Commonwealth of Massachusetts Executive Office of Environmental Affairs MEPA Office



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Environmental Notification Form

For Office Use Only Executive Office of Environmental Affairs

EOEA No.: 14293 MEPA Analyst: Bill GAGE Phone: 617-626-10 25

The information requested on this form must be completed to begin MEPA Review in accordance with the provisions of the Massachusetts Environmental Policy Act, 301 CMR

Project Name: Bedrock Wellfield, Lynnfield Center Water District					
Street: Phillips Road					
Municipality: Lynnfield		Watershed: North Coastal Basin			
Universal Tranverse Mercator Coordinates:		Latitude: 42° 32' 57"			
		Longitude:71°			
Estimated commencement date:		Estimated completion date:			
9/2008 (Design)		3/2010 (Construction)			
7/2009 (Construction)					
Approximate cost: \$2,700,000		Status of project design: Well Drilling-			
		100% complete; F	acilities Design – 10% complete		
Proponent: Lynnfield Center Water District					
Street: 83 Phillips Road					
Municipality: Lynnfield		S ate: MA	Zip Code: 01940		
Name of Contact Person From Whom Copies o this ENF May Be Obtained:					
Elaine Sistare, P.E.					
Firm/Agency: Camp Dresser & McKee Inc.		Street: 56 Exchange Terrace, 4 th Floor			
Municipality: Providence		State: RI	Zip Code: 02903		
Phone: 401-457-0311	Fax: 401	1-457-0311	E-mail: sistareec@cdm.com		

Does this project meet or exceed a mandatory El	R threshold (see 301 CMR 11.03)?	
	Yes	No
Has this project been filed with MEPA before?		
	Yes (EOEA No)	⊠No
Has any project on this site been filed with MEPA	before?	
	Yes (EOEA No)	⊠No
Is this an Expanded ENF (see 301 CMR 11.05(7)) requ	esting:	
a Single EIR? (see 301 CMR 11.06(8))	⊡Yes	⊠No
a Special Review Procedure? (see 301CMR 11.09)	□Yes	⊠No
a Waiver of mandatory EIR? (see 301 CMR 11.11)	□Yes	ΜNο
a Phase Waiver? (see 301 CMR 11.11)	☐Yes	⊠No

Identify any financial assistance or land transfer from an agency of the Commonwealth, including the agency name and the amount of funding or land area (in acres): NONE

Are you requesting coordinated review with any other federal, state, regional, or local agency? []Yes(Specify_____) ⊠No

List Local or Federal Permits and Approvals: _The District expects to submit a Request for Determination to the Lynnfield Conservation Commission.

Which ENF or EIR review threshold(s) does the project meet or exceed (see 301 CMR 11	.03):
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☐ Land ⊠ Water ☐ Energy ☐ ACEC	Rare Specie Wastewate Air Regulations	r 🗍	Transportat Solid & Haz	Vaterways, & Tidelands ion ardous Waste Archaeological	
Summary of Project Size	Existing	Change	Total	State Permits &	
& Environmental Impacts				Approvals	
LL	AND			Order of Conditions	
Total site acreage	104			Superseding Order of Conditions	
New acres of land altered		0.4		Chapter 91 License	
Acres of impervious area	0.6	0	0.6	401 Water Quality	
Square feet of new bordering vegetated wetlands alteration		NONE		Certification MHD or MDC Access Permit	
Square feet of new other wetland alteration		NONE		X Water Management	
Acres of new non-water dependent use of tidelands or waterways		NONE		 New Source Approval DEP or MWRA Sewer Connection/ Extension Permit 	
STRU	JCTURES			🛛 Other Permits	
Gross square footage	4387	0	4387	(including Legislative Approvals) – Specify:	
Number of housing units	N/A	N/A	N/A		
Maximum height (in feet)	20	0	20	-DEP Approval to Construct Source	
TRANS	PORTATION				
Vehicle trips per day	N/A	N/A	N/A		
Parking spaces	N/A	N/A	N/A		
WATER/W	WATER/WASTEWATER				
Gallons/day (GPD) of water use	N/A	N/A	N/A		
GPD water withdrawal*	920,000 max from this parcel	310,000	1,230,000 max from this parcel		
GPD wastewater generation/ treatment	N/A	N/A	N/A		
Length of water/sewer mains (in miles)	0.4	0.4	0.8		

*The District's existing water supplies on this parcel include Well No. 9, Well No. 26 and the Phillips Road tubular wellfield, with respective approved yields of 130,000 gpd, 300,000 gpd and 490,000 gpd. Therefore, the total existing approved yield is 920,000 gpd. The "approved yield" refers to the maximum withdrawal allowed by DEP in one day.

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The new wellfield is expected to have an approved yield of 610,000 gpd. However, since existing Well No. 26 (with 300,000 gpd approved yield) will be abandoned as part of the new wellfield project, the new total approved yield is 1,230,000 gpd. All of the supply sources described herein are located in the North Coastal Basin. Note that the Water Management Act limits on withdrawals are much lower than the approved yield figures.

