Sean M. Reese
Director of Public Works
Town Hall
703 Washington Street
Holliston, MA 01746

August 11, 2017

United States Environmental Protection Agency
New England Region 1
5 Post Office Square, Suite 100
Boston, MA 02109-3912

Dear Sir or Madam,

Please find attached the Notice of Intent for the Dopping Brook Water Treatment Plant in Holliston, MA. The complete NOI package includes:

- Environmental Protection Agency (EPA) PWTF NPDES General Permit NOI form
- Site figures including a site locus, lagoon and discharge photo and a schematic of the treatment process

The NOI form provides an overview of the Dopping Brook WTP treatment process and related chemicals.

Respectfully Submitted,

Sean M. Reese

B. Filing with MassDEP – As previously noted, **only** facilities in Massachusetts that were previously unpermitted and discharge to an Outstanding Resource Water (ORW) and High Quality Waters must submit an NOI to MassDEP. In such cases, a completed copy of the NOI must also be sent to:

Massachusetts Department of Environmental Protection
Division of Watershed Management
8 New Bond Street
Worcester, MA 01606

C. Filing with NH DES – All applicants in New Hampshire must also provide a completed copy of their NOI to NH DES at the following address:

New Hampshire Department of Environmental Services
Water Division, Wastewater Engineering Bureau
29 Hazen Drive, P.O. Box 95
Concord, New Hampshire 03302-0095

III. Suggested Notice of Intent (NOI) Format

A. Facility Information

1. *Indicate applicable General Permit for discharge* MAG640000

   NHG640000

2. *Facility Data*

   Facility Name Dopping Brook Water Treatment Plant

   Street/PO Box 1400 Mayflower Landing City Hollisten

   State MA Zip Code 01746

   Latitude 71° 28' 19" Longitude 42° 10' 32"

   SIC Code(s) 4941

   Type of Business Municipal Drinking Water Treatment Plant

3. *Facility Mailing Address (if different from Location Address, above)*

   Facility Name Hollisten Water Department

   Street/PO Box 703 Washington St. City Hollisten

   State MA Zip Code 01746

4. *Facility Owner:*
Legal Name Sean Reese

Email Reeses@hollisten.k12.ma.us

Street/PO Box 703 Washington St. City Hollisten

State MA Zip Code 01746

Contact Person Sean Reese Tel # 508-250-2350

Owner is (check one): Federal ____ State ✓ Tribal ____ Private ____

Other (describe)

5. *Facility Operator (if different from above):*
Legal Name

Email

Street/PO Box City

State Zip Code

Contact Person Tel #

6. *Currently (Administratively) Covered Under the Expired PWTF General Permit? (Please check yes or no):*

Yes No ✓

a) Has a prior NPDES permit (either individual or general permit coverage) been granted for the discharge that is listed on the NOI? Yes ✓ No If Yes, Permit Number MAG640066

b) Is the discharge a "new discharger" as defined by 40 CFR Section 122.22? Yes No ✓

c) Is the facility covered by an individual NPDES permit for *other* discharges? Yes No ✓

If yes, Permit Number:

d) Is there a pending NPDES application (either individual or general permit) on file with EPA for this discharge? Yes No ✓

If yes, date of submittal: and Permit Number, if available

7. *Attach a topographic map indicating the location of the facility and the outfall(s) to the receiving water.* **Map attached?**

B. Discharge Information (Attach additional sheets as needed):

1. *Name of receiving water into which discharge will occur*: Dopping Brook

Check Appropriate Box: Freshwater ✓ Marine Water

State Water Quality Classification Class A

Type of Receiving Water Body (e.g., stream, river, lake, reservoir, estuary, etc.) Brook

2. *Indicate the frequency of the discharge:*

Emergency Only Infrequent (Once/Twice a Year) Intermittent*** Continuous ✓

Other***

***If Intermittent (i.e., occurs sometimes but not regularly as in batch discharge), provide # of days per year the discharge occurs _____

***If Other, explain _____

3. Describe the discharge activities for which the owner/applicant is seeking coverage, including process discharges not specifically authorized in the PWTF GP which need to be authorized for discharge (and which attain the effluent limits and other conditions of the general permit.)

(This description should include all treatment methods used on the wastewater prior to discharge including lagoons, baffles, filter presses, etc. If lagoons are used at the facility, please include the number and size of lagoons; the size and elevation of the entry pipe; the time of travel from the entry point of the discharge into the lagoon to the entry point to the receiving waters; and the length of backwash cycle for any combination of filters.)

