

For Office Use Only  
 Executive Office of Environmental Affairs  
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# NPC

## Notice of Project Change

The information requested on this form must be completed to begin MEPA Review of a NPC in accordance with the provisions of the Massachusetts Environmental Policy Act and its implementing regulations (see 301 CMR 11.10(1)).

Project Name: <b>Norumbega Reservoir Project</b>		EOEA #: <b>9636</b>	
Street: <b>Oak Street</b>			
Municipality: <b>Weston</b>		Watershed: <b>Charles</b>	
Universal Transverse Mercator Coordinates: <b>15384744 N, 1020798 E</b>		Latitude: <b>42° 19' 58.3"</b> Longitude: <b>71° 17' 32.5"</b>	
Status of project construction: <b>95 %complete</b>			
Proponent: <b>Massachusetts Water Resources Authority (Attn: Marianne Connolly)</b>			
Street: <b>100 First Avenue, Bldg. 39-3</b>			
Municipality: <b>Boston</b>		State: <b>MA</b>	Zip Code: <b>02129</b>
Name of Contact Person From Whom Copies of this NPC May Be Obtained: <b>John Mahony</b>			
Firm/Agency: <b>Jacobs Edwards &amp; Kelcey</b>		Street: <b>Two Center Plaza 7<sup>th</sup> Fl.</b>	
Municipality: <b>Boston</b>		State: <b>MA</b>	<b>02108</b>
Phone: <b>(617) 994-4369</b>	Fax: <b>(617) 742-8830</b>	E-mail: <b>John.Mahony@jacobs.com</b>	

In 25 words or less, what is the project change?

The project change involves the unexpected newly developed 7,218 sq. ft. of wetlands that cannot be avoided for the construction of valve chambers that will connect to MWRA's Hultman Aqueduct and MetroWest Tunnel as part of planned water supply improvements at the Norumbega Reservoir Site. (See full project change description beginning on page 3.)

Date of ENF filing or publication in the Environmental Monitor:

Was an EIR required?  Yes  No; if yes,  
 was a Draft EIR filed?  Yes (Date: **February 1995**)  No  
 was a Final EIR filed?  Yes (Date: **May 1998**)  No  
 was a Single EIR filed?  Yes (Date: )  No

Have other NPCs been filed?  Yes (Date(s) : )  No

If this is a NPC solely for lapse of time (see 301 CMR 11.10(2)) proceed directly to "ATTACHMENTS & SIGNATURES" on page 4.

**PERMITS / FINANCIAL ASSISTANCE / LAND TRANSFER**

List or describe all new or modified state permits, financial assistance, or land transfers not previously reviewed: **None**

Are you requesting a finding that this project change is insignificant? (see 301 CMR 11.10(6))

Yes     No; if yes, attach justification.

Are you requesting that a Scope in a previously issued Certificate be rescinded?

Yes     No; if yes, attach the Certificate

Are you requesting a change to a Scope in a previously issued Certificate?  Yes     No; if yes, attach Certificate and describe the change you are requesting:

Summary of Project Size & Environmental Impacts	Previously reviewed	Net Change	Currently Proposed
<b>LAND</b>			
Total site acreage	180	0	180
Acres of land altered	26	0	26
Acres of impervious area	.5 acre	0	.5 acre
Square feet of bordering vegetated wetlands alteration	33,500	7,218	40,718
Square feet of other wetland alteration	57,050	0	57,050
Acres of non-water dependent use of tidelands or waterways	0	0	0
<b>STRUCTURES</b>			
Gross square footage	18 acres	0	18 acres
Number of housing units	0	0	0
Maximum height (in feet)	30 feet	0	30 feet
<b>TRANSPORTATION</b>			
Vehicle trips per day	10	0	10
Parking spaces	15	0	15
<b>WATER/WASTEWATER</b>			
Gallons/day (GPD) of water use	200 gallons	0	200 gallons
GPD water withdrawal	0	0	0
GPD wastewater generation/ treatment	200 gallons	0	200 gallons
Length of water/sewer mains (in miles)	0.6	0	0.6

Does the project change involve any new or modified:

1. conversion of public parkland or other Article 97 public natural resources to any purpose not in accordance with Article 97? Yes No

2. release of any conservation restriction, preservation restriction, agricultural preservation restriction, or watershed preservation restriction? Yes No

3. impacts on Estimated Habitat of Rare Species, Vernal Pools, Priority Sites of Rare Species, or Exemplary Natural Communities? Yes No

4. impact on any structure, site or district listed in the State Register of Historic Place or the inventory of Historic and Archaeological Assets of the Commonwealth?

