

**DES Waste Management Division
29 Hazen Drive; PO Box 95
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**Work Plan for Sampling of Water Supply Wells
and Provision of Alternate Water**

**Saint-Gobain Performance Plastics Facility
701 Daniel Webster Highway
Merrimack, New Hampshire 03054
NHDES Site No.: 199712055
Project Number: 36430**

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Work Plan for Sampling of Water Supply Wells and Provision of Alternate Water

SAINT-GOBAIN PERFORMANCE PLASTICS

MERRIMACK, NEW HAMPSHIRE

Submitted to:

New Hampshire Department of Environmental Services

Hazardous Waste Remediation Bureau
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September 30, 2019

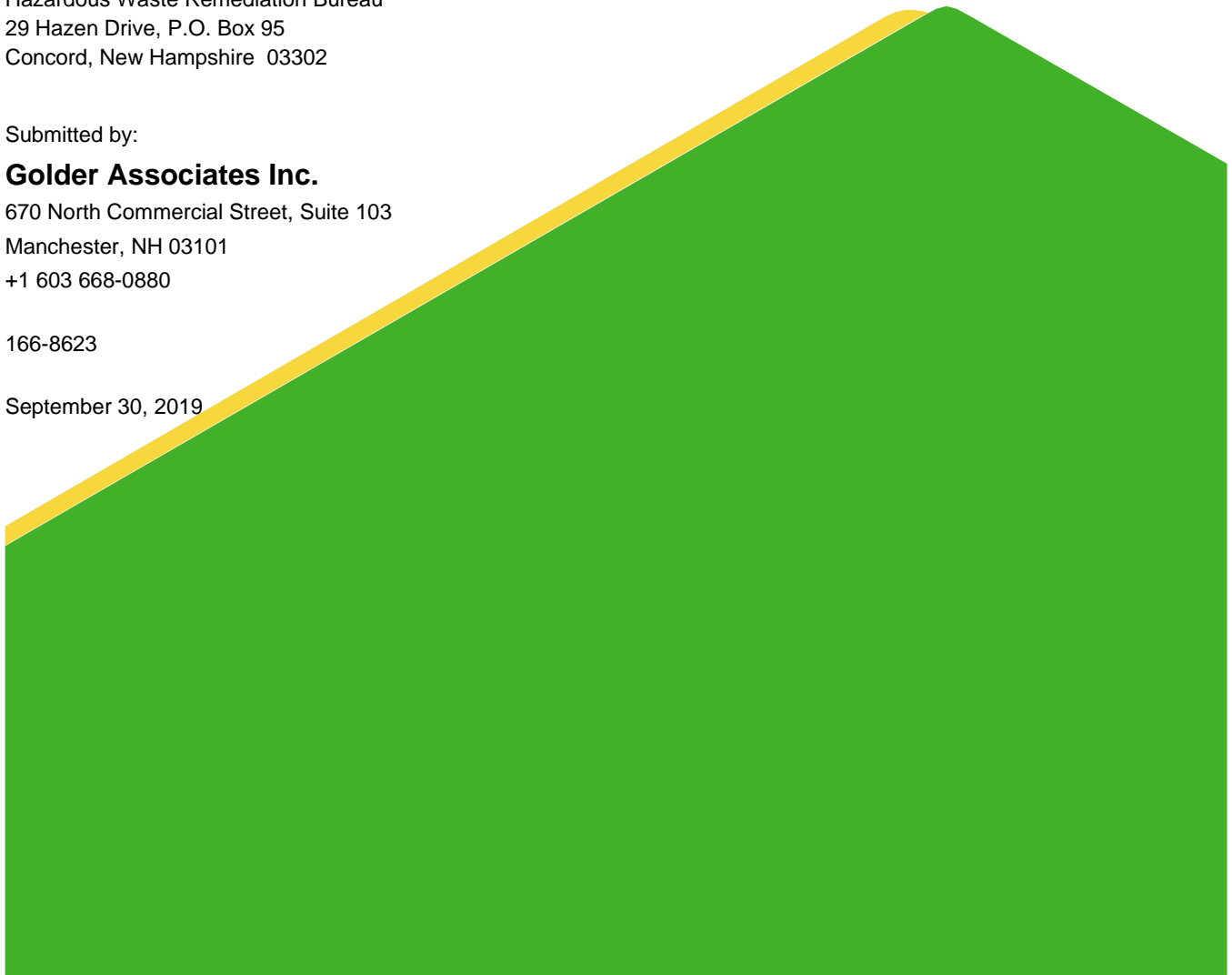


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1.0 INTRODUCTION

On behalf of Saint-Gobain Performance Plastics (SGPP), Golder Associates Inc. (Golder) is submitting this 2019 Work Plan for Sampling of Water Supply Wells and Provision of Alternate Water to the New Hampshire Department of Environmental Services (NHDES).

NHDES recently revised the Ambient Groundwater Quality Standards (AGQS) for per- and polyfluorinated alkyl substances (PFAS) in drinking water. The following PFAS AGQS are effective September 30, 2019 (“new PFAS AGQS”):

- Perfluorooctanoic acid, or perfluorooctanoate (PFOA) - 12 nanograms per liter (ng/L)
- for Perfluorooctane sulfonic acid, or perfluorooctane sulfonate (PFOS) - 15 ng/L
- Perfluorononanoic acid, or perfluorononanoate (PFNA) - 11 ng/L
- Perfluorohexane sulfonic acid, or perfluorohexane sulfonate (PFHxS) - 18 ng/L

In a letter dated July 25, 2019 (NHDES, 2019), NHDES requested “submission of a work plan to identify water supply wells that exceed the four new AGQS due to impacts by releases from the Saint-Gobain facility, and to provide an alternate source of potable water that meets applicable federal and state water quality criteria where the new standards are exceeded”. This work plan is submitted in response to this request.

1.1 Pre-GMZ and Outer Boundary

NHDES established a preliminary groundwater management zone (pre-GMZ) and an “Outer Boundary” in the 2018 Consent Decree¹ (the Consent Decree) as shown on Figure 1. This Work Plan specifies sampling of wells within the Outer Boundary.

There are known PFAS sources other than the SGPP facility within and near the pre-GMZ and between the pre-GMZ and the Outer Boundary. PFAS detections within the Outer Boundary may be attributable to sources other than the SGPP facility.

1.2 Work Plan Objectives

The scope of work presented herein has been developed to meet the following objectives, consistent with NHDES’ July 2019 letter (NHDES, 2019):

- Implement a sampling plan to identify water supply² wells within the Consent Decree Outer Boundary with PFAS concentrations above the new PFAS AGQS.
- Provide interim bottled water to occupants of properties where past sampling of the properties water supply has identified PFAS concentrations above the new PFAS AGQS and to provide interim bottled water to occupants at properties with where sampling conducted under this work plan identifies PFAS concentrations above the new PFAS AGQS

This work plan also includes:

¹ State of New Hampshire, Dept. of Environmental Services v. Saint-Gobain Performance Plastics Corporation, March 20, 2018.

² For the purposes of this work plan, the term “water supply wells” includes residential/private wells and transient non-community public water supplies.

- A schedule for implementation of the sampling program
- A schedule for provision of interim bottled water
- A proposed timeline to identify and implement long-term alternate water solutions.
- Reporting and notification requirements

2.0 EVALUATION OF EXISTING DATA

Golder obtained information on land use type, existing public water distribution networks, and groundwater quality to identify and prioritize residential water supply wells and/or areas within the Outer Boundary for sampling and further evaluation. These activities also represent a preliminary potential receptor survey. The evaluations described in the following sections will be revised and finalized as additional information is obtained and/or becomes available.

2.1 Tax Parcels, Locations of Water Lines and Point-of-Entry-Treatment (POET) Systems

Golder obtained information from New Hampshire Geographically Referenced Analysis and Information Transfer System (NH GRANIT) to identify tax parcels within the Outer Boundary as shown on Figure 2.

SGPP has provided, or intends to provide, alternate water through the connection to water lines or installation of POET systems to the parcels listed in Exhibits A, B, D and H of the Consent Decree and illustrated on Figure 2. Sampling will not be conducted at these parcels under this work plan.

To identify areas where private residential wells may be in use within the Outer Boundary, Golder relied on information provided from municipalities or private water supply companies (Pennichuck Water Works and Merrimack Village District). Golder relied on water line information from NHDES (e.g., NHDES, 2016) in areas where other sources of information were not available. Water line service areas are identified on Figure 2. Golder used this data to preliminarily identify parcels that are likely connected to public water supplies as described in more detail in Section 4.

2.2 Analytical Data

Since 2016, NHDES has completed sampling of residential water supply wells in the vicinity of the SGPP facility. Golder relied on a September 4, 2019 NHDES data transmittal of residential water supply well analytical results for this Work Plan.

SGPP has completed residential well sampling in the vicinity of the pre-GMZ for the SGPP facility under following two work plans:

- Work Plan for Residential Well Sampling (Golder, 2017). The objective of this work plan was to provide for routine monitoring of wells with PFOA concentrations between 35 and 70 ppt (50% to 100% of the 2017 AGQS for PFOA). Results of these investigations were transmitted to NHDES in 2018 (Golder, 2018)
- 2019 Work Plan for Interim Groundwater Monitoring – Preliminary Groundwater Management Zone (2019 pre-GMZ Groundwater Monitoring Work Plan, Golder, 2019). This work plan specified interim groundwater monitoring at locations within and around the perimeter of the pre-GMZ in Bedford, Merrimack, Londonderry, and Litchfield New Hampshire.

Analytical data for residential water supply wells sampled by NHDES and Golder are presented on Figure 3A (PFOA), 3B (PFNA), Figure 3C (PFHxS) and Figure 3D (PFOS). The well symbols on these figures are colored to indicate where PFAS have been detected above the new PFAS AGQS. As illustrated on these figures:

- PFOA (Figure 3A) has been detected above the AGQS (12 ppt) in samples collected from a number of water supply wells within the Outer Boundary.
- PFNA (Figure 3B) has not been detected above the AGQS in samples collected from water supply wells within the Outer Boundary.
- PFHxS (Figure 4C) and PFOS (Figure 4D) have been sporadically detected above the AGQS in samples collected from water supply wells within the Outer Boundary.

Significant concentrations of sulfonates (e.g., PFOS, PFHxS, and/or perfluorobutane sulfonate (PFBS)) have been detected in several residential water supply wells in the SGPP vicinity. However, the detections of sulfonates in residential water supply wells are spatially sporadic and are not consistent with a release via an air deposition pathway. These sulfonate detections at concentrations near or above PFOA concentrations in residential wells are not consistent with a release from the SGPP Merrimack, NH facility air emissions and are indicative of a separate and unrelated source of PFAS near these wells. This Work Plan prioritizes provision of bottled water and sampling in areas of PFOA detections.

2.3 Other PFAS Sources

Golder reviewed publicly available information to identify other PFAS sources in or near the Outer Boundary. While numerous other PFAS sources likely exist within and near the Outer Boundary, Golder focused on the following three common PFAS sources:

- Fire Stations – Golder identified five active municipal fire stations in the vicinity of the Outer Boundary. Golder used a 2,500 ft radius around each fire station to conservatively estimate of the area of potential PFAS impact to groundwater. Golder’s review of investigations of PFAS impacts in at fire stations elsewhere in New Hampshire indicates that residential water supply wells have been impacted at concentrations above the AGQS at distances of over 2,500 feet from the fire stations (i.e., Stratham, Kingston, and Windham Fire Stations). The extent of impacts relative to the new PFAS AGQS has not been delineated at the five identified municipal fire stations. Therefore, the areas within the 2,500 ft. radius around each fire station are excluded from this Work Plan.
- Landfills –Golder identified two municipal landfills in the vicinity of the Outer Boundary. Golder used a 2,000 ft offset from the Merrimack and Hudson Landfills’ GMZs as a conservative estimate of the area of potential PFAS impact to groundwater. The GMZs for these landfills were established prior to adoption of the new PFAS AGQS. Therefore, the areas within the 2,000 ft. of the GMZs for these landfills are excluded from this Work Plan.
- Airports –Manchester Airport has acknowledged the discharge of aqueous film-forming foam at multiple locations at the airport (Manchester-Boston Regional Airport, 2016). Potential for groundwater impacts from the Airport relative to the new PFAS AGQS values has not been delineated. Therefore, the area between Manchester Airport and Merrimack River is excluded from this Work Plan.

Other potential sources are shown on Figure 4.

3.0 IDENTIFICATION OF PROPERTIES FOR INTERIM ALTERNATE WATER

SGPP will provide bottled water for drinking and cooking as an interim source of alternate water to occupants of properties/parcels³ where past sampling has identified PFOA concentrations above the new AGQS. Bottled water will be used as an interim alternate water provision until:

- There is sufficient data to support and implement provision of permanent alternate water (e.g., point of use treatment system [POU], POET, or water line extension), or
- There is sufficient data to demonstrate that PFOA concentrations at a given location are below and are expected to stay below the new PFOA AGQS

SGPP will not provide bottled water to the following properties:

- Properties located partially or wholly within the zones around other PFAS sources identified in Section 2.3, and/or
- Properties with sulfonate concentrations near or above PFOA concentrations. As described in Section 2.3, this is not consistent with a release from the SGPP Merrimack, NH facility air emissions and are indicative of a PFAS source unrelated to the SGPP facility.

Properties to be included in provision of interim alternate water are shown on Figures 6A through 6F and listed in Table 1. Properties currently being sampled under the 2019 pre-GMZ Groundwater Monitoring Work Plan (Golder, 2019) that will be offered bottled water under this Work Plan will no longer be sampled.

4.0 IDENTIFICATION OF PROPERTIES FOR SAMPLING

A sequenced approach comprising multiple sampling events will be used to sample residential water supply wells within the Outer Boundary. This following describes the criteria used to identify properties for the initial sampling event, and how properties will be identified for subsequent sampling events.

4.1 Identification of Properties for Initial Sampling

Golder utilized the following screening approach to identify properties for sampling during the initial sampling event. Properties within the Outer Boundary that do not meet these initial screening criteria will be considered in subsequent sampling events as described in Section 4.2.

- **Distance from existing water lines:** Golder assumes that properties located greater than 150 feet from an existing water line are not connected to the water line, and therefore are likely served by a water supply well located on that property. These properties are assigned a higher priority for sampling. Properties within 150 feet of an existing water line are preliminarily assumed to be connected to a water line and are assigned a lower sampling priority. Figure 5 identifies properties within 150 of a water line. These assumptions will be further evaluated as a part of a complete receptor survey as discussed in Section 2.0.

³ The terms “property” and “parcel” are considered equivalent in this work plan.

- **Proximity to Wells with PFOA Detections:** Golder identified all properties within 1,000 feet of a residential water supply well with an existing detection of PFOA equal to or greater than 24 ppt (2x the new PFOA AGQS) and assigned these wells a higher priority for sampling.
- **Distance from Wells Previously Sampled:** Golder identified a subset of properties in areas greater than 2,000 feet from previously sampled residential water supply wells. These properties are assigned a higher priority to provide data in areas of relatively lower sample density.
- **Proximity to the pre-GMZ Boundary:** Golder assigned a higher priority to properties within 2,000 feet of the SGPP pre-GMZ boundary (i.e., closer to the SGPP Merrimack Facility).
- **Proximity to other PFAS Sources:** Golder did not include properties in the vicinity of the other PFAS sources described in Section 2.3. These properties will be further considered following completion of investigation/delineation activities at those Sites.

Based on this prioritization, Golder identified the properties to be included in initial sampling event as shown on Figures 7A through 7G and listed in Table 2. Properties selected to provide data in areas of relatively lower sample density are shown on Figure 8. Figures 7A through 7G include a color flood for properties that have been selected for initial sampling but are listed as unoccupied by town tax records. Golder will submit a sampling request to the properties listed as unoccupied to confirm occupancy status directly from property owners.

4.2 Identification of Properties for Subsequent Sampling

Following the initial phase of sampling, Golder will identify additional properties for sampling based on the results of the initial phase of sampling. Subsequent sampling will be prioritized following the same general approach described above and as new information is obtained from the receptor survey. Additional sampling will be proposed in the Semi-Monthly Status Reports submitted to NHDES as described in Section 6.0.

5.0 SAMPLING METHODOLOGY, ANALYTICAL PARAMETERS AND QUALITY ASSURANCE/QUALITY CONTROL

This section identifies the sampling methodologies, analytical parameters and quality assurance/quality control (QA/QC) requirements and identifies reporting procedures.

5.1 Sampling Methodology and Field Documentation

Sample collection will be performed following the standard operating procedures (SOPs) included in Appendices A through C. Golder will record temperature and field observations (including but not limited to color, odor, clarity, foam, and sheen) for each sample.

5.2 Analytical Parameters

Samples will be submitted to a qualified laboratory under chain-of-custody protocols for analysis of PFAS compounds as listed in Table 3. SGPP may add additional parameters if monitoring results indicate that localized PFAS sources or other water quality concerns are present. Addition or removal of parameters will be communicated to NHDES.

5.3 Quality Assurance/Quality Control

QA/QC samples will be collected in accordance with the sampling procedure included as Appendix C Field blanks, trip blanks and duplicates will be analyzed once for every 20 primary samples.

6.0 REPORTING

If results indicate concentration(s) above an AGQS in a sample collected from a well that is being used as a drinking water source, SGPP will:

- Provide notification to property owners within five business days of receipt of analytical data in accordance with the procedures identified during access agreement negotiations. Consistent with Section 3.0, the notification will include information on how to obtain interim alternate water (bottled water)
- NHDES and town health officers will be copied on the property owner notifications.

If results are below the AGQS, the unvalidated analytical laboratory reports will be transmitted to the property owner(s) within 45 days of the sampling date. NHDES Waste Management Division and town health departments will be copied on transmittals of analytical results to the property owner(s).

For the duration of the sampling under this Work Plan or an amended version of this work plan, SGPP will provide the following status reports to NHDES:

- Interim Status Reports (ISRs) every 60 days, with the first report due December 15, 2019; assuming NHDES approval of this work plan by October 15, 2019. These ISRs will include:
 - A tabular summary of and map showing PFAS results received, up to the date 15 days before the ISR submittal
 - Sampling Plan Addenda to identify additional properties/wells to be sampled and to provide updates on the preliminary receptor survey, as appropriate
 - Identification of properties eligible for interim alternate water based on results generated since the last ISR status report.
 - Identification of areas for evaluation of long-term alternate water solutions, where appropriate
- Bi-weekly tracking spreadsheets will be submitted to NHDES every other week with the first report due within two weeks of submittal of the first access agreements to property owners.

7.0 NEXT STEPS AND SCHEDULE

Following work plan approval from NHDES, SGPP will complete the following activities:

- Letters indicating eligibility for Interim Alternate Water (bottled water) were transmitted to the properties listed on Table 1 on September 30, 2019.
- Within 30 days of work plan approval initiate contact with and provide access agreements to owners of properties identified for the initial phase of sampling.
- Coordinate sampling of wells within 60 days of access agreement acceptance by the property owner(s).

8.0 CLOSING

The undersigned are the principal authors of this Report. Should you have any questions regarding this document, please contact Ross Bennett at (603) 668-0880.

Golder Associates Inc.



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Senior Consultant



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JTF/RWB/APTM/drb

9.0 REFERENCES

Consent Decree, State of New Hampshire, Dept. of Environmental Services v. Saint-Gobain Performance Plastics Corporation. March 20, 2018.

Golder, 2017. Work Plan for Residential Well Sampling. December 22, 2017

Golder, 2018. Work Plan for Residential Well Sampling - Response to Comments. November 6, 2018

Golder, 2019. 2019 Work Plan for Interim Groundwater Monitoring - Preliminary Groundwater Management Zone. March 14, 2019.

Manchester-Boston Regional Airport, 2016. Letter re: Request for Information. May 27, 2016.

NHDES, 2016. Southern NH PFC Investigation. Updated: August 4, 2016.

<https://www.des.nh.gov/organization/commissioner/documents/pfoa-samplingarea-poster-20160804.pdf>

NHDES, 2019. Letter Re: Request for Water Supply Well Sampling Work Plan and Plan for Provision of Alternate Water. July 25, 2019

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TABLES

Table 1: Properties Identified for Interim Alternate Water
Saint Gobain Performance Plastics
Merrimack, New Hampshire

LOCATION #	TOWN	ADDRESS		MAP	BLOCK	LOT
		STREET NUMBER	STREET NAME			
1	Bedford	18	BACK RIVER RD	22	37	
2	Bedford	64	BACK RIVER RD	25	61	
3	Bedford	142	BACK RIVER RD	25	78	
4	Bedford	157	BACK RIVER RD	34	62	1
5	Bedford	16	BARRINGTON DR	33	14	1
6	Bedford	17	BARRINGTON DR	33	14	4
7	Bedford	18	BARRINGTON DR	33	14	2
8	Bedford	36	CAMP (ALLEN) RD	34	19	
9	Bedford	1	CHECKERBERRY LN	33	4	38
10	Bedford	214	COUNTY RD	25	23	1
11	Bedford	1	DEVONSHIRE WAY	33	11	1
12	Bedford	4	DEVONSHIRE WAY	33	11	4
13	Bedford	5	DEVONSHIRE WAY	33	11	3
14	Bedford	15	HARROD LN	33	69	25
15	Bedford	19	HARROD LN	33	69	26
16	Bedford	23	HARROD LN	33	54	4
17	Bedford	30	HARROD LN	33	54	7
18	Bedford	31	HARROD LN	34	58	9
19	Bedford	35	HARROD LN	34	58	8
20	Bedford	1	HORIZON DR	33	4	36
21	Bedford	15	HORIZON DR	38	4	47
22	Bedford	26	HORIZON DR	38	4	28
23	Bedford	27	HORIZON DR	38	4	22
24	Bedford	32	HORIZON DR	38	4	27
25	Bedford	35	HORIZON DR	38	4	21
26	Bedford	60	HORIZON DR	38	4	26
27	Bedford	27	JUNIPER DR	33	7	9
28	Bedford	34	JUNIPER DR	33	7	6
29	Bedford	11	KAROLINA LN	25	60	6
30	Bedford	12	KAROLINA LN	25	60	11
31	Bedford	21	LEDGEWOOD RD	32	50	16
32	Bedford	305	LIBERTY HILL RD	38	13	
33	Bedford	26	MEADOWCREST DR	33	9	54
34	Bedford	37	MEADOWCREST DR	33	9	30
35	Bedford	46	MEADOWCREST DR	33	9	51
36	Bedford	65	MEADOWCREST DR	33	9	42
37	Bedford	75	MEADOWCREST DR	33	9	44
38	Bedford	81	MEETINGHOUSE RD	21	28	
39	Bedford	6	OLDE ENGLISH RD	33	17	13
40	Bedford	10	OLDE ENGLISH RD	33	17	12
41	Bedford	16	OLDE ENGLISH RD	33	17	10
42	Bedford	40	OLDE ENGLISH RD	33	46	5
43	Bedford	31	SANDY POND PKWY	34	23	26
44	Bedford	59	SEBBINS POND DR	25	48	
45	Bedford	90	SEBBINS POND DR	34	24	16
46	Bedford	15	SMITH RD	33	4	37
47	Bedford	36	SMITH RD	33	7	10
48	Bedford	39	SMITH RD	33	4	34
49	Bedford	78	SMITH RD	38	69	21
50	Bedford	82	SMITH RD	37	69	20

Table 1: Properties Identified for Interim Alternate Water
Saint Gobain Performance Plastics
Merrimack, New Hampshire