The water treatment plant includes sodium hydroxide for pH adjustment, zinc orthophosphate for corrosion control, greensand filtration for manganese removal, polyaluminum chloride and cationic polymer for color removal and sodium hypochlorite for disinfection. Backwash from the filters goes into one of two lagoons then to a wetland area and then to the brook. The filters backwash every 99 hours. Averaging 3 backwashes a month 88,000 gals of backwash is entered into lagoons. Each lagoon has a detention time of approximately 24 hours.

4. Attach a line drawing or flow schematic showing water flow through the facility including sources of intake water, operations contributing to flow, treatment units, outfalls, and receiving water(s).

Line drawing or flow diagram attached?

5. Identify the source of the water being discharged:

Surface water Groundwater ✓ Other (describe)

6. Number of Outfalls 1 Latitude and Longitude to the nearest second for each Outfall. Attach additional pages if necessary.

Outfall # Latitude 71°28'11 Longitude 42°10'32

Outfall # Latitude _____ Longitude _____

Outfall # Latitude _____ Longitude _____

7. For each outfall, indicate the proposed sampling location(s) for both effluent and ambient water (when applicable) and proposed consistent times of the month for collecting samples:

Outfall #
Samples collected at the termination of the lagoon discharge. Samples collected at the beginning of each backwash

Outfall #

Outfall #

C. Effluent Characteristics

1. List here and attach additional information (on separate sheet) on any water additives used at the facility. This includes chemicals (including aluminum, iron, or phosphorus-containing chemicals) for pH adjustment, dechlorination, control of biological growth, and control of corrosion and scale in water pipes.

See #3. Sodium hypochlorite, polymer, coagulant, sodium hydroxide, fluoride, zinc orthophosphate

2. Report any known remediation activities or water quality issues in the vicinity of the discharge

None

3. Are aluminum compounds or polymers used as coagulants at this facility?*

Yes ✓ No

*If answer is "Yes" and the facility was *not* covered under the PWTF GP that expired on

10/2/14, additional monitoring data and information is required. **Please complete Item III.C.12.**

4. Does the facility use any alum-based products for algae control?*

Yes_ No ✓

*If answer is "Yes" and the facility was *not* covered under the PWTF GP that expired on 10/2/14, additional monitoring data and information is required. **Please complete Item III.C.12.**

5. Are iron-containing coagulants used at this facility? Yes_ No ✓

6. Does the facility's discharge contain residual chlorine? Yes ✓ No

[If Yes, EPA will calculate a Total Residual Chlorine effluent limit for your facility]

7. Does the facility provide treatment to remove arsenic from the raw water source? Yes No ✓

8. a. Are phosphorus-containing chemicals added to the treated water at this facility? Yes ✓ No

b. If answer to 8.a. is Yes, does the facility discharge to Phosphorus-Impaired waters? Yes No ✓

c. If answer to 8.b. is Yes, provide name of P-Impaired waterbody: _____

9. Does the facility remove radium or other radioactive substances from raw water sources to comply with drinking water standards? Yes No ✓

10. Provide the reported or calculated seven day- ten year low flow (7Q10) of the receiving water 7Q10: _____cfs

NOTE: For facilities that discharge in New Hampshire, the state permitting authority **must** be contacted at the address listed in Appendix VI of the PWTF GP to determine and/or confirm the 7Q10 and/or dilution factor. For facilities that discharge in Massachusetts, it is highly recommended to contact the relevant state authority (MassDEP) to determine and/or confirm the 7Q10 and/or dilution factor. Attach any calculation sheets used to support the stream flow and dilution factors. See Appendix VII for equations and additional information.

11. For *each* outfall, provide the following discharge information:

Outfall # _____

a) *Design Flow of Facility (in million gallons per day, MGD):* _____
This value will determine the facility's daily maximum flow limit, up to a maximum of 1.0 MGD.

b) *Discharge Flow (in gallons per day, GPD):*
Maximum Daily Flow 88,000 GPD Average Monthly Flow 352,000 GPD

c) *TSS (mg/l)*: Number of samples: 10 (Minimum of 10 samples)

Maximum Daily ND mg/l Average Monthly ND mg/l

d) *pH (s.u.)* : Number of samples: 10 (Minimum of 10 samples)
Minimum 6.9 s.u. Maximum 7.4 s.u.

