

THE COMMONS IN LINCOLN EXPANSION 2023 - LINCOLN, MA



The Commons in Lincoln Expansion 2023 - Lincoln, MA

Preliminary Development and Use Plan

North Lincoln Planning Development
District Modifications

A Rezoning Article Proposed Before the
2023 Special Town Meeting

November 2, 2023

Prepared for:
The Commons in Lincoln



Prepared by:



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THE COMMONS IN LINCOLN EXPANSION 2023 - LINCOLN, MA

October 30, 2023

Ms. Margaret Olson, Chair
Town of Lincoln Planning Board
16 Lincoln Road
Lincoln, MA 01773

Re: The Commons in Lincoln, 2023 Expansion
North Lincoln Planned Development District 5
1 Harvest Circle
Lincoln, Massachusetts 01773

Dear Ms. Olson,

New England Life Plan Communities (NELPC) respectfully submits this Preliminary Development and Use Plan for modifications to the North Lincoln Planned Development District as related to The Commons in Lincoln senior housing community. Attached please find:

- Preliminary Development and Use Plan narrative
- Preliminary Development and Use Plan – Preliminary Plans (architectural and site)
- Supplemental reports and exhibits including traffic analysis, fiscal impact study, and a wastewater treatment facility assessment

NELPC acquired The Commons in January 2022 from Benchmark Senior Living (Benchmark), returning the senior housing community to its non-profit origins having originally developed by New England Deaconess and the Masonic Health System of Massachusetts. Benchmark successfully stabilized the community after early occupancy challenges due in part to the Great Financial Crisis of 2008 and then strengthened the campus with ninety (90) units of assisted living, memory care and skilled nursing, providing a full continuum of care. Benchmark continues to be an essential member of the team, now in the role of third-party property manager. The Commons is the first community for NELPC, which aims to promote transparency, inclusivity, and community integration within a culture of social awareness, workforce equity and environmental stewardship.

Responding to a higher concentration of older adults than national or statewide averages and recent history of strong operations, The Commons proposes to expand its offering of independent living options for the seniors in the Lincoln area. This expansion will promote housing diversity by providing additional senior housing and affordable opportunities while ensuring The Commons remains competitive in the marketplace. If approved and completed, the project will have a positive financial impact for the Town of Lincoln.

It is worth clarifying that there are presently 258 senior housing units on the campus and 1 vacant single-family residence, totaling 259 units entitled through the 2014 special permit. Therefore, with the proposed demolition of the vacant single-family residence, which itself would be subject to future review by the Historic Commission, when combined with the proposed 28 independent living units, the proposed net increase is 27 units for a total of 286 units.

The applicant has every intention to honor prior commitments made by predecessors regarding the conservation restriction area and no work is proposed in this environmental resource.

The proposed amendment to the Preliminary Development and Use Plan approved by Town Meeting in 2013 and by the Planning Board special permit in 2014 include:

- Increase total unit count from 259 to 286
- Changes to dimensional standards as noted in section 4.4
- No changes to permitted uses

Should a two-thirds approval be obtained at the Special Town Meeting in December, the applicant would pursue two Special Permit applications by its NELP-Commons Flint House LLC and NELP-Commons, LLC entities after the first of the year, in concert with filings with other relevant commissions and boards in town.

The Commons and the Town of Lincoln have a special relationship, Lincoln is the number one place of origin for current residents of The Commons, for example. Our goal is to build upon and strengthen that bond through this project. NELPC and its development team thank all residents, staff, interested parties, and Board/Commission members for their feedback to date and look forward to working together to refine this plan to best serve seniors in Lincoln.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Ryan", written in a cursive style.

Ryan Herchenroether, on behalf of New England Life Plan Communities
Senior Project Manager
OnePoint Partners
35 Main Street, Suite 211C
Topsfield, MA 01983

1.0 INTRODUCTION

History

The Commons in Lincoln, located on 30.97 acres adjacent to the Lincoln-Concord border, was originally entitled as The Groves in 2007 by the New England Deaconess Association – Abundant Life Communities, Inc. and constructed as an independent living facility in 2010 by the Masonic Health System of Massachusetts. More specifically, the Commons opened with one hundred (100) apartments located in the Russell building, thirty-eight (38) free-standing cottages, and thirty (30) apartments in the Flint building including 8 apartments designated for low- and moderate-income residents. The original special permit envisioned a second phase of an additional 28 cottages for a total independent living count of 196 units, plus the single family “President’s House” to remain. Common areas at the community include a dining room, café and pub, lounges, fitness center, indoor swimming pool, card room and library, internet café, and an auditorium, all of which are in the Russell building. The campus grounds have planting beds, walking paths, trails, and ADA accessible paths.

The eight (8) Flint building low-income and moderate-income units are subject to a 2007 regulatory agreement with the Department of Housing and Community Development (DHCD), which was amended in 2013 and remains in effect today with perpetual obligations to provide restricted rents. The Commons has rented the eight (8) affordable units and met these commitments per the most recently submitted monitoring report submitted in March, 2022.

Benchmark Senior Living (BSL/BN Groves Commons CCRC LLC) acquired the property in 2013 pursuant to a bankruptcy auction. On March 30, 2013, Benchmark Senior Living obtained Town Meeting approval for an expansion project to add 40 units of assisted living, 24 units of memory care, and 26 units of skilled nursing (90 units total) as an addition to the Russell building. On March 11, 2014 the Lincoln Planning Board approved a Definitive Development and Use Plan special permit. Construction ensued in 2015 and 2016 with the care operations opening later that year. The Benchmark led Town Meeting, special permit, and definitive development use plan approvals also created a 5.1-acre conservation restriction area near Cider Lane per recorded easement, which remains in place today.

In January 2022, New England Life Plan Communities (NELP-Commons, LLC) acquired the property, returning the campus ownership to its non-profit origins. Benchmark Senior Living remains a value team member taking the role of third-party manager upon this.

The Commons is fully occupied with a lengthy waitlist of prospective residents that would take years to accommodate at current capacity. The community predominantly serves the local area, which is reflected in the top five towns that current residents moved from: Lincoln, Lexington, Belmont, Concord, and Wayland.

Proposed Project

Responding to strong market demand that is only projected to increase in coming years, The Commons respectively proposes to expand its offering of independent living options for the Lincoln area. The proposed Project would be the third and likely final phase of campus development by infilling selective areas of vacant land and expanding existing structures.



The proposed project would infill select areas of vacant land and expand existing structures with twenty-eight (28) new independent living units, consisting of eight (8) freestanding and semi-attached cottages and twenty (20) apartments. All apartment style units would be additions to the existing Flint and Russell buildings. One vacant and obsolete single family residence is proposed to be demolished at the southwest corner of the site near Cider Lane. A net increase of fifty-two (52) parking spaces would be provided in the plan, a significant improvement of existing conditions.

Three (3) of the units proposed to be added to the Flint building would be designated as affordable housing and rented at rates affordable to the 80% area median income (AMI) threshold, allowing all 41 units in the expanded Flint building to count towards the town's Subsidized Housing Inventory.

The existing and proposed density of The Commons is consistent with other senior housing operators in surrounding towns. However, The Commons is unique among these senior housing communities because it offers the broadest housing options across the continuum of care, providing the most appropriate setting for older adults as their needs change.

Senior Housing Community	Distance	Year Opened	Ownership	Acres	IL	AL	MC	SNF	Total	% IL	Density units/ac	Max Bldg Stories
The Commons at Lincoln	-	2010	Non-Profit	30.97	168	40	24	26	258	65%	8.3	4
					196	40	24	26	286	69%	9.2	
<i>Existing</i>												
<i>Proposed</i>												
Newbury Court (Concord)	3.8 mi	1994	Non-Profit	34.85	230	0	27	42	299	77%	8.6	6
Brookhaven at Lexington	6.8 mi	1989	Non-Profit	25.70	288	50	0	12	350	82%	13.6	5
Waterstone of Lexington	7.4 mi	2022	For Profit	13.18	116	40	0	0	156	74%	11.8	4
Carleton Williard Village (Bedford)	8.4 mi	1989	Non-Profit	59.36	154	57	0	100	311	50%	5.2	2

Note: President's House is permitted as a dwelling unit, total existing unit count is 259

Subsequent Approvals

The proposed project would be permitted through a robust oversight process including:

- Town Meeting review and approval of an amended North-Lincoln Planned Development District
- Town Meeting review and approval of the Preliminary Use and Development Plan
- Planning Board review and approval of the amended Special Permit and Definitive Development Plan
- Historic Commission approval of demolition of an obsolete and vacant 1962 single family structure
- Conservation Commission review and approval of activities in the Riverfront Area and compliance with state and local wetlands protection law
- MassDEP approval of a Groundwater Discharge Permit

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Property Owners of Subject Parcels

2.0 PROPERTY OWNERS OF SUBJECT PARCELS

Map 111, Parcel 12-0

NELP-Commons LLC & NELP-Commons Flint House, LLC
C/O One Point Partners LLC
35 Main Street Suite 211C
Topsfield, MA 01983



3.0 DEVELOPMENT TEAM

Owner:	NELP Commons LLC 1 Harvest Circle Lincoln, MA 01773
Owner's Representative	OnePoint Partners 35 Main Street, Suite 211C Topsfield, MA 01983 Ryan Herchenroether Development Project Manager 614-736-7071
Property Manager:	Benchmark Senior Living 1 Harvest Circle Lincoln, MA 01773 Reynaldo Leblanc Executive Director 781-430-6010
Architect:	Bechtel Frank Erickson 1723 Massachusetts Avenue Lexington, MA 02420 Jesse Widtfeldt Senior Associate, Project Lead 781-862-3313 x135
Civil Engineer, Traffic Engineer, Landscape Architect Wetland Scientist Fiscal Impact:	Stantec 40 Water Street Boston, MA 02114 Chris Fee, Principal, Project Lead 617-523-8103
Sanitary Engineer	OnSite Engineers 279 East Central Street PMB 241 Franklin, MA 02038 David Formato President 508-553-0616 x700
Construction Manager:	C.E. Floyd 135 South Road Bedford, MA 01730 Chris Merrick Project Manager 781-325-0107

4.0 PRELIMINARY USE AND DEVELOPMENT PLAN

This written portion of the Preliminary Development and Use Plan is prepared under the provisions of Section 12.5 of the Town of Lincoln Zoning By-Law as last amended March 2022.

4.1 PURPOSE

The purpose of this article is to amend and revise the preliminary development and use plan for the North Lincoln Planned Development District No. 5 entitled Preliminary Development and Use Plan for NL – North Lincoln Planned Development District No. 5 an age 62 and over Multifamily Independent Living and Continuing Care Community at 9, 11, 15 and 17-19 Cambridge Turnpike, Lincoln, Massachusetts..

4.2 LOCATION AND BOUNDARIES

The property that comprises The Commons today totals +/-31.0 acres and is contained within the North Lincoln Planning District. The property was originally 34.5 acres but approximately 3.5 acres was taken by MassDOT in order to facilitate the realignment of Route 2. See Figure 1-North Lincoln Development District Map. The Commons property is bounded by the Lincoln/Concord town line to the northwest, Route 2 (Cambridge Turnpike) to the northeast, Saw Mill Brook to the southwest and single family residences to the southeast. Refer to Figure 2-Site Location Map. A 5.07 acre Conservation Restriction and a trail easement was added to the parcel in 2015, which places limits on activities, construction and development that can take place within the limits of the restricted area and provides public access rights. The Conservation Restriction was added to protect forested and stream habitat and adjacent public conservation lands within the property surrounding the Saw Mill Brook. All the wetland resources on site are contained within the limits of the Conservation Restriction area.