Yes No; if yes, does the project involve any demolition or destruction of any listed or inventoried historic or archaeological resources? Yes No

5. impact upon an Area of Critical Environmental Concern? Yes No

If you answered 'Yes' to any of these 5 questions, explain below:

**PROJECT CHANGE DESCRIPTION** (attach additional pages as necessary). The project change description should include:

(a) a brief description of the project as most recently reviewed

(b) a description of material changes to the project as previously reviewed,

(c) the significance of the proposed changes, with specific reference to the factors listed 301 CMR 11.10(6), and

(d) measures that the project is taking to avoid damage to the environment or to minimize and mitigate unavoidable environmental impacts. If the change will involve modification of any previously issued Section 61 Finding, include a proposed modification of the Section 61 Finding (or it will be required in a Supplemental EIR).

**(a) The Project as Reviewed**

**The Site:** The Norumbega Reservoir Site is located off Oak Street in Weston immediately to the south of the Massachusetts Turnpike. [Please refer to Attachment 4 "Location Map" for the project location.] The site encompasses the Norumbega Covered Storage Tank, the Norumbega Reservoir, Shenck's Pond, the Hultman Aqueduct, and Shaft N of the MetroWest Water Supply Tunnel.

**The Project Description:** The Final Environmental Impact Report for the Norumbega Reservoir Project was issued in May 1998. Section 4 "Description of Project" includes Figure 4-1 "Conceptual Construction Site Plan" which provides an overview of the work proposed. [Figure 4-1 is included in Attachment 2 "Reviewed Condition".] The main element of the work pictured is the massive three celled covered storage tank. The tank has now been completed and is in operation. The two other much smaller elements of the work that are of concern with regard to this Notice of Project Change are (1) the "Proposed Relief Valve Chamber" along the Hultman Aqueduct at a location immediately to the south of the covered storage tank and (2) the "Proposed Valve Chamber" along the Hultman Aqueduct on the east side of the site at the southwest corner of Schenk's Pond.

**The Valve Chamber to the South of the Storage Tank:** The valve chamber to the south of the storage tank allows for an interconnection between the Hultman Aqueduct and the covered storage tank. The site plan shows a connection system consisting of the valve chamber constructed over the existing Hultman Aqueduct and short section of 10 foot diameter pipeline. In the text of the Final Environmental Impact Report, the connection is described as "A 10-foot diameter pipeline connection from the Hultman Aqueduct to the southern header conveying water to the tank". This description is completely consistent with the work that is proposed. For final design and operations purposes this valve chamber is now identified by the nomenclature Valve Chamber N2.

**The Valve Chamber at the Southeast Corner of Schenk's Pond:** The valve chamber at the southeast corner of Schenk's Pond allows for an interconnection between the Hultman Aqueduct and Shaft N of the MetroWest Tunnel. The site plan shows a connection system consisting of the valve chamber constructed over the Hultman Aqueduct and a 10 foot diameter pipeline along the south end of Schenk's Pond. In the text of the Final Environmental Impact Report, the pipeline is described as "...a 10 foot connection between the Shaft N valve chamber and the Hultman Aqueduct downstream of the existing gatehouse". In describing the construction method and potential impacts, the report further states "It is proposed that the Shaft N to Hultman Aqueduct connection pipe and valve chamber be constructed within the limits of Schenk's Pond to avoid excavation and blasting at the toe of the Norumbega Reservoir main dam. This pipe alignment will require construction of a permanent embankment over the pipe and around the valve chamber; and thus, filling of a portion of the pond. Partial dewatering of Schenk's Pond will be necessary to install this pipeline." This description is completely consistent with the work that is proposed. For final design and operations purposes this valve chamber is now identified by the nomenclature Valve Chamber N3.

