

## **MEMO TO FILE**

**FROM:** Patrick Wood, Town Engineer  
**SUBJECT:** November 2023 Winchendon Landfill Site Observation

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On November 30, 2023 the Department of Public Works (DPW) visited the Winchendon Landfill to monitor the grading activities of the Landfill Closure Project. The monitoring was previously performed by Tighe and Bond until October of 2023. Refer to Tighe and Bond site reports for previous investigations and overview of the project.

### **History of Permit**

The Massachusetts Department of Environmental Protection (MassDEP) permitted the acceptance of up to 415,000 cubic yards of COMM 97-001 material as defined by MassDEP Policy. A Minor Modification of Existing Landfill was approved by MassDEP May 5, 2023 which increased the permitted maximum volume to 480,000 cubic yards.

In October 2022, test pits were performed delineating the extents of the landfill further than originally anticipated and a request for a major permit modification in May of 2023 was submitted to MassDEP. On October 20, 2023 the major permit modification was authorized allowing the facility to accept up to 755,000 cubic yards (1,434,500 tons). The modification also increased the daily load limit of 64 loads per day to 75 loads per day.

In accordance with Condition 13 of the Landfill Closure Agreement between the Town and the Operator, the Site was reviewed for compliance with the following documents:

- Corrective Action Design permit approval issued on September 23, 2020 and Corrective Action Design Plans prepared by Langdon Environmental, LLC, dated June 2019 and revised October 2019.
- Initial Operations Plan, by Langdon Environmental, LLC, dated January 2021, revised to include temporary rip rap settling area.

### **Landfill Operations**

General landfill operations appeared to comply with the Corrective Action Design. While on site, material was placed and spread by bulldozer in the general area within the limits designated for initial placement. The area of activity is shown below. While on site, operators were placing grading and shaping material to construct the proposed north stormwater basin.

As reported in previous reports from Tighe and Bond, the previous clearing to the north and east, which appears to be within the original limit of work, has not expanded and remains within the limit of work.

The Operator indicated that they have received final approval from MassDEP to expand operations and that the permit is in hand. The DPW has not received a copy of the permit, however the Operator has stated that it authorized the acceptance of an additional 65,000 cubic yards of material, bringing the total permitted volume to 1,434,500 cubic yards.

### **Stormwater and Erosion**

As reported in past reports, stormwater conveyances have been constructed per the Initial Operations Plan as revised to include a temporary rip rap settling area. This plan was submitted to MassDEP under a Major Permit Modification (BWP SQ 11). The temporary stormwater basin, catch basin, and swale have been removed and the proposed north stormwater basin was being constructed. The temporary settling area remained.

The area at the base of the southwestern slope (see photo), which have seen repeated issues due to erosion from the placed materials, was previously built up with a berm to slow the flow of runoff before it reached the erosion control. Rills are forming leading to the bermed area and currently the area is collecting silt and standing water.

Vegetation on the hydroseeded slopes has grown in inconsistently and there are several areas where erosion has caused rills and gullies to form. Erosion control has been installed around the areas that have been cleared on the north and east of the site.

### **Material Accepted**

DPW has reviewed the attached Net Daily Summary Report received for the month of November, which details the total tonnage and number of loads of material received by the facility. As indicated in the attached Table 1, a total of 33,456.05 tons of material was received in November, which results in 490,608.30 tons remaining of the total 1,434,500 tons permitted. Based on a utilization factor of 1.9 tons per cubic yard of soil, the total volume received in November was 17,608 cubic yards, which results in 258,215 cubic yards remaining. This represents about 34% of the total permitted volume remaining based on the updated BWP SW 11AC permit.

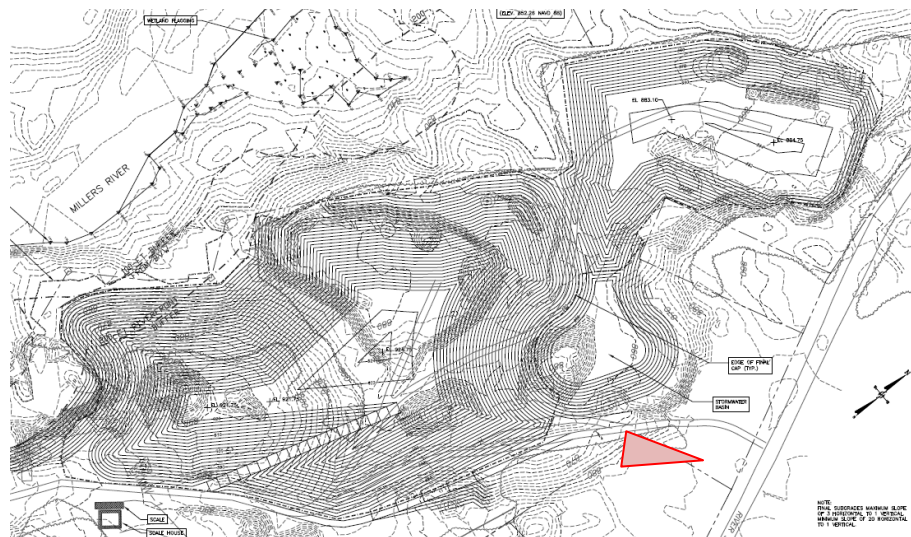
The DEP permit limits the number of loads received to 75 per day without special Town permission. There were no days in November in which the number of loads received was greater than 75.