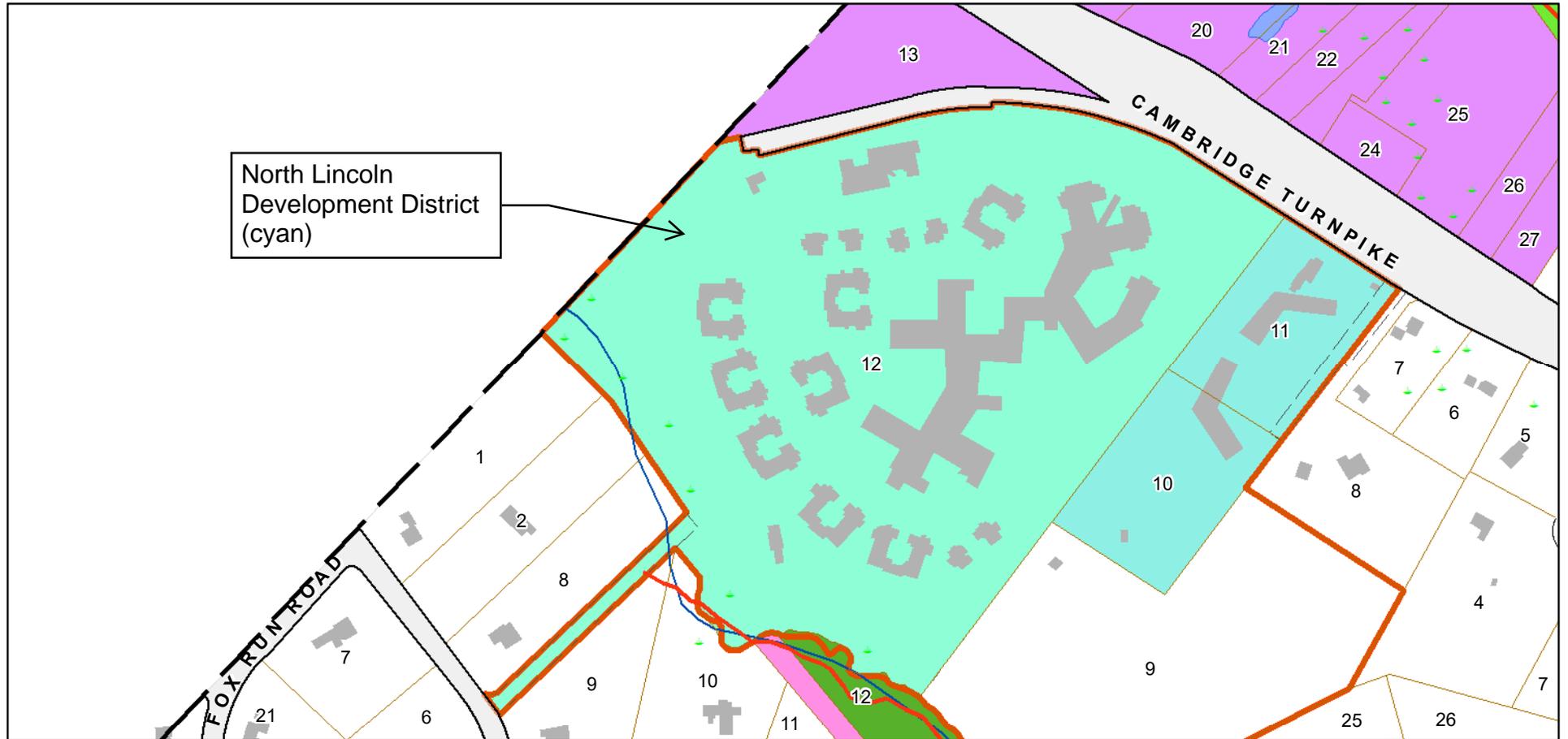
Lincoln, MA



January 27, 2023

1 inch = 350 Feet

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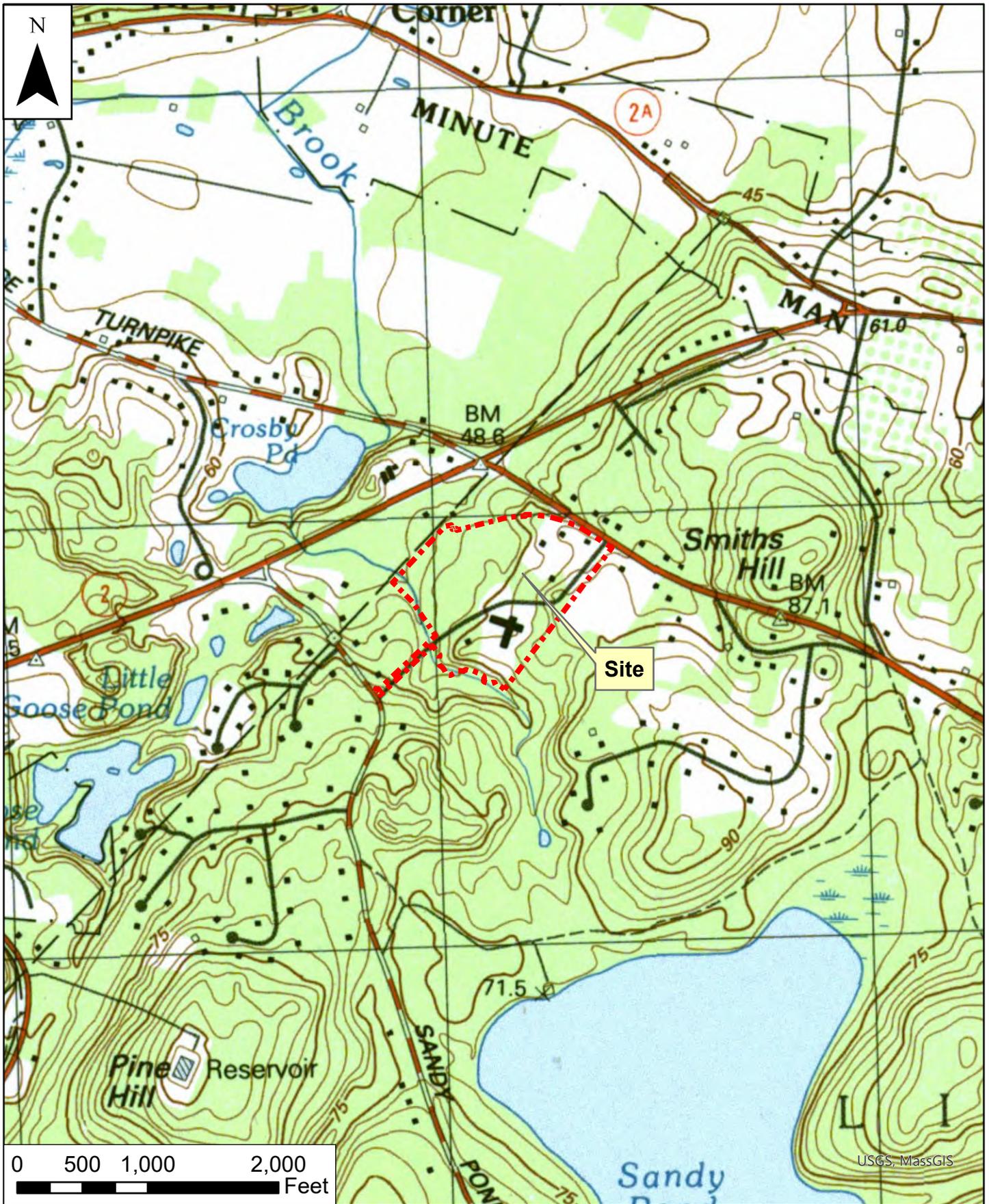


North Lincoln Development District (cyan)

CAI Town Line	Right of Way	Wireless Overlay Districts	Conservation Restrictions
Trail App Trails	Right of Ways	North Lincoln Overlay District	Town of Concord
Property Line	Wet Areas	The Commons (NL-5)	Town of Lincoln
Private Road	Stream	Oriole Landing (NL-6)	Commonwealth of Massachusetts
Public Road	Waterfills - Town	R-1	
Private Road ROW	Buildings	Conservation Deeds	

Data shown on this map is provided for planning and informational purposes only. The municipality and CAI Technologies are not responsible for any use for other purposes or misuse or misrepresentation of this map.

Figure 1 North Lincoln Development District Map



40 Water St., 3rd Floor
Boston, MA 02109

Figure 2 Site Location Map

Figure 1 - USGS Topographic Map
Lincoln Commons
Lincoln, MA
February 2023

Data Source: "Office of Geographic Information (MassGIS),
Commonwealth of Massachusetts, Information Technology Division and USGS"

4.3 TYPES OF USES PERMITTED

The following principal uses are currently permitted: an age 62 and over Multifamily Independent Living Community including freestanding units, duplex, triplex, quad and congregate style dwelling unit types. This requires that at least one member residing in each dwelling unit must be at least 62 years of age.

Accessory uses within the congregate building include: dining, fitness and wellness areas, storage, retail, laundry, assembly, etc.. and would serve the residents of the community.

A Continuing Care Facility consisting of assisted living and memory care units (defined under Massachusetts General Laws Chapter 19D) and skilled nursing units (defined under Massachusetts General Laws Chapter 111, Section 71.

Other Uses Allowed By Special Permit: Other uses which are not listed in the Preliminary Development and Use Plan, but are listed in the Zoning By-Law of the Town of Lincoln, as amended and dated March 24, 2012, may be permitted provided a Special Permit is granted by the Planning Board.



THE COMMONS IN LINCOLN EXPANSION 2023
 SITE PLAN

4.4 DIMENSIONAL STANDARDS

The following analysis is based on the lands within the limits of the North Lincoln Development District.

Table 1 Dimensional Standards¹

District Dimensional	Approved Spring 2013	Proposed Fall 2023
Total Area of District in Lincoln:	1,502,820 Square feet (34.5 Acres)	1,350,000 Square feet (31.0 Acres)²
Developable Site Area:	1,462,369 Square Feet (33.57 Acres)	1,129,000 Square Feet³ (25.92 Acres)
Undevelopable Site Area	40,451 Square Feet (0.93 Acres) 2013 Included Wetland Area only	221,000 Square Feet (5.1 Acres)⁴ Includes Conservation Restriction and Conservation Trail Areas (encompasses wetland area)
Area of Open Land:	1,040,996 Square Feet (23.89 Acres)	1,008,277 Square Feet (23.15 Acres)
Actual Height (as measured from average existing grade to highest)	52.5 Feet	52.5 Feet
Minimum Frontage in Feet:	120 Feet	120 Feet
Minimum Width of Lot:	250 Feet	250 Feet
Minimum Front Yard Setback:	50 Feet	42 Feet 10 Inches⁵
Minimum Rear Yard Setback:	50 Feet	50 Feet
Minimum Side Yard Setback:	50 Feet	50 Feet
Maximum Gross Floor Area:	455,405 Square feet	504,190 Square feet
Maximum Number of Units:	259 Units (8.56 units/developable acre)	286 Units (11.03 units/developable acre)
Maximum Ratio of Gross Floor Area to Developable Site Area:	0.31	0.45
Maximum Ratio of Gross Impervious Area to the developable site area:	0.31	0.41
Minimum number of parking spaces:	1 per dwelling unit	286
Maximum number of parking spaces:	318	370
Minimum number of parking spaces per each unit:	1 per dwelling unit	1 per dwelling unit

¹ Proposed change to dimensional standards are in bold type.

² Revised square footages are based on the current lot size, which was reduced by +/- 3.5 acres per the Order of Taking by the Commonwealth of Massachusetts in June of 2009.

³ In addition to the proposed changes, the substantial reduction in developable area due to Order of Taking and Conservation Restriction impacts the GFA and Gross Impervious Area to Developable Site Area ratios.

⁴ Conservation Restriction reduced developable site area by +/-4.15 acres

⁵ 2009 Taking by the Commonwealth of Massachusetts put the existing Sewer Treatment Plant into noncompliance. Note, the relief request is for frontage along Route 2 and does not impact any abutting residential properties.

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Preliminary Use and Development Plan

4.4.1 Gross Square Footage Buildings on Site

Phase I & II – Existing

Russell Building – Independent Congregate Units

Parking Level	45,236	
Ground Level	47,062	
Entry Level	58,225	
Second Level	56,506	
Third Level	<u>28,577</u>	
Total	235,606 GSF	(100 units)

Flint Building – Independent Rental Units

Basement	2,390	
Ground Level	12,263	
Second Level	12,223	
Third Level	<u>11,794</u>	
Total	38,670 GSF	(30 units)

Cottages – Freestanding Independent Living Units

Basement	12,850	
Ground Level	66,994	
Loft Level	<u>7,040</u>	
Total	86,884 GSF	(38 units)

Existing President's House 1,929 GSF (1 unit)

Waste Water Treatment Plant 1,200 GSF

Assisted Living/Memory Care /Skilled Nursing

Ground Level	44,191	
Second Level	17,884	
Third Level	<u>17,884</u>	
Total	79,959 GSF	(90 units)

Total Phase I & II Existing 444,248 GSF (259 units)

The Commons in Lincoln Expansion 2023 – Proposed

Russell Building Addition A1 – Independent Congregate Units

Parking Level	4,380	
Ground Level	3,920	
Entry Level	3,920	
Second Level	<u>3,823</u>	
Total	16,043 GSF	(6 units)

Russell Building Addition A2 – Independent Congregate Units

Parking Level	1,689	
Ground Level	1,613	



Entry Level	1,613	
Second Level	<u>1,554</u>	
Total	6,469 GSF	(3 units)

Cottages B – Freestanding Independent Living Units

Ground Level	4,582	
Loft Level	<u>1,108</u>	
Total	5,690 GSF	(2 units)

Building C – Independent Rental Units

Basement	4,688	
Level One	4,587	
Level Two	4,834	
Level Three	<u>4,652</u>	
Total	18,761 GSF	(11 units)

Cottages D – Freestanding Independent Living Units

Ground Level	8,512	
Loft Level	<u>1,800</u>	
Total	10,312 GSF	(4 units)

Cottages E – Freestanding Independent Living Units

Ground Level	3,848	
Loft Level	<u>748</u>	
Total	4,596 GSF	(2 units)

Total Proposed	61,871 GSF	(28 units)
Existing President's House to be removed	-1,929 GSF	(-1 unit)

Total Project – Phase I, II & The Commons in Lincoln Expansion 2023

Total Existing & Proposed	504,190 GSF	(286 units)
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4.4.2 Lot Coverage Calculations

Russell Building Lot Coverage		58,225 SF
Cottage Unit Type A – Footprint 22	1,811 SF	39,842 SF
Cottage Unit Type B – Footprint 16	1,822 SF	29,152 SF
Flint Building Lot Coverage		12,263 SF
President's House (to be demolished)		0 SF
Wastewater Treatment Plant		1,200 SF
Assisted Living / Skilled Nursing		44,191 SF

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Preliminary Use and Development Plan

Proposed Building Addition A1	4,380 SF
Proposed Building Addition A2	1,867 SF
Proposed Building Addition B	4,582 SF
Proposed Building Addition C	4,688 SF
Proposed Building Addition D	8,512 SF
Proposed Building Addition E	<u>4,100 SF</u>
Subtotal Building Coverage	213,002 SF
Pavement, walks, paths and driveways (exis.+ proposed)	250,979 SF
Total Impervious Coverage	463,981 SF
% of Developable Lot Impervious	41.0%

4.4.3 Parking

Number of parking spaces provided:	318 existing spaces (includes garage spaces and 1 space at each cottage)
	81 new surface spaces (1 space at each cottage)
	14 new garage spaces
	43 Spaces removed for new construction
	52 Net additional spaces for 27 new units
Total Spaces	370 spaces (1.29 spaces per unit) Refer to Figure 4 – Proposed Parking Diagram



4.5 OTHER ZONING PROVISIONS

The actual footprint area of the buildings does not exceed 25 percent of the lot area.

4.5.1 Section 13.3- (Lot Coverage)

The Commons at Lincoln shall not be in compliance with Section 13.3 of the Zoning By-Law. The Gross Floor Area of all buildings will exceed 25% of the area of the lot.

4.5.2 Section 13.4- (Accessory Structure)

The Commons at Lincoln shall not be in compliance with Section 13.4 of the Zoning By-Law. The wastewater treatment plant building is located less than 50 feet from the street line of Mary's Way. This is due to an Order of Taking by the Commonwealth of Massachusetts in June of 2009 for the reconstruction of Route 2.

4.5.3 Section 15- (Off-Street Parking and Loading Areas)

The Commons at Lincoln shall not be in compliance with Section 15.3.3.1 of the Zoning By-Law: 15.3.3.1(c) "The width of a driveway for 2-way use shall be a minimum of 18 feet as measured at its narrowest point." The driveways leading to the existing cottages are 12 feet min. in width. Driveways leading to the proposed new buildings 'B', 'D' and 'E' are 12 feet min. in width. All of these drives enter and exit on to a private roadway within the community.



PROPOSED PARKING	
EXISTING UNITS	259
EXISTING PARKING	318
PROPOSED UNITS (net)	28
PROPOSED SURFACE PARKING	81
PROPOSED GARAGE PARKING	14
EXISTING PARKING REMOVED	43
NET GAIN	52
TOTAL UNITS (EXISTING & PROPOSED)	287
TOTAL PARKING (EXISTING AND PROPOSED)	370

LEGEND

- EXISTING BUILDING
- PROPOSED BUILDING
- SURFACE PARKING SPACE ADDED
PROPOSED PARKING STALLS ARE 9'x18'

THE COMMONS IN LINCOLN EXPANSION 2023

Figure 4 - Proposed Parking Diagram

4.5.4 Section 16- (Signs)

The Commons in Lincoln requires an entry sign and accessory signage that are in excess of the two (2) square feet allowed without Special Permit. Drawings and location of such signage were submitted and approved as part of the previous Definitive Development and Use Plan and any modifications thereto will be provided as part of the Definitive Development and Use Plan.

4.6 TRAFFIC

Stantec has prepared a Trip Generation Assessment in accordance with Section 12.5 of the Town of Lincoln Zoning By-Laws. That study is included within Appendix A .

4.7 MUNICIPAL & FISCAL IMPACT

Refer to Appendix E for Fiscal Impact Analysis.

4.8 ENVIRONMENTAL IMPACT

4.8.1 Physical Environment

The property that comprises The Commons today totals 31.0 acres and is contained within the North Lincoln Planning District. The property was originally 34.5 acres but approximately 3.5 acres was taken by MassDOT in order to facilitate the realignment of Route 2. The construction of Phases I and II included the infrastructure to support the overall community including roads, utilities and the Waste Water Treatment Plant. Phase I improvements were completed in 2010.

Phase II developed an additional 4-5 acres in the northeast corner of the site, supplementing the existing facility with a new 90-unit building addition that contained assisted living, memory care and skilled nursing services and housing. The Phase II development also included site circulation, parking and infrastructure improvements associated with the additional 90 units and was completed in 2016.

While the Phase II project was geared toward adding new services, The Commons in Lincoln Expansion 2023 will add independent living units to help meet demand and alleviate the existing waiting list. Much of the site is built out, however there are several locations that can accommodate further infill development. New freestanding buildings are proposed in locations that are currently undeveloped open space or are existing parking lots. Additionally, there are several opportunities to add on to the existing Russell house building. Proposed new buildings have been designed to fit in with the character and density of the existing campus while building additions have been designed to complement the existing architecture.

4.8.2 Roadway Improvements

The primary point of access for The Commons at Lincoln is via Mary's way. The Route 2 & 2A Crosby's Corner Safety Improvement Project has been complete for several years and provides efficient access to Mary's way and to the campus. All proposed modifications to the roadway are on private roads interior to the campus. Roadway improvement construction will be sequenced to maintain vehicular access

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Preliminary Use and Development Plan

throughout the site. Portions of the road that need to be temporarily closed for construction will be coordinated with the Fire Department to ensure uninterrupted life safety access.

The Commons is committed to adhering to the conditions imposed in the 2007 Special Permit regarding access to/from Sandy Pond Road. Employees and deliveries have been directed to ingress/egress the property only from Route 2 and this will continue to be monitored. An electronically operated access gate has been installed on Cider Lane to restrict access from Sandy Pond Road to authorized vehicles only.

