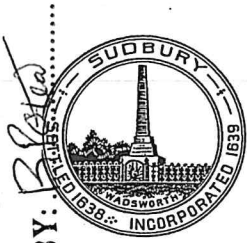


RECEIVED
SEP 06 2024



BY: *R. Poteat*

Town of Sudbury

Community Preservation Committee

cpc@sudbury.ma.us

Flynn Building
278 Old Sudbury Road
Sudbury, MA 01776
978-639-3387
Fax: 978-639-3314

www.sudbury.ma.us/cpc

PROJECT SUBMISSION FORM

Applicant: Sheila Cusolito for Sudbury Housing Authority

Submission Date:

9/6/2024

Group or Committee Affiliation (if any): Sudbury Housing Authority

Applicant Address: 55 Hudson Road

Purpose (please select all that apply):

Applicant Email: director@sudburyha.org

Open Space & Recreation

Applicant Phone: 978-443-5112, option 5

Community Housing

Project Manager Email: director@sudburyha.org

Historic Resource

Project Manager Phone: 978-443-5112, option 5

Project Name: Redevelopment of Single-Family Homes

Project Description: The SHA proposes to redevelop four single-family homes in its portfolio: 21 Great Lake Dr, 8 Oakwood Ave, 2 Beechwood Ave, and 9 Richard Ave.

Costs:

Fiscal Year	Total Project Cost	CPC Funds Requested	Other Funding Sources (Amount and Source)
2026	\$4.18MM	\$450,000	Previously awarded CPA (\$650k)
2027			Development mitigation funds (\$90k)
2028			Newly awarded Public Housing Innovations Grant (\$1.2MM plus operating subsidy)
2029			Green energy funding (\$100k)
2030			Private mortgage (\$1.26MM)
Total			Deferred developer fee (\$432.6k)

How does this project meet the General Criteria and Category Specific Criteria for Community Preservation Committee projects (see attached)?

The project both preserves and creates affordable rental housing opportunities for individuals and families with incomes in the low or extremely low range.

Does this project fall within the jurisdiction or interest of other Town Boards, Committees, Commissions, or Departments? If so, please list the boards, committees, commissions, or departments, whether applications and/or presentations have been made, and what input or recommendations have been given.

The project overview has been presented to the following departments, boards & committees: Planning & Community Development; Town Manager; Assessing; Select Board; Housing Trust, Community Preservation Committee. Additionally, the project overview has been presented to abutters of the four properties, with an ongoing engagement format. The Select Board unanimously voted to continue PILOT agreements on the properties following redevelopment. The Community Preservation Committee approved the FY25 prior version of this application for the ATM2024 warrant; however, Article 37 was subsequently indefinitely postponed.

For Community Preservation Committee Use:

Form Received On: 9-6-24

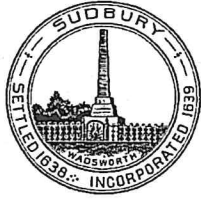
Project Presented to CPC On: _____

Reviewed By: R. Poteat

Determination: _____

RECEIVED
OCT 09 2024

BY: R. P. Poteat



Town of Sudbury Community Preservation Committee

cpc@sudbury.ma.us

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278 Old Sudbury Road
Sudbury, MA 01776
978-639-3387
Fax: 978-639-3314

www.sudbury.ma.us/cpc

PROJECT SUBMISSION FORM

Applicant: Sudbury Housing Authority

Submission Date:

replaces 9/6/2024

Group or Committee Affiliation (if any):

Applicant Address: 55 Hudson Road, Sudbury MA 01776

Purpose (please select all that apply):

Applicant Email: director@sudburyha.org - Sheila M. Cusolito

- Open Space & Recreation
- Community Housing
- Historic Resource

Applicant Phone: 978 443 5112 ext. 5

Project Manager Email: director@sudburyha.org

Project Manager Phone: 978 443 5112 ext. 5

Project Name: Redevelopment of Single-Family Homes

Project Description: Please see attached narrative, response #1.

Costs:

Fiscal Year	Total Project Cost	CPC Funds Requested	Other Funding Sources (Amount and Source)
2026	\$4,182,005	\$450,000	SHA monies, private mortgage, green energy funding, competitive housing loans: \$3,732,005
2027			
2028			
2029			
2030			
Total			

How does this project meet the General Criteria and Category Specific Criteria for Community Preservation Committee projects (see attached)?

Please see attached narrative, response #2.

Does this project fall within the jurisdiction or interest of other Town Boards, Committees, Commissions, or Departments? If so, please list the boards, committees, commissions, or departments, whether applications and/or presentations have been made, and what input or recommendations have been given.

Please see attached narrative, response #3.

For Community Preservation Committee Use:

Form Received On: 10-9-24

Project Presented to CPC On: _____

Reviewed By: R. Poteat

Determination: _____

Project Narrative

The Sudbury Housing Authority (SHA) is pleased to submit an application for Community Preservation Act funding to support the redevelopment of four Chapter 705 single-family homes in its portfolio: 21 Great Lake Drive, 8 Oakwood Avenue, 2 Beechwood Avenue and 9 Richard Avenue (the “Single-Family Homes”). SHA proposes to leverage state, local and private resources in order to transform these Single-Family Homes into energy-efficient, high-quality duplexes, with all units utilized as affordable rentals. The project will construct four replacement units and four net new units.

Prompted by the financial and physical challenges associated with the Single-Family Homes, and the need for smaller units in its inventory, SHA opted in 2021 to study its options for redevelopment of the sites. SHA hired an engineering firm, Hancock Survey Associates (Hancock), and an affordable housing consultant, the Cambridge Housing Authority (CHA). Both firms worked under the direction and supervision of the SHA Board and staff.

The project team conducted a successful concept phase of design and predevelopment. Once all financing is secured, the project team proposes to demolish the Single-Family Homes and reconstruct duplexes. SHA wishes to make clear that any site plans proposed to date are purely conceptual and do not represent its final plans for redevelopment of the sites. SHA has begun an extensive process of community and resident engagement, as well as working with the Town Departments and the Select Board. SHA wants to ensure that the design selected reflects the characteristics of the neighborhood.

The total development cost of the project is \$4.18M, with over \$1.94M already secured. A project budget, dated April 3, 2024 is attached as Exhibit A. The project budget will be examined periodically to ensure its accuracy as the project proceeds.

The duplexes will be constructed with slab-on-grade modular construction. Overall, there will be eight deeply affordable rental units. Four units will replace the existing units, “Replacement Units”. Four net-new units will be added to the properties, “New Units”. The residents of all eight units would pay no more than 30% of their income on rent. The maximum income of applicants for the Replacement Units would be set at 50% of Area Median Income. The New Units will serve applicants earning up to 80% of AMI. It is anticipated that the units would serve lower income families based on SHA’s existing residents, applicants and the proposed tenant selection plan. The proposed unit mix reflects the current need for family housing within SHA’s waiting list and portfolio, in which over-housing¹ is a consistent concern.

Key indicators of project feasibility and readiness are:

Preliminary site plans: Soil suitability assessments conducted by Hancock are attached as Exhibit B. The assessments confirmed the feasibility of septic systems for two-family homes. In order to contain costs and develop conceptual pricing, the project team extensively studied the possibility of modular housing on the sites, including conversations with multiple modular builders and affordable housing developers who recently completed modular projects. The project team found that modular construction will result in significant cost savings over vertical construction.

¹HUD defines over-housing as follows: if the bedroom size of the family's unit exceeds the number of bedrooms for which the family qualifies under the subsidy program.

Relocation: Two of the four properties are currently vacant or will be vacant soon. SHA is considering utilizing a staggered construction start for each of the properties, whereby demolition and construction begins with the currently vacant units. Upon completion of those homes, the new units would serve as the relocation resources for the other two Single-Family Homes to be redeveloped.

Feasibility Issues: The Single-Family Homes are located in an A-Residential zoning district. The project team identified that redevelopment of the properties will require zoning relief related to setbacks through a variance or comprehensive permit. SHA met with the Sudbury Director of Planning and Community Development and received constructive feedback on the site plans. Per guidance from the Town Planner, the project will apply for a Comprehensive Permit under the Local Initiative Program. A letter of support written to the Massachusetts Executive Office of Housing and Livable Communities' (EOHLC) Undersecretary of Public Housing & Rental Assistance from the Director of Planning and Community Development is attached as Exhibit C.

Schedule: SHA anticipates completing the full design and predevelopment of the project in 2025, with construction starting by 2026. A construction term of 12 months² is contemplated. Please see Exhibit D for the project's schedule.

