R.C.R.D.

OPERATOR
SEVERINO TRUCKING CO., INC.
RONALD A. SEVERINO, PRESIDENT
PO BOX 202
CANDIA N.H.
PHONE (603)483-2133
FAX (603)483-2998

TOTAL AREA
22.37 AC

PROPOSED EXCAVATION
13.2 AC

REVISED: JUNE 8, 1998

MAP 7 LOTS 4 & 4A
NH RTE 27, RAYMOND, N.H.

SEVERINO TRUCKING CO., INC.
PROPOSED EXCAVATION PLAN
NH RTE 27, RAYMOND, N.H

JONES & BEACH ENGINEERS, INC.
85 PORTSMOUTH AVENUE
STRATHAM, N.H. 03885
PHONE 772-4746 FAX 772-0227

DRAWING NO. C2

SCALE :	DATE :	FILE :	REV.	SHEET NO.
1" = 50'	11/25/97	SEVERINO		__ OF __

STATE OF NEW HAMPSHIRE
RANDALL B. JONES
No. 6408
LICENSED PROFESSIONAL ENGINEER

J/B

2036.1

APPROVED BY THE RAYMOND PLANNING BOARD
ON _____

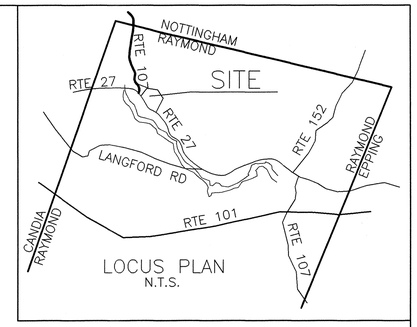
CERTIIFIED BY:

_____

_____

_____

_____



LOCUS PLAN
N.T.S.

RECLAMATION NOTES:

1. RECLAMATION WILL BE CONDUCTED IN 5 ACRE INCREMENTS WITH PHASING MOVING FROM WEST TO EAST IN THE NORTHERN PORTION OF THE PIT AND FOLLOWED BY WEST TO EAST IN THE SOUTHERN PORTION OF THE PIT.
2. ALL DISTURBED AREAS WILL BE GRADED TO A MAXIMUM SLOPE OF 3:1 (3 FEET HORIZONTAL TO 1 FOOT VERTICAL) AND A MINIMUM SLOPE OF 0.5%. ALL DISTURBED AREAS WILL BE SPREAD WITH A 4" LAYER OF REAPPLIED TOPSOIL, PER TOWN OF RAYMOND EXCAVATION REGULATIONS (R.E.R.) PLAN SHEET E-1, AND PROJECT NARRATIVE (RECLAMATION PLAN).
3. RECLAIMED 3:1 SIDE SLOPES AND CONSTRUCTED BERMS TO BE PLANTED WITH WHITE PINE SEEDLINGS 8 FEET ON-CENTER. A PORTION OF THE RECLAIMED PIT FLOOR WILL BE USED AS A NURSERY AND BE PLANTED WITH BUFFER WHITE PINE SEEDLINGS THAT CAN BE PLANTED IMMEDIATELY DUE TO THE LOCATION OF EXISTING STRUCTURES TO BE RAIZED.

   WAIVER OF SEEDLING PLANTING ON PIT FLOOR GRANTED JUNE 4, 1998.

PROPOSED SILTFENCE
EXISTING SILTFENCE
TOP OF CONSTRUCTED BERM, ELEV=216'
MAP 7, LOT 4
MAP 7, LOT 4A
PROPOSED TREELINE TO FOLLOW LIMIT OF EXCAVATION
EDGE OF WETLAND
RECLAIMED AREA
EXISTING TREES TO REMAIN
METAL GATE
HIGHWAY FENCE
APPROXIMATE WETLANDS BOUNDARIES
25'
CONCRETE REFUSE DISPOSAL AREA
FINAL GRADE TO BE RECLAIMED WITH LOAM & SEED
BUFFER AREA TO BE PLANTED WITH WHITE PINE SEEDLINGS 3 ROWS - 8' O.C. 130 TREES
EXISTING BUFFER TO BE REINFORCED WITH 130 WHITE PINE SEEDLINGS
50' PAVED APRON
℄ RTE 27
AL1 AL2 AL3 AL4 AL5 AL6 AL7 AL8 AL9 AL10 AL11 AL12
MAGNETIC

LEGEND

- TEST PITS
- HIGH CONTOURS
- LOW CONTOURS
- PROPERTY LINES
- WETLAND BOUNDARIES
- EDGE OF WOODS
- 218 PROPOSED CONTOUR

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

OWNER OF RECORD
RONALD A. SEVERINO
PO BOX 202
CANDIA N.H.
BOOK 3032 PG 81 R.C.R.D.

OPERATOR
SEVERINO TRUCKING CO., INC.
RONALD A. SEVERINO, PRESIDENT
PO BOX 202
CANDIA N.H.
PHONE (603)483-2133
FAX (603)483-2998

TOTAL AREA
22.37 AC

REVISED: JUNE 8, 1998

RANDALL R. JONES No. 6406 LICENSED PROFESSIONAL ENGINEER STATE OF NEW HAMPSHIRE

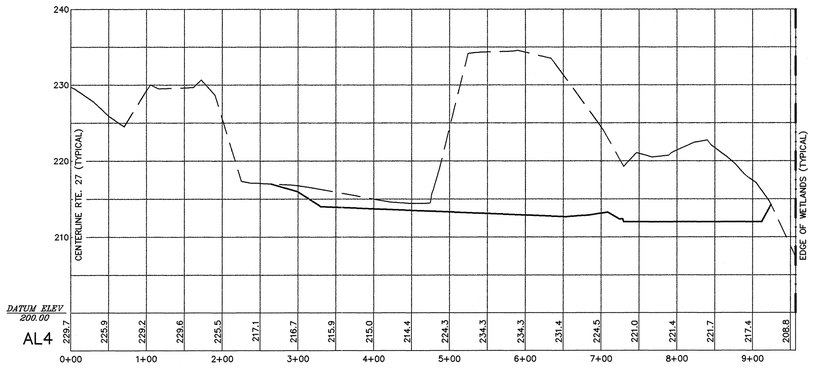
MAP 7 LOTS 4 & 4A
NH RTE 27, RAYMOND, N.H.

