

ACQUISITION OF THE NORTH 40



10/3/2014

An Interim Report to the Board of Selectmen

A report of the North 40 Steering Committee on whether the Town should acquire the land known as the North 40 for municipal purposes.

Respectfully submitted to the Board of Selectmen

The North 40 Steering Committee

Don McCauley, Chair

Deborah Carpenter, Vice Chair

Allen Port

Owen Dugan

Patricia Quigley

Robert Kenney

Jim Conlin

Heidi Gross

Maria Davis

Tom Fitzgibbons

David Murphy, Alternate

Catherine Johnson, Alternate

Matthew Kelley, Alternate

Dona Kemp, Alternate

Steve Burt, Alternate

Raina McManus, Alternate

Elisa Romano, Alternate

Peter Jones, Alternate

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Acquisition of the North 40

A REPORT TO THE BOARD OF SELECTMEN

1. INTRODUCTION

Wellesley College officials informed the Board of Selectmen on April 16, 2014, and College alumnae and neighbors on April 23, 2014 that they had filed a petition with the Massachusetts Supreme Judicial Court seeking to remove the deed restrictions that then precluded the sale of the large, undeveloped parcel of land bounded by Route 135, Weston Road and Turner Road. This site, totaling approximately 46 acres, is commonly referred to as the “North 40”. The Selectmen, understanding that the potential sale and development of this land has significant implications to the Town with regards to traffic, infrastructure and municipal services, began efforts to analyze the possible uses of this land. The Selectmen appointed the North 40 Steering Committee to consider whether the Town should acquire the site or some portion thereof to address outstanding municipal needs and, in support of that consideration, to undertake a comprehensive visioning effort.

Committee Formation and Membership

On May 2, 2014, the Massachusetts Supreme Judicial Court ruled in favor of the College to release the deed restriction on the North 40, commonly referred to as the Durant Indenture. The Board of Selectmen, following the decision, drafted the charge to and composition of a newly appointed committee to study the potential acquisition of the site. The North 40 Steering Committee was established and an organizational meeting of the Committee was held on May 27, 2014.

The North 40 Steering Committee is comprised of representatives and alternates from various Town Boards and Committees and includes a neighborhood representative and alternate from both the Woodlands Neighborhood and the Weston Road Neighborhood. Each representative of the 10 person committee has one vote towards the recommendation. The Committee is further comprised of staff support from the various Town departments.

Table 1. Committee Members Appointed

Representative	Board or Committee	Staff Support
Don McCauley, Chair Dave Murphy, Alternate	Board of Selectmen	Hans Larsen, Executive Director Meghan Jop, Deputy Director Terrance Connolly, Deputy Director Jack Pilecki, Deputy Chief of Police Michael Zehner, Planning Director
Deborah Carpenter, Vice Chair Catherine Johnson, Alternate	Planning Board	
Patricia Quigley KC Kato, Alternate	School Committee	David Lussier, School Superintendent
Owen Dugan	Board of Public Works	Mike Pakstis, DPW Director Dave Cohen, DPW Assistant Director Dave Hickey, Town Engineer
Allan Port	Community Preservation	

Representative	Board or Committee	Staff Support
Tad Heuer, Alternate	Committee	
Jim Conlin	Recreation Commission	
Steve Burt, Alternate		
Robert Kenney	Wellesley Housing	
Dona Kemp, Alternate	Development Corp.	
Heidi Gross	Natural Resources	Janet Hartke Bowser, NRC Specialist
Raina McManus, Alternate	Protection Commission	
Maria Vijil-Davis	Woodland Neighborhood	
Elisa Romano, Alternate		
Thomas Fitzgibbons	Weston Road	
Blair Caple, Alternate	Neighborhood	

Committee Charge and Funding

The Committee's mission is to recommend to the Board of Selectmen whether the acquisition of the North 40 for the development of municipal uses and purposes should be pursued. The Committee's charge was to investigate, analyze, and report on the following to the Board of Selectmen:

1. Whether the ability to develop/locate municipal uses on the site satisfies an existing identified need.
2. Whether the site is appropriate for the location of municipal uses, and if so, what uses should be considered to be located on the site.
3. If the Committee determines it is appropriate to relocate and/or consolidate existing uses on the site, whether vacated sites should be repurposed for other municipal purposes or monetized to offset short term and long term costs of the acquisition and/or development of the property. This evaluation should be conducted on a town-wide scale.
4. If the Committee determines it is appropriate to relocate and/or consolidate existing uses on the site, what will be the municipal systems impacts (traffic, water, sewer, stormwater, etc) and the potential neighborhood impacts relative to project appearance, access, noise, traffic, parking, lighting, landscape buffers, screening, etc. for the various uses proposed.
5. Whether the relocation and/or consolidation of existing uses to the site would have an impact on Town assets including maintenance costs and responsibilities.
6. Whether municipal uses in planning stages are better located on the subject property.
7. Whether there are any environmental issues on the property which may negatively impact the Town's ownership and development of the property.

Resources Appropriated to the Committee

To accomplish the charge and mission of the Committee, funding for consultants was necessary to assist in the study. Funding was generated from multiple sources. The Community Preservation Committee approved the use of \$25,000 of administrative funds, and the Board of Selectmen committed the use of \$30,000. Once the work of the Committee was underway, it became apparent that the initial \$55,000 appropriated for the project would be insufficient given the numerous tasks required to study the site in a condensed timeframe. On July 23, 2014, the Board of Selectmen requested a Reserve Fund Transfer from the Advisory Committee in the amount of \$75,000. The Advisory Committee voted unanimously to support the transfer bringing the funding for the Committee up to \$130,000.

Consultants Hired

Each of the consultants engaged to study the North 40 have separate sections of this report detailing their findings. A brief summary of the consultants engaged and their purpose is described below.

Vision

The Committee, following a Request for Proposals and interviews, voted to engage Dodson & Flinker, Inc., with Brovitz Planning and Design to conduct a Vision Study for the site. The objective of the Vision Study is to structure public participation activities in order to develop a vision statement and mission for the North 40. As part of the Vision Study, an inventory of the existing land use conditions was compiled. The consultants, through workshops with various groups, identified the ways in which the North 40 is currently used and the varied relationships between the North 40 and stakeholders including: adjacent neighbors, Morses Pond neighbors, and Wellesley residents living outside the immediate neighborhoods. The consultants strived to identify how the North 40 is perceived and valued by the participating groups and individuals.

Environmental Assessment

The Committee and the Board of Selectmen, working with Wellesley College, performed a peer review of the Phase 1 and Phase 2 environmental analysis conducted by the College's consultants, Haley & Aldrich, with regard to the former Town landfill located on site. The Town engaged Environmental Partners, Inc., to review the documentation of the Phase 1 report and to oversee the boring and test pit activities performed by Haley & Aldrich on site. Environmental Partners advised the Town on the findings.

Wetlands Peer Review

The Committee engaged John Rockwood of EcoTec, Inc. to perform a site evaluation and to peer review the College's wetlands analysis performed by VHB. The findings of the study are detailed in Chapter 2.

Circulation and Access Study

The Committee engaged Beta Engineering, the Town's on call traffic engineers, to perform a preliminary traffic access evaluation. The purpose of this study was to identify any potential roadway and access connections to the site, including the potential for future roadways and bridges. Beta's charge was to use "out of the box" thinking to, among other things, envision ways in which The Town could increase the capacity of the existing Weston Road Bridge and roadway or direct traffic to alternative existing or new roadways and access ways. In addition to the access evaluation, Beta was asked to conduct new traffic counts and turning movement studies along Weston Road and Central Street. The findings of the study are detailed in Chapter 7.

Table 2. Committee Expenditures

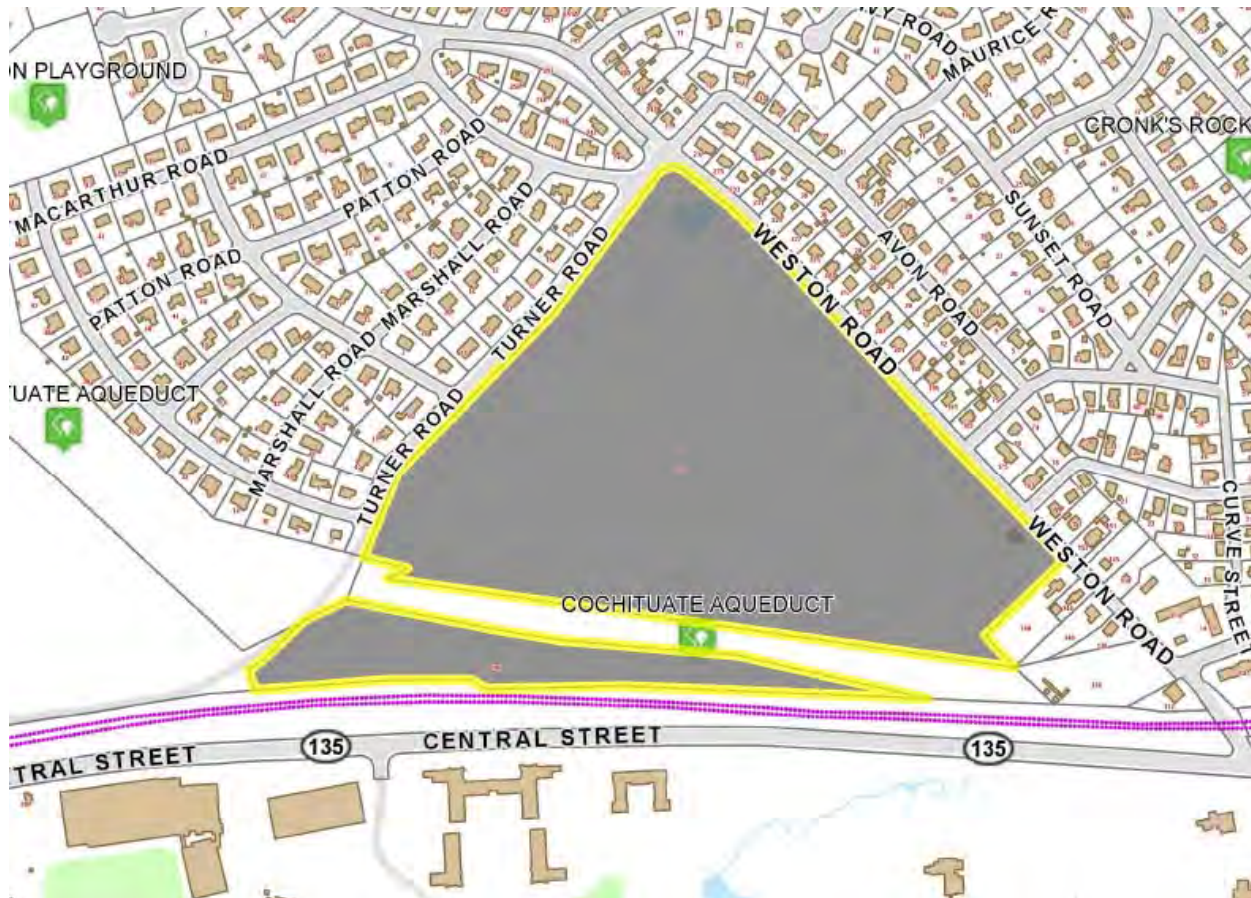
Consulting Firm	Committee Expenditure
Dodson & Flinker, Inc.	\$25,000
Environmental Partners, Inc.	\$7,000
EcoTec, Inc.	\$2,200
Beta Engineering, Inc.	\$20,000

2. NORTH 40 OVERVIEW

Location

The North 40 is a forty-six (46) acre parcel of land owned by Wellesley College located between Weston Road to the east, Turner Road to the north, Central Street (Route 135) to the south, and Town land (Morses Pond) to the west. The site is bisected by the Cochituate Aqueduct, and the MBTA rail line is located along the southern property line. The site is largely wooded with varying topography. The site has approximately 7 acres of community gardens along the eastern border of the site. A vernal pool is located on the site on the northwest corner of the parcel.

Image 1. Location Plan of the North 40



Neighboring Areas

Generally, the North 40 is surrounded by established residential areas to the northeast and northwest legs of the triangular parcel. To the west of the site are Morses Pond, the Town's beach and three of the Town's wells which provide drinking water to residents. The site as noted above is bisected by the Cochituate Aqueduct. A trails system, along with the interior trails on the site, allows a hiker, biker, or dog walker to walk within a

natural setting continuously to Route 9. The site is within a ¼ mile of the Wellesley Square MBTA station and Hardy School, and within a ½ mile of Fells Market to the north and Linden Square to the east.

Environmental Inventory

Wetlands and Natural Resources

Wellesley College hired Vanasse Hangen Brustlin, Inc. (VHB) to conduct a Natural Resources site analysis (Appendix I). VHB inspected the parcel for wetland resource areas as defined by the local bylaw, the WPA and the U.S. Army Corps of Engineers. VHB identified one area in the northernmost corner of the site. The wetland is shown as a certified vernal pool (CVP No. 32) by the latest Natural Heritage Program mapping (2008). It is a depression that appears to hold water for much of the year and receives runoff from the surrounding roadways and uplands. The pool itself is unvegetated and is underlain by a mucky substrate. The edges are vegetated with red maple, silver maple (*Acer saccharinum*), silky dogwood (*Cornus amomum*), burning bush (*Euonymus alatus*), multiple *Carex* species and Virginia creeper. VHB determined the resource appears to meet the regulatory definitions of an Isolated Land Subject to Flooding (ILSF) under the WPA and as a Vernal Pool and Isolated Wetland under the local by-law. This wetland area is presumed to be not regulated by the USACE under Section 404 of the CWA as it does not have a significant nexus to a regulated Water of the U.S.

VHB found no other state regulated resource areas on the site. The low lying areas adjacent to the former aqueduct were inspected closely during the site. While some of these areas contained hydric vegetation VHB determined they lacked any evidence of wetland hydrology or hydric soils.

Peer Review

The Town hired John Rockwood of EcoTec, Inc. to conduct a peer review of the VHB report (Appendix J). EcoTec was provided with a copy of the 'Natural Resource Assessment, North 40, Wellesley, Massachusetts' memorandum, prepared by VHB, dated August 4, 2014. EcoTec concurred that there is a single wetland area on the subject site and that this wetland area may be characterized as Isolated Land Subject to Flooding under the Regulations and Isolated Vegetated Wetlands, Isolated Land Subject to Flooding, and Vernal Pool Habitat under the Bylaw or alternatively a Pond, which would be regulated as Land Under Water Bodies and Waterways and Bank, with a fringe of Bordering Vegetated Wetlands under the Regulations and Bylaw. Certain resource areas have a 100-foot Buffer Zone under the Regulations and/or the Bylaw and Bylaw Regulations.

Habitat

VHB's report found that according to the 2008 Edition of the Massachusetts Natural Heritage Atlas2, the North 40 parcel is not located within an estimated habitat of rare wildlife or priority habitat of rare species, and that according to data available on MassGIS, the site is not located within a Living Waters resource.

A portion of the center of the site is mapped by the UMass Extension Center as Habitat of Potential Regional or Statewide Importance based on the Conservation and Prioritization System (CAPS) mapping dated November 2011. This CAPS mapping is not an area subject to regulatory jurisdiction under any state regulatory program, but is used by DEP to determine whether supplemental wildlife habitat evaluations would be required for work in wetlands.

Peer Review

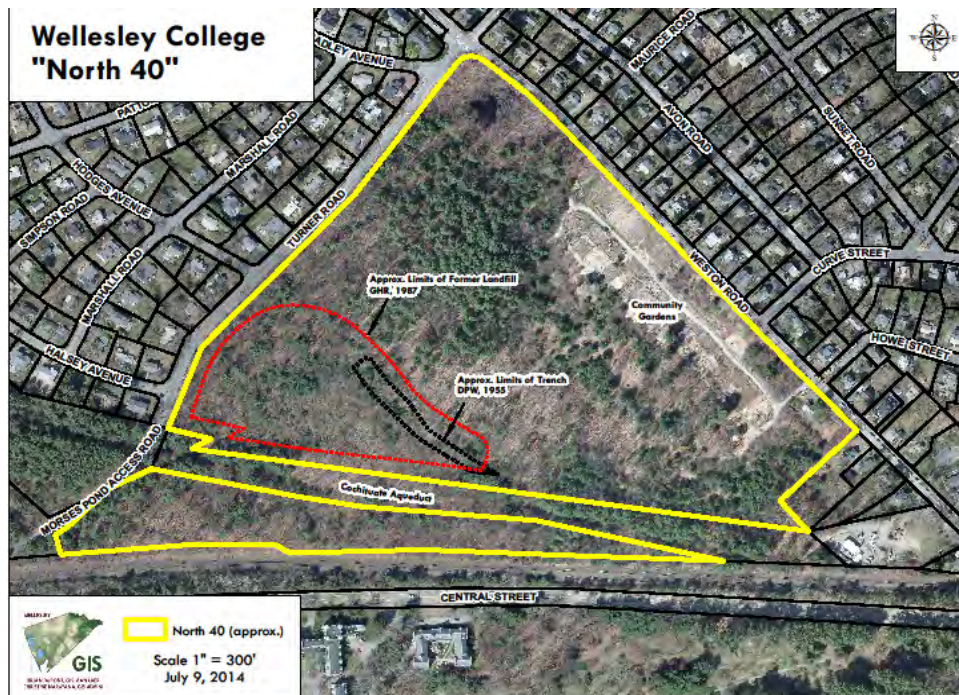
Mr. Rockwood agreed with VHB's findings on Habitat.

Historic Use of the Property

The land known as the North 40 is comprised of land acquired through transactions in the 1860s from the City of Boston (1862), Charles Dana (1869), Gilbert Seagrave (1868), and a 7 acre parcel from the Town (1947). The 7 acres from the Town was the only portion of the site unrestricted by the deed restriction known as the Durant Indenture. The site has largely remained as open space since the 1860s, excepting a short period of time when the Town leased a portion of the site for a Sanitary Land Fill.

From 1955-1960 twenty-three (23) acres of the site were leased from Wellesley College and a portion was used by the Town as a sanitary land fill. After 1960, the Town planted over 13,000 pine saplings on the disturbed portion of the leased site and returned the property to the College. The College has historically allowed public access and use of the site. As such, the site today is largely an upland woodland area with public access trails. Approximately seven (7) acres of the site has been used for community gardening since prior to the 1940s. The southern six (6) acres of the site are largely isolated due to the location of the Cochituate Aqueduct (Town owned) bisecting the lot to the north, and MBTA tracks to the south. The site is located within walking distance to Wellesley Square and is located on the MWRTA Route 8 bus route which runs along Weston Road.

Image 2. Area (in red) of the potential delineation of the former landfill site.



Current Use

A portion of the land is currently used for the Community Gardens which is comprised of 60 plots equating to approximately 7 acres of the site. There is one single family structure at 156 Weston Road, located at the entrance to the Community Gardens, occupied by an employee of Wellesley College. The balance of the site largely remains untouched with only passive recreation including, walking, hiking, biking, and snowshoeing in the winter.

3. DEVELOPMENT SCENARIOS

NOTE: This section, prepared by the Planning Board and the Planning Director, is a summary and general interpretation of the bylaws applicable to the development of the North 40. This section is not intended to serve as opinion of the Planning Board or the Planning Director of action that could or should be taken by a potential developer, or any Town board, in connection with a proposed development of the Property by any party for any use.

Zoning and Land Use

Current Zoning

The North 40 is zoned Single Residence District - 15,000 sq. ft. minimum area district (SRD15); additionally, the site is located in the Water Supply Protection District overlay zoning district. The site is comprised of three (3) existing lots, with one of the lots bisected by the Cochituate Aqueduct. It is believed that two (2) of the lots are conforming and building permits could be sought and issued for any one of the by-right uses, without any additional approvals necessary; the third lot has frontage solely on the Morses Pond Access Road, which may not satisfy frontage requirements.

Permitted Uses

The following uses are allowed by-right in the SRD15 zoning district, without the issuance of a Special Permit:

1. One-Family Dwelling;
2. Religious Purposes;
3. Educational purposes, subject to compliance with specific dimensional restrictions, including a requirement that a minimum of 75% of the lot area shall be open space;
4. Child Care Facility ("day care center" or a "school age child care program"), subject to compliance with specific dimensional and operational restrictions;
5. Club, except a club the chief activity of which is a service customarily carried on as a business;
6. Agriculture, horticulture, floriculture, including the use of the premises for the sale of natural products raised thereon, subject to compliance with operational requirements;
7. Home Occupations, subject to compliance with specific operational restrictions; and
8. Accessory uses which are customary and incidental to the uses included above.

Special Permit Uses

The following uses are allowed in the SRD15 zoning district only with the issuance of a Special Permit:

1. Continuation of a preexisting residence for not more than two families, or boarding or lodging house, but not a restaurant;
2. Educational purposes (in addition to those permitted by-right), and any non-profit purpose, subject to compliance with specific operational restrictions (not to include Registered Marijuana Dispensaries);
3. Public, semi-public institution of a Philanthropic, Charitable or Religious character;
4. Community Group Residence in an existing building having a single kitchen facility. Requires compliance with specific dimensional and operational restrictions;
5. Telephone exchange provided there is no service yard or garage; unless otherwise provided for under SECTION XV, Public Service Corporations, of the Zoning Bylaw;
6. Removal of sand, gravel, rock, clay, loam or sod there from; except for permitted construction activities or construction of streets under a subdivision plan;

7. Residence where more than three (3) persons reside together as a single housekeeping unit and where such persons are not related to one another by blood, adoption or marriage;
8. Home occupations, in addition to those permitted by-right, that include additional parking and/or nonresident employees;
9. Municipally owned or operated public parking lot or other public use;
10. Off-street parking as a non-accessory use subject to specific dimensional and operational criteria;
11. Such accessory uses as are customary in connection with any of the above special permit uses and are incidental thereto; and
12. Use by the Town of a building, structure or land for its Municipal Light Plant or its Water Works Plant.

Uses Requiring Town Meeting Approval

The following uses are allowed in the SRD15 zoning district only with the prior approval of Town Meeting; not all uses listed require the separate issuance of a Special Permit.

1. Air Navigation Facilities, subject to specific dimensional and operational restrictions;
2. Conversion of a building and site previously used for a municipal purpose to a use permitted in residential districts;
3. Cemetery (burial use), with specific dimensional and operational restrictions.

Water Supply Protection District Restrictions

Under the Water Supply Protection District, the following uses are specifically prohibited:

1. Solid waste disposal facilities, including without limitation landfills and junk and salvage yards, that require a site assignment from the Board of Health;
2. Storage of petroleum and other refined petroleum products, including without limitation gasoline, waste oil, and diesel fuel, except within buildings which it will heat or where it currently exists or for in-kind replacement or in quantities for normal household use, provided there is compliance with all local, state, and federal laws;
3. Storage of road salt or other de-icing chemicals in quantities greater than for normal household use;
4. Storage of hazardous wastes, including without limitation chemical wastes, radioactive wastes, and waste oil in quantities greater than resulting from normal household activities;
5. Manufacture, use, storage, or disposal of toxic or hazardous materials as an integral part of a principal activity, but excluding domestic activities and pesticide applications;
6. Motor vehicle service stations, repair garages, car washes, truck or bus terminals, heliports, airports, electronic manufacturing, metal plating, commercial chemical and bacteriological laboratories, and dry cleaning establishments using toxic or hazardous materials on site; and
7. Disposal of hazardous wastes.

Under the Water Supply Protection District, the following uses are permitted with the issuance of a Special Permit, and subject to a determination by the ZBA that specific design and operation standards are adequately satisfied. These uses would only be allowed with the issuance of a Special Permit if permitted by the underlying SRD15 zoning district.

1. Commercial mining of land (not a permitted use in the SRD15 zoning district);
2. Major construction projects as defined and subject to site plan review (may include uses allowed in the SRD15 zoning district);
3. Parking lots, vehicle rental agencies, photographic processing establishments, or printing establishments (except for parking lots, these uses are not permitted in the SRD15 zoning district); and
4. Any uses where more than 10,000 square feet of any lot would be rendered impervious (may include uses allowed in the SRD15 zoning district).

If the Property was to be developed for a residential subdivision (due to the likelihood of new roadways and other paved, impervious surfaces exceeding 10,000 square feet) or a non-residential use (due to the likelihood that such projects would constitute a major construction project, include a parking lot, and/or render 10,000 sq. ft. or more of any lot impervious), it is likely that the Water Supply Protection District Special Permit would be triggered. It is important to note that the Planning Board would act as Special Permit Granting Authority for a Water Supply Protection District Special Permit associated with a subdivision application; otherwise, the Zoning Board of Appeals would review and consider the Special Permit request.

Subdivisions and ANR

Residential Development of Existing Lots and Creation of ANR Lots

Under a specific exemption from the Subdivision Control Law, the site is allowed to be divided and/or reconfigured into two or more lots, with each lot having the SRD-15 minimum required frontage of one-hundred (100) feet on at least one of the two (2) public streets, Turner Road and Weston Road, and the minimum area of 15,000 square feet. Due to the location of the MBTA Commuter Rail line, the site does not have frontage along Central Street. Based on the approximate frontage of 1,500' along Turner Road and 1,700' along Weston Road, it is estimated that a maximum of 32 lots could be developed through the ANR process (15 lots along Turner Road and 17 along Weston Road). This estimate does not take into account an inability to utilize the former landfill portion of the site for home construction, or that a developer might eliminate one or two potential ANR lots to allow access to the interior of the site for further development, discussed below, either of which would reduce the number of lots that could be developed under the ANR process.

Residential Subdivision and Natural Resources Protection Development

While an estimated 32 lots could be developed along Turner Road and Weston Road through the ANR process, development of the interior of the site would be subject to the Subdivision Control Law. Additionally, a property owner could decide to forgo creation of lots through the ANR process and make the development of the entire site subject to Subdivision Control. Proposals to divide property into two or more buildable lots, where each lot proposed does not have existing frontage, are considered to be subdivisions. Subdivisions must comply with the Town's adopted development standards for streets and other municipal infrastructure (established in the *Rules and Regulations Governing the Subdivision of Land in Wellesley Massachusetts*), and proposed lots must comply with the Zoning Bylaw. Subdivisions are reviewed and approved (endorsed) by the Planning Board.

A first step in planning a subdivision would be to determine the Zoning Bylaw requirements for lots. While the site is zoned Single Residence District - 15,000 minimum area district, the Natural Resources Protection Development bylaw, (Section 16F of the Zoning Bylaw, referred to herein as "the NRPD bylaw") would require the property owner to determine applicability since it is triggered by any subdivision proposal for property that has the potential (under the NRPD bylaw's yield formula) to be divided into five (5) or more lots. Based on the size of the site and the zoning, a subdivision of the site would be subject to the NRPD bylaw, whether it was the entire site or only the interior remaining from the creation of ANR lots.

Except where deviations from the NRPD bylaw requirements are requested (which would necessitate a Special Permit) or if a Water Supply Protection District Special Permit is necessary (as discussed above), the development of a Natural Resources Protection Development subdivision is not handled under a separate review and permitting process; rather, subdivision plans that are required to be submitted under Subdivision Control must demonstrate compliance with the design and open space standards contained in the NRPD bylaw. While there are specific, detailed design standards in the NRPD bylaw, development potential is primarily controlled by the allowance to reduce lot area and dimensions to a minimum of 7,500 sq. ft. in area

and 50' in frontage/front yard width, and the requirement that 50% of the total site must be protected open space. Considering the two scenarios, development under NRPD vs. ANR and NRPD, it is anticipated that residential development of the Site could yield a maximum of 75 lots under NRPD vs. 95 lots under ANR and NRPD.

As noted, subdivision plans are reviewed and approved by the Planning Board. An applicant may choose to submit a Preliminary Plan for consideration prior to the Definitive Plan, but submittal of the Definitive Plan is a requirement. The Preliminary Plan is allowed to be less detailed and allows the applicant to receive initial staff, department, and Board comments and feedback prior to undertaking more costly design work. The Definitive Plan is required to be more detailed, providing the Town with all information necessary to determine compliance and functionality of proposed infrastructure, some of which may eventually be accepted by the Town. The Planning Board's decision to approve a Definitive Subdivision Plan is based on compliance of the plan with the Rules and Regulations.

Once approved, the developer may begin constructing improvements, following recordation of the plan at the Registry of Deeds. To ensure compliance with the approval, the Planning Board is obligated to require a covenant and/or bond. Additionally, the Board may require a bond to be established prior to releasing lots for home construction to ensure project completion. Binding obligations, such as covenants and bonds, are not released until Town staff and the Planning Board are satisfied with the completion of the subdivision in accordance with the approval, allowing for a release of such obligations, the acceptance by the Town of certain utilities, and the pursuit of street acceptance by Town Meeting.

Image 3. Traditional Subdivision v. Natural Resource Protection Subdivision of 72 Lots

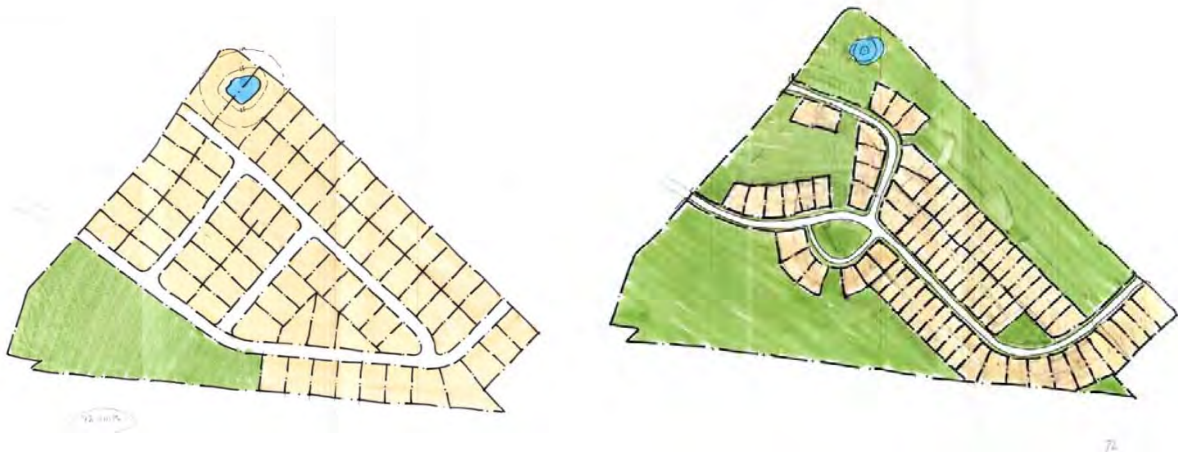


Image 4. Natural Resource Protection Subdivision with ANR Lots - 93 Lots**ANR Frontage Lots Subdivision****Development of Municipal and Other Uses**

As noted above, uses other than single-family dwellings are permitted, either by-right or with the issuance of a Special Permit. Regardless of whether a Special Permit is needed for the specific use sought, all uses other than one-family or two-family dwellings will require a Project of Significant Impact (“PSI”) Special Permit from the Planning Board if involving newly constructed floor area of 10,000 or more square feet in area. Projects issued a PSI Special Permit would then be required to receive Site Plan approval from the Zoning Board of Appeals (with recommendations from the Design Review Board, Planning Board, and other Town departments and boards). Projects with less than 10,000 square feet of newly constructed floor area, but more than 2,500 square feet of newly constructed floor area, or involving grading/regrading and removal/disturbance of vegetation over an area of 5,000 or more square feet would constitute a Major Construction Project, requiring Site Plan review by the Zoning Board of Appeals. Additionally, as discussed above, development of uses triggering these reviews would require the review and issuance of a Water Supply Protection District Special Permit from the Zoning Board of Appeals.

Reviews and permits required for municipal uses vary based on the type of use. Schools and their associated accessory uses would be allowed by-right, without the issuance of a Special Permit for the use; however, PSI and Water Supply Protection District Special Permits would likely be required, as well as Site Plan approval. Other municipal uses, which would include recreational facilities such as fields, are covered under the allowance of, by Special Permit, “municipally owned or operated public parking lot or other public use.” The Special Permit for the use would need to be reviewed and issued by the Zoning Board of Appeals, following issuance of any required PSI Special Permit, and generally considered in conjunction with the ZBA’s review of the Site Plan and any other special permits. Consideration should be given to whether recreational facilities accessory to a municipal school use, used for non-school events, requires the issuance of a Special Permit for such non-school use of the facilities.

Affordable housing developed by the Wellesley Housing Development Corporation, not intended to be Town-owned, would need to consist of one-family dwellings. These dwellings could be developed similar to privately developed residential uses discussed above.

Development under a Comprehensive Permit/40B

Sections 20-23 of Chapter 40B of the Massachusetts General Laws allows a developer to qualify for waivers of local zoning and permitting rules if the developer's proposed project constitutes "low or moderate income housing", which means housing subsidized under any state or federal government program. A 40B proposal would be reviewed by the Zoning Board of Appeals (other than the submittal of a recommendation, the Planning Board has no jurisdiction), who may issue a "comprehensive permit", which covers all local permitting requirements, including necessary zoning relief. If the Zoning Board of Appeals were to deny a comprehensive permit, since the Town's housing stock is less than 10% affordable (currently approximately 6%), the applicant could appeal the denial to the Commonwealth's Housing Appeals Committee. The Housing Appeals Committee generally reverses such denials, absent compelling health and safety reasons for the denial or unless the project constitutes a "large project." A large project, as it pertains to Wellesley, would consist of more than 300 units, and given the uncertainty a developer would have to contend with in order to undertake a large project, it might be expected that a 40B proposal would not exceed 300 units.

Existing 40B projects in Wellesley include Hastings Village on Hastings Street with 52 units, Ardmore Apartments on Cedar Street with 36 units; Waterstone at Wellesley qualifies under 40B with 135 units, Edgemoor Circle Condominiums, and Glen Grove Apartments with 120 units.

Context of the Comprehensive Plan; Consideration of Alternative Development Proposals

In order to consider alternative development proposals for the site, which may include rezoning and possibly rezoning in conjunction with amendments to the Zoning Bylaw, it is necessary to review the 2007-2017 Comprehensive Plan as it applies to the site. While there are several policies and recommendations that could relate to the specific type of development of the site (i.e. housing, municipal uses, etc.), there are generally two over-arching policies or recommendation that guide the anticipated, if not desired use of the site; these are as follows:

1. The "10 key Comprehensive Plan recommendations that can shape Wellesley's future", identify the site (and other similar properties) and note that based on the site's size, "mandatory cluster zoning for the few remaining large open space parcels that lack conservation restrictions" should be considered. This recommendation was essentially implemented and is applicable to the subject site through the Natural Resources Protection Development bylaw.
2. The land use recommendations for future land use indicate that the use of the site should be "Colleges and Schools" with identification that the Town "Consider Mandatory Cluster Zoning."
3. Based on the above, it is difficult to contemplate or support alternative uses for the site other than those identified in the Comprehensive Plan. Should uses or development other than those identified in the Comprehensive Plan be sought, it is recommended that a thorough planning study (or revision of the Comprehensive Plan) be conducted to determine the appropriateness of such development.

4. INVENTORY OF TOWN ASSETS AND IDENTIFICATION OF NEEDS

The North 40 Steering Committee asked each representative to prepare a report outlining whether the existing municipal land holdings and municipal facilities meet the existing and future service demands of the various departments and how acquisition of the North 40 parcel may assist in improving programming and services. Below is a brief summary of the identification of needs from the various departments.

Recreation

Based on the number of current sports, leagues, and participants and playing seasons for field sports in Wellesley, the Playing Fields Task Force has estimated that three additional full size rectangular multipurpose, synthetic turf fields are needed to alleviate the existing shortage. They have also surmised that lighting the fields could reduce the need from three to two fields. The additional fields would meet the immediate demand, reduce scheduling conflicts, reduce grass field overuse and eliminate the dependency on the Elm Bank Reservation fields. Adding a “bubble” to one or more of the fields would create additional capacity to utilize the fields for indoor sports during the winter. The PFTF full report can be found in Appendix A.

Natural Resources Commission

The Natural Resources Commission analyzed the percentage of Wellesley’s open space in relation to the Town’s comparable communities including Natick, Needham, and Newton and found that Wellesley has the lowest percentage of protected open space at 40% of the 2,168 acres of open space. The NRC’s analysis concluded that Wellesley needs to not only preserve its open space, but needs to aggressively acquire more open space to protect against private conversion of the considerable (60% of existing 2,168 acres of open space) private, unprotected space. The NRC recommended acquiring the entire site for open space and recreation. The NRC full report can be found in Appendix B.

Schools

The School Committee prepared a report analyzing the impacts of private development on the site relative to school enrollment. In addition, the School Committee considered whether acquisition of the North 40 could be used as a green site for school building to assist in the renovation or new construction of one or more of the Hardy, Hunnewell, and Upham elementary schools. The School Committee’s full report can be found in Appendix C.

Affordable Housing

The Wellesley Housing Development Corporation (WHDC) goals are to promote the creation of housing options for a range of income, age, family size and needs, other than single-family homes; and to promote affordable housing to households with incomes at or below 80 percent of the area median income. The Town is currently at 6.16% of the State’s goal of 10% for affordable housing. Should the Town choose to not acquire the site, or fail to acquire the site it could be susceptible to a 40B development. Should the Town acquire the site, the WHDC supports the limited development of a mix of both market and affordable housing on a portion of the site in a “cluster type” development. The WHDC’s full report can be found in Appendix D.

DPW

The Department of Public Works developed preliminary estimates for various build out scenarios of the North 40. With exception of leaving the site as conservation land, other developments would generate additional costs to the DPW for maintenance. The DPW's full report can be found in Appendix E.

Neighborhood

The Woodlands and Weston Road Neighborhood Representatives conducted a survey of each of the respective neighborhoods in late June, early July timeframe. The results of their findings were presented at the July 8, 2014 meeting of the Committee. The surveys identified the neighbors concerns with potential development and if developed, identification of uses both desirable and undesirable to the neighborhoods. Separate surveys were conducted for both neighborhoods, but the results were comparable.

The identified concerns of any development of the North 40 were the integrity of the neighborhood (Woodlands), traffic, loss of forest-land, and the loss of the community gardens. The Woodland Neighborhood 's top concern is the impact new construction along Turner would have in terms of opening the neighborhood to increased traffic and a lower quality-of-life.

Both surveys indicated the most desirable uses were to maintain the site as open space with the preservation of the land, community gardens, dog-walking areas, playground, and athletic fields. The least desired uses were residential housing, including both market and affordable housing. The complete surveys of both neighborhoods can be found in Appendix F.

