



**ECR, Inc.**  
PO Box 966 -  
Acton, MA 01720 -  
(978) 500-3199  
info@ecr-consulting.com

February 10, 2015

Ms. Suzanne Warner  
US EPA, Region 1  
NCCW GP Processing  
Mail Code: OEP 06-4  
5 Post Office Square, Ste 100  
Boston, Massachusetts 02109-3912  
nccw.generalpermit@epa.gov

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

Re: Notice of Intent  
NPDES General Permit No. MAG250009 Renewal  
Parkview Condominium Association  
200 Swanton Street  
Winchester, Massachusetts 01890

Dear Ms. Warner:

On behalf of the Parkview Condominium Association (Parkview), Engineering and Consulting Resources, Inc. (ECR) prepared the attached Notice of Intent (NOI) as required by Environmental Protection Agency (EPA) and Massachusetts Department of Environmental Protection (MassDEP). This NOI includes the Appendix 5 application form and other required information regarding the above-referenced facility, with the exception of radionuclide data which will be forwarded separately upon receipt. This NOI is being submitted in order to continue coverage under the current National Pollutant Discharge Elimination System (NPDES) Non-Contact Cooling Water General Permit.

#### **General Facility Information**

The facility location, shown on the attached Site Locus Map, is Parkview Condominiums (Parkview), 200 Swanton Street in Winchester, Massachusetts 01890. The facility is a residential condominium with 318 units. Peter Simon is the Chairman of Parkview Condominium Association, whose office is at the same location. Mr. Simon can be reached at telephone #781-729-0360, and via fax at 603-882-7313.

### **Discharge Information**

Parkview has been covered under the NPDES Non-Contact Cooling Water General - Permit since November 28, 2000. The discharge is to the Aberjona River, a Class B freshwater body. This discharge, with one outfall, is not a "new discharge" as defined - by 40 CFR Section 122.2. Parkview uses groundwater in their heat pump system to - provide heating and cooling of residential units (see Figure 2). The heat pump system - has been operational since approximately 1966, and was substantially modified in 1985 - and 2003 to increase efficiency and decrease water consumption. Chemical additives are not used for pH neutralization or dechlorination. See Appendix 5 for further - information. -

Prior to discharge, the non-contact heating and cooling water passes through four small - decorative ponds, as shown on the attached line diagram. ECR recognizes the - potential for some amount of stormwater to enter these ponds during rain and melting - events. ECR will therefore schedule monitoring events to avoid sampling during and - shortly after significant precipitation and melting events to the extent practical, in order to obtain samples more representative of non-contact heating and cooling water. -

Engineering calculations previously submitted indicated the potential for a temperature - rise greater than allowable limits. Therefore, in-stream temperature monitoring has - been performed since July 2013. In-stream data has consistently indicated no - downstream increase in temperature, as shown in the attached October 1, 2014 letter. - In-stream temperature monitoring will continue as required by EPA and MassDEP. -

On January 22, 2015, ECR collected a sample from the effluent for analysis of metals, - including hexavalent chromium, chloride and radionuclides. A sample was collected - upstream for hardness. Samples were sent under chain of custody to New England - Testing Laboratory of North Providence, Rhode Island. As shown in the attached - laboratory report, metals were not detected. The radionuclides data is still being - processed, and will be forwarded to you upon receipt. -

Please feel free to call if you have any questions or comments on this Notice of Intent. -

Sincerely, -  
Engineering & Consulting Resources, Inc. -

Richard E. Doherty, P.E. -  
President -

Attachments: Appendix 5 Application Form -  
Site Locus Map and Site Plan  
Flow Schematic  
Endangered Species Act Trust Resources List  
Copy of October 1, 2014 letter  
Laboratory Report for Metals

cc: Peter Simon, Parkview Condominium Association



- c) Is there a pending NPDES application 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: Aberjona River

Freshwater ☒ Marine Water ☐

State Water Quality Classification Class B

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

2. 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? ☒**

3. Describe the discharge activities for which the owner/applicant is seeking coverage (e.g., building cooling, process line cooling, etc.) Heating and cooling of residential condominium

4. Number of Outfalls: 1 Latitude and Longitude to the nearest second for each Outfall. See EPA's siting tool at [http://www.epa.gov/tri/reporting/siting\\_tool](http://www.epa.gov/tri/reporting/siting_tool). Attach additional pages if necessary.

Outfall # 1 Latitude: 42° 27' 38.81"

Longitude: 71° 8' 13.93"

Outfall # Latitude \_\_\_\_\_

Longitude \_\_\_\_\_

Outfall # Latitude \_\_\_\_\_

Longitude \_\_\_\_\_

5. For each Outfall provide the following discharge information:

Outfall # 1

a) Maximum Daily Flow: 0.40 MGD Average Monthly Flow: 0.30 MGD

**NOTE: EPA will use the flow reported here as the facility's permitted effluent flow limit.**

b) Maximum Daily Temperature: 78°F Average Monthly Temperature: 57°F

c) Maximum Monthly pH: 7.6 s.u. Minimum Monthly pH: 6.6 s.u.

d) Outfall's discharge is: continuous ☒ intermittent ☐ seasonal ☐

Outfall # \_\_\_\_\_

a) Maximum Daily Flow \_\_\_\_\_ MGD Average Monthly Flow \_\_\_\_\_ MGD

**NOTE: EPA will use the flow reported here as the facility's permitted effluent flow limit.**

b) Maximum Daily Temperature \_\_\_\_\_ °F Average Monthly Temperature \_\_\_\_\_ °F

c) Maximum Monthly pH \_\_\_\_\_ s.u. Minimum Monthly pH \_\_\_\_\_ s.u.

d) Outfall's discharge is: continuous ☐ intermittent ☐ seasonal ☐

Outfall # \_\_\_\_\_

a) Maximum Daily Flow \_\_\_\_\_ MGD Average Monthly Flow \_\_\_\_\_ MGD

**NOTE: EPA will use the flow reported here as the facility's permitted effluent flow limit.**

b) Maximum Daily Temperature \_\_\_\_\_ °F Average Monthly Temperature \_\_\_\_\_ °F

c) Maximum Monthly pH \_\_\_\_\_ s.u. Minimum Monthly pH \_\_\_\_\_ s.u.

d) Outfall's discharge is: continuous ☐ intermittent ☐ seasonal ☐

6. Is the source of the NCCW potable water? yes ☐ no ☒

If yes, EPA will calculate a Total Residual Chlorine effluent limit for your facility.

7. Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water: 0.74 MGD

Attach any calculation sheets used to support stream flow and/or dilution calculations.

**8. For facilities that discharge to Massachusetts surface waters:**

a) Submit the completed engineering calculation of the surface water temperature rise as shown in Attachment B of the General Permit. Calculation attached? ☒ \*See attached October 1, 2014 letter and temperature measurements

b) Does the discharge occur in an Area of Critical Environmental Concern (ACEC)? yes ☐ no ☒

If yes, provide the name of ACEC \_\_\_\_\_

**Note: See Part 3.4 and Appendix 1 of the General Permit for more information on ACEC.**

**C. Chemical Additives**

1. Are any non-toxic neutralization and/or dechlorination chemicals used in the discharge(s)? yes ☐ no ☒

2. If yes, attach a listing of each chemical used. Include the chemical name and manufacturer; maximum and average daily quantity used on a monthly basis, as well as the maximum and average daily expected concentrations (mg/l) in the discharge, and the vendor's reported aquatic toxicity (NOAEL and/or LC<sub>50</sub> in percent for typically acceptable aquatic organism).

3. Was the listing submitted with the facility's 2008 NCCWGP NOI? yes ☐ no ☐

**D. NCCW Source Water Information**

1. State the source of the NCCW (e.g., municipal water supply, private well, surface water withdrawal, etc.).

Source: Private wells

Name of Source Water: N/A

2. Is the source water registered/permitted under MA Water Management Act or NHDES User Registration Rule (ENV WQ 2202)? yes ☒ no ☐ If yes, registration number: 9P2-3-19-344.03

3. If the source water is groundwater (non-municipal well water), see Appendix 9 of the General Permit and submit effluent (and receiving water hardness) test results, as required in Part 5.4 of the General Permit.

**Test results attached? ☒** \*See cover letter. Test results attached except for radiologicals, which are pending, and will be forwarded upon receipt.

4. Does the facility use both a primary and backup source of NCCW? yes ☐ no ☒ If yes, **attach information** that identifies and explains the primary and backup sources of NCCW and how often the backup supply was used in the past three years.

**E. Best Technology Available for Cooling Water Intake Structures (CWISs)**

If the facility's discharge is covered by this General Permit and the facility **withdraws non-contact cooling water from a surface water**, you are subject to the BTA requirements at Part 4.2 of the General Permit.

1. Are you subject to the BTA requirements of the General Permit? yes ☐ no ☒

- a) If no, explain: no withdrawal from surface water. and skip to F.
- b) If yes, was the facility-specific BTA description submitted with the facility's 2008 NCCW GP NOI?  
yes ☐ no ☐
- c) If yes, does that description accurately describe the facility current operations and practices? yes ☐ no ☐

2. If the facility is subject to the General Permit's BTA requirements and is requesting coverage under the NCCWGP for the first time, or if you answered "No" to question E.1.c. above, attach the facility-specific BTA description as required in Part 4.2 of the General Permit. For additional information and guidance, see Section IV of the Fact Sheet.

Include in your description:

- a) Measures to meet the General Permit Part 4.3.a general BTA requirements, including documentation that describes the facility's monitoring program for impinged fish and/or invertebrate; or the required alternative monitoring plan frequency and/or protocol.
- b) A characterization of the source water body's aquatic life habitat in the vicinity of each CWIS during the seasons when the CWIS may be in use.
- c) The attributes of the current CWIS.
- d) The design measures of the CWIS.
- e) The operation measures of the CWIS.
- f) The historical occurrence of impinged fish for the past five years.
- g) If applicable, a demonstration that the facility's intake rate is commensurate with a closed-cycle recirculation system.
- h) Other components to reduce impingement and/or entrainment of aquatic life.

3. Provide the following information for each CWIS to support your attached facility-specific BTA description:

- a) The design capacity of the of the CWIS \_\_\_\_\_ MGD
- b) Maximum monthly average intake of the CWIS during the previous five years \_\_\_\_\_ MGD
- c) The month in which this flow reported in 3.b. occurred \_\_\_\_\_
- d) The maximum through-screen design intake velocity \_\_\_\_\_ feet/second (fps)

4. For facilities where the CWIS is located on a freshwater river or stream, provide the following information:

- a) The source water's annual mean flow in MGD as available from USGS or other appropriate source  
\_\_\_\_\_ MGD
- b) The design intake flow as a % of the source water's annual mean flow \_\_\_\_\_ %  
Attach calculations if equal to or less than 5% of annual mean flow.
- c) The source water's 7Q10 \_\_\_\_\_ MGD
- d) The design intake flow as a percent of the source water's 7Q10 \_\_\_\_\_ %

5. Provide a map showing the location of each cooling water intake structure; NCCW Outfall(s) and CWIS features referred to in the BTA description. **Map attached?** ☐

## F. Endangered Species Act Eligibility Information

Using the instructions in Appendix 2 of the NCCW GP, which of the following criteria apply to your facility? 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 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 ☐

3. Attach documentation of ESA eligibility for USFWS as required at Part 3.4 and Appendix 2 of the General Permit.

**Documentation attached? X**

4. Please indicate if your facility **directly intakes water for non-contact cooling** from any of the following waterbodies:

- ☐ Merrimack River
- ☐ Connecticut River
- ☐ Piscataqua River
- ☐ Taunton River

EPA will consult with the National Marine Fisheries Service on cooling water intakes covered under this permit in areas (in the above waterbodies) of the endangered Shortnose Sturgeon and Atlantic Sturgeon.