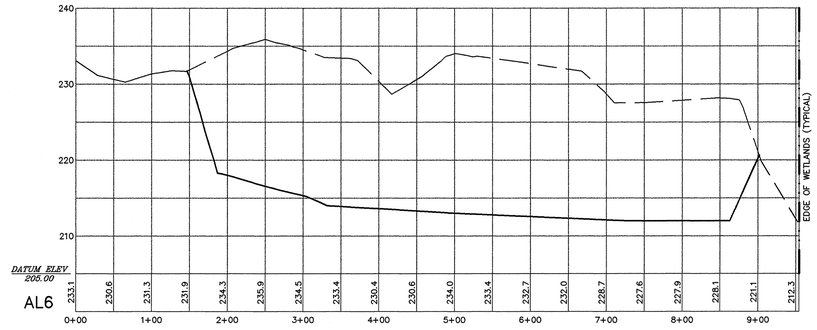
SEVERINO TRUCKING CO., INC.
RECLAMATION PLAN
NH RTE 27, RAYMOND, N.H

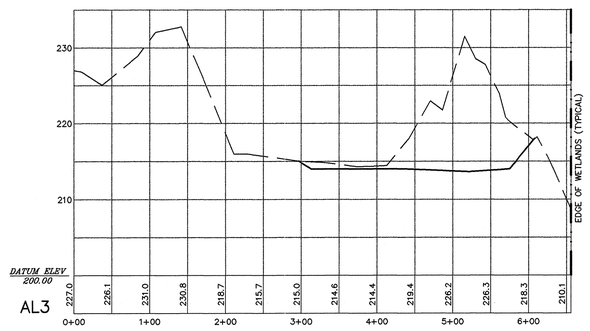
JONES & BEACH ENGINEERS, INC.
85 PORTSMOUTH AVENUE
STRATHAM, N.H. 03885
PHONE 772-4746 FAX 772-0227

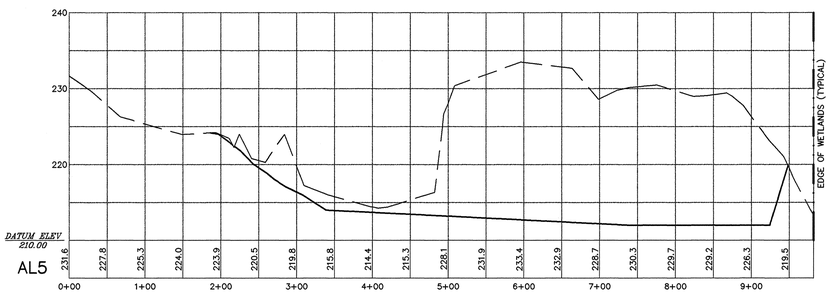
DRAWING NO. C3

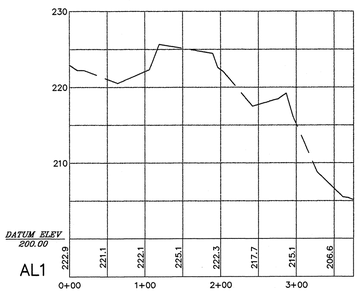
SCALE :	DATE :	FILE :	REV.	SHEET NO.
1" = 50'	11/25/97	SEVERINO		3 OF 6

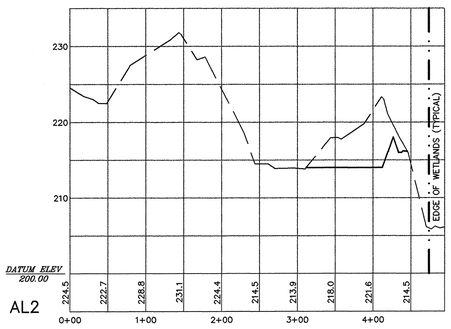












LEGEND

EXISTING GRADE — — — — —

PROPOSED GRADE ————————

EDGE OF WETLANDS — · · — · · —

NO.	DATE	REVISION	
0	11/25/97	ISSUED FOR APPROVAL	PRWH

KAB	RBJ	RBJ	
DESIGNED	CHECKED	APPROVED	DRAWN

STATE OF NEW HAMPSHIRE
RANDALL B. JONES No. 6409
LICENSED PROFESSIONAL ENGINEER

MAP 7, LOT 4 & 4A
NH RTE 27, RAYMOND, N.H.

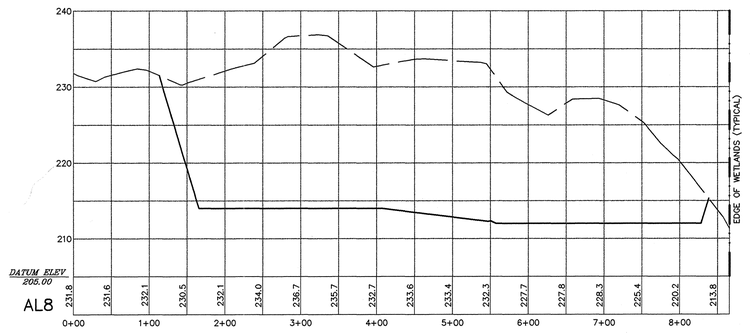
CROSS SECTIONS
SEVERINO TRUCKING CO., INC.
SAND & GRAVEL PIT EXCAVATION

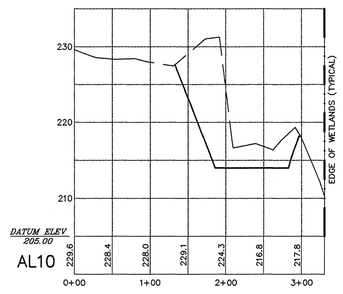
JONES & BEACH ENGINEERS, INC.
85 PORTSMOUTH AVENUE
STRATHAM, N.H. 03885
PHONE 772-4746 FAX 772-0227

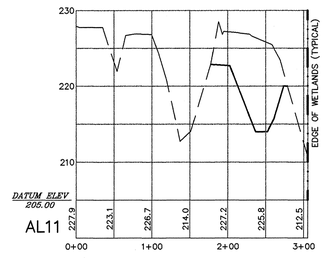
DRAWING NO. X1

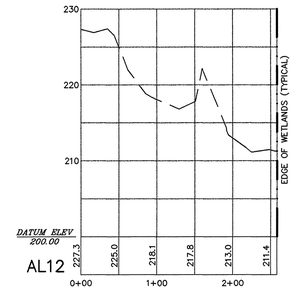
SCALE	DATE	FILE	REV.	SHEET NO.
1"=10' V 1"=100' H	11/25/97	C:\SEVERINO		-- OF --