e) *Total Residual Chlorine (ug/l)*: Number of samples: 10 (Minimum of 10 samples)
Maximum Daily 40 ug/l
NOTE: TRC is only required for discharges which have been previously chlorinated or contain residual chlorine

12. The following section must be completed for any facility that answered "Yes" to Question III.C.3 or III.C.4 (e.g. adds an aluminum-containing chemical to the water being treated and/or discharged) **AND** was not covered under the previous PWTF GP (which expired on 10/2/14).

a) Collect, analyze and submit **12 effluent samples and 10 ambient surface water samples** from a location upstream of and not affected by the discharge. For facilities in New Hampshire and Massachusetts, each sample should be analyzed for total recoverable Al in micrograms per liter. All laboratory results shall be submitted on a separate sheet.
   - **a.** The samples shall be composite samples consisting of four grab samples taken at approximately equal intervals on a flow weighted basis during the time at which the discharge is entering the receiving water after the start of the backwash cycle.
   - **b.** For each sampling event, the effluent and surface water samples shall be collected on the same day and during a representative discharge event. The samples shall be no more frequent than weekly and, if time allows in completing the NOI, at monthly intervals and at different flow conditions. If taking the ambient water quality sample from lakes/reservoirs, the 10 samples should be composited vertically.
   - **c.** Discharge flow at the time of effluent sampling should be recorded. Flow conditions at the time of ambient water sampling should be recorded (or estimated from nearest gaging station).
   - **d.** Do not include dilution when recording the results.
   - **e.** See Section 2.1.2.3 and Footnote 12 of Section 2.1.1 for MA facilities (or Section 3.1.2.3 and Footnote 10 of 3.1.1 for NH facilities) for key information on minimum level for analysis and sufficiently sensitive test procedures.
   - **f.** Sampling data that was collected within one year of the effective date of this general permit AND that adheres to all of the requirements above may be submitted in lieu of new samples. This must be denoted with the submitted data.

b) Provide a description of control measures, chemical substitutions, waste handling methods, and operational changes evaluated and/or used by the facility to minimize the discharge of aluminum to surface waters. (Include additional sheet(s), if necessary)

D. Endangered Species Act Eligibility Information

Using the instructions in Appendix III of the PWTF GP, which of the following criteria apply to your facility?

U.S. Fish and Wildlife Service (USFWS) Criteria: A ✓ B C

1. If you selected USFWS criteria B, has consultation with the U.S. Fish and Wildlife Service been completed?

   Yes No

2. If consultation with US Fish & Wildlife Service was completed, was a written concurrence finding that the discharge is "not likely to adversely affect" listed species or critical habitat received?

   Yes No

3. Attach documentation of ESA eligibility for USFWS as required at Part 1.4 and Appendix III of the General Permit. **Documentation attached?** _____

4. For facilities seeking coverage under the Potable Water Treatment Facility General Permit for the *first* time, respond to the following questions to assist in ESA eligibility for NMFS:

   a) Indicate if the facility discharges into any of the stretches of the following rivers which can support or provide habitat to either Shortnose or Atlantic Sturgeon:

Merrimack River (from Essex Dam in Lawrence, Downstream (including Haverhill) to mouth of River)	Yes	No
Connecticut River (from Turner's Falls, downstream through Holyoke (including Holyoke Dam region)	Yes	No
Taunton River	Yes	No
Piscataqua River (in NH)	Yes	No

   b) Has the facility had any previous formal or informal consultation with NMFS?

   Yes No

   If yes, attach the results of the consultation(s). **Documentation attached?** _____

E. National Historic Properties Act Eligibility

1. Are any historic properties listed or eligible for listing on the National Register of Historic Places located on the facility site or in proximity to the discharge? Yes No ✓

2. Have any State or Tribal Historic Preservation Officers been consulted in this determination?

   Yes No ✓

   If yes, attach the results of the consultation(s). **Documentation attached?** _____

3. Which of the three National Historic Preservation Act scenarios listed in Appendix II, Section III have you met?

   1 2 3

F. Supplemental Information

Please provide any supplemental information, including antidegradation review information applicable to new or increased discharges. Attach any analytical data used to support the application. Attach any certification(s) required by the General Permit.