LOCATION #	TOWN	ADDRESS		MAP	BLOCK	LOT
		STREET NUMBER	STREET NAME			
51	Bedford	2	TAVISTOCK DR	33	9	38
52	Bedford	10	TAVISTOCK DR	33	9	37
53	Bedford	5	VERONICA DR	38	69	2
54	Bedford	9	VERONICA DR	38	69	3
55	Bedford	17	VERONICA DR	38	69	4
56	Bedford	18	VERONICA DR	37	69	16
57	Bedford	35	VERONICA DR	38	69	5
58	Bedford	39	VERONICA DR	38	69	6
59	Bedford	87	WALLACE RD	32	10	2
60	Bedford	11	WEST WIND DR	33	46	15
61	Bedford	7	WOBURN ABBEY DR	33	9	56
62	Bedford	10	WOBURN ABBEY DR	33	9	78
63	Bedford	11	WOBURN ABBEY DR	33	9	57
64	Bedford	13	WOBURN ABBEY DR	33	9	58
65	Bedford	15	WOBURN ABBEY DR	33	9	59
66	Bedford	19	WOBURN ABBEY DR	33	9	60
67	Bedford	25	WOBURN ABBEY DR	33	9	61
68	Bedford	30	WOBURN ABBEY DR	33	9	71
69	Bedford	33	WOBURN ABBEY DR	33	9	63
70	Bedford	37	WOBURN ABBEY DR	33	9	64
71	Bedford	39	WOBURN ABBEY DR	33	9	65
72	Bedford	43	WOBURN ABBEY DR	33	9	68
73	Litchfield	4	BUTTONBUSH LN	14		82
74	Litchfield	206	CHARLES BANCROFT HWY	9		15
75	Litchfield	19	COLONIAL DR	17		18
76	Litchfield	15	DEERWOOD DR	14		89
77	Litchfield	21B	PINECREST RD	9		34
78	Litchfield	103	PINECREST RD	14		2
79	Litchfield	15	SHIRLEY WY	16		23
80	Londonderry	3	ANGELO LN	5	52	6
81	Londonderry	19	JUSTIN CR	11	58	29
82	Londonderry	8	KIMBALL RD	11	28	1
83	Londonderry	114	LITCHFIELD RD	11	26	1/2
84	Londonderry	12	MAYFLOWER DR	8	6	68
85	Londonderry	12	MONT VERNON DR	5	73	7
86	Londonderry	19	PINE HOLLOW DR	8	9	19
87	Londonderry	7	POPLAR CR	8	6	83
88	Londonderry	12	QUINCY RD	5	2	18
89	Londonderry	3	RAINTREE DR	8	6	27
90	Londonderry	3	RED FERN CR	8	9	25
91	Londonderry	7	ROLLING RIDGE RD	8	9	44
92	Londonderry	39	ROLLING RIDGE RD	11	58	65
93	Londonderry	25	SEVERANCE DR	2	4	38
94	Londonderry	10	TYLER DR	5	21	4
95	Londonderry	15	TYLER DR	5	21	18
96	Londonderry	111	WEST RD	5	9	23
97	Merrimack	61	BEDFORD RD	06D		93
98	Merrimack	159	BEDFORD RD	07C		10
99	Merrimack	35	BRENDA LN	07C		35
100	Merrimack	36	BRENDA LN	07C		32

Table 1: Properties Identified for Interim Alternate Water
Saint Gobain Performance Plastics
Merrimack, New Hampshire

LOCATION #	TOWN	ADDRESS		MAP	BLOCK	LOT
		STREET NUMBER	STREET NAME			
101	Merrimack	37	BRENDA LN	07C		34
102	Merrimack	38	BRENDA LN	07C		33
103	Merrimack	4	CHADSWORTH CT	07C		5
104	Merrimack	15	CHRISTOPHER RD	04C		271
105	Merrimack	496	DW HWY	D-3		111
106	Merrimack	8	EDWARD LN	05C		654
107	Merrimack	4	FALCON DR	06C		320
108	Merrimack	40	JOPPA RD	05C		237
109	Merrimack	90	JOPPA RD	06C		385
110	Merrimack	9	KLARA DR	06C		607
111	Merrimack	32	PEARSON RD	07D		3
112	Merrimack	38	PEARSON RD	07D		3
113	Merrimack	40	PEARSON RD	07D		4
114	Merrimack	52	PEARSON RD	07D		5
115	Merrimack	59	PEARSON RD	07D		11
116	Merrimack	20	WEST CHAMBERLAIN RD	04C		277
117	Merrimack	6	WHISPERING PINES LN	06C		162
118	Merrimack	10	WILDCAT FALLS RD	04C		263
119	Merrimack	77A	WIRE RD	06C		231
120	Merrimack	83	WIRE RD	06C		227
121	Merrimack	85	WIRE RD	06C		226
122	Merrimack	168	WIRE RD	07C		28

Notes:

- 1.) Properties identified as receiving interim alternate water is described in Section 3.0 of the Work Plan for Water Supply Wells and Provisions of Alternate Water, dated September 30, 2019.
- 2.) A notice letter will be sent to the properties identified to receive interim alternate water during the week of September 30, 2019.

Prepared by: JTF
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Table 2: Properties Identified for Initial Sampling
Saint Gobain Performance Plastics
Merrimack, New Hampshire

LOCATION #	TOWN	ADDRESS		MAP	BLOCK	LOT	SLUC	Likely Developed	Likely Not Developed
		STREET NUMBER	STREET NAME						
1	Bedford	13	BACK RIVER RD	22	45		11	X	
2	Bedford	24	BACK RIVER RD	22	38		11	X	
3	Bedford	28	BACK RIVER RD	22	39	5	11	X	
4	Bedford	32	BACK RIVER RD	22	39	4	11	X	
5	Bedford		BACK RIVER RD	37	24		27		X
6	Bedford	24	CAMELOT DR	33	12	49	11	X	
7	Bedford	25	CAMELOT DR	33	12	29	11	X	
8	Bedford	30	CAMELOT DR	33	12	48	11	X	
9	Bedford	36	CAMELOT DR	33	12	47	11	X	
10	Bedford	37	CAMELOT DR	33	12	28	11	X	
11	Bedford	43	CAMELOT DR	33	12	27	11	X	
12	Bedford	44	CAMELOT DR	33	12	46	11	X	
13	Bedford	45	CAMELOT DR	33	12	26	11	X	
14	Bedford	49	CAMELOT DR	33	12	25	11	X	
15	Bedford	51	CAMELOT DR	26	5	24	11	X	
16	Bedford	88	CAMELOT DR	26	5	37	11	X	
17	Bedford	26	CAMP (ALLEN) RD	34	26		57		X
18	Bedford	36	CAMP (ALLEN) RD	34	19		27		X
19	Bedford	56	CAMP (ALLEN) RD	34	19	1	57		X
20	Bedford		CAMP (ALLEN) RD	34	22		27		X
21	Bedford		CAMP (ALLEN) RD	34	21		27		X
22	Bedford	16	CHECKERBERRY LN	38	4	42	11	X	
23	Bedford	18	CHECKERBERRY LN	38	4	45	11	X	
24	Bedford	238	COUNTY RD	25	16	3	11	X	
25	Bedford	1	DEVONSHIRE WAY	33	11	1	11	X	
26	Bedford	2	DEVONSHIRE WAY	33	11	2	11	X	
27	Bedford	4	DEVONSHIRE WAY	33	11	4	11	X	
28	Bedford	5	DEVONSHIRE WAY	33	11	3	11	X	
29	Bedford	8	DEVONSHIRE WAY	33	11	6	11	X	
30	Bedford	9	DEVONSHIRE WAY	33	11	5	11	X	
31	Bedford	11	DEVONSHIRE WAY	33	11	7	11	X	
32	Bedford	12	DEVONSHIRE WAY	33	11	8	11	X	
33	Bedford		EVERETT TP	25	14		27		X
34	Bedford	3	EXECUTIVE PARK DR	22	8	3	33	X	
35	Bedford		FIRESIDE DR	25	16	5	22		X
36	Bedford	26	FOREST DR	26	4	27	11	X	
37	Bedford	27	FOREST DR	26	4	28	11	X	
38	Bedford	3	HARROD LN	38	69	22	11	X	
39	Bedford	8	HARROD LN	38	69	30	11	X	
40	Bedford	9	HARROD LN	38	69	23	11	X	
41	Bedford	11	HARROD LN	33	69	24	11	X	
42	Bedford	12	HARROD LN	33	69	29	11	X	
43	Bedford	15	HARROD LN	33	69	25	11	X	
44	Bedford	16	HARROD LN	33	69	28	11	X	
45	Bedford	19	HARROD LN	33	69	26	11	X	
46	Bedford	20	HARROD LN	33	69	27	11	X	
47	Bedford	22	HARROD LN	33	54	5	11	X	
48	Bedford	26	HARROD LN	33	54	6	11	X	
49	Bedford	27	HARROD LN	33	54	3	11	X	

Table 2: Properties Identified for Initial Sampling
Saint Gobain Performance Plastics
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LOCATION #	TOWN	ADDRESS		MAP	BLOCK	LOT	SLUC	Likely Developed	Likely Not Developed
		STREET NUMBER	STREET NAME						
50	Bedford	30	HARROD LN	33	54	7	11	X	
51	Bedford	14	HEATHER DR	25	35	12	11	X	
52	Bedford	1	HORIZON DR	33	4	36	11	X	
53	Bedford	11	HORIZON DR	38	4	41	11	X	
54	Bedford	12	HORIZON DR	38	4	43	11	X	
55	Bedford	15	HORIZON DR	38	4	47	11	X	
56	Bedford	18	HORIZON DR	38	4	32	11	X	
57	Bedford	19	HORIZON DR	38	4	46	11	X	
58	Bedford	24	HORIZON DR	38	4	31	11	X	
59	Bedford	26	HORIZON DR	38	4	28	11	X	
60	Bedford	27	HORIZON DR	38	4	22	11	X	
61	Bedford	32	HORIZON DR	38	4	27	11	X	
62	Bedford	35	HORIZON DR	38	4	21	11	X	
63	Bedford	40	HORIZON DR	38	4	50	11	X	
64	Bedford	45	HORIZON DR	38	4	19	11	X	
65	Bedford	49	HORIZON DR	38	4	18	11	X	
66	Bedford	51	HORIZON DR	38	4	17	11	X	
67	Bedford	60	HORIZON DR	38	4	26	11	X	
68	Bedford	61	HORIZON DR	38	4	15	11	X	
69	Bedford	65	HORIZON DR	38	4	14	11	X	
70	Bedford	66	HORIZON DR	38	4	29	11	X	
71	Bedford	70	HORIZON DR	38	4	30	11	X	
72	Bedford	71	HORIZON DR	38	4	13	11	X	
73	Bedford	77	HORIZON DR	38	4	12	11	X	
74	Bedford		ISLAND IN RIVER	24	8		27		X
75	Bedford		ISLAND IN RIVER	24	6		27		X
76	Bedford	11	JUNIPER DR	33	7	2	11	X	
77	Bedford	12	JUNIPER DR	33	7	3	11	X	
78	Bedford	26	JUNIPER DR	33	7	5	11	X	
79	Bedford	27	JUNIPER DR	33	7	9	11	X	
80	Bedford	34	JUNIPER DR	33	7	6	11	X	
81	Bedford		JUNIPER DR	33	7	4	22		X
82	Bedford		JUNIPER DR	33	7	8	22		X
83	Bedford		LIBERTY HILL RD	33	9	82	27		X
84	Bedford		LIBERTY HILL RD	38	8		22		X
85	Bedford	14	MEADOWCREST DR	33	9	81	11	X	
86	Bedford	16	MEADOWCREST DR	33	9	80	11	X	
87	Bedford	21	MEADOWCREST DR	33	9	25	11	X	
88	Bedford	25	MEADOWCREST DR	33	9	26	11	X	
89	Bedford	26	MEADOWCREST DR	33	9	54	11	X	
90	Bedford	29	MEADOWCREST DR	33	9	27	11	X	
91	Bedford	32	MEADOWCREST DR	33	9	53	11	X	
92	Bedford	33	MEADOWCREST DR	33	9	28	11	X	
93	Bedford	35	MEADOWCREST DR	33	9	29	11	X	
94	Bedford	37	MEADOWCREST DR	33	9	30	11	X	
95	Bedford	38	MEADOWCREST DR	33	9	52	11	X	
96	Bedford	41	MEADOWCREST DR	33	9	31	11	X	
97	Bedford	43	MEADOWCREST DR	33	9	32	11	X	
98	Bedford	46	MEADOWCREST DR	33	9	51	11	X	

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LOCATION #	TOWN	ADDRESS		MAP	BLOCK	LOT	SLUC	Likely Developed	Likely Not Developed
		STREET NUMBER	STREET NAME						
99	Bedford	50	MEADOWCREST DR	33	9	50	11	X	
100	Bedford	53	MEADOWCREST DR	33	9	39	11	X	
101	Bedford	54	MEADOWCREST DR	33	9	49	11	X	
102	Bedford	56	MEADOWCREST DR	33	9	48	11	X	
103	Bedford	57	MEADOWCREST DR	33	9	40	11	X	
104	Bedford	59	MEADOWCREST DR	33	9	41	11	X	
105	Bedford	60	MEADOWCREST DR	33	9	47	11	X	
106	Bedford	62	MEADOWCREST DR	33	9	46	11	X	
107	Bedford	66	MEADOWCREST DR	33	9	45	11	X	
108	Bedford	71	MEADOWCREST DR	33	9	43	11	X	
109	Bedford	75	MEADOWCREST DR	33	9	44	11	X	
110	Bedford		MEADOWCREST DR	33	9	83	27		X
111	Bedford	3	MONADNOCK LN	38	4	23	11	X	
112	Bedford	7	MONADNOCK LN	38	4	20	11	X	
113	Bedford		MOORES CROSSING RD	24	17		27		X
114	Bedford	35	MULBERRY LN	25	96	10	11	X	
115	Bedford	37	MULBERRY LN	25	39	8	11	X	
116	Bedford	38	MULBERRY LN	25	96	9	11	X	
117	Bedford		No CAMA Data Avail				57		X
118	Bedford	16	NORTHGATE DR	26	4	45	11	X	
119	Bedford	2	SANDY POND PKWY	25	39	2	11	X	
120	Bedford	5	SANDY POND PKWY	25	39	1	11	X	
121	Bedford	10	SANDY POND PKWY	25	39	3	11	X	
122	Bedford	14	SANDY POND PKWY	25	39	4	11	X	
123	Bedford	15	SANDY POND PKWY	25	39	29	11	X	
124	Bedford	18	SANDY POND PKWY	25	39	5	11	X	
125	Bedford	20	SANDY POND PKWY	25	39	6	11	X	
126	Bedford	23	SANDY POND PKWY	25	39	28	11	X	
127	Bedford	24	SANDY POND PKWY	25	39	7	11	X	
128	Bedford	27	SANDY POND PKWY	34	23	27	11	X	
129	Bedford	28	SANDY POND PKWY	34	23	8	11	X	
130	Bedford	31	SANDY POND PKWY	34	23	26	11	X	
131	Bedford	35	SANDY POND PKWY	34	23	25	11	X	
132	Bedford	36	SANDY POND PKWY	34	23	30	11	X	
133	Bedford	39	SANDY POND PKWY	34	23	24	11	X	
134	Bedford	43	SANDY POND PKWY	34	23	23	11	X	
135	Bedford	44	SANDY POND PKWY	34	23	35	11	X	
136	Bedford	47	SANDY POND PKWY	34	23	22	11	X	
137	Bedford	52	SANDY POND PKWY	34	23	34	11	X	
138	Bedford	59	SANDY POND PKWY	34	23	18	11	X	
139	Bedford	62	SANDY POND PKWY	34	23	32	11	X	
140	Bedford	71	SANDY POND PKWY	34	23	13	11	X	
141	Bedford	77	SANDY POND PKWY	34	23	12	11	X	
142	Bedford	81	SANDY POND PKWY	34	23	11	11	X	
143	Bedford	85	SANDY POND PKWY	34	23	10	11	X	
144	Bedford	89	SANDY POND PKWY	34	23	9	11	X	
145	Bedford		SANDY POND PKWY	34	23	20	22		X
146	Bedford		SANDY POND PKWY	34	23	17	22		X
147	Bedford		SANDY POND PKWY	34	23	33	22		X

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LOCATION #	TOWN	ADDRESS		MAP	BLOCK	LOT	SLUC	Likely Developed	Likely Not Developed
		STREET NUMBER	STREET NAME						
148	Bedford		SANDY POND PKWY	34	23	31	19	X	
149	Bedford	11	SEBBINS POND DR	25	57	5	11	X	
150	Bedford	56	SEBBINS POND DR	25	37	11	11	X	
151	Bedford	62	SEBBINS POND DR	25	38		11	X	
152	Bedford	67	SEBBINS POND DR	25	42		11	X	
153	Bedford	71	SEBBINS POND DR	25	41		11	X	
154	Bedford	73	SEBBINS POND DR	25	40	10	11	X	
155	Bedford	76	SEBBINS POND DR	25	40	30	11	X	
156	Bedford	77	SEBBINS POND DR	25	40	9	11	X	
157	Bedford	78	SEBBINS POND DR	25	40	11	11	X	
158	Bedford	79	SEBBINS POND DR	34	24	8	11	X	
159	Bedford	80	SEBBINS POND DR	25	40	12	11	X	
160	Bedford	82	SEBBINS POND DR	34	24	24	11	X	
161	Bedford	83	SEBBINS POND DR	34	24	7	11	X	
162	Bedford	84	SEBBINS POND DR	34	24	25	11	X	
163	Bedford	85	SEBBINS POND DR	34	24	6	11	X	
164	Bedford	86	SEBBINS POND DR	34	24	15	11	X	
165	Bedford	89	SEBBINS POND DR	34	24	5	11	X	
166	Bedford	89	SEBBINS POND DR	34	24	5	11	X	
167	Bedford	90	SEBBINS POND DR	34	24	16	11	X	
168	Bedford	91	SEBBINS POND DR	34	24	4	11	X	
169	Bedford	92	SEBBINS POND DR	34	24	17	11	X	
170	Bedford	93	SEBBINS POND DR	34	24	3	11	X	
171	Bedford	94	SEBBINS POND DR	34	24	18	11	X	
172	Bedford	95	SEBBINS POND DR	34	24	2	11	X	
173	Bedford	96	SEBBINS POND DR	34	24	19	11	X	
174	Bedford		SEBBINS POND DR	25	54	2	22		X
175	Bedford		SEBBINS POND DR	25	40	27	22		X
176	Bedford		SEBBINS POND DR	34	23	21	27		X
177	Bedford		SEBBINS POND DR	25	40	29	22		X
178	Bedford		SEBBINS POND DR	34	16		27		X
179	Bedford		SEBBINS POND DR	34	24	22	22		X
180	Bedford		SEBBINS POND DR	34	24	23	22		X
181	Bedford	2	SMITH RD	33	8		11	X	
182	Bedford	15	SMITH RD	33	4	37	11	X	
183	Bedford	20	SMITH RD	33	7	1	11	X	
184	Bedford	24	SMITH RD	33	6		11	X	
185	Bedford	25	SMITH RD	33	4	35	11	X	
186	Bedford	28	SMITH RD	33	5		11	X	
187	Bedford	41	SMITH RD	38	4	33	11	X	
188	Bedford	43	SMITH RD	38	4	11	11	X	
189	Bedford	52	SMITH RD	33	3		11	X	
190	Bedford	59	SMITH RD	38	3		11	X	
191	Bedford	65	SMITH RD	38	2		11	X	
192	Bedford	71	SMITH RD	38	69	1	11	X	
193	Bedford	78	SMITH RD	38	69	21	11	X	
194	Bedford	82	SMITH RD	37	69	20	11	X	
195	Bedford		SOUTH RIVER RD	36	98	45	23		X
196	Bedford	1	TAVISTOCK DR	33	9	33	11	X	

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LOCATION #	TOWN	ADDRESS		MAP	BLOCK	LOT	SLUC	Likely Developed	Likely Not Developed
		STREET NUMBER	STREET NAME						
197	Bedford	2	TAVISTOCK DR	33	9	38	11	X	
198	Bedford	9	TAVISTOCK DR	33	9	34	11	X	
199	Bedford	10	TAVISTOCK DR	33	9	37	11	X	
200	Bedford	14	TAVISTOCK DR	33	9	36	11	X	
201	Bedford	15	TAVISTOCK DR	33	9	35	11	X	
202	Bedford	16	TAVISTOCK DR	34	58	5	11	X	
203	Bedford	19	TAVISTOCK DR	34	58	4	11	X	
204	Bedford	20	TAVISTOCK DR	34	58	6	11	X	
205	Bedford	22	TAVISTOCK DR	34	58	7	11	X	
206	Bedford		TAVISTOCK DR	34	58		22		X
207	Bedford	8	TEABERRY LN	25	35	15	11	X	
208	Bedford	11	TEABERRY LN	25	35	14	11	X	
209	Bedford	12	TEABERRY LN	25	35	16	11	X	
210	Bedford	17	TEABERRY LN	25	96	22	11	X	
211	Bedford	18	TEABERRY LN	25	96	23	11	X	
212	Bedford		TURNPIKE	34	14		27		X
213	Bedford	4	VERONICA DR	38	69	19	11	X	
214	Bedford	5	VERONICA DR	38	69	2	11	X	
215	Bedford	8	VERONICA DR	37	69	18	11	X	
216	Bedford	9	VERONICA DR	38	69	3	11	X	
217	Bedford	14	VERONICA DR	37	69	17	11	X	
218	Bedford	18	VERONICA DR	37	69	16	11	X	
219	Bedford	38	VERONICA DR	38	69	13	11	X	
220	Bedford	39	VERONICA DR	38	69	6	11	X	
221	Bedford	41	VERONICA DR	38	69	7	11	X	
222	Bedford	42	VERONICA DR	38	69	12	11	X	
223	Bedford	45	VERONICA DR	38	69	8	11	X	
224	Bedford	46	VERONICA DR	38	69	11	11	X	
225	Bedford	47	VERONICA DR	38	69	9	11	X	
226	Bedford	52	VERONICA DR	38	69	10	11	X	
227	Bedford	4	WOBURN ABBEY DR	33	9	79	11	X	
228	Bedford	5	WOBURN ABBEY DR	33	9	55	11	X	
229	Bedford	10	WOBURN ABBEY DR	33	9	78	11	X	
230	Bedford	11	WOBURN ABBEY DR	33	9	57	11	X	
231	Bedford	13	WOBURN ABBEY DR	33	9	58	11	X	
232	Bedford	14	WOBURN ABBEY DR	33	9	77	11	X	
233	Bedford	15	WOBURN ABBEY DR	33	9	59	11	X	
234	Bedford	18	WOBURN ABBEY DR	33	9	76	11	X	
235	Bedford	19	WOBURN ABBEY DR	33	9	60	11	X	
236	Bedford	24	WOBURN ABBEY DR	33	9	73	11	X	
237	Bedford	25	WOBURN ABBEY DR	33	9	61	11	X	
238	Bedford	26	WOBURN ABBEY DR	33	9	72	11	X	
239	Bedford	29	WOBURN ABBEY DR	33	9	62	11	X	
240	Bedford	33	WOBURN ABBEY DR	33	9	63	11	X	
241	Bedford	36	WOBURN ABBEY DR	33	9	70	11	X	
242	Bedford	37	WOBURN ABBEY DR	33	9	64	11	X	
243	Bedford	39	WOBURN ABBEY DR	33	9	65	11	X	
244	Litchfield	BL535	CORNING RD	22		97	22		X
245	Litchfield	94	HILLCREST RD	16		26	11	X	