**The Description of the Environment:** Figure 4.1 "Conceptual Construction Site Plan" shows the major wetlands resource areas at the site. These areas were delineated and given a letter designation. There is no delineated wetland area shown along the alignment of the Hultman Aqueduct at the location of the valve chamber to the south of the storage tank that will connect the Hultman Aqueduct to the Tank. There is no delineated wetland area shown along the alignment of the Hultman Aqueduct at the location of the valve chamber at the southeast corner of Schenk's Pond that will connect the Hultman Aqueduct to Shaft N of the MetroWest Tunnel.

**Additional Information in the Record:** In detail provided elsewhere in the Final Environmental Impact Report in Table 7-3 "Wetland Area Impacts by Project Component and Alternative", permanent impacts to 300 square feet of wetlands along the south side of Schenk's Pond were identified as associated with the valve chamber at the southeast corner of Schenk's Pond and the pipeline connection to Shaft N. The impacted wetland was referred to as "Wetland SP" in Table 7-7 "Norumbega Reservoir Project Alternatives – Wetlands Comparison" and was described as "...a narrow fringe of BVW [Bordering Vegetated Wetland] associated with Schenk's Pond". The delineation of this very small area was not brought forward into the overall site plan Figure 4-1 "Conceptual Construction Site Plan".

**Overall Projected Wetlands Impacts:** In Table 7-7 “Norumbega Reservoir Project Alternatives – Wetlands Comparison”, a total of 90,550 square feet of permanent impacts to wetland resources are identified as associated with the Preferred Alternative. Only a very limited portion of this total was associated with the valve chamber construction. Of the total wetlands impacts, valve chamber construction contributed (1) no wetland impacts associated with construction of the valve chamber to the south of the storage tank and the associated pipeline connection and (2) 300 square feet of wetlands impacts associated with the valve chamber at the southeast corner of Schenk’s Pond and the associated pipeline connection

**The Certificate of the Secretary:** The Certificate of the Secretary on the Final Environmental Impact Report was issued on August 14, 1998. [A copy of the certificate is included in Attachment 1 “Secretary’s Certificate”.] The certificate is a general response to project impacts; the valve chambers and the connecting pipelines were relatively small elements of the overall project and were not specifically addressed. With regard to wetlands impacts the Certificate states: “It is expected that both DEP and the Weston Conservation Commission will be responsible for reviewing and approving the wetlands replication plan and stormwater management plans pursuant to the Wetlands Protection Act.”

**(b) Material Changes to the Project**

**Changes in the Wetlands Regime Near the Valve Chamber to the South of the Storage Tank:** At the time of the resource inventory for the preparation of the Final Environmental Impact Report, no wetlands were identified in the vicinity of the proposed location of Valve Chamber N2 to the south of the storage tank. In a field delineation of the wetland completed in September 2006, it was determined that wetlands have now developed in this area. [Please refer to Attachment 3 “Proposed Conditions” for the general location of this wetland area in Figure 3-1 and a detailed representation of this wetland area in Figure 3-2.] These wetlands, which have formed on top of the Hultman Aqueduct, are thought to be hydrologically supported partially by leakage through the dike at Norumbega Reservoir and partially supported by stormwater discharge from the drainage system associated with the storage tank site. These new wetlands are classified as “wet meadow” and are dominated by herbaceous hydrophytic vegetation. Until recently, the area was regularly mowed as a part of maintenance for the Hultman Aqueduct; mowing ceased when the area become too wet to mow successfully. The wetland is contiguous to and hydrologically connected to a downstream wetland, namely Wetland G which was described in the Final Environmental Impact Report. Because of this connectivity the new wetland is considered a Bordering Vegetated Wetland. Approximately 1,781 square feet of this new wetland area will be permanently impacted by the construction of Valve Chamber N2. This impact was not included as part of the previously reviewed project.