4.8.3 Site Soils

The soils on site consist of the following USDA Natural Resources Conservation Council (NRCC) soil classifications:

Table 2 Site Soils

Soil Map Unit	Description
245B – Merrimac fine Sandy loam	3 to 8 percent slopes, greater than 80 inches to restrictive feature, somewhat excessively drained, depth to water table typically greater than 80 inches
315B – Scituate Fine Sandy Loam	3 to 8 percent slopes, 18 to 33 inches depth to restrictive feature (dense material), moderately well drained, depth to water table typically 18 to 24 inches
420B – Canton Fine Sandy Loam	3 to 8 percent slopes, Greater than 80 inches depth to restrictive feature (dense material), well drained, depth to water table typically greater than 80 inches
422B – Canton Fine Sandy Loam	3 to 8 percent slopes, Greater than 80 inches depth to restrictive feature (dense material), well drained, depth to water table typically greater than 80 inches

4.8.4 Wetlands

Several wetland jurisdictional resources as defined by the Massachusetts Wetlands Protection Act (MA WPA) 310 CMR 10.00 are located within the limits of this project. These resources include a Bordering Vegetated Wetlands (BVW), an Inland Bank and a coincident Mean Annual High Water Line.

While no disturbance is proposed within the 100' Buffer Zone associated with the Bordering Vegetated Wetland (BVW), and no work is proposed within Bordering Land Subject to Flooding (BLSF), site



improvements are proposed within the 200' Riverfront Area. The proposed improvements within the 200' Riverfront Area fall solely within the 100' Outer Riparian Zone.

The proposed work within the 200' Riverfront Area includes demolition of an existing building that is in disrepair and construction of a new two-unit building, along with modifications to the vehicular paving, proposed new utilities, new stormwater infrastructure and new plantings. The project was designed to minimize additional alteration within the Riverfront Area by keeping proposed improvements within the limits of the existing building footprint as much as possible. Proposed disturbance within the Riverfront Area is less than the 10% of the total Riverfront Area on site, which is permissible under the Wetlands Protection Act.

Work within jurisdictional resources must be approved by the Conservation Commission via the Notice of Intent process. The proposed scope has been provided to the Conservation Commission preliminarily and reviewed at the February 1, 2023 meeting. A Notice of Intent will be submitted and an Order of Conditions obtained and recorded before any work within the jurisdictional area begins.

4.8.5 Floodplain

According to the Federal Emergency Management Agency Flood Insurance Rate Map (FIRM), Map Number 25017C0379F, dated July 7, 2014, the project limits lie within Zone X, areas determined to be outside the 0.2% annual chance (500-year) floodplain.

4.8.6 Surface Water Drainage

4.8.6.1 Existing Conditions

The Commons stormwater system, constructed in prior phases, includes site drain piping, catch basins and manholes within site drives and paved areas, infiltration systems and detention basins to provide stormwater recharge, water quality treatment and mitigation of peak runoff rates. It has come to the attention of the applicant that prior maintenance obligations of the stormwater management system have not been met. Current facilities staff are now aware of these commitments and have contracted with a local stormwater management vendor to implement best practices and conduct ongoing maintenance and will coordinate these efforts with the Conservation Commission.

4.8.6.2 Proposed Conditions

As part of the preliminary design for this project, stormwater impacts associated with this project have been evaluated. During final design of the project, stormwater management systems will be designed to include deep sump hooded catch basins, underground drainage piping systems, water quality treatment and peak rate control local to most building additions. In general, the intent is to capture, treat and recharge stormwater runoff from the proposed improvements while minimizing impacts to the existing site stormwater system. This is done by providing mostly localized best management practices to reduce peak rate of runoff to pre-development levels, promote groundwater recharge and improve overall quality of stormwater runoff in compliance with the MA Stormwater Handbook and the Town of Lincoln Stormwater Management Bylaw.

Preliminary Use and Development Plan

The only notable exception to this localized stormwater treatment approach is at the two new cottages at site E. Due to the installation of a new septic leach field near these buildings, stormwater runoff associated with these added impervious areas will be collected in the site stormwater drainage system and conveyed to the existing detention/infiltration basin on-site. Minor modifications to the existing downstream site piping and detention basins will be made to accommodate the added stormwater runoff associated with these site improvements.

4.8.7 Erosion and Sedimentation Control

During construction the following erosion control measures will be implemented to protect downgradient regulated resources and adjacent properties:

- Prior to any ground disturbance, a barrier of staked straw bales or equivalent barrier will be installed at the down gradient limit of work. The barrier will be placed to trap sediment transported by runoff before it reaches any drainage system or leaves the construction site.
- Temporary stabilized construction entrances will be installed at the site entrances to remove sediment attached to construction vehicle tires and to minimize sediment transport and deposition onto public road surfaces.
- Temporary silt & sediment sacks will be installed at nearby catch basin inlets to protect existing drainage systems adjacent to the site.
- A temporary vegetative cover will be established on areas of exposed soils (including stockpiles). The seeded surfaces will be covered with a layer of straw mulch, hydro mulch or erosion control mats as appropriate.
- Drainage outfalls will be constructed with rip-rap stone protection to prevent scouring of soils at pipe outfalls.
- Temporary catch basin inlet protection will be installed at all new site catch basins or other drain inlets to prevent site soils and sediments from entering any portion of the new drainage system.

An Operations and Maintenance program will be in place after construction which will ensure that the new stormwater system is inspected and maintained at regular periodic intervals and also after major storm events.

4.8.8 Wastewater

Onsite Engineering, Inc. has prepared a Wastewater Treatment Facility (WWTF) Assessment as it relates to the Commons in Lincoln. That Assessment Memorandum is included within Appendix B.

Also, the existing septic system servicing the existing President's House will be decommissioned. The new building constructed in its place will be connected to the on-site wastewater collection and disposal system.



4.8.9 Water

Water service to The Commons site is currently provided by the Town of Lincoln Water Department. The proposed buildings will either connect to existing site water mains within The Commons parcel or in the case of some building additions, by extending existing building services into the proposed additions. Preliminary water usage amounts were estimated based on Massachusetts Title V design flow rates and the types of units proposed to be constructed. The MA DEP “Housing for the Elderly” design flow rates of 150 gallons per day (GPD) per two-bedroom unit and 110 GPD per one-bedroom unit were used.

Additional One Bedroom Units: 6 units x 110 gal/bed	= 660 gpd
Additional Two Bedroom Units: 22 units x 150 gal/unit	= 3,300 gpd
<u>Total</u>	<u>= 3,960 gpd</u>
Net additional water usage:	= 3,960 gpd

4.9 DWELLING UNIT BREAKDOWN

Table 3 Dwelling Unit Breakdown

INDEPENDENT LIVING

Unit Type	Quantity	Bedrooms	Avg. SF
1 BR	6	6	840 sf
2 BR	22	44	1,436 sf
Total	28	50	

The project will provide three (3) units as affordable age-restricted rentals for those earning up to 80% area median income (AMI). These units will be located in building C, the Flint building addition. Two (2) of these units are anticipated to be one-bedroom units with at least 700 sf each and one (1) of these units are expected to be two-bedroom units having at least 900 sf. The Commons existing ground lease and regulatory agreement will be amended to encompass these new affordable units. Drafts of these amendments are expected during the Special Permit review.

4.10 PLANS, EXHIBITS AND DOCUMENTS

Refer to Appendix C for Plans, Exhibits and other documents.

4.11 ABUTTERS LIST

Abutters lists for both the Town of Lincoln and the Town of Concord are included in this application. Refer to Figures 3 and 4 for the respective town assessor’s maps. The certified abutters’ lists are attached in Appendix D.

4.12 REVIEW BOARDS

The applicant met informally with the Planning Board on several occasions to discuss the proposed modifications to the Preliminary Development and Use Plan. In addition, the applicant and its development team are in the process of coordinating with various Town of Lincoln Departments (including representatives of Conservation, Police, Fire, Building, Water, Council on Aging and Housing Commission) following a scoping session organized by the Town Planner to discuss the project and identify relevant issues.

4.13 FILING FEE

The filing fee will be determined through a discussion with the Lincoln Planning Board.



5.0 APPENDICES



Appendix A

TRIP GENERATION ASSESSMENT



To: Ryan Herchenroether
Senior Project Manager
One Point Partners

From: Peter Vasiliou, PE, PTOE, IMSAIII
Stantec
45 Network Dr 3rd Floor
Burlington, MA 01803

Project/File: The Commons in Lincoln / 210801974 Date: February 1, 2023

Reference: Traffic Investigation for Additional Units

We have completed an analysis of the expected traffic impacts associated with the addition of 40 housing units at The Commons. The analysis included a trip generation assessment and calculation of intersection operating levels of service. Overall, we find that the additional trips from the 40 proposed units will have a nominal impact on the operations of the site driveways at Mary's Way and Old Sandy Road and that additional analyses are not warranted.

Existing Trip Generation

The Commons in Lincoln (formerly the Groves at Lincoln) is a senior living community located at 17-19 Cambridge Turnpike (Route 2). Vehicular access is provided principally by way of a driveway at Mary's Way and a secondary driveway at Sandy Pond Road. The site includes 258 independent living units. Traffic counts conducted on the two site driveways show that the existing units generate up to 57 AM peak hour vehicle trips and 60 PM peak hour trips. The existing count data are summarized in Table 1. Hourly traffic data are attached.

Table 1: Existing Driveway Counts

Street	Direction	2022 AM Peak	2022 PM Peak
Main Entrance - Mary's Way at Groves Ave			
Mary's Way	EB TH	16	27
Mary's Way	EB RT	35	20
Mary's Way	WB LT	0	0
Mary's Way	WB TH	32	15
Groves Ave	NB LT	15	27
Groves Ave	NB RT	1	1
Total Entering site		35	20
Total Exiting site		16	28

Reference: The Commons in Lincoln

Street	Direction	2022	2022
		AM Peak	PM Peak
Total Site Trips		51	48
Sandy Pond Road at Cider Lane			
Sandy Pond Rd	NB TH	32	25
Sandy Pond Rd	NB RT	2	3
Sandy Pond Rd	SB LT	1	2
Sandy Pond Rd	SB TH	16	16
Cider Ln	WB LT	2	2
Cider Ln	WB RT	1	5
Total Entering site		3	5
Total Exiting site		3	7
Total Site Trips		6	12
Both Driveways			
All Entering (both driveways)		38	25
All Exit (both driveways)		19	35
All Total (both driveways)		57	60
LUC 251 – Sr. Housing-Detached		61	74

Stantec prepared a traffic impact assessment for The Groves in 2013, prior to the last project expansion. At the time, the development program was being expanded from 197 dwelling units to 258 dwelling units. As noted above, there are 57 AM and 60 PM peak hour trips associated with the existing 258 units. Applying Institute of Transportation Engineers (ITE) trip rates (*Trip Generation Manual, 11th Edition* for Land Use Code 251 Senior Housing – Detached) to the existing 258 units indicates 61 AM peak hour trips and 74 PM peak hour trips at the site. Consequently, actual site traffic generation is slightly less than indicated by average ITE trip rates. The observed vehicle trip generation indicates that the existing land use generates vehicle trips at rates of 0.22 and 0.23 vehicle trips per dwelling unit during the AM and PM peak hours, respectively. The ITE manual indicates slightly higher rates of 0.24 and 0.30 AM and PM peak hour vehicle trips per dwelling unit.

Proposed Trip Generation

Since the ITE trip rates are slightly higher than the locally observed trip rates, the ITE rates were applied to the proposed units to present a conservative (worse case) analysis condition. Traffic forecasts for the proposed 40 new dwelling units using the ITE Trip Generation Manual Land Use Code 251 Senior Housing – Detached are shown in Table 2. As noted, 20 new AM peak hour trips and 22 new PM peak hour trips are predicted.

Reference: The Commons in Lincoln

Table 2: Proposed Trip Generation

Time Period	Enter	Exit	Total
AM Peak Hour	6	14	20
PM Peak Hour	14	8	22
Daily	137	137	274

Based on ITE LUC 251 trip rates for 40 dwelling units

Traffic Operations

The anticipated new trips were added to the turning movement counts conducted on May 5, 2022 and analyzed using Synchro version 11 to determine intersection operating conditions. Intersection approach volume-to-capacity ratios, delay, Level of Service (LOS) and the 95th percentile queue lengths are presented in the following table for existing and Build conditions. As shown below, the two site driveway intersections operate at the highest level of service, LOS A, during both peak hours and will continue to operate at this level of service with the new units built and occupied.

Groves Ave at Mary's Way Intersection

Approach	Movement	AM Peak Period				PM Peak Period			
		V/C	Delay (Seconds)	LOS	95th Queue (Feet)	V/C	Delay (Seconds)	LOS	95th Queue (Feet)
Mary's Way	EB Thru/Right	-	-	-	-	-	-	-	-
Mary's Way	WB Left/Thru	-	0	A	0	-	0	A	0
Groves Ave	NB Left/Right	0.031	9	A	2.5	0.04	9	A	2.5

Sandy Pond Rd at Cider Lane Intersection

Approach	Movement	AM Peak Period				PM Peak Period			
		V/C	Delay (Seconds)	LOS	95th Queue (Feet)	V/C	Delay (Seconds)	LOS	95th Queue (Feet)
Sandy Pond Rd	NB Thru/Right	-	-	-	-	-	-	-	-
Sandy Pond Rd	SB Left/Thru	0.001	7.3	A	0	0.00	7.3	A	0
Cider Ln	WB Left/Right	0.006	8.7	A	0	0.01	8.6	A	0

Reference: The Commons in Lincoln

Conclusion

Stantec projected new vehicle trip generation for the proposed expansion of the senior living community. The new trips were added to existing driveway volumes and operations analyses were conducted to assess the impact of the added traffic on intersection performance. The analyses indicate that the proposed project expansion will have no significant impact on traffic operations on the roadway system adjacent to the project site.

Should you have any questions regarding the above, please do not hesitate to call. We appreciate having the opportunity to assist you with this project.

Sincerely,

STANTEC CONSULTING SERVICES INC.

A handwritten signature in black ink, appearing to read 'Peter Vasiliou', is centered on the page. The signature is fluid and cursive.

Peter Vasiliou PE, PTOE, IMSA-III

Senior Traffic Engineer

Phone: 781-221-0453

peter.vasiliou@stantec.com

Attachment: Appendix – Traffic Counts & Synchro Report

u:\210801974\design\analysis\traffic study\2023-02-01_tis_40 units.docx

APPENDIX SUBTITLE

Appendix B

Appendix B

WASTEWATER TREATMENT FACILITY ASSESSMENT





Water, Wastewater and Stormwater Specialists

October 26, 2023

Mr. Chris Fee, Principal
Stantec
311 Summer Street
Boston, Massachusetts 02210-1723

Re: Lincoln Commons - Lincoln, Massachusetts
Onsite Wastewater Treatment System Assessment Report

Dear Chris:

We are pleased to submit this report summarizing the existing conditions of the onsite wastewater treatment facility (WWTF) and the modifications that may be necessary to accommodate the proposed expansion of the WWTF servicing Lincoln Commons Senior and Assisted Living and Skilled Nursing Facility in Lincoln, Massachusetts. The evaluation consisted of reviewing the current configuration of the treatment and disposal systems as well as identifying the components that most likely will need additional capacity in order to accommodate the increase in sewage generated from the proposed site expansion.

BACKGROUND INFORMATION

The Commons in Lincoln sewage disposal system is currently achieved via an onsite wastewater treatment facility that was originally constructed in 2008 and designed to serve the site as currently configured. Since that time, the facility has been expanded once (in 2014) to treat additional flow and has routinely been able to meet or exceed the requirements in the MassDEP issued groundwater discharge permit.

While treatment levels and permit compliance has been satisfactory, in 2022, Commons residents and staff observed surface breakout from the original Zones 1 & 2 (courtyard/lawn system) of the effluent disposal field, which suggested that the system was no longer percolating the fully treated effluent into the ground. In the past few months, subsurface investigations were undertaken to identify the source of the problem, which was determined, in concert with MassDEP, to most likely be inadequate venting combined with a densely compacted fill placed over the system allowing for excessive biomat growth, which is now impeding the downward percolation of the treated effluent into the ground. Addressing these issues required the replacement of Zones 1 & 2 of the effluent disposal system, which are located in the courtyard/lawn behind the Russell building. The underlying geologic conditions and soil characteristics were confirmed to be adequate at the time of the investigations. The replacement work began in June of 2023 and was recently

completed. During construction, any unsuitable soils found were removed and the underlying soils were perc tested in several areas to confirm their viability. In addition, the system was constructed with chambers and vent piping to allow for adequate venting. As of mid-September, the new zones have been constructed, the fields were tested in the presence of MassDEP and the approval by MassDEP to send flow to the new fields was issued in writing. At this time, the fields are online and functional. Final grading and landscaping to accommodate the proposed changes to the site is underway and is anticipated to be completed in the next month.