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LOCATION #	TOWN	ADDRESS		MAP	BLOCK	LOT	SLUC	Likely Developed	Likely Not Developed
		STREET NUMBER	STREET NAME						
246	Litchfield	96	HILLCREST RD	16		28	11	X	
247	Litchfield	102	HILLCREST RD	16		32	11	X	
248	Litchfield		ISLAND	20		94	27		X
249	Litchfield		ISLAND	20		94	27		X
250	Litchfield	2	ROCKY HILL DR	16		31	11	X	
251	Litchfield	3	ROCKY HILL DR	16		34	11	X	
252	Litchfield	4	ROCKY HILL DR	16		33	11	X	
253	Litchfield	5	ROCKY HILL DR	16		36	11	X	
254	Litchfield	6	ROCKY HILL DR	16		35	11	X	
255	Litchfield	7	ROCKY HILL DR	16		38	11	X	
256	Litchfield	8	ROCKY HILL DR	16		37	11	X	
257	Litchfield	2	SHIRLEY WAY	16		6	11	X	
258	Litchfield	3	SHIRLEY WAY	16		11	11	X	
259	Litchfield	5	SHIRLEY WAY	16		13	11	X	
260	Litchfield	7	SHIRLEY WAY	16		15	11	X	
261	Litchfield	9	SHIRLEY WAY	16		17	11	X	
262	Litchfield	10	SHIRLEY WAY	16		16	11	X	
263	Litchfield	11	SHIRLEY WAY	16		19	11	X	
264	Litchfield	12	SHIRLEY WAY	16		18	11	X	
265	Litchfield	13	SHIRLEY WAY	16		21	11	X	
266	Litchfield	14	SHIRLEY WAY	16		20	11	X	
267	Litchfield	16	SHIRLEY WAY	16		22	11	X	
268	Litchfield	BL554	TEMPLE DR	23		15	26		X
269	Londonderry	192	LITCHFIELD RD	14	6	2	11	X	
270	Londonderry	24	TETON DR	11	42	0	57		X
271	Manchester	47	BARBARA LN	816		23	11	X	
272	Manchester	50	BARBARA LN	816		18	11	X	
273	Manchester	59	BARBARA LN	816		24	11	X	
274	Manchester	4523	BROWN AV	714		10	11	X	
275	Manchester	4531	BROWN AV	714		9	11	X	
276	Manchester	16	LILAC CT	714		1	11	X	
277	Merrimack	4	ACRE LN	07D		47	22		X
278	Merrimack	5	ACRE LN	07D		52	22		X
279	Merrimack	6	ACRE LN	07D		48	22		X
280	Merrimack	7	ACRE LN	07D		52	22		X
281	Merrimack	8	ACRE LN	07D		49	22		X
282	Merrimack	14	ACRE LN	07D		57	22		X
283	Merrimack	15	ACRE LN	06D		124	22		X
284	Merrimack	16	ACRE LN	07D		58	22		X
285	Merrimack	17	ACRE LN	06D		125	22		X
286	Merrimack	18	ACRE LN	06D		123	22		X
287	Merrimack	19	ACRE LN	06D		126	22		X
288	Merrimack		BACK RIVER RD	07E		18	27		X
289	Merrimack	139	BEDFORD RD	07C		16	11	X	
290	Merrimack	141	BEDFORD RD	07C		16	11	X	
291	Merrimack	38	BRENDA LN	07C		33	11	X	
292	Merrimack	2	BREWSTER ST	06D		185	11	X	
293	Merrimack	4	BREWSTER ST	06D		186	11	X	
294	Merrimack		BREWSTER ST	06D		188	27		X

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LOCATION #	TOWN	ADDRESS		MAP	BLOCK	LOT	SLUC	Likely Developed	Likely Not Developed
		STREET NUMBER	STREET NAME						
295	Merrimack	2	BRYANT CR	07C		21	11	X	
296	Merrimack	3	BRYANT CR	07C		25	11	X	
297	Merrimack	4	BRYANT CR	07C		22	11	X	
298	Merrimack	5	BRYANT CR	07C		24	11	X	
299	Merrimack	6	BRYANT CR	07C		23	11	X	
300	Merrimack	50	CATHY ST	07D		75	22		X
301	Merrimack	52	CATHY ST	07D		76	22		X
302	Merrimack	53	CATHY ST	07D		82	22		X
303	Merrimack	54	CATHY ST	07D		77	22		X
304	Merrimack	55	CATHY ST	07D		81	22		X
305	Merrimack	57	CATHY ST	07D		80	22		X
306	Merrimack	4	CLAIRE ST	06D		64	22		X
307	Merrimack	5	CLAIRE ST	06D		78	22		X
308	Merrimack	6	CLAIRE ST	06D		65	22		X
309	Merrimack	7	CLAIRE ST	06D		77	22		X
310	Merrimack	8	CLAIRE ST	06D		66	22		X
311	Merrimack	746	DANIEL WEBSTER HWY	07E		36	33	X	
312	Merrimack		DANIEL WEBSTER HWY	07E		59	22		X
313	Merrimack	793	DANIEL WEBSTER HWY	06E		8	26		X
314	Merrimack	109	FRONT ST	E-1		15	27		X
315	Merrimack		FRONT ST	D-2		8	27		X
316	Merrimack		FRONT ST	D-2		9	19	X	
317	Merrimack		JOPPA RD	06C		387	22		X
318	Merrimack	9	KINSMAN LN	07E		46	11	X	
319	Merrimack	21	LAWRENCE RD	07C		4	27		X
320	Merrimack	3	LEVEL ST	06D		80	22		X
321	Merrimack	5	LEVEL ST	06D		79	22		X
322	Merrimack	6	LEVEL ST	06D		62	22		X
323	Merrimack	7	LEVEL ST	06D		63	22		X
324	Merrimack	8	LEVEL ST	07D		51	22		X
325	Merrimack	9	LEVEL ST	07D		55	22		X
326	Merrimack	10	LEVEL ST	07D		51	22		X
327	Merrimack	11	LEVEL ST	07D		56	22		X
328	Merrimack	12	LEVEL ST	07D		50	22		X
329	Merrimack	7	LILAC CT	06D		88	11	X	
330	Merrimack	7	LOUIE ST	06D		74	22		X
331	Merrimack	8	LOUIE ST	06D		75	22		X
332	Merrimack	9	LOUIE ST	06D		73	22		X
333	Merrimack	10	LOUIE ST	06D		76	22		X
334	Merrimack	11	LOUIE ST	06D		72	22		X
335	Merrimack	15	LOUIE ST	06D		71	22		X
336	Merrimack		No CAMA Data Avail				57		X
337	Merrimack	4	ROBERT ST	06D		81	22		X
338	Merrimack	142	WIRE RD	07C		19	22		X
339	Merrimack	144	WIRE RD	07C		20	11	X	
340	Merrimack	150	WIRE RD	07C		26	11	X	
341	Merrimack	155	WIRE RD	07C		28	22		X
342	Merrimack		WIRE RD	07C		40	19	X	
343	Merrimack		WIRE RD	07C		40	19	X	

Table 2: Properties Identified for Initial Sampling
Saint Gobain Performance Plastics
Merrimack, New Hampshire

LOCATION #	TOWN	ADDRESS		MAP	BLOCK	LOT	SLUC	Likely Developed	Likely Not Developed
		STREET NUMBER	STREET NAME						
PARCELS IN AREAS OF RELATIVELY LOWER SAMPLE DENSITY									
344	Bedford	1	PINECREST CR	21	47	37	11	X	
345	Bedford	11	COUNTY RD WEST	27	25	1	11	X	
346	Bedford	14	MAIDEN LN	27	38	9	11	X	
347	Bedford	154	WALLACE RD	27	42	1	11	X	
348	Bedford	2	OAK DR	12	45	2	11	X	
349	Bedford	7	SHEPHERD HILL RD	31	4	6	11	X	
350	Bedford	71	GAULT RD	21	38		11	X	
351	Hudson	1	FULLER DR	110	24	0	11	X	
352	Hudson	7	TWIN MEADOW DR	105	26	0	12	X	
353	Litchfield	11	CUTLER RD	2		75	11	X	
354	Litchfield	145	PAGE RD	4		22	11	X	
355	Londonderry	1	MICHELLE LN	2	27	24	11	X	
356	Londonderry	2	WAYLAND DR	5	50	35	11	X	
357	Londonderry	3	CAROUSEL CT	5	31	2	11	X	
358	Londonderry	42	ANTHONY DR	5	48	16	11	X	
359	Londonderry	93	HIGH RANGE RD	5	29	0	11	X	
360	Londonderry	97	WILEY HILL RD	5	58	5	11	X	

Notes:

- 1.) Properties identified for initial sampling as described in Section 4.1 of the Work Plan for Water Supply Wells and Provision of Alternate Water, dated September 30, 2019.
- 2.) SLUC = State Land Use Code

Prepared by: SDL
 Checked by: JTF
 Reviewed by: RWB

Table 3: PFAS Target Analyte List
Saint-Gobain Performance Plastics
Merrimack, New Hampshire

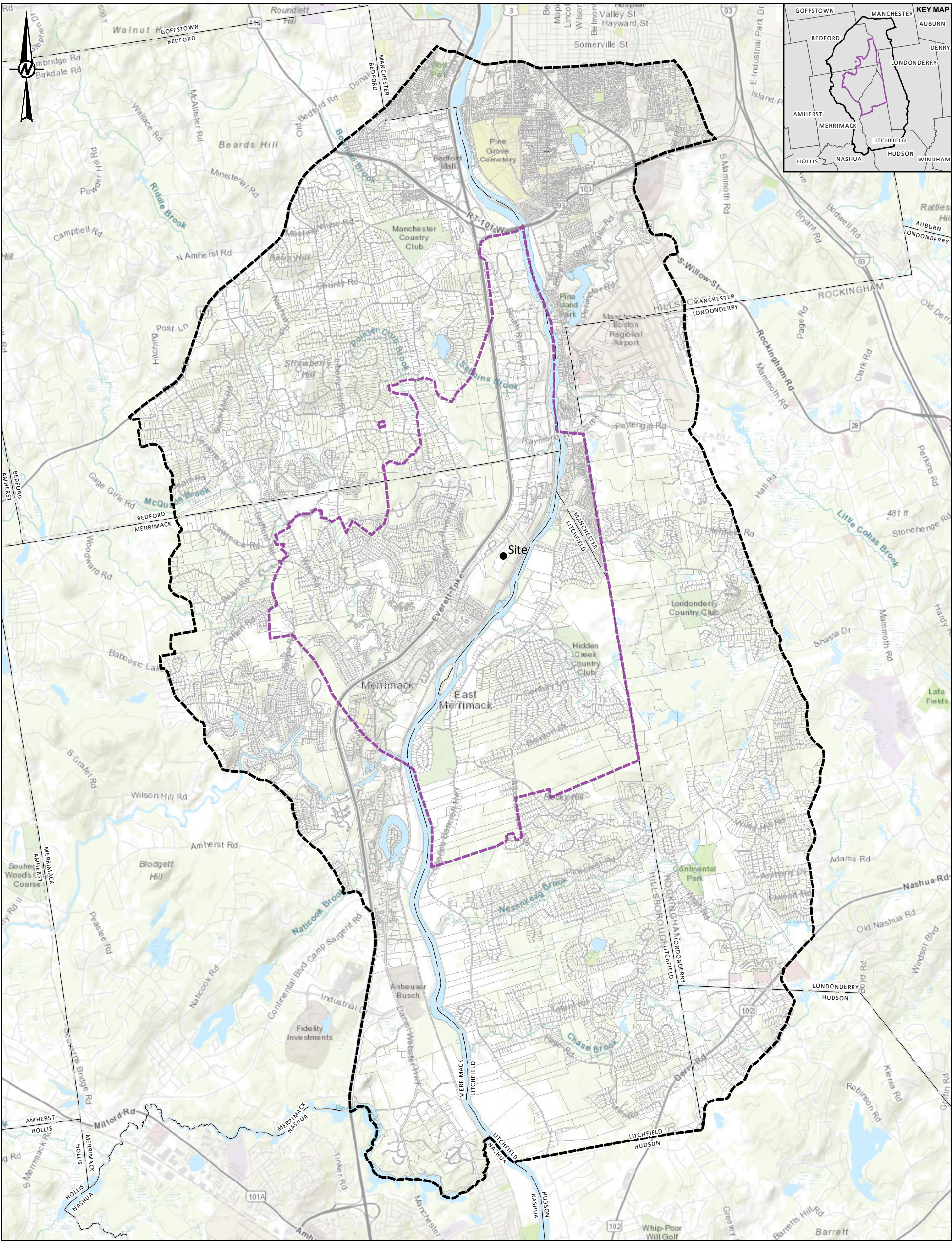
Method	Units	Anticipated Method Detection Limit	Bottle Requirements	Preservative	Hold Time
Parameter					
EPA 537 modified					
NEtFOSAA	ng/L	0.4	250 mL wide mouth plastic	none	28 days
NMeFOSAA	ng/L	0.4	250 mL wide mouth plastic	none	28 days
Perfluorobutanesulfonate	ng/L	0.3	250 mL wide mouth plastic	none	28 days
Perfluorobutanoic acid	ng/L	2	250 mL wide mouth plastic	none	28 days
Perfluorodecanoic acid	ng/L	0.4	250 mL wide mouth plastic	none	28 days
Perfluorododecanoic acid	ng/L	0.3	250 mL wide mouth plastic	none	28 days
Perfluoroheptanoic acid	ng/L	0.3	250 mL wide mouth plastic	none	28 days
Perfluorohexanesulfonate	ng/L	0.4	250 mL wide mouth plastic	none	28 days
Perfluorohexanoic acid	ng/L	0.3	250 mL wide mouth plastic	none	28 days
Perfluorononanoic acid	ng/L	0.3	250 mL wide mouth plastic	none	28 days
Perfluoro-octanesulfonate	ng/L	0.7	250 mL wide mouth plastic	none	28 days
Perfluorooctanoic acid	ng/L	0.3	250 mL wide mouth plastic	none	28 days
Perfluoropentanoic acid	ng/L	0.3	250 mL wide mouth plastic	none	28 days
Perfluorotetradecanoic acid	ng/L	0.3	250 mL wide mouth plastic	none	28 days
Perfluorotridecanoic acid	ng/L	0.3	250 mL wide mouth plastic	none	28 days
Perfluoroundecanoic acid	ng/L	0.4	250 mL wide mouth plastic	none	28 days

Notes:

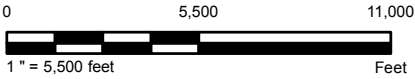
ng/L = nanograms per liter

Prepared by: JTF
 Checked by: RWB
 Reviewed by: APTM

FIGURES



- LEGEND**
- Saint-Gobain Merrimack Facility
 - Town Boundary
 - ▭ Pre-GMZ Boundary (see Note 1)
 - ▭ Outer Boundary (see Note 1)
 - ▭ Tax Parcel Boundary



NOTE(S)
1. PRE-GMZ BOUNDARY AND OUTER BOUNDARY FROM ATTACHMENT C OF CONSENT DECREE, STATE OF NEW HAMPSHIRE, DEPT. OF ENVIRONMENTAL SERVICES V. SAINT-GOBAIN PERFORMANCE PLASTICS CORPORATION, MARCH 20, 2018.

REFERENCE(S)
1. COORDINATE SYSTEM: NAD 1983 STATEPLANE NEW HAMPSHIRE FIPS 2800 FEET
2. IMAGERY SOURCES: ESRI, HERE, GARMIN, INTERMAP, INCREMENT P CORP., GEBCO, USGS, FAO, NPS, NRCAN, GEOBASE, IGN, KADASTER NL, ORDNANCE SURVEY, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), (C) OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY

CLIENT
SAINT-GOBAIN PERFORMANCE PLASTICS

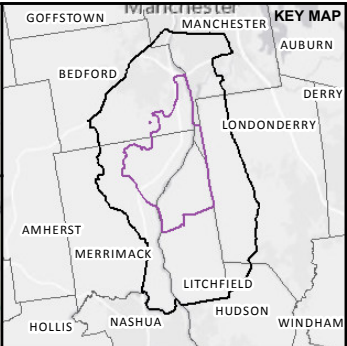
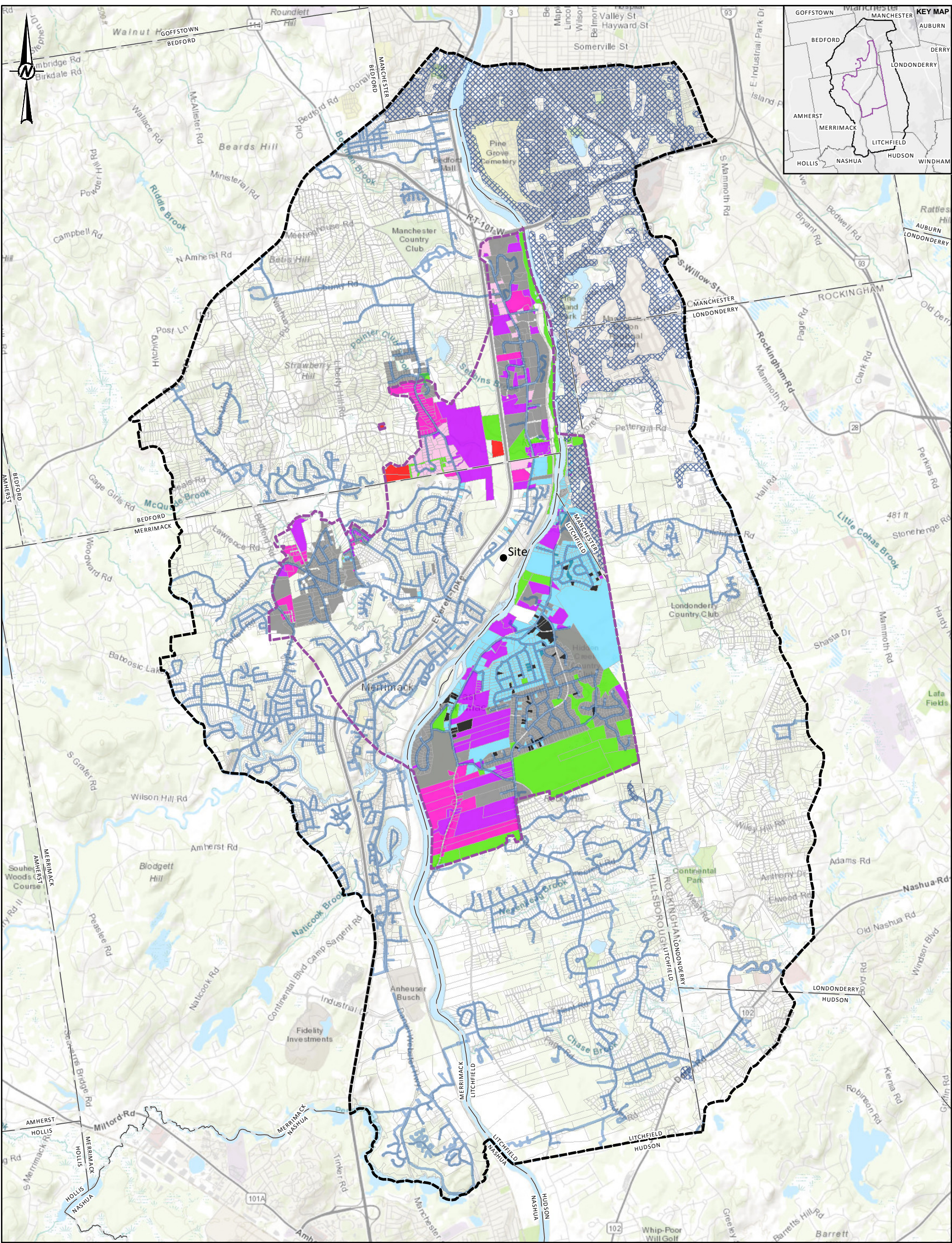
PROJECT
**RESIDENTIAL WELL WORK PLAN
SAINT-GOBAIN PERFORMANCE PLASTICS FACILITY
MERRIMACK, NH**

TITLE
SITE LOCATION, PRE-GMZ AND OUTER BOUNDARY

CONSULTANT	YYYY-MM-DD	2019-09-30
	DESIGNED	RWB
	PREPARED	SHL
	REVIEWED	RWB
	APPROVED	APTM



PROJECT NO. 1668623	CONTROL -	REV. -	FIGURE 1
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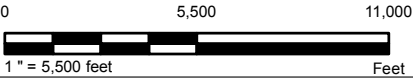
LEGEND

- Saint-Gobain Merrimack Facility
- Pre-GMZ Boundary (see Note 1)
- Outer Boundary (see Note 1)
- Town Boundary
- Tax Parcel Boundary
- Approximate location of known water main line
- Approximate Water Main Location

Consent Decree - Parcel Status

- Property Connected
- Main to Stop Installed
- Owner Refused Service
- Design Underway
- Design Required

- Not Developed, Main to Stop to be Provided
- POET Approved
- Already Connected
- No Development Potential



NOTE(S)

1. PRE-GMZ BOUNDARY AND OUTER BOUNDARY FROM ATTACHMENT C OF CONSENT DECREE, STATE OF NEW HAMPSHIRE, DEPT. OF ENVIRONMENTAL SERVICES V. SAINT-GOBAIN PERFORMANCE PLASTICS CORPORATION, MARCH 20, 2018.

REFERENCE(S)

1. WATER MAIN LINES SOURCED FROM BEDFORD TOWN ASSESSOR'S OFFICE, NHDES PFOA SAMPLING AREA FIGURE DATED AUGUST 2016, MERRIMACK VALLEY DISTRICT PDF, PENNICHUCK WATER WORKS SHAPEFILE, AND NRPC'S "STREETINDEX AND TOWN FACILITIES" MAP.
2. COORDINATE SYSTEM: NAD 1983 STATEPLANE NEW HAMPSHIRE FIPS 2800 FEET
3. IMAGERY SOURCES: ESRI, HERE, GARMIN, INTERMAP, INCREMENT P CORP., GEBCO, USGS, FAO, NPS, NRCAN, GEOBASE, IGN, KADASTER NL, ORDNANCE SURVEY, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), (C) OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY

CLIENT

SAINT-GOBAIN PERFORMANCE PLASTICS

PROJECT
RESIDENTIAL WELL WORK PLAN
SAINT-GOBAIN PERFORMANCE PLASTICS FACILITY
MERRIMACK, NH

TITLE
TAX PARCELS, CONSENT DECREE PARCELS, AND KNOWN
WATER LINES

CONSULTANT



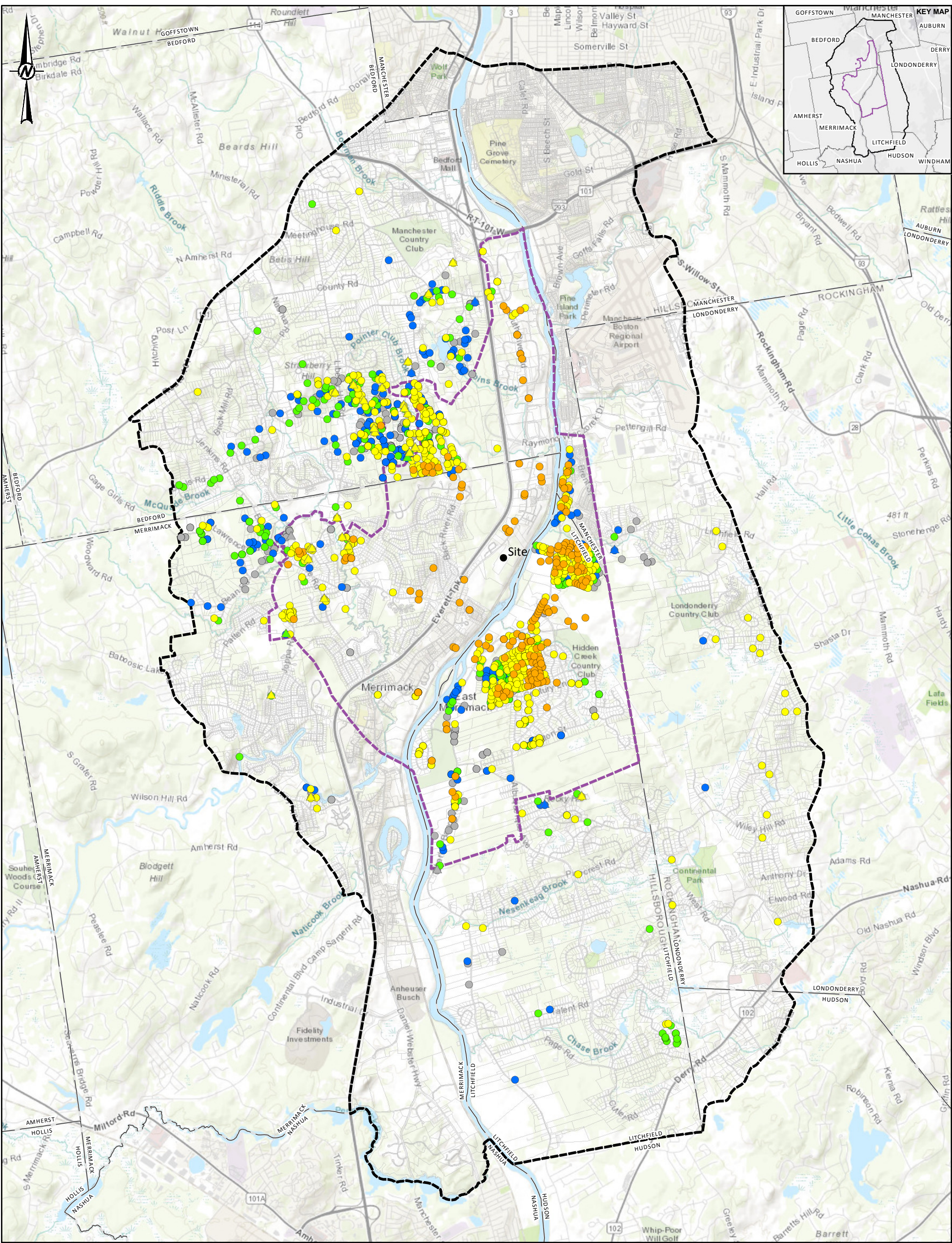
PROJECT NO.
1668623

CONTROL

REV.