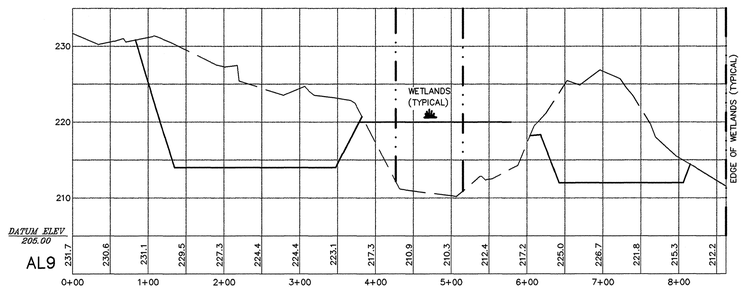
2036.1

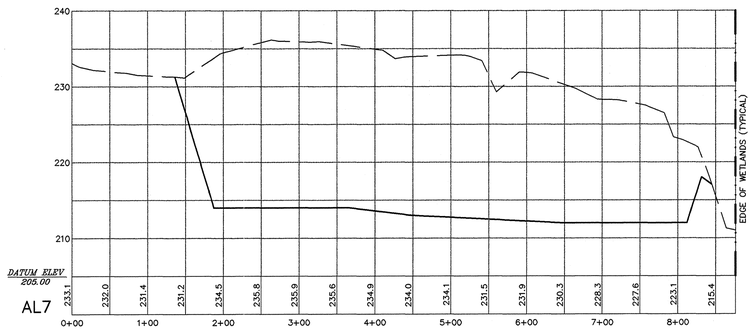












LEGEND

EXISTING GRADE

PROPOSED GRADE

EDGE OF WETLANDS

NO.	DATE	REVISION			
0	11/25/97	ISSUED FOR APPROVAL			PRWH
		KAB	RBJ	RBJ	
		DESIGNED	CHECKED	APPROVED	DRAWN

STATE OF NEW HAMPSHIRE — RANDALL B. JONES No. 6403 — LICENSED PROFESSIONAL ENGINEER

J/B

MAP 7, LOT 4 & 4A
NH RTE 27, RAYMOND, N.H.

CROSS SECTIONS
SEVERINO TRUCKING CO., INC.
SAND & GRAVEL PIT EXCAVATION

JONES & BEACH ENGINEERS, INC.
85 PORTSMOUTH AVENUE
STRATHAM, N.H. 03885
PHONE 772-4746 FAX 772-0227

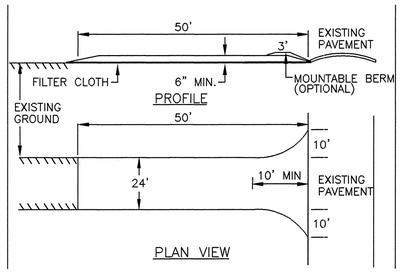
DRAWING NO. X2

SCALE : 1"=10' V, 1"=100' H | DATE : 11/25/97 | FILE : C:\SEVERINO | REV. | SHEET NO. -- OF --

2036.4

B / E-1 STABILIZED CONSTRUCTION ENTRANCE

N.T.S.



1. STONE FOR A STABILIZED CONSTRUCTION ENTRANCE SHALL BE 1 TO 2 INCH STONE, RECLAIMED STONE, OR RECYCLED CONCRETE EQUIVALENT.
2. THE LENGTH OF THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 50 FEET, EXCEPT FOR A SINGLE RESIDENTIAL LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY.
3. THE THICKNESS OF THE STONE FOR THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 6 INCHES.
4. THE WIDTH OF THE ENTRANCE SHALL NOT BE LESS THAN THE FULL WIDTH OF THE ENTRANCE WHERE INGRESS OR EGRESS OCCURS OR 10 FEET, WHICH EVER IS GREATER.
5. GEOTEXTILE FILTER CLOTH SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING THE STONE. FILTER CLOTH IS NOT REQUIRED FOR A SINGLE FAMILY RESIDENCE LOT.
6. ALL SURFACE WATER THAT IS FLOWING TO OR DIVERTED TOWARD THE CONSTRUCTION ENTRANCE SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A BERM WITH 5:1 SLOPES THAT CAN BE CROSSED BY VEHICLES MAY BE SUBSTITUTED FOR THE PIPE.
7. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOPDRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, WASHED, OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED PROMPTLY.