#### **G. 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 **X**

2. Have any State or Tribal Historic Preservation Officers been consulted in this determination? yes ☐ no **X**  
If yes, attach the results of the consultation(s).

3. Which of the three National Historic Preservation Act scenarios listed in Appendix 3, Section C have you met?  
☐ 1 **X** 2 ☐ 3

#### **H. 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.


See attached letter.

**I. 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) no biocides or other chemical additives except for those used for pH adjustment and/or dechlorination are used in the noncontact cooling water (NCCW) system; (2) the discharge consists solely of NCCW (to reduce temperature) and authorized pH adjustment and/or dechlorination chemicals; (3) the discharge does not come in contact with any raw materials, intermediate product, water product (other than heat) or finished product; (4) if the discharge of noncontact cooling water subsequently mixes with other wastewater (i.e. stormwater) prior to discharging to the receiving water, any monitoring provided under this permit will be only for noncontact cooling water; (5) where applicable, the facility has complied with the requirements of this permit specific to the Endangered Species Act and National Historic Preservation Act; and (6) 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 my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I certify that I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

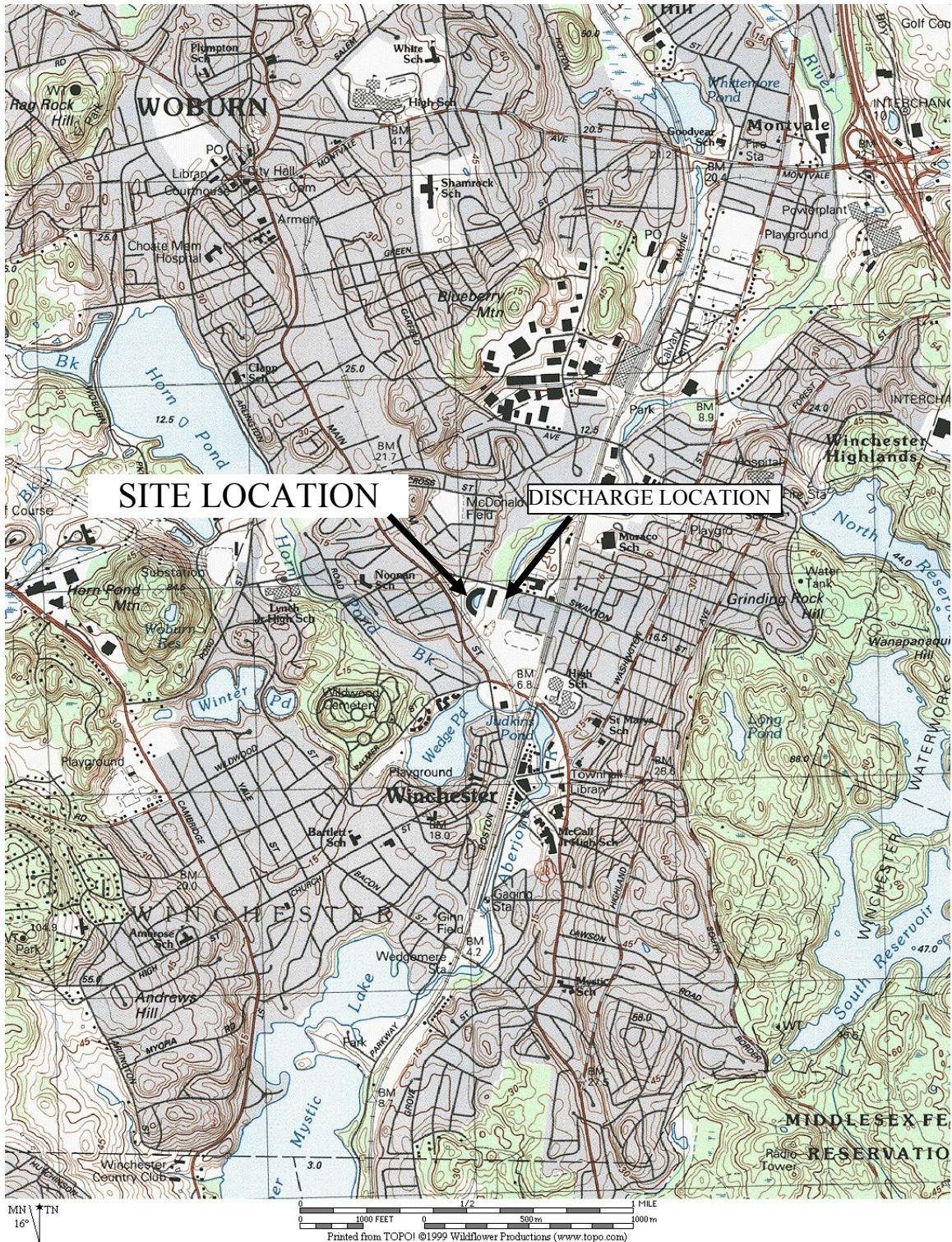
Signature  Date 2-3-2015

Printed Name and Title PETER SIMON, CHAIRMAN BOARD OF TRUSTEES

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 a 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.





**SOURCE:**  
Winchester, MASSACHUSETTS, USGS QUAD.



**TITLE:** SITE LOCUS  
**FIGURE #:** 1  
**SITE:** PARKVIEW  
CONDOMINIUMS  
200 SWANTON STREET  
WINCHESTER, MA  
**DATE:** 9/29/08  
**SCALE:** AS SHOWN



TITLE:

SITE PLAN

E

ngineering &

onsulting

R

esources, Inc.