FIGURE

2



LEGEND

- Saint-Gobain Merrimack Facility
- Pre-GMZ Boundary (see Note 1)
- Outer Boundary (see Note 1)
- Town Boundary
- NHDES Sample Location
- △ Golder Sample Location

PFOA Results (see Notes 2 and 3)

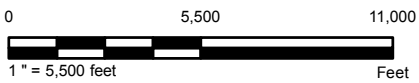
- Non-detect
- 0 - ≤6 ppt
- 6 - ≤12 ppt
- 12 - ≤70 ppt
- > 70 ppt

NOTE(S)

- PRE-GMZ BOUNDARY AND OUTER BOUNDARY FROM ATTACHMENT C OF CONSENT DECREE, STATE OF NEW HAMPSHIRE, DEPT. OF ENVIRONMENTAL SERVICES V. SAINT-GOBAIN PERFORMANCE PLASTICS CORPORATION, MARCH 20, 2018.
- PFOA DATASET BASED ON DATA PROVIDED BY NHDES SEPTEMBER 2019.
- MOST RECENT DATA FOR EACH LOCATION IS SHOWN. IF MULTIPLE SAMPLES WERE TAKEN ON THE SAME DATE, THE SAMPLE WITH THE HIGHEST VALUE IS SHOWN.

REFERENCE(S)

- COORDINATE SYSTEM: NAD 1983 STATEPLANE NEW HAMPSHIRE FIPS 2800 FEET
- IMAGERY SOURCES: ESRI, HERE, GARMIN, INTERMAP, INCREMENT P CORP., GEBCO, USGS, FAO, NPS, NRCAN, GEOBASE, IGN, KADASTER NL, ORDNANCE SURVEY, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), (C) OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY



CLIENT

SAINT-GOBAIN PERFORMANCE PLASTICS

PROJECT
RESIDENTIAL WELL WORK PLAN
SAINT-GOBAIN PERFORMANCE PLASTICS FACILITY
MERRIMACK, NH

TITLE
**RESIDENTIAL WELL AND PUBLIC WATER SUPPLY ANALYTICAL
RESULTS – PFOA**

CONSULTANT



PROJECT NO.
1668623

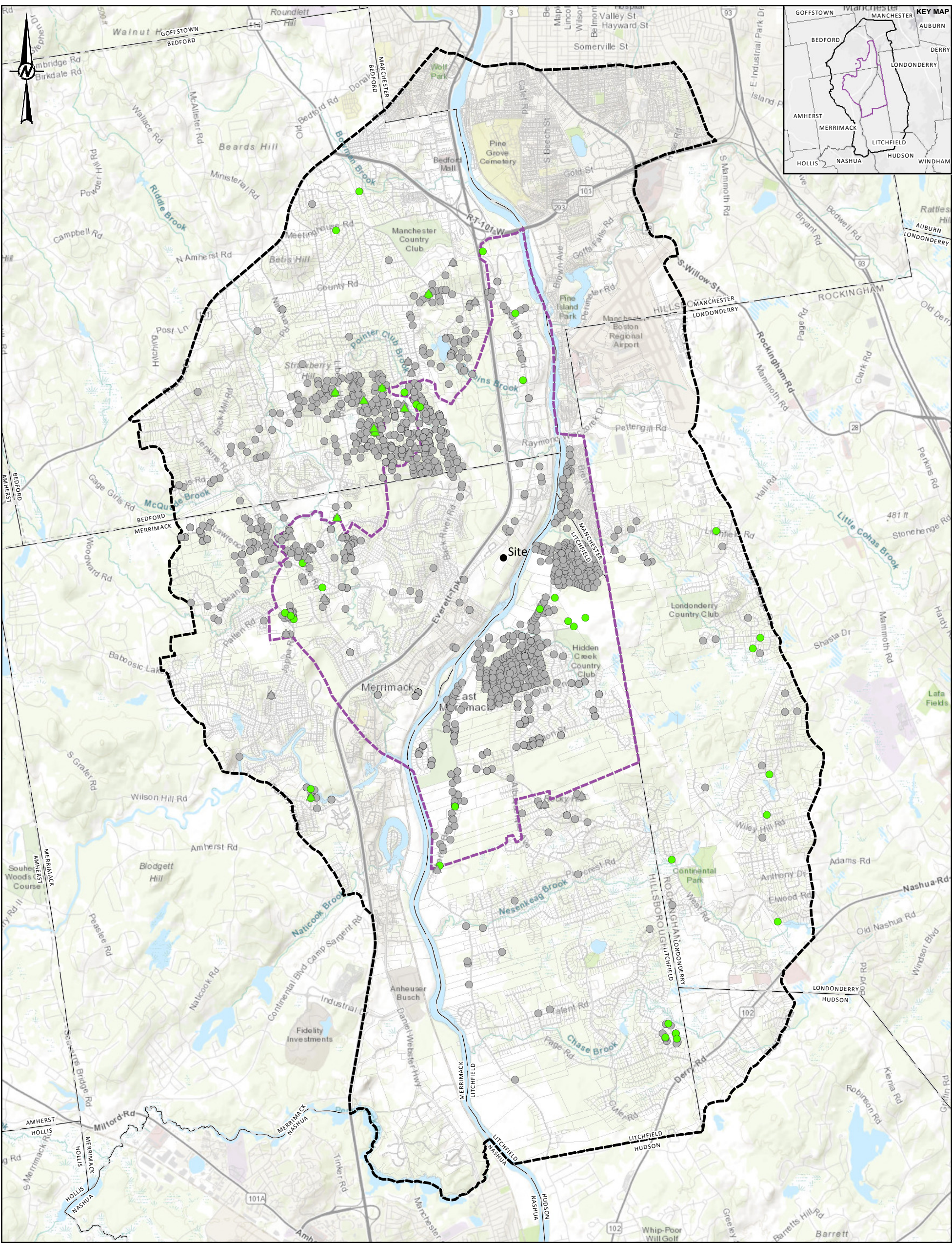
CONTROL

REV.

FIGURE

3A

YYYY-MM-DD	2019-09-30
DESIGNED	RWB
PREPARED	SHL
REVIEWED	RWB
APPROVED	APTM



LEGEND

- Saint-Gobain Merrimack Facility
- Pre-GMZ Boundary (see Note 1)
- Outer Boundary (see Note 1)
- Town Boundary
- NHDES Sample Location
- △ Golder Sample Location

PFNA Results (see Notes 2 and 3)

- Non-detect
- 0 - ≤11 ppt
- >11 ppt

NOTE(S)

- PRE-GMZ BOUNDARY AND OUTER BOUNDARY FROM ATTACHMENT C OF CONSENT DECREE, STATE OF NEW HAMPSHIRE, DEPT. OF ENVIRONMENTAL SERVICES V. SAINT-GOBAIN PERFORMANCE PLASTICS CORPORATION, MARCH 20, 2018.
- PFNA DATASET BASED ON DATA PROVIDED BY NHDES SEPTEMBER 2019.
- MOST RECENT DATA FOR EACH LOCATION IS SHOWN. IF MULTIPLE SAMPLES WERE TAKEN ON THE SAME DATE, THE SAMPLE WITH THE HIGHEST VALUE IS SHOWN.

REFERENCE(S)

- COORDINATE SYSTEM: NAD 1983 STATEPLANE NEW HAMPSHIRE FIPS 2800 FEET
- IMAGERY SOURCES: ESRI, HERE, GARMIN, INTERMAP, INCREMENT P CORP., GEBCO, USGS, FAO, NPS, NRCAN, GEOBASE, IGN, KADASTER NL, ORDNANCE SURVEY, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), (C) OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY

CLIENT

SAINT-GOBAIN PERFORMANCE PLASTICS

PROJECT

RESIDENTIAL WELL WORK PLAN
SAINT-GOBAIN PERFORMANCE PLASTICS FACILITY
MERRIMACK, NH

TITLE

RESIDENTIAL WELL AND PUBLIC WATER SUPPLY ANALYTICAL
RESULTS – PFNA

CONSULTANT



GOLDER

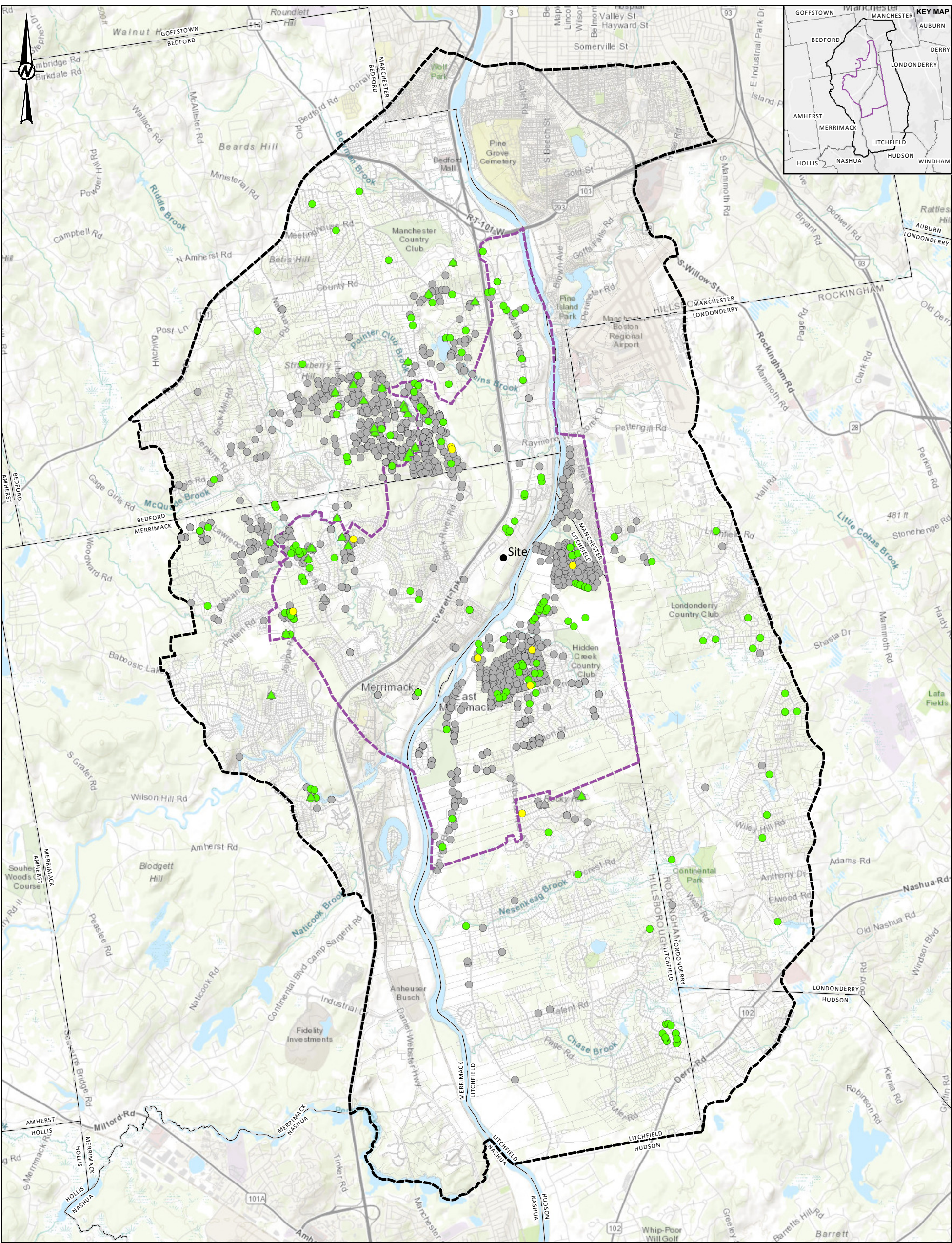
PROJECT NO.
1668623

CONTROL
-

REV.
-

FIGURE
3B

YYYY-MM-DD	2019-09-30
DESIGNED	RWB
PREPARED	SHL
REVIEWED	RWB
APPROVED	APTM



- LEGEND**
- Saint-Gobain Merrimack Facility
 - Pre-GMZ Boundary (see Note 1)
 - Outer Boundary (see Note 1)
 - Town Boundary
 - NHDES Sample Location
 - △ Golder Sample Location

PFHxS Results (see Notes 2 and 3)

- Non-detect
- 0 - ≤18 ppt
- >18 ppt

NOTE(S)

- PRE-GMZ BOUNDARY AND OUTER BOUNDARY FROM ATTACHMENT C OF CONSENT DECREE, STATE OF NEW HAMPSHIRE, DEPT. OF ENVIRONMENTAL SERVICES V. SAINT-GOBAIN PERFORMANCE PLASTICS CORPORATION, MARCH 20, 2018.
- PFHXS DATASET BASED ON DATA PROVIDED BY NHDES SEPTEMBER 2019.
- MOST RECENT DATA FOR EACH LOCATION IS SHOWN. IF MULTIPLE SAMPLES WERE TAKEN ON THE SAME DATE, THE SAMPLE WITH THE HIGHEST VALUE IS SHOWN.

REFERENCE(S)

- COORDINATE SYSTEM: NAD 1983 STATEPLANE NEW HAMPSHIRE FIPS 2800 FEET
- IMAGERY SOURCES: ESRI, HERE, GARMIN, INTERMAP, INCREMENT P CORP., GEBCO, USGS, FAO, NPS, NRCAN, GEOBASE, IGN, KADASTER NL, ORDNANCE SURVEY, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), (C) OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY

CLIENT

SAINT-GOBAIN PERFORMANCE PLASTICS

PROJECT
RESIDENTIAL WELL WORK PLAN
SAINT-GOBAIN PERFORMANCE PLASTICS FACILITY
MERRIMACK, NH

TITLE
**RESIDENTIAL WELL AND PUBLIC WATER SUPPLY ANALYTICAL
RESULTS – PFHXS**

CONSULTANT



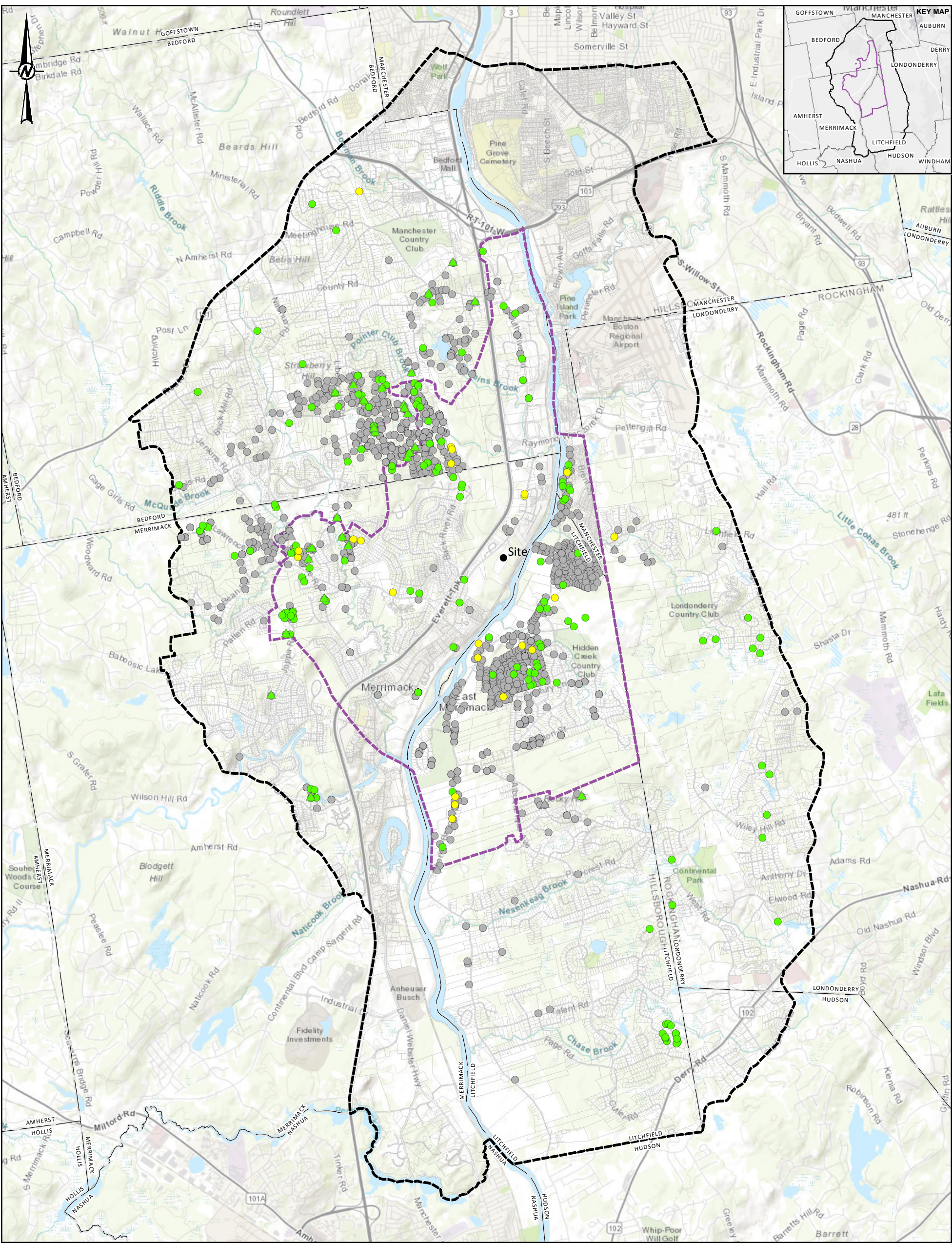
PROJECT NO.
1668623

CONTROL

REV.

FIGURE

3C



- LEGEND**
- Saint-Gobain Merrimack Facility
 - Pre-GMZ Boundary (see Note 1)
 - Outer Boundary (see Note 1)
 - Town Boundary
 - NHDES Sample Location
 - △ Golder Sample Location

PFOS Results (see Notes 2 and 3)

- Non-detect
- 0 - ≤11 ppt
- >11 ppt

NOTE(S)

- PRE-GMZ BOUNDARY AND OUTER BOUNDARY FROM ATTACHMENT C OF CONSENT DECREE, STATE OF NEW HAMPSHIRE, DEPT. OF ENVIRONMENTAL SERVICES V. SAINT-GOBAIN PERFORMANCE PLASTICS CORPORATION, MARCH 20, 2018.
- PFOS DATASET BASED ON DATA PROVIDED BY NHDES SEPTEMBER 2019.
- MOST RECENT DATA FOR EACH LOCATION IS SHOWN. IF MULTIPLE SAMPLES WERE TAKEN ON THE SAME DATE, THE SAMPLE WITH THE HIGHEST VALUE IS SHOWN.

REFERENCE(S)

- COORDINATE SYSTEM: NAD 1983 STATEPLANE NEW HAMPSHIRE FIPS 2800 FEET
- IMAGERY SOURCES: ESRI, HERE, GARMIN, INTERMAP, INCREMENT P CORP., GEBCO, USGS, FAO, NPS, NRCAN, GEOBASE, IGN, KADASTER NL, ORDNANCE SURVEY, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), (C) OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY

CLIENT

SAINT-GOBAIN PERFORMANCE PLASTICS

PROJECT
RESIDENTIAL WELL WORK PLAN
SAINT-GOBAIN PERFORMANCE PLASTICS FACILITY
MERRIMACK, NH

TITLE
**RESIDENTIAL WELL AND PUBLIC WATER SUPPLY ANALYTICAL
RESULTS – PFOS**

CONSULTANT



PROJECT NO.
1668623

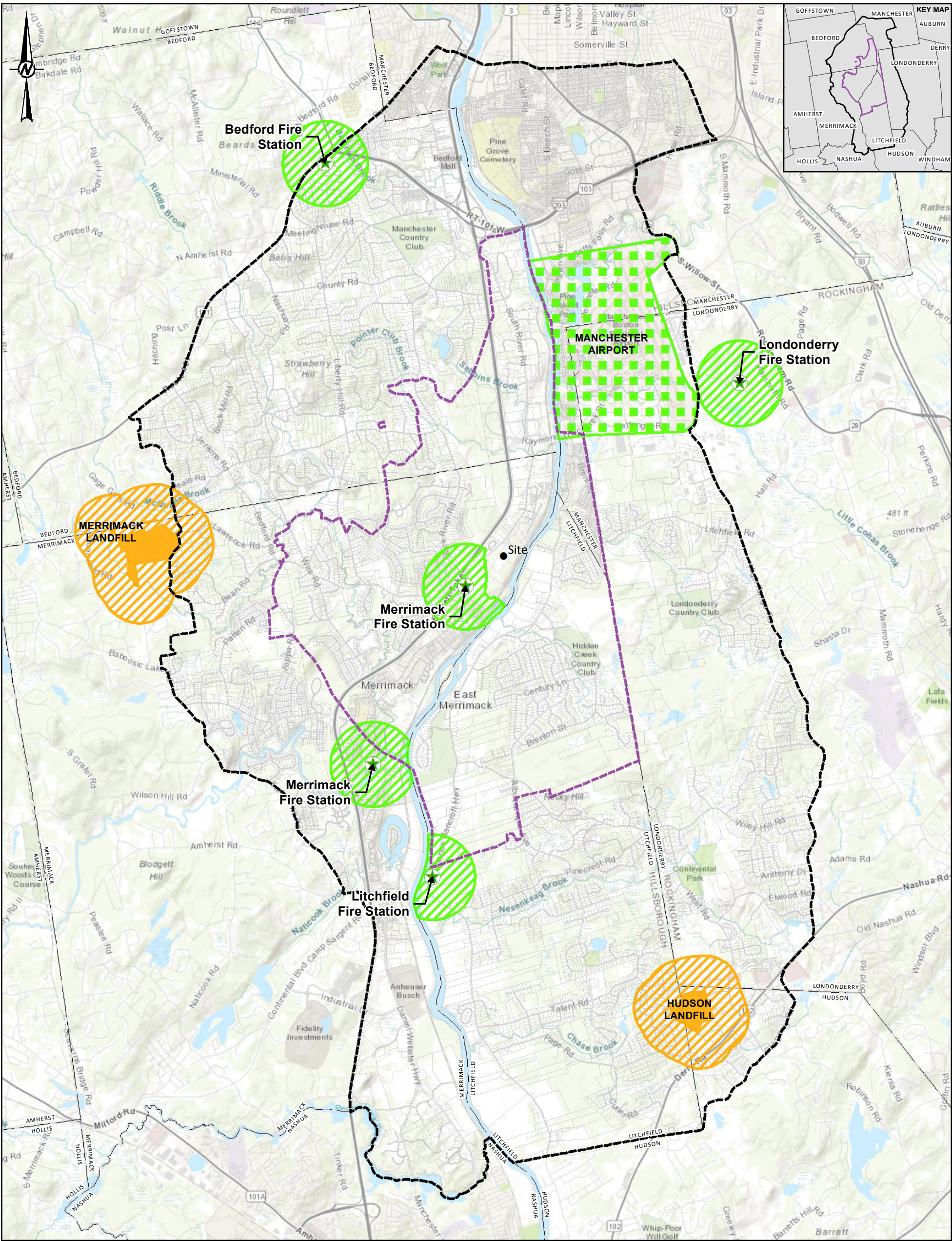
CONTROL

REV.