Ownership Structure: SHA anticipates submitting a request to HLC in the near future for conveyance of the property to a SHA-owned LLC per Public Housing Notice 2023-04 to access public procurement relief. SHA anticipates that this affiliate will have long-term ownership of the properties.

Among the proposed project's positive features are complete concept design and significant awarded state funding (\$1.2MM, 29% of TDC), with the award letter attached as Exhibit E. The state also awarded SHA four MRVP vouchers that will provide an operating subsidy to fund ongoing maintenance and capital repairs for all eight of the units

² The 12-month construction term is based on modular research conducted by SHA's consultant that indicates a typical modular construction schedule of 10-16 months.

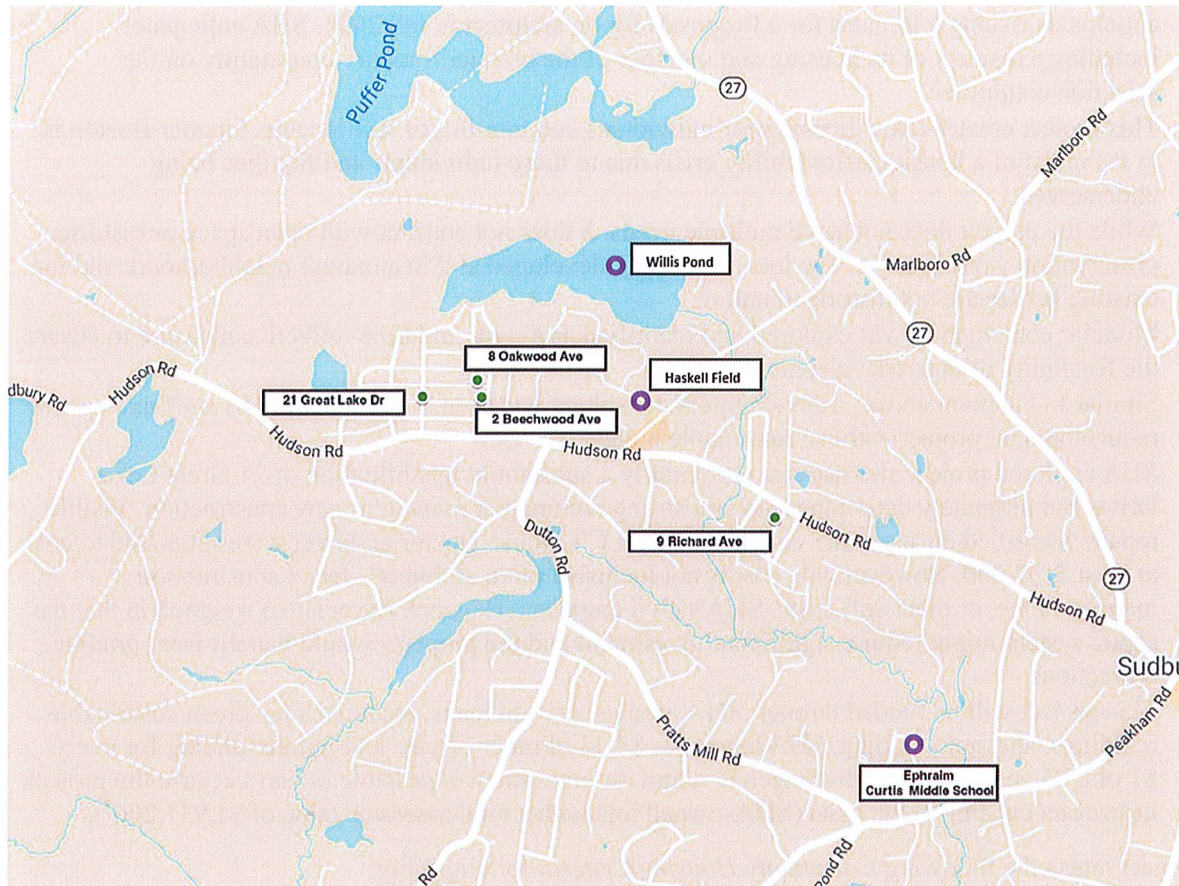


Figure 1: Map of Single-Family Homes in close proximity to schools and recreation spaces, such as the Ephraim Curtis Middle School, Haskell Field, and Willis Pond.

#2. How does this project meet the General Criteria and Category Specific Criteria for Community Preservation Committee projects?

The project meets the following General Criteria for eligibility:

- The new construction of affordable housing is eligible for Community Preservation Act (CPA) funding according to the requirements described in the CPA legislation.
- The project is consistent with and provides housing options that address some of the challenges identified in the 2021 Master Plan. All units created and replaced in this project will count as both affordable and subsidized housing, aligning with the Plan's strategy to create a much more diverse housing stock.
- The project is consistent with the 2016 Housing Production Plan in terms of identified needs, goals, and strategies. The first goal reads, "Create more affordable housing opportunities, both rental and homeownership, for eligible households, including for households with very low and extremely low incomes...", this project will create increased opportunities for individuals with very to extremely low incomes to secure stable and high-quality rental housing in the community.
- As with all prior development projects, SHA will assemble a talented design team in order to create housing that preserves the essential quality of the town and is harmonious architecturally with the surrounding neighborhood. These are cornerstone considerations for SHA. SHA

anticipates issuing a Request for Proposals for an architect in fall 2024. SHA anticipates including a resident of its housing and member of the broader Sudbury community on the selection committee.

- This project creates rental housing for individuals and families of low income. Greater Boston is in the midst of a housing affordability crisis due to these individuals and families being underserved.
- While the project does not serve multiple needs, it does not conflict with open space or historic preservation work in town. The lots are already developed and in a mature neighborhood, and the existing homes are not historic in nature.
- Modular construction was explored and identified as a cost- and time- effective measure to ensure the feasibility of this redevelopment project.
- Similar to the point above, a development consultant has been hired to help SHA staff manage the redevelopment project within a reasonable budget.
- SHA explored project alternatives, particularly a substantial rehabilitation of 21 Great Lake Drive, but ultimately determined several strong factors that pointed to new construction. Visible repairs identified during a site visit from EOHLA's House Doctor architect were estimated to cost at least \$137,000. However, this cost is not inclusive of an architect's fee, a construction manager's fee, or other soft costs. SHA's civil engineer (Hancock Associates) weighed in that the septic system might require significant investment and the property would benefit from grading corrections.
- This project will be funded through SHA monies, private loans, incentives for green/sustainable buildings, and state funding. SHA leverages \$2.33 of other private and public funding for every \$1 of CPA support. This advantageous return on investment is possible in part because the project utilizes an existing Town asset (SHA-owned lots with a total assessed value of \$1,937,200³).

The project meets the following *Community Housing Criteria* for eligibility:

- The project will provide four net new affordable and deeply subsidized rental units for families of low income.
- The project will conform to the Town's Housing Production Plan.
- It will promote socioeconomic diversity by increasing housing opportunities for families and individuals with incomes at or below 80% AMI, 60% AMI and 30% AMI.
- New affordable, subsidized housing units will be woven into the fabric of an existing mixed-income neighborhood.
- SHA will ensure long-term affordability through deed restrictions and regulatory agreements, with resident income eligibility periodically recertified.
- To the extent allowable while following Affirmative Fair Housing rules, the project will give preference to Sudbury residents and Town employees.

#3. Does this project fall within the jurisdiction or interest of other Town Boards, Committees, Commissions, or Departments? If so, please list the boards, committees, commissions, or departments, whether applications and/or presentations have been made, and what input or recommendations have been given.

SHA anticipates that the redevelopment project will involve collaboration with a broad range of Town stakeholders. To-date SHA formally presented the preliminary redevelopment concept to the following boards:

³ Source: Town of Sudbury Assessors Online Database

- SHA met with the Director of Assessing, Cynthia Gerry and Town Manager, Andrew Sheehan, to propose the redevelopment. This meeting occurred at SHA’s main office. Cynthia Gerry and Andrew Sheehan provided constructive feedback for the project.
- SHA met with the Director of Planning and Community Development, Adam Burney, to introduce him to the project. Adam Burney expressed his support for the project and suggested that SHA apply for a Comprehensive Permit.
- SHA presented the redevelopment concept to the Select Board and requested that the Select Board approve of the continuation of the PILOT Agreement during and after redevelopment. SHA is following an EOHLC process to transfer ownership of properties to an affiliate LLC to obtain public procurement relief for designer selection and selection of a construction manager. EOHLC requires that the PILOT remain intact after the transfer of the properties. The Select Board approved continuation of the existing PILOT Agreements. The agreements are subject to change depending on further Select Board discussions.
- SHA presented to the CPC in Fall 2023 to share the concept of the Redevelopment of Single-Family Homes.⁴
- SHA held two public meetings including an introductory presentation and Q&A session. Many residents from the Pine Lakes and surrounding neighborhoods attended and expressed concerns regarding increased density in the already densely populated neighborhood. SHA responded to questions and continues to engage in discussions and information sharing. SHA will keep the neighborhood apprised of all project updates and hopes to mitigate concerns via close collaboration with the project design team to achieve a design that aligns with the structures in the neighborhood and uses SHA’s properties efficiently.