FIGURE #:

2

ADDRESS:

200 Swanton Street,  
Winchester, Massachusetts

DATE:

2/16/04

FILE:

PARKVIEWSP

APPROX. SCALE:

1"=60'

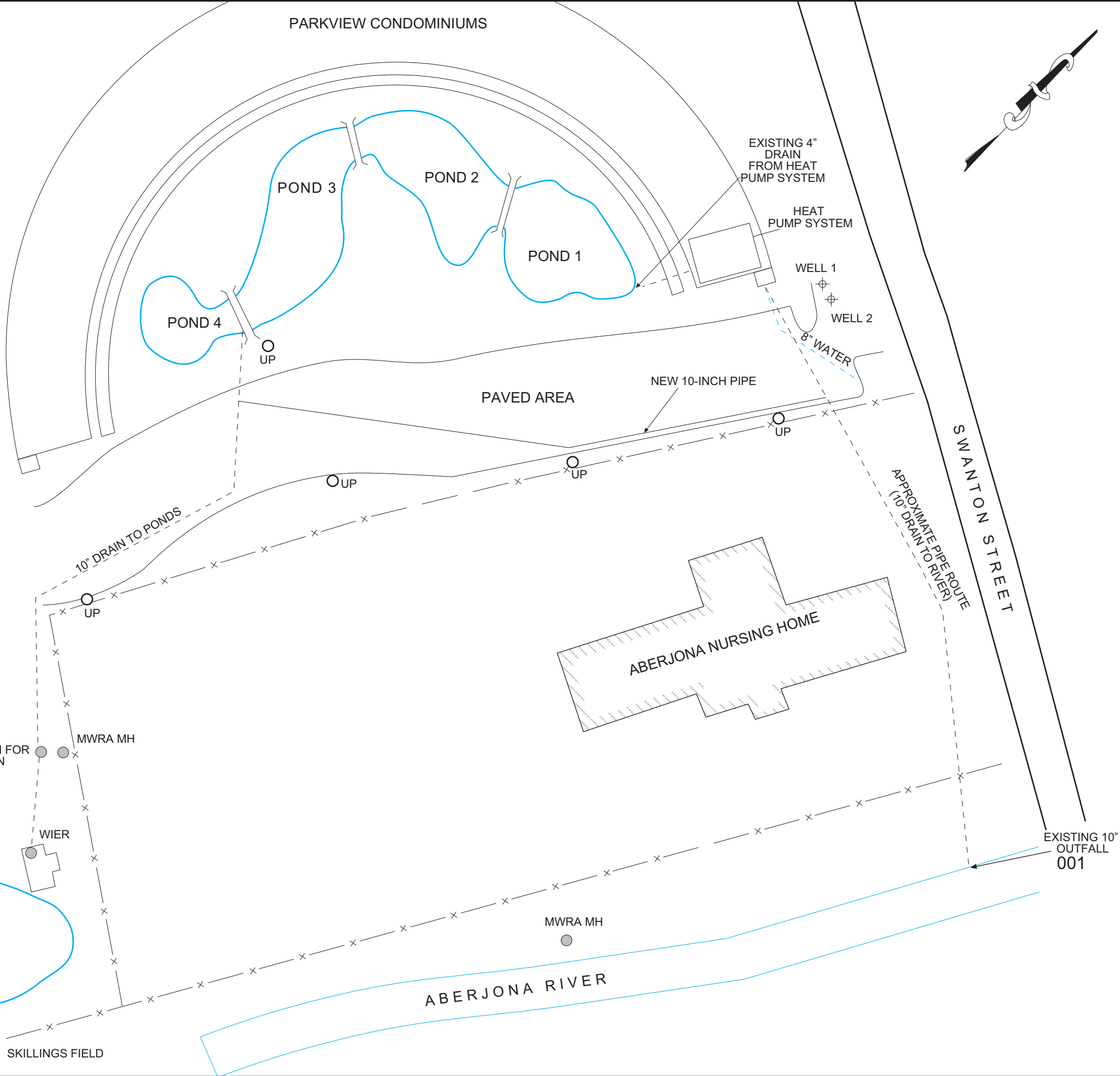
- LEGEND
- PROPERTY BOUNDARY
- ▣

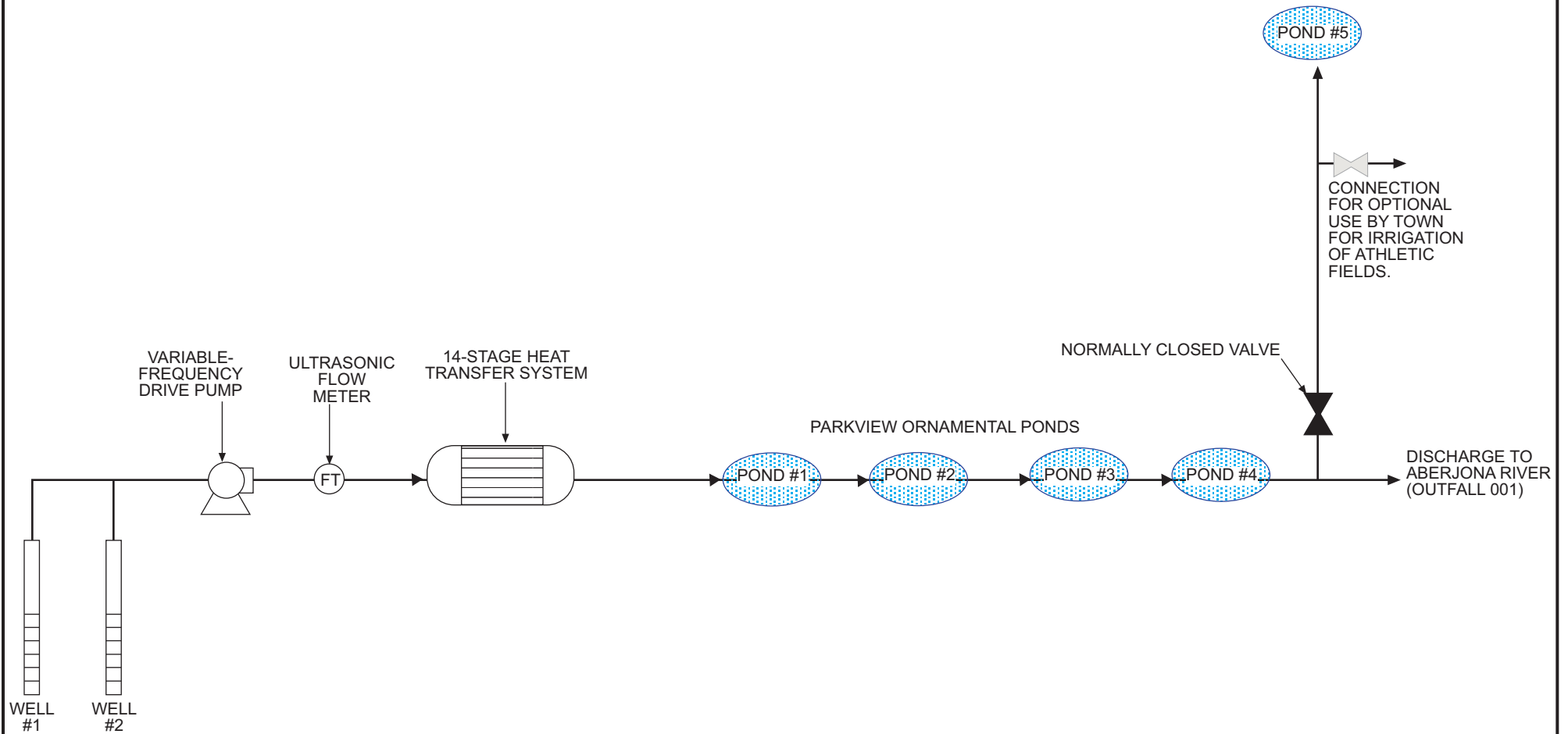
CATCH BASIN
- W---

WATER LINE
- ×---×

CHAIN-LINK FENCE
- UTILITY POLE
- ⊕

EXTRACTION WELL





TITLE:

## FLOW SCHEMATIC



FIGURE #:

3

ADDRESS:

PARKVIEW CONDOMINIUMS  
200 SWANTON STREET  
WINCHESTER, MA



U.S. Fish and Wildlife Service

## Trust Resources List

**This resource list is to be used for planning purposes only — it is not an official species list.**

**Endangered Species Act species list information for your project is available online and listed below for the following FWS Field Offices:**

**New England Ecological Services Field Office**  
70 COMMERCIAL STREET, SUITE 300  
CONCORD, NH 3301  
(603) 223-2541  
<http://www.fws.gov/newengland>

***Project Name:***

PARKVIEW2



U.S. Fish and Wildlife Service

## Trust Resources List

### ***Project Location Map:***



### ***Project Counties:***

Middlesex, MA

### ***Geographic coordinates (Open Geospatial Consortium Well-Known Text, NAD83):***

MULTIPOLYGON (((-71.1411123 42.4614336, -71.1363487 42.461117, -71.1382788 42.456337, -71.1382788 42.456337, -71.1411123 42.4614336)))

### ***Project Type:***

Water Withdrawal / Depletion



## Trust Resources List

### ***Endangered Species Act Species List ([USFWS Endangered Species Program](#)).***

*There are no listed species found within the vicinity of your project.*

### **Critical habitats within your project area:**

*There are no critical habitats within your project area.*

### ***FWS National Wildlife Refuges ([USFWS National Wildlife Refuges Program](#)).***

*There are no refuges found within the vicinity of your project.*

### ***FWS Migratory Birds ([USFWS Migratory Bird Program](#)).***

The protection of birds is regulated by the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA). Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. For more information regarding these Acts see: <http://www.fws.gov/migratorybirds/RegulationsandPolicies.html>.

All project proponents are responsible for complying with the appropriate regulations protecting birds when planning and developing a project. To meet these conservation obligations, proponents should identify potential or existing project-related impacts to migratory birds and their habitat and develop and implement conservation measures that avoid, minimize, or compensate for these impacts. The Service's Birds of Conservation Concern (2008) report identifies species, subspecies, and populations of all migratory nongame birds that, without additional conservation actions, are likely to become listed under the Endangered Species Act as amended (16 U.S.C 1531 et seq.).