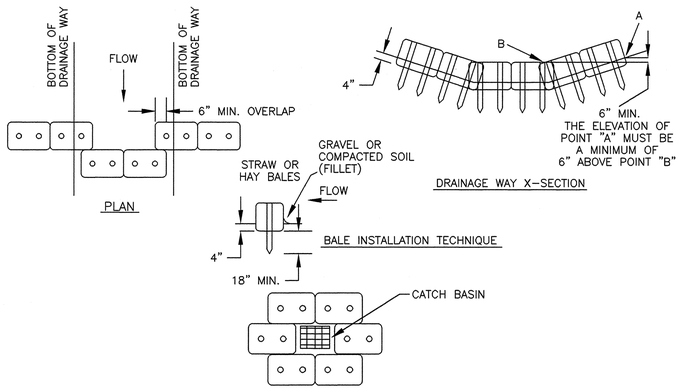
TEMPORARY EROSION CONTROL MEASURES

1. THE SMALLEST PRACTICAL AREA OF LAND SHALL BE EXPOSED AT ANY ONE TIME
2. EROSION, SEDIMENT AND DETENSION MEASURES SHALL BE INSTALLED AS SHOWN ON THE PLANS AND AT LOCATIONS AS REQUIRED, DIRECTED BY THE ENGINEER
3. ALL DISTURBED AREAS SHALL BE GRADED TO SPECIFIED ELEVATIONS. DISTURBED AREAS SHALL BE LOAMED WITH A MINIMUM OF 4" OF LOAM AND SEEDED WITH NOT LESS THAN ONE POUND OF SEED PER 50 SQUARE YARDS OF AREA. (SEE SEED SPECIFICATIONS THIS SHEET)
4. SILT FENCES AND STRAW OR HAY BALES BARRIERS SHALL BE INSPECTED PERIODICALLY AND AFTER EVERY RAIN DURING THE LIFE OF THE PROJECT. ALL DAMAGED AREAS SHALL BE REPAIRED, SEDIMENT DEPOSITS SHALL PERIODICALLY BE REMOVED AND DISPOSED OF.
5. AFTER ALL DISTURBED AREAS HAVE BEEN STABILIZED, THE TEMPORARY EROSION CONTROL MEASURES ARE TO BE REMOVED AND THE AREA DISTURBED BY THE REMOVAL SMOOTHED AND RE-VEGETATED
6. ALL SEDIMENT AND EROSION CONTROL MEASURESWILL BE IN PLACE AND STABILIZED PRIOR TO HAVING RUN-OFF DIRECTED TO THEM.

6a. A BERM MUST BE MAINTAINED BETWEEN THE EXCAVATION AND THE DELINEATED WETLANDS.

CONSTRUCTION SEQUENCE

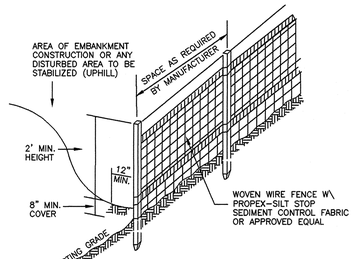
1. CUT AND REMOVE TREES IN CONSTRUCTION AREA ONLY AS REQUIRED
2. CONSTRUCT AND/OR INSTALL TEMPORARY AND PERMANENT SEDIMENT EROSION AND DETENSION CONTROL FACILITIES AS REQUIRED. EROSION, SEDIMENT AND DETENSION CONTROL FACILITY SHALL BE INSTALLED & STABILIZED PRIOR TO ANY EARTH MOVING OPERATION & OR DIRECTING RUNOFF TO THEM
3. CLEAR, CUT AND DISPOSE OF DEBRIS IN APPROVED FACILITY
4. CONSTRUCT TEMPORARY CULVERTS AS REQUIRED, OR DIRECTED
5. CONSTRUCT ROADWAYS FOR ACCESS TO DESIRED CONSTRUCTION AREAS. ALL ROADS SHALL BE STABILIZED IMMEDIATELY AFTER GRADING
6. CONDUCT EXCAVATION ACTIVITIES.
7. BEGIN PERMANENT AND TEMPORARY SEEDING AND MULCHING. ALL CUT AND FILL SLOPES AND DISTURBED AREAS SHALL BE SEEDED OR MULCHED AS REQUIRED, OR DIRECTED.
8. RECLAMATION WILL BE ACCOMPLISHED IN 5 ACRE SEGMENTS.
   A. RECLAMATION STANDARD: WITHIN TWELEVE (12)MONTHS AFTER THE EXPIRATION DATE IN A PERMIT ISSUED UNDER THESE REGULATIONS, OR AFTER COMPLETION OF ANY EXCAVATION, THE EXCAVATED LAND SHALL HAVE COMPLETED THE RECLAMATION OF THE AREAS AFFECTED BY THE EXCAVATION.
   B. INCREMENTAL RECLAMATION: ANY EXCAVATED AREA OF FIVE (5) CONTIGUOUS ACRES OR MORE, FROM WHICH NO EARTH MATERIALS HAVE BEEN REMOVED FOR A TWO (2) YEAR PERIOD, SHALL BE RECLAIMED IN ACCORDANCE WITH THE TOWN OF EPPING REGULATIONS AND RSA 155-E:5, WITHIN TWELVE (12) MONTHS FOLLOWING SUCH DEPLETION.
9. DAILY, OR AS REQUIRED CONSTRUCT TEMPORARY BERMS, DRAINS DITCHES, SILT FENCES, SEDIMENT TRAPS, ETC. MULCH AND SEED AS REQUIRED.
10. INSPECT AND MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES DURING CONSTRUCTION
11. COMPLETE PERMANENT SEEDING AND LANDSCAPING
12. REMOVE TEMPORARY EROSION CONTROL MEASURES AFTER SEEDING AREAS HAVE ESTABLISHED THEMSELVES AND SITE IMPROVEMENTS ARE COMPLETE. SMOOTH AND REVEGETATE ALL DISTURBED AREAS.



EROSION PROTECTION TYPE "E"

NORMAL USE AROUND CATCH BASINS

NOT TO SCALE



E / E-1 SILT FENCE

N.T.S.

CONSTRUCTION SPECIFICATIONS FOR SILT FENCES

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES AND FILTER CLOTH SHALL BE FASTENED TO WOVEN WIRE EVERY 24" AT TOP MID AND BOTTOM SECTIONS AND BE EMBEDDED INTO GROUND A MINUMUM OF 8"
2. THE FENCE POSTS SHALL BE A MINIMUM 48" LONG, SPACED A MAXIMUM 10' APART, AND DRIVEN A MINIMUM OF 16" INTO THE GROUND
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THE ENDS OF THE FABRIC SHALL BE OVERLAPPED BY SIX INCHES, FOLDED AND STAPLED TO PREVENT SEDIMENT FROM BY-PASSING
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND SEDIMENT REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE AND PROPERLY DISPOSED OF
5. PLACE THE ENDS OF THE SILT FENCE UP CONTOUR TO PROVIDE FOR SEDIMENT STORAGE
6. SILT FENCES SHALL BE REMOVED WHEN NO LONGER NEEDED AND THE SEDIMENT COLLECTED SHALL BE DISPOSED AS DIRECTED BY THE ENGINEER. TTHE AREA DISTURBED BY THE REMOVAL SHALL BE SMOOTHED AND RE-VEGETATED

D / E-1 CONSTRUCTION SPECIFICATIONS FOR STRAW OR HAY BALE BARRIERS

1. STRUCTURES SHALL BE INSTALLED ACCORDING TO THE DIMENSIONS SHOWN ON THE PLANS AT THE APPROPRIATE SPACING.
2. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER SO THAT EROSION AND AIR AND WATER POLLUTION WILL BE MINIMIZED.
3. WHEN HAY BALES ARE USED, THE BALES SHALL BE EMBEDDED AT LEAST 4 INCHES INTO THE SOIL. WHEN TIMBER STRUCTURES ARE USED, THE TIMBER SHALL EXTEND AT LEAST 18 INCHES INTO THE SOIL.
4. HAY OR STRAW BALES SHALL BE ANCHORED INTO THE SOIL USING 2" X 2" STAKES DRIVEN THROUGH THE BALES AND AT LEAST 18 INCHES INTO THE SOIL.
5. SEEDING, FERTILIZING, AND MULCHING SHALL CONFORM TO THE RECOMMENDATIONS IN THE APPROPRIATE VEGETATIVE BMP.
6. STRUCTURES SHALL BE REMOVED FROM THE CHANNEL WHEN THEIR USEFUL LIFE HAS BEEN COMPLETED.