G. Signature Requirements

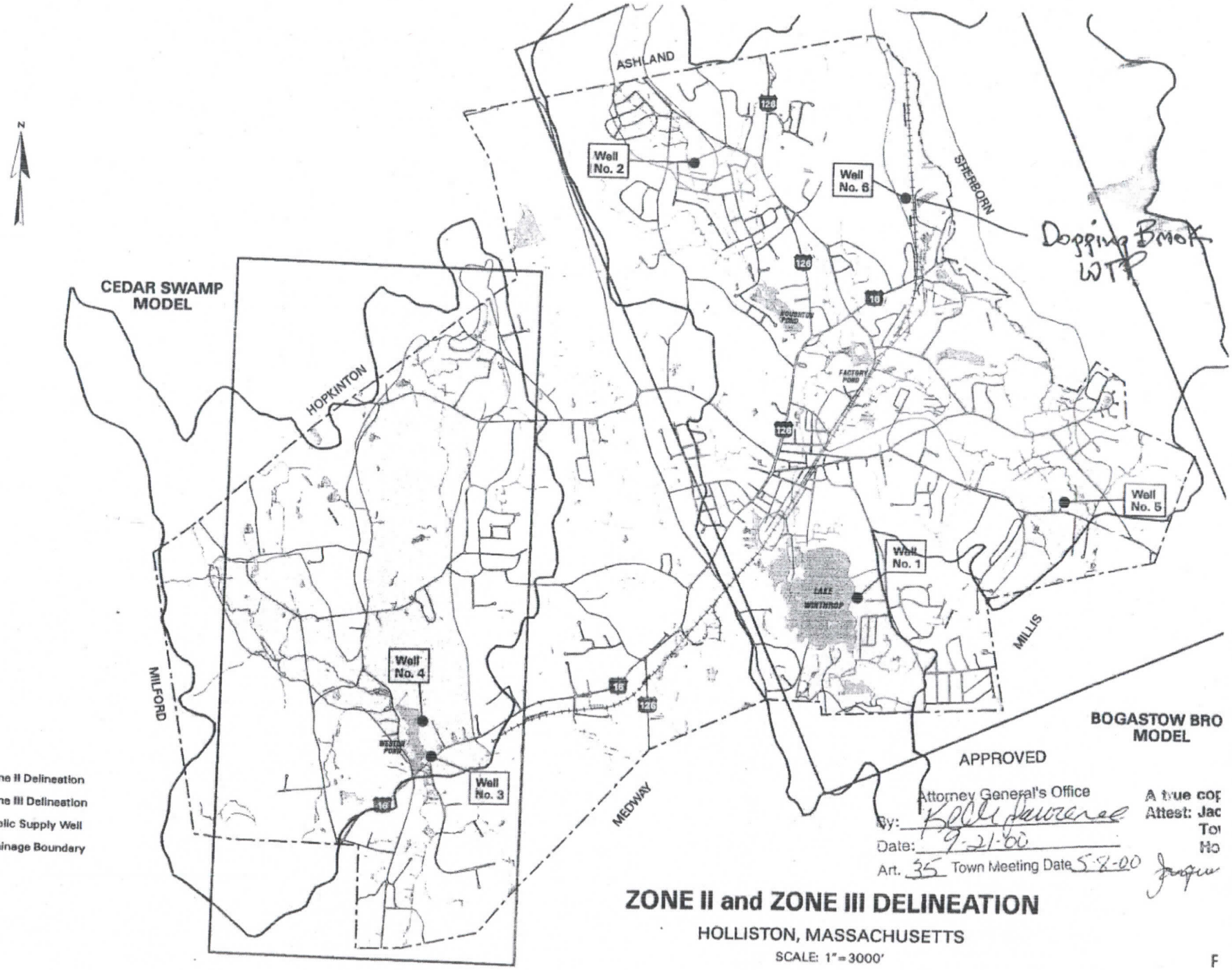
The NOI must be signed by the operator in accordance with the signatory requirements of 40 CFR § 122.22 (see below) including the following certification:

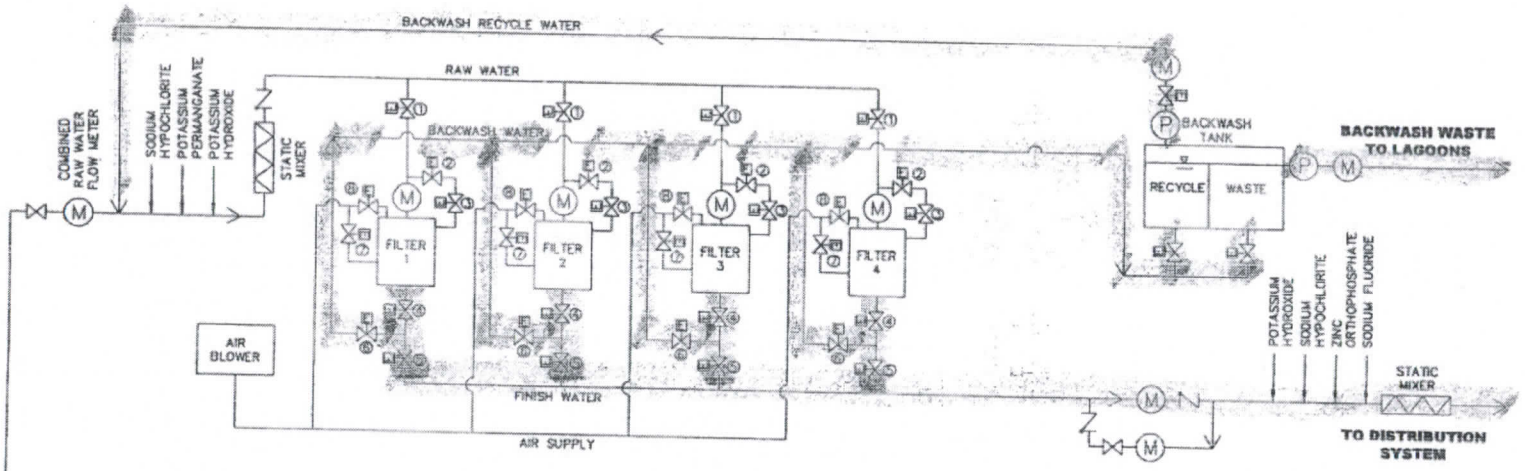
I certify under penalty of law that (1) the discharge for which I am seeking coverage under the general permit consists solely of a surface water discharge from a potable water treatment facility; (2) any chemicals used to treat the discharge have been identified in this NOI; and (3) where applicable, the facility has complied with the requirements of this permit specific to the Endangered Species Act and National Historic Preservation Act.

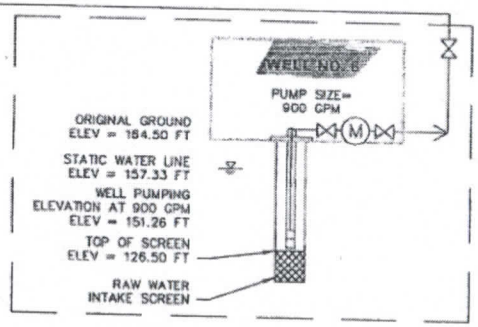
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature Sean M Reese Date 8-11-17

Printed Name and Title Sean M. Reese, Public Works Director


ASHLAND
Well No. 2
Well No. 6
SHERBORN
Dopping Brook WTP
CEDAR SWAMP MODEL
HOPKINTON
MILFORD
Well No. 4
Well No. 3
Well No. 5
Well No. 1
MILLIS
MEDWAY
BOGASTOW BRO MODEL
Legend
Zone II Delineation
Zone III Delineation
Public Supply Well
Drainage Boundary
APPROVED
Attorney General's Office
By: Kelly Lawrence
Date: 9-21-00
Art. 35 Town Meeting Date 5-8-00
A true cop
Attest: Jac
To
Ho
ZONE II and ZONE III DELINEATION
HOLLISTON, MASSACHUSETTS
SCALE: 1"=3000'
March 1996





