

Winchendon Landfill Site Observation – November 19, 2021

To: Brian Croteau, DPW Director
FROM: Aaron Sabbs, PE, Tighe & Bond
COPY: Tracy Murphy, Director of Planning and Development & Acting Planning Agent
Alex Fagnand, PE, Tighe & Bond
DATE: December 14, 2021

On November 19, 2021, Aaron Sabbs from Tighe & Bond visited the Winchendon Landfill (hereby referred to as the "Site") to monitor the grading and shaping activities of the Landfill Closure Project. The Site, which is located at 580 River Street, is the former Mabardy Landfill. It is owned and operated by W.L. French Corporation (Operator) as the Winchendon Landfill. As part of the Landfill Closure Project, the Massachusetts Department of Environmental Protection (MassDEP) has permitted the acceptance of up to 415,000 cubic yards of COMM 97-001 material as defined by MassDEP Policy. 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 best practices and the Corrective Action Design. While on site, material was placed and spread by bulldozer in the general area of Section C-C of Sheet C-5 of the Corrective Action Design, within the limits designated for initial placement.

Stormwater and Erosion

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). A swale, including check dams, has been constructed from the temporary stormwater basin to the temporary settling area. Overflow from the temporary stormwater basin runs to the settling area with a PVC culvert running beneath the access road. The swale from the northern section of the site to the temporary stormwater basin has not yet been constructed.

The swale had previously experienced significant sediment buildup and damage from heavy rainfall. The Operator has rebuilt portions of the swale and check dams, including installing additional rip rap to remedy the damage. The swale will require continued maintenance and cleaning, as sediment is still visible within the swale and settling area.

Erosion control was present along the northern, southern, and western edges of the site. There were no noted deficiencies in the erosion control.

Material Accepted

Tighe & Bond 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 Table 1 below, a total of 30,332.79 tons of material was received in November, which results in 521,921.12 tons remaining of the total 788,500 tons permitted. Based on a utilization factor of 1.9 tons per cubic yard of soil, the total volume received in November was 15,964.63 cubic yards, which results in 274,695.33 cubic yards remaining.

Table 1 - Cumulative Material Received

Month-Year	Material Received (tons)	Material Received (cubic yards)
Before Feb-21	12,764.15	6,717.97
Feb-21	32,224.28	16,960.15
Mar-21	26,702.78	14,054.09
Apr-21	22,376.79	11,777.26
May-21	26,096.58	13,735.04
Jun-21	24,834.48	13,070.78
Jul-21	16,002.93	8,422.59
Aug-21	13,708.12	7,214.80
Sep-21	32,160.64	16,926.65
Oct-21	29,375.34	15,460.71
Nov-21	30,332.79	15,964.63
Total	266,578.88	140,304.67
Remaining	521,921.12	274,695.33

The DEP permit limits the number of loads received to 64 per day without special Town permission. There were no days in November in which the number of loads received was greater than 64.

Enclosed are photographs summarizing the items observed during the site visit.

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Photo 1 – Eastern slope and access road.



Photo 2 – Temporary stormwater overflow catch basin.



Photo 3 – Swale and check dams between temporary stormwater basin and temporary rip rap settling area.



Photo 4 – Stormwater culvert under access road.



Photo 5 - Temporary rip rap settling area.



Photo 6 - Material placed and graded in the northern area of the site.



Photo 7 – Material placed and graded in the northern area of the site.



Photo 8 – Representative view of erosion control on the western limits of the Site.



Photo 9 – Southwestern slope and erosion control.



Photo 10 – Grading at monitoring well.



Photo 11 – Existing slope and erosion control at the southern limits of the Site.

580 River Street, LLC

Gross/Tare/Net Daily Summary

Order: by Job Name Type: All
From 11/01/2021 to 11/30/2021

11/01/2021

Job Name	<u>Loads</u>	<u>Net</u>	<u>Net Tons</u>
5 Washington Street (T20-0270-1-B)	2	85,520	42.76
66 Galen St Watertown MSR soil (T21-0114-1-M)	14	1,030,340	515.17
Ragon Inst Cambridge Group I-1 I-2 (T21-0147-1-M)	2	146,280	73.14
Residences at 1800 Boylston (T21-0087-1-B)	10	724,580	362.29
11/01/2021 Totals	28	1,986,720	993.36

11/02/2021

Job Name	<u>Loads</u>	<u>Net</u>	<u>Net Tons</u>
250 Centre St JP (T21-0136-1-B)	12	890,740	445.37
66 Galen St Watertown MSR soil (T21-0114-1-M)	14	1,092,580	546.29
Boynton Yards Phase 1B Utilities (C20-016-1-B)	14	977,920	488.96
Brookline Catch Basin Cleanings (T20-0169-1-M)	6	398,100	199.05
Marchese - 85 Walnut St Watertown3-36944 (T21-0202-2-B)	10	756,960	378.48
Ragon Inst Cambridge Group I-1 I-2 (T21-0147-1-M)	4	295,460	147.73
11/02/2021 Totals	60	4,411,760	2,205.88