FIGURE

3D

YYYY-MM-DD	2019-09-30
DESIGNED	RWB
PREPARED	SHL
REVIEWED	RWB
APPROVED	APTM



- LEGEND**
- Saint-Gobain Merrimack Facility
 - Pre-GMZ Boundary (see Note 1)
 - Outer Boundary (see Note 1)
 - Town Boundary
 - Tax Parcel Boundary
 - ★ Potential Other Sources
 - Fire Stations 2500 ft Buffer
 - Airport Potential Source Boundary
 - Landfill Boundary 2000 ft Buffer
 - Landfill - Approximate GMZ Boundary Before AGQS Revision

NOTE(S)
1. PRE-GMZ BOUNDARY AND OUTER BOUNDARY FROM ATTACHMENT C OF CONSENT DECREE, STATE OF NEW HAMPSHIRE, DEPT. OF ENVIRONMENTAL SERVICES V. SAINT-GOBAIN PERFORMANCE PLASTICS CORPORATION, MARCH 20, 2018.

REFERENCE(S)
1. COORDINATE SYSTEM: NAD 1983 STATEPLANE NEW HAMPSHIRE FIPS 2800 FEET
2. IMAGERY SOURCES: ESRI, HERE, GARMIN, INTERMAP, INCREMENT P CORP., GEBCO, USGS, FAO, NPS, NRCAN, GEOBASE, IGN, KADASTER NL, ORDNANCE SURVEY, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), (C) OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY

CLIENT
SAINT-GOBAIN PERFORMANCE PLASTICS

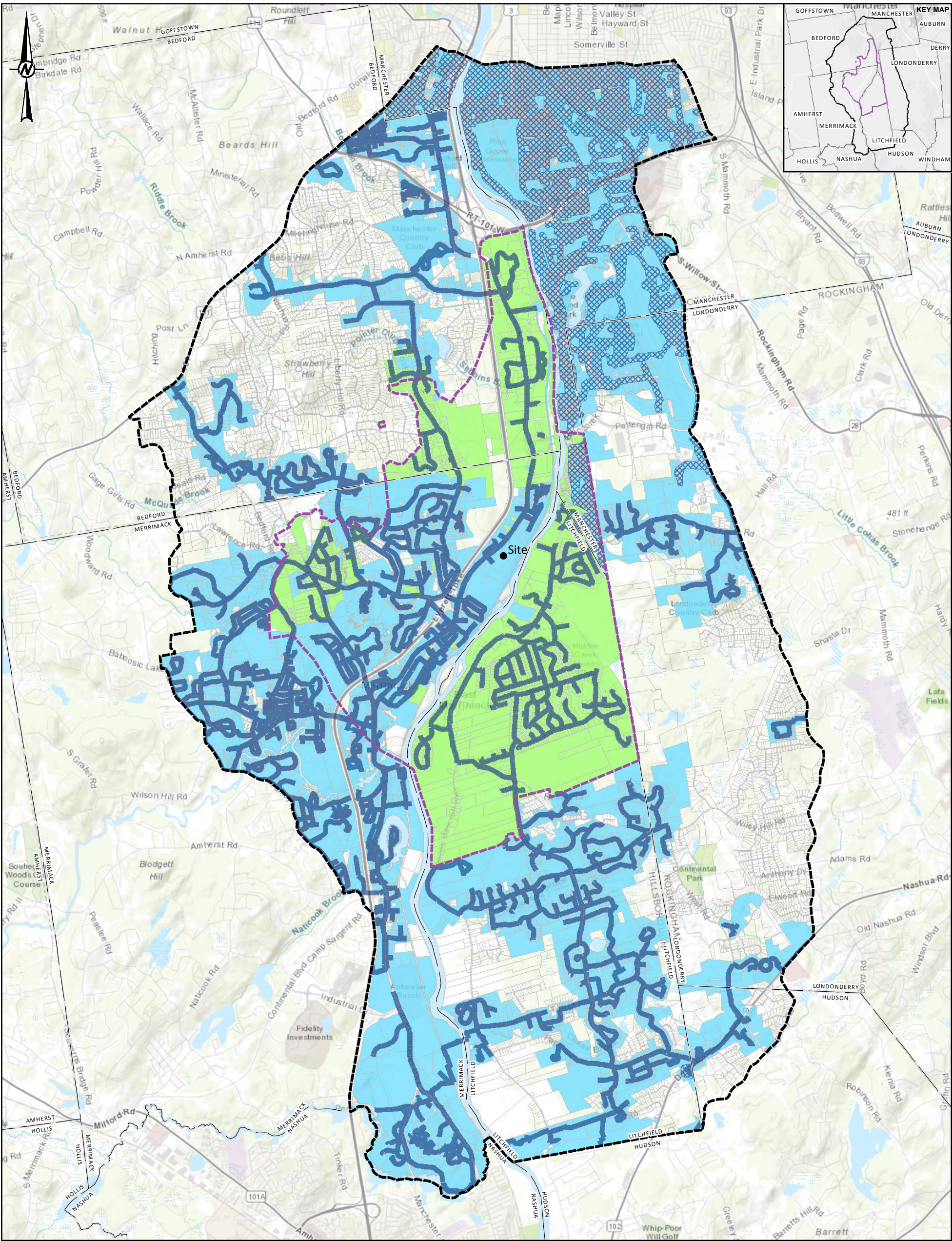
PROJECT
**RESIDENTIAL WELL WORK PLAN
SAINT-GOBAIN PERFORMANCE PLASTICS FACILITY
MERRIMACK, NH**

TITLE

OTHER PFAS SOURCES

CONSULTANT	YYYY-MM-DD	2019-09-30
	DESIGNED	RWB
	PREPARED	SHL
	REVIEWED	RWB
	APPROVED	APTM

PROJECT NO. 1668623 CONTROL - REV. - FIGURE 4



- LEGEND**
- Saint-Gobain Merrimack Facility
 - Pre-GMZ Boundary (see Note 1)
 - Outer Boundary (see Note 1)
 - Town Boundary
 - Approximate Water Main Location
 - Known Water Mains (150 ft Buffer)

- Parcel-Water Main Status**
- Access to Alternate Water confirmed by Consent Decree (if applicable)
 - Access to Water Mains is Likely
 - Access to Water Mains is not Likely

NOTE(S)

1. PRE-GMZ BOUNDARY AND OUTER BOUNDARY FROM ATTACHMENT C OF CONSENT DECREE, STATE OF NEW HAMPSHIRE, DEPT. OF ENVIRONMENTAL SERVICES V. SAINT-GOBAIN PERFORMANCE PLASTICS CORPORATION, MARCH 20, 2018.

2. LIKELIHOOD OF ACCESS TO WATER MAINS DETERMINED BY PROXIMITY TO KNOWN WATER MAIN LINE AND DECOMMISSION STATUS, IF APPLICABLE.

REFERENCE(S)

1. WATER MAIN LINES SOURCED FROM BEDFORD TOWN ASSESSOR'S OFFICE, NHDES PFOA SAMPLING AREA FIGURE DATED AUGUST 2016, MERRIMACK VALLEY DISTRICT PDF, PENNICHUCK WATER WORKS SHAPEFILE, AND NRPC'S "STREETINDEX AND TOWN FACILITIES" MAP.

2. COORDINATE SYSTEM: NAD 1983 STATEPLANE NEW HAMPSHIRE FIPS 2800 FEET

3. IMAGERY SOURCES: ESRI, HERE, GARMIN, INTERMAP, INCREMENT P CORP., GEBCO, USGS, FAO, NPS, NRCAN, GEOBASE, IGN, KADASTER NL, ORDNANCE SURVEY, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), (C) OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY

CLIENT

SAINT-GOBAIN PERFORMANCE PLASTICS

PROJECT

RESIDENTIAL WELL WORK PLAN

SAINT-GOBAIN PERFORMANCE PLASTICS FACILITY

MERRIMACK, NH

TITLE

PROPERTY CONNECTION STATUS/ PROXIMITY TO EXISTING WATER LINES

CONSULTANT	YYYY-MM-DD	2019-09-30
	DESIGNED	RWB
	PREPARED	SHL
	REVIEWED	RWB
	APPROVED	APTM

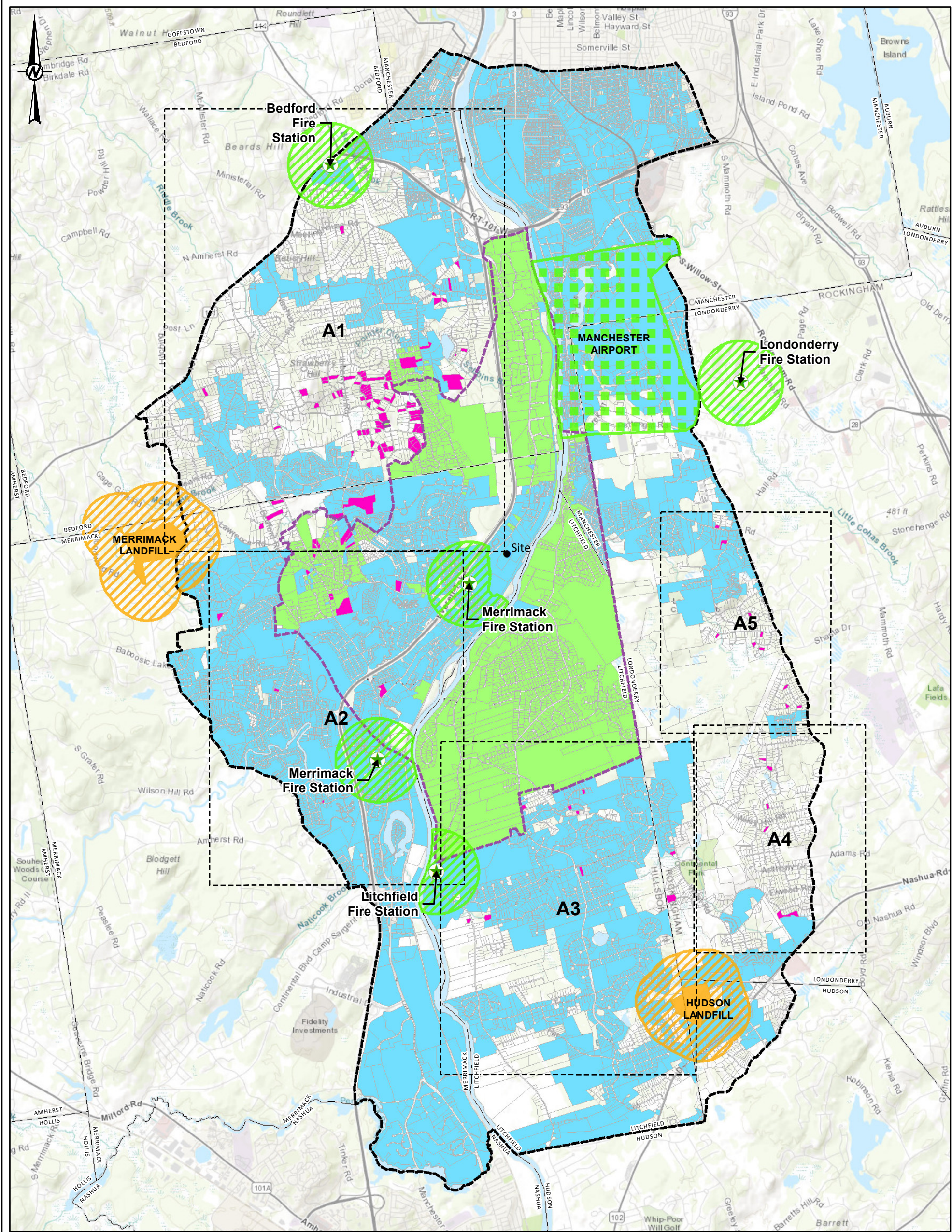


PROJECT NO. 1668623

CONTROL -

REV. -

FIGURE 5



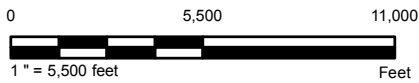
LEGEND

- Saint-Gobain Merrimack Facility
- Pre-GMZ Boundary (see Note 1)
- Outer Boundary (see Note 1)
- Town Boundary
- Tax Parcel Boundary

Parcel-Water Main Status

- Access to Alternate Water (if applicable) confirmed by Consent Decree
- Access to Water Mains is Likely
- Access to Water Mains is not Likely
- Parcels where Occupants will be Offered Bottled Water
- Potential Other Sources

- Fire Stations 2500 ft Buffer
- Airport Potential Source Boundary
- Landfill Boundary 2000 ft Buffer
- Landfill - Approximate GMZ Boundary Before AGQS Revision



NOTE(S)

- PRE-GMZ BOUNDARY AND OUTER BOUNDARY FROM ATTACHMENT C OF CONSENT DECREE, STATE OF NEW HAMPSHIRE, DEPT. OF ENVIRONMENTAL SERVICES V. SAINT-GOBAIN PERFORMANCE PLASTICS CORPORATION, MARCH 20, 2018.
- BOTTLED WATER STATUS DETERMINED BY PFOA CONCENTRATIONS USING DATA PROVIDED BY NHDES IN SEPTEMBER 2019.

REFERENCE(S)

- COORDINATE SYSTEM: NAD 1983 STATEPLANE NEW HAMPSHIRE FIPS 2800 FEET
- IMAGERY SOURCES: ESRI, HERE, GARMIN, INTERMAP, INCREMENT P CORP, GEBCO, USGS, FAO, NPS, NRCAN, GEOBASE, IGN, KADASTER NL, ORDNANCE SURVEY, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), (C) OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY

CLIENT

SAINT-GOBAIN PERFORMANCE PLASTICS

PROJECT

RESIDENTIAL WELL WORK PLAN
SAINT-GOBAIN PERFORMANCE PLASTICS FACILITY
MERRIMACK, NH

TITLE

PROPERTIES IDENTIFIED FOR INTERIM ALTERNATE WATER -
OVERVIEW MAP

CONSULTANT



PROJECT NO.
1668623

CONTROL
-

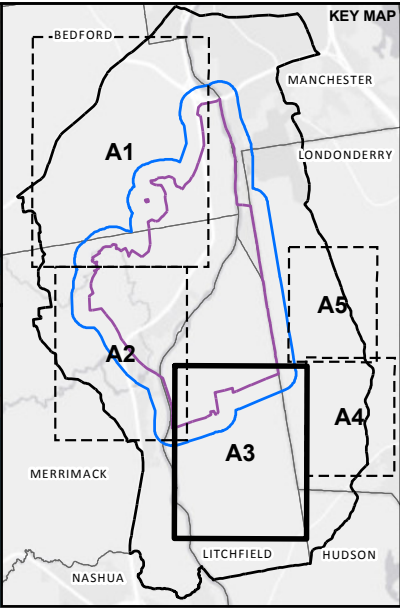
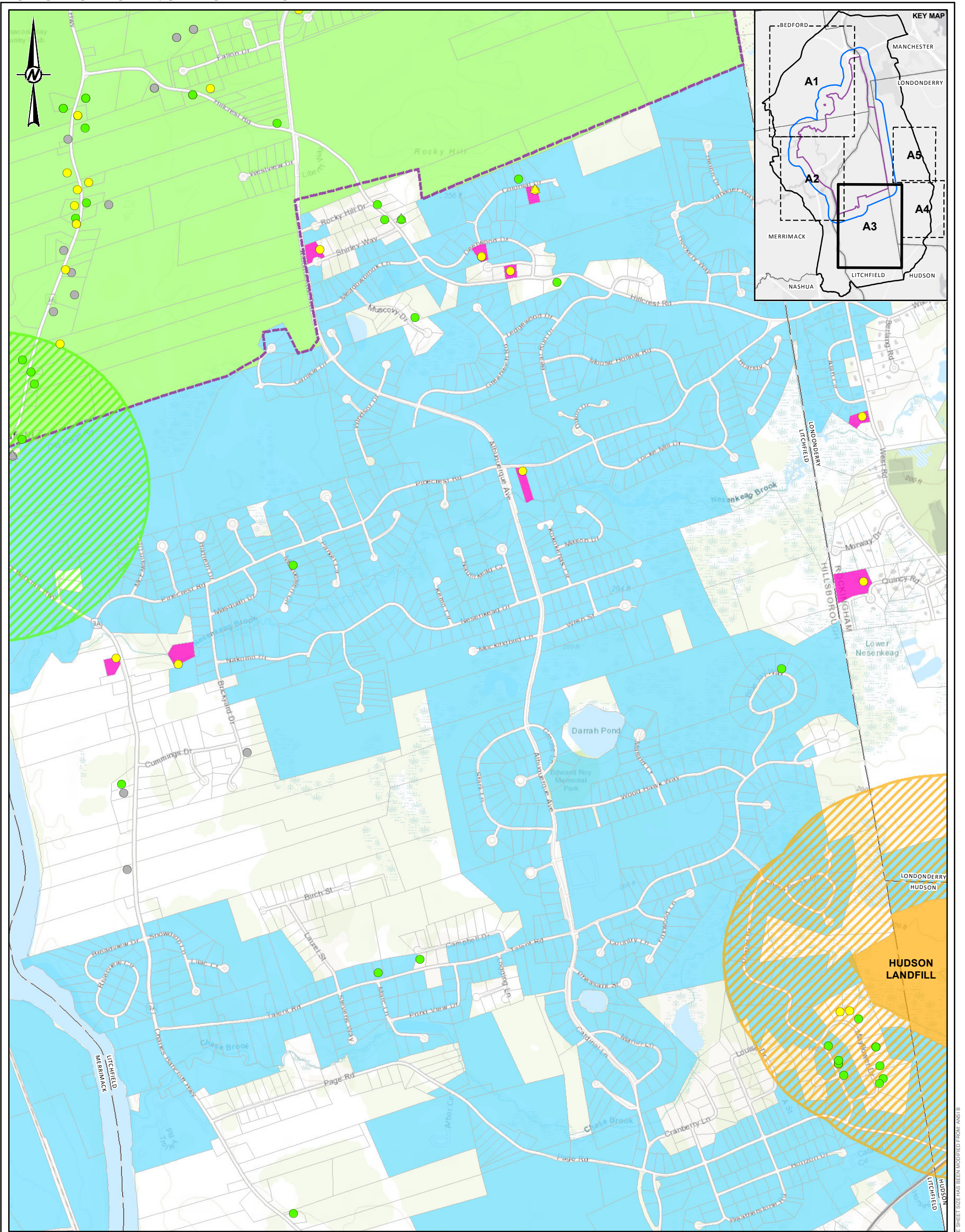
REV.
-

FIGURE
6A

YYYY-MM-DD	2019-09-30
DESIGNED	RWB
PREPARED	SHL
REVIEWED	RWB
APPROVED	APTM

FIGURE
6B

FIGURE 6C



LEGEND

- Pre-GMZ Boundary (see Note 1)
- Outer Boundary (see Note 1)
- Town Boundary
- Tax Parcel Boundary
- NHDES Sample Location
- Golder Sample Location

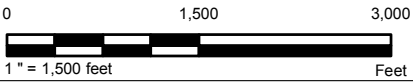
PFOA Results

- Non-detect
- ≤12 ppt
- >12 ppt

Parcel-Water Main Status

- Access to Alternate Water confirmed by Consent Decree (if applicable)
- Access to Water Mains is Likely
- Access to Water Mains is not Likely
- Parcels where Occupants will be offered Bottled Water

- Fire Stations 2500 ft Buffer
- Landfill Boundary 2000 ft Buffer
- Landfill - Approximate GMZ Boundary Before AGQS Revision



NOTE(S)

- PRE-GMZ BOUNDARY AND OUTER BOUNDARY FROM ATTACHMENT C OF CONSENT DECREE, STATE OF NEW HAMPSHIRE, DEPT. OF ENVIRONMENTAL SERVICES V. SAINT-GOBAIN PERFORMANCE PLASTICS CORPORATION, MARCH 20, 2018.
- BOTTLED WATER STATUS DETERMINED BY PFOA CONCENTRATIONS USING DATA PROVIDED BY NHDES IN SEPTEMBER 2019.

REFERENCE(S)

- COORDINATE SYSTEM: NAD 1983 STATEPLANE NEW HAMPSHIRE FIPS 2800 FEET
- IMAGERY SOURCES: ESRI, HERE, GARMIN, INTERMAP, INCREMENT P CORP., GEBCO, USGS, FAO, NPS, NRCAN, GEOBASE, IGN, KADASTER NL, ORDNANCE SURVEY, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), (C) OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY

CLIENT

SAINT-GOBAIN PERFORMANCE PLASTICS

PROJECT
RESIDENTIAL WELL WORK PLAN
SAINT-GOBAIN PERFORMANCE PLASTICS FACILITY
MERRIMACK, NH

TITLE
PROPERTIES IDENTIFIED FOR INTERIM ALTERNATE WATER - AREA 3

CONSULTANT



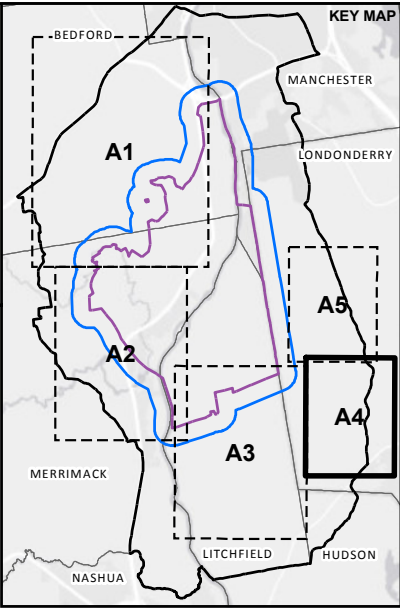
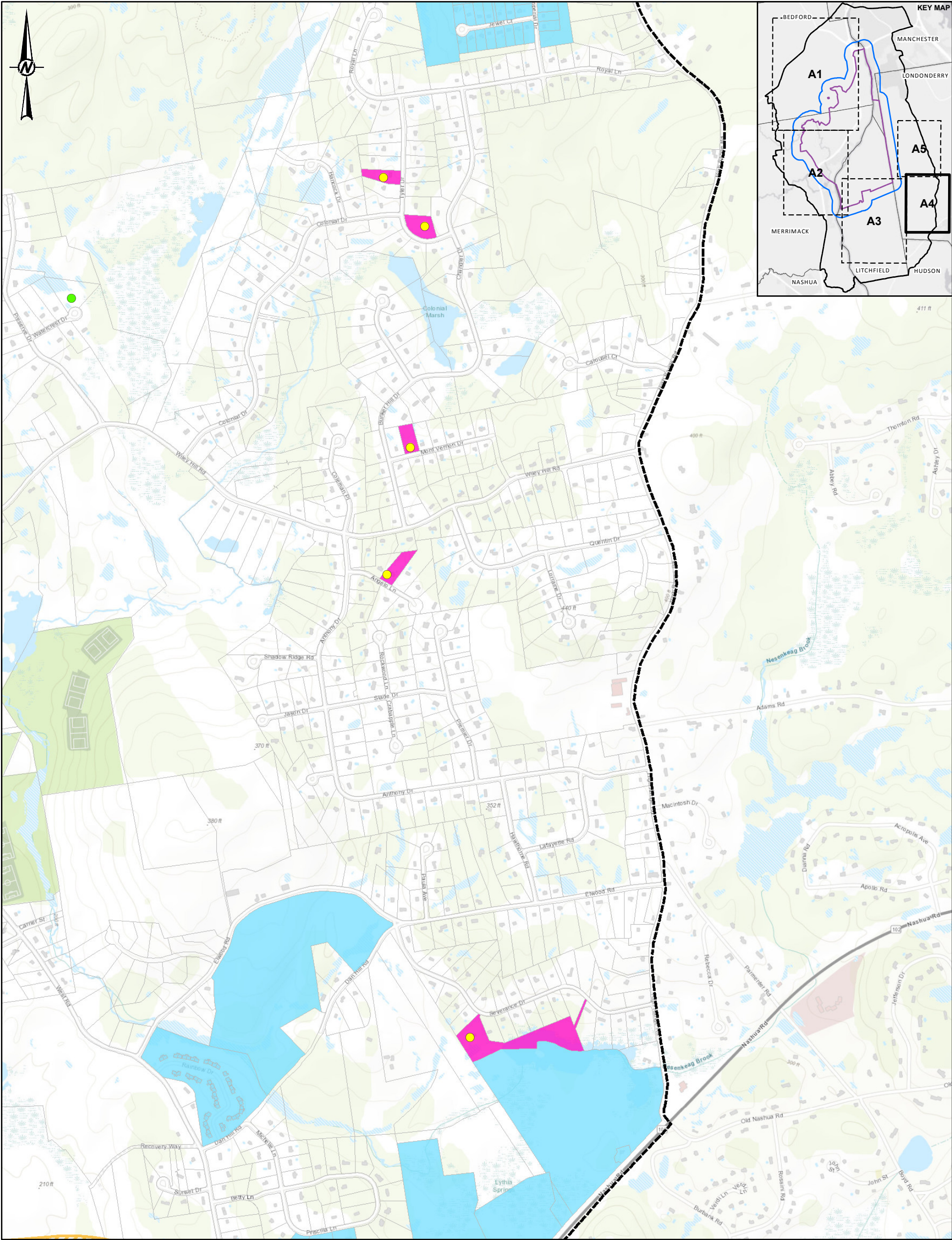
PROJECT NO.
1668623

CONTROL
-

REV.
-

FIGURE
6D

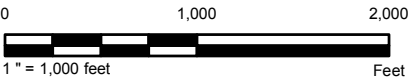
YYYY-MM-DD	2019-09-30
DESIGNED	RWB
PREPARED	SHL
REVIEWED	RWB
APPROVED	APTM



- LEGEND**
- Outer Boundary (see Note 1)
 - Town Boundary
 - Tax Parcel Boundary
 - NHDES Sample Location
 - Golder Sample Location

- PFOA Results**
- Non-detect
 - ≤12 ppt
 - >12 ppt

- Parcel-Water Main Status**
- Access to Water Mains is Likely
 - Access to Water Mains is not Likely
 - Parcels where Occupants will be offered Bottled Water
 - Landfill Boundary 2000 ft Buffer



NOTE(S)

1. PRE-GMZ BOUNDARY AND OUTER BOUNDARY FROM ATTACHMENT C OF CONSENT DECREE, STATE OF NEW HAMPSHIRE, DEPT. OF ENVIRONMENTAL SERVICES V. SAINT-GOBAIN PERFORMANCE PLASTICS CORPORATION, MARCH 20, 2018.