H / E-1 SEEDING RATES

MIXTURE	POUNDS PER ACRE	POUNDS PER 1,000 SQ.FT.
A. TALL FESCUE	20	0.45
CREEPING RED FESCUE	20	0.45
REDTOP	2	0.05
TOTAL	42	0.95
B. TALL FESCUE	15	0.35
CREEPING RED FESCUE	10	0.25
CROWN VETCH	15	0.35
OR		
FLATPEA	30	0.75
TOTAL	40 OR 55	0.95 OR 1.35
C. TALL FESCUE	20	0.45
CREEPING RED FESCUE	20	0.45
BIRDSFOOT TREFOIL	8	0.20
TOTAL	48	1.10
D. BIRDSFOOT TREFOIL	10	0.25
REDTOP	5	0.10
REED CANARYGRASS	15	0.35
TOTAL	30	0.70
E. TALL FESCUE	20	0.45
FLATPEA	30	0.75
TOTAL	50	1.20
F. CREEPING RED FESCUE 1/	50	1.15
KENTUCKY BLUEGRASS 1/	50	1.15
TOTAL	100	2.30
G. TALL FESCUE 1	150	3.60

RECOMMENDED

1/ FOR HEAVY USE ATHLETIC FIELDS CONSULT THE UNIVERSITY OF NEW HAMPSHIRE COOPERATIVE EXTENSION TURF SPECIALIST FOR CURRENT VARIETIES AND SEEDING RATES.

G / E-1 Seeding Guide

USE	SEEDING MIXTURE 1/	DROUGHTY	WELL DRAINED	MODERATELY WELL DRAINED	POORLY DRAINED
STEEP CUTS AND FILLS, BORROW AND DISPOSAL AREAS	A	FAIR	GOOD	GOOD	FAIR
	B	POOR	GOOD	FAIR	FAIR
	C	POOR	GOOD	EXCELLENT	GOOD
	D	FAIR	FAIR	GOOD	EXCELLENT
	E	FAIR	EXCELLENT	EXCELLENT	POOR
WATERWAYS, EMERGENCY SPILLWAYS, AND OTHER CHANNELS WITH FLOWING WATER.	A	GOOD	GOOD	GOOD	FAIR
	C	GOOD	EXCELLENT	EXCELLENT	FAIR
	D	GOOD	EXCELLENT	EXCELLENT	FAIR
LIGHTLY USED PARKING LOTS, ODD AREAS, UNUSED LANDS, AND LOW INTENSITY USE RECREATION SITES.	A	GOOD	GOOD	GOOD	FAIR
	B	GOOD	GOOD	FAIR	POOR
	C	GOOD	EXCELLENT	EXCELLENT	FAIR
	D	FAIR	GOOD	GOOD	EXCELLENT
PLAY AREAS AND ATHLETIC FIELDS. (TOPSOIL IS ESSENTIAL FOR GOOD TURF.)	F	FAIR	EXCELLENT	EXCELLENT	2/
	G	FAIR	EXCELLENT	EXCELLENT	2/

RECOMMENDED

GRAVEL PIT---SEE NH-PM-24 IN APPENDIX FOR RECOMMENDATION REGARDING RECLAMATION OF SAND AND GRAVEL PITS.

1/ REFER TO SEEDING MOXTURES AND RATES IN TABLE 7-36.
2/ POORLY DRAINED SOILS ARE NOT DESIRABLE FOR USE AS PLAYING AREA AND ATHLETIC FIELDS.

F / E-1 SEEDING SPECIFICATIONS

1. Grading and Shaping
   a. Slopes shall not be steeper than 2:1;3:1 slopes or flatter are preferred. Where mowing will be done, 3:1 slopes or flatter are recommended.
2. Seedbed Preparation
   a. Surface and seepage water should be drained or diverted from the site to prevent drowning or winter killing of the plants.
   b. Stones larger than 4 inches and trash should be removed because they interfere with seeding and future maintenance of the area. Where feasible, the soil should be tilled to a depth of about 4 inches to prepare a seedbed and mix fertilizer and lime into the soil. The seedbed should be left in reasonably firm and smooth condition. The last tillage operation should be performed across the slope whereever practical.
3. Establishing a Stand
   a. Lime and fertilizer should be applied prior to or at the time of seeding and incorporated into the soil kinds and amounts of lime and fertilizer should be based on an evaluation of soil tests. When a soil test is not available, the following minimum amounts should be applied:

   Agricultural limestone, 2 tons per acre or 100lbs. per 1,000 sq.ft.

   Nitrogen(N), 50lbs. per acre or 1.1lbs. per 1,000 sq.ft.

   Phosphate(P205), 100lbs. per acre or 2.2lbs. per 1,000 sq.ft.

   Potash(K20), 100lbs. per acre or 2.2lbs. per 1,000 sq.ft.

   (Note: This is the equivalent of 500lbs. per acre of 10-20-20 fertilizer or 1,000lbs. per acre of 5-10-10.)

   b. Seed should be spread uniformly by the method most appropriate for the site. Methods include broadcasting, drilling and hydroseeding. Where broadcasting is used, cover seed with .25 inch of soil or less, by cultipacking or raking.
   C. Refer to Table7-35 for appropriate seed mixtures and Table7-36 for rates of seeding. All legumes (crownvetch, birdsfoot trefoil, and flatpea) must be inoculated with their specific inoculant.
   d. When seeded areas are mulched, plantings may be made from early spring to early October. When seeded areas are not mulched, plantings should be made from early spring to May 20 or from August 10 to September 1.

