

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND - REGION I
ONE CONGRESS STREET, SUITE 1100
BOSTON, MASSACHUSETTS 02114-2023

Request for General Permit Authorization to Discharge Wastewater
(Notice of Intent to be covered by the General Permit (NOI))

Potable Water Treatment Facility (PWTF)
NPDES General Permit No. MAG640000 and NHG640000

A. Facility Information

1. Facility Owner:

Name Billerica Water Department e-mail _____
Street/PO Box 270 Treble Cove Road City Billerica
State Massachusetts Zip Code 01821
Contact Person John McGovern Telephone Number 978-671-0957

2. Facility Operator (if different from above):

Name _____ e-mail (optional) _____
Street/PO Box _____ City _____
State _____ Zip Code _____
Contact Person _____ Telephone Number _____

3. Facility Data (attach topographic map or other map showing facility/discharge location):

Name Billerica Water Treatment Plant e-mail (optional) _____
Street/PO Box 270 Treble Cove Road City Billerica
State Massachusetts Zip Code 01821
Contact Person John McGovern Telephone Number 978-671-0957
Latitude 42.549444 Longitude -71.287222

4. Standard Industrial Classification (SIC Codes) and Descriptions of Processes:

SIC Code(s) 4941
Description(s) Water Supply

5. Current Permitting Status (please check yes or no):

1. Has a prior NPDES permit been granted for the discharge? Yes ☒ (Permit Number: MA640050)
No ☐
2. Is the discharge a "new discharge" as defined by 40 CFR Section 122.22? Yes ☐ No ☒
3. Is the facility covered by an individual NPDES permit? Yes ☐ (Permit Number) No ☒
4. Is there a pending application on file with EPA for this discharge? Yes ☐ (Date of submittal:) No ☒

B. Discharge Information

1. Name of Receiving Waterbody Winning Brook
2. Type of Receiving Waterbody (e.g. stream, lake, reservoir, estuary etc) Brook
3. State Water Quality Classification: B Freshwater: X Marine Water:
4. 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

Appendix IV – NPDES Potable Water Treatment Facility General Permit

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 water; and the length of backwash cycle for any combination of number of filters. (attach extra sheets if necessary):

Please see Attachment 1

5. Please provide a diagram depicting the treatment methods, outfalls, and receiving water. Please see Figures 1,2 and 3.

6. Number of outfalls: 1

For each outfall: Latitude: 42.549444

Longitude: -71.287222

7. What is the proposed sampling location(s) and proposed consistent times of the month for collecting samples:

Typically, Billerica discharges to the Billerica Waste Water Treatment Plant, which does not require sampling. The WTP only discharges to Winning Brook in emergency situations. The data provided below is from samples taken in the Clearwell and Gravity Thickeners to be representative of the quality of the discharge. The samples were collected every 2-5 days within the past 2 months, 6 samples total.

C. Effluent Characteristics

1. List here and attach information on any water additives used at the facility (Including chemicals for pH adjustment, dechlorination, control of biological growth, and control of corrosion and scale in water pipes):

Please see Attachment 2

2. Please report here any known remediation activities or water-quality issues in the vicinity of the discharge.

There are no known remediation activities or water-quality issues within a 1/2 mile radius of the discharge. Please see Figure 4.

3. Are aluminum-containing coagulants used at this facility? Yes ☒ No ☐

4. Does the discharge contain residual chlorine? Yes ☒ No ☐

5. Does the facility provide treatment to remove arsenic from the raw water source? Yes ☐ No ☒

6. Are phosphorus-containing chemicals added to the treated water at this facility? Yes ☐ No ☒

7. All applicants must attach a separate sheet listing all laboratory results (minimum of five) for total recoverable aluminum (in micrograms per liter) taken within the last six months. Do not include dilution when recording your results. See Section 4.4.5 of General Permit for more information. Please see Attachment 5.