5. IMPACT OF DEVELOPMENT FOR NON-MUNICIPAL PURPOSES

If the North 40 is sold to a private developer, it has been estimated that 70-93 single family homes can be constructed on the site through the use of subdivision control, and up to 300 units under a Comprehensive Permit (40B) that is not classified as a “large project”. Under the Town’s permitting procedures for a Project of Significant Impact or subdivision control, the impacts of a development project must be mitigated both on and off site. This section will discuss a limited list (given significant variation dependent upon development) of identified impacts should the site be purchased by a private developer for non-municipal development.

Traffic

Traffic volume and delays along Weston Road have long been a concern for residents and the Town. As part of the North 40 Committee’s review of the site, a preliminary assessment of the existing traffic conditions was conducted in efforts to creatively evaluate whether it is possible to divert traffic to alleviate congestion.

Beta Engineering, the Town’s traffic consultant, noted the intersection of Weston Road at Central Street (135) has a volume capacity of 1800 vehicles during the morning and afternoon peak hours. For this intersection, the morning peak hour is between 7:30 am to 8:30 am, and the afternoon peak hour is between 4:30 pm - 5:30 pm. Traffic data indicates approximately 2300 cars are traveling through the intersection during these peak hours, exceeding the volume capacity by approximately 500 cars. As a result of the demand, queues for the Weston Road/Central Street intersection can extend during these times approximately 1200 feet back from the intersection along Weston Road. This is an existing site condition, and should additional uses be added to the site, the circulation pattern and vehicle trips would be additive to the existing traffic volumes.

Schools

Should the site be developed for residential construction, age restricted homes would have a less intensive impact to the schools, but some additional students would be added by existing residents selling their single family homes elsewhere in Town to live in the new complex. Based on sales trends for the past 4 years, a new subdivision of 100 units without age restrictions is anticipated to increase the enrollment in the Wellesley schools is by approximately 70 students at a cost per year of \$1,200,430. Of the 70 students, over 60% are anticipated to be within grades K-5 within the existing Hardy School district which is currently at/over capacity.

A 40B project, as described in Chapter 3, could allow for a project of 300 units on the site. Should a non-age restricted 300 unit housing development be constructed on site, the student/household multiplier indicates over 250 students would be added to the current enrollment with a cost of per year of \$4,321,548. Of these 250 students, over 50% are estimated to be in grades K-5 which would necessitate the addition of a new elementary school given existing enrollment and facility capacity limits.

Open Space

The Natural Resources Commission strongly supports acquisition of the North 40.

The NRC’s report to the North 40 Steering Committee stated there are 2,168 acres of open space in Wellesley. Of this open space, 866 acres is Town land that is protected. These lands include parkland, playing fields, playgrounds, the Cochituate Aqueduct, and the RDF. An additional 1,302 acres are considered private open space. These 1,302 acres include State and Federally owned lands such as Mass Bay Community College, the Sudbury Aqueduct, and the National Guard Armory; land trusts; educational institutions and

cemeteries; lands that benefit from tax relief such as lands under conservation easements/restrictions and golf courses.

Wellesley's per capita of protected open space is currently at 0.031, or 1,350 square feet per person. The acquisition of the North 40 would increase our per capita protected open space by 87 square feet, to 1,437 square feet per person.

The sale of the North 40 for private development would decrease open space, with minimal opportunities remaining in Wellesley to acquire land holdings of this size in the future. The loss would also strain protected open space and remaining natural resources.

Recreation

The Playing Fields Task Force (PFTF) analyzed the rise in the participation in Town sport programs with the impact on the limited number of fields present in Town. They found that over the years the number of sports activities and participants has grown in Wellesley while the number of athletic fields available to support activities has remained the same. In particular, participation in two of the four major sports that require rectangular fields has grown meaningfully over the past six years with youth soccer and youth lacrosse combined adding over 40 new teams. Private development of family housing could have a considerable impact on participation in youth sports exacerbating the existing shortage of playing fields, indoor basketball court space, tennis courts, and available ice time in the region for hockey and figure skating.

Department of Public Works

The DPW notes if the site is developed under subdivision control, 40B, or rezoning, the Town's permitting process would mandate the access, upgrade, and/or maintenance of the Town's infrastructure improvements be paid for and installed by the developer. The infrastructure included in this analysis is roads and sidewalks, water, sewer, stormwater drainage, and electric. The cost to the DPW to improve the infrastructure for private development is minimal. Once a project is constructed, the maintenance activities generated from the site would be an operating cost for the DPW. Maintenance includes for example, road repairs, catch basin cleaning, street sweeping, debris clean up, plowing, and hydrant flushing on public ways and sidewalks. Estimated current annual costs for 100 single family homes is \$213,000 and for a 300 unit 40B housing development is \$240,000.

The North 40 site is outside the Zone II Wellhead Protection District for the Town wells; however, the majority of the site is within the Zone II Wellhead Protection District for the Wellesley College wells. Development of the site, whether private or municipal, should take into account the watershed as part of the Wellesley Water Supply Protection Bylaw to insure the Town and Wellesley College drinking water is protected.

Neighborhood

Private development of the North 40 into single family residential units or multi-family residential units is found by the Neighborhood representatives to have a substantial impact on both the Woodlands and Weston Road neighborhoods. The concerns range from traffic impacts from increased vehicle volumes, additional curb cuts, and direct access to the neighborhoods to loss of the community gardens, loss of open space, impact to habitat, additional noise and lighting. The neighbors were concerned over the impact a dense development could have on the water supply, particularly the Wellesley College wellhead protection zone and the Town wells just west of the site. Additionally, dense development is a concern for significant tree removal and grading would be required to make the site suitable for building.

Affordable Housing

Private development of the North 40 into single family residential units or multi-family residential units has positive impacts to the Town's goal of attaining 10% affordable housing. Under the Town's Inclusionary Zoning Bylaw any subdivision of land that creates 5 or more lots is required to have 20% of the units qualify on the Town's Subsidized Housing Inventory as "assisted units". "Assisted units are dwelling units which qualify for enumeration under Chapter 40B, which are at 80% or less of the median income as determined by HUD.

Should a 40B project of any size be approved for the site (rental or ownership), the law requires 25% of the project to meet the 80% of median income affordability threshold.

From an affordable housing aspect, both by right and 40B options yield assisted units in the range of 20-25%. Below are the 2013 income limits, as determined by HUD, for individuals and families to qualify for Chapter 40B moderate to low income housing opportunities.

Table 4. 2013 HUD Income Limits for Town of Wellesley

Wellesley town, Massachusetts										
FY 2013 Income Limit Area	Median Income Click Here	FY 2013 Income Limit Category	1 Person	2 Person	3 Person	4 Person	5 Person	6 Person	7 Person	8 Person
Wellesley town	\$94,400	Very Low (50%) Income Limits Click Here	\$33,050	\$37,800	\$42,500	\$47,200	\$51,000	\$54,800	\$58,550	\$62,350
		Extremely Low (30%) Income Limits Click Here	\$19,850	\$22,650	\$25,500	\$28,300	\$30,600	\$32,850	\$35,100	\$37,400
		Low (80%) Income Limits Click Here	\$47,150	\$53,900	\$60,650	\$67,350	\$72,750	\$78,150	\$83,550	\$88,950

6. POTENTIAL UTILIZATION FOR TOWN NEEDS AND ASSOCIATED IMPACTS

Open Space

Passive Recreation

The NRC found residents already heavily use the area for passive recreation. The land hosts walking and running trails, bike paths, natural play areas for children, and community gardens. The land connects the Crosstown Trail, sits atop a wellhead protection zone, and provides valuable wildlife habitat, including a vernal pool. These reasons for acquisition, and more, are illustrated in the NRC Report Appendix 1, “The Heart of a Neighborhood” found in Appendix B

Associated Impacts

The NRC advocates retaining as parkland as much of the North 40 as possible. This would not impact traffic, have minimal maintenance cost, and keep the land as a valuable community open space asset. Acquiring the 46 acres as protected open space would raise Wellesley’s protected open space totals from 40% to 42%.

Active Recreation

The NRC suggested, as a possible active recreational use, the addition of sport playing fields, a natural playground for active play and educational purposes, and expanded bike paths in lieu of biking on Weston Road.

Associate Impacts

See “Recreation,” below.

Housing

The Wellesley Housing Development Corporation (WHDC) finds the Town has an identified need for affordable housing that qualifies under the Department of Housing and Community Development. The DHCD regulations include pricing (sale and rental) to accommodate a person making 50-80% of the median income of the Boston Metropolitan Statistical Area (MSA). The Town currently has 6.1% of the mandatory 10% affordable housing, leaving the Town open to hostile 40Bs and reducing the number of individuals and families in need that can benefit from affordable homes and affordable rental units in Wellesley. The WHDC also identified a need for workforce housing which allows for pricing (rental and ownership) up to 110% of the median income of the Boston MSA. Workforce housing would not qualify towards the Town’s 10% affordability goal, but is seen as a positive endeavor to assist a segment of the Wellesley population.

The WHDC finds the North 40 location to be favorable to affordable housing given the proximity to the MBTA Commuter Rail, Wellesley Square, schools, supermarket, religious and cultural institutions. The Metrowest Regional Transit Authority Route 8 also travels down the Weston Road corridor allowing for public transportation options to connect the site the commercial districts, Commuter Rail, and the Woodlands T station.

Associated Impacts

The impacts of housing will depend on the number and type of units generated. WHDC would suggest a “cluster development” to maximize the open space of the entire site as well as minimize the project’s footprint. Initial suggestions on unit types would include a mix of both market rate and affordable units. This would allow for a sufficient income stream to finance the entire housing portion of the project. As discussed in Chapter 5, an increase in residential development has a myriad of impacts. A moderate number of age-restricted units will not have a significant impact on traffic or schools, but would require additional curb cuts,

roadwork, and may have aesthetic impacts. Family housing would have a greater impact on traffic and potential impact on schools. The type of unit (First Time Buyer, Over 55, for sale /for rent) and the unit mix and density would be determined as the scoping and visioning process is further defined.

Schools

In the School Committee's report to the North 40 Steering Committee, they indicated there is value in the Town acquiring the North 40. The Town's School Facilities Committee hired the consulting firm SMMA to study and evaluate all of the School Department buildings and found that Hardy, Hunnewell, and Upham will require significant renovations or replacement over the next 5-7 years. If the North 40 site was available, and the land or a portion thereof was found suitable, with a reasonable traffic plan it could be a location for a new consolidated elementary school. SMMA estimated that in order to construct the school, associated open space, and parking, approximately 10-12 acres of land is necessary with the remainder of the site available for alternative uses. A new school is estimated to cost approximately \$45 million, which is comparable to the cost likely to be incurred for renovation and remodeling of one or more of the existing school sites in the next 5-7 years. The School Committees full report can be found in Appendix C.

Associated Impacts

The Weston Road corridor is home to an existing elementary school. If a new school housed the same number of students or a minor increase in student population, additional traffic impacts would be minimal. A new 4 to 5 section school, which would consolidate 2 or 3 schools, would generate approximately 250 additional vehicle trips during the school pick up and drop off period. The site would better accommodate stacking and queuing and would facilitate an improved pickup/drop off.

Recreation

Use of the Town's playing fields is not solely limited to the youth sport population. In addition to the regularly scheduled practices and games of the youth and school sports, there are a number of groups who pay user fees, including recreation, youth sports and other third parties that host a variety of camps, clinics and games on the playing fields throughout the year on a space available basis. The lack of available field time reduces the ability to add programs that require rectangular fields. The Recreation Commission would like to create after school programs (e.g. flag football) that are in proximity to the middle school, that require the use of rectangular fields, but is unable to do so due to the lack of field availability. Increased field capacity would allow for an increase in programming. Further, the current shortage of adequate rectangular athletic field space necessitates Wellesley United Soccer Club to lease fields at Elm Bank Reservation to accommodate all of their teams. Elm Bank is owned by the State, and there is no long term guarantee that Elm Bank will continue to be available for use in the future.

The Recreation Commission also considered other potential Town Facilities including the need for indoor basketball courts. The Recreation Commission reported that in the past 5 years the participation in various basketball programs has grown from 630 players to 1185 players, and the required court time has increased from 107 hours a week to 179 hours a week. The Town School facilities serve a large portion of the hours; however, court time has been rented at Dana Hall, the Warren Building, and out of town venues to make up for the increase in hours.

A Town Pool and Ice Rink are under considerable study in anticipation of being located at 900 Worcester Street. This report does not account for those uses, but should the Town only acquire the North 40, those uses would also be considered for this site.

Associated Impacts

The creation of playing fields and/or the potential construction of recreational facilities have positive impacts with the generation of revenue from fee paying groups. Additional field space allows for a potential reduction in traffic given the potential to distribute users geographically throughout Town at various times. Field space is currently centralized at Hunnewell Field and Sprague Field.

Negative impacts of playing fields include the potential for lights and noise. Should playing fields be constructed on the site, the Town would work closely with neighbors and user groups to find the best design to reduce potential impacts, as was done with the Sprague Field project.

Trails

The Trails Committee, a subsidiary of the NRC, is in support of acquisition of the land. The Trails Committee's preference is to keep the land in its current condition, and to not alter the landscape. The Trails Committee prefers total preservation of the land, but recognizes that may not be possible. They encouraged the Town, should the site be acquired and later developed, to retain at least 50% of the site as contiguous protected open space. The Trails Committee's full memorandum to the North 40 Steering Committee can be found in Appendix G.

Associated Impacts

There are no associated impacts with the Trails Committee proposal.

Project Maintenance Costs

The DPW has estimated potential maintenance costs for various municipal projects, which are substantially within the \$200,000-\$225,000 range for active and passive recreation and/or a school. Upgrades to the Town's infrastructure to accommodate new uses would be part of the permitting of the site and are always calculated into the Design and Permitting costs presented at Town Meeting.

An active recreation site would require field maintenance, mowing, seeding, weeding, grooming, and site amenity maintenance. Schools similarly would have the same requirements plus plowing, catch basin cleaning, debris clean up and street sweeping.

Table 3. DPW Projected Maintenance Costs

Scenario	Tax Impact	Water/Sewer Impact	Additional F/T Staff	Additional P/T Staff
Conservation	\$14,000	\$0	0	0
Passive Recreation	\$187,000	\$1,000	0	0
Active Recreation	\$222,000	\$5,000	1	2
School	\$200,000	\$5,000	0.5	1

Any combination of these uses would yield an aggregate cost of the various scenarios. As an example, a school with a field would have a DPW cost of \$422,000 per year. For the complete DPW memo see Appendix E.

7. OTHER FACTORS

Vision

A separate report will be submitted on the findings of the visioning exercise; however, a brief summary of the scope of work is provided. The consultants were asked to review previous plans and reports submitted by the North 40 Committee representatives and plans on file. They were asked to develop an inventory of existing site conditions and through a public process determine potential viable uses for the site. The public process included a series of “Visioning Workshops”. The Visioning Workshops were divided into three main areas of focus: town officials and staff, neighborhoods, and town-wide.

An internal workshop held on August 13, 2014 brought together elected and appointed officials and management level Town staff. The intent of this session was for elected officials and staff, who oversee the town finances, planning, maintenance, public safety and other elements of Town government to verify the facts and mapping developed by the consultants and to weigh in on opportunities and constraints as seen from their respective department.




























































The second workshop for the neighborhood was conducted on September 7, 2014. This workshop invited residents living in the Woodlands and Weston Road neighborhoods and asked them to evaluate the site conditions and discuss ways in which they currently use and value the North 40 and the surrounding area. The goal of this workshop was to listen to the concerns of the neighbors, and to discuss and brainstorm alternative uses for the site.

Two town-wide workshops were conducted on September 14, 2014. These workshops included a presentation on the existing site conditions, the environmental analysis, and a brainstorming session. The workshops had participants break into small groups with plans of the site. Participants were asked to consider potential uses for the site and were given stickers with various open spaces, community, and housing uses listed. The results had considerable variation, but there was general consensus that the Town should acquire the North 40 and retain a portion of the site as open space. Several of the groups also proposed including a range of housing and recreational uses on the site.

Below is an example of the Open Space findings from the town-wide workshops.

Image 5. Sample of Vision Workshop Matrix

I. Open Space Uses

		Session 1					Session 2					Students
Use		Table 1	Table 2	Table 3	Table 4	Table 5	Table 1	Table 2	Table 3	Table 4	Table 5	
	Community Farm											
	Community Garden											
	Wildlife Habitat											
	Hiking Trails											
	Picnic Area											
	Playground											
	Visitor Parking											
	Fenced Dog Park											

Please see the Vision Report due October 17, 2014 for a complete list of findings.

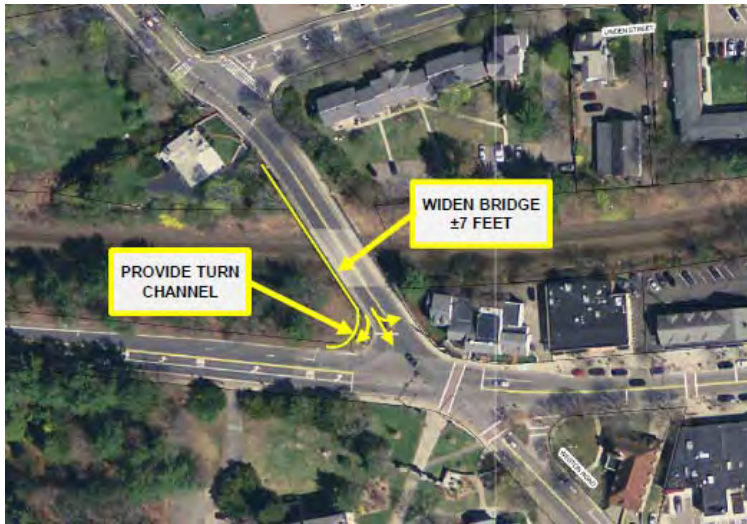
Traffic

The existing traffic conditions along the Weston Road corridor are described above. To improve the intersection of Weston Road at Central Street, already at capacity, Beta considered 6 alternatives to divert the 500 additional cars during the peak hours.

Alternative 1. proposed to create a dedicated right turn only lane on the south bound approach to Central Street to facilitate the movement of approximately 250 cars during the morning and afternoon peak. The existing width of the bridge (33') could not accommodate a new right turn only lane, and the bridge would require widening by approximately 7 feet.

Alternative 2. proposed to fully signalize Linden Street at Weston Road. This alternative would allow for gaps in the traffic flow, for cars traveling southbound along Weston Road, to turn onto Linden Street and not delay the traffic continuing to Weston Road. The analysis for alternative 2 shows an improvement to Linden Street, but only a small benefit to Weston Road.

Alternative 1.0



Alternative 2.0



Alternative 3. proposed to extend Linden Street at the existing signal and to connect via a bridge to Central Street (135). The benefits of this connection would be the ability to divert the cars that would take a right at Weston Road to head west on Central Street towards Natick, as well as providing an opportunity for cars heading east on Central Street to take a right in advance of the Central/Weston intersection.

Alternative 4. proposed creating a signal at Curve Street to divert traffic through the North 40 to Central Street. This proposal would create two new signals (Curve and Central). In addition to diverting the westbound traffic at the Weston/Central intersection, this proposal has an optional connector road to facilitate a four way intersection at Linden Street. The disadvantage to this proposal is the likely increase of cut through traffic on Curve Street and the increased number of traffic lights.

Alternative 3.0



Alternative 4.0



Alternative 5 and 5B. continues with the need for a bridge, but aligns the bridge with the existing signal at the Wellesley College entrance on Central Street (135) to reduce the number of signals. The variation from 5A and 5B is that 5A would have a connection to Turner Road, where it is eliminated in 5B. Beta found that from a pure traffic management analysis option 5A is the optimal design alternative.

Alternative 5.A

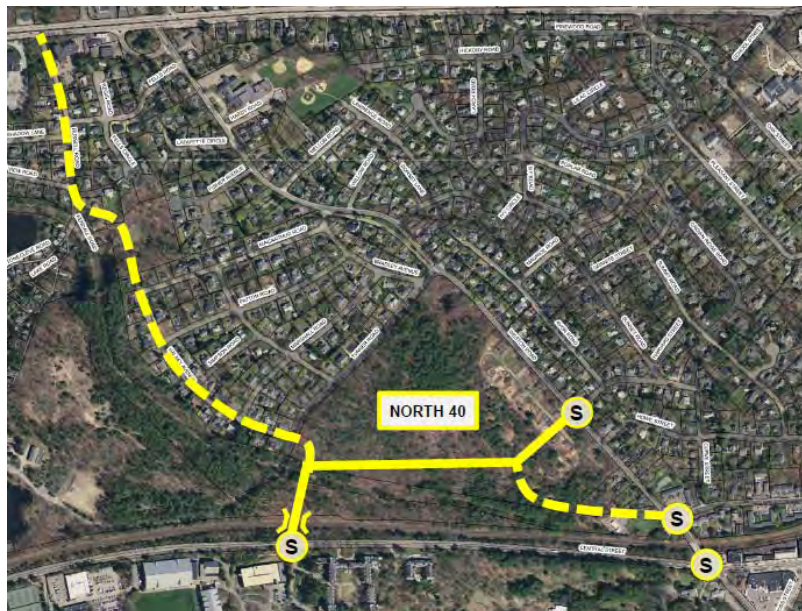


Alternative 5.B



Alternative 6. Proposes to modify Alternative 5A and to make a further connection to Route 9 via Halsey Avenue to Russell Road. This proposal has the greatest impact on takings, with the smallest cost benefit to improving traffic.

Alternative 6.0



The majority of the proposed alternatives include the installation of a bridge to allow vehicles to cross the MBTA Commuter tracks to access Central Street. In considering the ability to actually construct such a structure, cost and negotiations with Mass Highway and MBTA are both limiting factors. Beta's preliminary cost estimates range from \$1.5M for alternatives 1 and 2 up to \$5.5M for alternatives 5A and 5B.

Weston Road in 2010 was found to have approximately 16,000 vehicles trips a day, new counts conducted from September 15, 2014 to September 20, 2014 revealed that the Average Daily Traffic on Weston Road is approximately 15,500 vehicles per day. The new data concurs with past efforts that the intersection of Weston Road and Central Street operates with Level of Service (LOS) F with long queues on Weston Road and Central Street. The intersection at Weston and Central continues to operate over capacity with approximately 500 vehicles during the AM and PM peak hours. Beta's complete Draft Report can be found in Appendix K.

Landfill

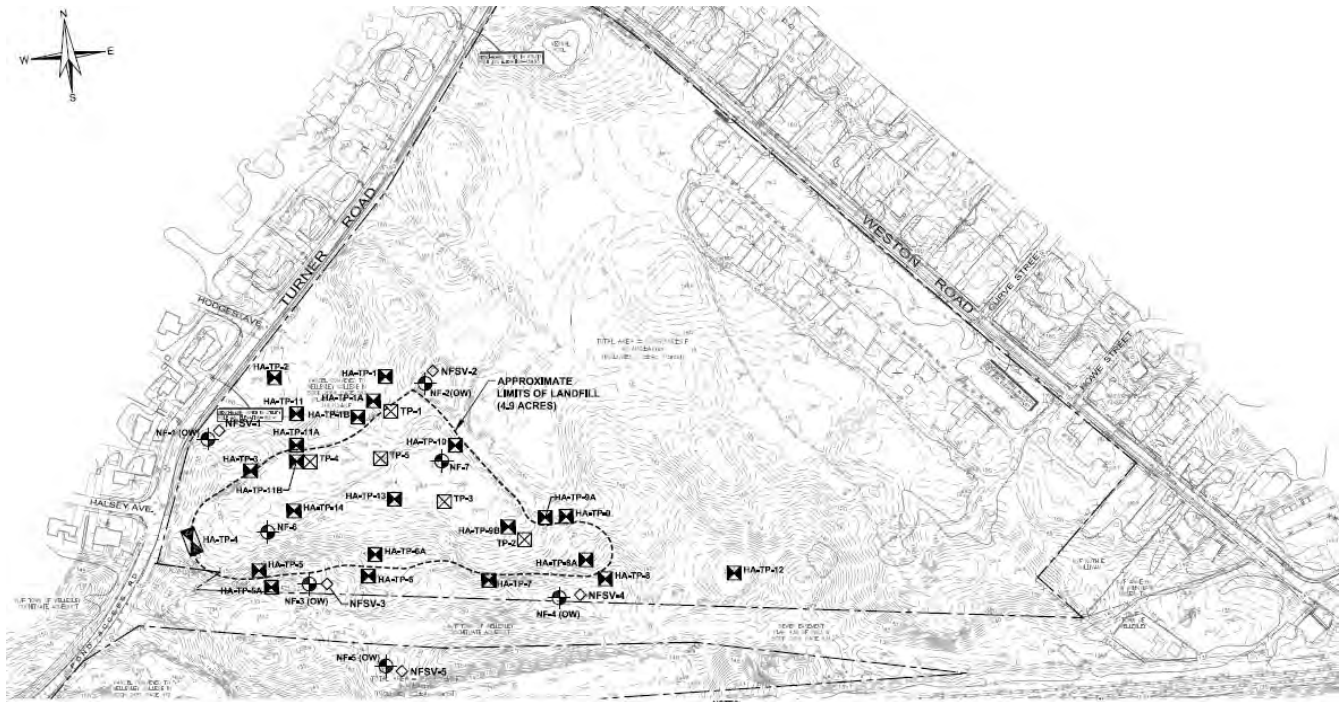
As noted previously, the Town leased land from the College from 1955-1960 for the use of a sanitary land fill. The College hired Haley and Aldrich, an environmental consulting company to evaluate the environmental conditions of the landfill and herein is a summary of their findings. The full Haley and Aldrich Summary can be found in Appendix H and the Phase I environmental report can be found online at www.wellesleyma.gov/north40. In addition to the landfill, a former pump house structure was located south of the Cochituate Aqueduct and north of the railroad tracks, and was possibly related to the former transport of oil to Wellesley College's main campus. Haley and Aldrich investigated this site for contamination as well.

Haley and Aldrich (HA) conducted subsurface investigations including 14 test pits around the perimeter and within the center of the former landfill. HA conducted 2 deep soil borings with the center of the landfill, and 5 soil boring/groundwater monitoring wells and 5 co-located soil vapor monitoring points outside the perimeter of the landfill. The investigations revealed that the former Town landfill "was significantly smaller than previously believed, was used primarily for the disposal of ordinary municipal solid waste, and has resulted in contaminant conditions that are remarkably benign relative to what typically is found in and around former municipal landfills."

The test results found the landfill is contained to approximately 4.9 acres of the site with waste found at depths ranging from 7.5 ft to 29 ft below ground surface. Results of testing found elevated levels of semi-volatile and volatile organic compounds above reportable concentrations established in the Massachusetts Contingency Plan (MCP). A polychlorinated biphenyl compound (PCB) was detected above its reportable concentration in one location. This finding will require a 120 day notice to the Department of Environmental Protection (DEP).

The groundwater testing found an elevated level of arsenic in one monitoring well located down gradient of the landfill. This one result was above the MCP reportable concentration for arsenic, and is also subject to the 120-day reporting rule.

Methane gas, a typical landfill-producing gas, was detected in two test pits at low levels, but was not detected in other test pits. The site investigation did not identify any evidence of petroleum or other contamination at a former pump house facility located south of the aqueduct.

Image 6. Delineated Landfill Area

8. RECOMMENDATION

The North 40 Steering Committee unanimously recommends the Board of Selectmen acquire the North 40 for municipal purposes. The Committee has three core findings in making this recommendation: the site for over 130 years has been utilized as a Town asset and failure to acquire the site would be a loss for Wellesley residents; the site's size and location as exhibited in this report can serve a variety of municipal needs; and third party development of the site may severely impact the Town's infrastructure with regards to traffic and elementary school student population.

In review of the Committee's Charge, comments addressing the findings of their investigation and analysis of the site, largely addressed elsewhere in the report, are summarized below and are the basis for the favorable recommendation.

1. Whether the ability to develop/locate municipal uses on the property satisfies an existing identified need.

The Committee is in agreement that this process has identified a wide variety of potential uses for the site and that a clear consensus, other than in support of acquisition, has not been reached on those uses suitable for the site. Chapter 4 Inventory of Town Assets and Identification of Needs explicitly identify open space, recreation, affordable housing, schools, neighborhood preferences, and trail amenities needed and desired in Town. In addition to recommending acquisition, the Committee recommends a thorough site development study be prepared with an evaluation of the impact the acquisition would have on Town-wide municipal assets.

2. Whether the site is appropriate for the location of municipal uses, and if so, what uses should be considered to be located on the site.

As identified throughout the report, the Committee has identified various open space, recreation, affordable housing, and school uses for the site. The Community Preservation Committee Representative finds the open space, recreation, and affordable housing uses qualify for CPA funding. The Neighborhood Representatives find the Town must buy the site to control the future development of the site. The Neighborhoods are supportive of passive open space uses on the site which will have the lowest traffic impact on the surrounding area, but have not precluded the potential for additional uses. The Planning Board finds acquisition of the site for any of the identified uses falls within the parameters of the Comprehensive Plan. The Committee is divided on conservancy and development potential, but is united in Town acquisition of the North 40.

3. If the Committee determines it is appropriate to relocate and/or consolidate existing uses on the site, whether vacated sites should be repurposed for other municipal purposes or monetized to offset short term and long term costs of the acquisition and/or development of the property. This evaluation should be conducted on a town-wide scale.

The North 40 Steering Committee focused efforts on the main question of acquisition and did not focus on whether other Town assets would be repurposed, sold, or leased. As noted above, the Committee recommends the next phase of study seek to evaluate potential uses on the North 40 in conjunction with performing a detailed analysis of Town assets to determine the best course of action for asset management and enhancement.

4. If the Committee determines it is appropriate to relocate and/or consolidate existing uses on the site what will be the municipal systems impacts (traffic, water, sewer, stormwater, etc) and the potential neighborhood impacts relative to project appearance, access, noise, traffic, parking, lighting, landscape buffers, screening, etc. for the various uses proposed.

The North 40 Committee finds development of the site would likely increase traffic, but would not have significant impact on water, sewer, electric or stormwater infrastructure. Any development on the site will need significant buffers to minimize impacts to the neighbors, and all efforts will need to be made to reduce noise and lighting associated with any development of the site. Large residential projects would have a significant impact on student enrollment during a time when the elementary schools, particularly the Hardy District where the North 40 lies, is at capacity. The neighbors are concerned about the described impacts, but additionally raise significant concern with the environmental implications of development on the site's habitat, Wellesley College Wellhead Protection Zone, the Town Wells, potential cost, impact, and neighborhood disturbance with any remediation of the landfill, and the increased carbon footprint associated with development of the site.

5. Whether the relocation and/or consolidation of existing uses to the site would have an impact on Town assets including maintenance costs and responsibilities.

As noted in #3 above the Committee determined the best course of study was to answer whether the North 40 should be acquired for municipal purposes and to inventory the needs of the Town departments and organizations. The ripple effect of relocating uses on the North 40, or on other Town assets was not contemplated or considered. That being said, the Recreation Report indicates the construction of additional rectangular playing fields on the North 40 may reduce the maintenance cost of the Town's existing fields given the ability to rest grass fields as appropriate.

6. Whether municipal uses in planning stages are better located on the subject property.

The North 40 Committee did not evaluate municipal uses in planning stages.

7. Whether there are any environmental issues on the property which may negatively impact the Town's ownership and development of the property.

The former Town landfill on the site has been evaluated by Haley and Aldrich and a brief summary of those findings has been received and reviewed by the Town and the North 40 Committee. Additional study of the landfill is needed to determine the necessary remediation and as additional information on the landfill is available, the Town will need to determine how the landfill will be capped or improved. The Committee did not find the presence of the landfill to be a deterrent for acquisition.

The only other regulated environmental issue identified on site is the vernal pool located on the north tip of the site at Turner Road and Weston Road. Given the large acreage of the site and the location of the vernal pool, the Committee finds the impact on development is minimal.

APPENDIX A – REPORT OF THE RECREATION COMMISSION AND PLAYING FIELDS TASK FORCE

Athletic Fields Needs Analysis

Town of Wellesley, MA

Findings of the Playing Fields Task Force
July 2014

Section 1.	Introduction
Section 2.	Background
Section 3.	Field Usage Analysis
Section 4.	Recommendation

DRAFT

Section 1. Introduction

The North 40 Steering Committee requested that the Playing Fields Task Force (PFTF) provide its perspective on the current status and availability of athletic fields in Wellesley and to make recommendations on current and future needs.

The PFTF surveyed the Wellesley youth sports groups that utilize playing fields (soccer, lacrosse, football, baseball, softball) to develop data on the changes in the number of teams using recreational fields from 2008 to 2014. In addition, we received input from the Wellesley Athletic Director on the number of high school and middle school teams using recreational fields from 2008 to 2014.

Section 2 includes some background on demographic trends, field inventory, scheduling and maintenance. Section 3 provides a high level analysis of field usage trends and our recommendations for future needs are presented in Section 4.

Section 2. Background

Demographic Trends

The population of Wellesley since 1960 has ranged from a low of 26,071 in 1960 to a high of 28,051 in 1970. While there have been fluctuations in the distribution of the age groups over the years the total population has not fluctuated by more than 7.6% over the last 50 years (see table below). However, the number of children participating in certain youth sports that utilize rectangular fields has grown significantly in the last 10 years. For example the youth lacrosse program had 10 teams in 2000, 24 teams in 2008 and 34 teams in 2014, a 240% increase in the number of teams since 2000. In addition, many more children are participating in athletic activities at early ages and several sports have become multi-seasonal in the last decade or so.

Wellesley	1990	2000	% chg	2010	% chg
All Persons	26,615	26,642	0.10%	27,982	5.03%
Under 5 yrs	1,570	1,957	24.65%	1,570	-19.78%
5 - 17 yrs	3,833	4,727	23.32%	5,962	26.13%
18-64 yrs	17,486	16,247	-7.09%	16,585	2.08%
65 yrs and over	3,726	3,711	-0.40%	3,865	4.15%
Source: Bureau of the Census					

Field Development History and Use Characteristics

The last new field to be developed in Wellesley was Tom Lee field in the mid 1990's. While the population has remained relatively stable since that time the number of children in town has grown dramatically (see table above). In addition to, or perhaps as a result of that growth there has been a increase in the number of youth sports teams since then.

Field use is governed chiefly by the type and size of field required for a particular sport and the amount of use that the field can support. For those fields without lights field use is also governed by the amount of daylight and for those with artificial lights, by town imposed limitations on the hours the lights can be operated. Field availability is also governed by the condition of the fields. Periodically weather related issues or intensity of use issues (soil compaction that results in the thinning of the grass) limits the availability of grass fields.

Current Inventory of Athletic Fields and Primary Users

Currently all sports teams (adult, youth and school based) requiring a playing field have access to the following fields in town:

Wellesley Playing Field Inventory				
Name	Owner	Surface	Lights (Y/N)	Primary Users
Fiske School Field	School	Grass	N	Youth Soccer, Youth Baseball
Hardy Field 1	School	Grass	N	Youth Baseball, Youth Soccer
Hardy Field 2	School	Grass	N	Youth Baseball, Youth Soccer
Schofield School Fields	NRC/School	Grass	N	Youth Soccer, Youth Baseball
Sprague School Field 1	School	Grass	N	MS Football, MS Soccer, HS Lacrosse, HS Softball, Youth Soccer, Youth Lacrosse, MS Softball, Youth Softball
Sprague School Field 2	School	Turf	N	HS Lacrosse, HS Soccer, Youth Lacrosse, Youth Soccer, HS Football, MS Football
Sprague School Field 3	School	Turf	N	Youth Soccer, HS Lacrosse, HS Soccer, HS Field Hockey, Youth Lacrosse
Sprague School Field 4	School	Grass	N	Youth Soccer, HS Soccer, HS Lacrosse, Youth Lacrosse, MS Baseball
Sprague School Field 5	School	Grass	N	HS Baseball, MS Field Hockey, MS Soccer, Freshmen Soccer, MS Baseball
Upham School Lower Field	School	Grass	N	Youth Soccer
Upham School Upper Field	School	Grass	N	Youth Baseball
Brown Field	NRC	Grass	N	Youth Baseball
High School Stadium Field and Track	NRC	Grass	N	HS Football, Youth Lacrosse, HS Track, Youth Track
Hunnewell Multipurpose Field	NRC	Grass	Y	Youth Football, Youth Softball, Adult Softball
Hunnewell Park Fields	NRC	Grass	N	HS Field Hockey, HS Soccer, HS Football, HS Baseball, HS Softball, HS Lacrosse, HS Track & Field, HS Cross Country, MS Field Hockey, MS Soccer, MS Track & Field, MS Cross Country, Youth Lacrosse, Youth Soccer
Kelly Field 1 (Bates School)	NRC	Grass	N	Youth Soccer, Youth Baseball
Kelly Field 2 (Bates School)	NRC	Grass	N	Youth Soccer, Youth Baseball
Kelly Field 3 (Bates School)	NRC	Grass	N	Youth Soccer, Youth Baseball
Kelly Field 4 (Bates School)	NRC	Grass	N	Youth Soccer, Youth Baseball
Lee Field	NRC	Grass	N	Youth Softball
Ouellet Field	NRC	Grass	N	Youth Baseball
Perrin Park	NRC	Grass	N	Youth Soccer, Youth Lacrosse
Reidy Field	NRC	Grass	Y	Youth Baseball

These properties have one or more playing fields of varying types including soccer, lacrosse, baseball, softball, field hockey, track & field and/or practice fields (not regulation size fields for competition). Many of the fields, while not necessarily designed to be so, are multi-purpose fields that are used to accommodate multiple sports at different times (or sometimes shared at the same time during peak demand) of the day and year. It should also be noted that several of the fields (Schofield, some of the Hunnewell Park fields and the High School Stadium field) are not ADA compliant.

In addition, due to the existing shortage of adequate rectangular athletic field space in town, Wellesley United Soccer Club (WUSC – youth soccer) leases two fields at Elm Bank Reservation in order to accommodate all of their teams. It should be noted that while WUSC has been able to lease the land at Elm Bank for a number of years, the land is owned by the state and there is no long term guarantee that Elm Bank will continue to be available for use in the future.

Regulation Rectangular Field Size Requirements

High School Soccer Field – 60-80 yds wide by 110-120 yds long

High School Lacrosse Field – 65 yds wide by 120 yds long

High School Field Hockey Field – 60 yds wide by 100 yds long

High School Football Field – 53½ yds wide by 120 yds long

Scheduling

Scheduling and permitting for the fields is handled by the Recreation Department or the School Athletic Department, depending on the field.