4. Mulch
   a. Hay, straw, or other mulch, when needed, should be applied immediately after seeding.
   b. Mulch will be held in place using appropriate techniques from the Best Management Practice for mulching.

5. Maintenance to Establish a Stand
   a. Planted area should be protected from damage by fire, grazing, traffic, and dense weed growth.
   b. Fertilization needs should be determined by onsite inspections. Supplemental fertilizer is usually the key to fully complete the establishment of the stand because most perennial stake 2 to 3 years to become established.
   c. In waterways, channels, or swales where uniform flow conditions are anticipated, occasional mowing may be necessary to control growth of woody vegetation.

STATE OF NEW HAMPSHIRE
RANDALL B. JONES No. 5408
LICENSED PROFESSIONAL ENGINEER

MAP 7, LOT 4 & 4A
NH RTE 27, RAYMOND, N.H.

EROSION & SEDIMENT CONTROL DETAILS

SEVERINO TRUCKING CO., INC.
SAND & GRAVEL PIT EXCAVATION

J/B

JONES & BEACH ENGINEERS, INC.
85 PORTSMOUTH AVENUE
STRATHAM, N.H. 03885
PHONE 772-4746 FAX 772-0227

DRAWING NO. E1

SCALE :	DATE :	FILE :	REV.	SHEET NO.
AS INDICATED	11/25/97	C:\SEVERINO	0	6 OF 6

8302

APPROVED BY THE RAYMOND PLANNING BOARD
ON _____

CERTIFIED BY:

_____

_____

_____

_____

A BERM MUST BE MAINTAINED BETWEEN THE EXCAVATION AND THE DELINEATED WETLANDS.

TAX MAP 7, LOT 9
PAUL F. & MARGARET EDWARDS
PO BOX 478
RAYMOND, NH 03077
BK: 2027 PG: 219

TAX MAP 8, LOT 33
LEISURE VILLAGE ESTATES
15 NORTH STREET
MANCHESTER, NH 03104
BK: 2691 PG: 2609

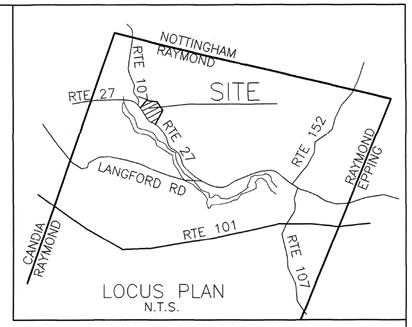
MAGNETIC

LEGEND

- DIRECTION OF GROUND WATER FLOW
- 205 GROUND WATER CONTOURS 4/20/2023
- 220 EXISTING CONTOURS 5/22/2023

NOTES:
1. CURRENT CONDITIONS SHOWN IN GREEN AND ORANGE, OVERLAID UPON APPROVED EXCAVATION PLAN BY JONES AND BEACH ENGINEERS MAY OF 1998.
2. PLAN PRODUCED BY SEVERINO TRUCKING CO., INC.
4. ZONING: LOT IS SPLIT BETWEEN COMMERCIAL (C1) AND RESIDENTIAL/AGRICULTURAL (B).
5. NO BLASTING IS TO BE DONE ON PROJECT.
6. DUST CONTROL WHEN REQUIRED, SHALL BE PERFORMED BY USE OF A WATER TRUCK.
7. NO ONSITE FUELING OF EQUIPMENT AND TRUCKS.
9. NO BUILDINGS, STRUCTURES OR SEPTIC SYSTEMS EXIST WITHIN 200 FEET OF SITE BOUNDARY.

TAX MAP 7, LOT 4B
IVY VERGOS, & GEORGE & EVELYN BAKER
8 HILLCREST DRIVE
ROCHESTER, NH 03867



LOCUS PLAN
N.T.S.

OPERATION NOTES:

1. PROPOSED EXCAVATION LOCATED WITHIN A STRATIFIED–DRIFT AQUIFER AS SHOWN ON MAPS WITHIN USGS OPEN–FILE REPORT 92–95 STRATIFIED–DRIFT AQUIFERS IN THE EXETER, LAMPREY, AND OYSTER RIVER BASINS. (SEE WELL #6)
2. AREA OF PROPOSED EXCAVATION: 13.27 ACRES, 578,000 SQUARE FEET
3. VOLUME OF MATERIAL: 220,000 CUBIC YARDS
4. PROJECT DURATION: ~~5 YEARS~~ **20 Years**
5. ESTIMATED SEASONAL HIGH WATER TABLE DETERMINED TO BE AT ELEVATION 198' AT TEST HOLE #1. PROPOSED EXCAVATION IS A MINIMUM OF 13 FEET ABOVE ESHWT.
6. TRUCK TRAFFIC:
   A. TRIPS PER DAY: 100 LOADS PER DAY MAX.
   B. TYPE OF VEHICLES: 1–15 TRUCKS PER DAY
   C. WEIGHT LIMITS: 10 WHEELERS – 65,000 LBS.
   TRAILER DUMP BODIES – 100,000 LBS.
   TRI–AXLE – 72,000 LBS.
7. HOURS OF OPERATION: WAIVER GRANTED JUNE 4, 1998.
   MACHINERY: 7:00AM – 5:00PM
   MATERIAL REMOVAL: 7:00AM – 5:00PM
   SATURDAY: 7:00AM – 12:00 (NOON)
8. PERIMETER OF THE PIT SHALL BE SUITABLY POSTED WITH SIGNS AT A MAXIMUM 100 FOOT INTERVAL, NOTIFYING TRESPASSERS OF POTENTIAL DANGER.
9. THE PROPOSED MINIMUM DISTANCE FROM EXCAVATION TO A SIDE PROPERTY LINE IS 67 FEET. THE PROPOSED MINIMUM DISTANCE FROM EXCAVATION TO A FRONT RIGHT–OF–WAY LINE IS 50 FEET.
10. SITE SPECIFIC PERMIT #WPS–5001, JANUARY 28, 1998. **AMENDED MARCH 9, 2010**
11. TRUCKS WILL NOT QUE ONTO ROUTE 27 AND ARE NOT ALLOWED TO BACK OUT ONTO THE HIGHWAY. TRUCKS ARE ALSO PROHIBITED FROM BACKING FROM ROUTE 27 ONTO THE SITE.
12. **MONITORING WELLS INSTALLED 4/6/2023**

