

1034-1100 Concord Ave. Site Overview

(also known as the “Transfer Station/Incinerator Site”)

6/17/2024

Site Highlights:

- Parcels “A” & “B”: deed restricted, earmarked for recreational, public works or other municipal purposes per 2013 legislation.
- Parcel “C”: unrestricted, owned by Town of Belmont.
- The site consists of ~25 Acres, with environmental buffer & zoning restrictions reducing the buildable size to ~7-8 Acres.
- Current site use includes school bus parking, as well as snow/general storage by the Department of Public Works.
- Following extensive site evaluation & public process, the Select Board granted control of the site to Belmont Light in 2019, with the following motion:
 - “To have the incinerator site post-closure use be for solar array, battery storage and other Belmont Light use, as well as DPW use.”
- Official site use to be submitted to Mass DEP. in the coming months, determining the proper type of cap. Capping process to begin ~12 months following DEP. approval.

Belmont Light Proposal:

- Utilize site for the construction of a new Belmont Light operational center.
 - Current building lacks adequate vehicle & materials storage space, slowing down capital projects
 - Current building lacks adequate personnel & parking space
 - Presently, there is no adequate space for a SCADA./Control Room
- Deploy utility scale Battery Energy Storage System(s) (“BESS”), as well as ground/roof mounted solar arrays.
 - The size and number of BESS. to be determined; driven by overall financial implications.
 - Unrestricted parcel to be used for BESS., providing more flexibility with financing/ownership & overall project feasibility.
- Belmont Light to make the 40 Prince St. site available to the Town in exchange for the exclusive use of the Concord Ave. site, including the unrestricted, Town-owned parcel.

Proposed Site Layout:



ZONING ANALYSIS		
ZONING DISTRICT: SINGLE RESIDENT D		
CRITERION	REQUIRED	PROPOSED
MINIMUM LOT AREA (SQ FT)	20,000	1,201K-200
MINIMUM FRONT SETBACK (FT)	20	100
MINIMUM SIDE SETBACK (FT)	10	30
MINIMUM REAR SETBACK (FT)	20	100
MINIMUM LOT FRONTAGE (FT)	100	633
MINIMUM LOT COVERAGE (%)	20	18.8
MINIMUM OPEN SPACE (%)	20	23.2
MAXIMUM BUILDING HEIGHT	10 FT 7 1/2 FT (10)	20 FT 7 1/2 FT (20)

PARKING REQUIREMENTS		
USE	AREA	MINIMUM SPACES
OFFICE (15,400 S.F.)	15,400 S.F.	62
TOTAL	15,400 S.F.	62

NOTES:

1. ALL PARCELS ARE LOCATED WITHIN THE SINGLE RESIDENT D DISTRICT.
2. WETLAND BOUNDARIES & SETBACK CONDITIONS WERE OBTAINED FROM THE "WETLANDS AND WOODLANDS USE PLAN" PREPARED BY LANDSON ENVIRONMENTAL, LLC DATED FEBRUARY 2024.
3. THE LOCATIONS AND DIMENSIONS OF THE ABOVE ITEMS ARE APPROXIMATE AND SUITABLE FOR PLANNING PURPOSES. ALL ITEMS MUST BE VERIFIED IN THE FIELD PRIOR TO FINAL DESIGN.
4. AERIAL IMAGES FROM GOOGLE EARTH ON MAY 20TH, 2024.
5. THIS PLAN IS CONCEPTUAL IN NATURE AND HAS BEEN DEVELOPED BASED ON REASONABLY AVAILABLE RECORD INFORMATION. ACTUAL BOUNDARY, TOPOGRAPHY, AND EXISTING CONDITIONS SHOWN MAY NOT BE EXACTLY AS SHOWN ON THIS PLAN. BELMONT LIGHT AND BEALS ASSOCIATES SHALL BE RESPONSIBLE FOR VERIFYING THE ACCURACY OF ALL INFORMATION. THESE COMPLIANCE AND OTHER REQUIREMENTS SHOULD BE VERIFIED TO BE ACCURATE AT THE DATE INFORMATION IS OBTAINED BY BEALS ASSOCIATES.

Conceptual Cost Estimates:

- Capping: ~\$5.5M, Town has ~\$2.7M in reserve.
- New building: \$300-350/sqft., for a total cost of \$12 - \$17M depending on final size and design (i.e., 39,000-48,000 sqft., single or two-story).
- BESS. cost for one 5MW, 15MWh battery: ~\$10M
- Ground-mounted solar ~1.5MW array cost: ~\$4M
- Roof-mounted solar: ~300kW, array cost: ~\$800,000
- Electric infrastructure upgrades: ~\$3.5M

Financial Benefit highlights:

- BESS.: \$6-8M savings over 20 years with no upfront BMLD. expenditures. Savings would likely be much higher under BMLD. financing/ownership.
- Ground-mounted solar benefit: ~\$10M over 20+ years
- Roof-mounted solar benefit: ~\$2M over 20+ years
- Combined BESS. & Solar savings: Likely >\$20M over 20+ years
- Site likely to qualify for a 40% direct pay incentive (30% base credit + 10% brownfield credit), reducing the effective up-front battery and solar cost by ~\$8M.

Net expenditure range & impact on rates:

- Minimum projected up front cost: \$16.58M after ITC.
 - Impact on average monthly bill not including BESS. & Solar benefit: \$5.15
- Maximum projected up-front cost: \$29.98M after ITC.
 - Impact on average monthly bill not including BESS. & Solar benefit: \$9.32
- Minimum projected impact on average monthly bill including savings from BESS. & Solar: \$0.0670 (almost no impact)
- Maximum projected impact on average monthly bill including savings from BESS. & Solar: \$6.77
- Note: This does not include the benefit/deferred investment due to the transfer of the 40 Prince St. site to the Town.

Board Feedback Requested