For the overall site, per Massachusetts Department of Environmental Protection (MassDEP) regulations, each unit is anticipated to generate maximum day wastewater flow depending on the type of use. Table 2, included later in this report, provides a detailed accounting of the exiting uses (by flow category) and the associated anticipated Title 5 sewage generation from those uses. Based upon these criteria, the MassDEP issued the most recent Groundwater Discharge Permit renewal (# 855-2) on July 22, 2022 with a maximum daily flow limit of 36,600 gallons.

The permit issued by MassDEP requires that the WWTF discharge be operated and monitored in accordance with 314 CMR 12.00 and that such operation results in the effluent discharge meeting the standards set forth in 314 CMR 5.00. Table 1 below details the parameters in the Groundwater Discharge Permit for this site that the discharged effluent is required to meet on a monthly basis:

Table 1
Groundwater Discharge Permit Summary
Lincoln Commons, Lincoln, Massachusetts

Permit Category	Limitation
Number	855-2
Flow ⁽¹⁾	36,600 Gallons
pH	6.5 to 8.5
Biochemical Oxygen Demand ⁽²⁾	30 mg/L
Total Suspended Solids ⁽²⁾	30 mg/L
Oil & Grease	15 mg/L
Nitrate-Nitrogen	10 mg/L
Total Nitrogen	10 mg/L

- (1) When effluent discharged for the annual average exceeds 80 percent of the permitted flow limitations, the permittee shall submit to the permitting authorities projected loadings and a program for maintaining satisfactory treatment levels consistent with approved water quality management plans.
- (2) The monthly average concentration of BOD and TSS in the discharge shall not exceed 15 percent of the monthly average concentrations of BOD and TSS in the influent to the permittee's wastewater treatment facility.

To achieve this level of treatment, the wastewater treatment facility consists of a single train Amphidrome system comprised of two anoxic/flow equalization tanks, one Amphidrome Reactor, one clearwell, one Amphidrome Plus Reactor, an ultraviolet disinfection unit, an odor control system, an effluent disposal pump chamber and two subsurface effluent disposal areas. The system is currently designed and sized to treat a maximum day flow of 36,600 gallons of sewage flow and the effluent disposal system is sized accordingly to dispose of that volume of wastewater as well.

The system is currently being operated on a multi-year contract basis by WhiteWater, Inc. a regional wastewater contract operations firm that employs licensed wastewater treatment system operators throughout New England. WhiteWater specializes in operating facilities of this size and type for private clients and maintains staff that has the required levels of training, licensure and experience necessary to operate and maintain this facility. As part of our assessment of the system, we conducted a review of the required Daily Monitoring Report (DMR) data filed with MassDEP relative to the Permit discharge limits noted above. Upon review of the data, we feel that the facility is generally being run properly and has been consistently within the effluent discharge limits above, well within the normal variations in the effluent quality that are expected from these types of systems.

Anoxic/Flow Equalization Tanks

Sewage generated from the project is directed to the Anoxic/Flow Equalization tanks. The two tanks are installed in series so that raw sewage is mixed with return sludge from the Amphidrome process at the beginning of the first tank and then it travels through both tanks prior to flowing by gravity into the Amphidrome Reactor for aerobic biological treatment. These tanks contain three zones; sludge storage, flow equalization and a settling zone. The functions of these tanks are to collect and remove coarse solids and floatable material from the waste stream, attenuate peak flows occurring during the morning and evening hours of the day, and to provide storage of sludge from the backwashing of other treatment units.

Amphidrome Reactor

The Amphidrome Reactor serves as combination fixed-film reactor and denitrification filter to provide aerobic and anoxic treatment of wastewater. The Amphidrome Reactor consists of submerged granular media that is alternately supplied and deprived of air during multiple computer controlled aerobic and anoxic cycles.

The Amphidrome Reactor operates similar to a sequencing batch reactor, with alternating aerobic and anoxic cycles. The aerobic biological treatment cycle is utilized for the removal of dissolved organic matter, measured as Biochemical Oxygen Demand (BOD₅), and to accomplish oxidation of reduced forms of nitrogen (nitrification). In addition to removing the carbonaceous BOD during aeration, additional aerobic bacteria perform a series of biochemical reactions known collectively as nitrification to convert the reduced nitrogenous compounds present within the wastewater to the completely oxidized nitrate-nitrogen (NO₃-N) form. After completion of the aerobic cycle, the oxygen feed is discontinued to provide anoxic conditions necessary for the denitrification cycle. The denitrification cycle uses bacteria functioning in the anoxic (devoid of free dissolved oxygen) environment that are capable of using combined forms of oxygen for respiration thereby, converting the nitrate-nitrogen present in the wastewater to nitrogen gas.

Clearwell Tanks

The clearwell consists of a precast concrete tank that stores the treated effluent from the Amphidrome Reactor. The clearwell contains two sets of pumping systems that direct wastewater to either the Amphidrome Reactor or the Amphidrome Plus Reactor. The pumping systems direct wastewater based upon a preset time schedule that is controlled via a Programmable Logic Controller (PLC).

Amphidrome Plus Reactor

The Amphidrome Plus Reactor provides an additional anoxic zone to promote additional denitrification while also serving as a polishing filter designed to remove solids not removed in the Amphidrome Reactor. The silica sand media in the Amphidrome Plus Reactor is completely submerged in the wastewater and operates in an anoxic environment that allows the predomination of denitrifying organisms.

UV Feed Pump Station

The UV Feed pump station consists of a precast concrete tank that stores the treated effluent from the Amphidrome Plus Reactor for ultimate dosing to the UV system for disinfection prior to effluent disposal. This tank contains a duplex pumping system that directs wastewater into the WWTF building, through the UV unit and flow meter, prior to gravity flow into the leaching field dosing chamber. The pumping system runs based upon a preset time schedule and water levels that is controlled via a Programmable Logic Controller (PLC).

UV Disinfection

The UV disinfection system consists of a stainless steel channel that houses ultraviolet generating light bulb racks. The bulbs are contained in quartz glass sleeves so they never come in direct contact with the wastewater. The control system of the unit provides the electricity needed to generate the UV light and also monitors the amount of light that is being transmitted into the wastewater. This is an effective way to measure the intensity of the light, which is a good indicator of the effectiveness of the disinfection process.

Leaching Field Dosing Chamber

The leaching field dosing chamber consists of a precast concrete tank that stores the treated, disinfected effluent from the WWTF process prior to pumping it to the leaching fields for subsurface effluent disposal. This tank contains a triplex pumping system that directs wastewater into the two pressure dosed leaching systems that is configured in three zones, one pump for each zone.

Leaching Fields

The effluent disposal system consists of two pressure dosed leaching areas located to the east and southeast of the WWTF. The larger of the two areas, in the courtyard/lawn behind Russell Building, is broken up into two separate zones (zones 1 & 2). As both areas are hydraulically up-gradient of the WWTF, the effluent is pumped to both fields. The fields consist of pressure dosing manifolds, small diameter effluent distribution pipes and 2-ft by 2-ft stone trenches of various lengths. The effluent disposal system is sized to dispose of a maximum day sewage flow of 36,600 gallons and is based upon loading

rates of 2.5 gal/sf and 1.5 gal/sf for the two different leaching areas. As previously noted, the leaching area located in the Russell Building rear Courtyard has been replaced and is now online with the work having been completed per the permitting and oversight requirements of MassDEP’s regulations.

Proposed Conditions

Lincoln Commons, through OnePoint Partners, is seeking to increase the independent living unit count at the site which would result in a net increase of 28 units to the property. As shown in Table 2 below, this would result in an increase of the MassDEP sewage flow from the permitted 36,600 gallons to 40,560 gallons. To affect this change, expansion of the system and re-permitting of the site with MassDEP will be required.

Table 2
Title 5 Design Flow Calculations
The Commons at Lincoln, Lincoln, MA

Category	Unit	Flow/Unit	Flow
Initial Existing Uses			
Cottages	38 Units	150 gal/unit	5,700 gal
Russell Building	16 Bedrooms	110 gal/bedroom	1,760 gal
Russell Building	84 Units	150 gal/unit	12,600 gal
Flint Building	15 Bedrooms	110 gal/bedroom	1,650 gal
Flint Building	15 Units	150 gal/unit	2,250 gal
Assisted Living Facility	30 bedrooms	110 gal/bedroom	3,300 gal
Assisted Living Facility	10 Units	150 gal/unit	1,500 gal
Memory Care	14 Bedrooms	110 gal/bedroom	1,540 gal
Memory Care	10 Units	150 gal/unit	1,500 gal
Nursing Care	32 Units	150 gal/unit	4,800 gal
Total Existing Flows:			36,600 gal
Proposed Additional Flow			
<i>Independent Elderly Living</i>	<i>6 One Bedroom Units</i>	<i>110 gal/unit</i>	<i>660 gal</i>
<i>Independent Elderly Living</i>	<i>22 Two Bedroom Units</i>	<i>150 gal/unit</i>	<i>3,300 gal</i>
Site Total			40,560 gallons

As part of this feasibility assessment for the project, we conducted a preliminary review of the proposed site expansion. This included a review of the soil profiles/subsurface conditions at the site and of the treatment system itself to determine the actual capacities of each unit process relative to adding residential units and

more flow. For the leaching and WWTF components, our assessment revealed that it should be feasible to site additional leaching area and expand the WWTF, as necessary, to secure the required MassDEP permits and to affect system modifications that would allow for the WWTF to process the additional wastewater flow to within the current Permit limits. Generally, we envision that the additional flow would require the following process changes at the WWTF, (which we believe can be accommodated);

- Additional anoxic tank volume would be required to address the increase in suspended solids loading,
- A second Amphidrome Reactor would be required for organic pollutant removal,
- A larger Amphidrome Plus Reactor would be needed to achieve satisfactory nitrogen removal,
- Additional effluent pump and control systems would be necessary to accommodate an additional leaching field zone, and;
- A new control panel would be required to control these new systems.

As we've begun to move forward with the proposed expansion, the additional permitting with MassDEP will take place in two phases. The first phase will included conducting field investigations at the site to finalize the location and configuration of an additional leaching field. As the current effluent disposal leaching areas are sized to accommodate the existing flows, the additional flow added to the site will require more leaching area. This phase is underway and the site testing, soil characterization and hydraulic conditions have been identified and modeled. This information and results of the testing indicates that the site should be suitable to accommodate the increases in flow. Based on these results, we anticipate filing the necessary reports and applications with MassDEP in support of the leaching expansion in November, 2023.

In addition to determining the hydrogeological capacity of the site to adequately dispose of this additional wastewater, an assessment and re-permitting of the WWTF treatment system must be completed and approved by MassDEP for the additional flow as the second phase of the project. To complete the second phase tasks, a complete wastewater loading and capacity analysis of the system would be required to determine the extents of the required modifications and to then develop a program to be used in the design upgrade and permitting of the Amphidrome and Amphidrome Plus unit processes. These tasks will be completed by a licensed Engineer in concert with the system manufacturer, while being reviewed and approved by MassDEP. Upon final analysis and development of recommendations, as well as the design of any required modifications, a WWTF Modification Plan Approval application will be filed with MassDEP. At that time, the Department will review the application and provide comments or issue approvals, subject to public comment, on the feasibility of the proposed plan to increase the capacity of the onsite WWTF. Upon issuance of permits and approvals for the proposed upgrades, the system modifications would be completed by a licensed contractor with experience in the construction of onsite WWTFs.

Mr. Chris Fee, P.E., Principal
Stantec

October 26, 2023
Page 7

We thank you for the opportunity to assist you on this important project. We trust that the information included in this evaluation suits your present needs. If you wish to discuss these findings or have any questions, please feel free to contact us.

Sincerely,

Onsite Engineering, Inc.

A handwritten signature in blue ink that reads "David C. Formato". The signature is stylized and written in a cursive-like font.

David C. Formato, P.E.
President

Appendix C

PLANS, EXHIBITS AND DOCUMENTS

Sheet Number	Plan Title	Plan date
3D-1	3D Perspective Views 1	10/25/2023
3D-2	3D Perspective Views 2	10/25/2023
A1-1	A-1 Floor Plans	10/25/2023
A1-2	A-1 Elevations	10/25/2023
A2-1	A-2 Floor Plans	10/25/2023
A2-2	A-2 Elevations	10/25/2023
B-1	B Floor Plan	10/25/2023
B-2	B Elevations	10/25/2023
C-1	C Floor Plans	10/25/2023
C-2	C Elevations	10/25/2023
D-1	D Floor Plans	10/25/2023
D-2	D Elevations	10/25/2023
E-1	E Floor Plan & Elevations	10/25/2023
L-000	Existing Conditions Plan	10/27/2023
L-001	Site Preparation and Erosion and Sedimentation Control Plan	10/27/2023
C-01	Overall Utility Plan	10/27/2023
L-100	Site Layout and Materials Plan	10/27/2023
L-101	Property Rights and Dimensional Standards Plan	10/27/2023
L-102	Lighting Plan	10/27/2023
L-200	Overall Grading and Drainage Plan	10/27/2023
L-300	Planting Plan	10/27/2023





A-1



A-2

10/26/2023 4:05:51 PM

**THE COMMONS IN LINCOLN
EXPANSION 2023 (A1)**
1 HARVEST CIR
LINCOLN, MA 01773

ARCHITECT

BECHTEL FRANK ERICKSON
ARCHITECTS, INC.
1720 MASSACHUSETTS AVE
LEXINGTON, MA 02420
(781) 862-3313
www.bfeac.com

CONSULTANT

Date Issued For

ISSUANCES



DRAWING TITLE
3D PERSPECTIVE VIEWS
1

SHEET ISSUE DATE: 10/25/2023

PROJECT ISSUE DATE:

SCALE:

PROJ. NO. 2212.00

3D-1



1 (A1) EXTERIOR ELEVATION 1
3/16" = 1'-0"



2 (A1) EXTERIOR ELEVATION 2
3/16" = 1'-0"

THE COMMONS IN LINCOLN
EXPANSION 2023 (A1)
1 HARVEST CIR
LINCOLN, MA 01773

ARCHITECT
BECHTEL FRANK ERICKSON
ARCHITECTS, INC.
1720 MASSACHUSETTS AVE
LEXINGTON, MA 02420
(781) 862-3313
www.bferac.com

CONSULTANT

Date Issued For

ISSUANCES



DRAWING TITLE
A-1 ELEVATIONS

SHEET ISSUE DATE: 10/25/2023

PROJECT ISSUE DATE:

SCALE: 3/16" = 1'-0"