In addition to the meetings above, SHA has successfully collaborated with many stakeholders on previous projects to increase and/or to stabilize rental housing and tenancies in Sudbury. The entities that SHA anticipates working with to ensure that the redevelopment project meets community needs include:

- Town Manager – SHA anticipates ongoing conversations throughout the development process.
- Select Board – SHA may present to the Select Board during the development process.
- Sudbury Housing Trust
- Planning and Community Development (and related committees) – SHA anticipates ongoing conversations throughout the development process.
- Community Preservation Committee
- Zoning Board of Appeals
- Conservation Commission
- Building Department
- Board of Health
- Police and Fire Departments
- Sudbury Foundation
- Council on Aging

#4. Need for affordable housing in Sudbury

There is strong demand for affordable housing in Sudbury. Among data points that demonstrate the need for projects such as the redevelopment of SHA’s Chapter 705 homes are:

⁴ At that time, SHA’s proposal to the CPC did not include all four homes. It contained just the two homes then anticipated to be in the first phase (21 Great Lake Drive and 8 Oakwood Ave). For clarity, SHA has elected to resubmit an application that includes all four homes.

- 1.5%--approximately 278 community members of the Sudbury population--falls below the poverty threshold. Of those individuals, 58% are estimated to be adults (18 years and older), with 29.6% of those individuals estimated to be 65 years or older⁵.
- 28% of households that rent face a housing cost burden (paying more than 30% of their income on housing)⁶.
- Vacancy rates are very low for both owner-occupied and renter-occupied properties. There are 6,386 occupied housing units and only 170 vacant housing units, representing a vacancy rate of approximately 2.5%. This vacancy rate reflects high housing demand⁷.
- SHA's October 2024 waiting list for its 16 units of family public housing contains 13,962 applicants.

#5. Provide examples of similar project proposals in other communities, if any, including examples of project scope, project cost, and status of completion

There are many CPA communities that strengthen affordable housing. In total, Massachusetts CPA communities have supported the creation of 10,170 new affordable housing units and preserved 16,049 affordable housing units for a total of \$761,486,399 funds awarded⁸. A sample of projects similar in size and scope to SHA's proposed redevelopment include:

- The Commonwealth Avenue Project, Concord MA. In 2020, Habitat for Humanity of Greater Lowell in partnership with Concord Housing Authority received \$300,000 of local CPA funds for the construction of an affordable homeownership opportunity. The development consisted of a two-bedroom single family home located at 367 Commonwealth Avenue, Concord, MA and had a total project cost of \$350,000. The project was designed to be energy efficient and consistent with the design and scale of the neighborhood. CPA funds represent 86% of the total development costs. This initiative supported Concord's goal of incorporating affordable housing opportunities into the development of a Town-owned parcel⁹. The project broke ground in late 2022 and is slated to be completed soon¹⁰.
- The Mendes-Monteiro House, Dartmouth, MA. In June 2023, the Dartmouth Community Preservation Committee awarded \$500,000 for the construction of 10 units of subsidized rental housing for individuals over the age of 55 receiving services from the Department of Mental Health (DMH). Partners in Housing, Inc. will develop the project. Upon completion, it will be managed by Dartmouth Housing Authority, with services provided by DMH. The development will consist of one (1) four-bedroom congregate unit and six (6) one-bedroom units. The total development cost is estimated to be \$5,091,873. Partners in Housing will utilize private and state funding sources in addition to CPA funds¹¹.

⁵ Source: American Community Survey 2022

⁶ Source: Regional Housing Services Office, "Sudbury Has Diverse Housing Needs".

⁷ Source: Decennial Census 2020

⁸ Community Preservation Coalition.

⁹ Source: Town of Concord Community Preservation Committee.

¹⁰ Source: Habitat for Humanity of Greater Lowell.

¹¹ Dartmouth Community Preservation Committee.

Exhibit A: Sources and Uses - Sudbury HA 705 Duplexes

Date: 4/3/24 (notes updated 10/8/24); Used for: EOHLC PHI Application Follow-Up Questions / CPA Application

Sources	Construction		Permanent	Per Unit	Interest Rate	Amortization	Term
	Construction	Permanent					
Hard Debt							
Construction Loan (private)	1,392,986	1,259,343	157,418		5.88%	40	2
Permanent Loan (private)					5.26%		20
Soft Debt							
HLC PHI	1,180,458	1,200,000	150,000		0.00%		Awarded
SHA Sponsor Loan (Development Mitigation Funds)		90,000	11,250		0.00%		SHA has funds
Sudbury Community Preservation Act (Current request = \$450k)	1,100,000	1,100,000	137,500		0.00%		
Green Energy Funding		100,000	12,500		0.00%		
Deferred Developer Fee		432,662	54,083		0.00%		
Total Sources	3,673,444	4,182,005	522,751				
Uses	Construction	Permanent	Per Unit	Per SF Net	Per SF Gross	Notes	
Acquisition							
Land	0	0	0	0	0	0	
Building	0	0	0	0	0	0	
Hard/Direct Construction							
Construction	2,136,000	2,136,000	267,000		334	278 Assumes modular construction	
Demolition, abatement of bldgs, grading & earthwork	130,000	130,000	16,250		20	17	
Sales Tax							
General Conditions	158,620	158,620	19,828		25	21	
General Admin	90,640	90,640	11,330		14	12	
Bonds and Insurance	45,320	45,320	5,665		7	6	
Subtotal - Direct Construction	2,560,580	2,560,580	320,073		400	333	
Construction Contingency	128,029	128,029	16,004		20	17 10%	
Subtotal	2,688,609	2,688,609	336,076		420	350	
Financing Fees							
Construction Loan Interest	20,762	27,588	3,448		4	4	
Origination Fees	14,855	14,855	1,857		2	2	
Lender Legal	25,000	25,000	3,125		4	3	
Due Diligence	15,000	25,000	3,125		4	3	
Construction Interest	15,000	15,000	1,875		2	2	
Subtotal	90,617	107,443	13,430		17	14	
Other Costs/Fees/Contingency							
Architectural and Engineering	382,897	382,897	47,862		60	50	
Survey	10,000	20,000	2,500		3	3	
Permits	58,991	58,991	7,374		9	8	
Clerk of the Works	67,200	67,200	8,400		11	9	
Environmental	10,000	10,000	1,250		2	1	
Legal	35,000	45,000	5,625		7	6	
Title	3,841	3,841	480		1	1	
Recording	14,867	14,867	1,858		2	2	
Accounting/Audit	2,500	2,500	313		0	0	
Marketing	5,000	5,000	625		1	1	
Real Estate Taxes	1,726	1,726	216		0	0	
Builder's Risk/Liability Insurance	53,772	53,772	6,722		8	7	
Relocation	13,160	13,160	1,645		2	2	
Owner's Representative	25,000	25,000	3,125		4	3	
Commissioning	5,000	5,000	625		1	1	
Soft Cost Contingency	35,961	35,961	4,495		6	5 5%	
Subtotal	724,915	744,915	93,114		116	97	
Fees and Reserves							
Operating Reserves	9	39,074	4,884		6	5 3-months of debt service and op. ex.	
Developer Fees	169,302	601,964	75,246		94	78 Less than 20% LIP maximum	
Subtotal	169,302	641,038	80,130		100	83	
Total Uses	3,673,444	4,182,005	522,751		653	545	

EXHIBIT B



Commonwealth of Massachusetts
City/Town of

Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

A. Facility Information

Sudbury Housing Authority
Owner Name
2 Beechwood Ave
Street Address
Sudbury MA
City State
Map F05, Lot 219
Map/Lot #
01776
Zip Code