In the spring and fall, the largest field users (the Athletic Department, Youth Soccer, Youth Lacrosse and Youth Baseball/Softball) meet to develop a master use schedule for the needs of their respective programs. These schedules are revised as necessary to accommodate unforeseen changes in needs as the season progresses. The school teams always have priority for the playing fields. The high school and middle school sports programs have exclusive use of the Sprague Fields prior to 6:00 pm weekdays, during the school year. This makes it difficult for all the youth sports to get their practices in during the spring and fall due to shorter daylight hours in those seasons. The limited daylight hours and lack of lighted fields means that practices must finish by dusk, thereby necessitating that more fields be available for practices during the relatively short window of daylight after 6:00 pm.

Opportunities to share fields with other sports are consistently evaluated as scheduling takes place. However, such opportunities are limited. For example, it is difficult for youth sports such as soccer and lacrosse to share fields with baseball or softball as the potential for injury due to stray hardballs flying through the fields is too great.

Maintenance

Maintenance of the grass and turf fields is performed by the Department of Public Works Park and Tree Division. Grass field maintenance typically includes mowing, fertilization, irrigation, cultivation, weed control, over seeding, controlling field use, and controlling pests like insects or diseases when necessary. Turf field maintenance primarily involves infill maintenance.

Due to the current level of sports participation and the shortage of available fields, particularly for the youth soccer program, tremendous stress has been put on many of the existing fields from overuse (e.g. high school stadium field, Hunnewell multipurpose field, Sprague Field 1, Sprague Field 4). The high demand for use of these fields makes it difficult to “rest” the fields during ideal growing seasons (fall and spring). This can result in degradation of the surface quality with the development of unstable, loose or uneven areas leading to divots and pot-holes resulting in twisting or trip hazards that could cause injury to the participants.

Section 3. Field Usage Analysis

Over the years the number of sports activities and participants has grown in Wellesley while the number of athletic fields available to support activities has not. In particular, participation in two of the four major sports that require rectangular fields has grown meaningfully over the past six years.

Wellesley Playing Field Usage					
Rectangular Fields					
		#	#		
		Teams	Teams		
	Season	2008	2014	Variance	
Youth Lacrosse	Spring	24	34	10	
Youth Soccer	Spring	160	160	0	
	Fall	130	160	30	
Youth Football	Fall	5	5	0	
School Lacrosse	Spring	6	6	0	
School Field Hockey	Fall	5	5	0	
School Football	Fall	4	4	0	
School Soccer	Fall	9	9	0	
	Total	343	383	40	
Diamond Fields					
Youth Baseball	Summer	18	18	0	
Youth Baseball/Softball	Spring	108	85	(23)	
Youth Baseball	Fall	28	24	(4)	
School Baseball	Spring	4	4	0	
School Softball	Spring	4	4	0	
Adult Coed Softball	Spring/Summer	4	0	(4)	
Mens Slo Pitch Softball	Spring/Summer	8	7	(1)	
	Total	174	142	(32)	
Other Fields					
Youth Track and Field	Summer	0	1	1	
School Track and Field	Spring	4	4	0	
School Cross Country	Fall	4	4	0	
	Total	8	9	1	

NOTE: The baseball/softball team numbers are estimates based on user fees paid in the respective years.

What is not captured by the number of teams is the frequency of practices and games. Youth sports (except for football) tend to have a 2 or 3 day per week event schedule on average (1 or 2 practices and 1 game). The school sports have a 5 day per week schedule. As a result the number of teams does not correlate equally with the amount of field time needed by the respective school and youth sports.

In addition to the regularly scheduled practices and games of the youth and school sports there are a number of groups who pay user fees, including recreation, youth sports and other third parties that host a variety of camps, clinics and games on the playing fields throughout the year on a space available basis. The lack of available field time does have a dampening effect on adding additional programs that require rectangular fields. As an example, recreation would like to create after school programs (e.g. flag football) that are in proximity to the middle school, that require the use of rectangular fields but is unable to do so due to the lack of field availability.

Section 4. Recommendation

In 2007, the town completed a two year project to develop a Town of Wellesley Ten Year Comprehensive Plan. As described in the Open Space and Recreation section of the plan:

“Open space used for active recreational programs totals approximately 225 acres of Town-owned land. Some of this land is attached to schools and includes school playgrounds and playing fields. As is the case in many communities, demand for athletic fields is growing as sports programs increase resulting in the need for expanded fields year-round. The Town has a limited number of fields and good turf management requires that they be “rested” to keep them from being overused.”

The shortage of playing fields and overuse of fields is not new to Wellesley and continues to be an issue today. With the possible purchase of the North 40 the town has an opportunity to address some of the playing field needs.

Based on the number of current sports, leagues, participants and playing seasons for field based sports in Wellesley, the existing shortage of rectangular fields, the limited ability to fully utilize the High School Stadium field due to its condition and the inability to properly “rest” a number of fields which could lead to future harm to those fields, the PFTF has estimated that three additional full size rectangular multipurpose, synthetic turf fields are needed to alleviate the existing shortage. We estimate that lighting the fields would reduce the need from three to two fields. The additional fields would meet the immediate demand, reduce scheduling conflicts, reduce grass field overuse and eliminate the dependency on the Elm Bank Reservation fields. Adding a “bubble” to one or more of the fields would create additional capacity to utilize the fields for indoor sports during the winter.

It should also be noted that the high school track is near the end of its useful life and will need to be replaced within the next few years.

There are several additional considerations that could modify the need for the number of new additional fields:

1. High School Stadium Field – This field is underutilized due to the chronically poor condition of the field. Converting this field to a synthetic turf field would increase the opportunity to optimize the utilization of this field. The addition of lights to this field would increase the number of available field hours, thus reducing the number of new fields needed.
2. Hunnewell Multipurpose Field – This is the only rectangular field with lights in Wellesley. However use of this field is not maximized due to soil compaction issues associated with current levels of use. Converting this field to a synthetic turf field would increase the number of available field hours for this field, thus reducing the number of new fields needed.
3. Sprague Fields Usage – Increasing the number of available field hours for the two synthetic turf fields at Sprague could be achieved with the addition of lights, thus reducing the number of new fields needed.

Youth Basketball has **Doubled** in Past 5 Years with **No** New Courts

Program (hrs/team/wk)	2008 Teams / Players	2013 Teams / Players
Metrowest Travel – 3 hrs / team	8 teams / 80 players 24 hrs / wk	20 teams / 210 players 60 hrs/ wk
Wellesley Hoops (aka CYO) – 1.5 hrs / team	55 teams / 550 players 83 hrs / week	70 teams / 700 players 105 hrs / week
HS League – Warren on Sundays	Did Not Exist	75 HS players 4 hrs / week
Mini-Raiders - 2 nd & 3 rd graders	Did Not Exist	200 players 10 hrs / wk
Change in past 5 years	630 players in 107 hr/week	1185 players in 179 hrs/week

- And WYBA has opportunities to grow especially with the WHS “Intramural” program, summer camps, fall leagues, and tournaments.
- Growth opportunities exist beyond Youth to 3 v 3 tournaments, OTH leagues (men and women), and scheduled pickup.
- Inadequate court space prohibits growth.

WYBA rents courts from Dana Hall (14 hrs), Rivers School (2 hrs), Meadowbrook (12 hrs), Warren Building (4 hrs), WPS the rest (no capacity left)

APPENDIX B. REPORT OF THE NATURAL RESOURCES COMMISSION

TOWN OF WELLESLEY



MASSACHUSETTS

NATURAL RESOURCES COMMISSION

Town Hall, 525 Washington Street, Wellesley, Massachusetts 02482-5992

Heidi K. Gross, Chairman
Stephen Murphy, Vice Chairman
Joan E. Gaughan
Lise Olney
Raina McManus

Telephone: (781) 431-1019, Ext. 2290
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Janet Hartke Bowser, Director
(781) 431-1019 Ext. 2290
Website: www.wellesleyma.gov/NRC

July 22, 2014, Revised September 16, 2014

RE: Wellesley Natural Resources Commission Report on the North 40

To Whom It May Concern:

The following document, prepared for the North Forty Property Steering Committee, represents an analysis of the open spaces in the Town of Wellesley and their per capita use, as compared to the towns of Needham, Natick and the City of Newton.

The data for this document was accumulated by the authors using NRC internal sources and through public information available from the individual towns.

The most important finding in this report: Sixty percent of Wellesley's "open space" is actually privately owned.

If additional information is desired, please contact us.

Heidi Kost-Gross, NRC Chair
Raina McManus, NRC Commissioner and Principal Author

NRC Justification for Town Acquisition and Use of the North 40 Property

Presented to the North 40 Steering Committee July 22, 2014

It is the mission of the NRC to maintain Wellesley's public open spaces and to acquire additional land when opportunities arise.

Wellesley College officials recently informed the Town that the land known as the North 40 would be put on the market for sale. This 46-acre parcel more than meets NRC land acquisition goals, as outlined in the **NRC Criteria for Open Space Acquisition**, which is attached to this report.

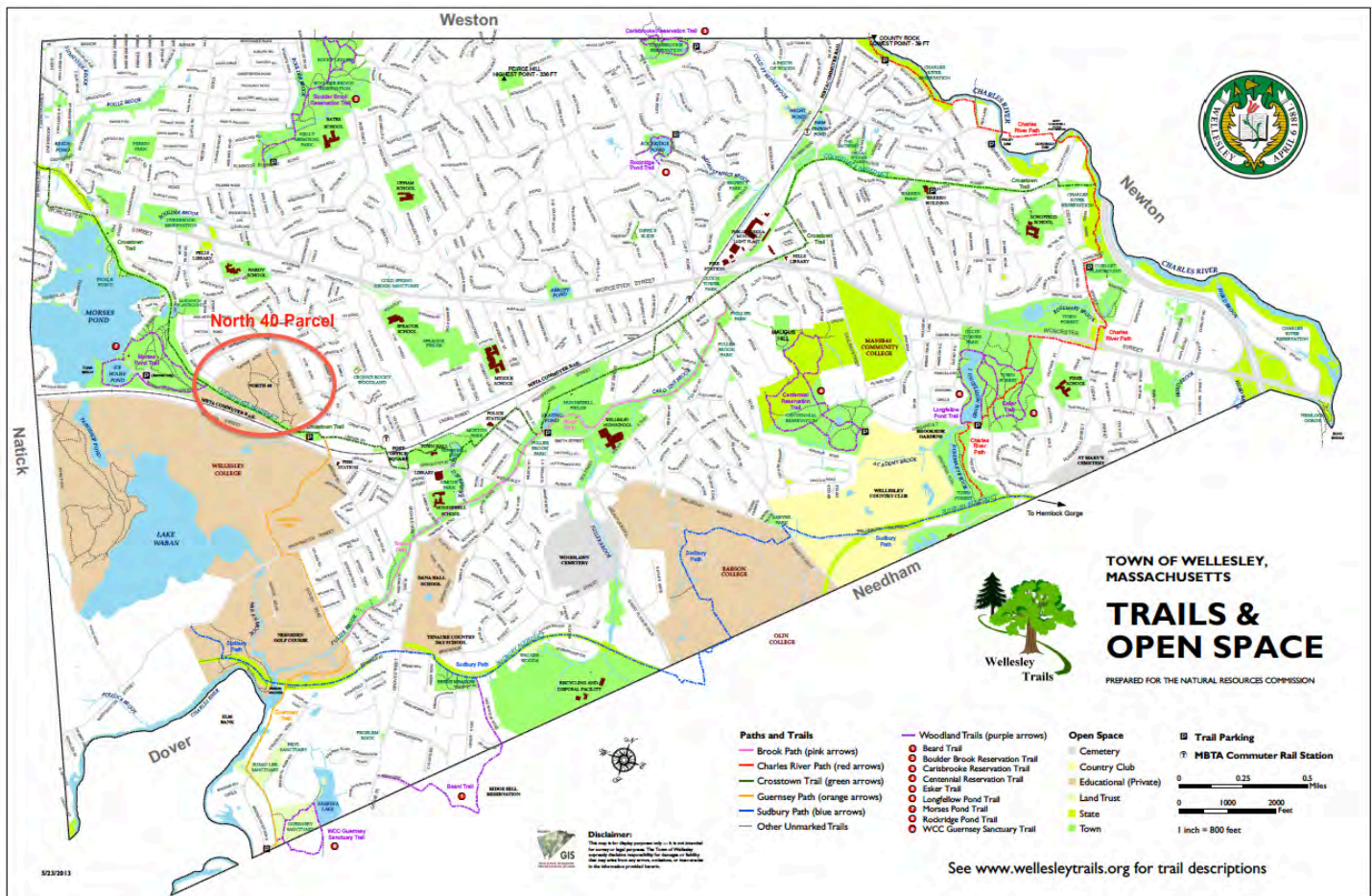
Mostly accumulated from the late 19th to the early 20th century, Wellesley's open spaces and natural resources provide extensive opportunities for the entire community to engage in, all contributing greatly to the quality of life our residents expect and enjoy.

Additionally, our open spaces provide valuable wildlife habitat and contribute to the health of our environment (and to us) by protecting our drinking water, storm water and cleaning our air.

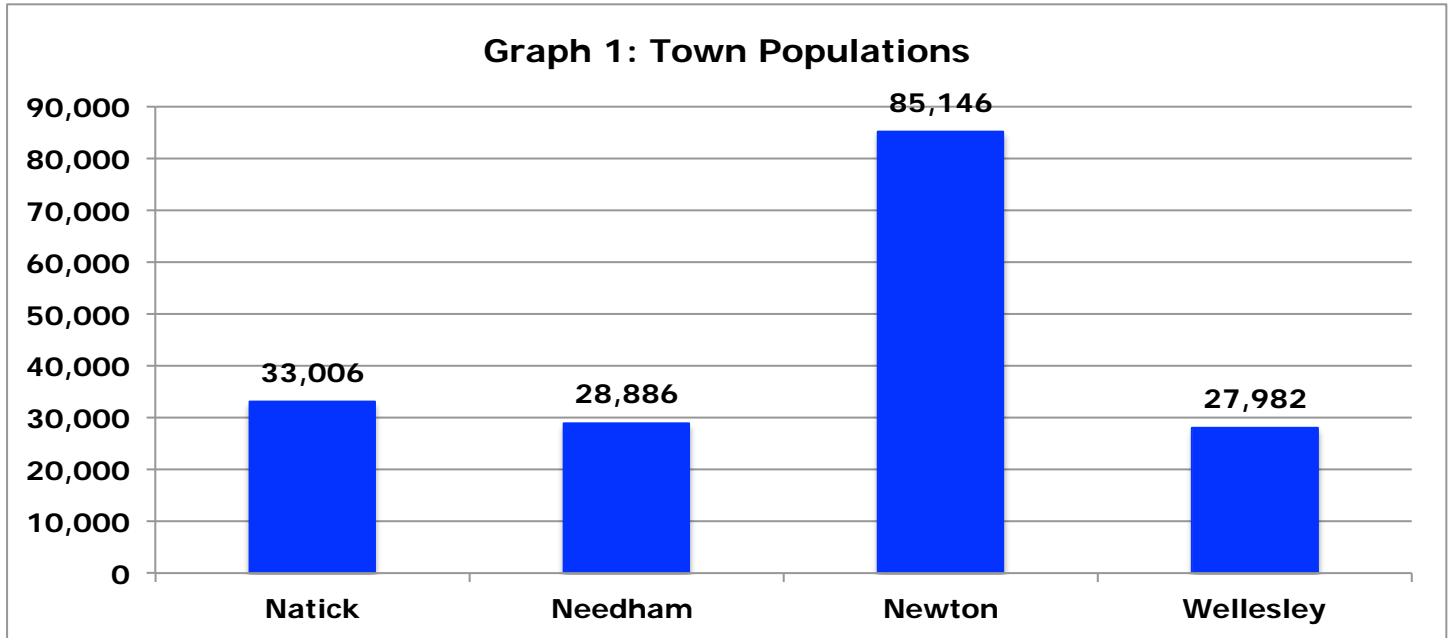
In fact, recognizing the above environmental qualities, our residents have continuously demonstrated their support for the acquisition of open spaces, such as the 1982 purchase of the 40-acre Centennial Park, and most recently, the approval of the Fuller Brook Park Restoration Project. Individual neighborhoods continue to work hard to raise funds to secure and maintain small pocket parks and playgrounds, and their Friends' groups are the go-to assets for the NRC.

The following study carefully examines the benefits of obtaining all – or part – of the N40 for open space and for recreation, as well as the negative implications of the loss of this land for residents. As comparators for our analysis, we used Natick, Needham, and Newton.

Located on the western side of town, this large undeveloped parcel of land is bounded by Route 135, Weston Road and Turner Road, as shown below in the red circle.

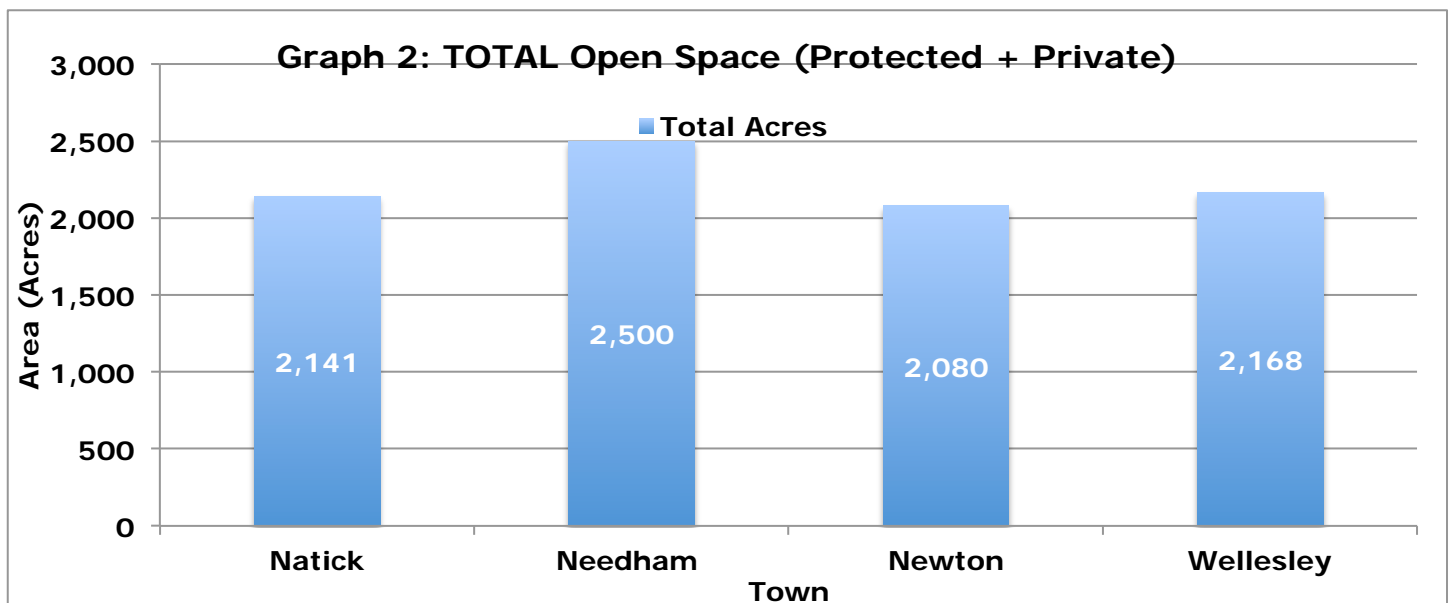


First, let's look at the relative populations of these 3 municipalities as compared to Wellesley. (See Graph 1 below created from the 2010 US Census data). Wellesley has the smallest population of the four municipalities, with Newton having the largest population.



Now, let's examine the total open spaces, including both public protected lands and private unprotected lands.

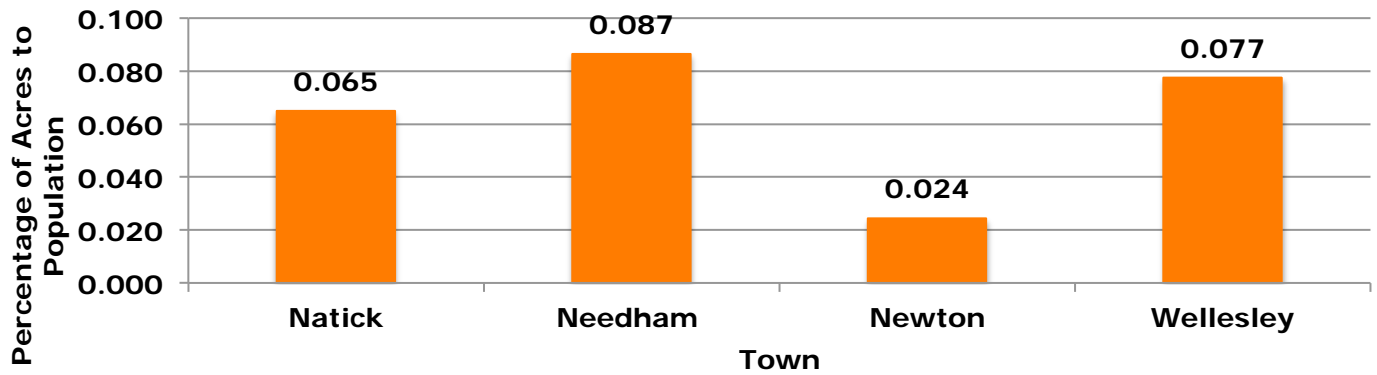
Graph 2 shows that Wellesley, Natick, and Newton are relatively close in their total open space, with Needham having the largest amount of open space.



If we combine the data behind Graph 1 and Graph 2, we create Graph 3, which shows the per capita values for the total open space versus the population of each municipality.

Note that Wellesley is second behind Needham in its per capita ranking.

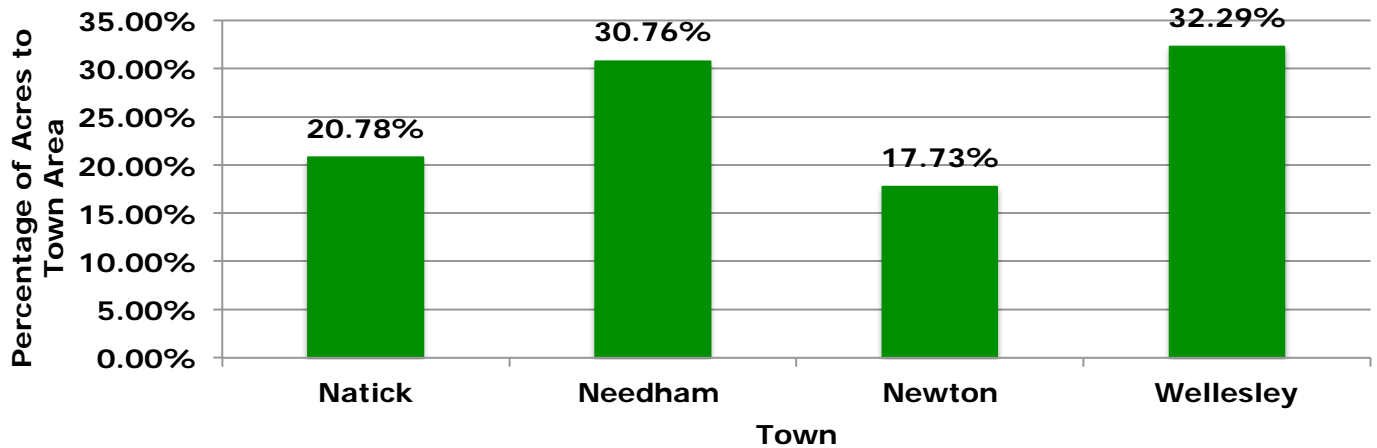
Graph 3: Per Capita Protected + Private Open Space



Graph 4 shows the percentage of the municipalities' total area that is occupied by its total open spaces.

Note that Wellesley leads with the largest percentage of open spaces in its total municipal area.

Graph 4: Protected+ Private Open Space vs. Town's Total Area



However, the above 4 graphs do not provide a complete picture of Wellesley's open space. If we examine the breakdown of the open space into the two categories of protected open space and private unprotected space, as show in Graph 5, it shows that Wellesley ranks last in the percentage of its total open space that is protected open space.

Graph 5: Protected Open Space vs. Private Open Space

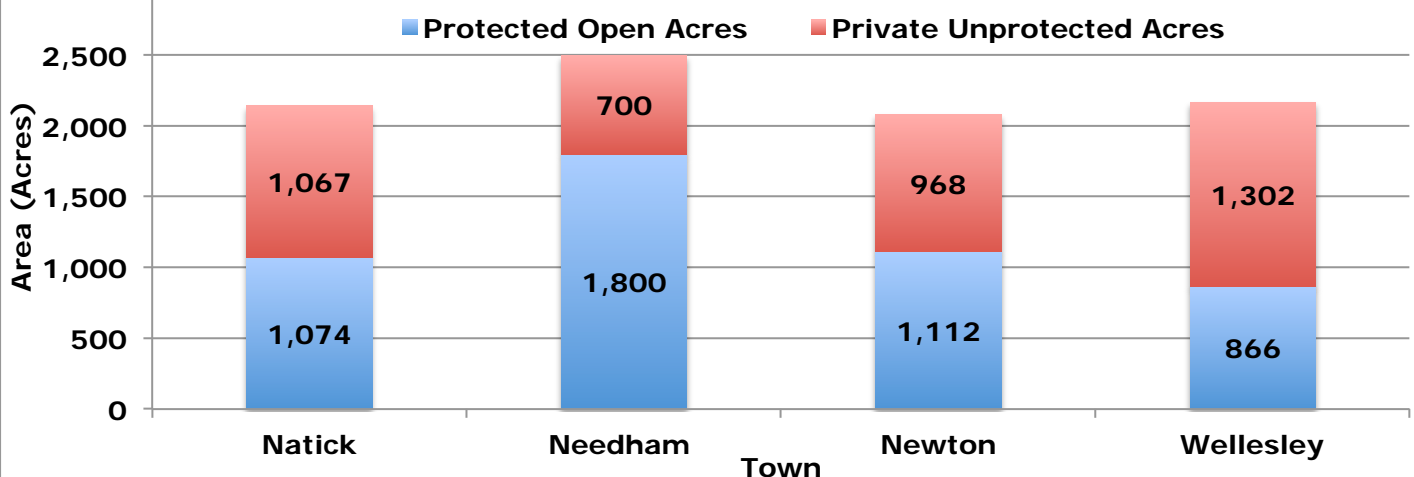
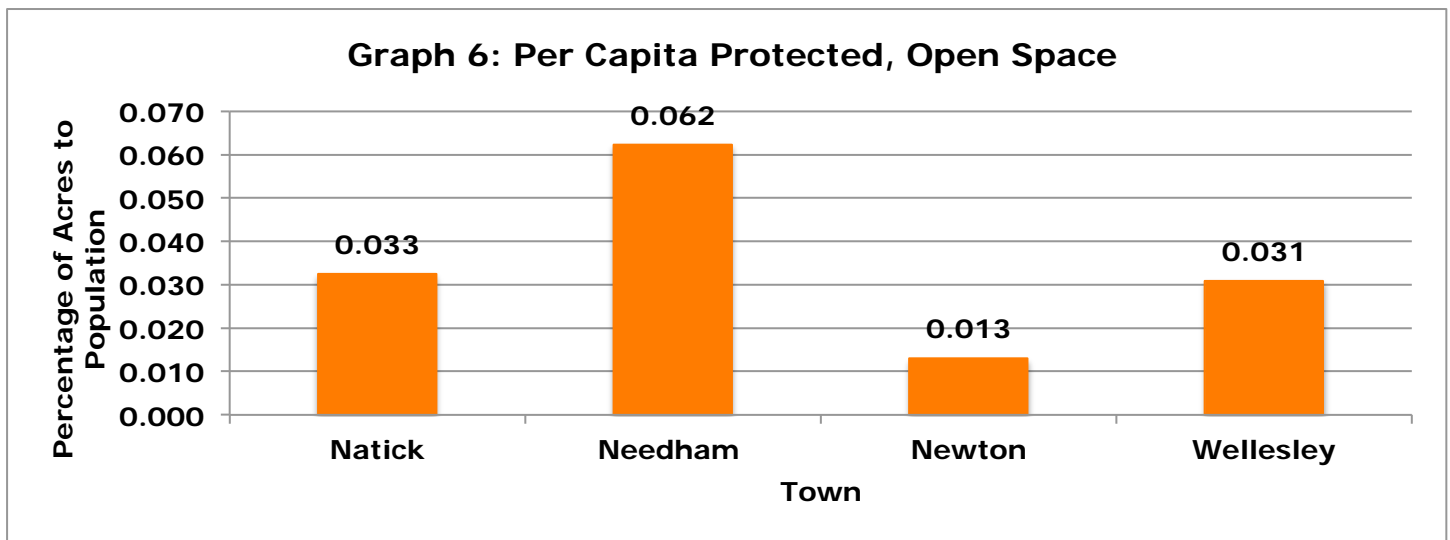


Table 1 (below) provides a percentage view of the protected open space versus private unprotected space.

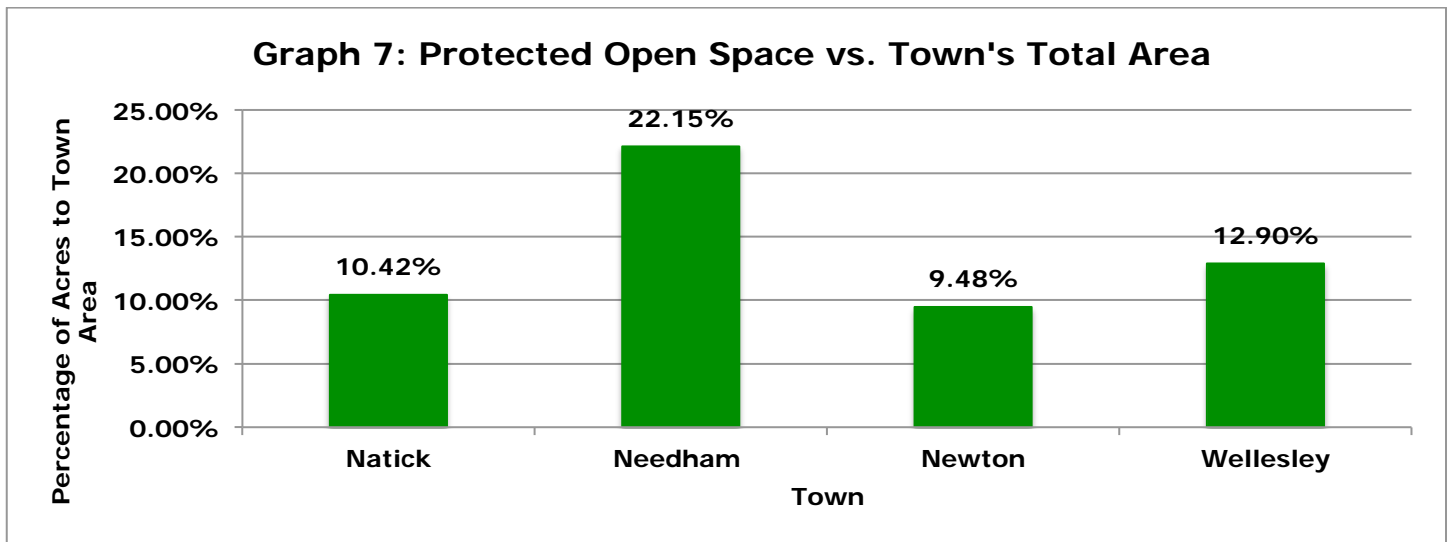
Table 1		
Town	%Protected Open	% Private, Unprotected
Natick	50%	50%
Needham	72%	28%
Newton	53%	47%
Wellesley	40%	60%

Note: 60% of Wellesley's open space is private unprotected space, with only 40% of its open space protected. This puts Wellesley in last place of the four municipalities.

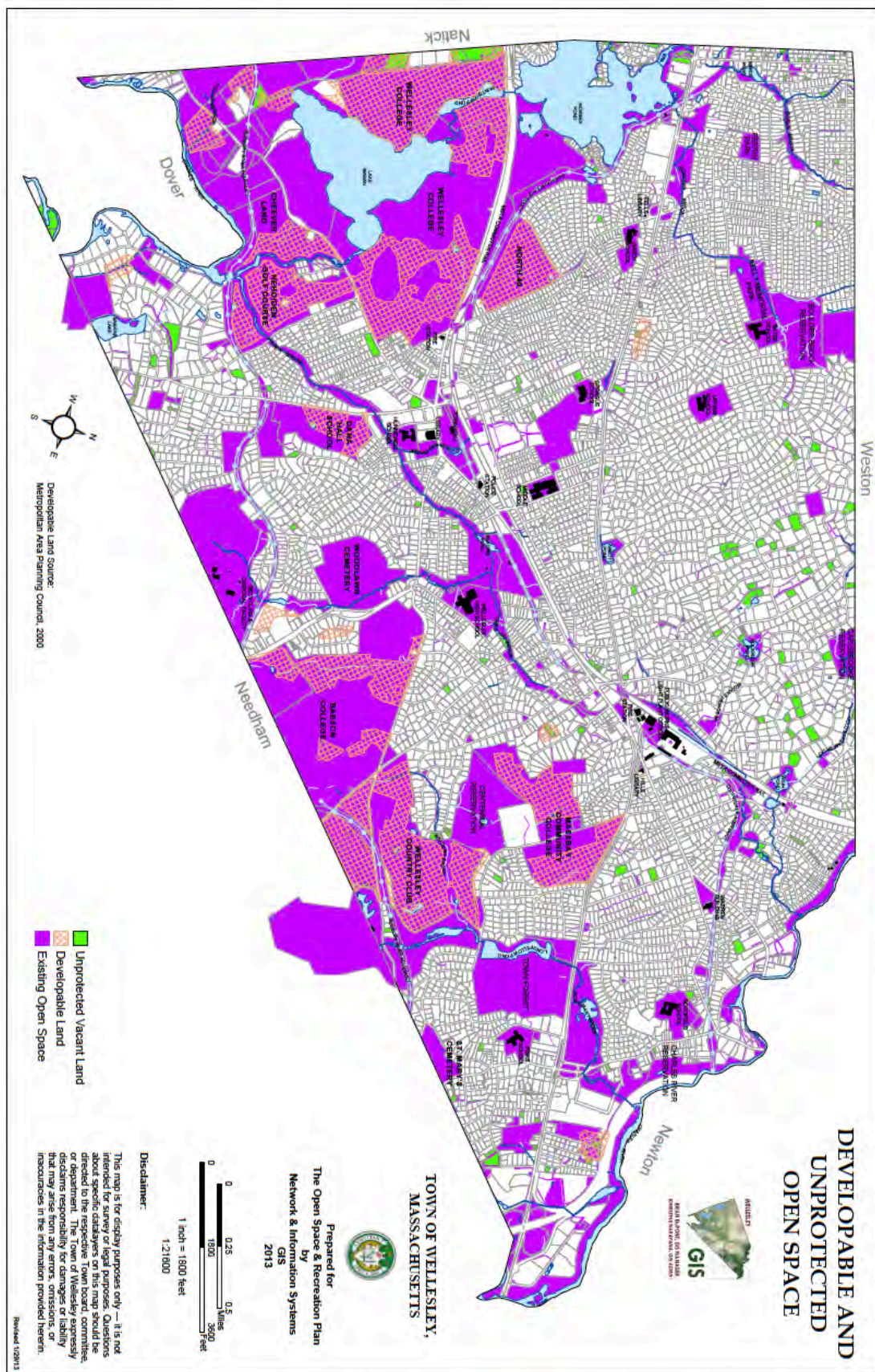
Considering an extreme case where all private unprotected open space is lost, Wellesley would slip from 2nd in its per capita rating, shown in Graph 3, to third as shown in Graph 6.



Finally, Graph 7 shows the change in Wellesley's number-one ranking in open space as shown in Graph 4 to a distant second place behind Needham.



Our analysis clearly shows that Wellesley needs to not only preserve its open space, but needs to aggressively acquire more open space to protect against private conversion of the considerable private, unprotected space.



Summary:

As the above analysis makes clear, the North 40 property represents an important opportunity for Wellesley to positively impact its open space assets.

Specifically, acquiring the 46 acres of open space contained in the North 40 will raise Wellesley's open space from 40% to 42%.

Also, this change represents a 5.3% increase in our total protected open space, raising it from 866 acres to 912 acres.

Additionally, Wellesley's per capita of protected open space is currently **at 0.031, or 1,350 square feet per person**. The acquisition of the North 40 would increase our per capita protected open space **by 87 square feet, to 1,437 square feet per person**.

Furthermore, the town's percentage of protected open space—as a percentage of the entire town's land area—**will rise from 12.90% to 13.58%**.

Please refer to the appendices for detailed maps of the open space of each municipality.

Following is the NRC's North 40 Wish List:

The Commissioners envision more passive and more intensive recreational uses for this site, all centered on the land's natural infrastructure and viability.

This would include (in no particular order):

- Community Gardens
- Trial and Demonstration Gardens
- Walking and Hiking Trails
- Biking Paths – for recreation, and for travel in lieu of Weston Road
- An innovative Playground as center for play and educational opportunities to explore the natural phenomena of the site, as well as a water feature
- Playing Fields for field sports

All features would be accessible via trails to encourage alternatives to car use.

In summary, Wellesley has less open space compared to our neighboring towns. Our residents already heavily use the North 40 for passive recreation, including gardening. The NRC believes acquiring the land would be strongly supported by our community and makes good sense for our Town.

It is well understood that large homes—or any other institutional development—will never serve the civic use and beauty of our Town as will the North 40 as open, passive and recreational space. As our Town Historian, Beth Hinchcliffe, writes in **A Brief History of Wellesley:**

"And finally, the flower in the (town) seal symbolizes the town's concern for its future. By providing new open space... and by continuing the level of pride in our town shown by Wellesley's leaders throughout the years, Wellesley's residents are pledging to future citizens gifts of immeasurable value: land, the beauty of nature, and the rare treasure of a community truly pledged to cooperation and unity."