CONSERVATION LAND: Will the project involve th		of public parkland or other Article 97 public natural
resources to any purpose not in accordance with Ar		⊠No
Will it involve the release of any conservation restrict	ction, preserva	tion restriction, agricultural preservation
restriction, or watershed preservation restriction?		
□Yes (Specify)	⊠No
RARE SPECIES: Does the project site include Estin		of Rare Species, Vernal Pools, Priority Sites of
Rare Species, or Exemplary Natural Communities?		
Yes (Specify)	⊠No
HISTORICAL /ARCHAEOLOGICAL RESOURCES listed in the State Register of Historic Place or the in Commonwealth?		
)	⊠No
If yes, does the project involve any demolition or de archaeological resources?	estruction of ar	ny listed or inventoried historic or
) 🖾No
AREAS OF CRITICAL ENVIRONMENTAL CONCE	ERN: Is the pro	oject in or adjacent to an Area of Critical
Yes (Specify)	No

PROJECT DESCRIPTION: The project description should include (a) a description of the project site, (b) a description of both on-site and off-site alternatives and the impacts associated with each alternative, and (c) potential on-site and off-site mitigation measures for each alternative (*You may attach one additional page, if necessary.*)

The purpose of this project is the development of four new municipal water bedrock supply wells within the existing 104 acre Lynnfield Center Water District (the District) parcel, which includes Phillips Road Tubular Wellfield, Well No. 9 and Well No. 26, and a Greensand Filter Water Treatment Plant (WTP). The parcel includes multiple bordering parcels owned by the District, the majority of which are wooded/forest.

The DEP-approved yield from the four new wells is expected to be 610,000 gallons per day (gpd).

The District has assumed that this project requires filing an ENF per 301 CMR 11.03(b)1, which lists the following trigger: "new withdrawal or expansion of withdrawal of 100,000 or more gpd from a water source that requires new construction for withdrawal." It is expected that DEP's water withdrawal permit will add Bedrock Wells No. 6, 7, 9, and 10 as approved withdrawal points, but will not include a permitted volume beyond that already registered by the District. The District will request an increase in permitted withdrawal after the Water Demand Forecast has been completed by the Water Resources Commission (WRC). While the Water Demand Forecast has been submitted to the WRC, a heavy backlog exists, and the WRC expects to wait until 2009 to complete the Water Needs Forecast. The requested withdrawal permit volume is expected to be in the range of 0.05 to 0.25 gpd.

All four bedrock wells have already been drilled, as was required for mandatory testing under the DEP Source Approval process. The development of the bedrock wells to the water supply system will include the following:

- Approximately 1,900 linear feet (If) of 8-inch diameter water main connecting Bedrock Wells No. 6,
 7, 9 and 10 to existing 8-inch ductile iron (DI) transmission main near existing Well No. 9
- Approximately 1500 feet of 10 ft wide gravel roadway along the existing dirt road around the new bedrock wells
- Submersible pump and motor for each of the four new bedrock wells
- 8 ft high fencing with gate around each of the four new bedrock wells
- Overhead power lines to supply power to the new bedrock wells
- Additional greensand filter in the existing Greensand Filter WTP
- Rollup garage door in place of existing knockout panel in the existing WTP building
- New concrete pad and new emergency generator with adjacent 2,000 gallon propane tank
- The existing Well No. 26 will be abandoned as part of this project

A site plan is presented in Figure 1 of the DEP Source Final Report, included in Attachment A. In addition, Attachment B includes a Site Plan showing the expected construction. Although there are wetlands present on the District parcel, no wetlands will be altered by the project construction.

The wellfield site is located in central Lynnfield and is bordered to the south by land owned by the Town of Lynnfield Conservation Commission. Residential areas border on the north, west and east boundaries of the parcel. The USGS quadrangle location of the site is shown on Figure 5-1 of the DEP Source Final Report (see Attachment A).

Alternatives to the construction of this wellfield include (1) taking water from other sources in the lpswich River Basin (not feasible, no new permits are being issued), (2) developing sand and gravel wells in the North Coastal Basin (not feasible because all such sources have already been developed), (3) purchasing water from another supplier (not feasible due to high cost from MWRA, and other suppliers do not have excess water to sell), (4) continued leak detection (District annually surveys; no significant leaks were found in recent years. The District's unaccounted for water has recently been about 10%.), (5) increased conservation and demand management (District continuously implements conservation measures, conservation efforts will not eliminate the need for the supply source) and (6) no action (this would likely result in a Water Management Act violation in the future, and therefore not acceptable).

DEP will include mitigation measures in the Water Management Act Permit, such as wetland monitoring, water conservation requirements, leak detection requirements, and outside water use restrictions.