B. Site Information

- 1. (Check one) [] New Construction [x] Upgrade [] Repair
- 2. Soil Survey Available? [x] Yes [] No If yes: NRCS 626B
Source Soil Map Unit
Merrimac Urban Land Complex N/A
Soil Name Soil Limitations
Stratified gravel to gravelly sand Outwash Terrace
Soil Parent material Landform
- 3. Surficial Geological Report Available? [] Yes [] No If yes: 2018/ Stone & Stone Coarse Deposits
Year Published/Source Map Unit
Gravel, sand and gravel, and sand deposits
Description of Geologic Map Unit:
- 4. Flood Rate Insurance Map Within a regulatory floodway? [] Yes [x] No
- 5. Within a velocity zone? [] Yes [x] No
- 6. Within a Mapped Wetland Area? [] Yes [x] No If yes, MassGIS Wetland Data Layer: Wetland Type
- 7. Current Water Resource Conditions (USGS): 11/21/2021 Range: [x] Above Normal [] Normal [] Below Normal
Month/Day/ Year
- 8. Other references reviewed:



Commonwealth of Massachusetts
City/Town of

Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

C. On-Site Review (minimum of two holes required at every proposed primary and reserve disposal area)

Deep Observation Hole Number: 3 Hole # 11/19/21 Date 8:40 am Time Sunny Weather 42.3939 Latitude 71.4532 Longitude:

1. Land Use Residential (e.g., woodland, agricultural field, vacant lot, etc.) Short Grass Vegetation None Surface Stones (e.g., cobbles, stones, boulders, etc.) 0-2 Slope (%)

Description of Location: _____

2. Soil Parent Material: Glacial Outwash Outwash Terrace Landform SU Position on Landscape (SU, SH, BS, FS, TS)

3. Distances from: Open Water Body >200 feet Drainage Way >200 feet Wetlands >100 feet
 Property Line >10 feet Drinking Water Well >100 feet Other _____ feet

4. Unsuitable Materials Present: Yes No If Yes: Disturbed Soil Fill Material Weathered/Fractured Rock Bedrock

5. Groundwater Observed: Yes No If yes: _____ Depth Weeping from Pit _____ Depth Standing Water in Hole

Soil Log

Depth (in)	Soil Horizon /Layer	Soil Texture (USDA)	Soil Matrix: Color-Moist (Munsell)	Redoximorphic Features			Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
				Depth	Color	Percent	Gravel	Cobbles & Stones			
0-18	Fill	SL							granular	friable	
18-24	Ab	SL	10YR2/2						granular	firable	
24-38	Bw	LS	10YR4/6						massive	loose	
38-84+	C	S	2.5Y5/6				10-15	0-5	massive	loose	Coarse Sand

Additional Notes: _____



Commonwealth of Massachusetts
City/Town of

Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

C. On-Site Review (minimum of two holes required at every proposed primary and reserve disposal area)

Deep Observation Hole Number: 2 Hole # 11/19/21 Date 8:55 am Time Sunny Weather 42.3946 Latitude 71.4534 Longitude:

1. Land Use: Residential (e.g., woodland, agricultural field, vacant lot, etc.) Short Grass Vegetation None Surface Stones (e.g., cobbles, stones, boulders, etc.) 0-2 Slope (%)

Description of Location: Front yard of residence of #2 Beechwood Ave

2. Soil Parent Material: Glacial Outwash Outwash Terrace Landform SU Position on Landscape (SU, SH, BS, FS, TS)

3. Distances from: Open Water Body >200 feet Property Line >10 feet Drainage Way >200 feet Drinking Water Well >100 feet Wetlands >100 feet Other feet

4. Unsuitable Materials Present: Yes No If Yes: Disturbed Soil Fill Material Weathered/Fractured Rock Bedrock

5. Groundwater Observed: Yes No If yes: Depth Weeping from Pit Depth Standing Water in Hole

Soil Log

Depth (in)	Soil Horizon /Layer	Soil Texture (USDA)	Soil Matrix: Color-Moist (Munsell)	Redoximorphic Features			Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
				Depth	Color	Percent	Gravel	Cobbles & Stones			
0-14	Ap	SL	10YR2/2						granular	friable	
14-38	Bw	LS	10YR4/6						massive	loose	
38-84	C	S	2.5Y5/6				10-15	0-5	massive	loose	Coarse Sand
84-104"+	2C	S	2.5Y6/4				0-5		massive	loose	Fine Sand

Additional Notes: _____



Commonwealth of Massachusetts
City/Town of

Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

D. Determination of High Groundwater Elevation

1. Method Used:
- | | | |
|--|-------------------|-------------------|
| <input type="checkbox"/> Depth observed standing water in observation hole | Obs. Hole # _____ | Obs. Hole # _____ |
| | _____ inches | _____ inches |
| <input type="checkbox"/> Depth weeping from side of observation hole | _____ inches | _____ inches |
| <input type="checkbox"/> Depth to soil redoximorphic features (mottles) | _____ inches | _____ inches |
| <input type="checkbox"/> Depth to adjusted seasonal high groundwater (S_h)
(USGS methodology) | _____ inches | _____ inches |

Index Well Number _____ Reading Date _____

$$S_h = S_c - [S_r \times (OW_c - OW_{max}) / OW_r]$$

Obs. Hole/Well# _____ S_c _____ S_r _____ OW_c _____ OW_{max} _____ OW_r _____ S_h _____

2. Estimated Depth to High Groundwater: 104 inches

E. Depth of Pervious Material

1. Depth of Naturally Occurring Pervious Material

a. Does at least four feet of naturally occurring pervious material exist in all areas observed throughout the area proposed for the soil absorption system?

Yes No

b. If yes, at what depth was it observed (exclude A and O Horizons)?

Upper boundary: 18 inches Lower boundary: 104 inches

c. If no, at what depth was impervious material observed?

Upper boundary: _____ inches Lower boundary: _____ inches



Commonwealth of Massachusetts
City/Town of

Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

F. Certification

I certify that I am currently approved by the Department of Environmental Protection pursuant to 310 CMR 15.017 to conduct soil evaluations and that the above analysis has been performed by me consistent with the required training, expertise and experience described in 310 CMR 15.017. I further certify that the results of my soil evaluation, as indicated in the attached Soil Evaluation Form, are accurate and in accordance with 310 CMR 15.100 through 15.107.

Signature of Soil Evaluator

Russell Tedford / SE#14372

Typed or Printed Name of Soil Evaluator / License #

Robert Lazo

Name of Approving Authority Witness

11/22/21

Date

7/1/2022

Expiration Date of License

Sudbury Health Department

Approving Authority

Note: In accordance with 310 CMR 15.018(2) this form must be submitted to the approving authority within 60 days of the date of field testing, and to the designer and the property owner with Percolation Test Form 12.

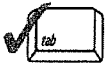
Field Diagrams: Use this area for field diagrams:



Commonwealth of Massachusetts
 City/Town of
Percolation Test
 Form 12

Percolation test results must be submitted with the Soil Suitability Assessment for On-site Sewage Disposal. DEP has provided this form for use by local Boards of Health. Other forms may be used, but the information must be substantially the same as that provided here. Before using this form, check with the local Board of Health to determine the form they use.

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



A. Site Information

Sudbury Housing Department
 Owner Name
2 Beechwood Avenue
 Street Address or Lot #
Sudbury MA 01776
 City/Town State Zip Code
978-443-5112
 Telephone Number
 Contact Person (if different from Owner)

B. Test Results

	<u>11/19/21</u>	<u>10:05 am</u>		
	Date	Time	Date	Time
Observation Hole #	<u>3</u>			
Depth of Perc	<u>48"</u>			
Start Pre-Soak	<u>9:05am</u>			
End Pre-Soak	<u>Did Not Prep</u>			
Time at 12"				
Time at 9"				
Time at 6"				
Time (9"-6")				
Rate (Min./Inch)	<u>< 2</u>			
	Test Passed: <input checked="" type="checkbox"/>		Test Passed: <input type="checkbox"/>	
	Test Failed: <input type="checkbox"/>		Test Failed: <input type="checkbox"/>	

Russell Tedford
 Test Performed By:
Robert Lazo
 Board of Health Witness

Comments:
25 gallons of water poured into P-3, did not maintain 12" level.