8. Please include the following effluent data for each outfall:

<u>Characteristic (report if measured)</u>	<u>Average Monthly</u>	<u>Maximum Daily</u>
Discharge Flow (gpd)	N/A	N/A
TSS (mg/l)	3.840	6.000
pH (s.u.)	(min) 6.20	(max) 6.59
Total Recoverable Aluminum (ug/l)	0.517	0.803
Total Residual Chlorine (ug/l)	2.14	0.050

(continued on next page)

Data collected from the Clearwell and Gravity Thickeners between 11/16/2009-12/02/2009. Billerica WTP typically only discharges in emergency situations, therefore there is no known average monthly flow.

Appendix IV – NPDES Potable Water Treatment Facility General Permit

8. Continued

Characteristic (report if measured)

Whole Effluent Toxicity (%) LC50 N/A and/or C-NOEC _____

9. If the discharge contains aluminum and/or residual chlorine, please provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water, the dilution factor, and attach any calculations used to support stream flow and dilution calculations (See Appendix VII for dilution calculations and additional information):

7Q10 0.10 cfs Dilution Factor _____ cfs Please see Attachment 3

D. Endangered Species Act Eligibility

- Using the instructions in Appendix I of the PWTF GP, under which criterion listed in Part II are you eligible for coverage under this general permit?
A ☒ B _____ C _____ D _____ E _____ F _____
- If you selected criteria D or F, has consultation with the federal services been completed? Yes _____ No _____
- If consultation with U.S. Fish and Wildlife Service and/or NOAA Fisheries 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 _____
- Attach documentation of ESA eligibility as described below and required at Part 3.4.1 and Appendix I, Part III, Step 4, of the General Permit. Please see Attachment 4.

Criterion A - No federally-listed threatened or endangered species or federally-designated critical habitat are present: A copy of the most current county species list pages for the county(ies) where your site or facility and discharges are located. You must also include a statement on how you determined that no listed species or critical habitat are in proximity to your site or facility or discharge locations.

Criterion B - Section 7 consultation completed with the Service(s) on a prior project: A copy of the USFWS's and/or NMFS's, as appropriate, biological opinion or concurrence on a finding of "unlikely to adversely effect" regarding the ESA Section 7 consultation.

Criterion C - Activities are covered by a Section 10 Permit: A copy of the USFWS's and/or the NMFS's, as appropriate, letter transmitting the ESA Section 10 authorization.

Criterion D - Concurrence from the Service(s) that the discharge is "not likely to adversely affect" federally-listed species or federally-designated critical habitat (not including the four species of concern identified in Section I of Appendix I): A copy of the USFWS's and/or the NMFS's, as appropriate, letter or memorandum concluding that the discharge is consistent with the general permit's "not likely to adversely affect" determination.

Criterion E - Activities are covered by certification of eligibility: A copy of the documents originally used by the other operator of your site or facility (or area including your site) to satisfy the documentation requirement of Criteria A, B, C or D.

Criterion F - Concurrence from the Service(s) that the discharge is "not likely to adversely affect" species of concern, as identified in Section I of Appendix I: A copy of the USFWS and/or the NMFS, as appropriate, concurrence with the applicant's determination that the discharge is "not likely to adversely affect" listed species.

E. National Historic Properties Act Eligibility

1. Using the instructions in Appendix III of the PWTF GP, under which criterion listed in Part III are you eligible for coverage under this general permit?

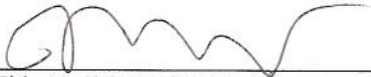
1 ☒ 2 ☐ 3 ☐

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).

F. Certification

I certify that 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. 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 gather and evaluate the information submitted. Based on 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 am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature



Date

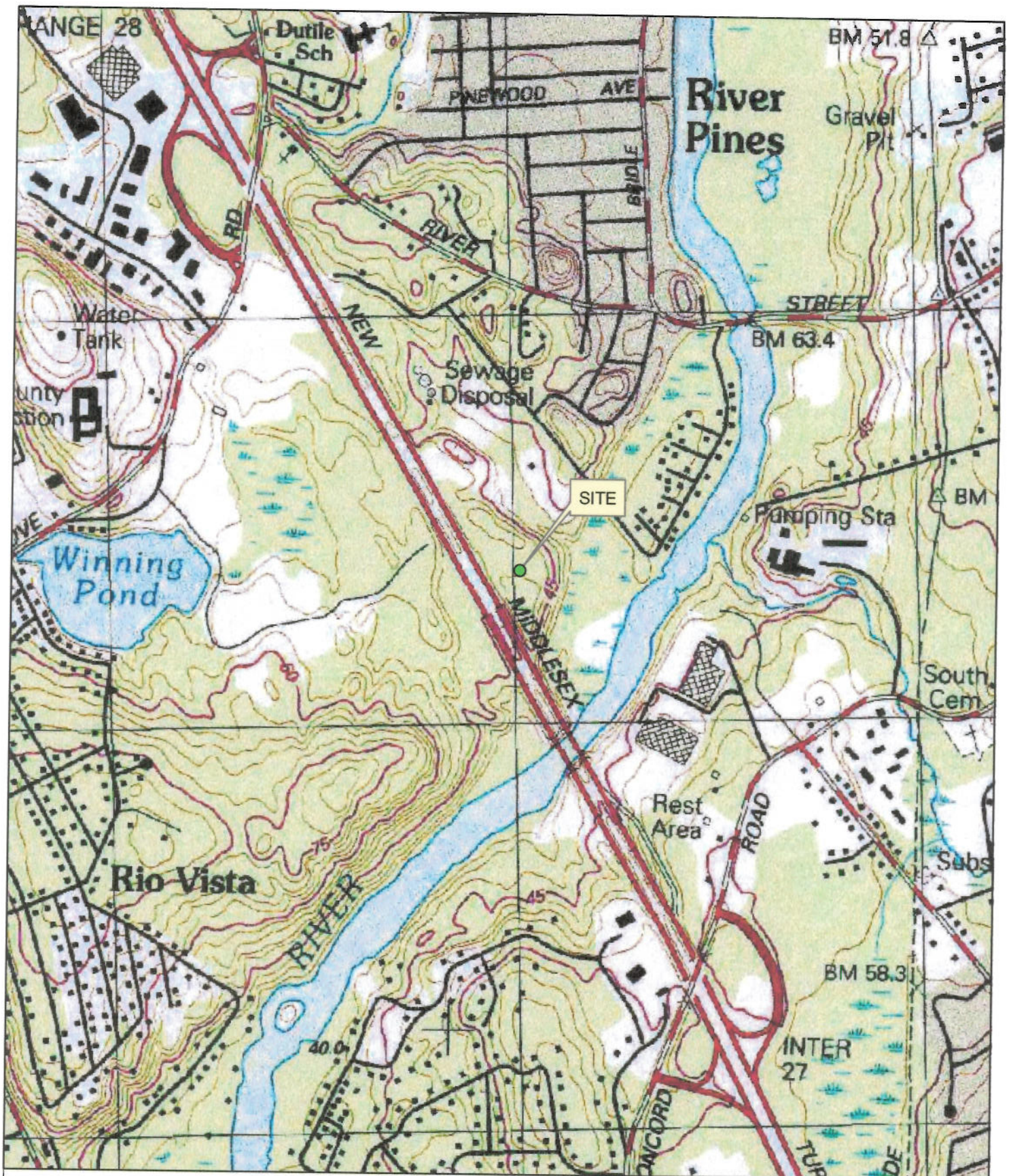
12/29/09

Printed Name and Title John McGovern, Superintendent

Federal regulations require this application to be signed as follows:

1. For a corporation, by a principal executive officer of at least the level of vice president;
2. For partnership or sole proprietorship, by a general partner or the proprietor, respectively, or,
3. For a municipality, State, Federal or other public facility, by either a principal executive officer or ranking elected official.