11/03/2021

Job Name	<u>Loads</u>	<u>Net</u>	<u>Net Tons</u>
250 Centre St JP (T21-0136-1-B)	5	330,140	165.07
5 Washington Street (T20-0270-1-B)	4	190,540	95.27
99 Washington Street, Melrose (T21-0112-1-M)	5	355,760	177.88
Boynton Yards Phase 1B Utilities (C20-016-1-B)	9	651,280	325.64
Marchese - 85 Walnut St Watertown3-36944 (T21-0202-2-B)	10	667,260	333.63
Ragon Inst Cambridge Group I-1 I-2 (T21-0147-1-M)	5	397,840	198.92
Residences at 1800 Boylston (T21-0087-1-B)	7	514,660	257.33
Wellesley Catch Basin Cleanings (T21-0152-1-M)	8	510,840	255.42
11/03/2021 Totals	53	3,618,320	1,809.16

11/04/2021

Job Name	<u>Loads</u>	<u>Net</u>	<u>Net Tons</u>
15 Bennett St, Somerville, MA (T21-0018-1-B)	4	265,580	132.79
250 Centre St JP (T21-0136-1-B)	12	875,160	437.58
5 Washington Street (T20-0270-1-B)	2	107,680	53.84
66 Galen St Watertown MSR soil (T21-0114-1-M)	8	588,140	294.07
Lowell High School (C20-023-3-B)	1	72,800	36.40
Marchese - 85 Walnut St Watertown3-36944 (T21-0202-2-B)	2	145,160	72.58
Ragon Inst Cambridge Group I-1 I-2 (T21-0147-1-M)	6	451,640	225.82
Residences at 1800 Boylston (T21-0087-1-B)	12	871,680	435.84
Wellesley Catch Basin Cleanings (T21-0152-1-M)	12	754,440	377.22
11/04/2021 Totals	59	4,132,280	2,066.14

11/05/2021

Job Name	<u>Loads</u>	<u>Net</u>	<u>Net Tons</u>
5 Washington Street (T20-0270-1-B)	4	224,120	112.06
Ragon Inst Cambridge Group I-1 I-2 (T21-0147-1-M)	6	432,160	216.08

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580 River Street, LLC

Gross/Tare/Net Daily Summary

Order: by Job Name Type: All
From 11/01/2021 to 11/30/2021

Residences at 1800 Boylston (T21-0087-1-B)	9	658,960	329.48
Wellesley Catch Basin Cleanings (T21-0152-1-M)	2	122,140	61.07
11/05/2021 Totals	21	1,437,380	718.69

11/08/2021

Job Name	<u>Loads</u>	<u>Net</u>	<u>Net Tons</u>
5 Washington Street (T20-0270-2-M)	4	218,880	109.44
AOTC Talcott Ave (T20-0345-1-B)	4	224,140	112.07
Boynton Yards Building 2 (C20-016-1-M)	17	1,192,660	596.33
Boynton Yards Phase 1B Utilities (C20-016-1-B)	13	939,200	469.60
Ragon Inst Cambridge Group I-1 I-2 (T21-0147-1-M)	6	432,300	216.15
11/08/2021 Totals	44	3,007,180	1,503.59

11/09/2021

Job Name	<u>Loads</u>	<u>Net</u>	<u>Net Tons</u>
5 Washington Street (T20-0270-1-B)	2	84,600	42.30
66 Galen St Watertown MSR soil (T21-0114-1-M)	23	1,559,660	779.83
AOTC Talcott Ave (T20-0345-1-B)	6	323,660	161.83
Ragon Inst Cambridge Group I-1 I-2 (T21-0147-1-M)	6	440,120	220.06
Residences at 1800 Boylston (T21-0087-1-B)	8	628,660	314.33
11/09/2021 Totals	45	3,036,700	1,518.35

11/10/2021

Job Name	<u>Loads</u>	<u>Net</u>	<u>Net Tons</u>
66 Galen St Watertown MSR soil (T21-0114-1-M)	15	1,023,940	511.97
Annisquam River Bridge (T20-0006-2-M)	2	100,360	50.18
AOTC Talcott Ave (T20-0345-1-B)	4	202,400	101.20
Belmont Street Sweepings (T19-0108-1-M)	1	30,520	15.26
Cambridge Crossing Parcel U (T21-0117-1-B)	4	253,160	126.58
Hancock Village Drive (C20-006-1-M)	12	864,480	432.24
Mansfield Catch Basin Cleanings (T21-0299-1-M)	6	409,400	204.70
Ragon Inst Cambridge Group I-1 I-2 (T21-0147-1-M)	4	313,860	156.93
Seaport Parcel L5 (T21-0228-1-M)	4	312,980	156.49
11/10/2021 Totals	52	3,511,100	1,755.55