Commonwealth of Massachusetts
City/Town of

Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

A. Facility Information

Sudbury Housing Authority

Owner Name

8 Oakwood Ave

Street Address

Sudbury

City

MA

State

Map F04, Lot 302

Map/Lot #

01776

Zip Code

B. Site Information

1. (Check one) New Construction Upgrade Repair

2. Soil Survey Available? Yes No

If yes:

NRCS

Source

626B

Soil Map Unit

Merrimac Urban Land Complex

Soil Name

N/A

Soil Limitations

Stratified gravel to gravelly sand

Soil Parent material

Outwash Terrace

Landform

3. Surficial Geological Report Available? Yes No

If yes:

2018/ Stone & Stone

Year Published/Source

Coarse Deposits

Map Unit

Gravel, sand and gravel, and sand deposits

Description of Geologic Map Unit:

4. Flood Rate Insurance Map Within a regulatory floodway? Yes No

5. Within a velocity zone? Yes No

6. Within a Mapped Wetland Area? Yes No

If yes, MassGIS Wetland Data Layer:

Wetland Type

7. Current Water Resource Conditions (USGS):

11/21/2021

Month/Day/ Year

Range: Above Normal

Normal

Below Normal

8. Other references reviewed:



Commonwealth of Massachusetts
City/Town of

Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

C. On-Site Review (minimum of two holes required at every proposed primary and reserve disposal area)

Deep Observation Hole Number: 1 Hole # 11/19/21 Date 8:00 am Time Sunny Weather 42.3946 Latitude 71.4534 Longitude:
 1. Land Use Residential (e.g., woodland, agricultural field, vacant lot, etc.) Short Grass Vegetation None Surface Stones (e.g., cobbles, stones, boulders, etc.) 0-2 Slope (%)
 Description of Location: _____
 2. Soil Parent Material: Glacial Outwash Outwash Terrace Landform SU Position on Landscape (SU, SH, BS, FS, TS)
 3. Distances from: Open Water Body >200 feet Drainage Way >200 feet Wetlands >100 feet
 Property Line >10 feet Drinking Water Well >100 feet Other _____ feet
 4. Unsuitable Materials Present: Yes No If Yes: Disturbed Soil Fill Material Weathered/Fractured Rock Bedrock
 5. Groundwater Observed: Yes No If yes: _____ Depth Weeping from Pit _____ Depth Standing Water in Hole

Soil Log

Depth (in)	Soil Horizon /Layer	Soil Texture (USDA)	Soil Matrix: Color-Moist (Munsell)	Redoximorphic Features			Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
				Depth	Color	Percent	Gravel	Cobbles & Stones			
0-28	Fill	SL							granular	friable	
28-31	Ab	SL	10YR2/2						granular	firable	
31-42	Bw	LS	10YR4/6				0-5		massive	loose	
42-110+	C	S	2.5Y6/4				0-5		massive	loose	

Additional Notes: _____



Commonwealth of Massachusetts
City/Town of

Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

C. On-Site Review (minimum of two holes required at every proposed primary and reserve disposal area)

Deep Observation Hole Number: 2 Hole # 11/19/21 Date 8:20 am Time Sunny Weather 42.3946 Latitude 71.4534 Longitude:

1. Land Use: Residential (e.g., woodland, agricultural field, vacant lot, etc.) Short Grass Vegetation None Surface Stones (e.g., cobbles, stones, boulders, etc.) 0-2 Slope (%)

Description of Location: Front yard of residence of #8 Oakwood Ave

2. Soil Parent Material: Glacial Outwash Landform Outwash Terrace Landform SU Position on Landscape (SU, SH, BS, FS, TS)

3. Distances from: Open Water Body >200 feet Drainage Way >200 feet Wetlands >100 feet
Property Line >10 feet Drinking Water Well >100 feet Other feet

4. Unsuitable Materials Present: Yes No If Yes: Disturbed Soil Fill Material Weathered/Fractured Rock Bedrock

5. Groundwater Observed: Yes No If yes: Depth Weeping from Pit Depth Standing Water in Hole

Soil Log

Depth (in)	Soil Horizon /Layer	Soil Texture (USDA)	Soil Matrix: Color-Moist (Munsell)	Redoximorphic Features			Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
				Depth	Color	Percent	Gravel	Cobbles & Stones			
0-14	Ap	SL	10YR2/2						granular	friable	
14-34	Bw	LS	10YR4/6						massive	loose	
34-112+	C	S	2.5Y6/4						massive	loose	

Additional Notes:



Commonwealth of Massachusetts
City/Town of _____

Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

D. Determination of High Groundwater Elevation

1. Method Used:
- | | | |
|--|-------------------|-------------------|
| <input type="checkbox"/> Depth observed standing water in observation hole | Obs. Hole # _____ | Obs. Hole # _____ |
| | _____ inches | _____ inches |
| <input type="checkbox"/> Depth weeping from side of observation hole | _____ inches | _____ inches |
| <input type="checkbox"/> Depth to soil redoximorphic features (mottles) | _____ inches | _____ inches |
| <input type="checkbox"/> Depth to adjusted seasonal high groundwater (S_h)
(USGS methodology) | _____ inches | _____ inches |

_____ index Well Number _____ Reading Date

$$S_h = S_c - [S_r \times (OW_c - OW_{max}) / OW_r]$$

Obs. Hole/Well# _____ S_c _____ S_r _____ OW_c _____ OW_{max} _____ OW_r _____ S_h _____

2. Estimated Depth to High Groundwater: 110 inches

E. Depth of Pervious Material

1. Depth of Naturally Occurring Pervious Material

a. Does at least four feet of naturally occurring pervious material exist in all areas observed throughout the area proposed for the soil absorption system?

Yes No

b. If yes, at what depth was it observed (exclude A and O Horizons)?

Upper boundary: 42 inches Lower boundary: 110 inches

c. If no, at what depth was impervious material observed?

Upper boundary: _____ inches Lower boundary: _____ inches



Commonwealth of Massachusetts
City/Town of

Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

F. Certification

I certify that I am currently approved by the Department of Environmental Protection pursuant to 310 CMR 15.017 to conduct soil evaluations and that the above analysis has been performed by me consistent with the required training, expertise and experience described in 310 CMR 15.017. I further certify that the results of my soil evaluation, as indicated in the attached Soil Evaluation Form, are accurate and in accordance with 310 CMR 15.100 through 15.107.

Signature of Soil Evaluator	11/22/21
Russell Tedford / SE#14372	Date
Typed or Printed Name of Soil Evaluator / License #	7/1/2022
Robert Lazo	Expiration Date of License
Name of Approving Authority Witness	Sudbury Health Department
	Approving Authority

Note: In accordance with 310 CMR 15.018(2) this form must be submitted to the approving authority within 60 days of the date of field testing, and to the designer and the property owner with Percolation Test Form 12.

Field Diagrams: Use this area for field diagrams:



Commonwealth of Massachusetts
 City/Town of
Percolation Test
 Form 12

Percolation test results must be submitted with the Soil Suitability Assessment for On-site Sewage Disposal. DEP has provided this form for use by local Boards of Health. Other forms may be used, but the information must be substantially the same as that provided here. Before using this form, check with the local Board of Health to determine the form they use.

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



A. Site Information

Sudbury Housing Department

Owner Name

8 Oakwood Avenue

Street Address or Lot #

Sudbury

City/Town

MA

State

01776

Zip Code

978-443-5112

Telephone Number

Contact Person (if different from Owner)

B. Test Results

	11/19/21	9:30 am		
	Date	Time	Date	Time
Observation Hole #	1			
Depth of Perc	52"			
Start Pre-Soak	9:45am			
End Pre-Soak	Did Not Prep			
Time at 12"				
Time at 9"				
Time at 6"				
Time (9"-6")				
Rate (Min./Inch)	< 2			

Test Passed:
 Test Failed:

Test Passed:
 Test Failed:

Russell Tedford

Test Performed By:

Robert Lazo

Board of Health Witness

Comments:

25 gallons of water poured into P-1, did not maintain 12" level.



Commonwealth of Massachusetts
City/Town of

Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

A. Facility Information

Sudbury Housing Authority

Owner Name

9 Richard Ave

Street Address

Sudbury

City

MA
State

Map G06, Lot 558

Map/Lot #

01776

Zip Code

B. Site Information

1. (Check one) New Construction Upgrade Repair

2. Soil Survey Available? Yes No

If yes:

NRCS
Source

255B
Soil Map Unit

Windsor Loamy Sand

Soil Name

N/A

Soil Limitations

Loose Sandy glaciofluvial deposits

Soil Parent material

Outwash Plain

Landform

3. Surficial Geological Report Available? Yes No

If yes:

2018/ Stone & Stone
Year Published/Source

Coarse Deposits
Map Unit

Gravel, sand and gravel, and sand deposits

Description of Geologic Map Unit:

4. Flood Rate Insurance Map Within a regulatory floodway? Yes No

5. Within a velocity zone? Yes No

6. Within a Mapped Wetland Area? Yes No

If yes, MassGIS Wetland Data Layer:

Wetland Type

7. Current Water Resource Conditions (USGS):

11/21/2021
Month/Day/ Year

Range: Above Normal

Normal

Below Normal

8. Other references reviewed:

Located in a IWPA Zone II according to MassGIS Oliver Online Maps



Commonwealth of Massachusetts
City/Town of

Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

C. On-Site Review (minimum of two holes required at every proposed primary and reserve disposal area)

Deep Observation Hole Number: 7 Hole # 11/19/21 Date 1:30m Time Sunny Weather 42.3894 Latitude 71.4374 Longitude:
 1. Land Use Residential (e.g., woodland, agricultural field, vacant lot, etc.) Short Grass Vegetation None Surface Stones (e.g., cobbles, stones, boulders, etc.) 0-2 Slope (%)
 Description of Location: _____
 2. Soil Parent Material: Glacial Outwash Landform Outwash Plain Landform BS Position on Landscape (SU, SH, BS, FS, TS)
 3. Distances from: Open Water Body >200 feet Drainage Way >200 feet Wetlands >100 feet
 Property Line >10 feet Drinking Water Well >100 feet Other _____ feet
 4. Unsuitable Materials Present: Yes No If Yes: Disturbed Soil Fill Material Weathered/Fractured Rock Bedrock
 5. Groundwater Observed: Yes No If yes: 96" Depth Weeping from Pit _____ Depth Standing Water in Hole

Soil Log

Depth (in)	Soil Horizon /Layer	Soil Texture (USDA)	Soil Matrix: Color-Moist (Munsell)	Redoximorphic Features			Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
				Depth	Color	Percent	Gravel	Cobbles & Stones			
0-14	Ap	SL	10YR2/2						granular	friable	
14-24	Bw	LS	10YR4/6						granular	friable	
24-104+	C	S	2.5Y6/4				0-5		massive	loose	Fine Sand

Additional Notes:



Commonwealth of Massachusetts
City/Town of

Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

C. On-Site Review (minimum of two holes required at every proposed primary and reserve disposal area)

Deep Observation Hole Number: 8 Hole # 11/19/21 Date 2:00 pm Time Sunny Weather 42.3946 Latitude 71.4534 Longitude:

1. Land Use: Residential (e.g., woodland, agricultural field, vacant lot, etc.) Short Grass Vegetation None Surface Stones (e.g., cobbles, stones, boulders, etc.) 0-2 Slope (%)

Description of Location: Rear yard of residence of #9 Richard Ave.

2. Soil Parent Material: Glacial Outwash Landform Outwash Plain Landform SU Position on Landscape (SU, SH, BS, FS, TS)

3. Distances from: Open Water Body >200 feet Drainage Way >200 feet Wetlands >100 feet
Property Line >10 feet Drinking Water Well >100 feet Other feet

4. Unsuited Materials Present: Yes No If Yes: Disturbed Soil Fill Material Weathered/Fractured Rock Bedrock

5. Groundwater Observed: Yes No If yes: Depth Weeping from Pit Depth Standing Water in Hole

Soil Log

Depth (in)	Soil Horizon /Layer	Soil Texture (USDA)	Soil Matrix: Color-Moist (Munsell)	Redoximorphic Features			Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
				Depth	Color	Percent	Gravel	Cobbles & Stones			
0-9	Ap	SL	10YR2/2						granular	friable	
9-24	Bw	LS	10YR4/6						massive	loose	
24-98+	C	S	2.5Y5/6	60	10R5/8	5	0-5		massive	loose	Fine Sand

Additional Notes:



Commonwealth of Massachusetts
City/Town of

Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

D. Determination of High Groundwater Elevation

1. Method Used:
- | | | |
|---|----------------------|----------------------|
| | Obs. Hole # <u>7</u> | Obs. Hole # <u>8</u> |
| <input type="checkbox"/> Depth observed standing water in observation hole | _____ inches | _____ inches |
| <input checked="" type="checkbox"/> Depth weeping from side of observation hole | <u>96</u> inches | _____ inches |
| <input checked="" type="checkbox"/> Depth to soil redoximorphic features (mottles) | _____ inches | <u>60</u> inches |
| <input type="checkbox"/> Depth to adjusted seasonal high groundwater (S_h) (USGS methodology) | _____ inches | _____ inches |

Index Well Number _____ Reading Date _____

$$S_h = S_c - [S_r \times (OW_c - OW_{max}) / OW_r]$$

Obs. Hole/Well# _____ S_c _____ S_r _____ OW_c _____ OW_{max} _____ OW_r _____ S_h _____

2. Estimated Depth to High Groundwater: 60 inches

E. Depth of Pervious Material

1. Depth of Naturally Occurring Pervious Material

a. Does at least four feet of naturally occurring pervious material exist in all areas observed throughout the area proposed for the soil absorption system?

Yes No

b. If yes, at what depth was it observed (exclude A and O Horizons)?

Upper boundary: 13 inches Lower boundary: 104 inches

c. If no, at what depth was impervious material observed?

Upper boundary: _____ inches Lower boundary: _____ inches



Commonwealth of Massachusetts
City/Town of

Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

F. Certification

I certify that I am currently approved by the Department of Environmental Protection pursuant to 310 CMR 15.017 to conduct soil evaluations and that the above analysis has been performed by me consistent with the required training, expertise and experience described in 310 CMR 15.017. I further certify that the results of my soil evaluation, as indicated in the attached Soil Evaluation Form, are accurate and in accordance with 310 CMR 15.100 through 15.107.

Signature of Soil Evaluator

Russell Tedford / SE#14372

Typed or Printed Name of Soil Evaluator / License #

Robert Lazo

Name of Approving Authority Witness

11/22/21

Date

7/1/2022

Expiration Date of License

Sudbury Health Department

Approving Authority

Note: In accordance with 310 CMR 15.018(2) this form must be submitted to the approving authority within 60 days of the date of field testing, and to the designer and the property owner with Percolation Test Form 12.

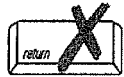
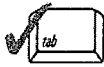
Field Diagrams: Use this area for field diagrams:



Commonwealth of Massachusetts
 City/Town of
Percolation Test
 Form 12

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Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



A. Site Information

Sudbury Housing Department
 Owner Name
9 Richard Avenue
 Street Address or Lot #
Sudbury MA 01776
 City/Town State Zip Code
978-443-51112
 Telephone Number
 Contact Person (if different from Owner)

B. Test Results

	<u>11/19/21</u> Date	<u>1:50 am</u> Time	<u> </u> Date	<u> </u> Time
Observation Hole #	<u>7</u>			
Depth of Perc	<u>38"</u>			
Start Pre-Soak	<u>1:53</u>			
End Pre-Soak	<u>2:08</u>			
Time at 12"	<u>2:08</u>			
Time at 9"	<u>2:09</u>			
Time at 6"	<u>2:11</u>			
Time (9"-6")	<u>2 minutes</u>			
Rate (Min./Inch)	<u>< 2</u>			
	Test Passed: <input checked="" type="checkbox"/>	Test Passed: <input type="checkbox"/>	Test Failed: <input type="checkbox"/>	Test Failed: <input type="checkbox"/>

Russell Tedford
 Test Performed By:
Robert Lazo
 Board of Health Witness

Comments:



Commonwealth of Massachusetts
City/Town of

Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

A. Facility Information

Sudbury Housing Authority

Owner Name

21 Great Lakes Road

Street Address

Sudbury

City

MA

State

Map F04, Lot 601

Map/Lot #

01776

Zip Code

B. Site Information

1. (Check one) New Construction Upgrade Repair

2. Soil Survey Available? Yes No

If yes:

NRCS
Source

626B
Soil Map Unit

Merrimac Urban Land Complex

Soil Name

N/A

Soil Limitations

Stratified gravel to gravelly sand

Soil Parent material

Outwash Terrace

Landform

3. Surficial Geological Report Available? Yes No

If yes:

2018/ Stone & Stone
Year Published/Source

Coarse Deposits
Map Unit

Gravel, sand and gravel, and sand deposits

Description of Geologic Map Unit:

4. Flood Rate Insurance Map Within a regulatory floodway? Yes No

5. Within a velocity zone? Yes No

6. Within a Mapped Wetland Area? Yes No

If yes, MassGIS Wetland Data Layer:

Wetland Type

7. Current Water Resource Conditions (USGS):

11/21/2021
Month/Day/ Year

Range: Above Normal

Normal

Below Normal

8. Other references reviewed:



Commonwealth of Massachusetts
City/Town of

Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

C. On-Site Review (minimum of two holes required at every proposed primary and reserve disposal area)

Deep Observation Hole Number: 5 11/19/21 10:25 am Sunny 42.3940 71.4565
Hole # Date Time Weather Latitude Longitude:

1. Land Use: Residential Short Grass None
(e.g., woodland, agricultural field, vacant lot, etc.) Vegetation Surface Stones (e.g., cobbles, stones, boulders, etc.) Slope (%)