For information about Birds of Conservation Concern, go to:

<http://www.fws.gov/migratorybirds/CurrentBirdIssues/Management/BCC.html>.

To search and view summaries of year-round bird occurrence data within your project area, go to the Avian Knowledge Network Histogram Tool links in the Bird Conservation Tools section at: <http://www.fws.gov/migratorybirds/CCMB2.htm>.

For information about conservation measures that help avoid or minimize impacts to birds, please visit:

<http://www.fws.gov/migratorybirds/CCMB2.htm>.



## Trust Resources List

### Migratory birds of concern that may be affected by your project:

There are **18** birds on your Migratory birds of concern list. The underlying data layers used to generate the migratory bird list of concern will continue to be updated regularly as new and better information is obtained. User feedback is one method of identifying any needed improvements. Therefore, users are encouraged to submit comments about any questions regarding species ranges (e.g., a bird on the USFWS BCC list you know does not occur in the specified location appears on the list, or a BCC species that you know does occur there is not appearing on the list). Comments should be sent to [the ECOS Help Desk](#).

Species Name	Bird of Conservation Concern (BCC)	Species Profile	Seasonal Occurrence in Project Area
American Oystercatcher ( <i>Haematopus palliatus</i> )	Yes	<a href="#">species info</a>	Breeding
American bittern ( <i>Botaurus lentiginosus</i> )	Yes	<a href="#">species info</a>	Breeding
Bald eagle ( <i>Haliaeetus leucocephalus</i> )	Yes	<a href="#">species info</a>	Year-round
Black-billed Cuckoo ( <i>Coccyzus erythrophthalmus</i> )	Yes	<a href="#">species info</a>	Breeding
Blue-winged Warbler ( <i>Vermivora pinus</i> )	Yes	<a href="#">species info</a>	Breeding
Canada Warbler ( <i>Wilsonia canadensis</i> )	Yes	<a href="#">species info</a>	Breeding
Hudsonian Godwit ( <i>Limosa haemastica</i> )	Yes	<a href="#">species info</a>	Migrating
Least Bittern ( <i>Ixobrychus exilis</i> )	Yes	<a href="#">species info</a>	Breeding
Peregrine Falcon ( <i>Falco peregrinus</i> )	Yes	<a href="#">species info</a>	Breeding
Pied-billed Grebe ( <i>Podilymbus podiceps</i> )	Yes	<a href="#">species info</a>	Breeding
Prairie Warbler ( <i>Dendroica discolor</i> )	Yes	<a href="#">species info</a>	Breeding
Purple Sandpiper ( <i>Calidris maritima</i> )	Yes	<a href="#">species info</a>	Wintering
Seaside Sparrow ( <i>Ammodramus maritimus</i> )	Yes	<a href="#">species info</a>	Breeding