NRC CRITERIA FOR OPEN SPACE ACQUISITION

The Natural Resources Commission evaluates potential open space acquisitions according to the following criteria. The applicability of the acquisition of the North 40 property is identified below:

I. RELATIONSHIP TO OPEN SPACE GOALS

A. Is the parcel identified in the Comprehensive Open Space Plan For Conservation or Recreation or does it meet a specific public open space need in terms of location, type of land or resource protection relating to one or more of the following:

Protection of wetlands:	YES
Protection or improvement of water quality:	YES
Active recreational uses (potential for playing fields, access to recreational resources such as the Charles River, regional resources, etc.):	YES
Passive open space uses (conservation, wildlife habitat, nature study areas):	YES
Urban parks in or near shopping and commercial areas:	YES
Neighborhood or pocket parks and buffer areas:	YES
Trail system and open space linkages:	YES

Would acquisition of the parcel contribute to Town land use goals as expressed in:

Town zoning regulations:	TBD
The Town's Comprehensive (Master) Plan as updated by the Planning Board:	YES

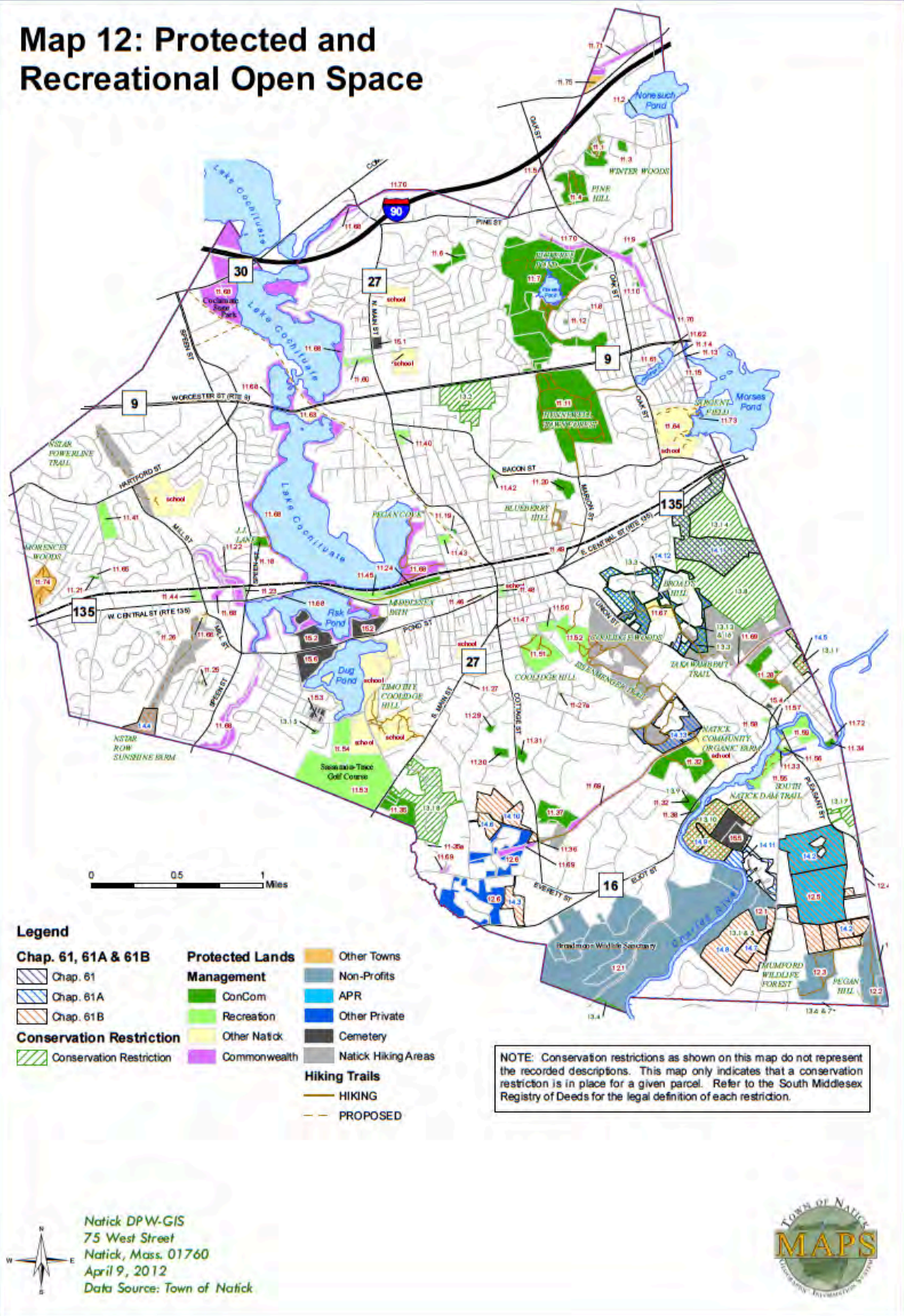
II. EVALUATION OF THE SITE

To what degree does the parcel fulfill the need or needs identified above?	ALL
Is the parcel essential in terms of type or location, or is there another parcel owned by the Town or available for future acquisition or public use that would do the job equally well or better?	NORTH 40 PARCEL IS ESSENTIAL
Can the parcel serve several purposes in relation to Town goals or needs?	YES
Can the parcel be linked to adjacent lands to enhance the usefulness of the open space system beyond the parcel's own boundaries?	YES
Is there adequate public access to the parcel?	YES

III. EVALUATION OF COST/BENEFIT EQUATION

Does the cost of acquiring the parcel bear a favorable relationship to the parcel's public value as open space?	YES
Are there indirect costs that this acquisition would incur, such as unusual maintenance needs, insurance costs, etc.?	NONE IDENTIFIED
Are there alternatives to outright acquisition in fee, such as acquiring development rights, conservation easements or restrictions, zoning, wetlands regulation, cooperative use arrangements, etc.?	TBD
What are the possible sources of funding for the acquisition (state or federal grants, public fundraising, neighborhood contributions, etc.)?	PRIMARY SOURCE FOR OPEN SPACE ACQUISITION WOULD BE CPA FUNDS

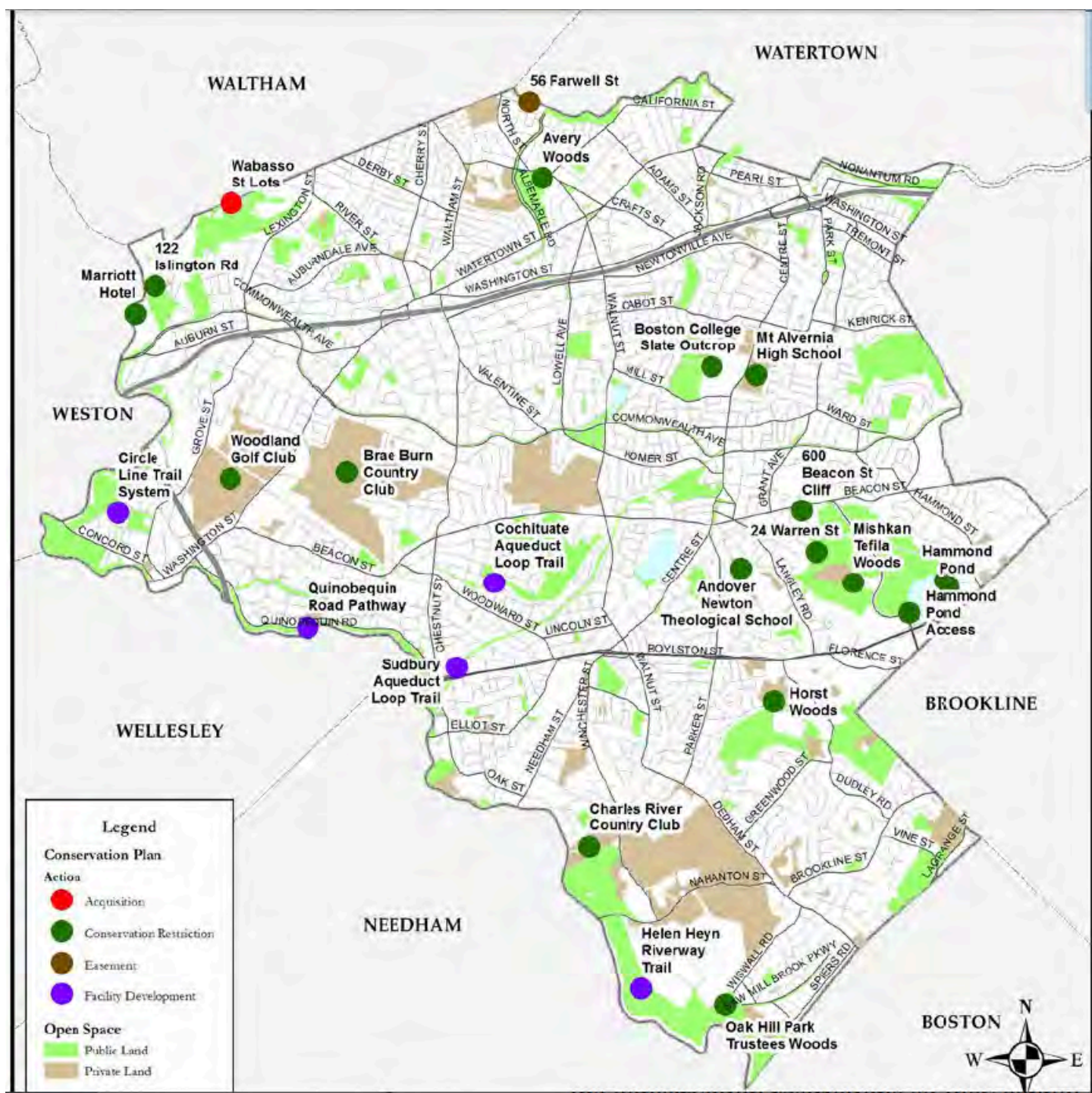
Map 12: Protected and Recreational Open Space



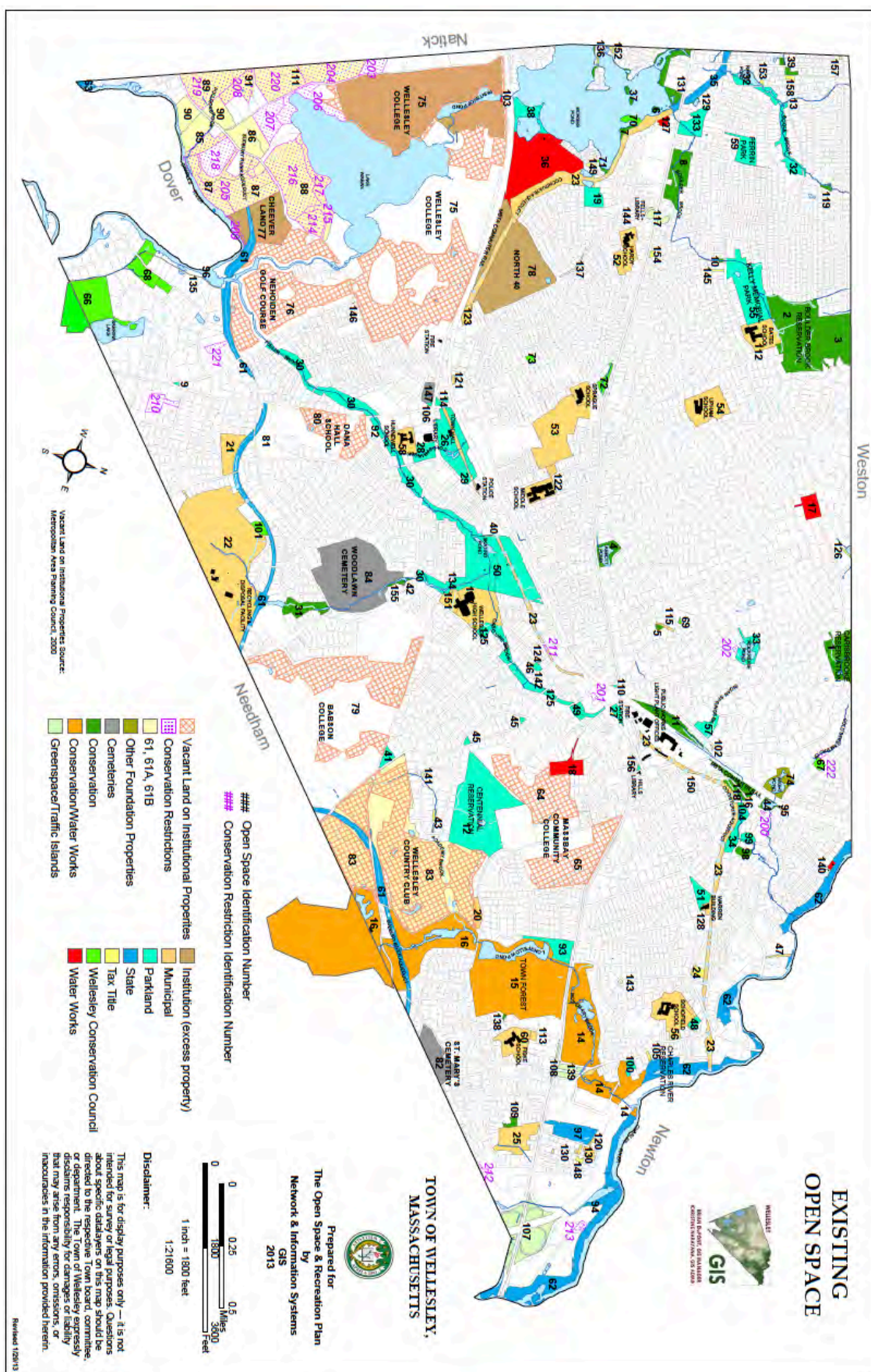
9



Appendix C – Map of Newton's Open Space



Map of Wellesley's Open Space, Corresponding to the Inventory of Lands of Conservation



Appendix E – Breakdown of Wellesley's Open Spaces

Chart 1 below shows a breakdown of Wellesley's public protected open space versus the private unprotected open space. Chart 2 shows the breakdown of the private unprotected 1,302 acres.

Chart 1: Breakdown of Public Protected vs. Private Unprotected Open Space (acres)

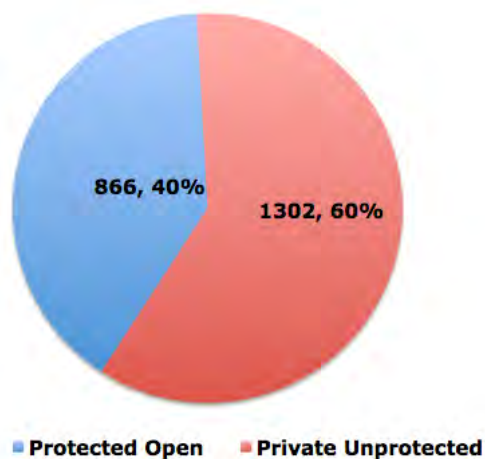
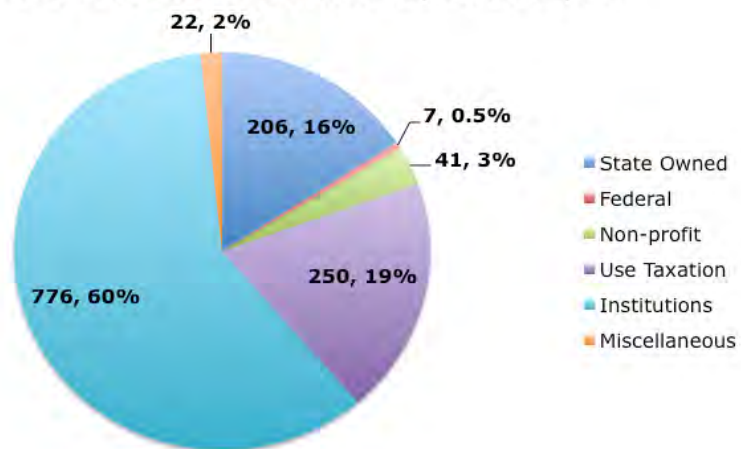


Chart 2: Breakdown of Private Unprotected Space



REFERENCES:

Population numbers are from the 2010 US Census

NATICK

Natick Open Space and Recreation Plan 2012

<http://www.natickma.gov/sites/natickma/files/file/file/natickosrpfinal.pdf>

Page 1: The inventory of Lands of Conservation and Recreation Interest identifies 1074 acres of protected open space and recreation land owned by the Town, State and abutting towns.

Page 54: 1067 Acres of Unprotected Privately owned Parcels

NEEDHAM

Town Of Needham Community Preservation Plan, October 14, 2005, Amended March 26, 2014

<http://www.needhamma.gov/documentcenter/view/9621>

Page 12: 1800 Acres of Permanently Protected Open Space

(2500 Acres of Designated Open Space)

NEWTON

City of Newton Recreation and Open Space Plan Update 2013-2017

<http://www.newtonma.gov/civicax/filebank/documents/45077>

Page 38: Inventory of Lands of Conservation and Recreation Interest

WELLESLEY data compiled from the:

Inventory of Lands of Conservation and Recreational Interest, on file with the NRC

There are 2,168 acres of open space in Wellesley. Of this open space, 866 acres is Town land that is protected. These lands include parkland, playing fields, playgrounds, the Cochituate Aqueduct, and the RDF.

An additional 1,302 acres are considered private open space. These 1,302 acres include State and Federally owned lands such as Mass Bay Community College, the Sudbury Aqueduct, and the National Guard; land trusts; educational institutions and cemeteries; lands that benefit from tax relief such as lands under conservation easements/restrictions and golf courses.

(Revised September 16, 2014)

APPENDIX 1

"THE NORTH FORTY -- The Heart of a Neighborhood"

**Presented to the North 40 Steering Committee
August 5th, 2014**

PREPARED AS SUPPLEMENT TO THE PREVIOUS REPORT

***"NRC Justification for Town Acquisition and Use of the
North 40 Property"***

**Presented to the North 40 Steering Committee
July 22nd, 2014**

THE NORTH FORTY -- *The Heart of a Neighborhood*

Together with Fuller Brook Park and the Centennial Reservation, the North Forty is the third Jewel and the one we should not lose.

The numbers speak for themselves:

Only 40% of Wellesley's open spaces are protected.

In order to discover the real benefits these 46 acres provide to the Town of Wellesley, and what they mean to the abutting neighborhood, we need to take a closer look:

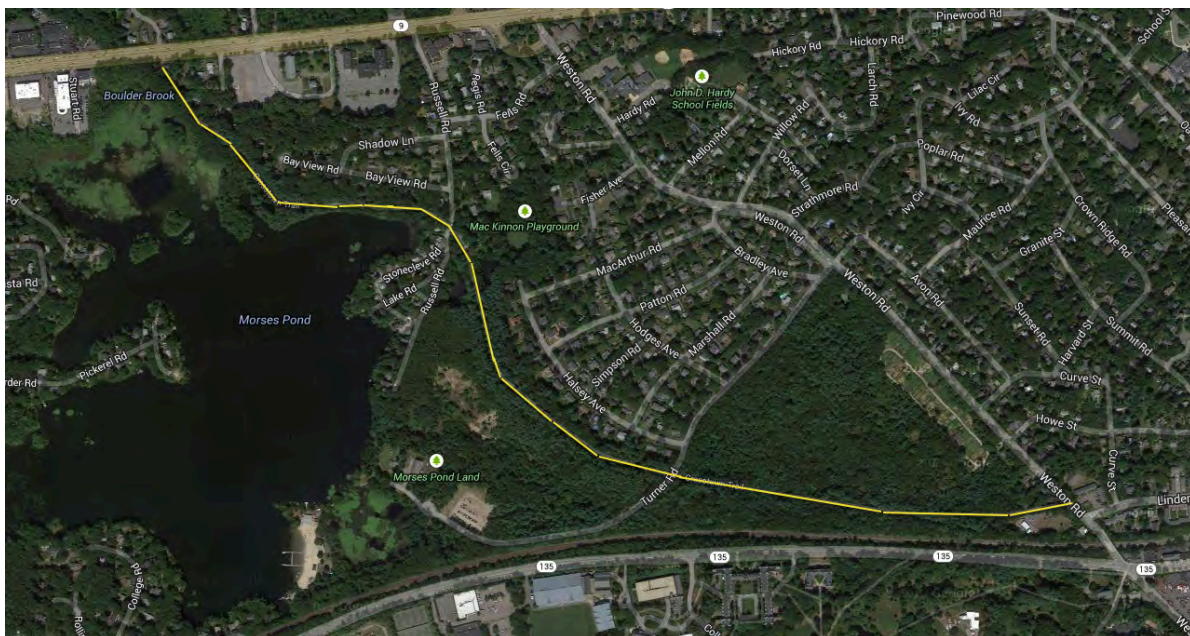
For many decades, Wellesley College has allowed our community the use of the North 40 for passive recreation of all kinds, which are particularly important to the residents of this densely populated part of town surrounding it. Combined with adjacent Moses Pond, this open space -- just steps from busy downtown -- gives the Town's residents the opportunity to be immersed in virgin nature, passive and active recreation,

Dotted throughout Wellesley, our open spaces offer respite from our busy lives and provide nourishment for our spirits. These areas are the touchstones of our Town, the hearts of our neighborhoods. Residents love and use their abutting open spaces, like Fuller Brook Park, Boulder Brook, Carisbrook and Centennial Reservations, Town Forest and Longfellow Pond, every day.

Similarly, the North 40's 46 acres are used and beloved by residents at this western end of town. Losing the North 40 would be like removing the heart from this neighborhood and a great loss for the Town's inventory of parkland and open spaces, protected or unprotected.

While it can be hard to convey the emotional reasons open spaces are so valued in our Town, we are offering the following 10 realistic reasons to purchase the N40 outright

TEN REASONS TO PRESERVE THE NORTH 40



1. THE CROSTOWN TRAIL

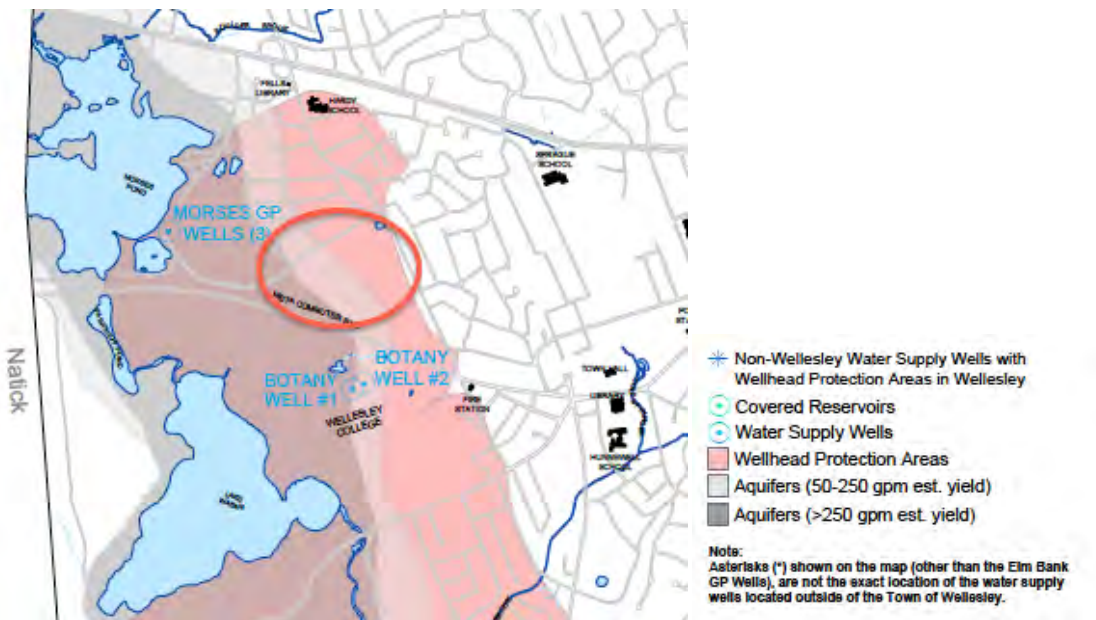
...is the pride of the NRC's all-volunteer Trails Committee, and heavily used by all Town residents; this part of the Crosstown Trail is perhaps the most scenic. It has views of Moses Pond, tall stands of pine trees, and a variety of dense wooded terrain, much of it unique to our geographic area. To walk it means one never sees a structure or car. It runs from Route 9, right through the North 40, and into Town.



2. EXERCISE FOR ALL

Walking, hiking, biking, running, cross-country - there's nothing better than a workout in nature.

Children play on the land, climb on boulders, and experience nature as they used to, before plastic swing sets and scripted activities became the norm.



3. CLEAN WATER & LAND

The orange oval on the above Wellesley Groundwater Resources Map* approximately shows the location of the North 40. The pink area indicates the Wellhead Protection Area. The light and dark grey areas indicate the location of underground aquifers. The area is a MassDEP Zone 2 Water Supply Protection Area. Simply stated, this land allows the rain and snow to return to ground water wells and be reused. The area provides natural flood protection to nearby properties and streets; vegetation, soils and roots naturally filter and clean the water. While the North 40 is very beautiful, it's much more than just a pretty face.



4. WILDLIFE

The North 40, along with next-door Morses Pond, provides important wildlife habitat. Snakes, bats, hawks and foxes keep our rodent and mosquito populations in check. Allowing our wildlife their own space helps keep them out of ours. A sensitive vernal pool occupies the site; the vernal pool is protected under state and local bylaws.



5. VEGETATION

Home to diverse and abundant moss, lichen, fungi, flora, and fauna, foliage and berries provide food for birds and animals. Roots protect against erosion, and help maintain our valuable topsoil.



6. THE GARDENS

They are the spirit of the North 40. Residents from all walks of life meet, greet and bond over the vegetables. The Community Gardens exemplify the true meaning of community.



7. COMMUNITY SERVICE

Many community gardeners generously donate produce weekly to the Wellesley Food Pantry. Students and Scouts volunteer and learn how good it feels to give back.



8. NO NEW TRAFFIC

We're all frustratingly familiar with the current traffic situation on Weston Road and surrounding streets. Why add more cars? Walking paths and bike trails alleviate traffic by providing alternate and safe transportation. These paths could be expanded to further mitigate traffic.



9. PEACE and BEAUTY

Both have value and add meaning to our lives. The North 40 provides 46 acres of serenity for reflection, bird watching, star-gazing -- the chance to commune with nature. That's priceless!



10. AND -- IT'S FREE!

Once purchased, keeping the North 40 as open space costs ZERO - nothing. The DPW estimates that a residential development of 80-100 homes would cost the Town approximately \$200K annually in upkeep of new roads alone. More homes mean more families and additional students for our schools. Leaving the land undisturbed is the most cost-effective to preserve this jewel.

Our open spaces provide all these things and more. They are a gift we give to ourselves and to future generations.

* Wellesley Groundwater Resources map:

http://www.wellesleyma.gov/Pages/WellesleyMA_Planning/7.3.pdf

Thanks to Jean Wiecha, Jack Davis, the Wellesley Trails Committee, and Save the North 40 for their use of photography. Thanks also to Drs. Judith and Giles Boland for their comments and support.

APPENDIX C. REPORT OF THE SCHOOL COMMITTEE

Wellesley School Committee
North 40 Committee Report
As of August 25, 2014

BACKGROUND

The North 40 committee was formed by the Board of Selectmen and is charged with recommending whether the acquisition of the property should be pursued for the development of municipal uses and purposes.

The committee is composed of representatives from the following town boards of which each board will have one (1) vote, regardless of the number of representatives:

- Selectmen (2 reps)
- School Committee (2)
- Planning Board (2)
- CPC (1)
- Board of Public Works (1)
- Recreation (1)
- Wellesley Housing Development Corporation (1)
- Natural Resources Commission (1)

Additionally, two (2) representatives from the neighborhood were appointed. One representative of the Woodlands/Generals neighborhood, one representative from the Weston Road neighborhood each having an individual vote.

The selectmen also requested participation of the following town staff to the committee:

- Executive Director
- Selectmen Staff
- Planning Director
- DPW Director
- Town Engineer
- Superintendent of Schools
- Deputy Chief of Police

PURPOSE OF THIS REPORT

In preparation of a recommendation to the Board of Selectmen, the North 40 Committee has asked each board to answer two questions:

1. Is there value to your department if the town were to purchase the North 40?
If so, give us your vision.
2. What would be the impact on your department's operation if the North 40 were to be purchased by a private developer?

Wellesley School Committee
North 40 Committee Report
As of August 25, 2014

PREPARATION OF THIS REPORT

To answer the questions on behalf of the School Committee and school administration, KC Kato and Patti Quigley used the following resources to gather information:

The School Facilities Committee (SFC)
Symmes Maini & McKee Associates (SMMA)
Brian DuPont – manager of the Geographic Information Systems (GIS)
Judy Belliveau – Assistant Superintendent of Finance and Operations
Meghan Jop – Deputy Director of General Government Services
Department of Elementary and Secondary Education (DESE)

ASSUMPTIONS MADE FOR THIS REPORT:

- Only considered current school property and the North 40 property
- Only a high level analysis was performed (detailed analysis would be performed when a decision is made but is unnecessary at this time)
- The North 40 land conditions are found to be safe and suitable for children and their educational needs
- The town finds a suitable solution to the traffic impact
- .78 students/house sale between Nov'09 and Oct'13 for typical development
 - 61.1% K-5
 - 18.0% MS
 - 21.0% HS
- 0.84 students/household (K-12) for 40B (affordable housing) development
 - 51.3% K-5
 - 19.6% MS
 - 24.1% HS
- 10% of Wellesley students attend private schools
- Cost per student FY13: \$17,149 (DESE K-12)

QUESTION ONE

Is there value to the school department (WPS) if the town were to purchase the North 40? If so, give us your vision.

In short, YES, there is value to the WPS in the purchase the North 40 property.

An SMMA study evaluated all WPS buildings and found 3 of Wellesley's elementary schools will require significant renovations or replacement over the next 5-7 years. If the North 40 parcel were available, the land suitable and a reasonable traffic plan

Wellesley School Committee
North 40 Committee Report
As of August 25, 2014

possible it could potentially be a wonderful site for a school. A new school with 4 or 5 sections per grade requires approximately 12 acres of land to support a building, adequate parking, a playground and a multipurpose field. The remainder of the North 40 would be available for alternative uses such as recreation, open space (trails and parks), community gardens, housing, etc.

The value of building on the North 40 site is less economically quantifiable but would have a significant impact on the students, teachers, parents, administration and the town as a whole.

Some of the considerations include:

- Enabling the town to build on an open site, free of the challenges of building next to an in-use building
- Less disruption to the town and students during construction
- Ability to develop an optimal building layout and site circulation plan
- No swing space needed for the long term plan

See attachment A and B for more details on the analysis by the SFC

If an alternative open site were to become available for a school, especially one that is better situated for distribution of students, has less traffic issues and fewer constraints, the SFC recommends the town consider it for a school site. Having any open space site, which currently does not house an in-use school, provides the same value as the North 40 property to the schools.

QUESTION TWO

What would be the impact to WPS if the North 40 were to be purchased by a private developer?

If a private developer purchases the North 40 and the development does not add students (e.g. senior housing), WPS can support the existing students on two of our current sites. However, further study is needed to determine the exact school configuration - replacement or renovation and which site. The SFC has evaluated the Hardy, Hunnewell and Upham sites and, although rough capital cost estimates are available, it is still too preliminary in the discussion to know exactly which sites would be used and which sites would be closed. This discussion requires greater analysis and community input.

If a private developer purchases the North 40 and the development does add students, then the enrollment and facilities capacity data would need to be revisited. It is likely the Town would need to replace and/or renovate and/or enlarge all three sites - Hardy, Hunnewell and Upham.

Wellesley School Committee
North 40 Committee Report
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For a typical development, based on town zoning regulations, the North 40 site could fit up to 100 residential houses of approximately 3600 square feet (3-4 bedroom) each. We estimate 70 students could be added to the WPS at cost of \$1,200,430 per year for the town (no inflation impact).

For a 40B, non-senior housing, development, the North 40 could fit up to 300 residential units. We estimate 252 students could be added to the WPS at a cost of \$4,321,548 per year for the town (no inflation impact).

These costs are the operating cost to the schools and do not include the SFC capital cost estimates.

See Attachment C for more details on the analysis by GIS

Wellesley School Committee
North 40 Committee Report
As of August 25, 2014

ATTACHMENT A – SFC AUGUST 6, 2014 MEETING REPORT

To: The School Facilities Committee
From: KC Kato, SFC Chair

If the Town were to purchase the North 40, given the need to replace and/or renovate 3 existing schools, the SFC recommends that we consider the N40 for a new school site.

- The construction costs of a new building on the N40 or building a new building on the Hardy site are quite similar. A N40 school project would require the inclusion of utilities and roads not currently in place.
- The value of building on the North 40 site is less economically quantifiable but is significant.
 - It would enable the town to build on an open site, free of the challenges of building next to an in-use building.
 - Less disruption to the town and students during construction.
 - Ability to develop an optimal building lay-out and site circulation plan.
 - No swing space needed for the long term plan.
- Any school configuration requires further study in the following areas:
 - Traffic, impact on site, impact to neighborhood and surrounding roads
 - Location of students - where might the redistricted lines be? Is there enough students in the nearby geography to support a school?
(currently, the high density of students is in the NW and W part of Wellesley)
 - And then which school(s) would remain and which school(s) would close? Given the number of students, the geography of those students and the roadway infrastructure, how might this drive the decision?

If an alternative open site were to become available for a school, especially one that is better situated, has less traffic issues and fewer constraints, the SFC recommends we consider it for a school site. Having any open space site, which currently does not house an in-use school, provides the same value as the N40 to the schools.

If the Town was to not purchase the N40 and there was NOT development, which added students (e.g., senior housing), the SFC believes we can support the existing students on two of our current sites. However, it recommends further study to determine the exact schools configuration; replacement and/or renovation and on which site or sites. The SFC has evaluated the Hardy, Hunnewell and Upham sites. And although we do have rough cost estimates, it is still too preliminary to know exactly which sites we would use and which sites we would close. This

Wellesley School Committee
North 40 Committee Report
As of August 25, 2014

discussion requires greater analysis and community input.

If the Town was to not purchase the N40 and it was developed with housing which added students, then the enrollment and facilities capacity data would need to be revisited. It is likely we would need to replace and/or renovate and/or enlarge all three sites - Hardy, Hunnewell and Upham.

There are several options of size and combination of schools that could meet the needs of the Wellesley Public Schools.

Attached are rough cost estimates for various schools. In reviewing the cost estimates, please note the following:

- Any school configuration requires further study in the following areas:
 - ☐ Traffic, impact on site, impact to neighborhood and surrounding roads
 - ☐ # of students and geographic distribution -- Location of students - where might the redistricted lines be? Are there enough students in the nearby geography to support a school? (Currently, the highest density of students is in the NW and W part of Wellesley.)
- Cropper projections indicated a need for 850 students cross the areas we are considering
- The SC and SFC recommended we develop scenarios for 1100 students across the areas (10% increase in TOTAL elementary enrollment which is 2250 including Schofield, Fiske, Bates and Sprague)
- The consensus of SFC, SC and the School Administration is that there are advantages to larger schools. Operating efficiencies, the ability to manage class size (less unevenness of class size), teacher collaboration and professional development, more district wide approach to teaching and curriculum, etc. There is also construction cost efficiencies (cost per student) when building larger schools. Therefore, we had SMMA developed cost estimates for schools sized at 425 students (3 sections/grade), 536 students (4 sections/grade) and 660 students (5 sections per grade). (interesting fun fact -- when Sprague and Bates were considered for renovations, the initial plan considered was 24 sections - 4 sections per grade. The town ended up building slightly smaller, but just a few years after both Sprague and Bates were opened, we needed to add 7 modulars between Fiske and Schofield.)
- For Hunnewell
 - ☐ Although SMMA did do some cost estimating for a new school and larger schools, they have been rejected.
 - ☐ A new school does not really fit on the site without taking down the current building first (due to wetlands).
 - ☐ Due to the small site, there is already a lack of parking. The town would need to consider expanding parking at the Cameron lot.
 - ☐ Due to the site constraints and size, the optimal Hunnewell

Wellesley School Committee
North 40 Committee Report
As of August 25, 2014

solution is a renovated school of 425 students.

- For Upham
 - ☐ Although SMMA did do some cost estimating for a renovation/addition, it was rejected
 - ☐ The addition would be significantly greater than the renovation.
 - ☐ There is no cost advantage to doing a renovation
 - ☐ The resulting school from a renovation would be suboptimal - flow, educational program, parking, site circulation
 - ☐ The back part of Upham is quite big and could support a larger new school
 - ☐ However, due to the low density of housing and thus students, if we build it, will they come? Or how would we fill it?
- For Hardy
 - ☐ After the N40, this is the easiest and most cost effective site to build a new school while still using the original school.
 - ☐ Building a new school in the back would allow the development of a better site circulation plan.
- The rough cost estimates do not include MSBA reimbursement. MSBA reimbursement, if invited, might contribute up to 30% of the cost of 1 school.
- The cost estimates assume starting construction mid 2016 and therefore have incorporated the appropriate escalation factor. Later start dates would increase the costs by an escalation rate of 3.5% per year.
- The cost estimates do not take into consideration the cost to maintain Hardy, Hunnewell and Upham while we wait to replace and/or renovate buildings. While we work through the process of the N40 and begin the facilities plan, our schools and specifically the modulars are getting older and will require some investment/work to be usable by students and staff.

As you can see, there many options to consider. The School Facilities Committee will be on hiatus until the N40 decision has been reached.

Wellesley School Committee
North 40 Committee Report
As of August 25, 2014

ATTACHMENT C – GIS ANALYSIS

Town of Wellesley, MA

Information Technology Department
Geographic Information Systems Office



Brian C. DuPont, GIS Manager
Christine Narayana, GIS Administrator

TO: Patti Quigley, K.C. Kato
DATE: July 22, 2014
SUBJECT: **School-Age Population Projections for Potential North 40 Development**
CC: Hans Larsen, Meghan Jop, David Lussier, Judy Belliveau

Ms. Quigley and Ms. Kato,

After a statistical and spatial analysis of the Town's Assessors' database, Annual Census, and GIS database, as well as information from the 2010 U.S. Census, I estimate that each new household from the traditional subdivision of the North 40 into single-family lots would yield an additional **.85 to 1.0 children under 18** to Wellesley's existing population. My analysis is detailed on the pages that follow.

Using these numbers as an estimate, a 100 lot subdivision on the North 40 property would likely add somewhere between 85 to 100 children to Wellesley's population. My analysis also indicates that the average age of these incoming children would be **noticeably younger** than the average age of all children in Town, and greater impacts may be felt at the elementary schools. Roughly 25% of these incoming children would be under the age of 5, 45% would be between the ages of 5 and 10 (K-5th Grade), and the rest would be old enough to attend Middle School or High School.