Description of Location: _____

2. Soil Parent Material: Glacial Outwash Outwash Terrace SU
Landform Position on Landscape (SU, SH, BS, FS, TS)

3. Distances from: Open Water Body >200 feet Drainage Way >200 feet Wetlands >100 feet
Property Line >10 feet Drinking Water Well >100 feet Other feet

4. Unsuitable Materials Present: Yes No If Yes: Disturbed Soil Fill Material Weathered/Fractured Rock Bedrock

5. Groundwater Observed: Yes No If yes: _____ Depth Weeping from Pit _____ Depth Standing Water in Hole

Soil Log

Depth (in)	Soil Horizon /Layer	Soil Texture (USDA)	Soil Matrix: Color-Moist (Munsell)	Redoximorphic Features			Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
				Depth	Color	Percent	Gravel	Cobbles & Stones			
0-14	Ap	SL	10YR2/2						granular	friable	
14-34	Bw	LS	10YR4/6						granular	firable	
34-84	C	S	2.5Y5/6				10-15	0-5	massive	loose	Coarse Sand
84-112+	2C	S	2.5Y6/4				0-5		massive	loose	Fine Sand

Additional Notes:



Commonwealth of Massachusetts
City/Town of

Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

C. On-Site Review (minimum of two holes required at every proposed primary and reserve disposal area)

Deep Observation Hole Number: 6 Hole # 11/19/21 Date 10:50 am Time Sunny Weather 42.3946 Latitude 71.4534 Longitude

1. Land Use: Residential Short Grass None 0-2
(e.g., woodland, agricultural field, vacant lot, etc.) Vegetation Surface Stones (e.g., cobbles, stones, boulders, etc.) Slope (%)

Description of Location: Front yard of residence of #21 Great Lakes Road

2. Soil Parent Material: Glacial Outwash Outwash Terrace SU
Landform Position on Landscape (SU, SH, BS, FS, TS)

3. Distances from: Open Water Body >200 feet Drainage Way >200 feet Wetlands >100 feet
Property Line >10 feet Drinking Water Well >100 feet Other feet

4. Unsuited Materials Present: Yes No If Yes: Disturbed Soil Fill Material Weathered/Fractured Rock Bedrock

5. Groundwater Observed: Yes No If yes: Depth Weeping from Pit Depth Standing Water in Hole

Soil Log

Depth (in)	Soil Horizon /Layer	Soil Texture (USDA)	Soil Matrix: Color-Moist (Munsell)	Redoximorphic Features			Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
				Depth	Color	Percent	Gravel	Cobbles & Stones			
0-13	Ap	SL	10YR2/2						granular	friable	
13-34	Bw	LS	10YR4/6						massive	loose	
34-84	C	S	2.5Y5/6				10-15	0-5	massive	loose	Coarse Sand
84-110+	2C	S	2.5Y6/4				0-5		massive	loose	Fine Sand

Additional Notes:



Commonwealth of Massachusetts
City/Town of

Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

D. Determination of High Groundwater Elevation

1. Method Used:
- | | | |
|--|-------------------|-------------------|
| <input type="checkbox"/> Depth observed standing water in observation hole | Obs. Hole # _____ | Obs. Hole # _____ |
| | _____ inches | _____ inches |
| <input type="checkbox"/> Depth weeping from side of observation hole | _____ inches | _____ inches |
| <input type="checkbox"/> Depth to soil redoximorphic features (mottles) | _____ inches | _____ inches |
| <input type="checkbox"/> Depth to adjusted seasonal high groundwater (S_h)
(USGS methodology) | _____ inches | _____ inches |

_____ index Well Number _____ Reading Date

$$S_h = S_c - [S_r \times (OW_c - OW_{max}) / OW_r]$$

Obs. Hole/Well# _____ S_c _____ S_r _____ OW_c _____ OW_{max} _____ OW_r _____ S_h _____

2. Estimated Depth to High Groundwater: 112 inches

E. Depth of Pervious Material

1. Depth of Naturally Occurring Pervious Material

a. Does at least four feet of naturally occurring pervious material exist in all areas observed throughout the area proposed for the soil absorption system?

Yes No

b. If yes, at what depth was it observed (exclude A and O Horizons)?

Upper boundary: 13 inches Lower boundary: 112 inches

c. If no, at what depth was impervious material observed?

Upper boundary: _____ inches Lower boundary: _____ inches



Commonwealth of Massachusetts
City/Town of

Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

F. Certification

I certify that I am currently approved by the Department of Environmental Protection pursuant to 310 CMR 15.017 to conduct soil evaluations and that the above analysis has been performed by me consistent with the required training, expertise and experience described in 310 CMR 15.017. I further certify that the results of my soil evaluation, as indicated in the attached Soil Evaluation Form, are accurate and in accordance with 310 CMR 15.100 through 15.107.

Signature of Soil Evaluator	11/22/21
Russell Tedford / SE#14372	Date
Typed or Printed Name of Soil Evaluator / License #	7/1/2022
Robert Lazo	Expiration Date of License
Name of Approving Authority Witness	Sudbury Health Department
	Approving Authority

Note: In accordance with 310 CMR 15.018(2) this form must be submitted to the approving authority within 60 days of the date of field testing, and to the designer and the property owner with Percolation Test Form 12.

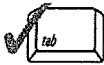
Field Diagrams: Use this area for field diagrams:



Commonwealth of Massachusetts
 City/Town of
Percolation Test
 Form 12

Percolation test results must be submitted with the Soil Suitability Assessment for On-site Sewage Disposal. DEP has provided this form for use by local Boards of Health. Other forms may be used, but the information must be substantially the same as that provided here. Before using this form, check with the local Board of Health to determine the form they use.

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



A. Site Information

Sudbury Housing Department

Owner Name

21 Great Lakes Road

Street Address or Lot #

Sudbury

City/Town

MA

State

01776

Zip Code

978-443-51112

Telephone Number

Contact Person (if different from Owner)

B. Test Results

	11/19/21 Date	11:05 am Time	Date	Time
Observation Hole #	See Comments			
Depth of Perc				
Start Pre-Soak				
End Pre-Soak				
Time at 12"				
Time at 9"				
Time at 6"				
Time (9"-6")				
Rate (Min./Inch)	< 2			
	Test Passed:	<input checked="" type="checkbox"/>	Test Passed:	<input type="checkbox"/>
	Test Failed:	<input type="checkbox"/>	Test Failed:	<input type="checkbox"/>

Russell Tedford

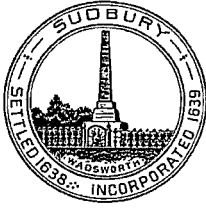
Test Performed By:

Robert Lazo

Board of Health Witness

Comments:

Based on consistency of soils between 8 Oakwood Ave, 2 Beechwood Ave, and 21 Great Lakes Rd. no percolation test was ran for this and a < 2 mpi was agreed upon.



Town of Sudbury

Planning & Community Development Department

Adam R. Burney, MPA, Director

Flynn Building
278 Old Sudbury Road
Sudbury, MA 01776
978-639-3387
Fax : 978-639-3314

www.sudbury.ma.us/pcd
BurneyA@sudbury.ma.us

30 January 2024

Ben Stone, Director, Division of Public Housing & Acting Director, Division of Rental Assistance
Executive Office of Housing and Livable Communities (EOHLC)
100 Cambridge Street, Suite 300
Boston, MA 02114

Re: Support for the SHA Redevelopment of Single-Family Homes

Dear Director Stone,

This letter is to confirm support from the Town of Sudbury Planning & Community Development Department for the Sudbury Housing Authority's (SHA) application for EOHLC Public Housing Innovations funds for the Redevelopment of Single-Family Homes, 21 Great Lake Drive, 8 Oakwood Ave, 2 Beechwood Ave and 9 Richard Ave which are all within the state's Chapter 705 public housing program.

The Redevelopment of Single-Family Homes is a meaningful effort to modernize and increase affordable rental housing opportunities in our community. The existing deeply affordable units are in need of significant repairs to meet the needs of SHA's residents. The project also represents an opportunity to enhance sustainability and resilience in the neighborhood.

The Planning & Community Development Department met with SHA in January 2024 to receive a briefing on the Redevelopment project. It is our understanding that implementation of the project requires dimensional zoning relief. Our judgement is that there is a realistic and timely path to the required zoning relief in 2024, particularly through a Comprehensive Permit as part of the Local Initiative Program process.

It is my understanding that Public Housing Innovation funding from EOHLC is critical to the feasibility of the Redevelopment of Single-Family Homes. Thank you for your time and consideration of SHA's application.