LEGEND

- TP — TEST PITS
- HIGH CONTOURS
- LOW CONTOURS
- PROPERTY LINES
- WETLAND BOUNDARIES
- EDGE OF WOODS/TREE LINE
- 216 — PROPOSED CONTOURS

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

OWNER OF RECORD
BRANCH BROOK HOLDINGS, LLC.
PO BOX 202
CANDIA, N.H.
BOOK 3919 - PAGE 1313

OPERATOR
SEVERINO TRUCKING CO., INC.
RONALD A. SEVERINO, PRESIDENT
PO BOX 202
CANDIA N.H.
PHONE (603)483–2133
FAX (603)483–2998

TOTAL AREA
22.37 AC

PROPOSED EXCAVATION
13.2 AC

REVISED: 5/23/2023

Monitoring Well 3
N: 204134.567 ft
E: 1104141.318 ft
Top of Well: 230.804 ft
Grnd Elev: 228.104 ft
Grnd Water Elv: 207.14

Monitoring Well 1
N: 204151.911 ft
E: 1103729.107 ft
Top of Well: 224.202 ft
Grnd Elev: 221.502 ft
Grnd Water Elv: 205.71

Monitoring Well 2
N: 203583.611 ft
E: 1103986.350 ft
Top of Well: 234.000 ft
Grnd Elev: 231.000 ft
Grnd Water Elv: 204.95

Monitoring Well 4
N: 203697.669 ft
E: 1103570.662 ft
Top of Well: 228.635 ft
Grnd Elev: 225.935 ft
Grnd Water Elv: 204.89

T.B.M: 224.202 ft
Spike in Helmlock

BKG-1 BKG-2 BKG-3 BKG-4 BKG-5 BKG-6 BKG-7 BKG-8

TS-1 TS-2 TS-3

TP1 TP2 TP3 TP4 TP5

OBSERVATION WELL #1
OBSERVATION WELL #2
OBSERVATION WELL #3

EXISTING SILTFENCE

Loam Stockpile
MAP 7, LOT 4

Pavement Stockpile

Loam Stockpile

MAP 7, LOT 4A

A BERM MUST BE MAINTAINED BETWEEN THE EXCAVATION AND THE DELINEATED WETLANDS.

APPROXIMATE WETLANDS BOUNDARIES

LIMIT OF EXCAVATION (TYP)

CONCRETE & REFUSE DISPOSAL AREA

CROSS SECTION ALIGNMENT #12
SEE SHEETS X–1 & X–2

ESTIMATED SEASONAL HIGH WATER TABLE @ ELEVATION 198'

RECLAIMED AREA

CONCRETE RUBBLE REFUSE FILL AREA

EXISTING TREES TO REMAIN

SWALE

METAL GATE

HIGHWAY FENCE

PROPOSED SIGN W/PIT OPERATOR AND PERMIT NUMBER

PROPOSED EDGE OF EXCAVATION

EXISTING BUILDINGS TO BE RAZED

STOCKADE FENCE BARRIERS TO BE INSTALLED BETWEEN INITIATION OF EXCAVATION PERMIT AND EVENTUAL RAZING OF BUILDINGS.

50' PAVED APRON

EDGE OF WETLAND

℄ RTE 27

AL1 AL2 AL3 AL4 AL5 AL6 AL7 AL8 AL9 AL10 AL11 AL12

MAP 7 LOTS 4 & 4A
NH RTE 27, RAYMOND, N.H.

SEVERINO TRUCKING CO., INC.
PROPOSED EXCAVATION PLAN
NH RTE 27, RAYMOND, N.H

JONES & BEACH ENGINEERS, INC.
85 PORTSMOUTH AVENUE
STRATHAM, N.H. 03885
PHONE 772–4746 FAX 772–0227

RANDALL R. JONES No. 8408 — STATE OF NEW HAMPSHIRE — LICENSED PROFESSIONAL ENGINEER

J/B

DRAWING NO. IC1

SCALE :	DATE :	FILE :	REV.	SHEET NO.
1" = 50'	11/25/97	SEVERINO		__ OF __

2036.1

Planning Board Minutes
May 25 2023 @ 8:20 PM
Media Center Raymond High School
45 Harriman Hill Road, Raymond, NH 03077

Planning Board Members Present:
Patricia Bridgeo
Jim McLeod
Gretchen Gott
Dee Luszcz
Bob McDonald
Dave Rice

Planning Board Members Absent:

Staff Present:
None

Pledge of Allegiance: Recited by all in attendance.

Meeting called to order:
The meeting started at approximately 8:20 pm.

Work Session:

Mrs. Luszcz said that on all site plan and subdivision regulations she would like to see the application and project name on all communications, documents, and pages as a footnote with the page number of total number of pages. Obviously the Master Plan has to be way up on the list of things that need to be done.

Ms. Bridgeo said she has asked for hard copies of all the documents and she still doesn't have some of these.

Mr. McLeod suggested that all of the members of the Board get new binders.

Mrs. Luszcz said that the TRC's rules and procedures have to be a top priority because it plays a major role in most of the applications that come before the Board.

Ms. Gott suggested having a joint meeting with TRC in a work session.

Mr. McLeod said there should be a preamble that is added to the TRC rules and procedure where they read off a statement at the opening of all of their meetings that clarifies what their role is and what the applicant can expect from the TRC, including the fact that the TRC is not a judiciary Board. That it is only an advisory Board. Mr. McLeod said he would write a preamble for the TRC rules and procedures.

Ms. Bridgeo said she would look into the scope and process of what we would expect them to be doing.

Mrs. Luszcz said she would table the whole master plan discussion until Maddie gets back.

Mr. Mcleod discussed the earth excavation regulations he said there is a big gap and what it is, is that that if you're an excavation site, which means that you're there is commercial taking of material off a site that you need to have that in place to get your blasting permit. But if you have an incidental excavation, then you don't need an excavation permit to get your blasting permit. And I think that that is an oversight that needs to be filled in I believe, and this is what I want to poll the board. If you agree with me is that we should update our Earth excavation regulations. So that if there is any blasting that you are required to get an excavation permit before any blasting, whether it's incidental or not ancillary.