The estimates above are for *total children*, not necessarily new *WPS students*. Presumably, a certain percentage of these children would attend private schools vs. Wellesley Public Schools. I'm confident that the WPS Business Office can get you estimate of that percentage.

The estimates above are also for a traditional subdivision. Children from an apartment or condo-style development would likely be very different, depending on the number and composition of the units (# of bedrooms, age restrictions, etc...).

Please don't hesitate to contact me if you have any questions or concerns about any of this information...

Regards,

Brian DuPont

Wellesley School Committee
North 40 Committee Report
As of August 25, 2014

Residential Sales (source: Assessors' Office)

- **8821** properties in Wellesley
 - Excludes apartments
- **1512** residential properties bought/sold between Nov. 2009 and Oct. 2013.
 - Excludes purchases/sales less than \$100K.
 - Includes new residents, as well as current residents moving *within Town*.
 - Analysis includes 4 years of sales to account for families that had their first child immediately *after* moving to Wellesley.

Child Population (source: Town of Wellesley Annual Census, received Oct. 2013)

- **6199** children between the ages of 2 and 17 (birth date between 9/1/1996 and 8/31/2012) residing in Wellesley as of Oct. 2013.
 - Because of the timing of the Annual Census, information on residents younger than 2 was incomplete at time of receipt.

Children / Sale

- **1578** of these 6199 children reside in the 1512 homes bought/sold between Nov. 2009 and Oct. 2013.
 - Some children may have moved within the town...
- **By these numbers, each residential sale would yield an estimated 1.04 children.**
- Age distribution of incoming children is noticeably **younger** (see table below)

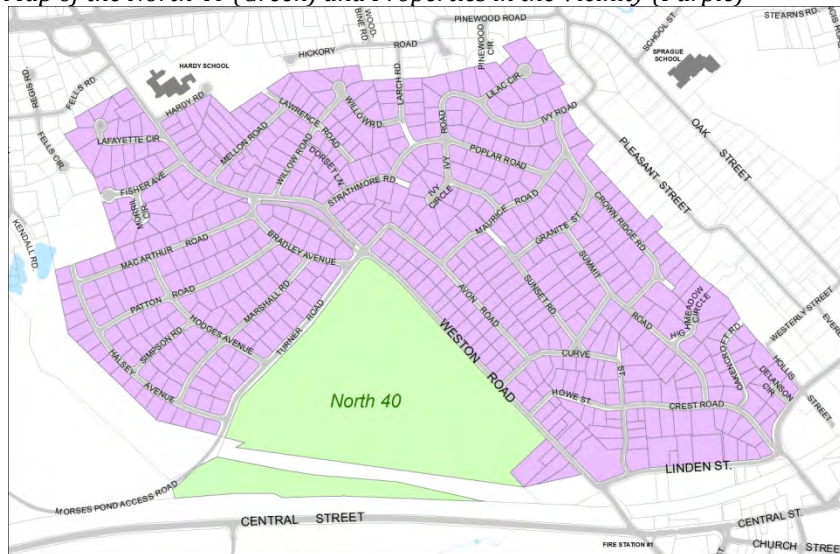
	In All 8821 Properties		In 1512 Residential Properties Bought/Sold	
Age	# Children	% of Total	# Children	% of Total
17	453	7.3%	58	3.7%
16	463	7.5%	57	3.6%
15	449	7.2%	57	3.6%
14	498	8.0%	74	4.7%
13	433	7.0%	58	3.7%
12	444	7.2%	75	4.8%
11	458	7.4%	78	4.9%
10	400	6.5%	99	6.3%
9	398	6.4%	99	6.3%
8	380	6.1%	121	7.7%
7	378	6.1%	114	7.2%
6	370	6.0%	144	9.1%
5	301	4.9%	140	8.9%
4	282	4.5%	141	8.9%
3	257	4.1%	127	8.0%
2	235	3.8%	136	8.6%
Total	6199	100.0%	1578	100.0%

Wellesley School Committee North 40 Committee Report As of August 25, 2014

In Vicinity of the North 40

- **584** properties (see map below)
- **104** residential properties bought/sold between Nov. 2009 and Oct. 2013.
- **477** children between the ages of 2 and 17.
- **133** of these children live in homes bought/sold between Nov. 2009 and Oct. 2013.
- Age distribution is consistent with Town-wide numbers (see table below)

Map of the North 40 (Green) and Properties in the Vicinity (Purple)



	In All 584 Properties		In 104 Residential Properties Bought/Sold	
Age	# Children	% of Total	# Children	% of Total
17	26	5.5%	3	2.3%
16	29	6.1%	3	2.3%
15	30	6.3%	3	2.3%
14	33	6.9%	7	5.3%
13	30	6.3%	6	4.5%
12	41	8.6%	8	6.0%
11	32	6.7%	3	2.3%
10	35	7.3%	11	8.3%
9	31	6.5%	8	6.0%
8	28	5.9%	6	4.5%
7	28	5.9%	14	10.5%
6	26	5.5%	8	6.0%
5	32	6.7%	12	9.0%
4	30	6.3%	16	12.0%
3	18	3.8%	11	8.3%
2	28	5.9%	14	10.5%
Total	477	100.0%	133	100.0%

Wellesley School Committee
North 40 Committee Report
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From the U.S. Census 2010 (available at <http://factfinder2.census.gov>)

- **8695** total households in Wellesley
- **3730** households with individuals under 18, or **42.9%** of total.
- **7512** children under 18 residing in Town
- Therefore, there are an average of **2.01** children for every household with children (7512/3730)
- **By these numbers, each new household in Wellesley would yield an estimated .86 children (42.9% x 2.01).**

APPENDIX D. REPORT OF THE WELLESLEY HOUSING DEVELOPMENT CORPORATION.

**WELLESLEY HOUSING DEVELOPMENT CORPORATION****Board of Directors**

Robert E. Kenney, *Chairman*
Robert A. Goldkamp, *Vice Chairman*
Timothy J Barrett, *Treasurer*
Susan S Troy *Assistant Treasurer*
Dona M. Kemp, *Secretary*
Sara G. Schnorr

Town Hall
525 Washington Street
Wellesley, MA 02482-5992

(781) 431-1019 ext 2232
Facsimile (781) 239-1043
Email whdc@wellesleyma.gov

August 4, 2014

Mission Statement: The Wellesley Housing Corporation's mission is to sponsor and assist in the development of affordable housing opportunities for persons of low and moderate income in the town of Wellesley, Massachusetts in order to implement the Town's Affordable Housing Policy. (As outlined in Wellesley Comprehensive Plan 2007-2017 update)

North 40 and Housing

Two of the Housing Goals identified in the 2007-2017 Update to the Town's Comprehensive Plan are:

1. Promote the creation of housing units other than single-family homes to provide housing options for people across a range of income, age, family size and needs while complementing town character.
2. Promote the creation of housing units permanently affordable to households with incomes at or below 80 percent of the area median income.

The North 40 site provides an opportunity to work toward these goals while at the same time meeting numerous other Town needs. An established need for additional Affordable Housing has been outlined in a report prepared for the WHDC by LDS Consulting Group, LLC entitled "**Affordable Housing Market Study For Wellesley and Surrounding Communities**" (June 29, 2009)

Among the reasons that this is a suitable site is that it meets the criteria as established by the WHDC for the location of affordable housing including;

- Close to the center of town with access to retail shops and grocery stores.
- Access to Public Transportation
- Access to nearby Schools
- Access to Religious and Cultural institutions.

If the Town of Wellesley elects to purchase the “North 40” for a variety of municipal purposes, then the Wellesley Housing Development Corporation supports the limited development of housing on a portion of the site. Our preliminary suggestion for housing is for “cluster type” development of homes under the Town’s newly adopted Natural Resource Protection Regulations. This would maximize the open space of the entire site as well as minimize the project’s footprint. We would foresee, potentially, a mix of both market rate and affordable units. This would allow for a sufficient income stream to finance the entire housing portion of the project.

The type of unit (First Time Buyer, Over 55, for sale /for rent) and the unit mix and density would be determined as the scoping and visioning process is further defined. We would also propose to update our current market study in order to better understand the specific needs of the potential end users. This would include the determination of the appropriate mix of “Percentage of Median Income” (PMI) as it relates to the housing types proposed.

The WHDC agrees that this is a unique opportunity for the Town to control a significant parcel of well-located land with many options for diverse municipal uses. If the Town chooses not to purchase the site it could be susceptible to a 40B type development (The Town is currently at 6.16% of the States goal of 10% for Affordable housing). As of right, the entire site could be developed to as many of 80-90 single family homes. In controlling such a parcel, the Town will be able to be pro-active in setting the agenda and direction of growth for many generations to come.

The need for additional housing in Wellesley is documented in the Town’s ***Comprehensive Plan***, especially Chapter 4 and in the 2009 ***Affordable Housing Market Study for Wellesley and Surrounding Communities***. Both documents are available through the Wellesley Planning Department.

APPENDIX E. MEMORANDUM FROM THE DEPARTMENT OF PUBLIC WORKS

TOWN OF WELLESLEY
DEPARTMENT OF PUBLIC WORKS



DAVID A. COHEN, ASSISTANT DIRECTOR

David A. Cohen

August 4, 2014

To: Owen Dugan, Board of Public Works
Don McCauley, North 40 Steering Committee

Re: DPW Cost Impacts of North 40 Development

In response to inquiries made by the North 40 Steering Committee, the Department of Public Works has developed preliminary estimates for various development scenarios at the North 40 property.

With the exception of leaving the property as conservation land, the various other scenarios result in additional costs of \$187K to \$240K. These amounts represent roughly a 2-3% increase to our total tax impact budget. The table below summarizes the estimated impacts for each scenario and also shows the incidental enterprise fund impact and additional staff anticipated. Our estimates includes personal service costs, expense costs, and ongoing capital costs of maintaining added inventory to our asset infrastructure (for example, 3 miles of road that would need to be repaved every 10 – 14 years).

Scenario	Tax Impact	Water/Sewer Impact	Additional Permanent Staff	Additional Seasonal Staff
Conservation	\$14,000	\$0	0	0
Passive Recreation	\$187,000	\$1,000	0	0
Active Recreation	\$222,000	\$5,000	1	2
100 Homes	\$213,000	\$5,000	0	0
300-400 Housing Units	\$240,000	\$7,000	0	0
School	\$200,000	\$5,000	.5	1

These estimates are based on projected maintenance required to support the infrastructure typical for each development scenario. For example, if 100 homes were to be built, we assume that approximately 3 miles of road, sidewalk and drainage infrastructure would need to be maintained. Maintenance requirements for these activities would include, for example, road repairs, catch basin cleaning, street sweeping, debris cleanup, plowing and hydrant flushing. In comparison, if an active recreation site were created, some portion of the above activities would be required along with field maintenance, mowing, seeding, weeding, grooming, and site amenities maintenance. Similar maintenance requirements would exist to more or less extent for each of the scenarios except for conservation.

If the property were to be left as is, there would be very little maintenance required and we have included a token amount to account for incidental maintenance that is typically required in existing similar areas for parking lots, access roads, and occasional trail maintenance.

We believe that our current water and sewer infrastructure is sufficient to handle the added demand in each scenario. Any costs of pumping additional water would be paid for by the specific users through their water and sewer rates. We have assumed that any initial infrastructure, including water and sewer, would be part of the capital cost or developer cost of any development. We estimate an incremental increase in water and sewer system maintenance and we have also accounted for capital maintenance and replacements due to any new infrastructure installed.

Finally, we expect that additional staff may be needed to handle the maintenance of select potential development. Specifically, active recreation space will require one (1) full time groundskeeper and two (2) additional seasonal staff. The creation of a new school will require one-half ($\frac{1}{2}$) of a full time groundskeeper and one (1) additional seasonal employee. We estimate that the maintenance required for the other scenarios could be handled by existing staff. Benefit costs for any additional staff have not been included in this analysis.

We hope this information is helpful to you and the Committee. Please let me know if you have any questions or need any additional information.

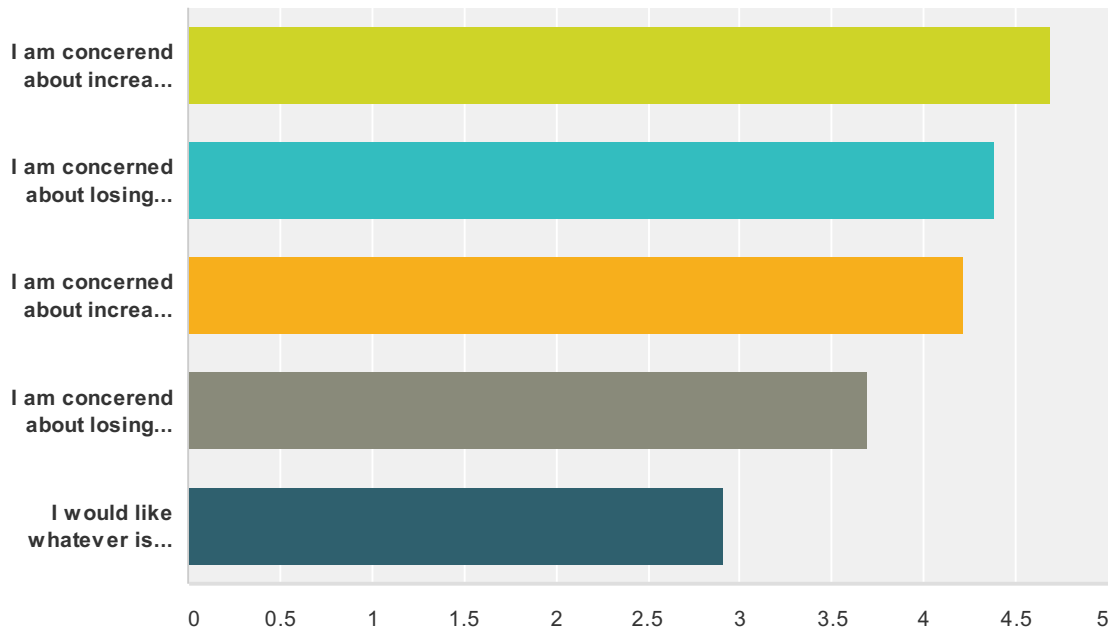
Cc: Mike Pakstis, Director of Public Works
David Donohue, Board of Public Works
Paul Criswell, Board of Public Works

APPENDIX F. NEIGHBORHOOD SURVEYS

Weston Road Area Neighborhood - North 40 Survey

Q1 In considering potential development of the North 40, please rate your agreement with the following statements:

Answered: 86 Skipped: 0



	Strongly disagree	Somewhat disagree	Neutral	Somewhat agree	Strongly agree	Total	Average Rating
I am concerend about increased traffic on Weston road.	0.00% 0	2.38% 2	4.76% 4	14.29% 12	78.57% 66	84	4.69
I am concerned about losing natural forest land.	2.33% 2	4.65% 4	9.30% 8	19.77% 17	63.95% 55	86	4.38
I am concerned about increased traffic on the smaller neighborhood streets near Weston Road.	3.49% 3	10.47% 9	8.14% 7	16.28% 14	61.63% 53	86	4.22
I am concerend about losing the community gardens that are currently present in the North 40.	10.47% 9	6.98% 6	20.93% 18	25.58% 22	36.05% 31	86	3.70
I would like whatever is built to produce revenue for the town.	17.65% 15	14.12% 12	38.82% 33	18.82% 16	10.59% 9	85	2.91

Weston Road Area Neighborhood - North 40 Survey

Q2 I have concerns you did not mention, and they are:

Answered: 33 Skipped: 53

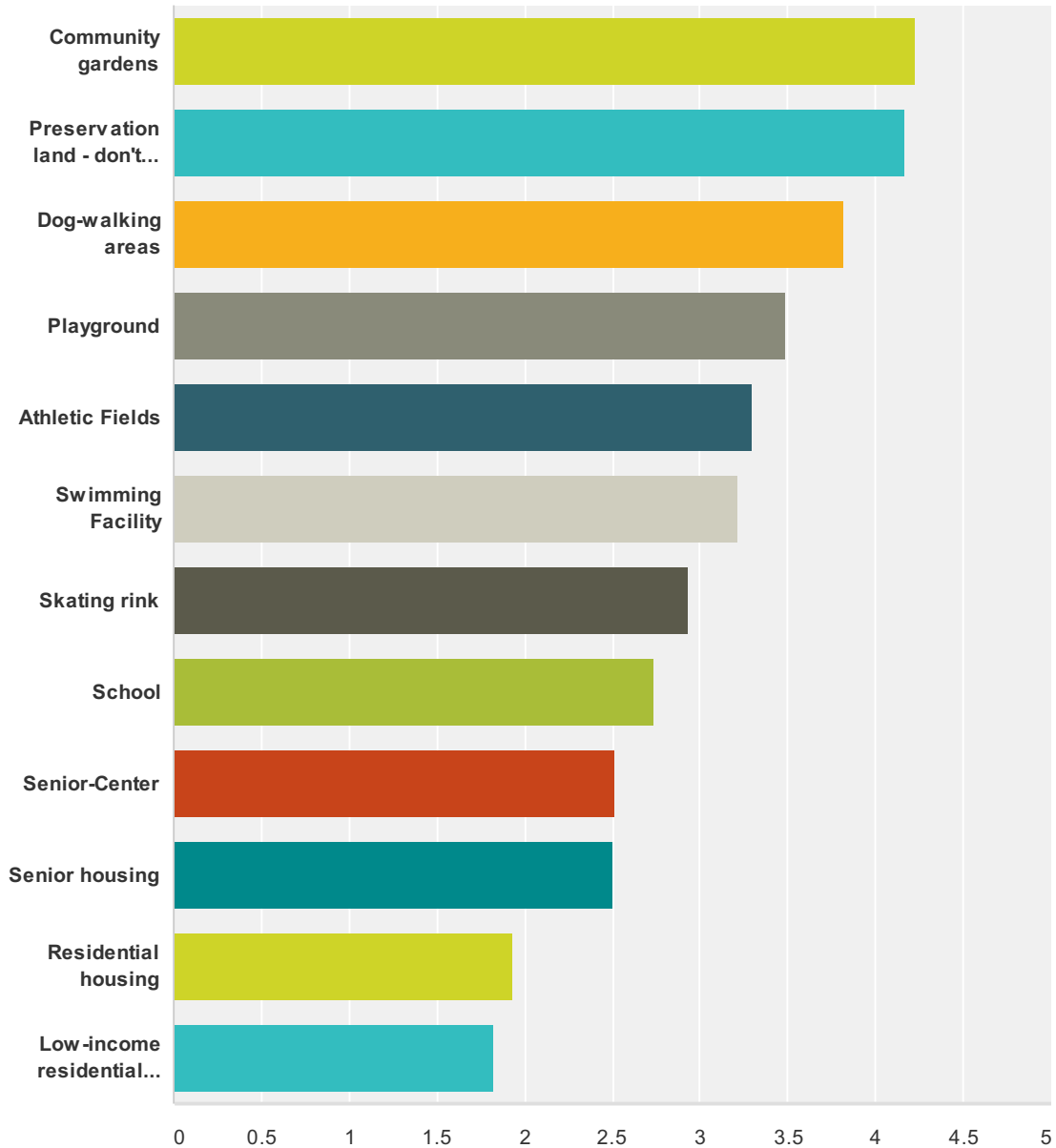
#	Responses	Date
1	What is in the dump area?	6/23/2014 7:13 PM
2	Continued overbuilding the town and the loss of its beauty. Diminished quality of life due to traffic and loss of open space.	6/21/2014 10:07 PM
3	I would prefer the town found a way to utilize this space for community use (fields, facilities, etc) rather than have it developed.	6/21/2014 3:51 PM
4	Noise from new use; lights if they put in playing fields; construction traffic/noise/disruption; loss of visual appeal of area; loss of general access to open space	6/21/2014 11:29 AM
5	Turner Road and the Morse's Pond Road have become Indy 500 practice zones during the summer season - unsafe for small children on bicycles, pedestrians/joggers, and dog walkers. Unfortunately, the Police will not put down traffic bumps to make people s-l-o-w down. I am concerned about losing a park-like setting where people can exercise, bird watch, dog walk, and just commune with Nature. The College has been very generous to let us use this open land for so many years. Were something to be built in the North 40, where would Town Residents park to utilize the new facilities or simply to walk in the remaining woods? I am also extremely concerned on the impact on the community living in the immediate area (The Generals).	6/21/2014 10:46 AM
6	I am concerned about someone building a bunch of McMansions here. Would prefer higher density townhomes with more forest preserved.	6/20/2014 7:54 PM
7	HOW WOULD TAXES BE IMPACTED BY THE TOWN'S PURCHASE OF THE LAND?	6/20/2014 1:11 PM
8	Loss of community gardens means LOSS OF COMMUNITY that developed there and around it - not a trivial thing.	6/20/2014 11:59 AM
9	My biggest concern is a 40B development wherein the Town loses almost all control over zoning restrictions and density. We will not be able to have all of our desires met unless there are conservation foundations willing to put the land in preservation. This is highly unlikely for that spot and the \$ required. My desire is that we help officials come up with innovative, yet practical approaches to this...including partnerships. I appreciate the need to protect the neighborhood and its residents. That is the first priority. Keeping the land and gardens and trails as is would be fantastic, but unrealistic.	6/20/2014 11:36 AM
10	I mainly use that area to walk my dogs, off-leash. I know that the Aqueduct Trail will still be public, but I hope that the abutting development is still dog-friendly.	6/19/2014 1:01 PM
11	I'm concerned that additional housing may be proposed for this location. Our school system and road system cannot handle the increased load that this additional housing would bring. I don't believe that would be a good use of the land.	6/19/2014 8:33 AM
12	I would love to have a real community garden that is not individual lots, but a Wellesley Farm / Garden.	6/19/2014 12:28 AM
13	I am concerned that if the land is used to build houses, the Town would need additional school(s) to support that.	6/18/2014 5:49 PM
14	I am concerned about the over development of the town as a whole. Wellesley is losing its charm which is what brought many people into the town.	6/18/2014 4:54 PM
15	I hate to think of all this land being developed. I fear the amount of building might be excessive.	6/18/2014 2:10 PM
16	The town buys the land and pays too much	6/18/2014 12:50 PM
17	Added congestion in the area might lower property values	6/18/2014 12:32 PM

Weston Road Area Neighborhood - North 40 Survey

18	the town needs open spaces but we also need tax revenue, an elderly housing complex would be ideal here as it could have an open space for the community, a community garden and the elderly housing our neighbors deserve. the town should buy a portion of it and have a developer create a small community of single story houses for our elderly neighbors to enjoy so they may vacate their houses and sell them to people who have children. this will remediate any traffic concerns as the elderly likely don't drive as much and reduce the potential burden on the hardy school because the elderly won't have school aged children	6/18/2014 11:08 AM
19	Loss of trails, wildlife; Noise	6/18/2014 7:25 AM
20	Top priorities are community space. For example, I am concerned about increased traffic in the area, but if it was because the space became a public use park of some sorts, I would not mind the increased traffic. As long as it is for the community!	6/17/2014 11:27 PM
21	I am also concerned about the environmental impact to the current district and the nearby areas such as the Morses pond if the north 40 is developed.	6/17/2014 6:27 PM
22	Cost of acquiring the land and also whatever the town decides to do on said property.	6/17/2014 1:06 PM
23	I want nothing to be built on that land. The town is already overbuilt and being taken over by monster houses with no relationship to the sizes of their lots. Open space is precious and should be preserved for the benefit of all.	6/17/2014 9:29 AM
24	The wild life that lives in the area.	6/17/2014 7:48 AM
25	Affecting the watershed area for Morse's Pond	6/16/2014 9:37 PM
26	Loss of space and trails for walking dogs	6/16/2014 7:46 PM
27	access to undeveloped land for walking, bird watching, walking dogs, breathing fresh air	6/16/2014 7:44 PM
28	Increase student enrollment in Hardy school	6/16/2014 5:28 PM
29	additional homes will put a strain on our already crowded schools.	6/16/2014 3:41 PM
30	We don't have many opportunities to save forest land for the use of the community. This is a beautiful pine forest with diverse wildlife, especially birds who feed on the garden. Developing this plot is short-sighted. We should make it an Audubon protected preserve or a campground for the town's children.	6/16/2014 3:23 PM
31	If the gardens are kept they should be kept neater and more presentable.	6/16/2014 1:34 PM
32	How the schools, specifically Hardy which already has enrollment issues, would accommodate an inflow of more children in this neighborhood.	6/16/2014 1:15 PM
33	This is a great resource for the town. if it needs to be developed, why not consider a town pool, lit athletic fields and a skating rink?	6/16/2014 11:56 AM

Q3 In considering uses of the North 40, please rate the desirability of each of the following options. Keep in mind that the land could be used for multiple purposes:

Answered: 84 Skipped: 2



	Very undesirable	Somewhat undesirable	Neutral	Somewhat desirable	Very desirable	Total	Average Rating
Community gardens	1.19% 1	5.95% 5	15.48% 13	23.81% 20	53.57% 45	84	4.23
Preservation land - don't build anything, keep it like it is	7.23% 6	8.43% 7	6.02% 5	18.07% 15	60.24% 50	83	4.16
Dog-walking areas	9.52% 8	3.57% 3	19.05% 16	30.95% 26	36.90% 31	84	3.82

Weston Road Area Neighborhood - North 40 Survey

Playground	14.29% 12	5.95% 5	23.81% 20	28.57% 24	27.38% 23	84	3.49
Athletic Fields	19.28% 16	12.05% 10	15.66% 13	25.30% 21	27.71% 23	83	3.30
Swimming Facility	21.95% 18	12.20% 10	18.29% 15	18.29% 15	29.27% 24	82	3.21
Skating rink	29.27% 24	10.98% 9	19.51% 16	18.29% 15	21.95% 18	82	2.93
School	30.95% 26	13.10% 11	23.81% 20	15.48% 13	16.67% 14	84	2.74
Senior-Center	25.30% 21	20.48% 17	36.14% 30	13.25% 11	4.82% 4	83	2.52
Senior housing	31.33% 26	21.69% 18	21.69% 18	15.66% 13	9.64% 8	83	2.51
Residential housing	56.63% 47	13.25% 11	15.66% 13	9.64% 8	4.82% 4	83	1.93
Low-income residential housing	62.65% 52	10.84% 9	12.05% 10	9.64% 8	4.82% 4	83	1.83

Q4 I strongly desire something that was not listed, and that is:

Answered: 11 Skipped: 75

#	Responses	Date
1	Not strongly, but maybe some Woodlands type moderately sized detached single family houses which would be priced under \$1,000,000	6/22/2014 6:49 AM
2	Given Wellesley's strong desire to be a leader in green initiatives this space might be ideal for putting in a solar farm - panels could supply electricity back to the grid for years to come while the public could still have access to a reasonable portion of the land for walking/recreational paths as part of the open space requirement. Developing the area for regular use purposes - whether residential, athletic, or for a school - would make a very bad traffic situation impossible. If we wanted to live on Route 9 we would have bought our house there in the first place.	6/21/2014 11:36 AM
3	What about a designated dog park/green area, since Perrin is so restricted? Children have enough areas to play. Dogs and their humans need a place to exercise, explore, and enjoy the out of doors off leash. What about building other walking/hiking nature trails identifying flora/fauna/geological features of the area? Is there enough security for the sub-station on the corner of Weston and Linden at the trail head?	6/21/2014 11:02 AM
4	preservation of green spaces is key!	6/20/2014 12:01 PM
5	A car-free zone for whatever ends up there.	6/20/2014 11:41 AM
6	I think a center that combines programming for Seniors AND youth is needed in this town, both to save resources and to promote interaction between generations.	6/19/2014 1:06 PM
7	Recreation center and/or affordable art studios	6/18/2014 8:09 PM
8	Preserve the land as it is and I wish that we would not disturb wildlife.	6/18/2014 4:57 PM
9	fence enclosed dog park	6/18/2014 11:19 AM
10	Create a safe bike lane along Weston Road.	6/16/2014 9:39 PM
11	What about small retail/restaurants? Is that an option?	6/16/2014 7:02 PM

Weston Road Area Neighborhood - North 40 Survey

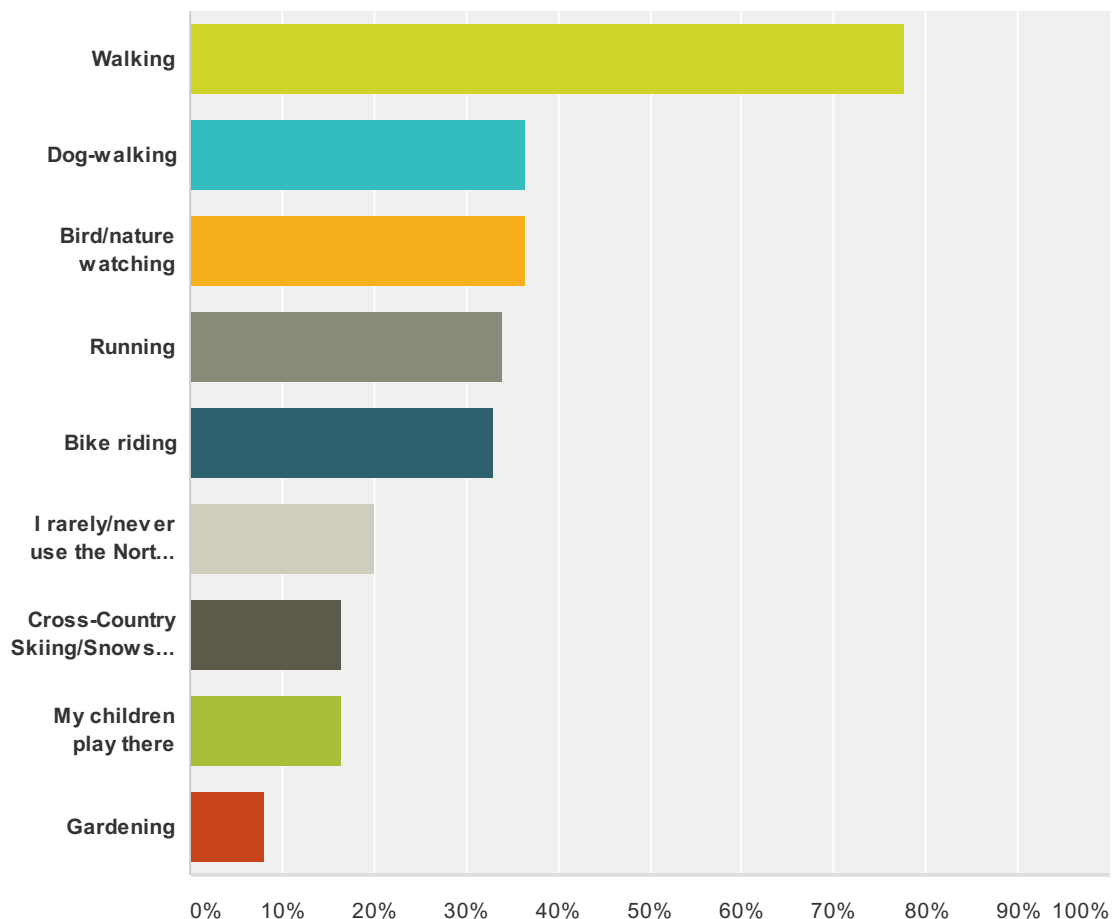
Q5 I strongly oppose something that was not listed, and that is:

Answered: 18 Skipped: 68

#	Responses	Date
1	Anything that will increase taxes in the town significantly. I would like to see this land generate revenue for the town or at least not cost us anything more.	6/23/2014 8:50 PM
2	No townhouses/apartments!	6/22/2014 6:49 AM
3	I assume it is zoned residential and not commercial...	6/21/2014 11:36 AM
4	A new housing complex due to traffic on Weston Road and impact on the Morse's Pond Water shed.	6/21/2014 11:02 AM
5	Any religious building, structure, gathering place of worship. Any commercial buildings. - no CVS needed here	6/21/2014 8:29 AM
6	anything that will be a money sink for the town like pool or skating rink.	6/20/2014 7:56 PM
7	development of this land into MacMansions!	6/20/2014 12:01 PM
8	An athletic complex to complement the Warren Building (other than a town swimming facility). A school and fields complex that would make the area designed for the school population only.	6/20/2014 11:41 AM
9	I strongly oppose anything that increases traffic on Weston Road and other neighborhood roads.	6/18/2014 4:57 PM
10	Shopping mall or commercial space Government or administrative building	6/18/2014 12:32 PM
11	We don't need a senior center.	6/17/2014 7:49 AM
12	As a home owner in this area I strongly oppose low income housing	6/16/2014 10:57 PM
13	luxury houses	6/16/2014 9:39 PM
14	Moving the Wellesley High School Stadium (and lights) to North 40	6/16/2014 8:25 PM
15	anything commercial	6/16/2014 7:48 PM
16	Using the land only for residential developments seems like a missed opportunity for the town.	6/16/2014 7:02 PM
17	retail	6/16/2014 3:42 PM
18	Why would we use forest, paths and public land for more housing - isnt there enough already?	6/16/2014 11:57 AM

Q6 In what ways do you currently use the North 40 (check all that apply)?

Answered: 85 Skipped: 1



Answer Choices	Responses
Walking	77.65% 66
Dog-walking	36.47% 31
Bird/nature watching	36.47% 31
Running	34.12% 29
Bike riding	32.94% 28
I rarely/never use the North 40.	20.00% 17
Cross-Country Skiing/Snowshoeing	16.47% 14
My children play there	16.47% 14
Gardening	8.24% 7
Total Respondents: 85	

#	Other (please specify)	Date
1	great for photos	6/23/2014 7:14 PM

Weston Road Area Neighborhood - North 40 Survey

2	We often use the trail to walk to downtown from the Fells neighborhood.	6/19/2014 1:08 PM
3	my children are grown up but they used to play there and I used to have gardens there	6/17/2014 6:45 PM
4	It is a treasure and should be preserved as it is. For once let the common good prevail over money.	6/17/2014 9:31 AM
5	It feels good to know that that land is there and is not being developed.	6/17/2014 7:50 AM
6	But when I do use it, it's usually for running or walking.	6/16/2014 1:57 PM

Weston Road Area Neighborhood - North 40 Survey

Q7 Do you have any additional comments for your neighborhood representative?

Answered: 36 Skipped: 50

#	Responses	Date
1	My primary concern is traffic. There are times when I have to wait 10 min to pull out of Lafayette Circle. It is a very bad road. The Hardy School creates a traffic problem (imagine having another school or recreation area on Weston Road!) Lafayette Circle is a parking lot for the parents of the Hardy School students. There are times that cars make it very difficult to back out of driveways.	6/23/2014 7:20 PM
2	Feel the town should zone the land green space no buildings	6/21/2014 10:10 PM
3	Thank you for your time in helping to find reasonable solutions to a very difficult problem - whenever money is involved, we know who will win.	6/21/2014 11:38 AM
4	Thank you for your time and effort on behalf on the neighbors. Having been caught in the AM/PM Hardy School traffic and well as the commuter traffic backups, we are very concerned that any construction in the North 40 would deleteriously impact our neighborhood. We feel that renovating Hardy and Hunnewell Schools would be preferable to any new building. Also, what would it cost to bring Warren School back on line to accommodate future enrollment?	6/21/2014 11:13 AM
5	Keeping the way it is probably is the best way; however, if going to develop the land anyways despite of objections, I will vote for a infrastructure that will benefit the community, instead of single family houses that will increase the tax base	6/20/2014 10:38 PM
6	I believe the best use of the North 40 would be a mixed use of residential (cluster housing) and open space recreation (playing fields, green belts, and walking paths)	6/20/2014 9:30 PM
7	Developed land can never be undeveloped. If we don't save it from development now, it will be gone forever. Make the North 40 preservation land, of which the town has so little left.	6/20/2014 9:11 PM
8	i did not agree with the court decision to let the college sell this land, but i suppose that's water under the bridge.	6/20/2014 7:57 PM
9	PLEASE DO NOT SELL OFF TO DEVELOPERS!!!	6/20/2014 12:02 PM
10	You are in a difficult position. Appreciate the complexity of the problem. Listen to all the neighbors and keep the dialog on a "high" level. Be sure to communicate clearly in both directions. You have the potential to be a huge asset to the Town officials.	6/20/2014 11:47 AM
11	One reason I moved to the Fells neighborhood was all the open space. I feel like I live in the woods. I understand the pressure for more athletic fields, playgrounds, and senior housing ... , but there is something wonderful about just letting your kids run around in the woods. If this area just became a development of cookie-cutter McMansions, I might enjoy my new neighbors and my taxes might go up less quickly, but Wellesley would be less of a special place.	6/20/2014 7:38 AM
12	Town should sell St. James parcel and buy North 40 for recreation facilities: pool, skating rink, playgrounds, athletic fields. Thanks!	6/19/2014 1:38 PM
13	Thanks for volunteering to do this!	6/19/2014 1:10 PM
14	We need to be very, very careful about "developing" this area. Open space is hard to come by. Once it's gone, it's gone.	6/18/2014 2:14 PM
15	The North 40 is not a good location for a senior center, as it would be too far from shopping and other services.	6/18/2014 12:38 PM
16	Weston Road can't handle any more major traffic.	6/18/2014 11:20 AM
17	The town has to stop trying to build things for itself, its time to let the market forces determine the use of the land instead of spending taxpayer money to buy all of it. if it does become a school, the hardy should then be made into a senior center and the horrible trailer behind it demolished. if people want a skating rink, let them pay for it, it is not the responsibility of the town to use town resources to build our own club med. you want it, pay for it like the rest of us have for years through places like the BSC and Wellesley Country Club. the town has to stop hemorrhaging money to suit the baby-factory mentality of these stupid housewives.	6/18/2014 11:11 AM

Weston Road Area Neighborhood - North 40 Survey

18	The town or the community should seek to buy the land through fundraising to keep it as is forever. It should be in a land trust. It's precious, and once gone, is gone forever. Along with the deer, mice, hawks, songbirds, woodpeckers, foxes, coyotes, snakes, butterflies and other wonderful residents. My children grew up playing there and I am there several times a week. The north 40 and the rest of the reservation are a big part of why I live here. We need open, undeveloped, beautiful space we share with each other and with wildlife. We just do. I can't see how any development there could take place without serious, longterm disruption of the already awful Weston road traffic.	6/18/2014 7:34 AM
19	Thank you for doing this!!	6/18/2014 6:48 AM
20	please preserve community gardens. forest is public land that is accessible by many people and widely used and appreciated. any development should be on a limited basis only with a priority for maintaining community garden and forested land. taking away community garden would remove food donation program, which has been very popular.	6/17/2014 9:21 PM
21	what mostly to see open space, nature undisturbed or as natural as possible and nothing that will generate increased traffic on an already extremely busy Weston Rd and entire area	6/17/2014 6:47 PM
22	Weston Road is virtually impassable during certain times of day. We need to be very conscious of adding more traffic to this area.	6/17/2014 1:08 PM
23	Please be strong and advocate for preservation of this space. I think it should be declared conservation land and protected from any development. Thank you.	6/17/2014 9:32 AM
24	I would agree to the town buying the land and not developing it beyond minimal necessity.	6/17/2014 7:50 AM
25	Please keep it as is.	6/16/2014 10:58 PM
26	I don't want to see residential development of more McMansions.	6/16/2014 9:52 PM
27	A town swimming pool near a senior center would be a great opportunity to encourage safe exercise (no danger of falling!) for seniors.	6/16/2014 9:41 PM
28	As a resident of Weston Rd, I take my life in my hands getting my car out of my drive as cars race by at 40+ mph. I actually hope that development of this land will lead to slower traffic and a 25mph speed limit.	6/16/2014 8:16 PM
29	I am concerned that the vocal minority - in the form of community gardeners and people worried about traffic - will overshadow the opportunity to have a constructive and balanced discussion about potential uses of the site.	6/16/2014 7:03 PM
30	Anything that would add traffic is not feasible. Traffic on Weston Road is already a problem several times of the day.	6/16/2014 6:25 PM
31	Thank you for organizing this	6/16/2014 5:30 PM
32	Feel strongly that the town should buy the property.	6/16/2014 4:29 PM
33	We have a working farm here, something many interested foodies/restaurants/schools/CSA buyers would have more enthusiasm for if they knew about it. And the surrounding area is beautiful forest. Please let's not squander these impossible to replace last remaining wild spaces. Someone please do an air quality/light pollution/ water pollution/ noise pollution study on the affects of turning this place into more houses/cars/pavement. the results may be disastrous!	6/16/2014 3:28 PM
34	We feel strongly that the town should buy the property.	6/16/2014 1:38 PM
35	Additional excessive traffic, other than more residential traffic, is a major concern.	6/16/2014 1:01 PM
36	In an era where towns and cities are looking to be create parks and land for recreational purposes - it seems ironic that a densely populated town like Wellesley is looking to take it away and create more housing.	6/16/2014 11:58 AM

Weston Road Area Neighborhood - North 40 Survey

Q8 Please provide your first name and street address. This info will NOT be shared with anyone, and will only be seen by the survey administrator to help him determine survey response rates. If you wish to remain anonymous, you may leave this blank.