11/12/2021

Job Name	<u>Loads</u>	<u>Net</u>	<u>Net Tons</u>
15 Bennett St, Somerville, MA (T21-0018-1-B)	2	147,240	73.62
66 Galen St Watertown MSR soil (T21-0114-1-M)	9	636,120	318.06
Annisquam River Bridge (T20-0006-2-M)	2	88,960	44.48
Cambridge Crossing Parcel U (T21-0117-1-B)	16	1,156,360	578.18
Hancock Village Drive (C20-006-1-M)	12	842,060	421.03
Ragon Inst Cambridge Group I-1 I-2 (T21-0147-1-M)	4	299,500	149.75
Residences at 1800 Boylston (T21-0087-1-B)	12	875,660	437.83
Seaport Parcel L5 (T21-0228-1-M)	6	427,020	213.51
11/12/2021 Totals	63	4,472,920	2,236.46

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Gross/Tare/Net Daily Summary

Order: by Job Name Type: All
From 11/01/2021 to 11/30/2021

11/15/2021

Job Name	<u>Loads</u>	<u>Net</u>	<u>Net Tons</u>
101 Smith Place (C21-006-1-M)	2	69,180	34.59
66 Galen St Watertown MSR soil (T21-0114-1-M)	22	1,419,560	709.78
Bridge Street Reconstruction (T21-0305-1-B)	10	689,060	344.53
Cambridge Crossing Parcel U (T21-0117-1-B)	13	932,000	466.00
Ragon Inst Cambridge Group I-1 I-2 (T21-0147-1-M)	4	299,740	149.87
Seaport Parcel L5 (T21-0228-1-M)	2	170,640	85.32
11/15/2021 Totals	53	3,580,180	1,790.09

11/16/2021

Job Name	<u>Loads</u>	<u>Net</u>	<u>Net Tons</u>
66 Galen St Watertown MSR soil (T21-0114-1-M)	14	947,260	473.63
99 Washington Street, Melrose (T21-0112-1-M)	8	561,000	280.50
AOTC Talcott Ave (T20-0345-1-B)	1	46,040	23.02
Boynton Yards Phase 1B Utilities (C20-016-1-B)	4	270,140	135.07
Bridge Street Reconstruction (T21-0305-1-B)	9	619,280	309.64
Cambridge Crossing Parcel U (T21-0117-1-B)	10	688,740	344.37
Natick Catch Basin Cleanings (T21-0104-1-M)	8	540,560	270.28
Ragon Inst Cambridge Group I-1 I-2 (T21-0147-1-M)	4	308,000	154.00
Seaport Parcel L5 (T21-0228-1-M)	4	299,900	149.95
11/16/2021 Totals	62	4,280,920	2,140.46

11/17/2021

Job Name	<u>Loads</u>	<u>Net</u>	<u>Net Tons</u>
99 Washington Street, Melrose (T21-0112-1-M)	4	291,740	145.87
AOTC Talcott Ave (T20-0345-1-B)	4	211,600	105.80
Boynton Yards Phase 1B Utilities (C20-016-1-B)	4	256,040	128.02
Bridge Street Reconstruction (T21-0305-1-B)	10	667,520	333.76
Cambridge Crossing Parcel U (T21-0117-1-B)	12	894,420	447.21
Ragon Inst Cambridge Group I-1 I-2 (T21-0147-1-M)	8	609,980	304.99
Residences at 1800 Boylston (T21-0087-1-B)	8	580,580	290.29
Seaport Parcel L5 (T21-0228-1-M)	4	303,100	151.55
11/17/2021 Totals	54	3,814,980	1,907.49

11/18/2021

Job Name	<u>Loads</u>	<u>Net</u>	<u>Net Tons</u>
99 Washington Street, Melrose (T21-0112-1-M)	1	75,140	37.57
AOTC Talcott Ave (T20-0345-1-B)	6	335,140	167.57
Bridge Street Reconstruction (T21-0305-1-B)	6	411,520	205.76
Bridgewater Catch Basin Cleanings (T21-0264-1-M)	8	533,220	266.61
Cambridge Crossing Parcel U (T21-0117-1-B)	10	740,200	370.10
Ragon Inst Cambridge Group I-1 I-2 (T21-0147-1-M)	4	307,720	153.86
Residences at 1800 Boylston (T21-0087-1-B)	8	569,720	284.86
Seaport Parcel L5 (T21-0228-1-B)	6	461,940	230.97
Waltham CB 167 Lexington St Waltham (T20-0155-1-M)	2	129,940	64.97