2. BOTTLED WATER STATUS DETERMINED BY PFOA CONCENTRATIONS USING DATA PROVIDED BY NHDES IN SEPTEMBER 2019.

REFERENCE(S)

1. COORDINATE SYSTEM: NAD 1983 STATEPLANE NEW HAMPSHIRE FIPS 2800 FEET

2. IMAGERY SOURCES: ESRI, HERE, GARMIN, INTERMAP, INCREMENT P CORP., GEBCO, USGS, FAO, NPS, NRCAN, GEOBASE, IGN, KADASTER NL, ORDNANCE SURVEY, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), (C) OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY

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SAINT-GOBAIN PERFORMANCE PLASTICS

PROJECT

RESIDENTIAL WELL WORK PLAN

SAINT-GOBAIN PERFORMANCE PLASTICS FACILITY

MERRIMACK, NH

TITLE

PROPERTIES IDENTIFIED FOR INTERIM ALTERNATE WATER - AREA 4

CONSULTANT



PROJECT NO.

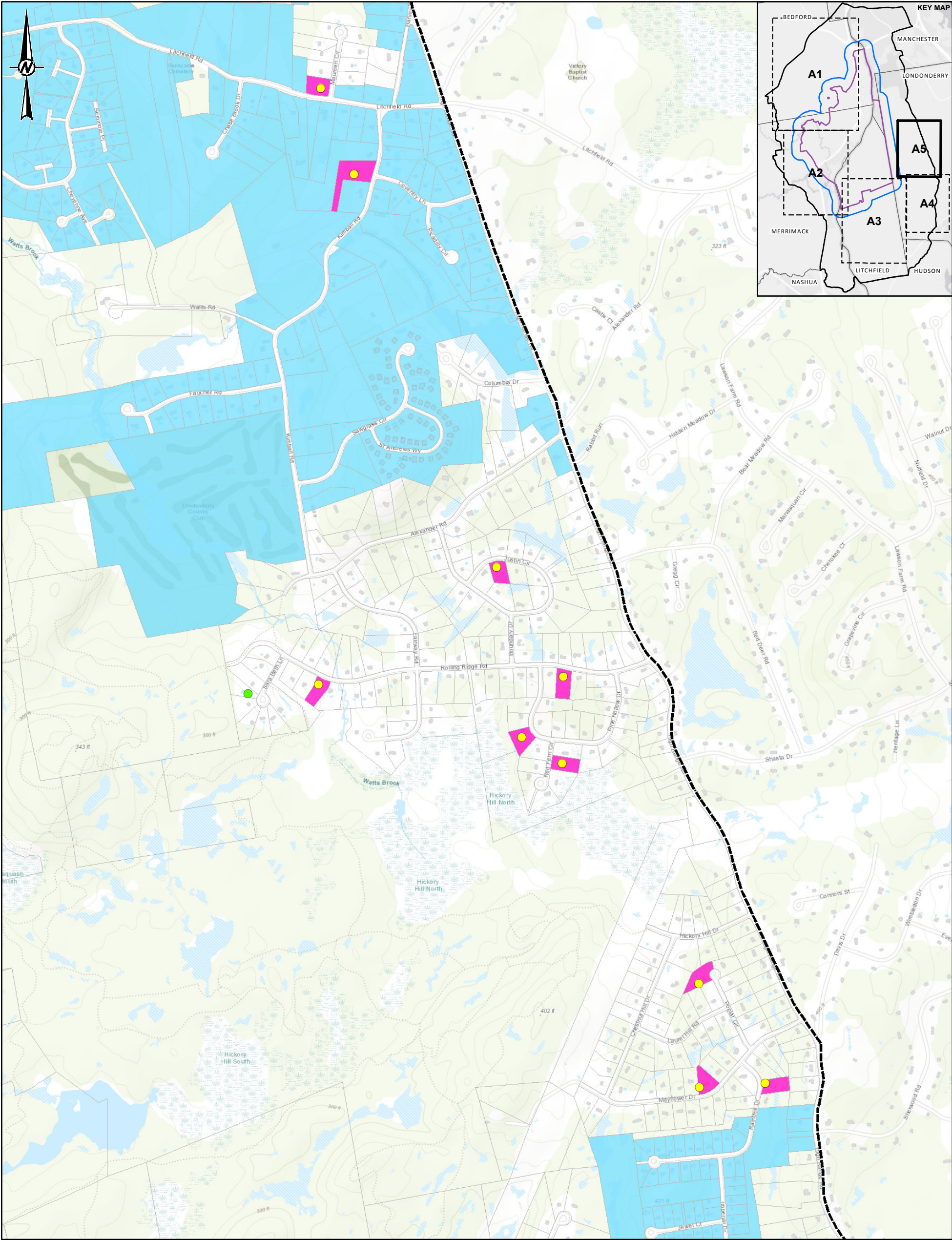
1668623

CONTROL

REV.

FIGURE

6E



- LEGEND**
- Outer Boundary (see Note 1)
 - Town Boundary
 - Tax Parcel Boundary
 - NHDES Sample Location
 - Golder Sample Location

- PFOA Results**
- Non-detect
 - ≤12 ppt
 - >12 ppt

- Parcel-Water Main Status**
- Access to Water Mains is Likely
 - Access to Water Mains is not Likely
 - Parcels where Occupants will be offered Bottled Water



NOTE(S)

1. PRE-GMZ BOUNDARY AND OUTER BOUNDARY FROM ATTACHMENT C OF CONSENT DECREE, STATE OF NEW HAMPSHIRE, DEPT. OF ENVIRONMENTAL SERVICES V. SAINT-GOBAIN PERFORMANCE PLASTICS CORPORATION, MARCH 20, 2018.

2. BOTTLED WATER STATUS DETERMINED BY PFOA CONCENTRATIONS USING DATA PROVIDED BY NHDES IN SEPTEMBER 2019.

REFERENCE(S)

1. COORDINATE SYSTEM: NAD 1983 STATEPLANE NEW HAMPSHIRE FIPS 2800 FEET

2. IMAGERY SOURCES: ESRI, HERE, GARMIN, INTERMAP, INCREMENT P CORP, GEBCO, USGS, FAO, NPS, NRCAN, GEOBASE, IGN, KADASTER NL, ORDNANCE SURVEY, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), (C) OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY

CLIENT

SAINT-GOBAIN PERFORMANCE PLASTICS

PROJECT

RESIDENTIAL WELL WORK PLAN

SAINT-GOBAIN PERFORMANCE PLASTICS FACILITY

MERRIMACK, NH

TITLE

PROPERTIES IDENTIFIED FOR INTERIM ALTERNATE WATER - AREA 5

CONSULTANT



PROJECT NO.

1668623

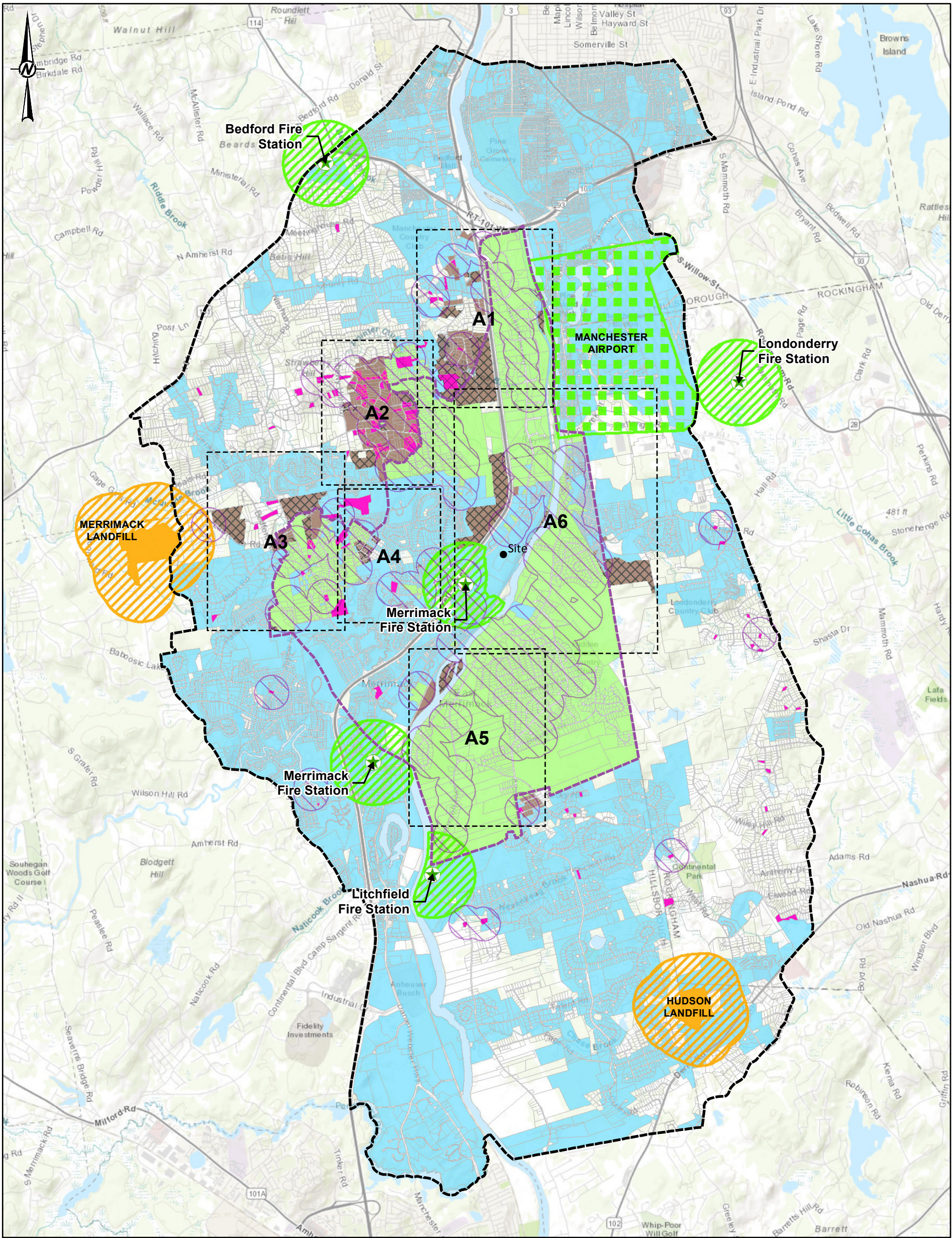
CONTROL

REV.

FIGURE

6F

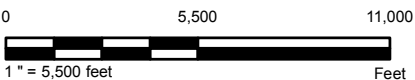
YYYY-MM-DD	2019-09-30
DESIGNED	RWB
PREPARED	SHL
REVIEWED	RWB
APPROVED	APTM



LEGEND

- Saint-Gobain Merrimack Facility
 - Pre-GMZ Boundary (see Note 1)
 - Outer Boundary (See Note 1)
 - Tax Parcel Boundary
 - 2x MCL (> 24 ppt) 1000 ft Buffer
 - Parcels Identified for Initial Sampling where Occupants will be Offered Bottled Water
 - Parcels Identified for Initial Sampling
 - Parcels Identified for Initial Sampling where bottled water will be offered - Likely Unoccupied
 - Parcels Identified for Initial Sampling - Likely Unoccupied
- Parcel-Water Main Status**
- Access to Alternate Water confirmed by Consent Decree (if applicable)
 - Access to Water Mains is Likely
 - Access to Water Mains is not Likely
 - Parcels where Occupants will be Offered Bottled Water

- ★ Potential Other Sources
- Fire Stations 2500 ft Buffer
- Airport Potential Source Boundary
- Landfill Boundary 2000 ft Buffer
- Landfill - Approximate GMZ Boundary Before AGQS Revision



NOTE(S)

1. PRE-GMZ BOUNDARY AND OUTER BOUNDARY FROM ATTACHMENT C OF CONSENT DECREE, STATE OF NEW HAMPSHIRE, DEPT. OF ENVIRONMENTAL SERVICES V. SAINT-GOBAIN PERFORMANCE PLASTICS CORPORATION, MARCH 20, 2018.

REFERENCE(S)

1. COORDINATE SYSTEM: NAD 1983 STATEPLANE NEW HAMPSHIRE FIPS 2800 FEET
2. IMAGERY SOURCES: ESRI, HERE, GARMIN, INTERMAP, INCREMENT P CORP., GEBCO, USGS, FAO, NPS, NRCAN, GEOBASE, IGN, KADASTER NL, ORDNANCE SURVEY, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), (C) OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY

CLIENT

SAINT-GOBAIN PERFORMANCE PLASTICS

PROJECT
RESIDENTIAL WELL WORK PLAN
SAINT-GOBAIN PERFORMANCE PLASTICS FACILITY
MERRIMACK, NH

TITLE
PROPERTIES IDENTIFIED FOR INITIAL SAMPLING - OVERVIEW MAP

CONSULTANT



PROJECT NO.
1668623

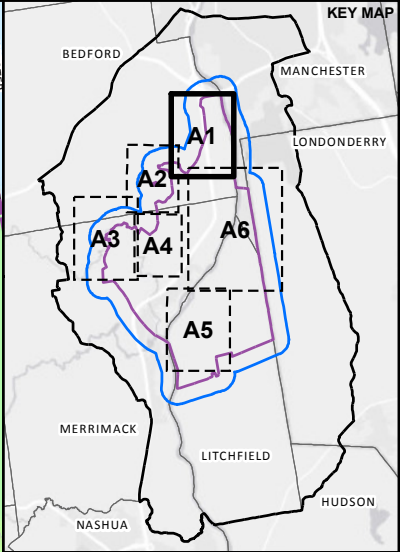
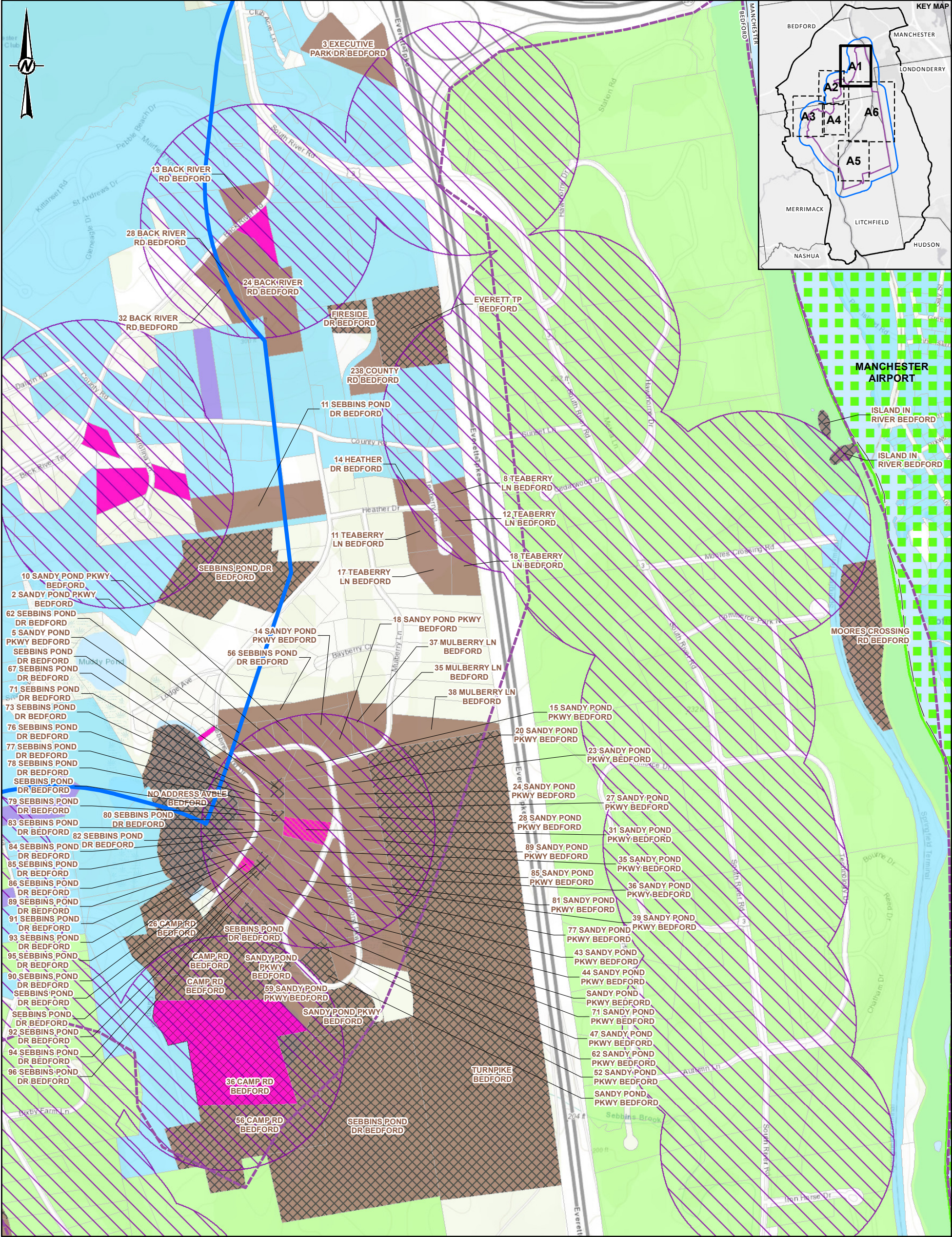
CONTROL

REV.

FIGURE

7A

YYYY-MM-DD	2019-09-30
DESIGNED	RWB
PREPARED	SHL
REVIEWED	RWB
APPROVED	APTM



LEGEND

- Pre-GMZ Boundary (see Note 1)
- Outer Boundary (see Note 1)
- Tax Parcel Boundary
- Town Boundary
- 2x MCL (> 24 ppt) 1000 ft Buffer
- Pre-GMZ 2000 ft Buffer
- Parcels Identified for Initial Sampling where Occupants will be Offered Bottled Water
- Parcels Identified for Initial Sampling
- Parcels Identified for Intial Sampling where bottled water will be offered - Likely Unoccupied
- Parcels Identified for Initial Sampling - Likely Unoccupied
- Parcel-Water Main Status**
 - Access to Alternate Water confirmed by Consent Decree (if applicable)
 - Access to Water Mains is Likely

- Access to Water Mains is not Likely
- Parcels where Bottled Water May be required
- Airport Potential Source Boundary



NOTE(S)

1. PRE-GMZ BOUNDARY AND OUTER BOUNDARY FROM ATTACHMENT C OF CONSENT DECREE, STATE OF NEW HAMPSHIRE, DEPT. OF ENVIRONMENTAL SERVICES V. SAINT-GOBAIN PERFORMANCE PLASTICS CORPORATION, MARCH 20, 2018.

REFERENCE(S)

1. COORDINATE SYSTEM: NAD 1983 STATEPLANE NEW HAMPSHIRE FIPS 2800 FEET
2. IMAGERY SOURCES: ESRI, HERE, GARMIN, INTERMAP, INCREMENT P CORP., GEBCO, USGS, FAO, NPS, NRCAN, GEOBASE, IGN, KADASTER NL, ORDNANCE SURVEY, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), (C) OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY

CLIENT

SAINT-GOBAIN PERFORMANCE PLASTICS

PROJECT
RESIDENTIAL WELL WORK PLAN
SAINT-GOBAIN PERFORMANCE PLASTICS FACILITY
MERRIMACK, NH

TITLE

PROPERTIES IDENTIFIED FOR INITIAL SAMPLING - AREA 1

CONSULTANT



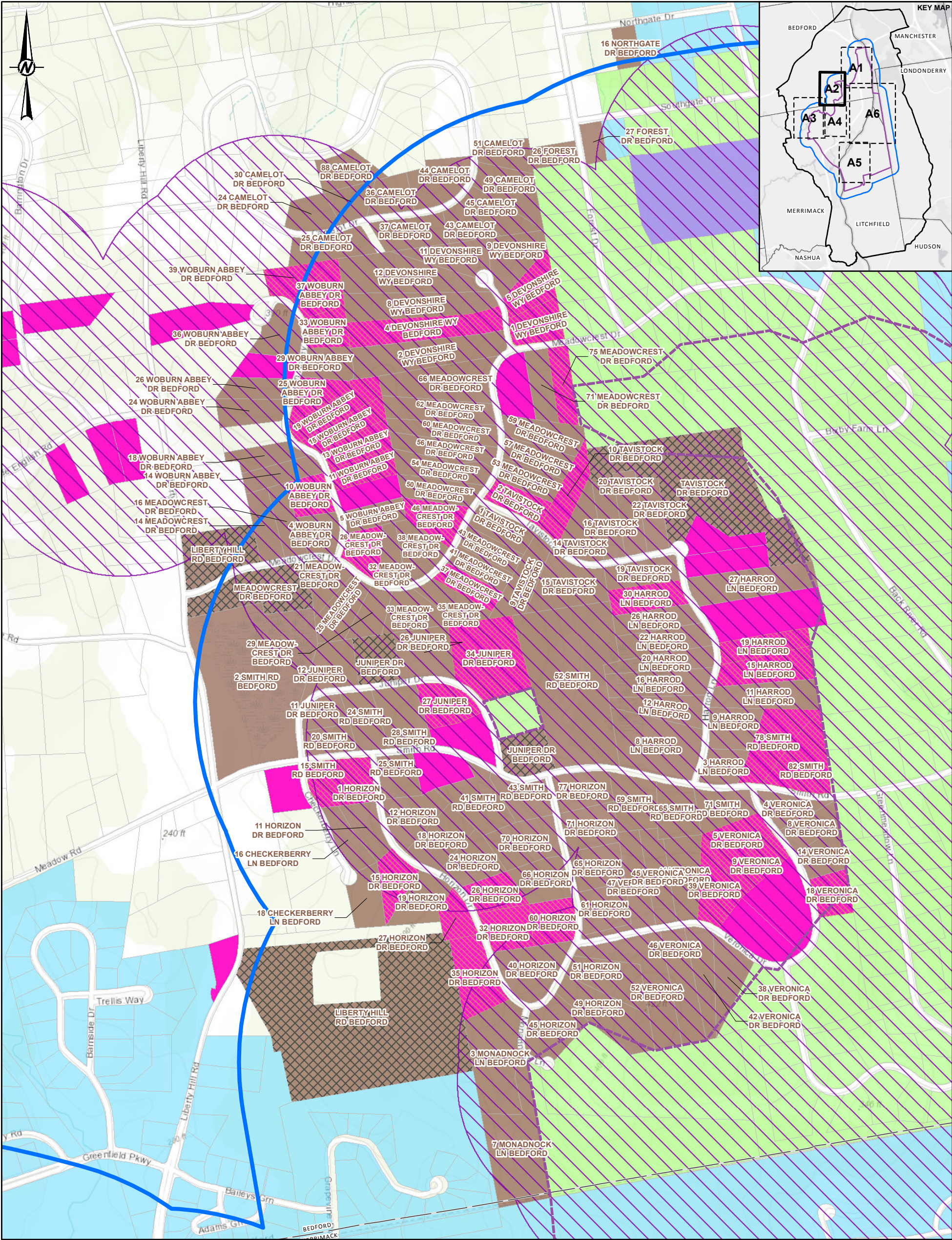
PROJECT NO.
1668623

CONTROL
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REV.
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FIGURE
7B

YYYY-MM-DD	2019-09-30
DESIGNED	RWB
PREPARED	SHL
REVIEWED	RWB
APPROVED	APTM



LEGEND

- Pre-GMZ Boundary (see Note 1)
- Outer Boundary (see Note 1)
- Tax Parcel Boundary
- Town Boundary
- 2x MCL (> 24 ppt) 1000 ft Buffer
- Pre-GMZ 2000 ft Buffer
- Parcels Identified for Initial Sampling where Occupants will be Offered Bottled Water
- Parcels Identified for Initial Sampling
- Parcels Identified for Initial Sampling - Likely Unoccupied
- Parcel-Water Main Status**
- Access to Alternate Water confirmed by Consent Decree (if applicable)
- Access to Water Mains is Likely
- Access to Water Mains is not Likely
- Parcels where Bottled Water May be required

NOTE(S)

1. PRE-GMZ BOUNDARY AND OUTER BOUNDARY FROM ATTACHMENT C OF CONSENT DECREE, STATE OF NEW HAMPSHIRE, DEPT. OF ENVIRONMENTAL SERVICES V. SAINT-GOBAIN PERFORMANCE PLASTICS CORPORATION, MARCH 20, 2018.