PROJ. NO.: 2212.00

A1-2

DEBTEL FRANK ECKSTON
ARCHITECTS, INC.
1123 MASSACHUSETTS AVE
LEWISTON, MA 02460
(781) 840-3993
www.dfarc.com

ISSUANCES



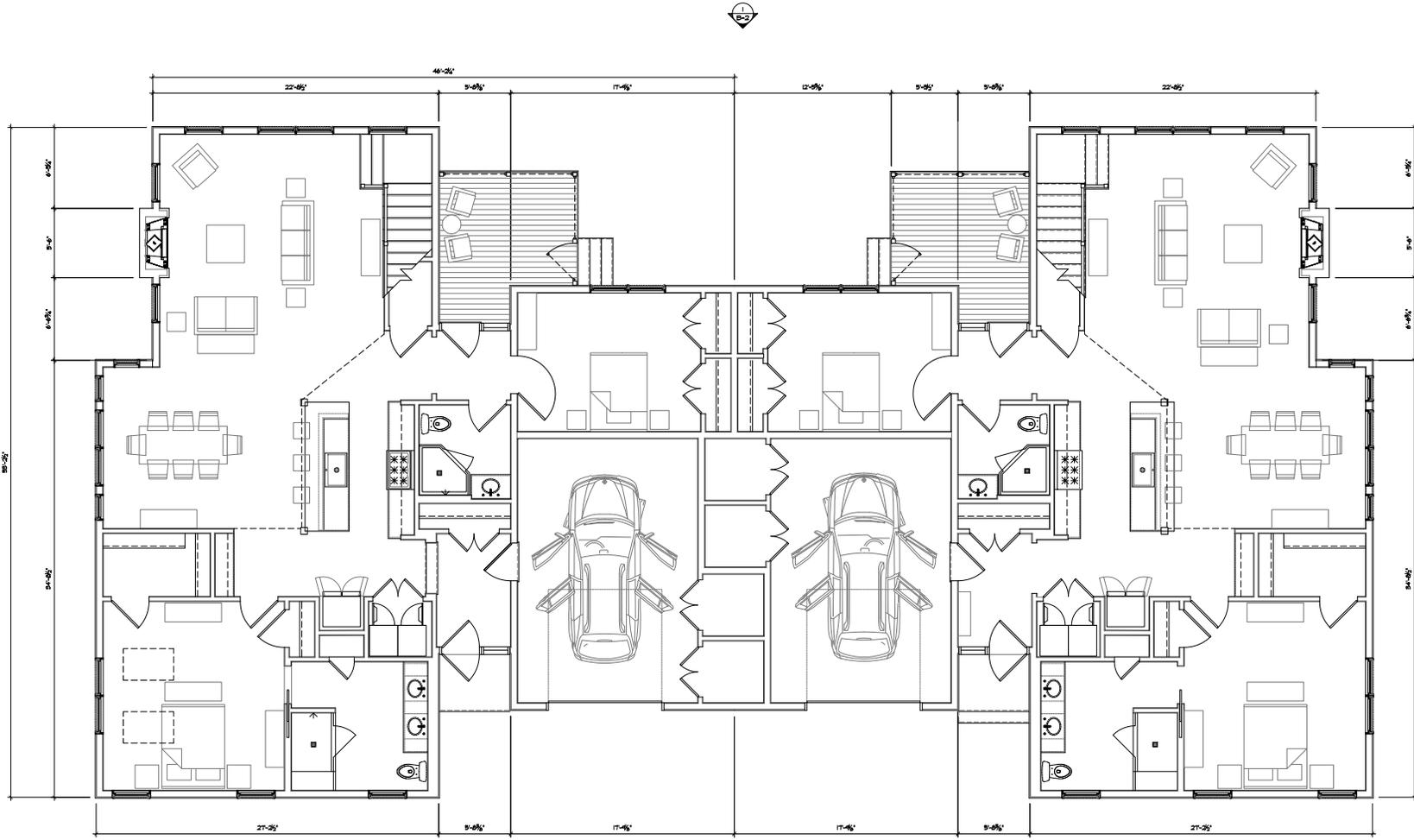
ISSUANCE TITLE
B FLOOR PLANS

DATE 10/25/2023

SCALE AS NOTED

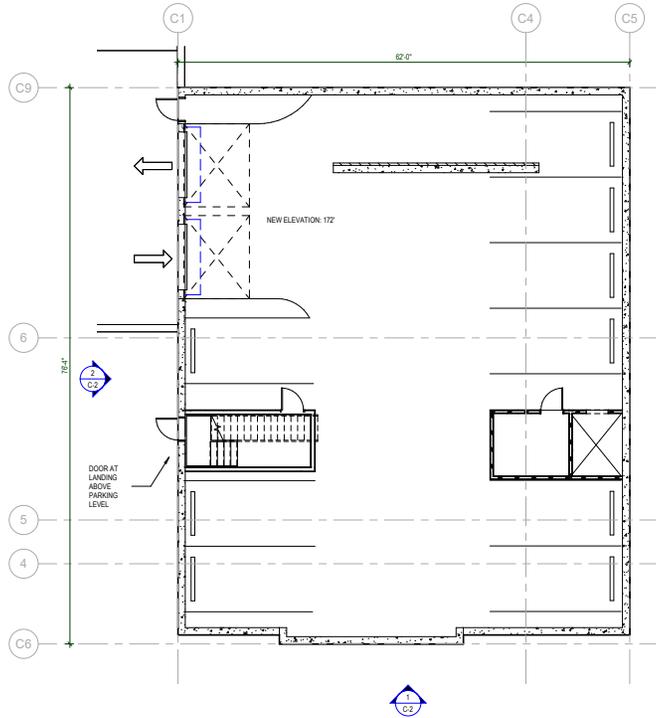
EFE PROJ No. 2322.00

B-1

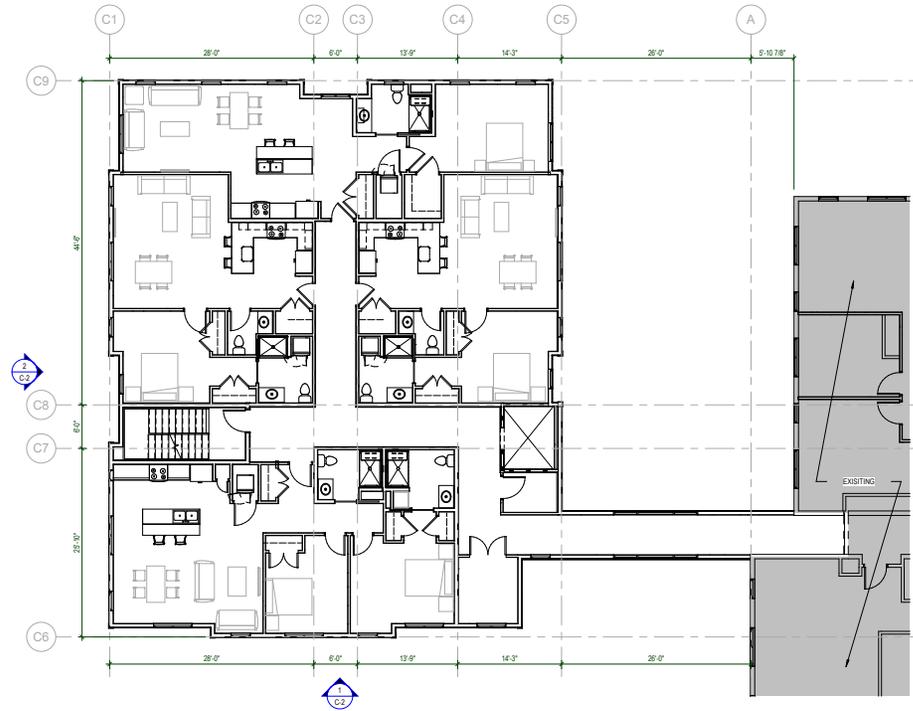


1 B-TYPE FLOOR PLAN
1/4" = 1'-0"

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2 C PARKING PLAN
1/8" = 1'-0"



1 C TYP. FLOOR PLAN
1/8" = 1'-0"

THE COMMONS IN LINCOLN
EXPANSION 2023 (C)
1 HARVEST CIR
LINCOLN, MA 01773

ARCHITECT
BECHTEL FRANK ERICKSON
ARCHITECTS, INC.
1720 MASSACHUSETTS AVE
LEXINGTON, MA 02420
(781) 862-3313
www.bfeacorp.com

CONSULTANT

Date Issued For

ISSUANCES



DRAWING TITLE
C FLOOR PLANS

SHEET ISSUE DATE: 10/25/2023

PROJECT ISSUE DATE:

SCALE: 1/8" = 1'-0"

PROJ. NO: 2212.00



1 C EXTERIOR ELEVATION 1
3/16" = 1'-0"



2 C EXTERIOR ELEVATION 2
3/16" = 1'-0"

THE COMMONS IN LINCOLN
EXPANSION 2023 (C)
1 HARVEST CIR
LINCOLN, MA 01773

ARCHITECT
BECHTEL FRANK ERICKSON
ARCHITECTS, INC.
1723 MASSACHUSETTS AVE
LEXINGTON, MA 02420
(781) 862-3313
www.bfeinc.com

CONSULTANT

Date Issued For

ISSUANCES



DRAWING TITLE
ELEVATIONS

SHEET ISSUE DATE: 10/25/2023

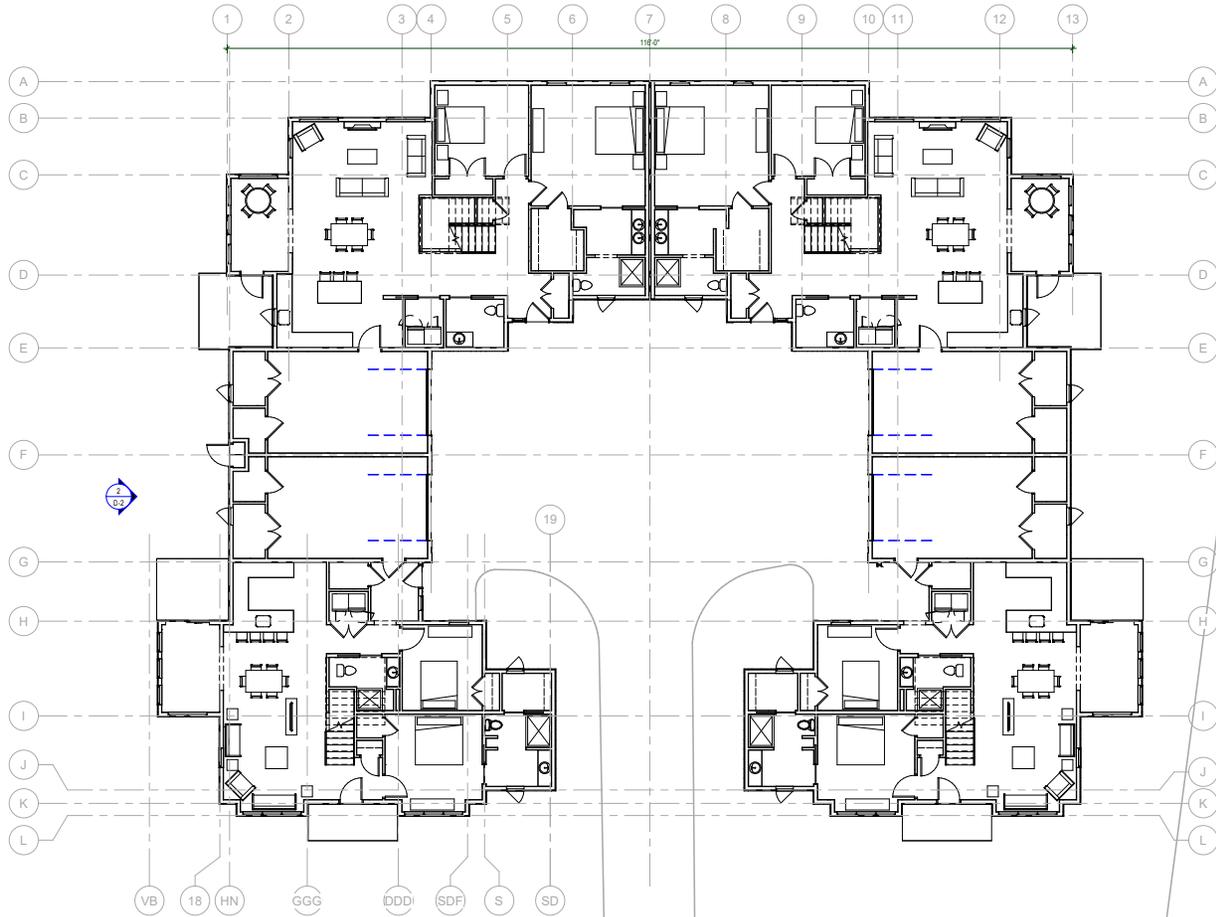
PROJECT ISSUE DATE:

SCALE: 3/16" = 1'-0"

PROJ. NO: 2212.00

C-2

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1 D FLOOR PLAN
1/8" = 1'-0"

THE COMMONS IN LINCOLN
EXPANSION 2023 (D)
1 HARVEST CIR
LINCOLN, MA 01773

ARCHITECT

BICHTEL FRANK ERICKSON
ARCHITECTS, INC.
180 MASSACHUSETTS AVE
LEXINGTON, MA 02420
(781) 862-3313
www.bfeaco.com

CONSULTANT

Date Issued For

ISSUANCES



DRAWING TITLE
D FLOOR PLAN

SHEET ISSUE DATE: 10/25/2023

PROJECT ISSUE DATE:

SCALE: 1/8" = 1'-0"

PROJ. NO. 2212.00

D-1

THE COMMONS IN LINCOLN
EXPANSION 2023 (D)
1 HARVEST CIR
LINCOLN, MA 01773

ARCHITECT
BICHTEL FRANK ERICKSON
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180 MASSACHUSETTS AVE
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(781) 862-3313
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CONSULTANT

Date Issued For

ISSUANCES



DRAWING TITLE
D ELEVATIONS

SHEET ISSUE DATE: 10/25/2023

PROJECT ISSUE DATE:

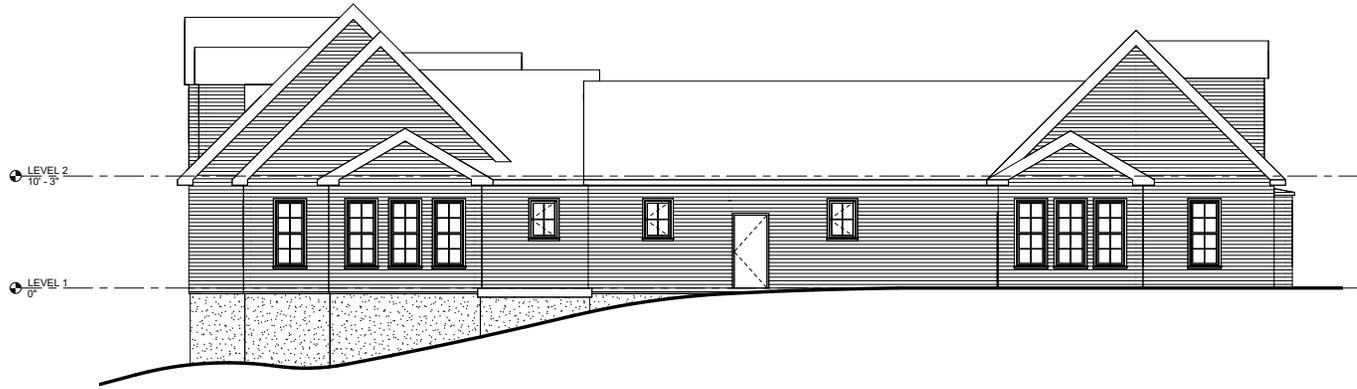
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PROJ. NO: 2212.00