LEGEND

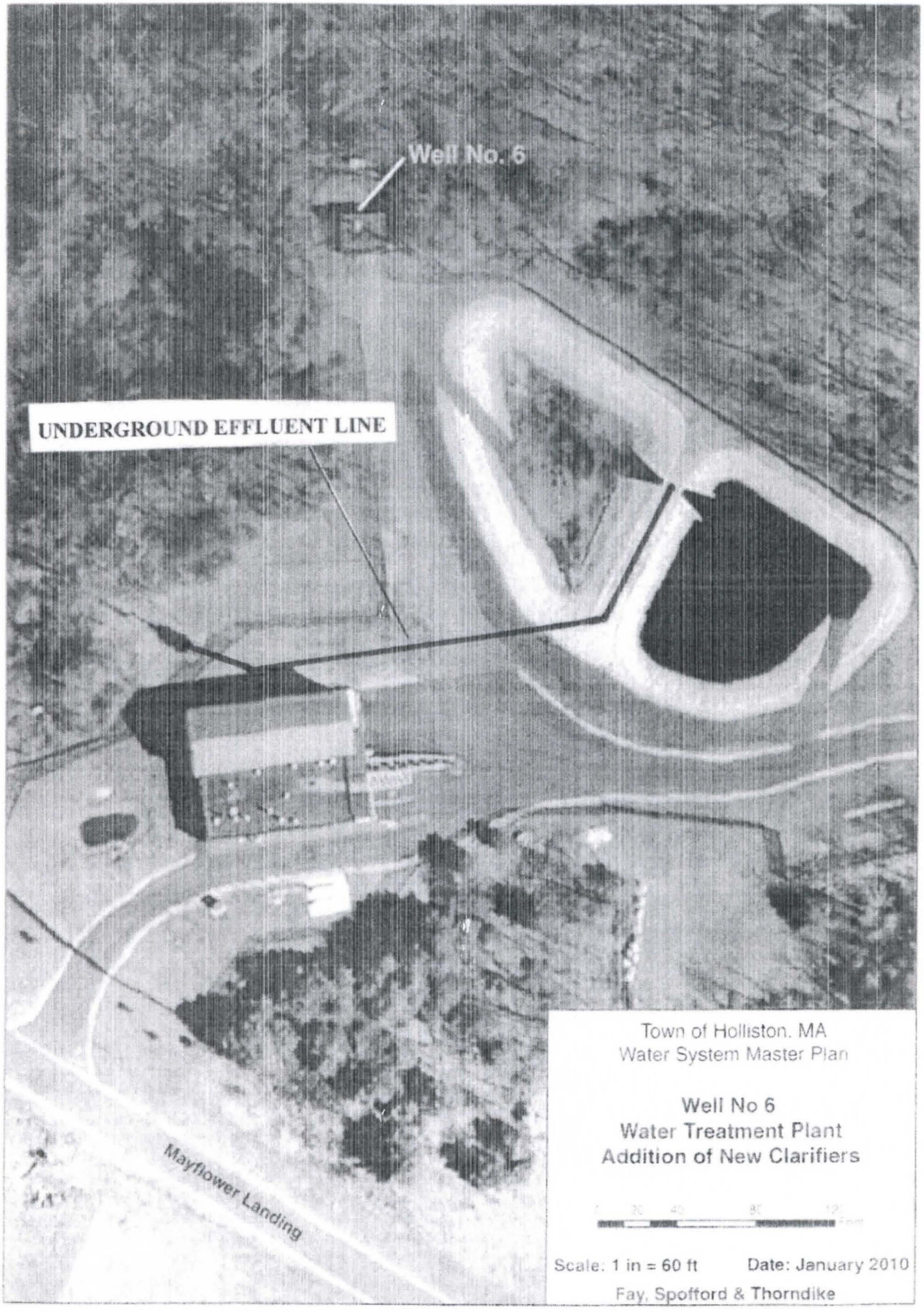
- FLOW METER
- PUMP
- STATIC MIXER
- ELECTRIC OPERATING VALVE
- CHECK VALVE
- BUTTERFLY VALVE
- FLOW DIRECTION
- EXISTING FACILITY
- FUTURE IMPROVEMENTS

Valve Schedule

1. FILTER INFLUENT
2. BACKWASH WASTE
3. DRAIN DOWN
4. FILTER EFFLUENT
5. BACKWASH INLET
6. RINSE
7. AIR WASH
8. AIR PRESSURIZATION

S E A Consultants Inc.
Scientists/Engineers/Architects
CAMBRIDGE, MASSACHUSETTS CONCORD, NEW HAMPSHIRE
ROCKY HILL, CONNECTICUT AUGUSTA, MAINE
STONEHAM, MASSACHUSETTS

Scale: NOT TO SCALE	Client: HOLLISTON, MASSACHUSETTS
Date: 11/1/06	
Job No.: 2003-07	Project: WATER TREATMENT PLANT WELL NO.4 AND WELL NO.6
Designed by: SVT	
Drawn by: AAB	Drawing: FIGURE 1-1: GREENSAND FILTER AND PLANT SCHEMATIC - WELL NO.6
Checked by: SVT	
Approved by: SVT	



Town of Holliston, MA
Water System Master Plan

Well No 6
Water Treatment Plant
Addition of New Clarifiers

Scale: 1 in = 60 ft Date: January 2010

Fay, Spofford & Thorndike