REFERENCE(S)

1. COORDINATE SYSTEM: NAD 1983 STATEPLANE NEW HAMPSHIRE FIPS 2800 FEET
2. IMAGERY SOURCES: ESRI, HERE, GARMIN, INTERMAP, INCREMENT P CORP., GEBCO, USGS, FAO, NPS, NRCAN, GEOBASE, IGN, KADASTER NL, ORDNANCE SURVEY, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), (C) OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY

CLIENT

SAINT-GOBAIN PERFORMANCE PLASTICS

PROJECT

RESIDENTIAL WELL WORK PLAN
SAINT-GOBAIN PERFORMANCE PLASTICS FACILITY
MERRIMACK, NH

TITLE

PROPERTIES IDENTIFIED FOR INITIAL SAMPLING - AREA 2

CONSULTANT



GOLDER

PROJECT NO.
1668623

CONTROL
-

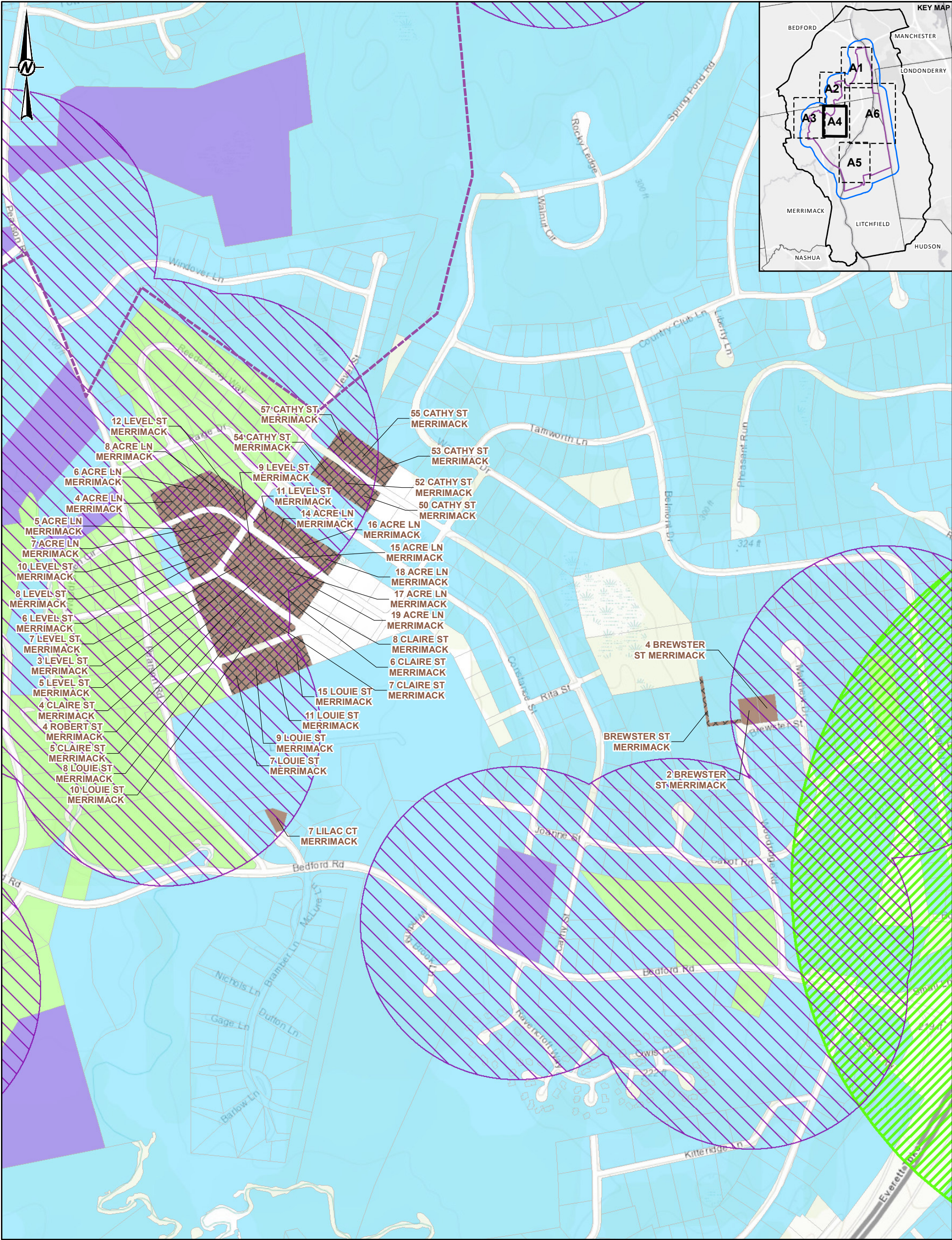
REV.
-

FIGURE
7C

YYYY-MM-DD	2019-09-30
DESIGNED	RWB
PREPARED	SHL
REVIEWED	RWB
APPROVED	APTM

FIGURE 7D

YYYY-MM-DD	2019-09-30
DESIGNED	RWB
PREPARED	SHL
REVIEWED	RWB
APPROVED	APTM



LEGEND

- Pre-GMZ Boundary (see Note 1)
- Outer Boundary (see Note 1)
- Tax Parcel Boundary
- Town Boundary
- 2x MCL (> 24 ppt) 1000 ft Buffer
- Pre-GMZ 2000 ft Buffer
- Parcels Identified for Initial Sampling
- Parcels Identified for Initial Sampling - Likely Unoccupied

Parcel-Water Main Status

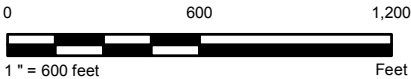
- Access to Alternate Water confirmed by Consent Decree (if applicable)
- Access to Water Mains is Likely
- Access to Water Mains is not Likely
- Parcels where Bottled Water May be required
- Fire Stations 2500 ft Buffer

NOTE(S)

1. PRE-GMZ BOUNDARY AND OUTER BOUNDARY FROM ATTACHMENT C OF CONSENT DECREE, STATE OF NEW HAMPSHIRE, DEPT. OF ENVIRONMENTAL SERVICES V. SAINT-GOBAIN PERFORMANCE PLASTICS CORPORATION, MARCH 20, 2018.

REFERENCE(S)

1. COORDINATE SYSTEM: NAD 1983 STATEPLANE NEW HAMPSHIRE FIPS 2800 FEET
2. IMAGERY SOURCES: ESRI, HERE, GARMIN, INTERMAP, INCREMENT P CORP., GEBCO, USGS, FAO, NPS, NRCAN, GEOBASE, IGN, KADASTER NL, ORDNANCE SURVEY, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), (C) OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY



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SAINT-GOBAIN PERFORMANCE PLASTICS

PROJECT

RESIDENTIAL WELL WORK PLAN
SAINT-GOBAIN PERFORMANCE PLASTICS FACILITY
MERRIMACK, NH

TITLE

PROPERTIES IDENTIFIED FOR INITIAL SAMPLING - AREA 4

CONSULTANT



GOLDER

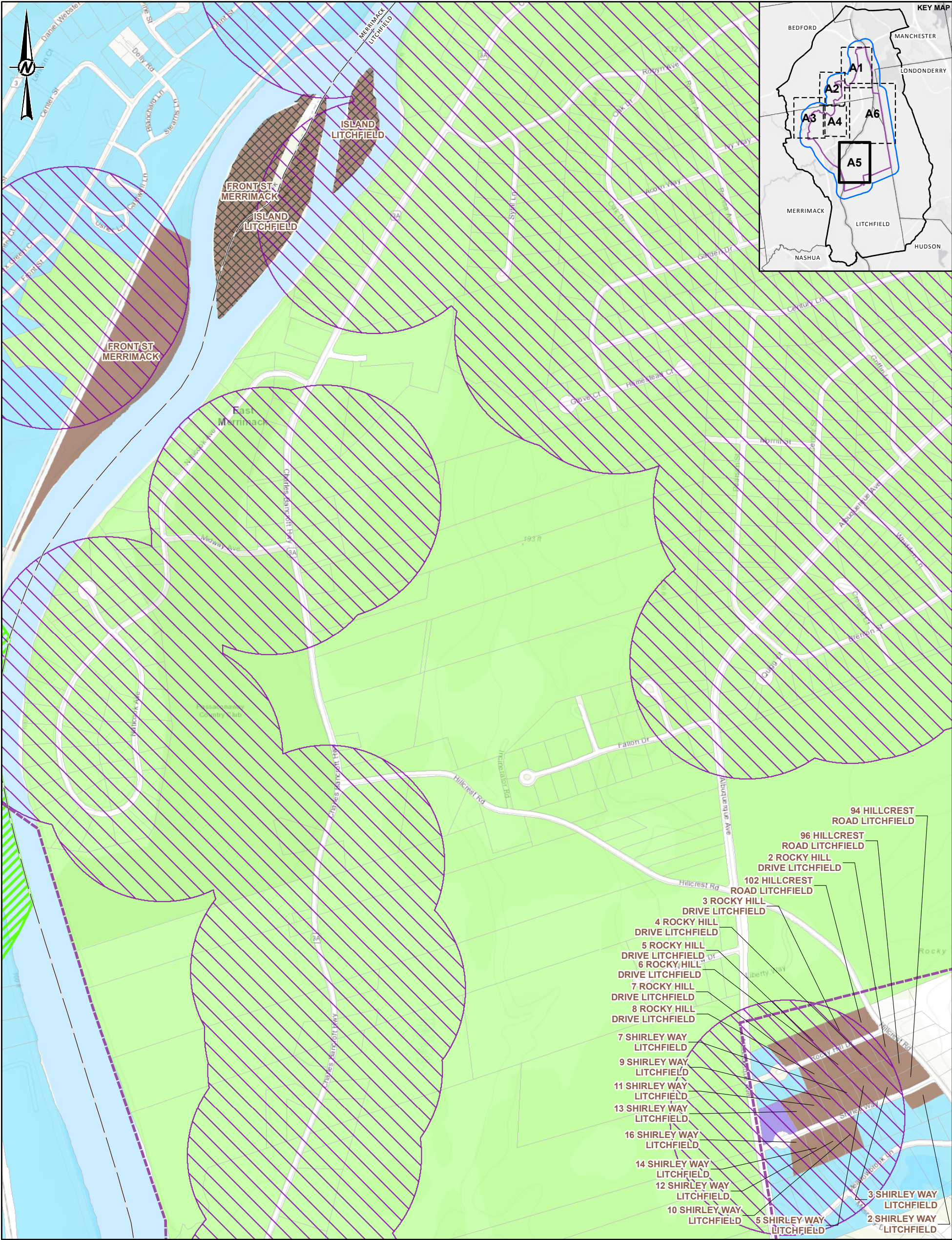
PROJECT NO.
1668623

CONTROL
-

REV.
-

FIGURE
7E

YYYY-MM-DD	2019-09-30
DESIGNED	RWB
PREPARED	SHL
REVIEWED	RWB
APPROVED	APTM



LEGEND

- Pre-GMZ Boundary (see Note 1)
- Outer Boundary (see Note 1)
- Tax Parcel Boundary
- Town Boundary
- 2x MCL (> 24 ppt) 1000 ft Buffer
- Pre-GMZ 2000 ft Buffer
- Parcels Identified for Initial Sampling
- Parcels Identified for Initial Sampling - Likely Unoccupied

Parcel-Water Main Status

- Access to Alternate Water confirmed by Consent Decree (if applicable)
- Access to Water Mains is Likely
- Access to Water Mains is not Likely
- Parcels where Bottled Water May be required
- Fire Stations 2500 ft Buffer

NOTE(S)
1. PRE-GMZ BOUNDARY AND OUTER BOUNDARY FROM ATTACHMENT C OF CONSENT DECREE, STATE OF NEW HAMPSHIRE, DEPT. OF ENVIRONMENTAL SERVICES V. SAINT-GOBAIN PERFORMANCE PLASTICS CORPORATION, MARCH 20, 2018.
REFERENCE(S)
1. COORDINATE SYSTEM: NAD 1983 STATEPLANE NEW HAMPSHIRE FIPS 2800 FEET
2. IMAGERY SOURCES: ESRI, HERE, GARMIN, INTERMAP, INCREMENT P CORP., GEBCO, USGS, FAO, NPS, NRCAN, GEOBASE, IGN, KADASTER NL, ORDNANCE SURVEY, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), (C) OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY

CLIENT

SAINT-GOBAIN PERFORMANCE PLASTICS

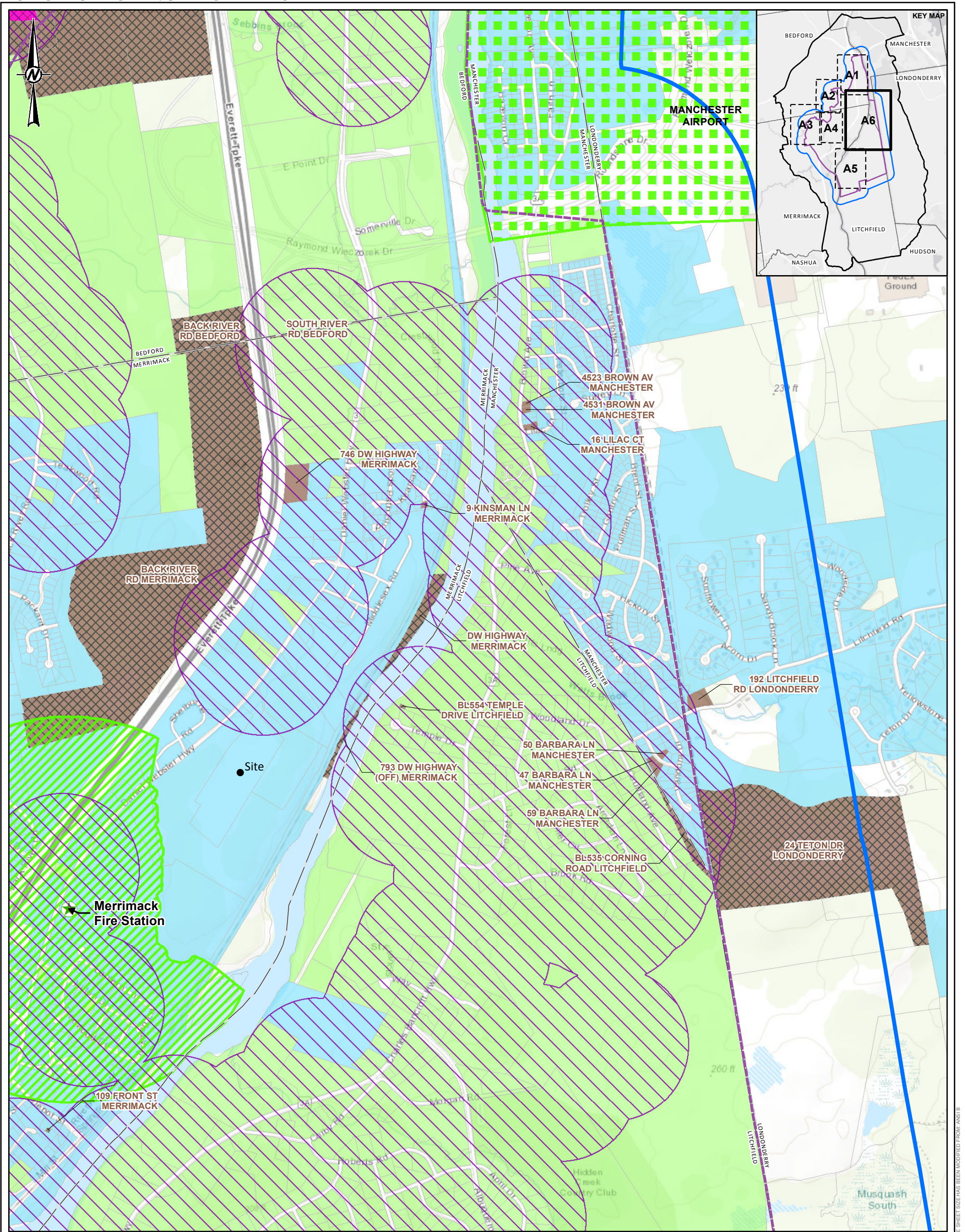
PROJECT
RESIDENTIAL WELL WORK PLAN
SAINT-GOBAIN PERFORMANCE PLASTICS FACILITY
MERRIMACK, NH

TITLE
PROPERTIES IDENTIFIED FOR INITIAL SAMPLING - AREA 5

CONSULTANT	YYYY-MM-DD	2019-09-30
	DESIGNED	RWB
	PREPARED	SHL
	REVIEWED	RWB
	APPROVED	APTM

PROJECT NO.	CONTROL	REV.	FIGURE
1668623	-	-	7F

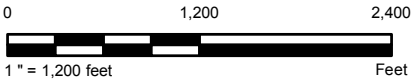




LEGEND

- Saint-Gobain Merrimack Facility
- Pre-GMZ Boundary (see Note 1)
- Outer Boundary (see Note 1)
- Tax Parcel Boundary
- Town Boundary
- 2x MCL (> 24 ppt) 1000 ft Buffer
- Pre-GMZ 2000 ft Buffer
- Parcels Identified for Initial Sampling
- Parcels Identified for Intial Sampling where bottled water will be offered - Likely Unoccupied
- Parcels Identified for Initial Sampling - Likely Unoccupied
- Parcel-Water Main Status**
 - Access to Alternate Water confirmed by Consent Decree (if applicable)
 - Access to Water Mains is Likely
 - Access to Water Mains is not Likely

- Parcels where Bottled Water May be required
- Potential Other Sources
- Fire Stations 2500 ft Buffer
- Airport Potential Source Boundary



NOTE(S)

1. PRE-GMZ BOUNDARY AND OUTER BOUNDARY FROM ATTACHMENT C OF CONSENT DECREE, STATE OF NEW HAMPSHIRE, DEPT. OF ENVIRONMENTAL SERVICES V. SAINT-GOBAIN PERFORMANCE PLASTICS CORPORATION, MARCH 20, 2018.

REFERENCE(S)

1. COORDINATE SYSTEM: NAD 1983 STATEPLANE NEW HAMPSHIRE FIPS 2800 FEET
2. IMAGERY SOURCES: ESRI, HERE, GARMIN, INTERMAP, INCREMENT P CORP., GEBCO, USGS, FAO, NPS, NRCAN, GEOBASE, IGN, KADASTER NL, ORDNANCE SURVEY, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), (C) OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY

CLIENT

SAINT-GOBAIN PERFORMANCE PLASTICS

PROJECT
RESIDENTIAL WELL WORK PLAN
SAINT-GOBAIN PERFORMANCE PLASTICS FACILITY
MERRIMACK, NH

TITLE
PROPERTIES IDENTIFIED FOR INITIAL SAMPLING - AREA 6

CONSULTANT



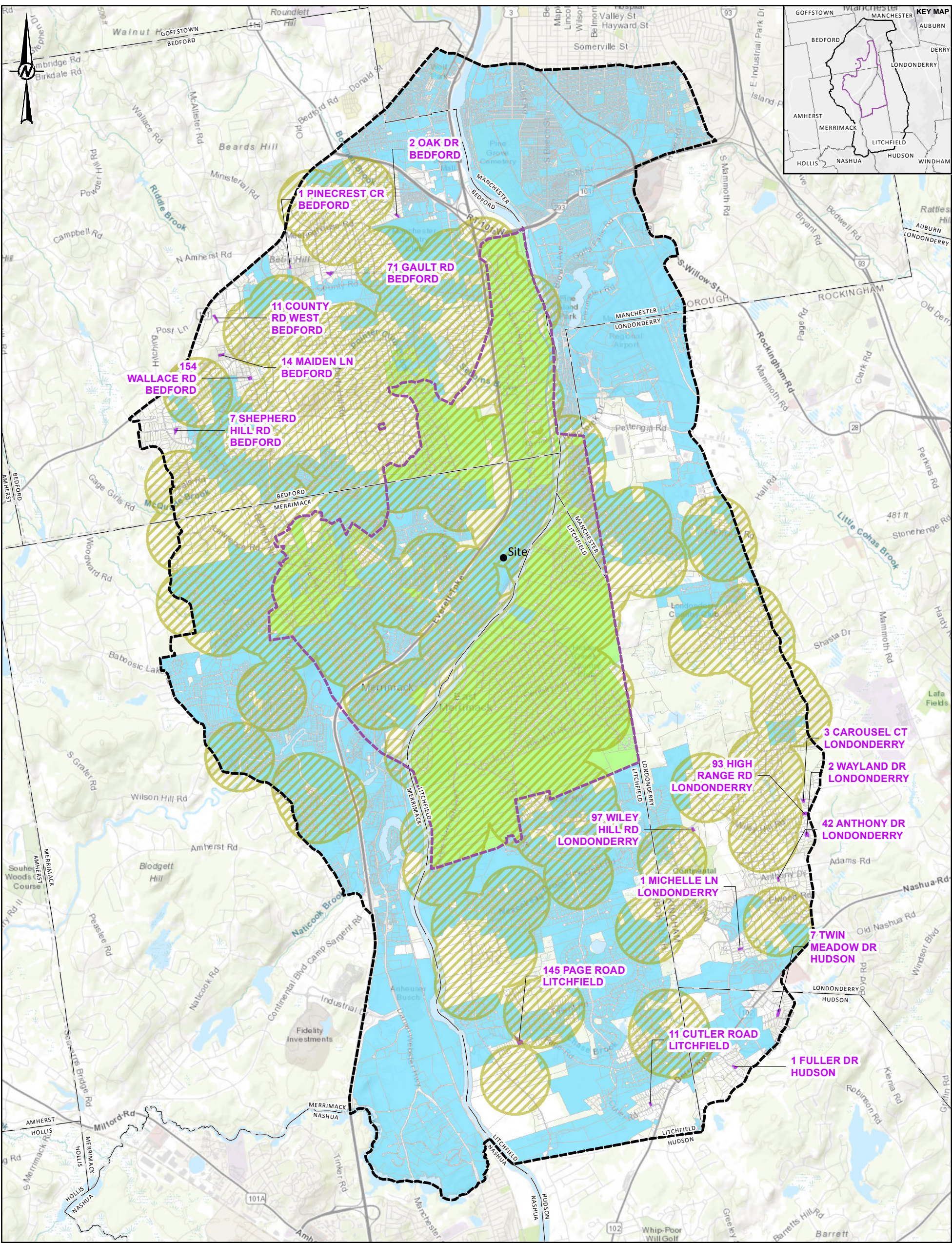
PROJECT NO.
1668623

CONTROL
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REV.
-

FIGURE
7G

YYYY-MM-DD	2019-09-30
DESIGNED	RWB
PREPARED	SHL
REVIEWED	RWB
APPROVED	APTM



- LEGEND**
- Saint-Gobain Merrimack Facility
 - Pre-GMZ Boundary (see Note 1)
 - Outer Boundary (see Note 1)
 - Town Boundary
 - Areas of Uncertainty Sample Location
 - 2000 ft Buffer Around Sampled Residential or Public Water Supply Well

- Parcel-Water Main Status**
- Access to Alternate Water confirmed by Consent Decree (if applicable)
 - Access to Water Mains is Likely
 - Access to Water Mains is not Likely

NOTE(S)

1. PRE-GMZ BOUNDARY AND OUTER BOUNDARY FROM ATTACHMENT C OF CONSENT DECREE, STATE OF NEW HAMPSHIRE, DEPT. OF ENVIRONMENTAL SERVICES V. SAINT-GOBAIN PERFORMANCE PLASTICS CORPORATION, MARCH 20, 2018.