D-2

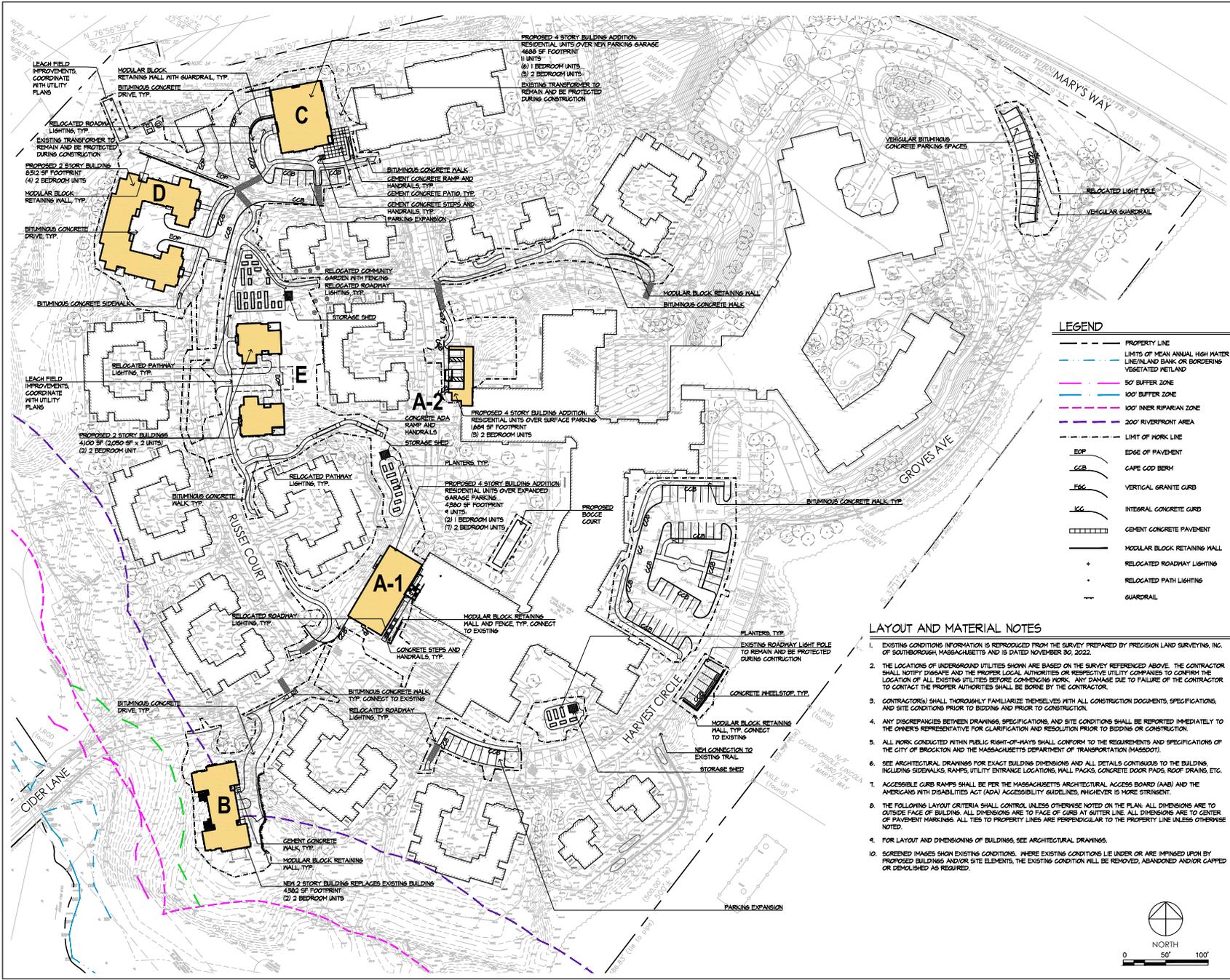


1 D EXTERIOR ELEVATION 1
3/16" = 1'-0"



2 D EXTERIOR ELEVATION 2
3/16" = 1'-0"

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LEGEND

---	PROPERTY LINE
---	LIMITS OF MEAN ANNUAL HIGH WATER
---	LINE/LAND BANK OR BORDERING VEGETATED WETLAND
---	50' BUFFER ZONE
---	100' BUFFER ZONE
---	100' INNER RIPARIAN ZONE
---	200' RIVERFRONT AREA
---	LIMIT OF WORK LINE
---	EDGE OF PAVEMENT
---	CAPE COD BERM
---	VERTICAL GRANITE CURB
---	INTEGRAL CONCRETE CURB
---	CEMENT CONCRETE PAVEMENT
---	MODULAR BLOCK RETAINING WALL
---	RELOCATED ROADWAY LIGHTING
---	RELOCATED PATH LIGHTING
---	GUARDRAIL

LAYOUT AND MATERIAL NOTES

- EXISTING CONDITIONS INFORMATION IS REPRODUCED FROM THE SURVEY PREPARED BY PRECISION LAND SURVEYING, INC. OF SOUTHBOROUGH, MASSACHUSETTS AND IS DATED NOVEMBER 30, 2022.
- THE LOCATIONS OF UNDERGROUND UTILITIES SHOWN ARE BASED ON THE SURVEY REFERENCED ABOVE. THE CONTRACTOR SHALL NOTIFY DIGSAFE AND THE PROPER LOCAL, STATE, OR FEDERAL UTILITY COMPANIES TO CONFIRM THE LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. ANY DAMAGE DUE TO FAILURE OF THE CONTRACTOR TO CONTACT THE PROPER AUTHORITIES SHALL BE BORNE BY THE CONTRACTOR.
- CONTRACTOR(S) SHALL THOROUGHLY FAMILIARIZE THEMSELVES WITH ALL CONSTRUCTION DOCUMENTS, SPECIFICATIONS, AND SITE CONDITIONS PRIOR TO BIDDING AND PRIOR TO CONSTRUCTION.
- ANY DISCREPANCIES BETWEEN DRAWINGS, SPECIFICATIONS AND SITE CONDITIONS SHALL BE REPORTED IMMEDIATELY TO THE OWNER'S REPRESENTATIVE FOR CLARIFICATION AND RESOLUTION PRIOR TO BIDDING OR CONSTRUCTION.
- ALL WORK CONDUCTED WITHIN PUBLIC RIGHT-OF-WAYS SHALL CONFORM TO THE REQUIREMENTS AND SPECIFICATIONS OF THE CITY OF BROCKTON AND THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MHD&T).
- SEE ARCHITECTURAL DRAWINGS FOR EXACT BUILDING DIMENSIONS AND ALL DETAILS CONTIGUOUS TO THE BUILDING, INCLUDING SIDEWALKS, RAMPS, UTILITY ENTRANCE LOCATIONS, WALL PACKS, CONCRETE DOOR PADS, ROOF DRAINS, ETC.
- ACCESSIBLE CURB RAMPS SHALL BE PER THE MASSACHUSETTS ARCHITECTURAL ACCESS BOARD (AAB) AND THE AMERICANS WITH DISABILITIES ACT (ADA) ACCESSIBILITY GUIDELINES, WHICHEVER IS MORE STRINGENT.
- THE FOLLOWING LAYOUT CRITERIA SHALL CONTROL UNLESS OTHERWISE NOTED ON THE PLAN. ALL DIMENSIONS ARE TO OUTSIDE FACE OF BUILDING. ALL DIMENSIONS ARE TO FACE OF CURB AT CUTTER LINE. ALL DIMENSIONS ARE TO CENTER OF PAVEMENT MARKINGS. ALL TIES TO PROPERTY LINE ARE PERPENDICULAR TO THE PROPERTY LINE UNLESS OTHERWISE NOTED.
- FOR LAYOUT AND DIMENSIONS OF BUILDINGS, SEE ARCHITECTURAL DRAWINGS.
- SCREENED IMAGES SHOWN EXISTING CONDITIONS. WHERE EXISTING CONDITIONS LIE UNDER OR ARE IMPINGED UPON BY PROPOSED BUILDINGS AND/OR SITE ELEMENTS, THE EXISTING CONDITION SHALL BE REMOVED, ABANDONED AND/OR CAPPED OR DEMOLISHED AS REQUIRED.

REVISION DEVELOPMENT PLAN	38	W/C	10/23
Issued	39	APP	10/23/21

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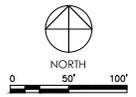
Client/Project
ONEPOINT PARTNERS

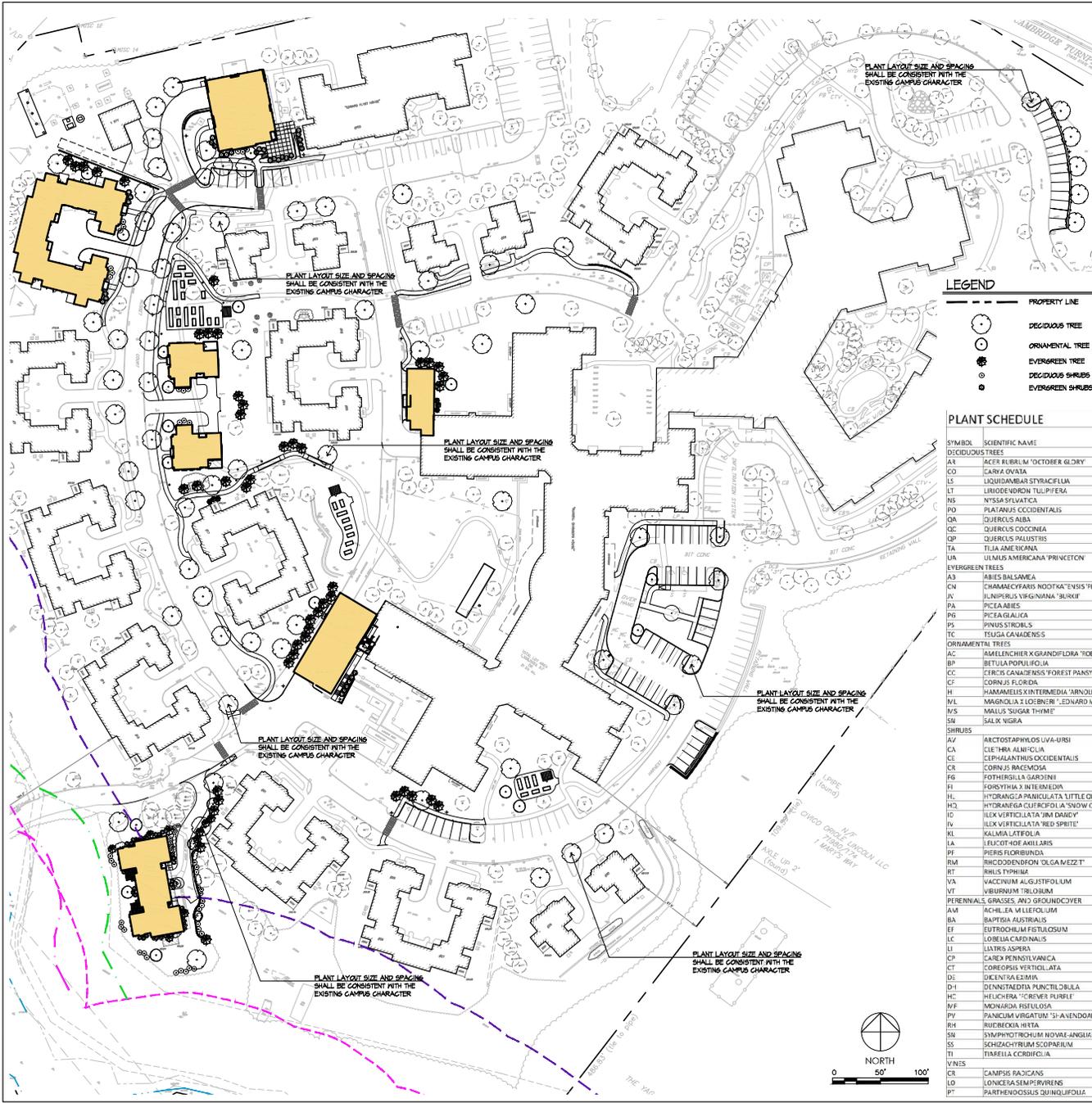
COMMONS IN LINCOLN EXPANSION 2023

LINCOLN, MA

Title
SITE LAYOUT AND MATERIALS PLAN

Project No. 210801974	Scale AS NOTED
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PLANTING NOTES

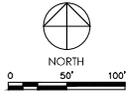
- CONTRACTOR SHALL BEGIN MAINTENANCE IMMEDIATELY AFTER PLANTING AND WILL CONTINUE UNTIL FINAL WRITTEN ACCEPTANCE OF PLANT MATERIAL.
- CONTRACTOR SHALL VERIFY ALL TREE REMOVALS AND/OR TRANSPLANTS WITH OWNERS REPRESENTATIVE PRIOR TO CONSTRUCTION START.
- CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AWAY FROM ALL BUILDING FOUNDATIONS, STREETS, AND PLANTING BEDS.
- MAXIMUM SLOPE WITHIN DISTURBED AREAS SHALL NOT EXCEED 8%, UNLESS OTHERWISE NOTED.
- THE LANDSCAPE CONTRACTOR SHALL SUPPLY ALL PLANT MATERIALS IN QUANTITIES SUFFICIENT TO COMPLETE ALL PLANTINGS SHOWN ON THIS DRAWING.
- ALL MATERIALS SHALL CONFORM TO THE GUIDELINES ESTABLISHED BY THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION.
- ALL PLANTS SHALL BEAR THE SAME RELATIONSHIP TO FINISH GRADE AS TO ORIGINAL GRADES BEFORE DIGGING.
- ALL PLANTS TO BE BALLED IN BURLAP OR CONTAINERIZED.
- MULCH FOR PLANTED AREAS TO BE ASPED PINE BARK, PARTIALLY DECOMPOSED, DARK BROWN IN COLOR AND FREE OF WOOD CHIPS THICKER THAN 1/4 INCH.
- PLANTING SOIL MIX MUST FOLLOW PROVIDED SPECIFICATIONS AND RECOMMENDATIONS OF THE SOILS ANALYSIS. FERTILIZER ADDED PER RECOMMENDED RATES OF THE SOILS ANALYSIS.
- THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIALS FOR ONE (1) FULL YEAR FROM DATE OF ACCEPTANCE.
- ALL PLANT MATERIALS ARE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT, AT THE NURSERY, AND AT THE SITE.
- ALL AREAS OF THE SITE WHICH HAVE BEEN DISTURBED AND NOT OTHERWISE DEVELOPED SHALL BE LOAMED AND SEEDED WITH A MINIMUM DEPTH OF 6" DEPTH TOPSOIL.