Enclosed are photographs summarizing the items observed during the site visit, and Table 1, which notes the monthly summary of material accepted.

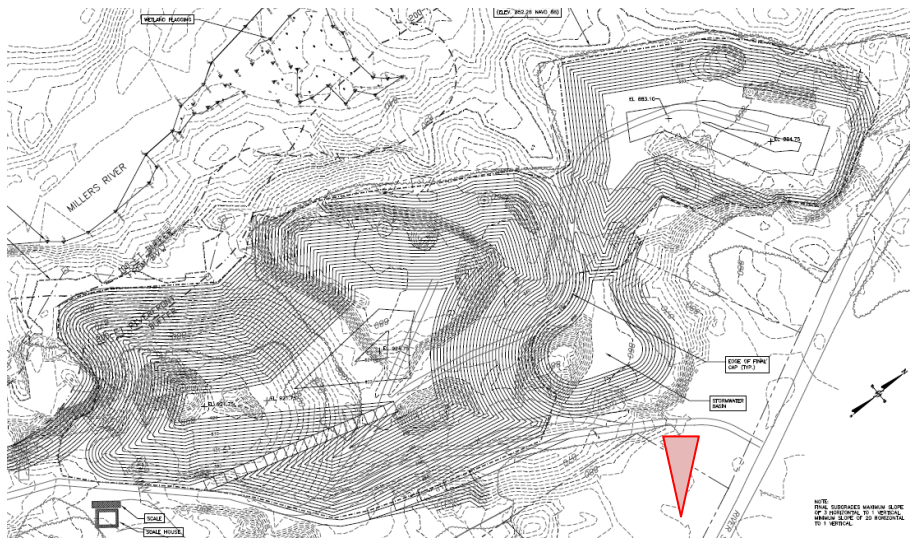
Table 1 – Monthly Summary Report

JOB NO	SHEET	2	OF	2
CLIENT SUBJECT	Winchendon DPW Mabardy Landfill Monthly Material Summary			DATE 12/15/2023

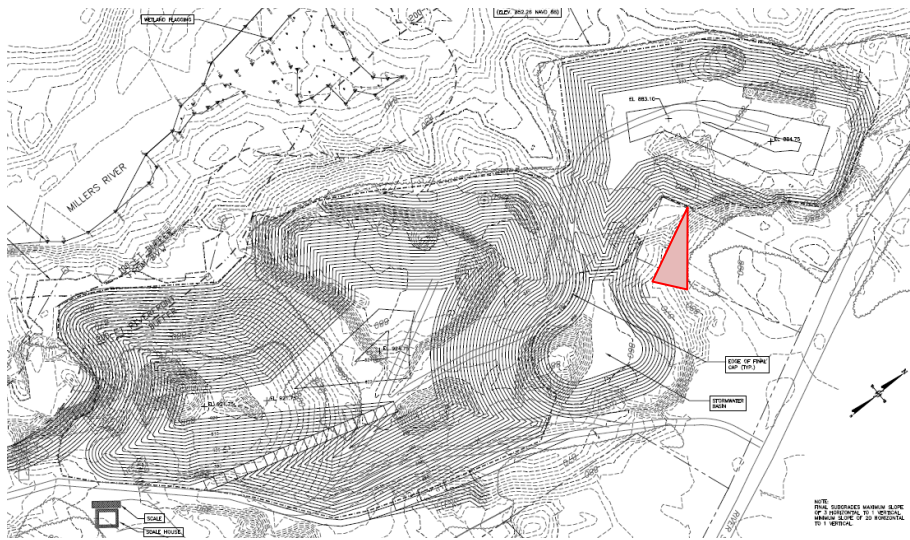
Table 1 - Cumulative Material Received		
<u>Month- Year</u>	<u>Material Received (tons)</u>	<u>Material Received (cubic yards)</u>
Before Oct-23	910,435.65	479,176.66
Nov - 23	33,456.05	17,608.00
<b>Total</b>	<b>943,891.70</b>	<b>496,784.66</b>
<b>Permit Limit</b>	<b>1,434,500.00</b>	<b>755,000.00</b>
<b>Remaining</b>	<b>490,608.30</b>	<b>258,215.34</b>