## Trust Resources List

Short-eared Owl ( <i>Asio flammeus</i> )	Yes	<a href="#">species info</a>	Wintering
Snowy Egret ( <i>Egretta thula</i> )	Yes	<a href="#">species info</a>	Breeding
Upland Sandpiper ( <i>Bartramia longicauda</i> )	Yes	<a href="#">species info</a>	Breeding
Wood Thrush ( <i>Hylocichla mustelina</i> )	Yes	<a href="#">species info</a>	Breeding
Worm eating Warbler ( <i>Helmitheros vermivorum</i> )	Yes	<a href="#">species info</a>	Breeding

### ***NWI Wetlands*** ([\*USFWS National Wetlands Inventory\*](#)).

The U.S. Fish and Wildlife Service is the principal Federal agency that provides information on the extent and status of wetlands in the U.S., via the National Wetlands Inventory Program (NWI). In addition to impacts to wetlands within your immediate project area, wetlands outside of your project area may need to be considered in any evaluation of project impacts, due to the hydrologic nature of wetlands (for example, project activities may affect local hydrology within, and outside of, your immediate project area). It may be helpful to refer to the USFWS National Wetland Inventory website. The designated FWS office can also assist you. Impacts to wetlands and other aquatic habitats from your project may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal Statutes. Project Proponents should discuss the relationship of these requirements to their project with the Regulatory Program of the appropriate [U.S. Army Corps of Engineers District](#).

### **Data Limitations, Exclusions and Precautions**

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery and/or field work. There





## Trust Resources List

may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

**Exclusions** - Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

**Precautions** - Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

**The following wetland types intersect your project area in one or more locations:**

Wetland Types	NWI Classification Code	Total Acres
Riverine	<a href="#">R2UBHx</a>	3.7105



ECR, Inc. -  
PO Box 966 -  
Acton, MA 01720-0966 -  
(978) 500-3199  
rdoherty@ecr-consulting.com

October 1, 2014

Ms. Austine Frawley, OEP6-04  
US Environmental Protection Agency  
Five Post Office Square-Suite 100  
Boston, MA 02109-3912

Mr. Robert Kubit, P.E.  
Environmental Engineer  
Massachusetts Department of Environmental Protection  
627 Main Street  
Worcester, MA 01608

Re: Request for Amended Monitoring Schedule  
**NPDES Permit #MAG250009**  
Parkview Condominium Association -  
Winchester, Massachusetts 01890 -

Dear Ms. Frawley and Mr. Kubit:

On behalf of the Parkview Condominium Association (Parkview), Engineering & Consulting Resources, Inc. (ECR) has prepared this letter to request a modification of the terms of USEPA's February 21, 2013 *Authorization to discharge under Noncontact Cooling Water General Permit*. The USEPA's Authorization letter contained a requirement for weekly monitoring of pH and temperature of the discharge, and upstream and downstream temperatures in the receiving stream (the Aberjona River). This requirement was instituted because Parkview was unable to demonstrate that the temperature increase in the receiving stream was within acceptable limits using engineering calculations. In a March 14, 2013 letter, USEPA agreed to reduce the monitoring frequency to monthly between October 1 and May 31. Based on data collected from the receiving stream during 2013 and 2014, Parkview and ECR hereby request that the monitoring frequency be restored to monthly for all months of the year.

**Background.** Parkview uses groundwater in their residential heating and cooling system. In the summer months when air conditioning is needed, heat is added to the groundwater, and the heated groundwater is discharged to the Aberjona River. Parkview's air conditioning system begins operation on or about June 1st of each year. In winter months, heat is extracted from the groundwater, and the cooled water is discharged to the Aberjona River.

Ms. Austine Frawley, USEPA  
Mr. Robert Kubit, MassDEP  
October 6, 2014  
Page 2 of 2



**Results from In-stream Monitoring.** In-stream temperature data collected on behalf of Parkview during 2013 and 2014 are shown in Table 1. Data include daily readings collected during a 7-day period of low streamflow and high air temperature in late August 2013, and weekly temperature data collected between June 1 and September 30 of 2014. As shown on the table, results consistently indicated no significant temperature increase at the downstream location, and in most cases a temperature decrease was measured at the downstream location.<sup>1</sup>

Based on these data, Parkview respectfully requests that the requirement for weekly monitoring be deleted for 2015 and future years.

Thank you for your consideration of this request, and for your assistance in the permitting process. Please feel free to contact me at (978) 500-3199 if you have questions or need additional information.

Sincerely,  
Engineering & Consulting Resources, Inc.

Richard E. Doherty, P.E., L.S.P.  
President

Attachment: Table 1

<sup>1</sup> Upstream readings were collected at the Swanton Street bridge. Downstream readings were collected just upstream of where the river enters a culvert beneath the Winchester High School athletic fields.