2. LIKELIHOOD OF ACCESS TO WATER MAINS DETERMINED BY PROXIMITY TO KNOWN WATER MAIN LINE, CONSENT DECREE STATUS, AND DECOMMISSION STATUS, IF APPLICABLE.

REFERENCE(S)

1. COORDINATE SYSTEM: NAD 1983 STATEPLANE NEW HAMPSHIRE FIPS 2800 FEET

2. IMAGERY SOURCES: ESRI, HERE, GARMIN, INTERMAP, INCREMENT P CORP., GEBCO, USGS, FAO, NPS, NRCAN, GEOBASE, IGN, KADASTER NL, ORDNANCE SURVEY, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), (C) OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY

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CLIENT

SAINT-GOBAIN PERFORMANCE PLASTICS

PROJECT

RESIDENTIAL WELL WORK PLAN

SAINT-GOBAIN PERFORMANCE PLASTICS FACILITY

MERRIMACK, NH

TITLE

PROPERTIES IDENTIFIED INITIAL SAMPLING - AREAS OF LOWER SAMPLE DENSITY

CONSULTANT	YYYY-MM-DD	2019-09-30
	DESIGNED	RWB
	PREPARED	SHL
	REVIEWED	RWB
	APPROVED	APTM

PROJECT NO.	CONTROL	REV.	FIGURE
1668623	-	-	8

APPENDIX A

**SOP-1: General Field Methods for
PFAS Sampling Programs**

APPENDIX A

GENERAL FIELD METHODS FOR PFAS SAMPLING PROGRAMS

1.0 GENERAL APPLICABILITY

The purpose of this Standard Operating Procedure (SOP) is to describe the procedures that shall be used during implementation of this perfluorinated compound (PFAS) sampling program.

Due to the extremely low method detection limits associated with PFAS analysis (i.e., nanograms per liter [ng/l]) and the many potential sources of trace levels of PFASs, field personnel shall employ the greatest caution by strictly following the protocols described herein. Frequent replacement of nitrile gloves and decontamination of non-dedicated sampling equipment in accordance with the appropriate procedures will reduce the potential for false detections of PFASs. This SOP may be modified as new information becomes available.

This SOP includes the following:

- Considerations regarding food packaging and food consumption during PFAS sampling programs
- Field gear and clothing restrictions
- Personal hygiene requirements
- Sample area access restrictions
- Field equipment decontamination

Implementation of a field program subject to the provisions of the PFAS sampling requirements described herein shall not conflict with or supersede standard health and safety procedures outlined in the site-specific Health and Safety Plan (HASP).

2.0 RESPONSIBILITIES

The Field Team Leader and field personnel have the shared responsibility to oversee and ensure that the PFAS sampling program is performed in accordance with the program-specific protocols described in this SOP while adhering to the site-specific HASP. The Field Team Leader shall ensure that on-site personnel, including subcontractors and third parties that may have direct access to the sampling area, understand and comply with this SOP. Field personnel shall be notified of these requirements a minimum of three days prior to the start of field work in order to have the time to appropriately comply with many of the food and clothing requirements prior to arriving at the site.

3.0 GENERAL FIELD METHODS

3.1 Food Consumption

Components of some food packages have been treated to resist wetting. Historically, this was achieved through the use of PFASs. Accordingly, field personnel shall avoid the use of paper bags and other paper packaging to transport food to the site, including pre-wrapped foods and snacks (e.g., chocolate bars, energy bars, granola bars, potato chips, etc.). Field personnel shall not bring any fast food to the site that uses any form of paper wrapping including such sandwich wrappers or paper drinking cups. If possible, field personnel shall use hard plastic or stainless-steel food containers. Field personnel shall not use aluminum foil, wax paper, or coated textiles to transport food to the site.

The Teflon® coating on some frying pans contains fluorinated compounds and as such represents a potential source of PFASs. Field personnel shall not transport to or consume food at the site that has been prepared using a Teflon® coated cooking utensil.

Field personnel shall not consume food or beverages in the immediate vicinity of the sample location. Prior to consuming food or beverages, field personnel shall remove their nitrile gloves and move to a location a minimum distance of 35 feet away from the sample location, preferably in the downwind direction. When finished eating or drinking, field personnel shall wash their hands (in accordance with the

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GENERAL FIELD METHODS FOR PFAS SAMPLING PROGRAMS

personal hygiene restrictions in Section 3.3), put their coveralls back on and put on a new pair of nitrile gloves prior to returning to the work area.

3.2 Field Gear and Clothing Restrictions

Because treatments to provide water resistant, water proof, or stain-resistant clothing include the use of PFASs, field personnel shall not wear any water resistant, water proof, stain-resistant treated clothing or Tyvek clothing during the field program. Permissible outer field clothing for PFAS sampling programs includes clothing made from natural fibers, preferably cotton, and rain gear made of polyethylene, vinyl or PVC. Clothing made of synthetic fibers shall be avoided (i.e., reflective vests); however, during cold-weather field events, it shall be allowable to wear synthetic under-layers, provided that they be completely covered by clothing made of natural fibers.

Field clothing shall be laundered with a minimal amount of detergent and no fabric softener or scented products shall be used. Once field clothing has been washed appropriately, field clothing shall be washed a second time on a rinse-only cycle, using only water, prior to drying. Anti-static dryer sheets shall not be used when drying field clothing. Field clothing shall preferably be old cotton clothing that has been laundered many times, as new clothing may contain PFAS related treatments. Clothing containing Gore-Tex™ shall not be worn during the sampling program, as Gore-Tex™ clothing contains a PFAS membrane.

Because rental field vehicle seats may have been treated with PFAS-containing products for stain resistance, the seats of rented field vehicles shall be covered with a well laundered cotton sheet or blanket for the duration of the field program in order to avoid direct contact between field personnel clothing and vehicle seat fabric. Covering of personal field vehicle seats with sheets is only required if the fabric has been treated/washed recently, or if the vehicle owner is uncertain about the history of the vehicle. Measures taken to mitigate field personnel contact with field vehicle seat fabric shall not in any way interfere with the functionality or impede the use of vehicle safety belts.

Waterproof field books shall not be used; field notes shall be recorded on loose paper using aluminum clip boards. Plastic clip boards, self-sticking notes, binders or spiral hard cover notebooks shall not be used. Field notes shall be recorded in pen or pencil. Markers shall not be used.

Most safety footwear is constructed of leather and synthetic materials that have been treated to provide some degree of waterproofing and/or increased durability. Therefore, footwear materials represent a potential source of trace PFASs. Nitrile gloves shall be worn when contacting footwear. The nitrile gloves worn while contacting footwear shall be removed and new nitrile gloves shall be put on prior to re-entering the sampling area.

Disposable nitrile gloves shall be worn at all times. A new pair of nitrile gloves shall be donned prior to the following activities at each sample location:

- Contact with laboratory-supplied sample containers or PFAS-free water containers
- Decontamination of sampling equipment
- Insertion of anything into the well (e.g., HDPE tubing, HydraSleeve, bailer, etc.)
- Insertion of silicon tubing into the peristaltic pump
- Completion of monitoring well purging
- Groundwater and soil sample collection
- Handling of QA/QC samples including field blanks and trip blanks
- After the handling of any non-dedicated sampling equipment or contact with non-decontaminated surfaces

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GENERAL FIELD METHODS FOR PFAS SAMPLING PROGRAMS

3.3 Personal Hygiene

Field personnel shall not use shampoo, conditioner, body gel, cosmetic cream, or hand cream as part of their personal showering routine on the day of a sampling event, as these products may contain surfactants and represent a potential source of PFASs. Field personnel shall follow their normal hygiene routine the night before a sampling event and then rinse with water only the morning before a sampling event. The use of bar soap is acceptable; however, bar soap including moisturizers shall be avoided.

Field personnel shall not use moisturizers, cosmetics, or dental floss (unless they are made with natural ingredients) for the duration of the field program, either on-site or off-site, as these products may contain trace PFASs.

Field personnel shall use sunscreen and insect repellent as necessary to provide adequate personal protection and maintain adherence to the site-specific HASP. The field team leader will keep in stock a specific sunscreen (Equate Sport Lotion SPF 50) and insect repellent (DeepWoods Off for mosquitoes, or Sawyer Premium Insect Repellent for ticks) for use by field personnel. Extra volume of these products will be stored for potential laboratory testing if abnormal PFAS detections occur in samples. Field personnel may choose to use other sunscreens and insect repellents; however, extra volume must be purchased and stored for potential laboratory testing if abnormal PFAS detections occur in samples. Field personnel shall document the use of sunscreen and insect repellent in field notes including the specific products used by each field personnel.

3.4 Sample Area Access

Visitors, including contractors or site personnel, who are not following these general PFAS sampling program protocols shall not be allowed to approach within 35 feet of the sample area until PFAS sample collection activities are complete and the PFAS sample container has been enclosed in a Ziploc® storage bag and placed in the sample cooler.

3.5 Sample Containers and Handling

Sample containers shall not be handled without first donning a new, clean pair of nitrile gloves. Samples shall only be collected in high density polyethylene (HDPE) or polypropylene containers provided by the laboratory for specific PFAS use (no Teflon liner). Glass containers shall not be used due to the potential for loss of PFAS through sorption. Sample container labels shall be completed after collection of the sample using a non-gel pen or a pencil. The sample shall be collected first and the lid to the sample container shall be re-sealed before the sample container label is completed.

3.6 Sample Storage and Shipment

Analytical samples shall be stored on ice, maintained at approximately 4 degrees Celsius (°C) and transported by overnight courier to ELLE under proper chain of custody protocols. Field personnel shall only use new, fresh ice. Reusable chemical or gel ice packs shall not be used as these may contain PFAS. Tracking numbers for all shipments shall be provided once the sample coolers have been shipped to ensure their timely delivery.

Samples shall be packed consistent with ELLE's packing requirements (typically included on a form mailed with the bottles/chains of custody). Typically, this includes the following:

Field personnel shall double check that bottles are appropriately labeled with location names, sample dates and times, and analyte(s), and match with chain of custody. Sample bottles from the same location should be bagged together (with the exception of PFAS bottles, which will be bagged separately), and the outside of the bag shall be labeled with the sample location.

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GENERAL FIELD METHODS FOR PFAS SAMPLING PROGRAMS

Glass bottles/vials shall be wrapped in bubble wrap, or placed in foam packing cubes, prior to being bagged.

PFAS samples shall be shipped in PFAS-specific coolers.

Coolers will be lined with a larger plastic bag, with 5+ lbs of ice in a ziplock bag, followed by samples in ziplock bags and an additional 5+ lbs of ice in a ziplock bag. The large plastic bag shall then be zip-tied shut. Chain of custody should be photographed, and placed in a ziplock bag on top of the large plastic bag before sealing cooler. *REMEMBER: The temperature blank bottle must be inside of the large plastic bag on top of the ice.* Ensure that the coolers are dry prior to packing so that no stray water is likely to leak from the cooler while in transit.

Coolers containing samples must be taped shut and a lab-supplied custody seal must be signed, dated, and affixed across the edge of the lid of the cooler. *REMEMBER: Even unused coolers which don't contain samples must be taped shut when being shipped back to the lab.* If the cooler contains samples with short hold times, affix the appropriate lab-supplied sticker indicating short hold times on the lid of the cooler. The coolers should be labeled on the packing tape with "1 of X," "2 of X," etc. so the lab will know if a cooler is missing.

Samples shall be shipped overnight, with Saturday delivery. Lab-supplied shipping labels should specify this. Retain shipping receipts from FedEx with tracking numbers (to confirm delivery).

The FedEx at the Manchester Airport (Londonderry) is open until 8:15PM, but to make sure coolers make it onto the last plane, **delivery to FedEx should be no later than 7:00PM.**

Designate a field team member or someone in the office to confirm FedEx delivery to the lab the following day – delivery is typically by 10:00AM (but may not show up in the system until 11:00AM)

APPENDIX B

SOP 2: PFAS Program Sampling Protocols

APPENDIX B

PFAS PROGRAM SAMPLING PROTOCOLS

1.0 GENERAL APPLICABILITY

The purpose of this Standard Operating Procedure (SOP) is to describe the procedures that shall be followed during sample collection for analysis of perfluoroalkyl substances (PFAS).

This SOP includes the following:

- Sample Container Considerations
- Sample Collection
- Sample Shipping Requirements

2.0 RESPONSIBILITIES

The Field Team Leader and field personnel have the shared responsibility to oversee and ensure that the monitoring well purge and PFAS groundwater sampling program is performed in accordance with the program-specific protocols described in this SOP. The Field Team Leader shall ensure that field personnel understand and comply with this SOP.

3.0 SAMPLING PROCEDURES

3.1 Sample Containers

Drinking water samples shall be collected in HDPE sample containers provided by the laboratory specifically for use in the collection samples for analysis of PFAS (i.e., HDPE without a Teflon® liner). Glass containers shall not be used due to the potential for loss of PFAS through adsorption.

Sample container lids shall remain on the sample container until immediately prior to sample collection and lids shall be resealed immediately following sample collection. Field personnel shall hold the sample container lid in their hand until the lid is replaced on the sample container. Field personnel shall not rinse sample container bottles during groundwater sample collection. Sample container labels shall be completed using a pen or a pencil after the lid has been re-secured on the sample container. Field personnel shall not use markers to complete sample container labels.

3.2 Sample Collection

Field personnel shall wash their hands and put on a new pair of nitrile gloves prior to sample collection. Once the nitrile gloves are put on, field personnel shall not handle papers, pens, clothes, etc. prior to the collection of groundwater samples. If field personnel need to take notes or handle anything other than the sample container prior to collecting the sample, the old nitrile gloves with which contact was made shall be removed and new nitrile gloves put on.

Field personnel shall hold the sample container in such a manner that the sample container does not come in direct contact with the sampling equipment. The sampling container shall be filled completely. If field personnel observe suspended solids in the collected sample, a new sample shall be collected, if possible. If it is not possible to collect a sample with minimal suspended solids (i.e., no evidence of solids settling at the bottom of the sampling container), field personnel shall contact the project manager and, if the sample is submitted for analysis, indicate the presence of suspended solids as a note on the chain-of-custody.

Samples shall be placed directly into the laboratory-supplied HDPE containers. Once the sample container lid has been resealed, groundwater sample containers are to be placed into individual new Ziploc® (or equivalent) storage bags. Following sample collection, sample containers enclosed within their Ziploc® (or equivalent) storage bags shall be placed on ice in the laboratory-provided sample cooler. Field personnel shall minimize sample exposure to sunlight during sample handling and storage.

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PFAS PROGRAM SAMPLING PROTOCOLS

All sampling materials shall be treated as single use and disposed of following completion of sampling at each location.

3.3 Sample Shipping

Sample containers shall be stored on ice and maintained at approximately 4 degrees Celsius (°C) and transported by overnight courier to the laboratory. Field personnel shall only use new, fresh ice. Reusable chemical or gel ice packs shall not be used as these may contain PFAS. Tracking numbers for all shipments shall be provided once the sample coolers have been shipped to ensure their timely delivery.

APPENDIX C

**SOP 3: PFAS Program Residential
Well Sampling Protocol**

APPENDIX C

PFAS RESIDENTIAL/PRIVATE WELL SAMPLING PROTOCOL

1.0 GENERAL APPLICABILITY

The purpose of this Standard Operating Procedure (SOP) is to describe the methods to be followed when collecting samples from private water supply wells for laboratory analyses from locations in the vicinity of the Saint-Gobain Performance Plastics manufacturing facility in Merrimack, New Hampshire.

2.0 EQUIPMENT AND MATERIALS

2.1 Equipment

The list below identifies the equipment required to complete this task.

- Clean hand tools
- Graduated container and stop watch and/or flowmeter to determine purge rate and volume
- Clean 5-gallon buckets for purge water (if sampling outdoor or basement tap)
- Thermometer
- First-aid kit
- Fire extinguisher
- Metal clipboard for field observations

2.2 Materials

The list below identifies the materials required to complete this task.

- Laboratory-supplied, pre-preserved sample containers and trip blanks
- Chain-of-Custody
- Cooler with ice
- Field sampling form
- Personal protective equipment (PPE)

3.0 PROCEDURES

3.1 Preliminary Activities

Observe well head if exposed. Note on the sampling form any defects observed in the well head and/or potential contaminant sources located near well head.

Determine and note on the sampling form the volume of the holding/pressure tank(s).

Trace the cold water system and look for in-house treatment devices, such as water softeners, pH adjusters, point-of-entry treatment (POET) systems, radon systems, carbon systems, reverse-osmosis system or ultra violet systems. Note in-house treatment devices on the sampling form. The sample must be collected prior to any type of water treatment system or the system must be bypassed.

Samples should be collected as close to the well head as possible.

Samples should be collected from an outdoor tap located downstream from the pressure tank as long as the water is untreated and purging protocols are followed to remove stagnant water from the piping system. Samples may be collected from an indoor tap (kitchen sink, bathroom sink, tap at the holding/pressure tank, etc.) if necessary.

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PFAS RESIDENTIAL/PRIVATE WELL SAMPLING PROTOCOL

Note the location of sample collection on the field form. Note any nearby potential contamination sources (PFAS-containing materials, cleaners, solvents, gas cans, paint cans, dry cleaning [if indoors], etc.) on the field form. Consider a different sampling location if the sample port is not clean (i.e., contains grease, lead soldering, or other possible contaminants) or if there are potential contamination sources nearby.

Always wear new personal protection gloves (e.g., nitrile) at each location when collecting samples.

3.2 Sampling

Begin purging the cold water tap using an empty container of known volume and stopwatch or a flowmeter to determine the sampling port flow rate. Note the time purging began and the estimated flow rate on the field form.

Sample container labels shall be completed using a pen or a pencil after the lid has been re-secured on the sample container. Field personnel shall not use markers to complete sample container labels.

Purge colder water at a high flow rate for a minimum of 10 minutes. If purging an indoor location, purging can be completed in a sink or tub, and purge water can be sent down the drain. If purging an outdoor location, purge water should be collected in a bucket and poured on the ground in an area away from walkways/play areas etc., such that ice or wet/slippery conditions are not created.

Record temperature and any field observations (e.g. color, odor, clarity, and foam) on the on the field form and collect the sample by:

1. Reduce the flow rate from the sampling port to achieve as laminar a flow as possible.
2. Collect the primary PFAS samples (and duplicate, if applicable), then collect the remaining primary and duplicate samples. Field duplicate samples will be collected at one in every twenty sampling locations, for all analytical parameters. Open the labeled sample container and collect the sample by allowing the water to flow gently down the inside wall of the container with minimal turbulence.
3. Wearing nitrile gloves, fill the sample bottles nearly to the top, secure caps on the bottles, and gently agitate the bottles to allow the preservative to dissolve. Do not rinse the sample containers or allow them to overflow.
4. One field blanks for perfluorinated compound (PFAS) sample will be collected at every twenty sampling locations. Collect the PFAS field blank for the location by slowly pouring the provided laboratory DI water into the appropriate sample container at the same location where the primary sample is collected. Place the sample container in the cooler with ice and record the sample collection time on the field form and complete the chain-of-custody.
5. Place the sample containers in a cooler on ice at 4 degrees Celsius to be delivered to the laboratory within 24-hours of collection.
6. Record the sample collection time on the field form and complete the chain-of-custody.
7. Samples must be delivered to the laboratory within 24-hours of collection.

4.0 SAMPLE NAMING

For consistency, name samples using the following conventions:

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PFAS RESIDENTIAL/PRIVATE WELL SAMPLING PROTOCOL

For primary field samples – use the street number street name, town, sample location and sample date (e.g., “179 Back River Road-Bedford-Outdoor Spigot-093019”).

For field duplicate samples - use the primary sample name appended by “Dup” (e.g., “179 Back River Road-Bedford-DUP-093019” for a field duplicate collected at 179 Back River Road, Bedford).

For field blank samples (Method 537.1 only) – use the primary sample name appended by “FB” (e.g., “179 Back River Road-Bedford-FB-093019” for the field blank collected at 179 Back River Road, Bedford).

5.0 QA/QC SAMPLES

5.1 Field Duplicates

Field personnel shall collect one blind field duplicate for every twenty primary field samples collected. Field personnel shall collect field duplicates immediately after collection of the primary field samples. Field duplicates shall be collected in the laboratory-supplied sample containers and analyzed for the same analytical parameters as the primary sample. Field duplicate container lids shall remain in the hand of field personnel until replaced on the sample container. Sample container labels shall be completed as described above.

Field personnel shall collect groundwater field duplicates for analysis of PFAS using the following procedures:

- Following collection of the primary sample, change gloves and prepare to collect the field duplicate.
- Field duplicates shall be collected immediately following collection of the primary sample.
- Completely fill the laboratory-provided sample containers.
- Replace and re-seal the lid on the groundwater sample containers and then complete the sample container label as described above.

5.2 Field Blanks

Field personnel shall submit one field blank for every twenty sampling locations for analysis of PFAS only. Field blanks shall consist of PFAS-free water containerized in an HDPE sample container filled at the laboratory prior to beginning the field program. Field blank sample containers shall be opened during the collection of a sample and the laboratory-supplied PFAS-free water contained therein shall be poured directly into a laboratory-supplied HDPE sample container and then resealed. Field blank container lids shall remain in the hand of field personnel until replaced on the sample container. Sample container labels shall be completed as described above.

5.3 Trip Blanks

Field personnel shall submit one laboratory-supplied trip blank for every twenty sampling locations for analysis of PFAS only. Trip blanks shall consist of PFAS-free water containerized in an HDPE sample container filled at the laboratory prior to the beginning of the field program. Field personnel shall place one trip blank container in the sample cooler at the beginning of the day and the trip blank shall remain in the cooler for the duration of sampling activities conducted on that day. Trip blank containers shall be submitted to the laboratory with the field sample shipment.

6.0 DOCUMENTATION

The field sampling form should be filled out in its entirety, including information regarding the location of sample collection, potential sources of cross contamination located near the sampling location, field

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measurements, any observations about the sample, and sample times. Duplicate samples, field blanks and trip blanks should be included on the chain-of-custody.



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