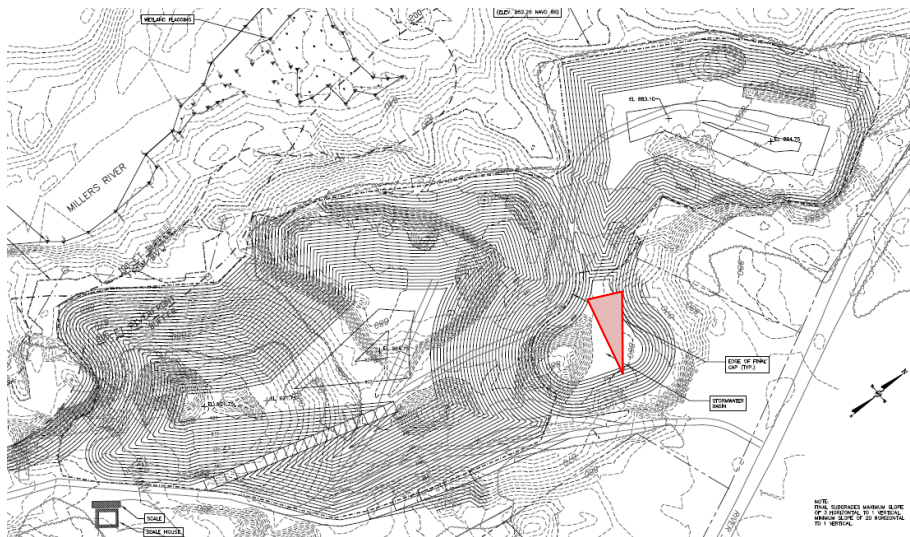




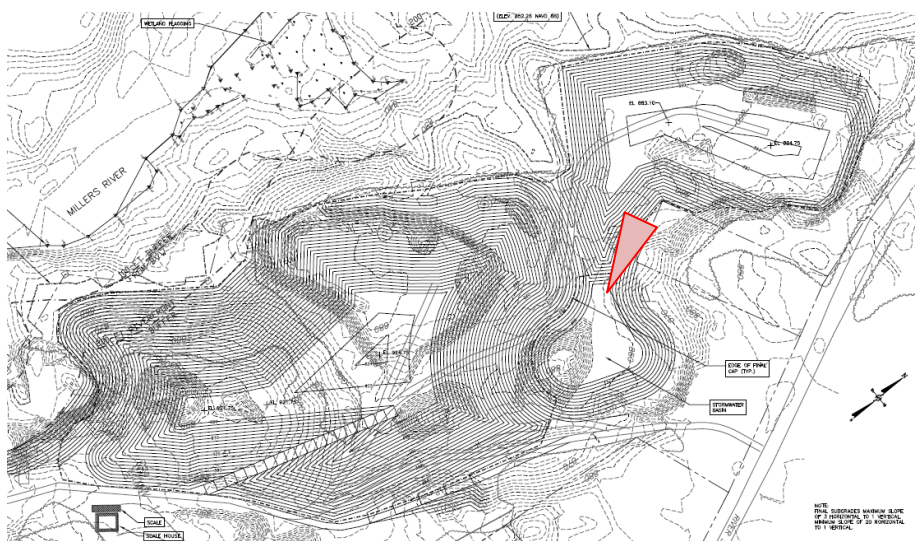




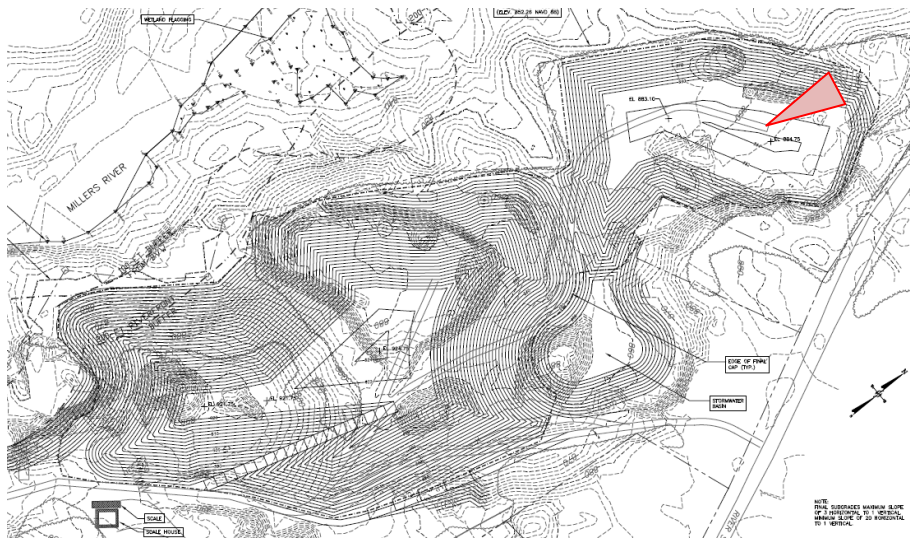








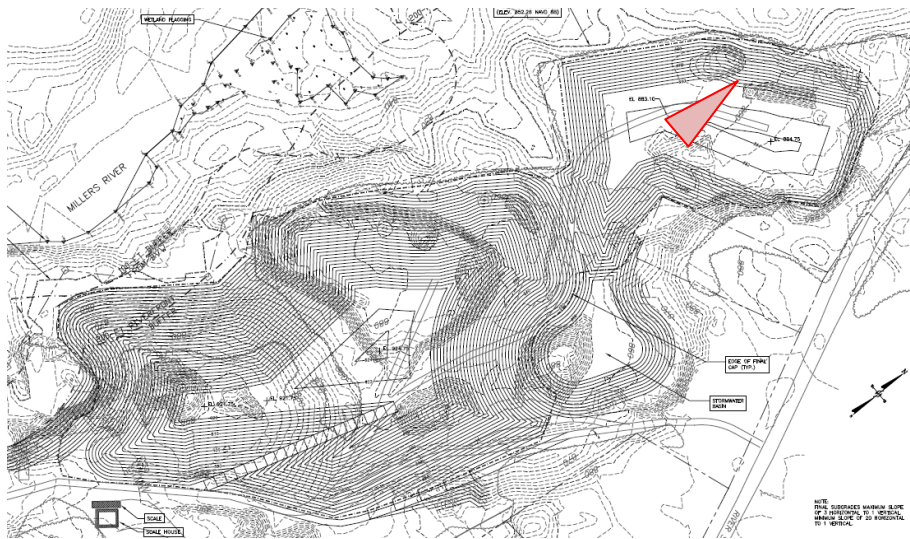








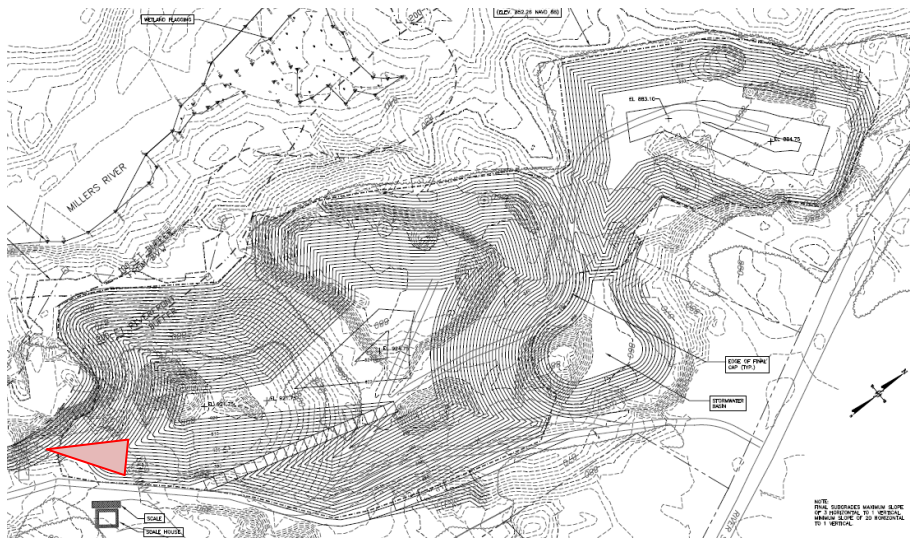




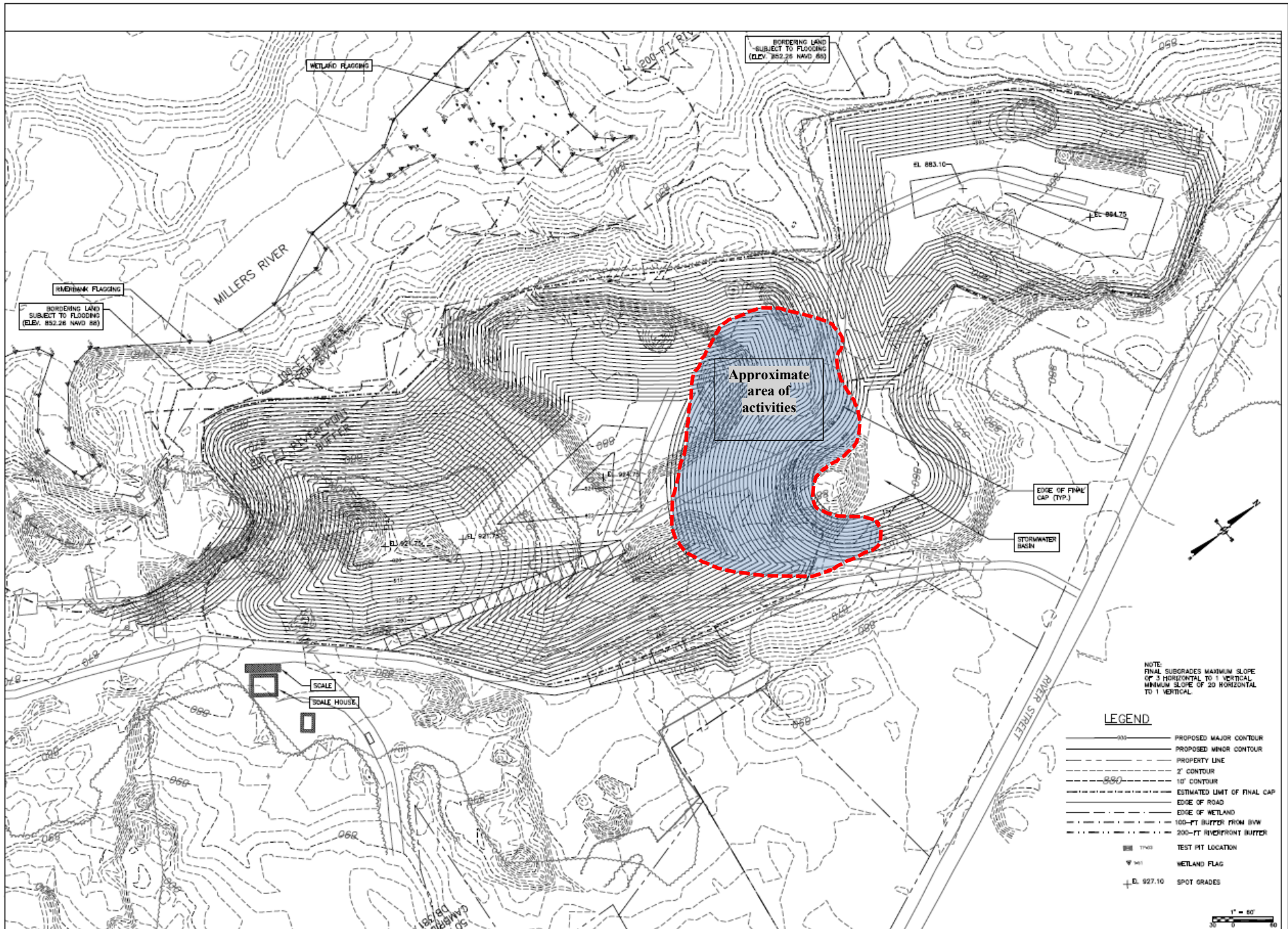












NO.	DATE	BY	REVISIONS
1	1/12/18	AS	COMPARISON FLOOD STORM DRAINAGE REVISIONS
2	1/12/18	AS	RESPONSE TO CONSENT/NO COMMENT
3	1/12/18	AS	
4	1/12/18	AS	
5	1/12/18	AS	
6	1/12/18	AS	
7	1/12/18	AS	
8	1/12/18	AS	
9	1/12/18	AS	
10	1/12/18	AS	



**Langdon Environmental LLC**  
 40 HEDGEMAN ST., SUITE 302, PO BOX 511  
 PORTSMOUTH, NH 03802  
 (603) 875-3883

Prep: May 2018  
 Design: AEC  
 Draw: AEC  
 Check: JWH  
 Scale: AS NOTED  
 Date: JUNE 2018

**SUBGRADE PLAN**  
 FORMER MABARDY LANDFILL  
 RIVER STREET, WINCHENDON, MA

Proj. No.  
 Dwg. No.

C-3