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580 River Street, LLC

Gross/Tare/Net Daily Summary

Order: by Job Name Type: All
From 11/01/2021 to 11/30/2021

11/18/2021 Totals 51 3,564,540 1,782.27

11/19/2021

Job Name	Loads	Net	Net Tons
15 Bennett St, Somerville, MA (T21-0018-1-B)	2	134,660	67.33
66 Galen St Watertown MSR soil (T21-0114-1-M)	6	415,620	207.81
AOTC Talcott Ave (T20-0345-1-B)	1	70,700	35.35
Bridgewater Catch Basin Cleanings (T21-0264-1-M)	4	282,160	141.08
Cambridge Crossing Parcel U (T21-0117-1-B)	12	824,640	412.32
Newton Catch Basin Cleanings (T19-0312-1-M)	9	611,740	305.87
Ragon Inst Cambridge Group I-1 I-2 (T21-0147-1-M)	8	578,560	289.28
Seaport Parcel L5 (T21-0228-1-B)	4	300,360	150.18
11/19/2021 Totals	46	3,218,440	1,609.22

11/22/2021

Job Name	Loads	Net	Net Tons
15 Bennett St, Somerville, MA (T21-0018-1-B)	7	471,500	235.75
362 Rindge Ave, Cambridge (T21-0300-1-B)	2	64,920	32.46
Bridge Street Reconstruction (T21-0305-1-B)	13	888,760	444.38
Ragon Inst Cambridge Group I-1 I-2 (T21-0147-1-M)	10	765,600	382.80
Seaport Parcel L5 (T21-0228-1-B)	6	482,160	241.08
11/22/2021 Totals	38	2,672,940	1,336.47

11/23/2021

Job Name	Loads	Net	Net Tons
717-721 American Legion Hwy, Roslindale (T21-0337-1-M)	8	409,160	204.58
Belmont Street Sweepings (T19-0108-1-M)	2	78,440	39.22
Logan Airport Terminals B-C (T21-0323-1-M)	10	692,060	346.03
Ragon Inst Cambridge Group I-1 I-2 (T21-0147-1-M)	5	376,100	188.05
Residences at 1800 Boylston (T21-0087-1-B)	11	793,080	396.54
Seaport Parcel L5 (T21-0228-1-B)	6	440,020	220.01
11/23/2021 Totals	42	2,788,860	1,394.43

11/24/2021

Job Name	Loads	Net	Net Tons
717-721 American Legion Hwy, Roslindale (T21-0337-1-M)	16	836,280	418.14
GLX (T18-0354-2-M)	2	129,190	64.60
Ragon Inst Cambridge Group I-1 I-2 (T21-0147-1-M)	4	294,800	147.40
Seaport Parcel L5 (T21-0228-1-B)	8	546,040	273.02
11/24/2021 Totals	30	1,806,310	903.16

11/26/2021

Job Name	Loads	Net	Net Tons
717-721 American Legion Hwy, Roslindale (T21-0337-1-M)	18	870,040	435.02
Ragon Inst Cambridge Group I-1 I-2 (T21-0147-1-M)	1	72,600	36.30

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580 River Street, LLC

Gross/Tare/Net Daily Summary

Order: by Job Name Type: All
From 11/01/2021 to 11/30/2021

11/26/2021 Totals	19	942,640	471.32
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11/29/2021

Job Name	<u>Loads</u>	<u>Net</u>	<u>Net Tons</u>
250 Centre St JP (T21-0136-1-B)	9	585,800	292.90
99 Washington Street, Melrose (T21-0112-1-M)	3	206,280	103.14
Cambridge Crossing Parcel U (T21-0117-1-B)	11	756,260	378.13
GLX (T18-0354-2-M)	1	44,480	22.24
Seaport Parcel L5 (T21-0228-1-B)	6	464,200	232.10
11/29/2021 Totals	30	2,057,020	1,028.51

11/30/2021

Job Name	<u>Loads</u>	<u>Net</u>	<u>Net Tons</u>
20 Overland St Boston (T21-0316-1-M)	2	35,460	17.73
717-721 American Legion Hwy, Roslindale (T21-0337-1-M)	12	592,480	296.24
Boynton Yards Phase 1B Utilities (C20-016-1-B)	2	131,960	65.98
Cambridge Crossing Parcel U (T21-0117-1-B)	12	836,020	418.01
Seaport Parcel L5 (T21-0228-1-B)	10	728,460	364.23
11/30/2021 Totals	38	2,324,380	1,162.19

	<u>Loads</u>	<u>Net</u>	<u>Net Tons</u>
Grand Total	888	60,665,570	30,332.79