Ms. Gott asked are we legally allowed to require if it's an ancillary use?

Mr. McLeod said they would vet it through legal.
Mr. Mcleod asked if the Board agreed he would work on that to make sure it is ironclad before it goes to legal.

Ms. Gott did say that they should explore it and the Board seemed to concur with a nod of heads.

Mrs. Luszcz discussed the waiver application form and improvements that could be made to the form including a signature and date line.

Public Comment:

Kathy McDonald suggested having a date stamp when the application comes in.

Work session continued:

Mrs. Luszcz stated that a video of the meetings is to be preserved for 5 years but that RCTV has stated that they only keep the videos for 1 year and they are under no obligation to keep them. I know we have a budget for the planning board. With your approval, I'd like to entertain some direction into finding a provider that could download all of our meetings and put them on a server so that we do have them for historical purposes. And I don't know the ins and outs of that, but what are your thoughts. Select Board already approved it, and Mrs. Luszcz is not in favor of a thumb drive. Mrs. Luszcz thinks that the Board should use some of the budget to preserve the videos for the 5 years as voted on. It is not getting done so they should do it themselves. Mrs. Luszcz said she would like to hire an outside person to do it. Somebody who does this for a living that will sit there, and they'll take the download it when it's posted onto our website and put it on a different server that then the town can just put the link and people can l

want everyone to be able to see it for the full five years. It shouldn't be in somebody's possession. And it shouldn't be on a disk or a thumb drive. It should be somewhere where it is backed up and everybody has access to it. That's the direction I'm going in anyway.

Mr. McDonald said they should look at the site plan regulations and in their next work session come back with any issues they have.

A suggestion was made about signing drawing that the act of signing the drawing will be on the agenda and the COA's will be in the packets.

Mr. McDonald asked one of the one of the other questions that I have is whose responsibility is it to get the mylar once it's signed? Recorded? And how do we know? Is there anything like in looking at the rules, it seems to be silent on that on once a plan is signed in his had been approved by the board and it meets all the criteria, but it never gets recorded. Where I think we should look at the rule on that as well, to make sure that who is going to do that recording, and it wasn't recorded. I think that's an important step that I've personally checked on projects. Over the years that haven't been recorded.

Ms. Gott said then is not officially done.

Mr. McLeod said so in concert with that was that the building inspector was before the board last year and said that they would like a separate copy of those conditions of approval. So that he didn't have to refer to the original drawing when he's going on site to see if they're following the conditions. So that should probably be part of that process.

Mrs. Luszcz would like to see the conditions of approval that were voted on in the next packet as a review document.

Mr. McLeod suggested having a sheet of paper for the building inspector that serves that purpose and the next week vote to send it to the building inspector if it is correct. What I would suggest is that once that is approved, that that can be added to our agenda in that format. So now that we've approved it, that's the format to add to our agenda where we check off whether it's been completed or not. And then once all of the ones for a particular project had been completed then that could disappear so that way, every other problem Look also has a running tally of where these projects are in compliance.

Ms. Gott agreed to work on subdivision regulations and Mr. Rice said he would start doing some research on how wide driveways have to be under subdivisions.

Mrs. Luszcz said she would come back with a rewrite on that and just point out that 1.200 meeting date, time and place doesn't accurately depict how we meet because we don't meet every Thursday. And she thinks they should specify the holidays that were closed.

Approval of Minutes:

May 4, 2023

Ms. Bridgeo requested that timestamp 2:15:00 to 2:20:20 be added to the May 4, 2023, minutes verbatim.

Motion:
Ms. Bridgeo made a motion to table the minutes of May 4, 2023, until the Board has the added language verbatim.
Mr. Rice seconded the motion.

The motion passed unanimously with a vote of 6 in favor, 0 opposed and 0 abstentions.

May 11, 2023

Ms. Gott requested on page 3 on line 97 that the word ‘what’ be added.

Also, on page 8 line 262 Ms. Gott requested that the word ‘be’ to be added.

On page 11 lines 361 to 363 Ms. Gott said that Sunday morning is not a normal time to have committee meetings. And specifically said that the location needs to be in a public place such as the school. Ms. Gott specifically said it needs to be in a public place. Even though you said it was open to the public. It needs to be in a public place such as a school that's accessible to all.

Mr. McLeod said it was an incorrect statement.

Ms. Gott would like the statement included int the minutes.

Ms. Bridgeo requested that the statement be checked against the actual meeting and included verbatim.

Mr. McLeod wanted an email received from NH Municipal Association included to show that it is perfectly acceptable to have a meeting outside of public building and a school to be attached to the May 11, 2023, minutes.

Ms. Bridgeo requested that on page 5 line 175 Eric Poulin be identified as ONYX.

Motion:
Ms. Bridgeo made a motion to table the minutes of May 11, 2023, until the Board has the added language verbatim and the adjustments for the applicants listed prior to their public hearing.
Mr. McLeod seconded the motion.

The motion passed unanimously with a vote of 6 in favor, 0 opposed and 0 abstentions.

Board Updates:

Ms. Gott requested a date to schedule Ethics Training for all.

Mr. McLeod said he disagreed with Ms. Gott about the need for all members to attend the training. That the code says it must be made *available* to all.

Mrs. Luszcz said she would table the discussion until they get legal advice.

Mrs. Luszcz thanked everyone that came out to the Town Meeting on Monday night.

Ms. Bridgeo asked how to better communication to Cons Com and vice versa.

Motion:
Mr. McLeod made a motion to vote to send him as a representative to Cons Com and make a list of what they need from the Planning Board, so the applicants know what they have to give them and when.
Ms. Bridgeo seconded the motion.

Discussion:
Mr. McLeod said he thinks we need to coordinate a little bit with the committee, and then bring it back to the board so that everybody knows what we discussed, and we can adjudicate it from there.

The motion passed unanimously with a vote of 6 in favor, 0 opposed and 0 abstentions.

Adjournment:

Motion:
Mr. McLeod made a motion to adjourn the meeting.
Mr. Rice seconded the motion.
The motion passed unanimously with a vote of 6 in favor, 0 opposed and 0 abstentions.

Chair Luszcz adjourned the meeting at approximate 9:48 pm.

The video of this meeting is to be preserved as part of the permanent and official record.

Respectfully submitted,

Jill A. Vadeboncoeur