Sincerely,

Adam Burney, MPA
Director of Planning & Community Development, Town of Sudbury

Cc: Sheila M Cusolito, SHA

Exhibit D: Schedule

Period	Project Milestone
Feb-24	Resident and Community Outreach Begins
Apr-24	SHA presented to the Select Board for approval of PILOT continuation
Oct-24	Interim Conveyance for Chapter 149/149A Relief Issue RFP for Designer Selection
Dec-24	Selection of Architect Begin GC Procurement and Selection Process
Jan-25	Architect begins Concept/Schematic Design Phase Community Engagement Meetings GC Selected
Apr-25	Submission of LIP Application Architect completes Schematic Design and begins Design Development
Jun-25	Architect completes Design Development EOHLC approval of LIP application Apply to the Sudbury Zoning Board of Appeals for a Comprehensive Permit
Jul-25	Architect begins Construction Documents Issue RFP for Debt Partner
Oct-25	Building Permits Issued Close on Construction Financing
Nov-25	Begin Construction
Nov-26	Construction Completion

EXHIBIT E



Commonwealth of Massachusetts EXECUTIVE OFFICE OF HOUSING & LIVABLE COMMUNITIES

Maura T. Healey, Governor ◆ Kimberley Driscoll, Lieutenant Governor ◆ Edward M. Augustus Jr., Secretary

July 30, 2024

Tatiana Vitvitsky, Chairperson
Sudbury Housing Authority
Musketahquid Village
55 Hudson Road
Sudbury, MA 01776

Re: Award of Public Housing Innovation (PHI) Funds for 4 scattered sites in Sudbury

Dear Chair Vitvitsky:

On behalf of EOHLIC, I am pleased to award the Sudbury Housing Authority (SHA) a \$1,200,000 capital grant and four (4) project-based Massachusetts Rental Voucher Program (MRVP) vouchers at 100% large-area Fair Market Rent¹ (FMR) in response to your application to the [Public Housing Innovations 2024 Notice of Funding Availability](#). The capital grant is from funding authorized by Chapter 99 of the Acts of 2018, item 7004-0055 and/or successor housing bond legislation (collectively the "Act"), known as the Public Housing Innovations Demonstration Program (PHIDP). This innovative program provides awards that fund rehabilitation and redevelopment of state-aided public housing, using creative methods including, but not limited to, mixed-income redevelopment including market-rate production, alternate funding sources with new management or capital structures potentially including affordable housing production, or conversion to federal public housing. The goal of the program is to develop and promote innovative and cost-effective means of modernizing public housing and preserving it for the long term while reducing or eliminating the need for future state-funded capital and/or operating subsidies for the development.

Your submitted project seeks to achieve this goal. The PHI 2024 award will fund demolition and replacement of 4 state-aided chapter 705 single family public housing units located at 21 Great Lake Drive, 8 Oakwood Ave., 2 Beechwood Ave. and 9 Richard Ave. This award will support the construction of modern duplex units to replace each of the 4 units of family housing at the chapter 705 sites named above. The specific scope of development items will be confirmed and approved upon review by EOHLIC's Bureau of Housing Development and Construction. EOHLIC will provide project-based MRVP's to support debt and operating costs for the 4 net-new units.

After redevelopment all 4 chapter 705 units will exit the state-aided public housing program and be converted into local housing units. These units will no longer follow the state's public housing regulations in CMR 760 4,5,6, or 11. These units will have income-based rents, with an affordable housing deed restriction restricting tenant eligibility to those earning no more than 50% Area Median Income (AMI) at initial occupancy. Households may remain in these units until their income exceeds 80% of AMI. These units will no longer receive operating or capital subsidies from EOHLIC.

SHA will submit a request to EOHLIC for an interim conveyance to an SHA-owned LLC per [Public Housing Notice 2023-04](#) to access public procurement relief. SHA or an affiliate will have long-term ownership of

¹ Boston-Cambridge-Quincy, MA-NH HUD Metro FMR Area

the properties. SHA will work to obtain written confirmation that the existing PILOT will extend to redevelopment.

Estimated Project Total Development Cost (TDC)	\$3,650,685
PHI 2024 NOFA Award	\$1,200,000
Other Sources	<ul style="list-style-type: none"> • Construction Loan - \$1,242,376 • Permanent Loan - \$1,218,100 • SHA Sponsor Loan - \$90,000 • Sudbury CPA Funds - \$720,000 • Green Energy Funds- \$100,000
Development Partner	<ul style="list-style-type: none"> • Cambridge Housing Authority
Scope	<ul style="list-style-type: none"> • Scattered Site redevelopment of 4 single family homes into 4 new duplexes (8 total units with 4 net new units)

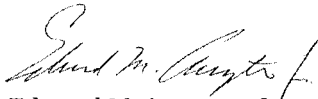
Please note the following:

1. The award of the PHI 2024 grant is conditioned on demonstration, to EOHLIC's satisfaction, that all demolished state-aided units will be replaced with new units subject to long-term use restrictions approved by EOHLIC.
2. If the final project costs are more than the TDC amount estimated in SHA's pro forma, then SHA must seek additional funds from a source other than EOHLIC. EOHLIC reserves the right to review the final project sources and uses budget to confirm that sufficient funds are available to carry out the project to completion.
3. If relocation of any resident is necessary to complete this project, SHA must comply with all state and federal relocation requirements pursuant to an EOHLIC-approved relocation plan, including, without limitation, the federal Uniform Relocation Act and M.G.L. c. 79A.
4. Subject to EOHLIC approval, these funds may be combined with previously awarded EOHLIC funds. If additional funds are made available from any federal sources, the project must comply with all applicable federal requirements.
5. If the final project costs are less than the Estimated TDC, EOHLIC will retain any unspent portion of the PHI 2024 funds.
6. EOHLIC expects this project to have a construction Notice to Proceed by June 30, 2026. If SHA has not met this milestone, these funds may be rescinded.
8. 5% of the PHI 2024 award will be withheld as retainage and disbursed upon submission of a satisfactory Certificate of Final Completion to EOHLIC.
9. Project must adhere to Massachusetts Multifamily New Construction Design Requirements & Guidelines, or their successor (Guidelines), which are currently available here: <https://www.mass.gov/doc/multifamily-new-construction-design-requirements-guideline-for-special-bhcd-initiatives/download>. Closing and advance of funds shall be subject to EOHLIC review of final plans and specifications for adherence to the Guidelines and other applicable requirements; provided, that EOHLIC in its sole discretion may, upon request from the Housing Authority, grant a waiver from such provisions of the Guidelines as may be necessary to accomplish the effective revitalization of the project in keeping with the requirements and goals of the PHI 2024 program and will not adversely affect public housing residents or applicants of any income who are otherwise eligible.
12. Up to 10% of the award may be used for predevelopment costs; the remainder cannot be expended until after construction closing and the project securing all necessary funds.

13. Pursuant to the Act, EOHLIC is authorized to (a) exempt a recipient of PHI 2024 funding from the requirements of Chapters 7C and 121B of the General Laws upon a showing by the recipient that such exemptions are necessary to accomplish the effective revitalization of public housing and shall not adversely affect public housing residents or applicants of any income who are otherwise eligible and (b) provide such additional regulatory relief as may be required to further the objectives of the program. Under EOHLIC regulations at 760 CMR 63.03(4), EOHLIC in its discretion may at any time approve an exemption for a PHI 2024-eligible project from the requirements of M.G.L. c. 7C if it determines that the local housing authority has demonstrated that the requested exemption is necessary to accomplish the effective revitalization of public housing and will not adversely affect public housing residents or applicants of any income who are otherwise eligible and will be consistent with the purpose of the Act, 760 CMR 63.00 and the PHI 2024 Program Guidelines and all applicable provisions of law. EOHLIC has made the necessary determination, and accordingly this award letter comprises a EOHLIC waiver of M.G.L. c. 7C (designer selection) to assist SHA in accomplishing the goals of this award. SHA may choose to utilize this waiver or to follow the typical designer selection process under M.G.L. c. 7C.

Congratulations and thank you for your efforts to preserve public housing in Sudbury. If you have questions about this award please contact Matthew Martin, Real Estate & Redevelopment Specialist, at matthew.martin3@mass.gov.

Sincerely,



Edward M. Augustus Jr.
Secretary

cc: Sheila Cusolito, Sudbury Housing Authority Executive Director
Andrew Sheehan, Sudbury Town Manager
James Eldridge, Senator
Carmine Gentile, Representative
Ben Stone, EOHLIC, Undersecretary of Public Housing & Rental Assistance
Fatima Razzaq, EOHLIC Director, Bureau of Housing Development & Construction
Avalon McLaren, EOHLIC Director of Project Management
Matthew Martin, EOHLIC Real Estate & Redevelopment Specialist