Answered: 68 Skipped: 18

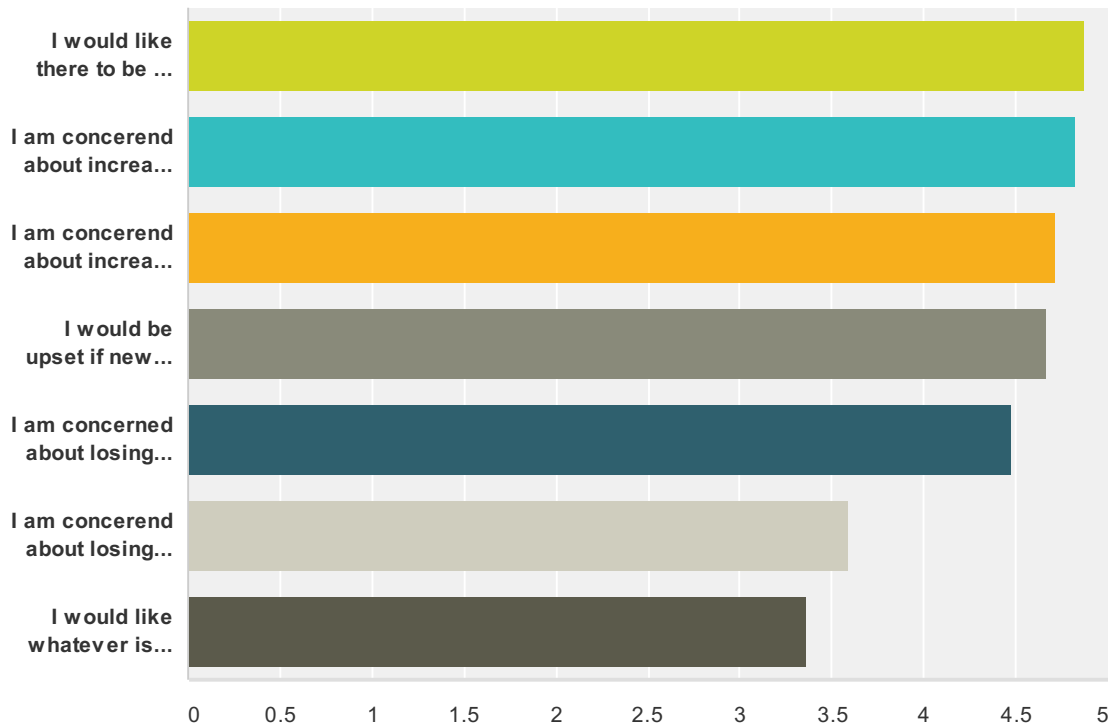
#	Responses	Date
1	6 linden st	6/23/2014 7:22 PM
2	Lucille Lyons 1 Lafayette Circle	6/23/2014 7:20 PM
3	Anne Orser 140 Weston	6/23/2014 7:14 PM
4	Joyce Wadlington 263 Weston Road	6/23/2014 5:46 PM
5	Haig 12 Curve Street	6/23/2014 12:12 PM
6	Paula, 9 Fisher Ave	6/22/2014 10:14 PM
7	Hugh 15 Sunset Rd	6/22/2014 6:49 AM
8	Barry, 15 Bay View Road	6/21/2014 10:10 PM
9	Jacquelyn Stathis 29 Poplar Road Wellesley MA 02482	6/21/2014 8:48 PM
10	Brian 1 Harvard St	6/21/2014 3:52 PM
11	Mellon Rd.	6/21/2014 2:42 PM
12	Weston Road resident	6/21/2014 11:38 AM
13	Lynn 15 Crown Ridge Rd	6/21/2014 8:30 AM
14	Alan 7 Bay View Rd	6/20/2014 10:38 PM
15	Andrew - 7 Summit Rd.	6/20/2014 9:25 PM
16	Greg 75 Ivy Road	6/20/2014 9:12 PM
17	Patrick 50 Summit Road	6/20/2014 7:58 PM
18	France, 30 Bay View Road	6/20/2014 1:37 PM
19	Svetlana & Andy Levin 30 Russell Rd.	6/20/2014 12:02 PM
20	Susan 45 Russell Road	6/20/2014 11:47 AM
21	George 41 Bay View Road	6/20/2014 7:39 AM
22	Tom 38 Bay View Rd	6/19/2014 1:39 PM
23	Erin, 28 Bay View Road	6/19/2014 1:14 PM
24	Katie Swenson 70 Curve Street	6/19/2014 12:29 AM
25	Russell Road	6/18/2014 10:52 PM
26	Carolyn 201 Weston Rd.	6/18/2014 8:10 PM
27	larry, 8 High Meadow Circle, wellesley 02482	6/18/2014 5:56 PM
28	Mary 21 Howe St	6/18/2014 5:52 PM
29	Lucille 41 Maurice Road	6/18/2014 4:59 PM

Weston Road Area Neighborhood - North 40 Survey

30	Jan and Eliot Putnam 5 Crown Ridge Road	6/18/2014 2:15 PM
31	Tracy, 15 Shadow Ln, Wellesley	6/18/2014 1:15 PM
32	Richard Fells road	6/18/2014 12:52 PM
33	Bruce 19 Lawrence Rd.	6/18/2014 12:39 PM
34	Richard Summit Rd	6/18/2014 11:43 AM
35	Georgia, 14 Lafayette Circle	6/18/2014 11:20 AM
36	Robert Kenney 38 Summit rd	6/18/2014 10:48 AM
37	Anne Marie 7 Oakencroft	6/18/2014 10:35 AM
38	Jean 13 willow road	6/18/2014 7:34 AM
39	Kelly 261 Weston Road	6/18/2014 6:48 AM
40	Samuel, 31 Summit Road	6/17/2014 11:29 PM
41	Summit Rd.	6/17/2014 9:21 PM
42	Kristin 46 Summit Rd	6/17/2014 9:19 PM
43	Rebekah 239 Weston Rd	6/17/2014 8:38 PM
44	Weston Rd/ Howe Street area	6/17/2014 6:49 PM
45	Zukui, 8 Willow Road	6/17/2014 6:32 PM
46	34 Summit Rd	6/17/2014 2:21 PM
47	Tom 223 Weston Rd.	6/17/2014 2:13 PM
48	Fred 19 Garrison Road	6/17/2014 1:08 PM
49	Leah 12 Mellon Road. Can certainly be contacted if that would help.	6/17/2014 9:33 AM
50	John 255 Weston rd	6/17/2014 9:33 AM
51	265 Weston Road	6/17/2014 7:50 AM
52	Curve Street resident	6/16/2014 10:58 PM
53	Martha 3 Lawrence rd	6/16/2014 10:02 PM
54	Raquel 16 Howe Street	6/16/2014 9:53 PM
55	Alison 28 Howe St.	6/16/2014 9:41 PM
56	Meryl 217 Weston Road	6/16/2014 8:25 PM
57	Elaine, Weston Rd	6/16/2014 8:16 PM
58	LISA 51 CURVE ST	6/16/2014 8:04 PM
59	Joan 18 Strathmore Road	6/16/2014 7:50 PM
60	Wiley 76 Crest Rd	6/16/2014 7:45 PM
61	Joel and Susan 20 Howe St,	6/16/2014 7:29 PM
62	Dana Conti 157 Weston Road	6/16/2014 7:03 PM
63	Kim. 251a Weston Rd	6/16/2014 5:30 PM
64	Amy/Curve street	6/16/2014 3:43 PM
65	Crystalle Lacouture 15 Howe St. Wellesley, MA 02482	6/16/2014 3:29 PM
66	David 151 Weston Road	6/16/2014 2:12 PM
67	Rhonda, 19 Willow Rd.	6/16/2014 1:01 PM
68	Dan Rubin 18 Strathmore Road Wellesley, MA 02482	6/16/2014 11:58 AM

Q1 In considering potential development of the North 40, please rate your agreement with the following statements:

Answered: 61 Skipped: 0



	Strongly disagree	Somewhat disagree	Neutral	Somewhat agree	Strongly agree	Total	Average Rating
I would like there to be a buffer-zone of forest-land between the Woodlands neighborhood and any development.	1.64% 1	0.00% 0	3.28% 2	0.00% 0	95.08% 58	61	4.87
I am concerend about increased traffic in the Woodlands neighborhood.	3.28% 2	0.00% 0	0.00% 0	4.92% 3	91.80% 56	61	4.82
I am concerend about increased traffic on Weston road.	3.33% 2	0.00% 0	5.00% 3	5.00% 3	86.67% 52	60	4.72
I would be upset if new roads entered into the Woodlands neighborhood from the North 40 development.	1.67% 1	1.67% 1	6.67% 4	8.33% 5	81.67% 49	60	4.67
I am concerned about losing natural forest land.	6.56% 4	0.00% 0	4.92% 3	16.39% 10	72.13% 44	61	4.48
I am concerend about losing the community gardens that are currently present in the North 40.	14.75% 9	1.64% 1	26.23% 16	24.59% 15	32.79% 20	61	3.59
I would like whatever is built to produce revenue for the town.	13.79% 8	3.45% 2	43.10% 25	12.07% 7	27.59% 16	58	3.36

Woodlands North 40 Survey

Q2 I have concerns you did not mention, and they are:

Answered: 28 Skipped: 33

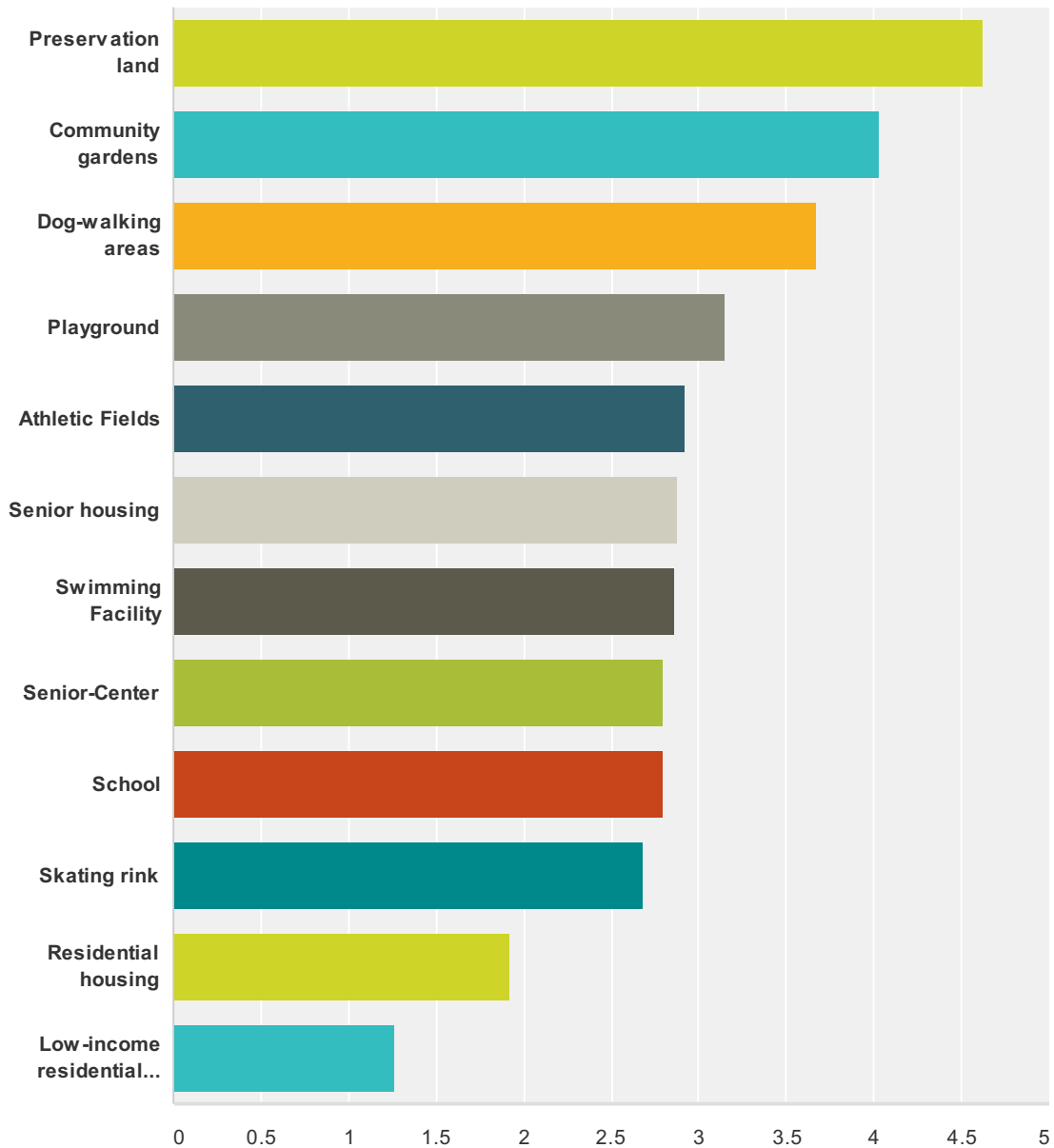
#	Responses	Date
1	Concerns about creating a new route from Turner to Route 135 that reduces traffic on Weston Road.	6/22/2014 2:58 PM
2	Would like to keep it as conservation land.	6/20/2014 8:05 PM
3	I FEEL AS THOUGH IT WOULD NOT BE WISE TO ALLOW ANY NEW HOUSING OR OTHER DEVELOPMENT THAT WOULD REQUIRE NUMEROUS VEHICLES TO TRAVEL TO THE AREA.	6/18/2014 3:51 PM
4	IF THEY CONSTRUCT ROADS INTO WOODLANDS THEY MUST BE NOT LINED UP DIRECTLY WITH EXISTING ROADS. MORE STOP SIGNS FOR WOODLANDS AND SPEED BUMPS.	6/17/2014 8:56 AM
5	Environmental concern about disturbing area that was the town landfill.	6/16/2014 10:45 PM
6	question of toxic waste under North 40 and possible poisoning of Morses Pond aquifer via run-off resulting from development.	6/16/2014 3:30 PM
7	effect upon the Town wells at Morses Pond - if developed it will have an impact on the quality of our drinking water.	6/16/2014 11:24 AM
8	The landfill under the North 40 is a SIGNIFICANT concern for the following reasons: 1. contents and extent of contamination are unknown. 2. No known/public studies have been undertaken to determine the extent of possible contamination and the possible effects of exposure and or disruption of the existing contents to abutting owners; nor of changes to drainage patterns and excavation activities which will occur as a result of any significant construction on the site 3. If the Town were to procure the property, because of the lack of current information regarding the issues in 1 and 2 above, the true cost to the town and its taxpayers is not calculable 4. Construction will inevitably uncover unknown contents 3. Abutter impact cannot be currently calculated 4. Abutting residents (woodlands) will bear the brunt of any contaminated material exposure and/or remediation efforts, along with the general disruption and potential property value impacts associated with the topics listed above	6/16/2014 10:52 AM
9	The exposure to toxins as a result of the development of the land that had the old dump	6/16/2014 9:04 AM
10	I would prefer a school or town fields to be built rather than have the land developed with new homes that would crowd our currently crowded elementary schools.	6/16/2014 5:55 AM
11	that the newly developed area, depending on what gets built there, leads to devaluation of the properties in the Woodlands neighborhood	6/15/2014 4:24 PM
12	the potential noise generated by traffic to new developed land (IE: delivery truck backup alarms at night/early morning, noise from trash pickup (typically early morning). also the increased demand on town services.	6/15/2014 1:46 PM
13	If more housing is developed, I am concerned about increased demand on schools and other town resources.	6/14/2014 5:41 PM
14	Whatever study they do will say that it will not impact traffic, that is nonsense. Weston Rd now is ridiculous when it comes to traffic and it will only get worse as well as Turner Rd.	6/14/2014 4:37 PM
15	The old Wellesley College oil storage building that was located on the North 40 between the railroad tracks and the Aqueduct, it was demo years ago, is the site oil free? An old fire hydrant might still be near the site. Move community gardens to a less visible location.	6/14/2014 4:35 PM
16	I'm more concern about a developer buying the land, and doing whatever they like with the property. I would rather have the town buy the property so we can have input on what is developed there.	6/14/2014 4:22 PM
17	I do not want to see any access roads cut into Turner Road. If this parcel is going to be developed the access must be on Weston with two roads entering the new neighborhood. One somewhat near the corner of Turner Road and one by the switching station at the base of Linden Street and Weston Road.	6/14/2014 2:23 PM

Woodlands North 40 Survey

18	Foremost priority should be to preserve the land. This is an issue for all of Wellesley, not just abutters of the North 40. If you look at a map of Wellesley that shows forested land open to the public, we have much less vs. comparable towns. We cannot afford to lose 40+ acres to any kind of development, be it town or private. The town should not be shortsighted: once this land is developed it is gone forever. Having in place zoning regulations that make builders preserve/conserv 50% still destroys the integrity of the landscape - it will be divide into piecemeal. We need to also consider the abundant wildlife which reside in the North 40. The town does not need to pave over every possible inch of available land. The town should only buy the North 40 if it is committed to preservation for future generations.	6/14/2014 12:48 PM
19	I favor preservation above all else. Town development (school or playing fields) will cause more traffic, pollution, and noise. Private housing development will also contribute to these negative effects on citizen health and safety although to a lesser degree. More attention should be paid to the environmental outcomes of favoring preservation over any kind of development as Wellesley has already become more urbanized and will continue to do so. I am very concerned about any negative effect of town or private development of the North 40 on access to and safety of our town water supply given the presence of wellheads and aquifers on the North 40.	6/14/2014 12:32 PM
20	Any development that allows direct access to the woodlands would be terrible for the neighborhood-even if there is a buffer zone of forestland.	6/14/2014 11:55 AM
21	I am strongly concerned about the trails for biking and the turkeys and other animals i see on a daily basis. This would also impact my desire to explore the outdoors with my biking fishing metal detecting and boating skills	6/14/2014 8:49 AM
22	Major concerns: The Marshall C. Springs dumping area at north 40 and I would hope that the town's people are not going to be taxed again for any removal expenses. There is probably a lot of other toxic stuff that has been buried there over the years. The Woodlands neighbors area have also had an enormous amount of cancer. Pretty close to each and every home in the area. Would not like to see a school or a soccer field located as this would not bring in extra revenue to the town.	6/14/2014 8:30 AM
23	Property values due to increase density Things that come with increase traffic such as street safety, noise, increase truck traffic to service new housing, school, etc and using the street as cut through for those not will to sit on Weston Rd	6/14/2014 7:27 AM
24	The loss of the last true piece of open space would be devastating to the town.	6/14/2014 7:25 AM
25	Safety, traffic and revenue for the town key concerns	6/13/2014 10:26 PM
26	Traffic traffic traffic is my concern.	6/13/2014 7:13 PM
27	Construction period and construction noise and traffic during any development. I would be very sad to lose the natural forest space. My greatest wish is that the integrity of Woodlands is not compromised, in that there's a buffer land of forest between Woodlands any any development, and that no new roads enter Woodlands.	6/13/2014 5:20 PM
28	I am concerned about the effect of lighting in the neighborhood for playing fields, etc. I am also concerned that the loss of the woods will increase train and traffic noise.	6/13/2014 2:27 PM

Q3 In considering uses of the North 40, please rate the desirability of each of the following options. Keep in mind that the land could be used for multiple purposes:

Answered: 61 Skipped: 0



	Very undesirable	Somewhat undesirable	Neutral	Somewhat desirable	Very desirable	Total	Average Rating
Preservation land	5.00% 3	0.00% 0	5.00% 3	8.33% 5	81.67% 49	60	4.62
Community gardens	5.00% 3	5.00% 3	23.33% 14	15.00% 9	51.67% 31	60	4.03
Dog-walking areas	13.33% 8	1.67% 1	26.67% 16	21.67% 13	36.67% 22	60	3.67

Woodlands North 40 Survey

Playground	20.00% 12	11.67% 7	16.67% 10	36.67% 22	15.00% 9	60	3.15
Athletic Fields	20.00% 12	25.00% 15	11.67% 7	30.00% 18	13.33% 8	60	2.92
Senior housing	17.54% 10	17.54% 10	33.33% 19	22.81% 13	8.77% 5	57	2.88
Swimming Facility	32.76% 19	10.34% 6	12.07% 7	27.59% 16	17.24% 10	58	2.86
Senior-Center	22.03% 13	15.25% 9	33.90% 20	18.64% 11	10.17% 6	59	2.80
School	33.90% 20	13.56% 8	15.25% 9	13.56% 8	23.73% 14	59	2.80
Skating rink	35.59% 21	8.47% 5	20.34% 12	23.73% 14	11.86% 7	59	2.68
Residential housing	50.85% 30	22.03% 13	16.95% 10	5.08% 3	5.08% 3	59	1.92
Low-income residential housing	82.46% 47	8.77% 5	8.77% 5	0.00% 0	0.00% 0	57	1.26

Q4 I strongly desire something that was not listed, and that is:

Answered: 9 Skipped: 52

#	Responses	Date
1	LARGE RECREATION AREA FOR COMMUNITY WITH ATTACHED SENIOR CENTER.	6/17/2014 8:59 AM
2	Use the land for the benefit of hundreds of kids playing soccer and sports year round. Not a few farmers and dog walkers.	6/14/2014 5:02 PM
3	I strongly desire so see the town make a decision on Saint James property to develop athletic fields and double hockey rinks so the project can support itself instead of the town 'bonding' its way to buying what captures its fancy.	6/14/2014 2:25 PM
4	re residential- certain portion of affordable housing ok with me	6/14/2014 9:43 AM
5	I strongly desire preservation land from its benefits to the community i think it could help kids be more active and desire to play outside than to play video games which do not help you in life what so ever	6/14/2014 8:56 AM
6	Whatever is done to that property, please do something that will not drive the senior citizens out of this town. Most seniors have built this lovely town and are being penalized for living here new additional taxes, the lack of a free standing senior center (where is the money that was donated to the town)	6/14/2014 8:38 AM
7	Condos age 55 and up.	6/13/2014 10:23 PM
8	A swimming pool	6/13/2014 2:29 PM
9	if the town is not going ahead with a plan for building a pool, then i would like to see a indoor pool there	6/13/2014 1:49 PM

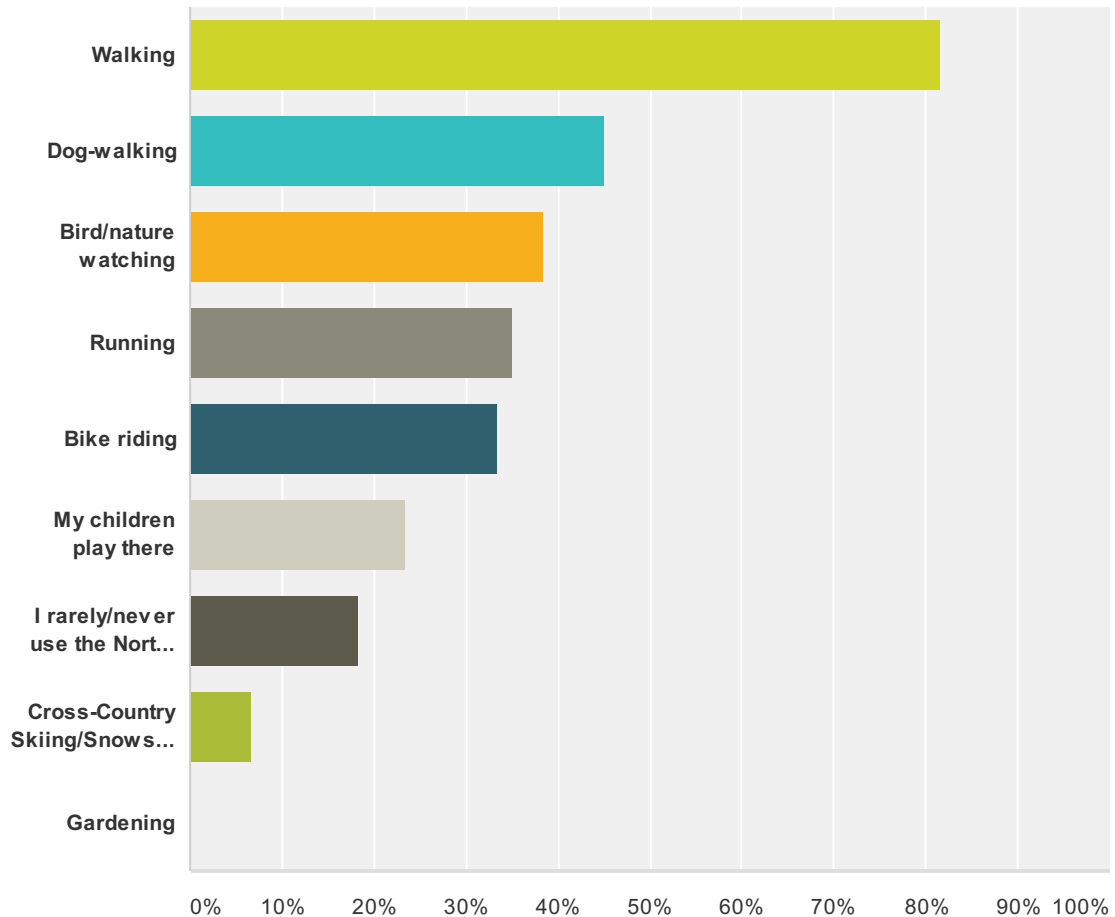
Q5 I strongly oppose something that was not listed, and that is:

Answered: 10 Skipped: 51

#	Responses	Date
1	Any fields with lighting; we have lit fields at Honeywell that are rarely used and several other fields there that could be lit at much lower cost or neighborhood impact.	6/22/2014 3:00 PM
2	RETAIL AREA	6/17/2014 8:59 AM
3	anything that is going to increase traffic on Weston Road - it is already a nightmare.	6/16/2014 11:27 AM
4	Any commercial use; expanded roadways which would feed through the Woodlands	6/16/2014 10:54 AM
5	shopping center	6/15/2014 4:31 PM
6	commercial development	6/15/2014 1:49 PM
7	Any other commercial development	6/14/2014 12:02 PM
8	I strong oppose to more housing and anything that would ruin our strong desire to be active in the wellesley community. I think if this would ever happen it would be like somebody died in my family because how much the ability to play outside affects my life	6/14/2014 8:56 AM
9	We do not need another school. Remember when we closed the six schools and built Sprague?????? High School???? It is time we maintain what we have instead of tossing it out like an old pair of shoes. You may think money grows on trees, but many townspeople do not make the hundred thousand dollar salary.	6/14/2014 8:38 AM
10	Hospital or health care facility	6/13/2014 2:29 PM

Q6 In what ways do you currently use the North 40 (check all that apply)?

Answered: 60 Skipped: 1



Answer Choices	Responses
Walking	81.67% 49
Dog-walking	45.00% 27
Bird/nature watching	38.33% 23
Running	35.00% 21
Bike riding	33.33% 20
My children play there	23.33% 14
I rarely/never use the North 40.	18.33% 11
Cross-Country Skiing/Snowshoeing	6.67% 4
Gardening	0.00% 0
Total Respondents: 60	

#	Other (please specify)	Date
1	drive by it - the increase of traffic will be huge if it is a school, fields or development	6/16/2014 11:27 AM

Woodlands North 40 Survey

2	For me, I value and the open space. The absence of additional traffic, sewerage, etc. is what I value.	6/14/2014 3:39 PM
3	children played there when younger	6/14/2014 9:45 AM
4	I also take friends and family there for an adventure	6/14/2014 8:57 AM
5	I enjoy watching the gardens growing.	6/14/2014 8:39 AM
6	Snowshoeing, X country skiing in winter.	6/14/2014 7:30 AM
7	Hiking, snowshoeing	6/14/2014 7:27 AM
8	I used to when i had dogs	6/13/2014 10:24 PM
9	As a short cut to Linden Street	6/13/2014 2:30 PM

Q7 Do you have any additional comments for your Woodlands neighborhood representative?

Answered: 21 Skipped: 40

#	Responses	Date
1	Whatever goes in the North 40, I don't want the Woodlands to be changed.	6/23/2014 7:26 PM
2	Thank you for creating a steering committee and involving the neighborhood.	6/22/2014 3:01 PM
3	We are concerned about disturbing the land over our watershed area and would like the EPA to look into the matter and advise. Also concerned about all the wildlife we have living there.	6/20/2014 8:14 PM
4	HOW DO WE STAY ABREAST WITH COMMUNICATIONS?	6/17/2014 9:00 AM
5	I definitely think that something should be done with that area because it is a TOTAL EYESORE to anyone driving down Weston Road. It looks like a junkyard whenever I drive past it so would wholeheartedly support it being developed in something more pleasing to the eye, however, nothing that would cause an huge increase in traffic to that area which is already congested with Rt 9 traffic making it's way to the center of town and Linden St.	6/17/2014 12:30 AM
6	keep this land undeveloped. Once cut and paved there is no going back!	6/16/2014 11:28 AM
7	Please raise the issue re: the landfill and the potential risks associated with its exposure during any construction process; as well, potential costs for remediation/liability associated with disruption of the current landfill	6/16/2014 10:56 AM
8	Very simply, Weston Road at that point is a traffic nightmare. The poorly designed traffic lights at Weston and Linden only add to the problem. The only way to alleviate traffic congestion is to make Weston at least three or four lanes, and have better turning onto Central Street. Addition traffic on Weston is a disaster in the making.	6/16/2014 9:07 AM
9	Thank you for representing the neighborhood!	6/14/2014 5:43 PM
10	Don't let them build anything that will effect the little bit of woodlands that exist in all of Wellesley.	6/14/2014 4:40 PM
11	Weston Road is over capacity as it is. It is narrow, unsafe for cyclists, seemingly hard for emergency vehicles to access. There is no use besides full preservation that Weston Road can handle.	6/14/2014 3:40 PM
12	I think it is sad that all meetings are held during normal working hours. How are we supposed to pay high property taxes and not work?	6/14/2014 2:54 PM
13	We need to ensure that the safety of our water supply is not compromised since there are wellheads and aquifers on it. If the North 40 is unfortunately developed, the impact of that development must be mitigated as much as possible re traffic, congestion, noise, pollution. Any development will have a significant impact on the quality of life for the entire town since Weston Road is a major thoroughfare both for residents and commuters from other towns. It could also have a possible negative economic impact on Wellesley Center since the resultant problems could dissuade patrons from wanting to deal with all the issues (e.g., traffic).	6/14/2014 12:56 PM
14	We need to organize and fight to keep the North 40 as preservation land.	6/14/2014 12:35 PM
15	Like to see this neighborhood remain free of additional traffic - the streets are great for walking and biking - anything that changes this would be a big negative	6/14/2014 12:06 PM
16	I hope this never happens because it would be a major loss to the wellesley community and would affect a generation of wellesley kids	6/14/2014 8:58 AM
17	Do we have a chance or is this all politics and the decisions have already been made.	6/14/2014 8:40 AM
18	For some reason, did not receive email. Just a comment re survey. It covered everything but found that I was filling out incorrectly at first as I am use to most desirable being 1st.	6/14/2014 7:33 AM
19	This entire process needs to be slowed down. What is the rush to try to develop something that has been open space for several hundred years!	6/14/2014 7:29 AM

Woodlands North 40 Survey

20	Remember as neighbors we are impacted by everything that is built on the North 40. The noise and traffic generated by a school, the lack of any return on town owned buildings.....	6/13/2014 10:32 PM
21	Thanks for doing this. You are awesome.	6/13/2014 5:24 PM

Q8 Please provide your first name and street address. This info will NOT be shared with anyone, and will only be seen by the survey administrator to help him determine survey response rates. If you wish to remain anonymous, you may leave this blank.

Answered: 47 Skipped: 14

#	Responses	Date
1	Mary Vaccari 2 Simpson	6/23/2014 7:27 PM
2	Charles Monks 1 Simpson Rd	6/23/2014 7:25 PM
3	Clare Scannell 22 Bradley	6/23/2014 7:24 PM
4	Rick, 11 Simpson	6/21/2014 5:24 PM
5	Elaine Wilson 11 Simpson Rd.	6/21/2014 3:39 PM
6	Brigitte 11 Marshall Rd.	6/21/2014 8:47 AM
7	Charles and Nancy 1 Simpson Rd.	6/20/2014 8:16 PM
8	Alexis Yost Fougere 49 Patton Rd.	6/18/2014 3:55 PM
9	Bobby Sheth 27 Turner Road Wellesley, MA	6/18/2014 2:46 PM
10	Louis Gefteas, 14 Mac Arthur Rd	6/17/2014 11:51 AM
11	Loretta Jaksic, 8 Hodges Ave, Wellesley 02482 lorettajaksic@verizon.net	6/17/2014 9:01 AM
12	Amy Wagner - 24 Marshall Rd.	6/17/2014 7:18 AM
13	Sue 15 MacArthur Rd,	6/17/2014 12:30 AM
14	Bill 39 Mac Arthur Road	6/17/2014 12:24 AM
15	Dodie - 240 Weston road	6/16/2014 10:48 PM
16	John Fortini 8 MacArthur Rd	6/16/2014 11:28 AM
17	Robin 12 Marshall	6/16/2014 10:56 AM
18	Steven 30 Halsey.	6/16/2014 9:08 AM
19	Ashley Ranaldi 9 Patton Road	6/16/2014 5:57 AM
20	Ralph 4 Hodges Ave	6/15/2014 10:36 PM
21	Jay Balboni 36 Patton Road	6/15/2014 1:50 PM
22	Ruth 22 Halsey Avenue	6/14/2014 8:01 PM
23	Carol Nahass MacArthur Road	6/14/2014 7:57 PM
24	Alyson 10 MacArthur Rd	6/14/2014 5:43 PM
25	Dan	6/14/2014 5:04 PM
26	Elliot 11 Turner Rd	6/14/2014 4:40 PM
27	Sheila, 42 Halsey Ave	6/14/2014 4:24 PM
28	Stephen 41 turner	6/14/2014 2:26 PM
29	Steve Grossman 37 turner Road Wellesley, MA 02482	6/14/2014 12:56 PM

Woodlands North 40 Survey

30	Jennifer Tebbe-Grossman	6/14/2014 12:37 PM
31	Karen McHenry 3 MacArthur Road	6/14/2014 12:31 PM
32	Marci, 31 Turner Road	6/14/2014 12:28 PM
33	Tim 36 hodges	6/14/2014 12:07 PM
34	David at 36 Marshall Rd	6/14/2014 10:24 AM
35	Hodges Ave	6/14/2014 9:46 AM
36	Tom 223 Weston Rd.	6/14/2014 9:36 AM
37	Eric Karofsky, 34 Halsey Ave ekarof@yahoo.com	6/14/2014 9:26 AM
38	43 MacArthur rd wellesley ma	6/14/2014 8:59 AM
39	Jane Hammond 19 Halsey Ave	6/14/2014 7:33 AM
40	Thomas Hammond. 19 Halsey Avenue	6/14/2014 7:30 AM
41	Anna 10 Halsey ave . Resident for 42 years	6/13/2014 10:25 PM
42	JoAnn Jones 5 Halsey Ave	6/13/2014 7:29 PM
43	Maura 16 Bradley Avenue	6/13/2014 7:21 PM
44	Elaine halsey ave	6/13/2014 7:14 PM
45	Jack Davis, 36 Marshall Road	6/13/2014 5:24 PM
46	Maria 36 Marshall Rd	6/13/2014 2:30 PM
47	michelle 8 marshall rd	6/13/2014 1:49 PM

APPENDIX G. MEMORANDUM FROM THE TRAILS COMMITTEE

**WELLESLEY TRAILS COMMITTEE**

Natural Resources Commission, Town Hall, 525 Washington Street, Wellesley, Massachusetts 02482



Miguel Lessing, Chairman
Denny Nackoney, Vice Chairman
781-431-1019, Ext. 2294
Fax: 781-237-6495
trails@wellesleyma.gov
www.wellesleytrails.org

To: North 40 Steering Committee
From: Trails Committee
Date: July 27, 2014
Subject: Recommendations for North 40 Land Usage
CC: Selectmen, Natural Resources Commission, Planning Board

We would prefer to see the land remain as is, with no new development, changes in usage, or alteration of the landscape. The North 40 is part of the open space lands and trails system around Morses Pond and provides the Crosstown Trail along the Cochituate Aqueduct with a woodland buffer between Weston Rd and the railroad. This is a golden opportunity for preserving this open space, and the Town should purchase the 46 acres as conservation land and designate it as protected for passive recreational use. The old adage is truer than ever: When open space is lost, it is gone forever.