LEGEND

- PROPERTY LINE
- DECIDUOUS TREE
- ORNAMENTAL TREE
- EVERGREEN TREE
- DECIDUOUS SHRUBS
- EVERGREEN SHRUBS

PLANT SCHEDULE

SYMBOL	SCIENTIFIC NAME	COMMON NAME	NOTES
DECIDUOUS TREES			
AA	ACER RUBRUM 'OCTOBER GLORY'	RED MAPLE	2-2 1/2" CAL. 8&B
CO	CARYA OVATA	SHAGBARK HICKORY	2-2 1/2" CAL. 8&B
LS	LIQUIDAMBAR STYRACIFLUA	SWEETGUM	2-2 1/2" CAL. 8&B
LT	LIRIODENDRON TULIPIFERA	TULIP POPLAR	2-2 1/2" CAL. 8&B
NS	NYSSA SYLVATICA	BLACK GLUEW	2-2 1/2" CAL. 8&B
PO	PLATANUS OCCIDENTALIS	SYCAMORE	2-2 1/2" CAL. 8&B
QA	QUERCUS ALBA	WHITE OAK	2-2 1/2" CAL. 8&B
QC	QUERCUS COCCINEA	SCARLET OAK	2-2 1/2" CAL. 8&B
PR	QUERCUS PRALINSTRIS	PIN OAK	2-2 1/2" CAL. 8&B
TA	TILIA AMERICANA	AMERICAN LINDEN	2-2 1/2" CAL. 8&B
UA	ULMUS AMERICANA 'PRINCETON'	PRINCETON ELM	2-2 1/2" CAL. 8&B
EVERGREEN TREES			
AS	ABIES BALSAEMA	BALSAM FIR	7-8' FT. 8&B
CN	CHAMAECYPARIS NODOSA 'NENSIS' 'RENDULA'	WEEPING ALASKAN CEDAR	7-8' FT. 8&B
JV	JUNIPERUS VIRGINIANA 'BURKII'	RED CEDAR	7-8' FT. 8&B
PA	PICEA ABIES	NORWAY SPRUCE	7-8' FT. 8&B
PR	PICEA MARIA MICA	WHITE SPRUCE	7-8' FT. 8&B
PS	PINUS STROBILIS	WHITE PINE	7-8' FT. 8&B
TC	TEUGA CANADENSIS	CANADIAN HEMLOCK	7-8' FT. 8&B
ORNAMENTAL TREES			
AB	AMELANCHIER X GRANDIFLORA 'ROBIN HL'	ROBIN HILL SERVICEBERRY	7-8' FT. 8&B
BP	BETULA POPULIFOLIA	GRAY BIRCH	7-8' FT. 8&B
CC	CITRUS CANADENSIS 'FOREST PANSY'	EASTERN REDBUD	7-8' FT. 8&B
CF	CORNUS FLORIDA	DOUGLASS DOGWOOD	7-8' FT. 8&B
H	HAMAMELIS X INTERMEDIA 'ARNOLD PROCVISE'	WITCHHAZEL	6-7' FT. 8&B
ML	MAGNOLIA X LOEBNERI 'LEONARD MESSEL'	LEONARD MESSEL MAGNOLIA	6-7' FT. 8&B
MS	MALUS 'SUGAR THYME'	SUGAR THYME CRAB APPLE	7-8' FT. 8&B
SH	SALEX VIGRA	BLACK WILLOW	6-7' FT. 8&B
SHRUBS			
AV	ARCTOSTAPHYLOS UVA-URSI	BEARBERRY	3 GAL.
CA	CLETHRA ALMIFLORA	SUMMERSWEET	3 GAL.
CE	CORYDALIUS OCCIDENTALIS	BRITTON BUSH	5 GAL.
CR	CORNUS RACEMOSA	GRAY DOGWOOD	5 GAL.
FG	FOTHERGILLA GARDENII	FOTHERGILLA	5 GAL.
FI	FORSYTHIA X INTERMEDIA	WINTER FLYING	5 GAL.
HL	HYDRANGIA PANCULATA 'LITTLE QU CHIRI'	HYDRANGIA	5 GAL.
H2	HYDRANGIA QUERCIFOLIA 'SNOW QUEEN'	ORN. LEAF HYDRANGIA	5 GAL.
IO	ILEX VERTICILLATA 'JIM DANDY'	WINTERBERRY	5 GAL.
IV	ILEX VERTICILLATA 'TREE SPRITE'	WINTERBERRY	5 GAL.
KL	KALMA LATIFOLIA	MOJUNTAI LAUREL	5 GAL.
LA	LEUCODIUM AXILLARIS	COAST LEUCODIUM	5 GAL.
PE	PERSEA FLORIBUNDA	PERSEA	5 GAL.
RM	RHICODENDRON 'OLGA MEZZEL'	RHICODENDRON	5 GAL.
RT	RIBES TYPHINUM	STAGHORN SUMAC	5 GAL.
VA	VACCINIUM ALGUSTIFOLIUM	HIGH BUSH BLUEBERRY	5 GAL.
VT	VIBURNUM VIBURNUM	CRANBERRYBUSH VIBURNUM	2 1/2 3 FT.
PERENNIALS, GRASSES, AND GROUND COVER			
AM	ACHILLEA MILLEFOLIUM	YARROW	1 GAL. SPACE 36" O.C.
BA	BAPTISIA AUSTRALIS	FALSE INDIGO	1 GAL. SPACE 36" O.C.
CE	CHEIRANTHUS FILIPPOUSUM	JOE PEE WEED	1 GAL. SPACE 36" O.C.
LC	LOBELIA CARDINALIS	CARDINAL FLOWER	1 GAL. SPACE 24" O.C.
LI	Liatris ASPERA	BLADING STAR	1 GAL. SPACE 12" O.C.
CP	CAREX PENNSYLVANICA	SEDGE	1 GAL. SPACE 12" O.C.
CT	CORYDOPHILA VERTICILLATA	CORYDOPHILA	1 GAL. SPACE 18" O.C.
DE	DICKENSAELEMMA	'FRINGED BLEEDING HEART'	1 GAL. SPACE 18" O.C.
D1	DIENNTHEIDIA PUNCTILOBULA	HAY-SCENTED FERN	1 GAL. SPACE 24" O.C.
HC	HELCYPERA 'ROSE'S PURPLE'	HELCYPERA	1 GAL. SPACE 12" O.C.
WF	MONARDIA FISTULOSA	WILD BURNING	1 GAL. SPACE 24" O.C.
PV	PANICUM VIRGATUM 'SHAVENDDAH'	SWITCHGRASS	1 GAL. SPACE 24" O.C.
RH	RHECOKIA HISTA	BLACK-EYED SUSAN	1 GAL. SPACE 24" O.C.
SM	STACHYS SPERMATOPHYTES	NEW ENGLAND ASTER	1 GAL. SPACE 24" O.C.
SS	SCHIZACHYRIUM SCOPARIUM	LITTLE BLUESTEM	1 GAL. SPACE 18" O.C.
TI	TIARELLA CORDIFOLIA	FOAMFLOWER	1 GAL. SPACE 18" O.C.
VINES			
CK	CAMPUS RAZICANS	TRUMPET VINE	1 GAL. SPACE 36" O.C.
LO	LONNESAEMPERVIRENS	CORAL HONEYBUCKLE	1 GAL. SPACE 36" O.C.
PT	PARTHENOCISSUS QUINQUEFOLIA	VIRGINIA CREEPER	1 GAL. SPACE 36" O.C.



INTERIM DEVELOPMENT USE PLAN
Issued: 08/11/2014

File Name: 210801914_planting.dwg
Date: 08/11/2014
User: JMS



Client/Project
ONEPOINT PARTNERS
COMMONS IN LINCOLN EXPANSION 2023
LINCOLN, MA

Title
PLANTING PLAN

Project No: 210801914
Scale: AS NOTED

APPENDIX SUBTITLE

Appendix D

Appendix D

ABUTTERS LIST





1 Harvest Circle

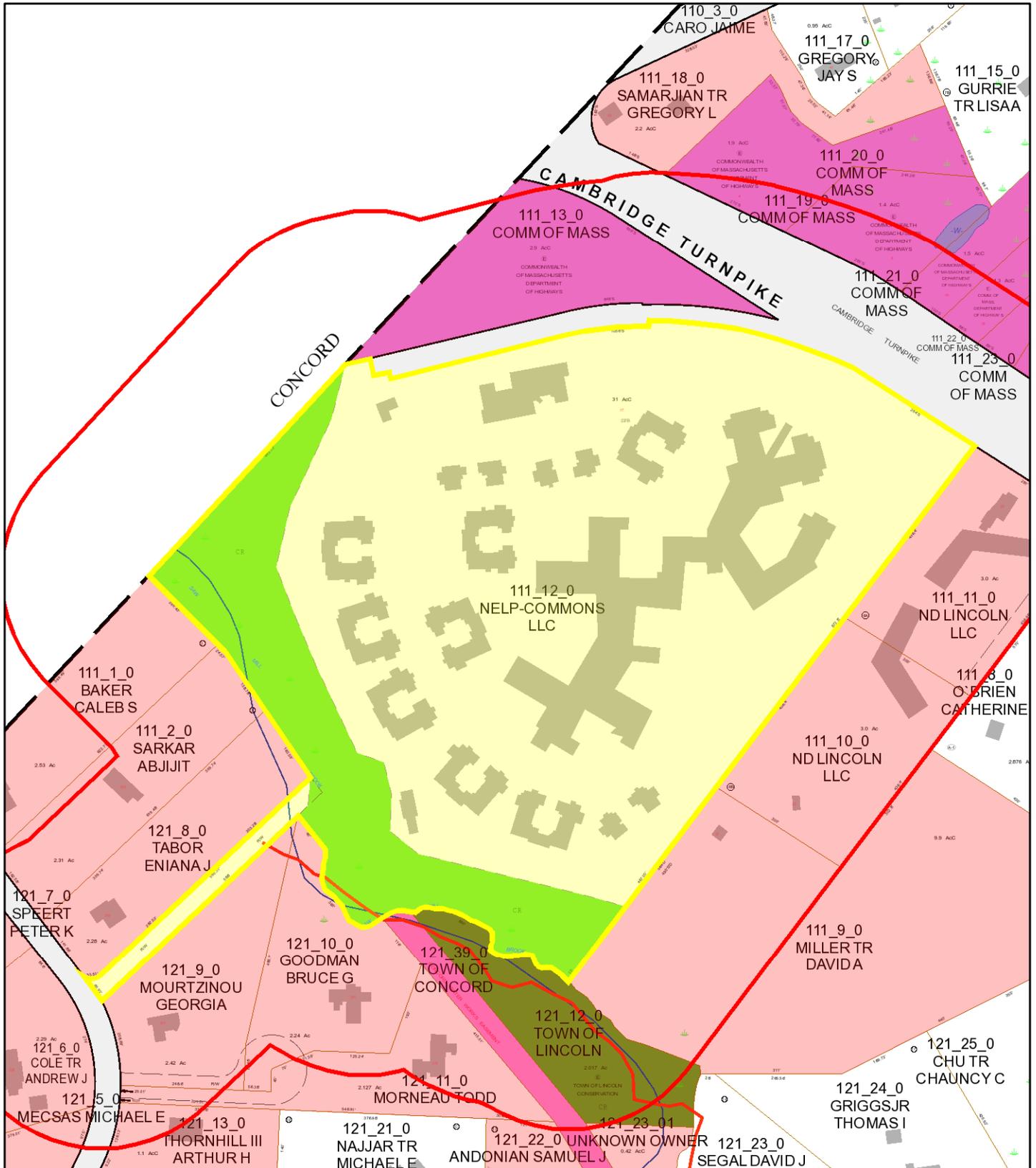
Lincoln, MA



January 20, 2023

1 inch = 277 Feet

www.cai-tech.com



Data shown on this map is provided for planning and informational purposes only. The municipality and CAI Technologies are not responsible for any use for other purposes or misuse or misrepresentation of this map.



300 foot Abutters List Report

Lincoln, MA
January 20, 2023

Subject Property:

Parcel Number: 111_12_0
CAMA Number: 111_12_0
Property Address: 1 HARVEST CR

Mailing Address: NERP-COMMONS LLC C/O ONE POINT PARTNERS LLC
35 MAIN STREET SUITE 211C
TOPSFIELD, MA 01983

Abutters:

Parcel Number: 111_1_0
CAMA Number: 111_1_0
Property Address: 225 SANDY POND RD

Mailing Address: BAKER CALEB S BAKER SUZANNE M
225 SANDY POND RD
LINCOLN, MA 01773-1802

Parcel Number: 111_10_0
CAMA Number: 111_10_0
Property Address: 0 MARY'S WAY

Mailing Address: ND LINCOLN LLC
2310 WASHINGTON STREET
NEWTON LOWER FALLS, MA 02462

Parcel Number: 111_11_0
CAMA Number: 111_11_0
Property Address: 1 MARY'S WAY

Mailing Address: ND LINCOLN LLC
2310 WASHINGTON STREET
NEWTON LOWER FALLS, MA 02462

Parcel Number: 111_13_0
CAMA Number: 111_13_0
Property Address: 0 CAMBRIDGE TP

Mailing Address: COMM OF MASS DEPT OF HIGHWAYS
10 PARK PLAZA RM 6160
BOSTON, MA 02116

Parcel Number: 111_18_0
CAMA Number: 111_18_0
Property Address: 50 BYPASS RD

Mailing Address: SAMARJIAN TR GREGORY L
SAMARJIAN TR ANN MARIE
50 BYPASS RD
LINCOLN, MA 01773-1202

Parcel Number: 111_19_0
CAMA Number: 111_19_0
Property Address: 4 CAMBRIDGE TP

Mailing Address: COMM OF MASS DEPT OF HIGHWAYS
10 PARK PLAZA RM 6160
BOSTON, MA 02116

Parcel Number: 111_2_0
CAMA Number: 111_2_0
Property Address: 223 SANDY POND RD

Mailing Address: SARKAR ABJIJIT BHATTACHARYA
DEBARATI
223 SANDY POND RD
LINCOLN, MA 01773-1802

Parcel Number: 111_20_0
CAMA Number: 111_20_0
Property Address: 8 CAMBRIDGE TP

Mailing Address: COMM OF MASS DEPT OF HIGHWAYS
10 PARK PLAZA RM 6160
BOSTON, MA 02116

Parcel Number: 111_21_0
CAMA Number: 111_21_0
Property Address: 16 CAMBRIDGE TP

Mailing Address: COMM OF MASS DEPT OF HIGHWAYS
10 PARK PLAZA RM 6160
BOSTON, MA 02116

Parcel Number: 111_22_0
CAMA Number: 111_22_0
Property Address: 18 CAMBRIDGE TP

Mailing Address: COMM OF MASS DEPT OF HIGHWAYS
10 PARK PLAZA RM 6160
BOSTON, MA 02116



www.cai-tech.com

This is not a certified abutters list. For a certified abutters list, please contact the Lincoln Assessors Department at 781-259-2611 or blakeleyd@lincolntown.org.



300 foot Abutters List Report

Lincoln, MA
January 20, 2023

Parcel Number: 121_6_0
CAMA Number: 121_6_0
Property Address: 228 SANDY POND RD

Mailing Address: COLE TR ANDREW J COLE TR HOLLY
BR
228 SANDY POND RD
LINCOLN, MA 01773-1801

Parcel Number: 121_7_0
CAMA Number: 121_7_0
Property Address: 4 FOX RUN RD

Mailing Address: SPEERT PETER K BERMAN FAYE
4 FOX RUN RD
LINCOLN, MA 01773-2404

Parcel Number: 121_8_0
CAMA Number: 121_8_0
Property Address: 219 SANDY POND RD

Mailing Address: TABOR ENIANA J TABOR JACOB N
219 SANDY POND
LINCOLN, MA 01773

Parcel Number: 121_9_0
CAMA Number: 121_9_0
Property Address: 217 SANDY POND RD

Mailing Address: MOURTZINO GEORGIA PASCHALIDIS
IOANNIS
217 SANDY POND RD
LINCOLN, MA 01773-1802

For B.S.
For the Board of Assessors



www.cai-tech.com

This is not a certified abutters list. For a certified abutters list, please contact the Lincoln Assessors Department at 781-259-2611 or blakeleyd@lincolntown.org.



Town of Concord
Board of Assessors
24 Court Lane
Concord, Massachusetts 01742-0535
Tel: (978) 318-3070
Fax: (978) 369-4760
www.concordma.gov

ABUTTERS LIST

PROPERTY : 10A Concord Turnpike
Concord, MA 01742

PARCEL: 4057

As per Massachusetts General Laws Chapter 131, Section 40 whereas the “abutters” included shall be:

Any person filing a notice of intention with a conservation commission shall at the same time give written notification thereof, by delivery in hand or certified mail, return receipt requested, to all abutters within one hundred feet of the property line of the land where the activity is proposed, at the mailing addresses shown on the most recent applicable tax list of the assessors, including, but not limited to, owners of land directly opposite said proposed activity on any public or private street or way, and in another municipality or across a body of water.

The Board of Assessors hereby certifies that the attached list contains the record owners as of January 1, 2022, recorded on the current tax rolls. In addition, the Board certifies that the list includes owners, as per recorded deeds as received up to December 31, 2022.