Note: Permits No. MAG640000 and NHG640000 may be found at www.epa.gov/region1/npdes/pwtfgp.html



**Billerica Water Treatment Plant
270 Treble Cove Road
Billerica, Massachusetts**

**Figure 1
Site Location**

Basemap: 7.5-Minute USGS Topographic Quadrangle
Source: Mass GIS
Coordinate System: NAD83 Mass. State Plane Mainland
Units: meters

0 500 1,000
Feet

CDM

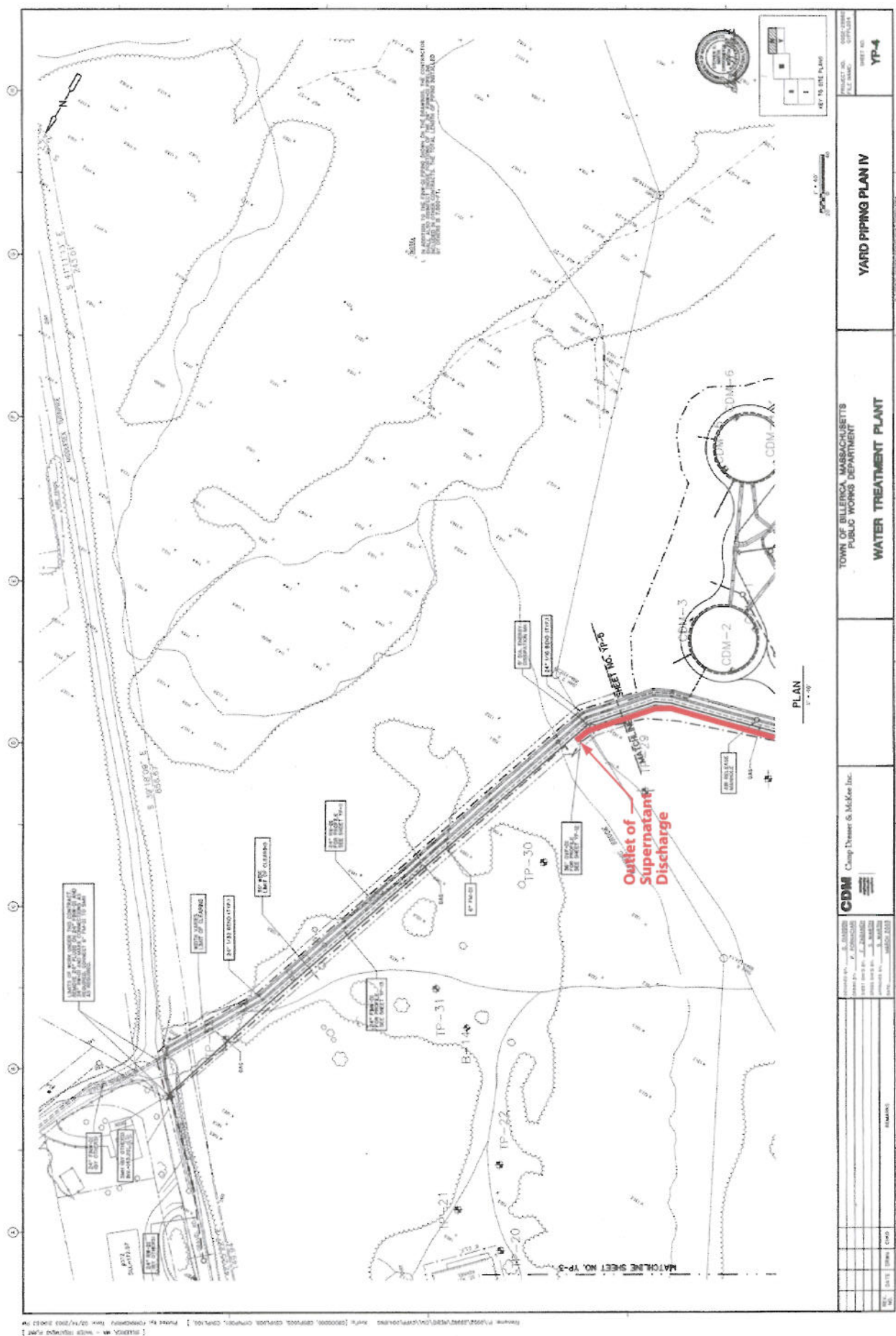


Figure 2
Yard Piping Plan IV

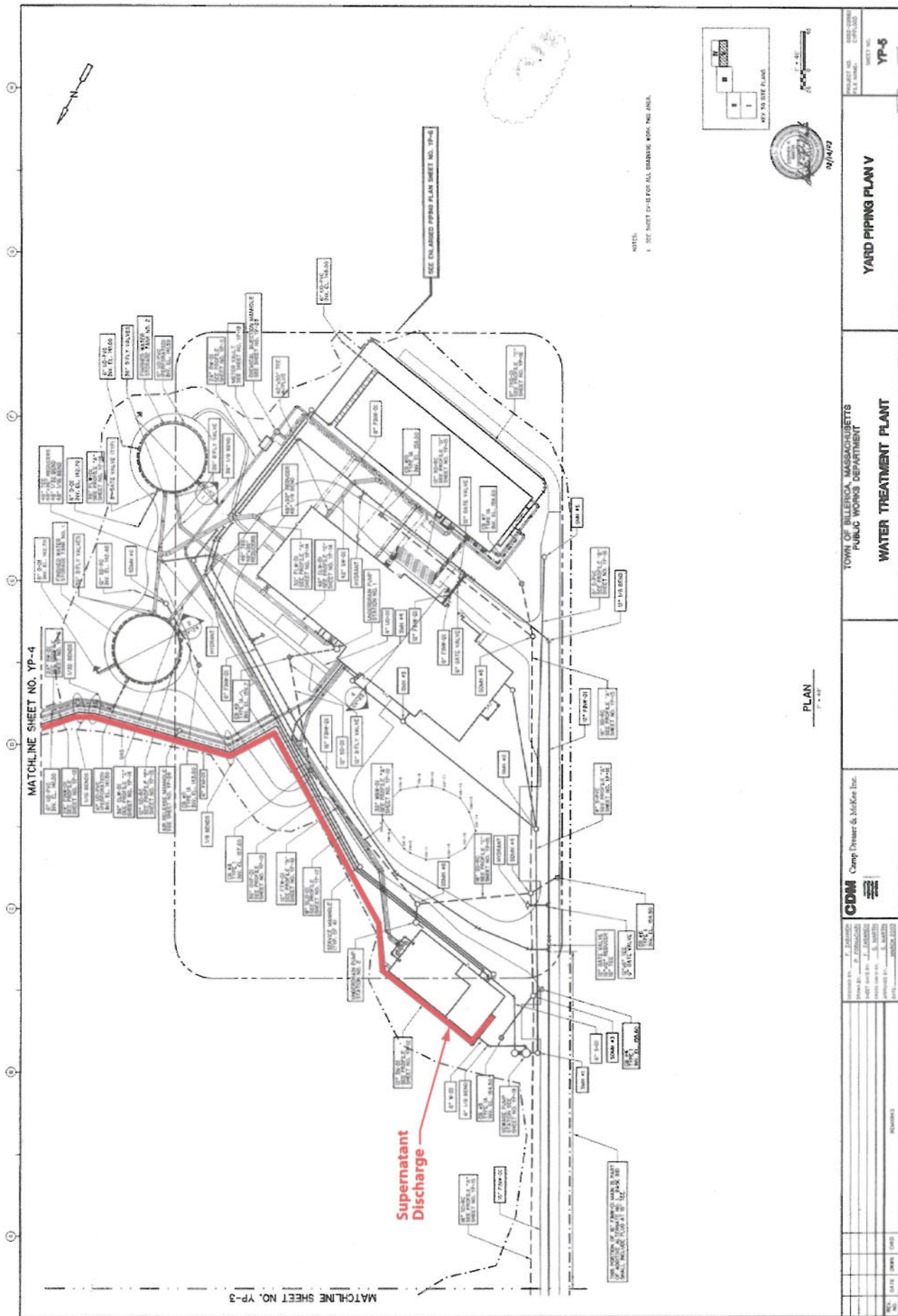
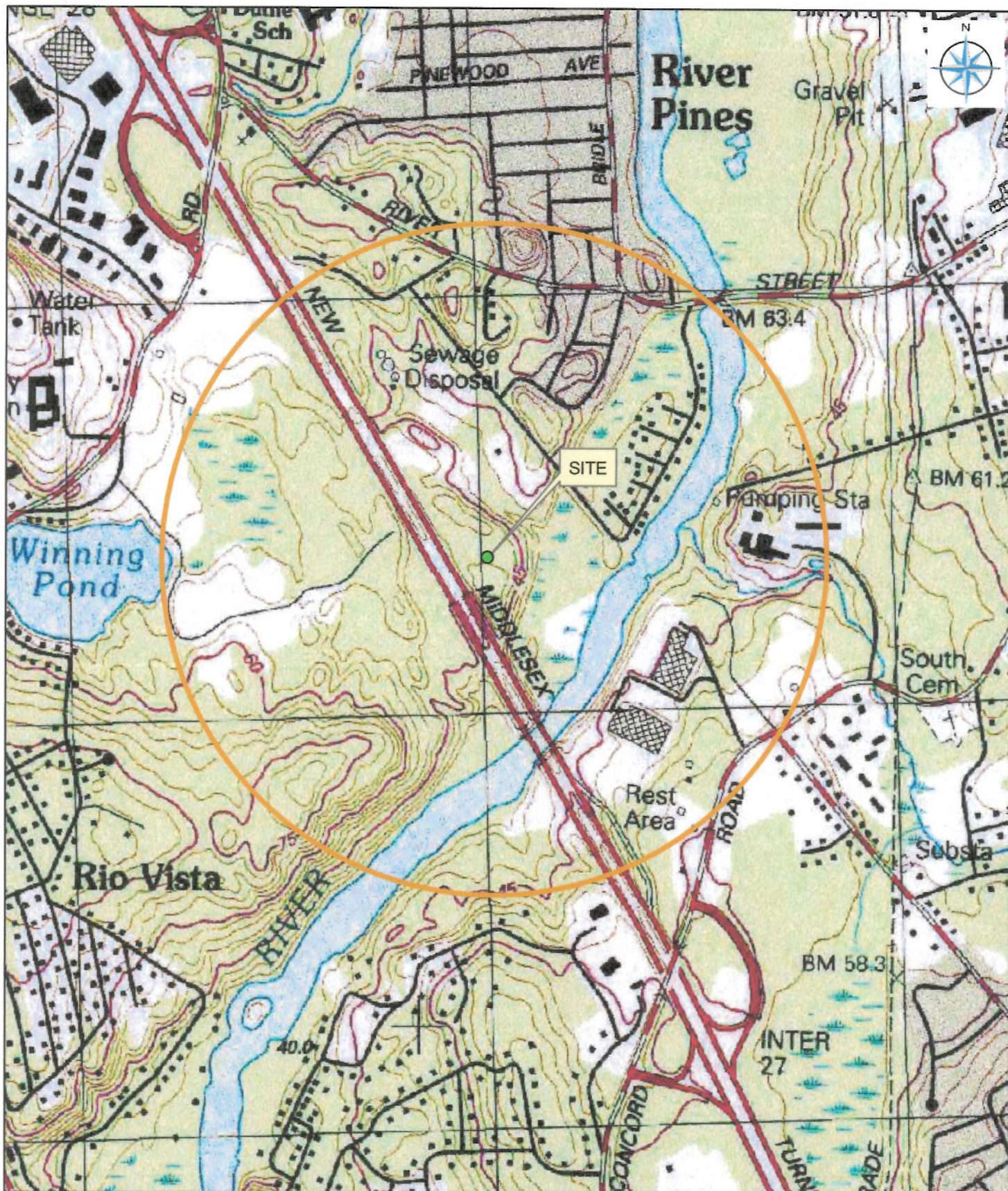


Figure 3
Yard Piping Plan V



■ MassDEP Tier Classified Oil and/or
 Hazardous Material Sites (MGL c. 21E)

Billerica Water Treatment Plant
270 Treble Cove Road
Billerica, Massachusetts

Figure 4
MassDEP Chapter 21E Sites

Basemap: 7.5-Minute USGS Topographic Quadrangle
 Source: Mass GIS
 Coordinate System: NAD83 Mass. State Plane Mainland
 Units: meters

0 500 1,000
 Feet

CDM