**TABLE 1**  
**2013-2014 TEMPERATURE COMPARISON AT ABERJONA RIVER**

**PARKVIEW CONDOMINIUMS**  
**200 SWANTON STREET**  
**WINCHESTER, MA 01890**

DATE	UPSTREAM TEMPERATURE READING (F)	DOWNSTREAM TEMPERATURE READING (F)	TEMPERATURE CHANGE (F)
Aug 19, 2013	71.8	71.4	-0.4
Aug 20, 2013	73.0	72.3	-0.7
Aug 21, 2013	74.8	74.1	-0.7
Aug 22, 2013	75.0	74.7	-0.3
Aug 23, 2013	75.0	73.9	-1.1
Aug 24, 2013	72.3	71.2	-1.1
Aug 25, 2013	72.0	70.2	-1.8
Oct 10, 2013	*55.6	*55.4	-0.2
Nov 8, 2013	49.8	49.1	-0.7
Dec 13, 2013	33.2	FROZEN	NA
Jan 15, 2014	38.1	38.2	0.1
Feb 20, 2014	38.1	37.6	-0.5
Mar 11, 2014	44.6	43.5	-1.1
Apr 17, 2014	47.3	47.3	0
May 7, 2014	56.8	56.8	0
Jun 3, 2014	69.1	68.4	-0.7
Jun 11, 2014	66.9	66.7	-0.2
Jun 17, 2014	67.1	67.1	0
Jun 24, 2014	65.2	64.6	-0.6
Jul 3, 2014	76.1	75.7	-0.4
Jul 8, 2014	75.0	75.0	0
Jul 17, 2014	72.0	71.8	-0.2
Jul 22, 2014	71.4	71.2	-0.2
Jul 30, 2014	68.9	68.9	0
Aug 6, 2014	73.8	73.8	0
Aug 15, 2014	68.0	67.5	-0.5
Aug 21, 2014	66.7	65.7	-1
Aug 26, 2014	68.0	67.5	-0.5
Sep 3, 2014	74.8	74.1	-0.7
Sep 10, 2014	66.1	66.0	-0.1
Sep 18, 2014	59.2	58.1	-1.1
Sep 23, 2014	57.4	56.7	-0.7

Notes:

\* An average temperature was used of multiple readings taken on this date.



## **REPORT OF ANALYTICAL RESULTS**

**NETLAB Case Number B0122-39 Partial**

Prepared for:

Attn: Richard Doherty  
ECR  
PO Box 966  
Acton, MA 01720

Report Date: February 3, 2015

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Director  
New England Testing Laboratory, Inc.  
Lab # RI010

**NEW ENGLAND TESTING LABORATORY, INC.**

1254 Douglas Avenue, North Providence, RI 02904

(401) 353-3420

## MassDEP Analytical Protocol Certification Form

Laboratory Name: New England Testing Laboratory, Inc.

Project #: 1021

Project Location: Parkview/Winchester

RTN:

**This Form provides certifications for the following data set: list Laboratory Sample ID Number(s):**  
**B0122-39**

Matrices: ☐ Groundwater/Surface Water ☐ Soil/Sediment ☒ Drinking Water ☐ Air ☐ Other:

**CAM Protocol** (check all that apply below):

8260 VOC CAM II A <input type="checkbox"/>	7470/7471 Hg CAM III B <input type="checkbox"/>	MassDEP VPH CAM IV A <input type="checkbox"/>	8081 Pesticides CAM V B <input type="checkbox"/>	7196 Hex Cr CAM VI B <input type="checkbox"/>	MassDEP APH CAM IX A <input type="checkbox"/>
8270 SVOC CAM II B <input type="checkbox"/>	7010 Metals CAM III C <input type="checkbox"/>	MassDEP EPH CAM IV B <input type="checkbox"/>	8151 Herbicides CAM V C <input type="checkbox"/>	8330 Explosives CAM VIII A <input type="checkbox"/>	TO-15 VOC CAM IX B <input type="checkbox"/>
6010 Metals CAM III A <input type="checkbox"/>	6020 Metals CAM III D <input type="checkbox"/>	8082 PCB CAM V A <input type="checkbox"/>	9014 Total Cyanide/PAC CAM VI A <input type="checkbox"/>	6860 Perchlorate CAM VIII B <input type="checkbox"/>	Other <input checked="" type="checkbox"/>

**Affirmative Responses to Questions A through F are required for "Presumptive Certainty" status**

<b>A</b>	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	x Yes	No
<b>B</b>	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	x Yes	No
<b>C</b>	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	x Yes	No
<b>D</b>	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	x Yes	No
<b>E</b>	VPH, EPH, APH, and TO-15 only: a. VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	Yes	No
<b>F</b>	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	x Yes	No

**Responses to Questions G, H and I below are required for "Presumptive Certainty" status**

<b>G</b>	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	x Yes	No <sup>1</sup>
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**Data User Note:** Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WSC-07-350.

<b>H</b>	Were all QC performance standards specified in the CAM protocol(s) achieved?	x Yes	No <sup>1</sup>
<b>I</b>	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	x Yes	No <sup>1</sup>

<sup>1</sup>All negative responses must be addressed in an attached laboratory narrative.

**I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.**

Signature: Richard Warila

Position: Laboratory Director

Printed Name: Richard Warila

Date: 2/3/2015

## **SAMPLES SUBMITTED and REQUEST FOR ANALYSIS:**

The samples listed in Table I were submitted to New England Testing Laboratory on January 22, 2015. The group of samples appearing in this report was assigned an internal identification number (case number) for laboratory information management purposes. The client's designations for the individual samples, along with our case numbers, are used to identify the samples in this report. This report of analytical results pertains only to the samples(s) provided to us by the client which are indicated on the custody record. The case number for this sample submission is B0122-39.

Custody records are included in this report.

### **Project: Parkview / Winchester**

**TABLE I, Samples Submitted**

Sample ID	Date Sampled	Matrix	Analysis Requested
Effluent	1/22/15	Water	Table II
Upstream	1/22/15	Water	Table III

**TABLE II, Analysis and Methods**

ANALYSIS	PREPARATION METHOD	DETERMINATIVE METHOD
Chloride	NA	SM 4500-Cl B
Gross Alpha	NA	*
Hexavalent Chromium	NA	3500-Cr B-2009
Radium 226	NA	*
Radium 228	NA	*
Total Metals		
Antimony	NA	200.9
Arsenic	NA	SM 3113B
Cadmium	NA	SM 3113B
Chromium	NA	SM 3120B
Copper	NA	SM 3120B
Iron	NA	SM 3120B
Lead	NA	SM 3113B
Mercury	NA	SM 3112B
Nickel	NA	SM 3120B
Silver	NA	SM 3113B
Zinc	NA	SM 3120B
Uranium	NA	*

**TABLE III, Analysis and Methods**

<b>ANALYSIS</b>	<b>PREPARATION METHOD</b>	<b>DETERMINATIVE METHOD</b>
Hardness	NA	3120B

These methods are documented in:

\*Analysis subcontracted to Eurofins Eaton Analytical.