Michael Gibbons
Sr. Department Clerk

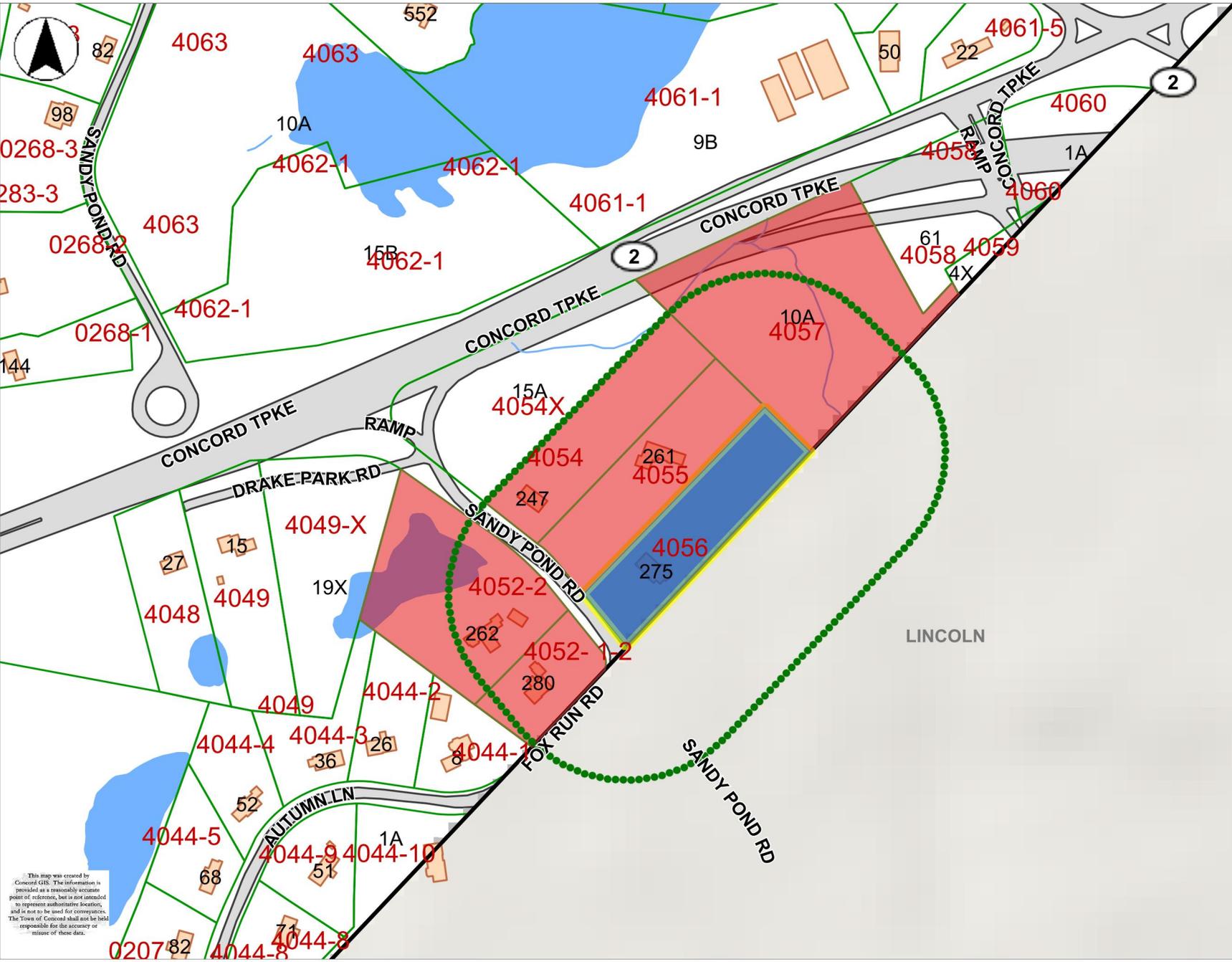
January 24, 2022

Abutters List for Parcel ID#4057, 10A Concord Tpke., using a distance of 300 ft.

Parcel ID	Owner	Co-Owner	Mailing Address	City	State	Zip Code	Property Location
2194-LL	BOYNTON JOHN W & ALBERT E WINEMILLER	C/O BOYNTON AFFILIATES	PO BOX 1147	CONCORD	MA	01742	84-LL COMMONWEALTH AVE
4061-1	COMMONWEALTH OF MASSACHUSETTS	DEPT OF PUBLIC WORKS	100 CAMBRIDGE ST	BOSTON	MA	02202	9B CONCORD TPKE
4054	CHUNG KYUNG MIN	CHUNG SUNHEE	247 SANDY POND RD	LINCOLN	MA	01773	247 SANDY POND RD
4054-X	COMMONWEALTH OF MASSACHUSETTS	DEPT OF PUBLIC WORKS	100 CAMBRIDGE ST	BOSTON	MA	02202	15A CONCORD TPKE
4055	DEMBA STEPHEN R	DEMBA MARLA T	261 SANDY POND RD	LINCOLN	MA	01773	261 SANDY POND RD
4056	MCGOWAN ADAM	MCGOWAN JENNIFER A	275 SANDY POND RD	CONCORD	MA	01742	275 SANDY POND RD
4057	COMMONWEALTH OF MASSACHUSETTS	DEPT OF PUBLIC WORKS	100 CAMBRIDGE ST	BOSTON	MA	02202	10A CONCORD TPKE
4058	MASSACHUSETTS DEPT OF HIGHWAYS		10 PARK PLAZA - RM 6160	BOSTON	MA	02116	61 CONCORD TPKE
4059	MASSACHUSETTS DEPT OF HIGHWAYS		10 PARK PLAZA RM 6160	BOSTON	MA	02116	4X CONCORD TPKE
4060	MASSACHUSETTS DEPT OF HIGHWAYS		10 PARK PLAZA - RM 6160	BOSTON	MA	02116	1A CONCORD TPKE
4062-1	TOWN OF CONCORD	DEPT OF NATURAL RES	141 KEYES RD	CONCORD	MA	01742	15B CONCORD TPKE
4061-5	GLOBAL MONTELLO GROUP CORP	C/O ALLIANCE ENERGY LLC - TAX DEPT	15 NE INDUSTRIAL RD	BRANFORD	CT	06405	22 CONCORD TPKE
4066	FIFTY CONCORD TURNPIKE LLC		50 CONCORD TPKE	CONCORD	MA	01742	50 CONCORD TPKE



- Town Boundary - State Survey
- Address Numbers
- Tax Map Parcel ID Labels
- Buildings (ft)
- Parcels
- MA Highways
 - Interstate
 - US Highway
 - Numbered Routes
- MBTA Commuter Rail Station
- Railroad
- Streams
- Streets Area
- Rivers & Ponds



This map was created by Concord GIS. The information is provided as a reasonably accurate point of reference, but is not intended to represent authoritative location, and is not to be used for conveyances. The Town of Concord shall not be held responsible for the accuracy or misuse of these data.



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275 Sandy Pond Road



Town of Concord
Board of Assessors
24 Court Lane
Concord, Massachusetts 01742-0535
Tel: (978) 318-3070
Fax: (978) 369-4760
www.concordma.gov

ABUTTERS LIST

PROPERTY : 275 Sandy Pond Road
Concord, MA 01742

PARCEL: 4056

As per Massachusetts General Laws Chapter 131, Section 40 whereas the “abutters” included shall be:

Any person filing a notice of intention with a conservation commission shall at the same time give written notification thereof, by delivery in hand or certified mail, return receipt requested, to all abutters within one hundred feet of the property line of the land where the activity is proposed, at the mailing addresses shown on the most recent applicable tax list of the assessors, including, but not limited to, owners of land directly opposite said proposed activity on any public or private street or way, and in another municipality or across a body of water.

The Board of Assessors hereby certifies that the attached list contains the record owners as of January 1, 2022, recorded on the current tax rolls. In addition, the Board certifies that the list includes owners, as per recorded deeds as received up to December 31, 2022.

Michael Gibbons
Sr. Department Clerk

January 24, 2022

Abutters List for Parcel ID#4056, 275 Sandy Pond Rd., using a distance of 300 ft.

Parcel ID	Owner	Co-Owner	Mailing Address	City	State	Zip Code	Property Location
4052-2	ANTHONY TR ELAINE M	ANTHONY JR TR ARTHUR J	262 SANDY POND RD	CONCORD	MA	01742	262 SANDY POND RD
4052-1-2	PRUSSING KAREN S		1 FOX RUN RD	LINCOLN	MA	01773	280 SANDY POND RD
4054	CHUNG KYUNG MIN	CHUNG SUNHEE	247 SANDY POND RD	LINCOLN	MA	01773	247 SANDY POND RD
4055	DEMBA STEPHEN R	DEMBA MARLA T	261 SANDY POND RD	LINCOLN	MA	01773	261 SANDY POND RD
4056	MCGOWAN ADAM	MCGOWAN JENNIFER A	275 SANDY POND RD	CONCORD	MA	01742	275 SANDY POND RD
4057	COMMONWEALTH OF MASSACHUSETTS	DEPT OF PUBLIC WORKS	100 CAMBRIDGE ST	BOSTON	MA	02202	10A CONCORD TPKE



- Town Boundary - State Surface
- Address Numbers
- Tax Map Parcel ID Labels
- Buildings (ft)
- Parcels
- MA Highways
 - Interstate
 - US Highway
 - Numbered Routes
- MBTA Commuter Rail Station
- Railroad
- Streams
- Streets Area
- Rivers & Ponds

This map was created by Concord GIS. The information is provided as a reasonably accurate point of reference, but is not intended to represent authoritative location, and is not to be used for conveyance. The Town of Concord shall not be held responsible for the accuracy or misuse of these data.

0 200 400 ft

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4X Concord Turnpike



Town of Concord
Board of Assessors
24 Court Lane
Concord, Massachusetts 01742-0535
Tel: (978) 318-3070
Fax: (978) 369-4760
www.concordma.gov

ABUTTERS LIST

PROPERTY : 4X Concord Turnpike
Concord, MA 01742

PARCEL: 4059

As per Massachusetts General Laws Chapter 131, Section 40 whereas the “abutters” included shall be:

Any person filing a notice of intention with a conservation commission shall at the same time give written notification thereof, by delivery in hand or certified mail, return receipt requested, to all abutters within one hundred feet of the property line of the land where the activity is proposed, at the mailing addresses shown on the most recent applicable tax list of the assessors, including, but not limited to, owners of land directly opposite said proposed activity on any public or private street or way, and in another municipality or across a body of water.

The Board of Assessors hereby certifies that the attached list contains the record owners as of January 1, 2022, recorded on the current tax rolls. In addition, the Board certifies that the list includes owners, as per recorded deeds as received up to December 31, 2022.

Michael Gibbons
Sr. Department Clerk

January 24, 2022

Abutters List for Parcel ID#4059, 4X Concord Tpke., using a distance of 300 ft.

Parcel ID	Owner	Co-Owner	Mailing Address	City	State	Zip Code	Property Location
4057	COMMONWEALTH OF MASSACHUSETTS	DEPT OF PUBLIC WORKS	100 CAMBRIDGE ST	BOSTON	MA	02202	10A CONCORD TPKE
4058	MASSACHUSETTS DEPT OF HIGHWAYS		10 PARK PLAZA - RM 6160	BOSTON	MA	02116	61 CONCORD TPKE
4059	MASSACHUSETTS DEPT OF HIGHWAYS		10 PARK PLAZA RM 6160	BOSTON	MA	02116	4X CONCORD TPKE
4060	MASSACHUSETTS DEPT OF HIGHWAYS		10 PARK PLAZA - RM 6160	BOSTON	MA	02116	1A CONCORD TPKE

Appendix E

MUNICIPAL & FISCAL IMPACT





Fiscal Impact Analysis 40 Unit Independent Living Addition to The Commons in Lincoln; Lincoln, MA

October 30, 2023

1.0 Preface

This report is designed to determine the likely impact that the proposed 28-unit addition to the existing senior living facility at The Commons in Lincoln will have on local finances.

2.0 Summary of Methodology

The methodology adopted for this analysis focused on the increased property taxes that will be generated by the additional units, and the likely burden on local services that the additional units may generate.

It is worth noting that given the age restricted nature of the existing facility, which will also govern the proposed additional units, there will be no school age children generated by the proposed program and no burden placed on the local school district.

As further detailed in the body of the report, we do anticipate there to be modest additional demand for certain public services generated by the proposed program, and in proportion to the number of units being proposed.

2.1 Revenue Projections

The cost of increased use of municipal services, proportionate to the new units being proposed, is only one part of the equation. Additionally, given that this cost is almost entirely concentrated in EMS services, for which private insurance companies provide

reimbursements back to the Town, we feel it is rather inconsequential. Outside of EMS, we do not anticipate any measurable cost impact to police or fire services resulting from the proposed 28-unit program.

With respect to revenue generated by the one-time stimulus of construction as well as the stabilized operation of the proposed units, we have looked at permits and fees for planning and construction as well as the annual property taxes that will be generated by the new units.

2.2 Fiscal Profile

As previously noted, this report attempts to compare the anticipated cost to the town of the increased use of municipal services generated by the proposed 28 units with the increased revenue to the town that those same units will generate; in other words, to estimate the annual fiscal profile of the proposed program. The aim is to provide the town with a clear understanding of the likely fiscal impact of the proposed program and the relative merits of its contribution to the local economy.

The true economic and fiscal impact is likely to vary from year to year due to macroeconomic conditions and natural variability of some of the inputs forecasted (e.g. exact number of EMS visits, spending patterns of residents in local economy, etc.).

3.0 Summary of Findings

- **The Proposal does not generate any meaningful additional burden to municipal services. As such, we estimate a net positive fiscal impact as anticipated revenue will outpace costs to the Town.**

- **The Proposal’s additional annual estimated property tax yield at stabilization will be approximately \$143,892 (current dollars).**
- **The Proposal will generate approximately \$515,860 in one-time building permit and construction related fees paid to the Town.**

4.0 General Service Costs

As previously stated, the only municipal service that will be measurably impacted by the addition of the proposed 28 units is Town ambulance service. Discussions with Chief Young of the Town of Lincoln Fire Department indicate that calls to the property over the past two calendar years indicate a yearly average of 400 incident calls per year and the increase in Fire/EMS calls would be proportionate to the increase in units (i.e. 13% (52) more calls). When the ambulance is dispatched for servicing these additional calls at the property, it is unavailable for emergencies elsewhere, thus requiring the Town to seek temporary coverage, “mutual aid”, from neighboring communities. There is no measurable financial impact from requesting such “mutual aid” but it may impact the community and government relations between Lincoln and those that it may more regularly rely on.

Discussions with Chief Young confirm that insurance reimbursements pay the Town of Lincoln for the cost-of-service calls to The Commons and help contribute to an “Ambulance Revolving Account” for the periodic replacement of the ambulance and related equipment.

5.0 Municipal Revenue

Recurring revenue to the town in the form of property taxes are expected to be \$5,139 per unit per annum. This estimate is based on the property’s 2022 tax bill of \$1,331,101 against the current unit count of 259.



Applying this number to the proposed 28-unit program will result in \$143,892 (current dollars) in additional property taxes paid to the town annually.

While less impactful than annual property taxes, we anticipate Motor Vehicle Excise Taxes will also be paid by residents of the 28 Independent Living units being proposed. Management estimates that 85% of their current IL residents have cars, suggesting that 34 of the new residents will also have vehicles that will generate excise taxes for the Town. Assuming an average car value of \$35,000 and applying the Massachusetts excise tax of \$25 per \$1,000 of vehicle value, generates \$21,000 ($\$35,000/\$1,000 \times \25×24) in annual excises taxes being generated by the proposed 28-unt program.

6.0 Fiscal Profile

With an annual recurring revenue stream of \$143,892 at stabilization and no additional measurable annual service costs that aren't being reimbursed, the Proposal is estimated to produce a net positive fiscal benefit to the Town. The \$143,892,575 in annual revenues will contribute to helping the Town meet municipal costs and obligations. As previously mentioned, the additional insurance reimbursements received through serving the additional 28 units with EMS will also help fund the Ambulance Revolving Account that helps the Town ensure it has modern equipment and can best meet the needs of all its residents.

7.0 One-Time Fees

The proposed 28-unit program is estimated to encompass 58,609 square feet of building space. The one-time Planning Board fee of \$100 for every 1,000 of square feet will result in \$5,860. The Town also imposes a one-time Building Permit fee of \$12 per every \$1,000



of construction cost and 6% of the plumbing and electrical scope for related permits. The current estimated construction cost for the 28-unit development program is \$27,542,100 of which \$3,000,000 is related to plumbing and electrical work. This will result in \$330,000 in one time Building Permit fees ($\$27.5\text{m}/\$1,000 \times \$12$) and \$180,000 in one-time plumbing and electric permit fees ($\$3\text{m} \times 6\%$) for a total of \$510,000 in fees paid to the Town resulting from the proposed program.

8.0 Summary of Annual and One-Time Fees

Annual Recurring Fees

Property Taxes	\$143,892
Excise Taxes	<u>\$21,000</u>
TOTAL	<u>\$164,892</u>

One -Time Fees

Planning Board Fee	\$5,860
Building Permit Fee	\$330,000
Plumbing / Electrical Fee	<u>\$180,000</u>
TOTAL	<u>\$515,860</u>

8.0 Additional Considerations

While outside the scope of our fiscal analysis, it is worth mentioning the likely economic impact that the residents of the proposed 28-unit program will have on the Town through spending on local food, beverage, retail and entertainment. Additionally, it is estimated that the additional program will generate an additional 7 full-time employee, who's purchasing on good and services in Town will also help contribute to the local economy.

APPENDIX SUBTITLE

Appendix F

Appendix F

SLOPE ANALYSIS