If the Town purchases the land and decides to develop it, we recommend retaining at least 50% as contiguous protected open space, kept in a natural state for passive recreational use, and not fragmented with driveways or buildings by:

1. Providing a woodland buffer between the Crosstown Trail and any development along the north side of the trail from Turner Road to the Weston Road electric substation as a visual barrier.
2. Retaining the narrow woodland buffer along the south side of the Crosstown Trail and the railroad tracks.
3. Not constructing new roadways crossing the Crosstown Trail between the [Morses Pond Access Road](#) and the Weston Road electric substation to preserve the continuity of the trail corridor.
4. Retaining parts of the existing trails and adding new trails as needed to supplement loss of existing trails. Having at least two trail pedestrian access points from the neighborhoods, one from Turner Road and one from Weston Road (note this is in addition to the Crosstown Trail access from [the Morses Pond Access Road](#) and at the Weston Road substation).
5. Retaining the pine forests and mature deciduous treed areas as woodlands.
6. Including the Trails Committee in the planning, layout, design, and construction of new trails or rerouting of existing trails.
7. Providing a small parking area off Turner Rd near the [Morses Pond Access Road](#) gate for trail walkers and the many other users of the area.
8. Retaining the community gardens, since it is an intrinsic part of the landscape and provides an important resource for the Town's residents.

APPENDIX H. SUMMARY OF THE ENVIRONMENTAL CONDITIONS
PREPARED BY HALEY AND ALDRICH 9/11/14



MEMORANDUM

11 September 2014
File No. 40420-002

TO: Wellesley College
Ben Hammond, Marianne Cooley

FROM: Haley & Aldrich, Inc.
Paul P. Ozarowski, P.E., LSP, Jennifer L. Sweet, P.E., LSP

SUBJECT: Summary of Environmental Conditions
North 40 Property
Wellesley, Massachusetts

Haley & Aldrich, Inc. (Haley & Aldrich) was engaged by Wellesley College to evaluate environmental conditions at the North 40 property (herein referred to as the subject site) in Wellesley, Massachusetts. The approximately 46-acre subject site consists of one residence, community gardens and undeveloped wooded property (including a former municipal solid waste landfill). Haley & Aldrich completed a Phase I Environmental Site Assessment (Phase I) in July and August 2014. At the request of Wellesley College, Haley & Aldrich then performed subsurface investigations to evaluate the following two "recognized environmental conditions" identified during the Phase I:

- 1) the Town of Wellesley's former municipal landfill, which reportedly operated between 1955 and 1960; and
- 2) a small former "pump house" structure located south of the Cochituate Aqueduct and north of the railroad tracks, possibly related to former transport of oil to Wellesley College's main campus.

EXECUTIVE SUMMARY

Our investigations have revealed that the former Town landfill on the North 40 was significantly smaller than previously believed, was used (as intended) primarily for the disposal of ordinary municipal solid waste rather than industrial wastes, and has resulted in contaminant conditions that are remarkably benign relative to what typically is found in and around former municipal landfills. Still, we did identify conditions that require reporting to the Massachusetts Department of Environmental Protection (MassDEP), and then further response under that agency's regulations governing the investigation and remediation of land affected by releases of oil or hazardous material. Based on our findings to date, this work can be confined to the landfill itself. We identified no adverse impacts spreading beyond the landfill's relatively small footprint. Finally, we identified no evidence of petroleum or other contamination at the former pump house facility located south of the aqueduct.

DISCUSSION

On behalf of Wellesley College, Haley & Aldrich performed a subsurface exploration program during July and August 2014 in the area of the former landfill and in the area of the former “pump house” structure. The primary objectives of the exploration program were to delineate the lateral extent of landfill refuse, determine depth of landfill refuse within the center of the landfill at select locations, to characterize the landfill refuse and soil quality, and to evaluate potential groundwater and soil gas impacts associated with the landfill, both within and beyond its delineated footprint. The program also included evaluation of potential impacts to soil and groundwater related to historic operations at the former “pump house” structure.

The subsurface exploration program consisted of 14 test pits around the perimeter and within the center of the former landfill, 2 deep soil borings within the center of the landfill, and 5 soil boring/groundwater monitoring wells and 5 co-located soil vapor monitoring points located outside the perimeter of the landfill. Landfill gas was field monitored with a combustible gas instrument and samples of mixed degraded refuse and soil were collected from test pits where refuse was encountered and submitted to an analytical laboratory for chemical testing. Landfill gas was also field monitored in the perimeter soil vapor monitoring points. Groundwater samples were collected from monitoring wells and submitted to an analytical laboratory for chemical testing. The locations where we conducted subsurface explorations are shown on the attached figure.

The test pit and soil boring program confirmed the presence of municipal refuse in an area estimated to be approximately 4.9 acres. This footprint is significantly smaller than the 23 acres that the Town historically leased for landfilling purposes and the 9-acre area preliminary delineated through a geophysical survey of the landfill conducted in the 1980’s. The bottom of landfill refuse materials was encountered in two soil borings and in one test pit ranging in depth from 7.5 ft to 29 ft below ground surface. Remaining test pits were completed to delineate the lateral extent and general quality of refuse.

The landfill refuse observed within the test pits was characterized as household waste material typically disposed of at municipal landfills during the period of time in question (1955-1960). Landfill refuse observed included glass and glass bottles, metal cans, other metal and wire, wood, paper, fabrics, plastics, leather, rubber, concrete and bricks, roofing materials, car parts (mufflers, wheel rims, etc.), and leaves. There were signs of potentially burned materials at five test pit locations. There were no obvious signs of the disposal of industrial wastes; the landfill appears to have been used exclusively for the disposal of municipal solid wastes.

Results of analytical testing of some of the soil/degraded refuse samples taken from within the landfill’s footprint indicated elevated levels of semi-volatile and volatile organic compounds above reportable concentrations established in the Massachusetts Contingency Plan (MCP). A polychlorinated biphenyl (PCB) compound was detected above its reportable concentration in one location. The few reportable conditions identified in the soil samples were only marginally above the relevant reportable concentration. Although the MCP establishes fast-track (i.e., 2-hour or 72-hour) reporting obligations for certain conditions that are considered to pose an elevated risk of harm to human health or the environment, the reportable conditions discovered at the landfill do not have to be reported until 120

days (four months) after their discovery. Overall, contaminant concentrations are lower than would be expected for soils and refuse located in a typical solid waste landfill that operated in the 1955-1960 time frame.

Results of analytical testing of groundwater samples indicated an elevated level of arsenic in one monitoring well located immediately downgradient (i.e., south) of the landfill. This one result was slightly above the MCP reportable concentration for arsenic, and also is subject to a 120-day reporting rule. Dissolved arsenic is commonly observed in landfill groundwater, which typically is lower in oxygen content because of the decaying waste materials. These so-called “reducing conditions” have a tendency to cause the arsenic that is naturally present in the soil to dissolve into the groundwater. The concentration of arsenic detected in this single well is likely a result of this typical landfill condition. Arsenic was not detected in any other groundwater wells above the MCP reportable concentration, including a well located farther away from the landfill and south of the Cochituate Aqueduct and is anticipated to be a localized condition. In our opinion, the analytical results for groundwater are remarkably clean and indicate that the landfill has had little impact on the quality of groundwater immediately adjacent to the landfill. It is possible that the single arsenic detection marginally above the reportable concentration may, through additional sampling in that location, be demonstrated to have been anomalous.

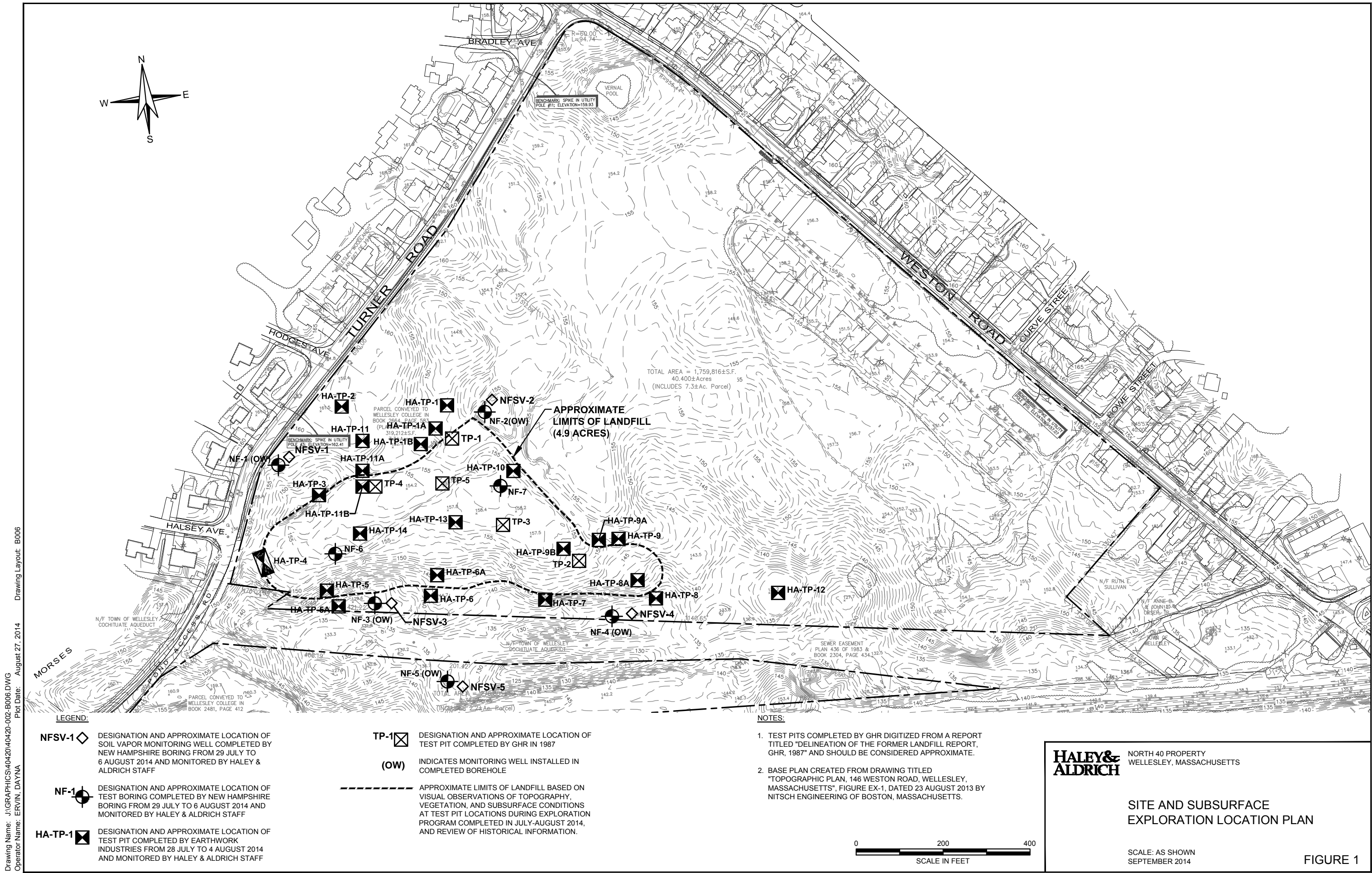
Methane, a typical landfill-producing gas, was detected in two test pits at low levels and was not detected in the remaining test pits. Methane was not detected in the soil gas samples collected from the perimeter soil vapor monitoring wells. Based on the results of the soil gas screening along the perimeter of the landfill and the very low concentrations of methane measured in test pits during excavation, methane migration through soil gas at concentrations that may pose a health or safety risk to any other portion of the North 40 or any adjacent properties is not anticipated to be occurring.

The test boring/monitoring well in the footprint of the former “pump house” structure was completed to a depth of 27 ft below ground surface. Observations on soils and field screening results during the drilling of the boring did not indicate evidence of contamination. Petroleum compounds, SVOCS, and VOCs were not detected in the groundwater sample collected from this monitoring well. Some dissolved metals were detected in groundwater at this location, but in all cases below MCP reportable concentrations.

Attachment

Figure 1 – Site and Subsurface Exploration Location Plan

G:\40420\North 40 Memo\2014-0911-HAI_North40 Memo_F.docx



APPENDIX I. NATURAL RESOURCE ASSESSMENT PREPARED BY VHB
DATED 9/18/14



Vanasse Hangen Brustlin, Inc.

101 Walnut Street
Post Office Box 9151
Watertown
Massachusetts 02471
617 924 1770

Memorandum

To: Project File

Date: September 18, 2014

Project No.: 12809.00

From: VHB

Re: Natural Resource Assessment
North 40
Wellesley, Massachusetts

This memorandum describes the natural resources as well as stands of significant trees located on the North 40 Parcel located at 156 Weston Road in Wellesley, Massachusetts. The memorandum also describes the regulatory status of each of the wetland areas, and the anticipated permitting requirements for development of the site.

On July 15, 2014, VHB personnel inspected the North 40 for the presence of wetland resources regulated under the Wellesley Wetland Protection Bylaw – Article 44 (the Bylaw), the Massachusetts Wetlands Protection Act (WPA), and the federal Clean Water Act (CWA). The parcel was also inspected for the presence of “significant trees” as defined in the Town of Wellesley Tree Bylaw (Section XVIIE). A desktop review was also completed using the following resources:

- Town of Wellesley GIS
- Town of Wellesley Natural Resources Commission
- MassGIS
- MA DEP
- MA Natural Heritage Program
- MA Water Resources Authority
- U.S. Department of Agriculture Soil Conservation Service

This memorandum also relies on information on the site history provided by others. The findings of the desktop review and site inspection are outlined below.

Site Description

The North 40 parcel is a triangular piece of largely undeveloped land located north of the Wellesley College Campus at 156 Weston Road in Wellesley, Massachusetts. The parcel is bounded by Weston Road to the east, the MBTA rail line to the south and Turner Road to the west. The parcel is transected east-west by the former Cochituate Aqueduct, now owned and controlled by the Town and part of its trail system and water and sewer infrastructure. The rail line and Aqueduct combine to effectively “landlock” six acres of the site from the larger parcel to the north. Fifty-five community garden plots are located in the northeast portion of the site with access from Weston Road. The Town of Wellesley leased approximately 23 acres of the parcel for use as a landfill for household waste. The landfill was in use from approximately 1955 to 1960 and the area has since revegetated. A network of walking trails runs throughout the parcel.

The majority of the site is made up of mixed coniferous-deciduous second growth upland forest. The conifer dominated communities have a sparse sub-canopy and groundcover layer and are vegetated

with white pine (*Pinus strobus*), red oak (*Quercus rubra*), white oak (*Quercus alba*), glossy buckthorn (*Frangula alnus*), lowbush blueberry (*Vaccinium angustifolium*), wild sarsaparilla (*Aralia nudicaulis*), spotted wintergreen (*Chimaphila maculata*) and wild lily of the valley (*Maianthemum canadense*). The communities dominated by hardwoods have a denser layer of undergrowth. Dominant species in include red oak, red maple (*Acer rubrum*), American elm (*Ulmus americana*), white pine, apple (*Malus* sp.), glossy buckthorn, bush honeysuckle (*Lonicera* sp.), lowbush blueberry, wild lily of the valley, Virginia creeper (*Parthenocissus quinquefolia*) and poison ivy (*Toxicodendron radicans*).

The soil map for Norfolk County shows that Hinckley sandy loam, Merrimac fine sandy loam, Merrimac-urban land complex and Sudbury fine sandy loam soils occur on the site. No mapped wetland soils occur on the site.

Floodplains

According to the Flood Insurance Rate Map (FIRM)¹ for the Town of Wellesley no portion of the North 40 parcel is within a designated 100-year floodplain zones (See attached FIRM Map).

Wetland Description

Approval of all wetland resource boundaries is subject to review by the Wellesley Wetlands Protection Committee and/ or DEP through an Abbreviated Notice of Resource Area Delineation (ANRAD) or Notice of Intent (NOI) process. To our knowledge, wetlands on the site have not been formally reviewed by the Wetlands Protection Committee, and there is no valid Order of Resource Area Delineation (ORAD) issued by the Wetlands Protection Committee in response to the filing of an ANRAD; therefore, all wetland boundaries and resource area identifications should be considered the opinion of VHB based on available survey information and other records and are subject to the approval of the Wellesley Wetlands Protection Committee.

The parcel was inspected for wetland resource areas as defined by the local bylaw, the WPA and the U.S. Army Corps of Engineers. One ponded area was identified in the northernmost corner of the site. The wetland is shown as a certified vernal pool (CVP No. 32) by the latest Natural Heritage Program mapping (2008). It is a depression that appears to hold water for much of the year and receives runoff from the surrounding roadways and uplands. The pool itself is unvegetated and is underlain by a mucky substrate. The edges are vegetated with red maple, silver maple (*Acer saccharinum*), silky dogwood (*Cornus amomum*), burning bush (*Euonymus alatus*), multiple *Carex* species and Virginia creeper. This resource appears to meet the regulatory definitions of an Isolated Land Subject to Flooding (ILSF) under the WPA and as a Vernal Pool and Isolated Wetland under the local by-law as discussed in greater detail below. This wetland area is presumed to be not regulated by the USACE under Section 404 of the CWA as it does not have a significant nexus to a regulated Water of the U.S.

No other state regulated resource areas were identified on the site. The low lying areas adjacent to the former aqueduct were inspected closely during the site visit as the site topographic map provided by the Client showed several depressions in this area which could potentially hold water for short periods of time during the year. These areas did not meet the necessary criteria to be regulated as a wetland resource areas. While some of these areas contained hydric vegetation they lacked any evidence of wetland hydrology or hydric soils.

According to the most recent USGS topographic map, there are no perennial streams on or immediately adjacent to the site, and therefore Riverfront Area is not present. This determination is supported by observations made by VHB personnel during the site visit.

¹ Federal Emergency Management Agency, 2012. FIRM, Norfolk County, Massachusetts. Map Number 25021C0016E Map 16 out of 430.

Regulatory Jurisdiction and Constraints

Federal Wetlands Regulations

Wetlands meeting the regulatory definition (areas that contain hydric soils, have a wetland hydrology, and support hydrophytic vegetation) are subject to jurisdiction under Sections 401 and 404 of the federal Clean Water Act (CWA). No federally regulated wetlands were identified on the property. The vernal pool does not meet the specified criteria and does not have a significant nexus to a regulated Water of the U.S. and therefore is not believed to fall under federal CWA regulations.

Massachusetts Wetlands Regulations

The vernal pool on the parcel does not border on a stream or other waterway and therefore is not a Bordering Vegetated Wetland regulated under the WPA. It is not within Bordering Land Subject to Flooding or Riverfront Area. However, the depression containing the vernal pool may qualify as Isolated Land Subject to Flooding (ILSF) (310 CMR 10.57(2)(b)1.), as defined below:

Isolated Land Subject to Flooding is an isolated depression or closed basin without an inlet or an outlet. It is an area which at least once a year confines standing water to a volume of at least ¼ acre-feet and to an average depth of at least six inches.

The vernal pool receives roadway runoff discharges via a small swale from a storm water outfall. The DEP Wetlands Program Policy 85-2 clarifies definition of ILSF by explaining that presence of an inlet does not necessarily exclude an area from being classified as ILSF. This clarification allows us to conclude that the vernal pool; should it meet the necessary volume requirements, could be regulated as ILSF. Per the definition of ILSF, the depression must support ¼-acre-foot of water on an annual basis. Preliminary calculations of both available volume within the depression and the runoff volume contributed from the depression's watershed indicate that the depression will qualify as ILSF under the WPA regulations. Additional survey information on the contributing watershed area, in particular the upstream developed neighborhoods is needed to finalize this determination.

We note that the water surface in the depression is also in excess of 10,000 square feet based on engineering survey and may qualify as a Pond. Additional historical research will be required to determine if the pond dries up. The definition of a Pond in the WPA regulations is provided below.

Pond (inland) means any open body of fresh water with a surface area observed or recorded within the last ten years of at least 10,000 square feet. Ponds may be either naturally occurring or man-made by impoundment, excavation, or otherwise. Ponds shall contain standing water except for periods of extended drought.

Town Wetlands Protection Bylaw

The Town of Wellesley has a Wetland Protection Bylaw, which also takes jurisdiction over the certified vernal pool on the parcel. The bylaw defines a "vernal pool habitat" as the pool itself along with the area within 100 feet of the pool. No alterations are permitted within the vernal pool itself or the vernal pool habitat without the issuance of a waiver from the commission. The Town Wetland Bylaw also regulates the vernal pool as an isolated wetland as its area is greater than 2,500 square feet. Locally regulated isolated wetlands have a 100-foot buffer zone, including an inner 25-foot No Disturbance zone and an outer 75-foot Limited Disturbance Zone. In addition, the Town bylaw regulates lands within 200 feet of an ILSF. However, the Regulations only describe performance standards for 100-foot buffer zones. Work may be permitted that does not conform to these performance standards under a Waiver process, if the area does not contribute to the protection of the resource (for example, an existing road within 100 feet of a vernal pool) or where the applicant can demonstrate that there are no feasible alternatives, that the proposed activity is the least environmentally damaging, and that mitigation measures are provided.

Estimated Habitat of Rare Wildlife/Priority Habitat of Rare Species

According to the 2008 Edition of the Massachusetts Natural Heritage Atlas², the North 40 parcel is not located within an estimated habitat of rare wildlife or priority habitat of rare species.

² NHESP, 2008. Massachusetts Natural Heritage Atlas. 13th Edition.

Outstanding Resource Waters

The certified vernal pool by definition is a Class B Outstanding Resource Water (Surface Water Quality Standards - 314 CMR 4.00). Work within Outstanding Resource Waters requires a Water Quality Certification (310 CMR 9.00) and must meet the requirements therein or will require a variance from these regulations.

Wellhead Protection Area

The site falls within a Zone II wellhead protection area. Wellhead protection areas are established for the protection of the recharge area and groundwater sources of a public water supply (PWS). 310 CMR 22.00 defines a Zone II as *"that area of an aquifer that contributes water to a well under the most severe pumping and recharge conditions that can be realistically anticipated (180 days of pumping at approved yield, with no recharge from precipitation). It is bounded by the groundwater divides that result from pumping the well and by the contact of the aquifer with less permeable materials such as till or bedrock. In some cases, streams or lakes may act as recharge boundaries. In all cases, Zone II shall extend upgradient to its point of intersection with prevailing hydrogeologic boundaries (a groundwater flow divide, a contact with till or bedrock, or a recharge boundary)".* State regulations at 310 CMR 22.21 establish prohibited uses within Zone II (and require municipal zoning bylaws reflecting these prohibitions), which include landfills, junkyards, fuel depots, and hazardous waste facilities. In addition to the underlying zoning district, the site falls within the Wellesley Water Supply Protection Overlay district. Within this overlay district, the requirements of the underlying zoning district continue to apply, however, there are several additional design and operational standards within the overlay district, which include but are not limited to:

- **On-site Recharge:** All storm water runoff from impervious surfaces shall be recharged on-site unless in conducting site plan review it is determined that either recharge is not feasible because of site conditions or is undesirable because of uncontrollable risks to water quality from such recharge. Such recharge shall be by surface infiltration through vegetated surfaces unless otherwise approved by the Special Permit Granting Authority (SPGA) during site plan review. If dry wells or leaching basins are approved for use, they shall be preceded by oil, grease, and sediment traps. Drainage from loading areas for toxic or hazardous materials shall be collected separately for safe disposal.
- **Grade Reduction:** Soil overburden shall not be lowered to finish exterior grades less than five feet above maximum groundwater elevation, unless technical evidence can be provided showing to the SPGA's satisfaction that groundwater quantity or quality will not be detrimentally affected. Technical evidence may include without limitation a determination of soil and geologic conditions where low permeability will mitigate leachate penetration and evaporation transpiration.

Other Non-Regulatory Programs

BioMap2

BioMap2 is a project of the Executive Office of Energy and Environmental Affairs, and consists of mapping produced by the Natural Heritage and Endangered Species Program in partnership with The Nature Conservancy. BioMap2 is a tool for community land use planning and protection, and maps three types of resources: Core Habitat (habitat necessary to protect rare species, exemplary natural communities and intact ecosystems); Critical Natural Landscapes (intact landscapes that are better able to support ecological processes and a wide array of species and habitats over long time frames); and Aquatic Core Habitats. According to the community information on the EEA Website, none of these important habitat types are present on the site.

Habitat of Potential Regional and Statewide Importance

A portion of the center of the site is mapped by the UMass Extension Center as Habitat of Potential Regional or Statewide Importance based on the Conservation and Prioritization System (CAPS) mapping dated November 2011. This CAPS mapping is not an area subject to regulatory jurisdiction

under any state regulatory program, but is used by DEP to determine whether supplemental wildlife habitat evaluations would be required for work in wetlands.

The CAPS mapping is created using a GIS model that accounts for a number of “stressor metrics” in order to identify land that may provide a level of ecological integrity that supports a priority for conservation, a goal of the UMass CAPS program. Among the stressors that may have led to the inclusion of a portion of the N40 site are distance from traffic, roadway sediment and impervious surfaces. We presume that the lack of these stressors in addition to the forested cover type resulted in the central part of the site being mapped by CAPS as “habitat of potential importance”. This mapping is not based on any actual field evaluations of wildlife habitat.

The only regulatory significance of this mapping is with regard to the analysis of impacts to wetland wildlife habitat. If the project resulted in the alteration of any wetland jurisdictional area that was as “habitat of potential importance” a wildlife habitat evaluation would be required. However, only wetland on the site is not within the mapped area. Work within the mapped area would not require a wildlife habitat evaluation or any regulatory review.

Significant Trees

The Town of Wellesley has a Tree Bylaw (Section XVIIE Tree Preservation and Protection) which protects trees deemed significant based on their diameter at breast height (DBH). As stated in the tree bylaw, any tree with a DBH of 10 inches or greater is considered significant and therefore protected when located within a property’s Tree Yard. Based on the sites zoning as a Residential 15 property, the property’s Tree Yard is 20 feet from the parcel boundaries.

Three stands of significant trees were identified on the site (Figure 1). These trees were not all located within the parcel’s Tree Yard. The majority of the trees of significance were white pines. While there are trees with a DBH of greater than 10 inches elsewhere on the site, only stands of multiple trees of significance were identified by this effort.

Summary – Regulatory Constraints

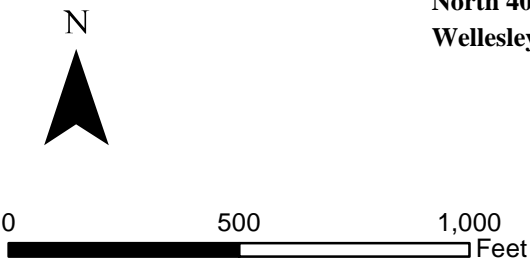
- A review of the 2008 Massachusetts Natural Heritage Atlas has shown there is a certified vernal pool in the northernmost corner of the parcel. This was confirmed during the site inspection. This vernal pool would be regulated as an Outstanding Resource Water under the state water quality standards. It is potentially regulated under the WPA and local bylaw as ILSF and under the local by-law as a Vernal Pool and an Isolated Wetland. Multiple buffer zones extend from the limits of the VP. Alternatively the depression appears to meet the definition of a Pond in the WPA regulations. The jurisdictional determination of the depression needs to be pursued with the Wellesley Wetlands Protection Committee. The vernal pool is not believed to fall under federal jurisdiction.
- Review of FEMA mapping for Wellesley has determined that no designated mapped 100-year floodplain (Bordering Land Subject to Flooding) exists on the parcel.
- No areas of estimated habitat of wildlife habitat or priority habitats of rare species occur on the property.
- A Zone II wellhead protection area encompasses nearly the entire parcel. As such, the site falls within the Town of Wellesley Water Supply Protection Overlay district. Within this overlay district which include but are not limited to increased stormwater recharge requirements and limitations on grade reduction as it relates to groundwater elevation.
- Three stands of significant trees were identified on the site (Figure 1). These trees were not all located within the parcel’s Tree Yard.



Source: MassGIS 2013, VHB 2014, NHDOT 2014, and Vanasse Hangen Brustlin, Inc.

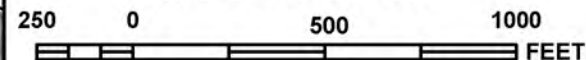
Natural Resources Due Diligence
North 40 Parcel
Wellesley, Massachusetts

- Figure 1
July 2014
- Approximate Limits of North 40 Parcel
 - Certified Vernal Pool
 - Approximate Significant Tree Locations





MAP SCALE 1" = 500'



NFP
NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0016E

FIRM

FLOOD INSURANCE RATE MAP
NORFOLK COUNTY,
MASSACHUSETTS
(ALL JURISDICTIONS)

PANEL 16 OF 430

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
DOVER, TOWN OF	250238	0016	E
NEEDHAM, TOWN OF	255215	0016	E
WELLESLEY, TOWN OF	250255	0016	E

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.



MAP NUMBER
25021C0016E
EFFECTIVE DATE
JULY 17, 2012

Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov



- NOTES:
- 1) PROPERTY LINES SHOWN ARE APPROXIMATE AND HAVE BEEN TAKEN FROM AVAILABLE BASE PLANS.
 - 2) TREE YARD SETBACKS ARE BASED ON DIMENSIONAL REQUIREMENTS FOR SR15 ZONING DISTRICT.
 - 3) AREAS OF SIGNIFICANT TREES SHOWN ARE APPROXIMATE AND ARE BASED ON AVAILABLE IMAGERY SUPPLEMENTED BY FIELD OBSERVATIONS.

Vanasse Hangen Brustlin, Inc.

Figure 2
August 2014



0 250 500 Feet

Tree Yard Setbacks
North 40
Wellesley College
Wellesley, Massachusetts

APPENDIX J. PEER REVIEW OF NATURAL RESOURCE ASSESSMENT BY
ECOTEC, INC. DATED 9/25/14

EcoTec, Inc.

ENVIRONMENTAL CONSULTING SERVICES

102 Grove Street
Worcester, MA 01605-2629
508-752-9666 – Fax: 508-752-9494

Via Email Only

September 25, 2014

Mr. Hans Larsen
Town Manager
Town of Wellesley
525 Washington Street
Wellesley, MA 02482

RE: Wetland Due Diligence Evaluation, 156 Weston Road, Wellesley, Massachusetts

Dear Mr. Larsen:

EcoTec was retained by the Town of Wellesley to conduct the following work relative to the above-referenced property:

...EcoTec proposes to inspect the above-referenced 46±-acre property plus the Aqueduct inclusion ... for the presence of wetland resource areas subject to jurisdiction under the Massachusetts Wetlands Protection Act (the "Act"; M.G.L. c. 131, § 40) and regulations (the "Regulations"; 310 CMR 10.00 et seq.), Section 404 the U.S. Clean Water Act, and the Wellesley Wetlands Protection Bylaw. EcoTec will conduct this work in accordance with our Standard Operating Procedures, and wetland identifications will be conducted in accordance with the above-referenced statutes and regulations and associated policy and guidance. The approximate boundary of jurisdictional resource areas (i.e., Land Under Water, Bank, Bordering Vegetated Wetlands, Bordering and Isolated Land Subject to Flooding, and Riverfront Area under the Act; Waters of the United States under the U.S. Clean Water Act; and analogous resource areas, including Isolated Vegetated Wetlands and Vernal Pools under the Bylaw) will be sketched on the provided Topographic Map. There is one mapped wetland area in the northern corner of the site that is also identified as a certified vernal pool; based upon the provided Topographic Map, there are a number of other more shallow depressed areas mapped across the site with a concentration of smaller such areas near the Aqueduct in the southern portion of the site. Off-site resources that could affect the site (i.e., project a resource area or buffer zone onto the site) will also be identified to the extent possible based upon observations from the site and adjacent areas where observations can be made from without trespass.... EcoTec will prepare a wetland resource evaluation report with various applicable mapping and the site sketch to detail the findings of the inspections.

The client acknowledges that the wetland resource areas are not being delineated as part of this review and that the sketch plan provided under this review simply identifies the approximate boundary of areas that meet criteria to be considered as a wetland resource under the applicable statute or regulation. This sketch plan is intended to be used for preliminary planning purposes only; it is not intended to be used for regulatory filings. The Client acknowledges that the

regulatory authority for determining wetland jurisdiction rests with local, state, and federal authorities. The Client hereby acknowledges that it has obtained physical and legal access for all requested work.

EcoTec was also asked to review a 'Natural Resource Assessment for the North 40, Wellesley, Massachusetts' that was prepared by Vanasse Hangen Brustlin, Inc. ("VHB"), dated August 4, 2014. Pertinent commentary will be incorporated into the EcoTec, Inc. letter.

Site Description

The subject site consists of 46.10± acres of land that is divided by the Town-owned former Cochituate Aqueduct in the southern portion of the subject site into approximately 40 acres to the north of the Aqueduct and approximately 6 acres to the south of the Aqueduct (see Attached Annotated Wellesley College 'North 40' Topographic Map; the "Topographic Map"). The subject site is otherwise surrounded by Weston Road to the northeast, Turner Road to the northwest, and the MBTA Commuter Rail to the south. Central Street (Route 135) is located to the south of the MBTA Commuter Rail further to the south of the subject site.

The eastern corner of the subject site near Weston Road is developed with an existing single family structure. An area of land located along Weston Road in the northeastern/north-central portions of the subject site includes multiple community garden plots, gravel access roads to the garden plots, and peripheral meadow and thicket. With the exception of an area of wetland resources near the northern corner of the subject site, the balance of the subject site consists of mixed coniferous-deciduous second growth upland forest. Based upon the Topographic Map, the subject site topography is irregular with shallow depressions common in the western and southern portions of the subject site. A series of walking trails was noted throughout the property. A number of excavator tracks related to an ongoing investigation of the subject site were also noted throughout the subject site during the inspections. Additional information, including discussions of plant communities and wetland resources observed on the subject site, is provided below.

Methodology

EcoTec conducted a desk-top survey of the subject site and its surroundings by reviewing various available resources; a copy of each bulleted resource is attached to this report:

- Wellesley College 'North 40' Topographic Map, Wellesley GIS, prepared for Board of Selectmen June 11, 2014 (Annotated by EcoTec);
- USGS Topographic Map, Framingham Quadrangle, 1987;
- Aerial Photographs, Google Earth, April 17, 2008 and August 24, 2013;
- Town of Wellesley Massachusetts Wetlands Viewer from Town of Wellesley Natural Resource Commission website;
- DEP Wetlands, Certified Vernal Pools, and Potential Vernal Pool Data Layers from MassGIS OLIVER;
- United States Department of Agriculture, National Resource Conservation Service, Web Soil Survey: Soil Map and Map Unit Legend;

- Flood Insurance Rate Map, Norfolk County, Map Number 25021C0016E, Effective Date July 17, 2012;
- *Massachusetts Natural Heritage Atlas*, Priority Habitats and Estimated Habitats, Natick Quadrangle, October 1, 2008; and
- Habitat of Potential Regional or Statewide Importance, Town of Wellesley, UMass Extension, dated November 2011.

In addition, EcoTec reviewed the BioMap2 Report for Wellesley prepared by the Massachusetts Natural Heritage and Endangered Species Program ("MNHESP"). This document is for planning purposes.

Following a review of the above-referenced desk-top references, on August 26 and 28, 2014, EcoTec, Inc. inspected the above-referenced property for the presence of wetland resources as defined by: (1) the Massachusetts Wetlands Protection Act (M.G.L. Ch. 131, § 40; the "Act") and its implementing regulations (310 CMR 10.00 *et seq.*; the "Regulations"); (2) the Town of Wellesley Wetlands Protection Committee Wetlands Protection Bylaw (i.e., Article 44; the "Bylaw") and Wetlands Protection Regulations ("Bylaw Regulations"); and (3) the U.S. Clean Water Act (i.e., Waters of the United States). John P. Rockwood, Ph.D., PWS conducted the inspections.

In the conduct of this evaluation, the perimeter of the subject site was walked, each of the depressional areas shown on the Topographic Map was evaluated, and the balance of the subject site was evaluated by walking parallel transects across the subject site. No wetland resource area boundaries were delineated as part of this evaluation. The plant taxonomy used in this report is based on the *National Wetland Plant List (Massachusetts 2012 Final State Wetland Plant List)*, ERDC/CRREL TR-12-11 (Lichvar, 2012).

Findings

Based upon a review of the Topographic Map, USGS Map, Town of Wellesley Massachusetts Wetlands Viewer, and the DEP Wetlands data layer from MassGIS, there are no mapped lakes, rivers, or streams located on or within 100 feet of the subject site and there are no mapped rivers or streams located within 200 feet of the subject site. These maps show a small ponding area in the northern corner of the subject site. This ponding area and its status are detailed in a subsequent section of this report. The USGS map shows a solid heavy blue line on the Aqueduct parcel; the Aqueduct itself is clearly a subsurface feature that does not project resource areas onto the subject site.

According to the Web Soil Survey, the soils on the subject site are mapped primarily as Hinckley sandy loam, Hinckley loamy sand, Merrimac fine sandy loam, Merrimac-Urban land complex, and Sudbury fine sandy loam. No mapped wetland soils occur on the subject site.

Again, with the exception of the community garden plots, the vast majority of the uplands on the subject site consist of mixed coniferous-deciduous second growth upland forest and shrub thicket/meadow proximate to the community garden plots. These cover types are clearly seen in the Aerial Photographs from Google Earth dated April 17, 2008 (before leaf-out of the deciduous

species) and August 24, 2013 during the height of the growing season. Plant species observed in these areas include the following.