*Methods for the Determination of Organic Compounds in Finished Drinking Water and Raw Source Water*, USEPA/EMSL.

*Standard Methods for the Examination of Water and Wastewater*, 20<sup>th</sup> Edition, 1998, APHA, AWWA-WPCF.

*Manual of Methods for Chemical Analysis of Water and Water Wastes*, EPA-600/4-79-020 (Revised 1983), USEPA/EMSL.

40 CFR 136, *Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act*, Office of Federal Register National Archives and Records Administration.



## **CASE NARRATIVE:**

### Sample Receipt

The samples were all appropriately cooled and preserved upon receipt. The samples were received in the appropriate containers. The chain of custody was adequately completed and corresponded to the samples submitted.

### Metals

All analyses were performed according to NETLAB's documented Standard Operating Procedures, within all required holding times, and with appropriate quality control measures. All QC was within laboratory established acceptance criteria. The samples were received, processed, and reported with no anomalies.

### Wet Chemistry

All samples were analyzed within method specified holding times and according to NETLAB's documented standard operating procedures.

**Effluent**

Parameter	Result	Reporting Limit	Date Analyzed	Units
Chloride	216	1	1/26/15	mg/l
Hexavalent Chromium	ND	0.01	1/22/15	mg/l

**Upstream**

Parameter	Result	Reporting Limit	Date Analyzed	Units
Hardness	151	0.33	1/26/15	mg/l

ND = Not Detected

## **METALS RESULTS**

The presence of the NETLAB LOGO in the top right corner of each page in this section indicates:

The Technical Manager of the Metals Analysis Department certifies that the results included in this section have been reviewed and approved. Any exceptions or qualifications of substance have been reported in the case narrative.

# METALS RESULTS



Case Number: B0122-39

Sample ID: EFFLUENT

Date collected: 01/22/15

Matrix WATER

Sample Type: TOTAL

SJC/AM

	CAS	Preparative	Analytical		Reporting		Date
Parameter	Number	Method	Method	Result	Limit	Units	Analyzed
Antimony	7440-36-0	NA	200.9	ND	0.005	mg/l	1/29/15
Arsenic	7440-38-2	NA	SM 3113B	ND	0.005	mg/l	1/30/15
Cadmium	7440-43-9	NA	SM 3113B	ND	0.0005	mg/l	1/29/15
Chromium	7440-47-3	NA	SM 3120B	ND	0.005	mg/l	1/26/15
Copper	7440-50-8	NA	SM 3120B	ND	0.02	mg/l	1/26/15
Iron	7439-89-6	NA	SM 3120B	ND	0.05	mg/l	1/26/15
Lead	7439-92-1	NA	SM 3113B	ND	0.001	mg/l	1/28/15
Mercury	7439-97-6	NA	SM 3112B	ND	0.0002	mg/l	1/26/15
Nickel	7440-02-0	NA	SM 3120B	ND	0.005	mg/l	1/26/15
Silver	7440-22-4	NA	SM 3113B	ND	0.0005	mg/l	1/30/15
Zinc	7440-66-6	NA	SM 3120B	ND	0.02	mg/l	1/26/15

ND indicates Not Detected.

# METALS RESULTS



Sample ID: METHOD BLANK  
 Matrix WATER  
 Sample Type: Preparation Blank

SJC/AM

	CAS	Preparative	Analytical		Reporting		Date
Parameter	Number	Method	Method	Result	Limit	Units	Analyzed
Antimony	7440-36-0	NA	200.9	ND	0.005	mg/l	1/29/15
Arsenic	7440-38-2	NA	SM 3113B	ND	0.005	mg/l	1/30/15
Cadmium	7440-43-9	NA	SM 3113B	ND	0.0005	mg/l	1/29/15
Chromium	7440-47-3	NA	SM 3120B	ND	0.005	mg/l	1/26/15
Copper	7440-50-8	NA	SM 3120B	ND	0.02	mg/l	1/26/15
Iron	7439-89-6	NA	SM 3120B	ND	0.05	mg/l	1/26/15
Lead	7439-92-1	NA	SM 3113B	ND	0.001	mg/l	1/28/15
Mercury	7439-97-6	NA	SM 3112B	ND	0.0002	mg/l	1/26/15
Nickel	7440-02-0	NA	SM 3120B	ND	0.005	mg/l	1/26/15
Silver	7440-22-4	NA	SM 3113B	ND	0.0005	mg/l	1/30/15
Zinc	7440-66-6	NA	SM 3120B	ND	0.02	mg/l	1/26/15

ND indicates Not Detected.

## LABORATORY CONTROL SAMPLE RECOVERY

Parameter	True Value	Result	Units	Recovery, %	Internal		Date Analyzed
					LCL, %	UCL, %	
Antimony	0.020	0.019	mg/l	95	85	115	1/29/15
Arsenic	0.040	0.044	mg/l	95	85	115	1/30/15
Cadmium	0.005	0.0049	mg/l	98	85	115	1/29/15
Chromium	1.00	1.09	mg/l	109	85	115	1/26/15
Copper	1.00	1.01	mg/l	101	85	115	1/26/15
Iron	1.00	1.11	mg/l	111	85	115	1/26/15
Lead	0.020	0.022	mg/l	110	85	115	1/28/15
Mercury	0.001	0.001	mg/l	105	85	115	1/26/15
Nickel	1.00	1.04	mg/l	104	85	115	1/26/15
Silver	0.005	0.0051	mg/l	102	85	115	1/30/15
Zinc	1.00	1.07	mg/l	107	85	115	1/26/15

## CHAIN OF CUSTODY RECORD

BO122-32<sup>39</sup> KS

\*\*Netlab subcontracts the following tests: Radiologicals, Radon, Asbestos, UCMRs, Perchlorate, Bromate, Bromide, Sieve, Salmonella, Carbamates