- Mixed coniferous-deciduous second growth upland forest: Plant species observed through the upland forest on the subject site include northern red oak (*Quercus rubra*), northern white oak (*Quercus alba*), eastern white pine (*Pinus strobus*), pitch pine (*Pinus rigida*), black cherry (*Prunus serotina*), American plum (*Prunus americana*), red maple (*Acer rubrum*), Norway maple (*Acer platanoides*), shag-bark hickory (*Carya ovata*), and sweet birch (*Betula lenta*) trees, saplings, and/or shrubs; eastern poison-ivy (*Toxicodendron radicans*), Virginia-creeper (*Parthenocissus quinquefolia*), Asian bittersweet (*Celastrus orbiculata*), and grape (*Vitis sp.*) climbing woody vines and/or ground cover; highbush blueberry (*Vaccinium corymbosum*), European buckthorn (*Rhamnus cathartica*), glossy false buckthorn (*Frangula alnus*), common winterberry (*Ilex verticillata*), bush honeysuckle (*Lonicera sp.*), winged spindle-tree (*Euonymus alata*), and Japanese barberry (*Berberis thunbergii*) shrubs; and late lowbush blueberry (*Vaccinium angustifolium*), wild sarsaparilla (*Aralia nudicaulis*), princess-pine (*Dendrolycopodium obscurum*), southern ground-cedar (*Diphasoastrum digitatum*), northern bracken fern (*Pteridium aquilinum*), hay-scented fern (*Dennstaedtia punctilobula*), feathery false Solomon's-seal (*Maianthemum racemosum*), false lily-of-the-valley (*Maianthemum canadense*), and spotted prince's-pine (*Chimaphila maculata*) ground cover. Significant trees (i.e., trees with a DBH of 10 inches or more), predominantly eastern white pine trees (*Pinus strobus*), were noted throughout much of the subject site, although more significant concentrations of such trees were observed in the north-central, southwestern, and southeastern portions of the subject site (see attached April 17, 2008 Google Earth Aerial Photograph).
- Shrub thicket and meadow: Plant species observed in the thicket/meadow near the garden plots include Virginia-creeper (*Parthenocissus quinquefolia*) and Asian bittersweet (*Celastrus orbiculata*) climbing woody vines and ground cover; American plum (*Prunus americana*), bramble (*Rubus sp.*), European buckthorn (*Rhamnus cathartica*), glossy false buckthorn (*Frangula alnus*), rambler rose (*Rosa multiflora*), bush honeysuckle (*Lonicera sp.*), and winged spindle-tree (*Euonymus alata*) shrubs; and grasses (Gramineae sp.), whiplash dewberry (*Rubus flagellaris*), bristly dewberry (*Rubus hispidus*), lesser periwinkle (*Vinca minor*), Japanese black-bindweed (*Fallopia japonica*), American pokeweed (*Phytolacca americana*), King's-cureall (*Oenothera biennis*), common wormwood (*Artemisia vulgaris*), Queen Anne's lace (*Daucus carota*), ox-eye daisy (*Leucanthemum vulgare*), goldenrods (*Solidago sp.*), goldentop (*Euthamia sp.*), common milkweed (*Asclepias syriaca*), lesser burdock (*Arctium minus*), garlic-mustard (*Alliaria petiolata*), bushclover (*Lespedeza sp.*), fleabane (*Erigeron sp.*), cinquefoil (*Potentilla sp.*), meadow-rue (*Thalictrum sp.*), wood-sorrel (*Oxalis sp.*), great plantain (*Plantago major*), red clover (*Trifolium pratense*), annual ragweed (*Ambrosia artemisiifolia*), garden vetch (*Vicia sativa*), violet (*Viola sp.*), and common yarrow (*Achillea millefolium*) ground cover.

The balance of this report will cover the various wetland resource areas under the Act and Regulations and the Bylaw and Bylaw Regulations as well as other pertinent areas.

Land Under Water Bodies and Waterways, Bank, Bordering Vegetated Wetlands, Isolated Land Subject to Flooding, Isolated Vegetated Wetlands, Vernal Pool Habitat, and Buffer Zone: There is an area in the northern portion of the subject site that is mapped as open water on several of the referenced maps. During the site inspections on August 26 and 28, 2014, a depression with a limited area and depth of standing water (approximately 900 square feet at 4 inches maximum depth on August 28, 2014) was observed in the northern portion of the subject site. It is clear, based upon the existing vegetation, that a substantially larger portion of this area (i.e., approximately 10,000 square feet) ponds annually. The annually ponded area is fringed by a thin band of forested swamp. Several orange flags labeled LEC were observed near the southern boundary of the area. Two stormwater outfalls from the surrounding roadways drain to this area, one from the north, one from the southwest. Plant species observed in this area include red maple (*Acer rubrum*), silver maple (*Acer saccharinum*), and American elm (*Ulmus americana*) trees, saplings, and/or shrubs; eastern poison-ivy (*Toxicodendron radicans*) climbing woody vines and ground cover; highbush blueberry (*Vaccinium corymbosum*), silky dogwood (*Cornus amomum*), and glossy false buckthorn (*Frangula alnus*) shrubs; and spotted touch-me-not (*Impatiens capensis*), sedges (*Carex spp.*), and sphagnum moss (*Sphagnum sp.*) ground cover. Evidence of wetland hydrology included an area of shallow inundation, evidence of flooding, saturated soils, high groundwater, and stained leaf litter. EcoTec is not aware of any prior filings or determinations on this resource area under the Act or Bylaw.

In determining what resource areas this ponding area would comprise, the maximum area of the ponding area and its permanence must be determined. Based upon the ponding area shown on the Topographic Map, the area that is shaded blue is approximately 10,000 square feet in size. The source of the ponding area extent on this plan is not known. During the EcoTec inspections, an area of standing water approximately 900 square feet in size and 4 inches in depth was observed in the center of the area. Information included as part of the Vernal Pool Certification Letter, dated October 18, 1989, indicates that this area does not meet the 10,000 square foot requirement to be designated as pond; the letter also indicated that the area does not dry up annually. Under the Regulations (and Bylaw, as Pond is not otherwise defined therein), a Pond:

...means any open body of fresh water with a surface area observed or recorded within the last ten years of at least 10,000 square feet. Ponds may be either naturally occurring or man-made by impoundment, excavation, or otherwise. Ponds shall contain standing water except for periods of extended drought. Periods of extended drought for purposes of 310 CMR 10.00 shall be those periods, in those specifically identified geographic locations, determined to be at the "Advisory" or more severe drought level by the Massachusetts Drought Management Task Force, as established by the Executive Office of Environmental Affairs and the Massachusetts Emergency Management Agency in 2001, in accordance with the Massachusetts Drought Management Plan (MDMP).

As of the date of this letter, an Advisory or more severe level of drought had not been designated pursuant to the Massachusetts Drought Management Plan.

It is EcoTec's opinion that adequate information to designate this ponding area as a Pond under the Regulations and Bylaw does not currently exist. The size of the maximum ponding area based upon

field location and survey (preferably during the spring when flooded or based upon area to the base of the shrubs around the ponding area periphery) would be necessary to demonstrate that this area meets the threshold to be designated as a Pond under the Regulations and Bylaw. Anecdotal information from 1989 suggests that the area is too small. Additional historic information regarding the duration of water presence within this area would also be helpful in this determination. If the Committee were to find this area to be a Pond, the Pond would be regulated as Land Under Water Bodies and Waterways and as Bank and the fringe of forested swamp would be regulated as Bordering Vegetated Wetlands under the Regulations and Bylaw. Bordering Vegetated Wetlands and Bank have a 100-foot Buffer Zone under the Regulations and Bylaw/Bylaw Regulations. Under the Bylaw Regulations the 100-foot Buffer Zone is itself a resource area and is divided into an inner 25-foot No Disturbance Zone and an outer 75-foot Limited Disturbance Zone.

Alternatively, this area would be regulated as Isolated Land Subject to Flooding under the Regulations. Under the Regulations (and the Bylaw since Isolated Land Subject to Flooding is not otherwise defined therein), Isolated Land Subject to Flooding:

...is an isolated depression or closed basin without an inlet or an outlet. It is an area which at least once a year confines standing water to a volume of at least ¼ acre-feet and to an average depth of at least six inches.

At about 10,000 square feet in size, this area would only have to hold water to a depth of one foot to meet this threshold. It is clear that this depression floods to a depth in excess of one foot on an annual basis. As such, assuming this area is found not to meet the definition of a Pond above, this area would be subject to jurisdiction as Isolated Land Subject to Flooding under the Regulations and Bylaw. Isolated Land Subject to Flooding does not have a 100-foot Buffer Zone under the Regulations. However, Isolated Land Subject to Flooding does have a 100-foot Buffer Zone from the maximum observed extent of flooding with an inner 25-foot No Disturbance Zone and outer 75-foot Limited Disturbance Zone under the Bylaw Regulations. Again, the 100-foot Buffer Zone is a resource area under the Bylaw and Bylaw Regulations. EcoTec's reading of the Bylaw (as originally formatted in 2002) indicates that the Bylaw does not regulate land located within 200 feet of Isolated Land Subject to Flooding (and Bordering Land Subject to Flooding); that error, which currently persists on the website, resulted during prior reformatting of Section 2 of the Bylaw.

Furthermore, under the alternative scenario, this area would also be regulated as an Isolated Vegetated Wetland under the Bylaw as it is greater than 2,500 square feet in size and as Vernal Pool Habitat under the Bylaw. This area was designated as Certified Vernal Pool #32 on November 15, 1989 based upon the presence of facultative invertebrate species, obligate invertebrate species (i.e., fairy shrimp), and obligate amphibian species (i.e., recently confirmed by MNHESP to be wood frog egg masses). Isolated Vegetated Wetlands have a 100-foot Buffer Zone extending outward from the wetland boundary with an inner 25-foot No Disturbance Zone and outer 75-foot Limited Disturbance Zone under the Bylaw Regulations. The Vernal Pool Habitat under the Bylaw includes the pool itself and the land located within 100 feet of the mean annual boundary of the depression (i.e., 100 feet outward from the maximum observed extent of flooding). Vernal Pool Habitat does not need to be located within another resource area protectable under the Bylaw to be subject to

protection under the Bylaw and Bylaw Regulations. Vernal Pool Habitat itself does not have a 100-foot Buffer Zone under the Bylaw and Bylaw Regulations.

Based upon a review of the *Massachusetts Natural Heritage Atlas*, 13th edition, Priority Habitats and Estimated Habitats, Natick Quadrangle, valid from October 1, 2008, there is one Certified Vernal Pool (i.e., CVP #32) located in the northern portion of the subject site. Based upon MassGIS, this pool is also mapped as a Potential Vernal Pool. There are no other mapped Certified Vernal Pools or Potential Vernal Pools located on or within 100 feet of the subject site. Certified Vernal Pools are Class B Outstanding Resource Waters. It must be noted that vernal pools are not a resource area under the Regulations; they are simply a type of wildlife habitat that occurs within other resource areas or within unregulated uplands. Vernal Pool Habitat under the Regulations includes the pool itself as well as land located within 100 feet of the pool boundary that is located within a jurisdictional resource area under the Regulations; the 100-foot Buffer Zone is not a resource area under the Regulations.

With regard to jurisdiction under the U.S. Clean Water Act, while it is quite probable that this wetland lacks a significant nexus to a jurisdictional Water of the United States and would not be jurisdictional under the U.S. Clean Water Act, EcoTec offers no opinion on this matter. Federal wetland jurisdiction can only be determined by the U.S. Army Corps of Engineers ("Corps") upon the filing of a Jurisdictional Determination or through the submittal of an Application for Permit to the Corps.

Based upon the map review and the site inspections, including observations made from the subject site and public roads, no other resources areas that would project either Riverfront Area or 100-foot Buffer Zone onto the subject site were noted. There is a wetland system located to the south of the site across the MBTA Commuter Rail and Central Street from the subject site; this wetland would be located close to 200 feet from the southern subject site boundary.

Bordering Land Subject to Flooding: Bordering Land Subject to Flooding is an area that floods due to a rise in floodwaters from a bordering waterway or water body. Where flood studies have been completed, the boundary of Bordering Land Subject to Flooding is based upon flood profile data prepared by the National Flood Insurance Program. Based upon a review of the Flood Insurance Rate Map, Norfolk County, Map Number 25021C0016E, Effective Date July 17, 2012, the subject site and its surroundings are mapped as Other Areas: Zone X, which are defined as areas located outside of the 0.2% annual chance flood (i.e., outside of 500-year floodplain). Given the lack of a significant water body or waterway or a mapped Zone A or AE (i.e., a mapped 100-year floodplain) proximate to the subject site, Bordering Land Subject to Flooding under the Regulations and the Bylaw would not occur on the subject site. Bordering Land Subject to Flooding does not have a 100-foot Buffer Zone under the Regulations or Bylaw. Again, as noted above for Isolated Land Subject to Flooding, it is EcoTec's position that the Bylaw does not regulate land located within 200 feet of Bordering Land Subject to Flooding.

Riverfront Area: The Massachusetts Rivers Protection Act amended the Act to establish an additional wetland resource area: Riverfront Area. The Bylaw also establishes jurisdiction over land

located within 200 feet of perennial streams. Based upon a review of the current USGS Map and observations made during the site inspection, there are no mapped or unmapped streams located on or within 200 feet of the subject site. Accordingly, Riverfront Area under the Act and Bylaw would not occur on the subject site. Riverfront Area does not have a Buffer Zone under the Act and Regulations or Bylaw.

Estimated and Priority Habitat: Based upon a review of the *Massachusetts Natural Heritage Atlas*, 13th edition, Priority Habitats and Estimated Habitats, Natick Quadrangle, valid from October 1, 2008 (attached), there are no Estimated Habitats [for use with the Act and Regulations (310 CMR 10.00 *et seq.*)] and no Priority Habitats [for use with Massachusetts Endangered Species Act (M.G.L. Ch. 131A; "MESA") and MESA Regulations (321 CMR 10.00 *et seq.*)] on or in the immediate vicinity of the subject site. The Vernal Pool Certification Letter, dated November 15, 1989, indicates that the MHESP was not notified of the presence of state-listed wildlife species in this vernal pool habitat.

Habitat of Potential Regional or Statewide Importance: Based upon a review of the Habitat of Potential Regional or Statewide Importance Map for Wellesley, dated November 2011, the central portion of the subject site is mapped as Habitat of Potential Regional or Statewide Importance. MassDEP's June 2006 Massachusetts Wildlife Habitat Protection Guidance for Inland Wetlands ("Guidance") adopted an approach that utilizes maps developed at the University of Massachusetts using the Conservation and Prioritization System ("CAPS") based upon the integrated index of ecological integrity as part of the wildlife habitat evaluation process. This mapping on the subject site is of limited concern as the mapped area is not located within or proximate to a jurisdictional wetland resource area under the Regulations, and a wildlife habitat evaluation under the Regulations and Guidance would not likely be required for any project proposed on the subject site.

Areas of Critical Environmental Concern: Based upon a review of the State-wide Map of Areas of Critical Environmental Concern ("ACECs"), there are no ACECs located within or proximate to Wellesley, Massachusetts. This map is available at <http://www.mass.gov/eea/agencies/dcr/conservation/ecology-acec/areas-of-critical-environmental-concern-acec.html>.

BioMap2: Based upon a review of the BioMap2 Report prepared for the Town of Wellesley in 2012, there are no areas identified as Core Habitats or Critical Natural Landscapes located on or near the subject site. Core Habitats and Critical Natural Landscapes are located near the northeastern municipal boundary and the extreme southwestern municipal boundary. This report is available at http://maps.massgis.state.ma.us/dfg/biomap/pdf/town_core/Wellesley.pdf.

VHB Memorandum: EcoTec was provided with a copy of the updated 'Natural Resource Assessment, North 40, Wellesley, Massachusetts' memorandum, prepared by VHB, dated September 18, 2014. EcoTec concurs that there is a single wetland area on the subject site and that this wetland area may be characterized as Isolated Land Subject to Flooding under the Regulations and Isolated Vegetated Wetlands, Isolated Land Subject to Flooding, and Vernal Pool Habitat under the Bylaw or alternatively a Pond, which would be regulated as Land Under Water Bodies and Waterways and Bank, with a fringe of Bordering Vegetated Wetlands under the Regulations and

Mr. Hans Larsen
September 25, 2014
Page 9.

Bylaw. Certain of these resource areas have a 100-foot Buffer Zone under the Regulations and/or the Bylaw and Bylaw Regulations. Given the ambiguity of the resource area classification, the type and extent of this resource area would need to be determined through a formal filing under the Act and Bylaw with the Wellesley Wetlands Protection Committee. The determination of Wellhead Protection Areas and Significant Trees was outside of EcoTec's scope and, except as noted above, are not otherwise considered within this report. Subject to the above comments, EcoTec is in substantive agreement with the pertinent VHB findings.

The reader should be aware that the regulatory authority for determining wetland jurisdiction rests with local, state, and federal authorities. A brief description of my experience and qualifications is attached. If you have any questions, please feel free to contact me at any time.

Cordially,
ECOTEC, INC.



John P. Rockwood, Ph.D., PWS
Chief Environmental Scientist

Attachments (10, 12 pages)

18/WELLESLEYWESTONNOTH40REVIEWREV20140925

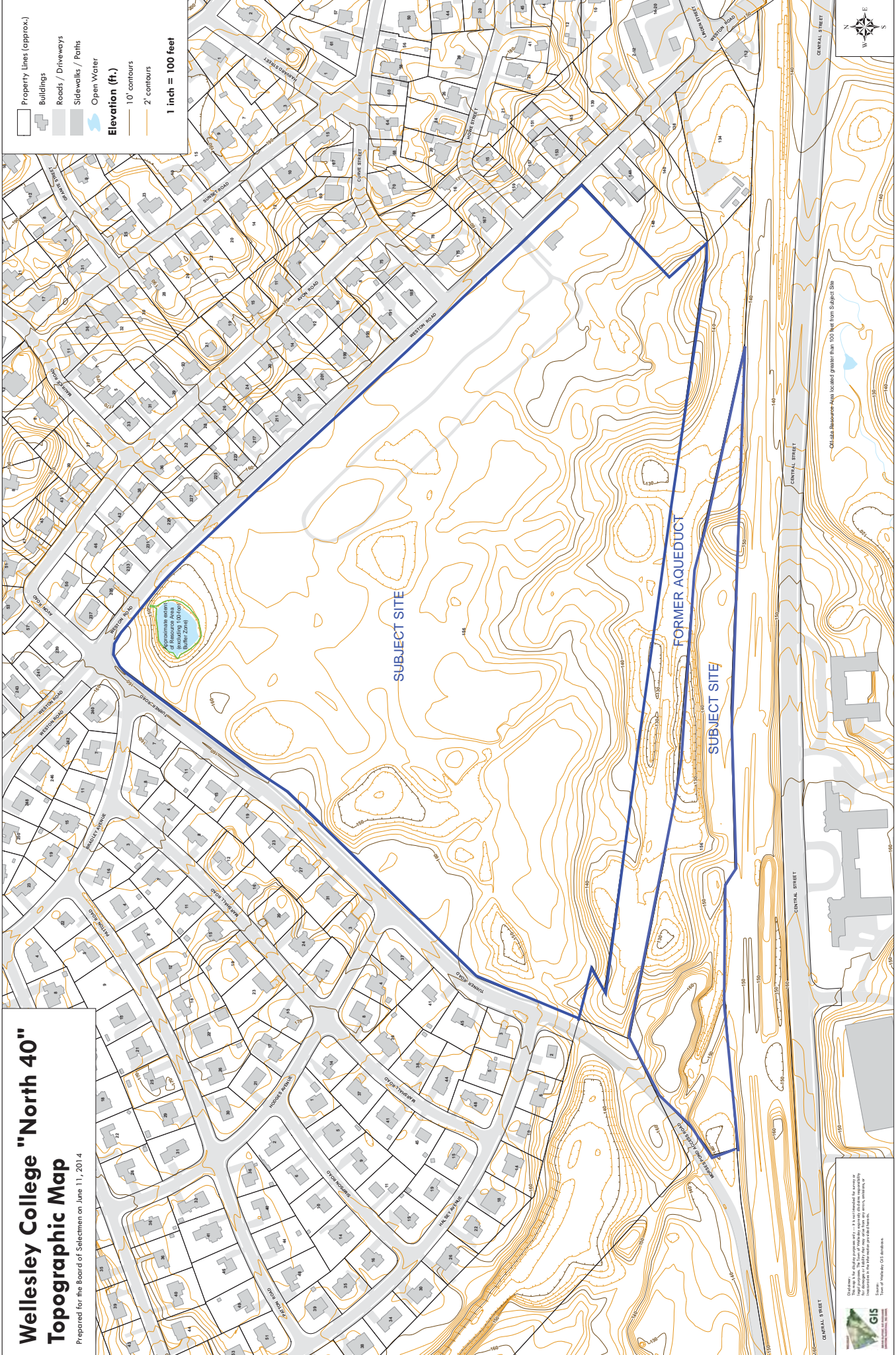
Wellesley College "North 40" Topographic Map

Prepared for the Board of Selectmen on June 11, 2014

Property Lines (approx.)
Buildings
Roads / Driveways
Sidewalks / Paths
Open Water

Elevation (ft.)
10' contours
2' contours

1 inch = 100 feet



Disclaimer:
This map is for informational purposes only. It is not intended to be used for any other purpose. The accuracy of the information is not guaranteed. The user assumes all responsibility for the use of this map. The user agrees to hold the provider harmless from all claims, damages, or losses, including reasonable attorneys' fees, arising from the use of this map.



USGS TOPOGRAPHIC MAP
FRAMINGHAM QUADRANGLE
1987
1:25,000



AERIAL PHOTOGRAPH
GOOGLE EARTH
APRIL 17, 2008

SUBJECT SITE

SUBJECT SITE

Image MassGIS, Commonwealth of Massachusetts EOEA

Google earth



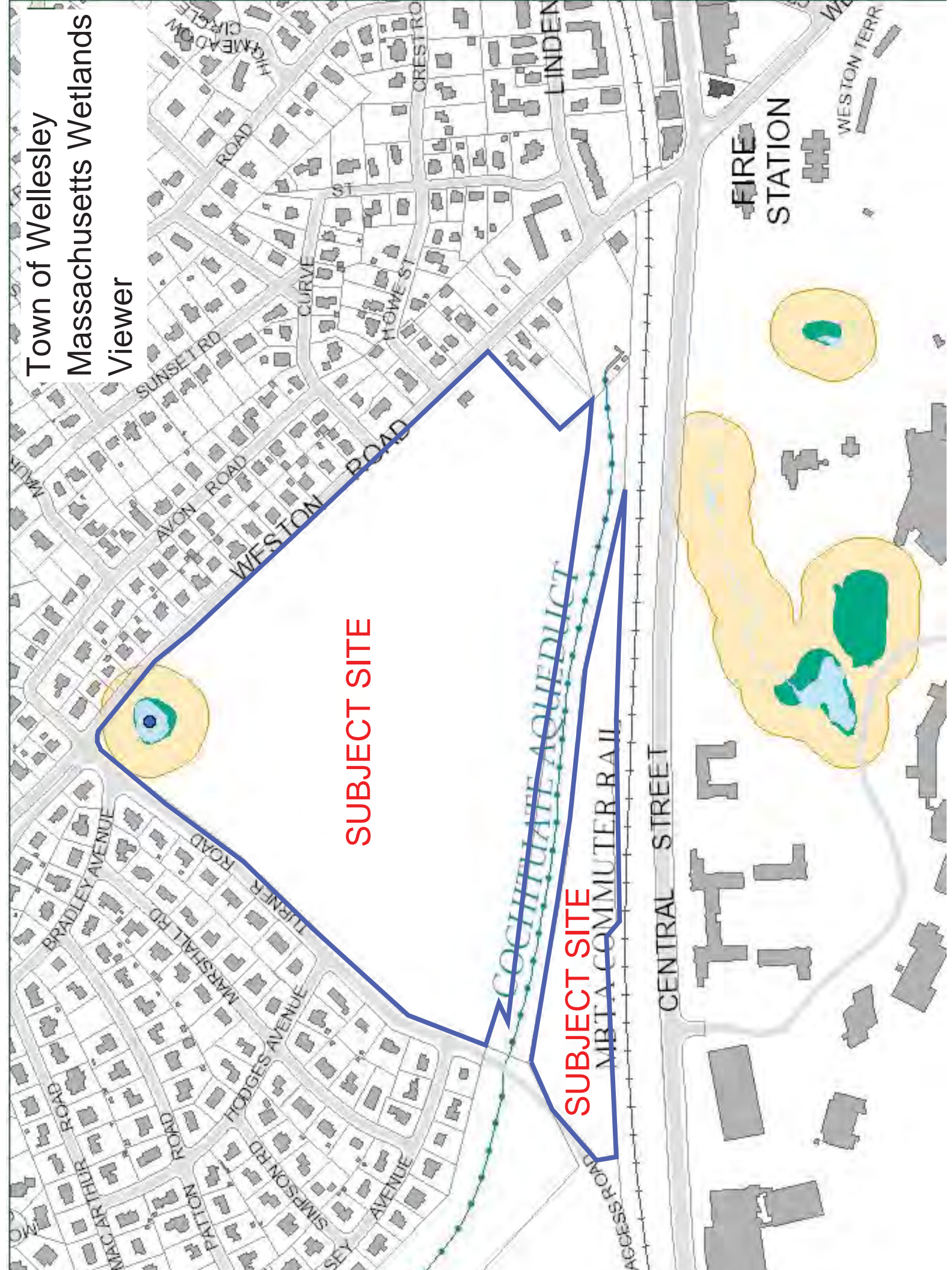
AERIAL PHOTOGRAPH
GOOGLE EARTH
AUGUST 24, 2013

SUBJECT SITE

SUBJECT SITE

Google earth

Town of Wellesley
Massachusetts Wetlands
Viewer





MASSGIS DEP WETLANDS AND
NHESP POTENTIAL AND
CERTIFIED VERNAL POOL
DATA LAYERS

SUBJECT SITE

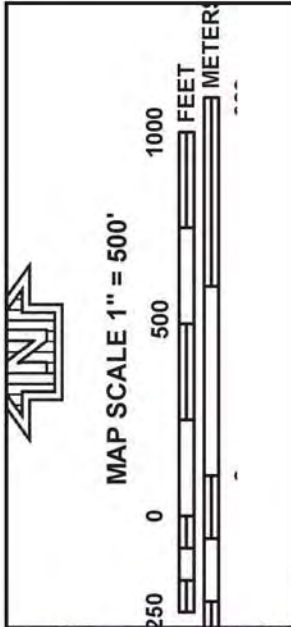
SUBJECT SITE

Custom Soil Resource Report
Soil Map



Map Unit Legend

Norfolk and Suffolk Counties, Massachusetts (MA616)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
245C	Hinckley sandy loam, 8 to 15 percent slopes	25.9	34.3%
253D	Hinckley loamy sand, 15 to 35 percent slopes	6.6	8.7%
254A	Merrimac fine sandy loam, 0 to 3 percent slopes	14.8	19.6%
254B	Merrimac fine sandy loam, 3 to 8 percent slopes	14.4	19.0%
260B	Sudbury fine sandy loam, 2 to 8 percent slopes	2.2	2.9%
602	Urban land, 0 to 15 percent slopes	1.1	1.4%
626B	Merrimac-Urban land complex, 0 to 8 percent slopes	7.7	10.2%
630C	Charlton-Hollis-Urban land complex, 3 to 15 percent slopes	2.8	3.8%
653	Udorthents, sandy	0.0	0.0%
Totals for Area of Interest		75.4	100.0%



NFP

PANEL 0016E

FIRM
FLOOD INSURANCE RATE MAP
NORFOLK COUNTY,
MASSACHUSETTS
(ALL JURISDICTIONS)

PANEL 16 OF 430
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

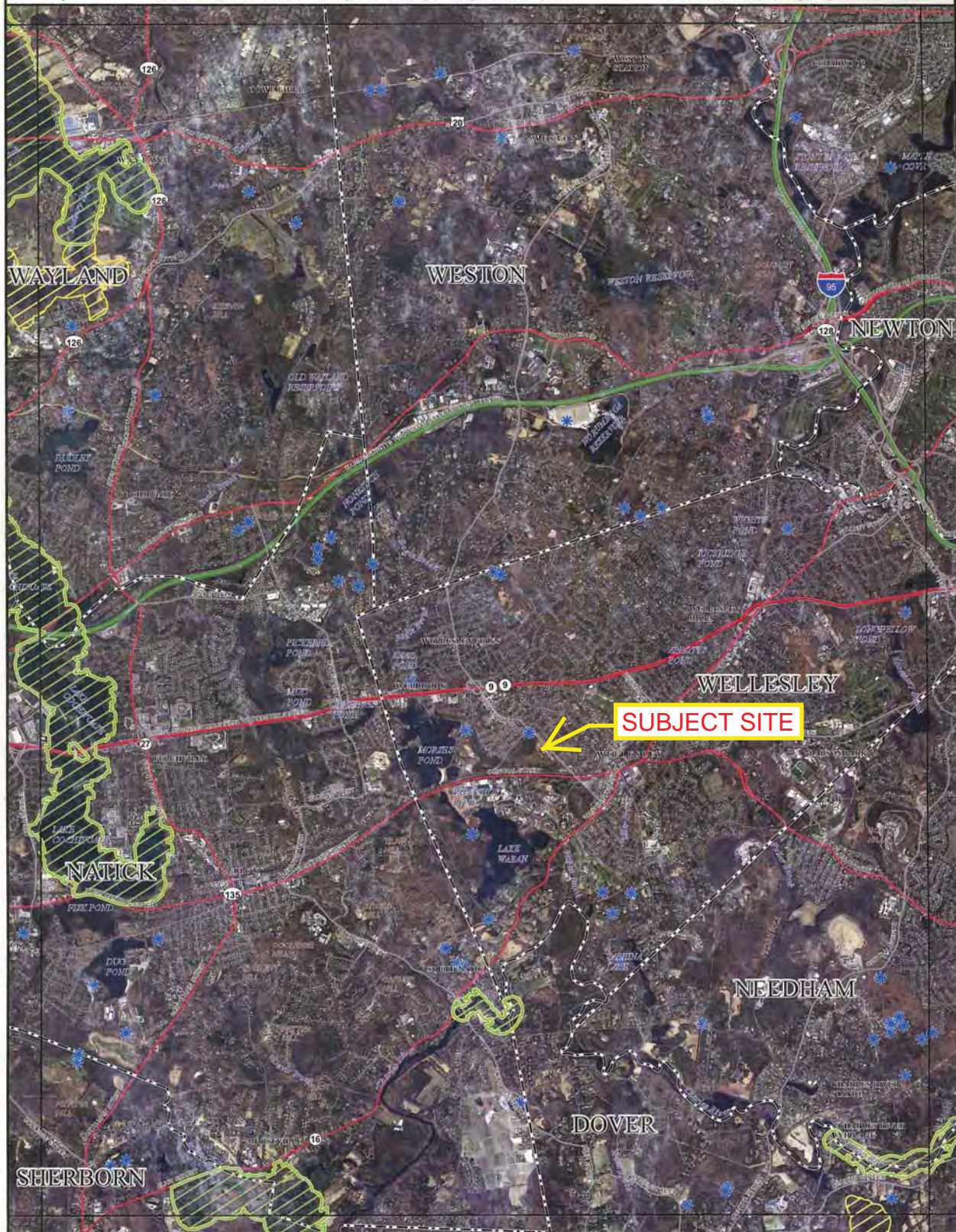
COMMUNITY	NUMBER	PANEL	SUFFIX
DOVER, TOWN OF	250238	0016	E
NEEDHAM, TOWN OF	250215	0016	E
WELLESLEY, TOWN OF	250255	0016	E

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
25021C0016E
EFFECTIVE DATE
JULY 17, 2012
Federal Emergency Management Agency




This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov





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-  Priority Habitat of Rare Species
-  Priority Habitat of Rare Species and also Estimated Habitat of Rare Wildlife
-  Certified Vernal Pool (as of July 31, 2008)

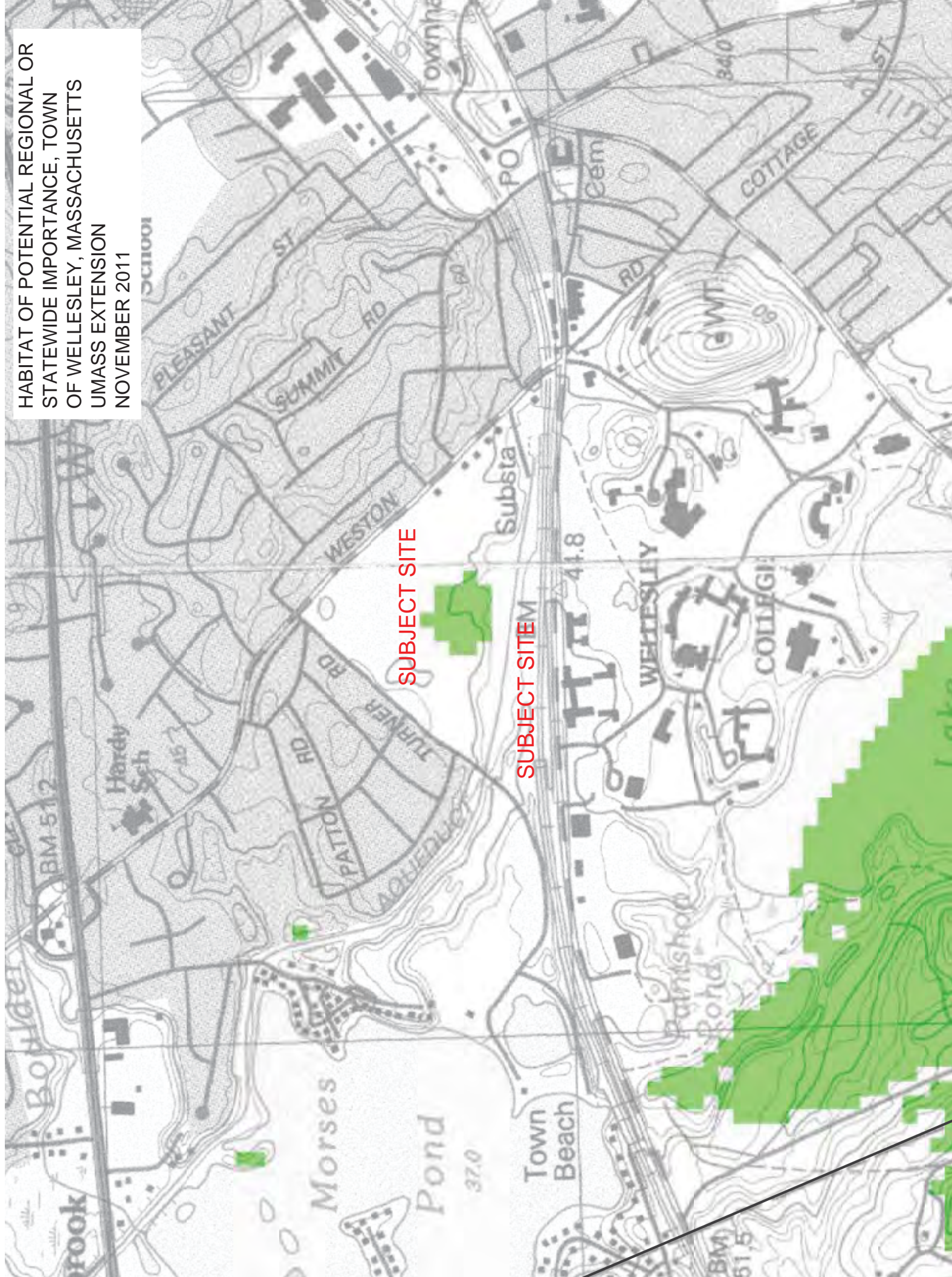


0 0.5 1 2 Miles

Natick Quad



HABITAT OF POTENTIAL REGIONAL OR
STATEWIDE IMPORTANCE, TOWN
OF WELLESLEY, MASSACHUSETTS
UMASS EXTENSION
NOVEMBER 2011



EcoTec, Inc.

ENVIRONMENTAL CONSULTING SERVICES

102 Grove Street

Worcester, MA 01605-2629

508-752-9666 – Fax: 508-752-9494

John P. Rockwood, Ph.D., PWS

Chief Environmental Scientist

Dr. John P. Rockwood has been with EcoTec, Inc. since October 1999. Dr. Rockwood was previously a Chief Environmental Scientist at Sanford Ecological Services, Inc. of Southborough, Massachusetts from September 1990 to October 1999. Dr. Rockwood was certified in August 2002 and recertified in March 2008 and January 2013 as a Professional Wetland Scientist (PWS) by the Society of Wetland Scientists, the leading professional organization in the field. His project experience includes wetland resource evaluation, delineation, and permitting at the local, state, and federal levels; wildlife habitat evaluation; pond and stream evaluation; vernal pool evaluation, certification, construction/replication, and monitoring; rare species habitat and impact assessment; wetland replacement, replication, and restoration area design, construction, and monitoring; and expert testimony preparation. He has served as a consultant to municipalities, conservation commissions, the development community, engineering and survey firms, industry, and citizen's groups. He has managed and participated in a wide variety of wetlands-related projects ranging in scope from single-family house lots to subdivisions, commercial developments, golf courses, a water park, and a regional mall. He has assessed the potential impacts of stormwater runoff, landfill leachate, and/or hazardous waste disposal sites on rare vertebrate and/or invertebrate species, and has conducted and/or directed surveys, delineated actual habitat, conducted habitat evaluations, and/or developed mitigation strategies necessary to protect rare vertebrate, invertebrate, and plant species and their habitats from proposed development-related impacts. He has conducted a drift fence study for the marbled salamander. He has participated in preconstruction sweeps for the spotted turtle, wood turtle, and eastern box turtle. He has filed MESA Project Review Checklists and has prepared applications for Conservation and Management Permits under MESA. He has conducted environmental impact assessments, and has prepared MEPA documentation related to an office park, an MBTA commuter train station, a water park, residential subdivisions, a landfill, and a regional mall. Dr. Rockwood also has extensive experience in the area of environmental site assessment related to possible oil and/or hazardous material contamination. He has conducted numerous environmental assessments, several including subsurface investigations, for sites located in Massachusetts, and has conducted preliminary environmental assessments for properties located in New York, New Hampshire, and Rhode Island. He has conducted ecological risk assessments (i.e., Stage I Environmental Screenings and Stage II Environmental Risk Characterizations) for a number of disposal sites in Massachusetts, including several disposal sites that had the potential to affect state-listed vertebrate and invertebrate species, and has utilized the EPA Rapid Bioassessment Protocol for macroinvertebrates to assess potential impacts of disposal sites and hazardous material releases on streams and rivers. He has served as the environmental contractor to the Franklin Consolidated Office of the Federal Deposit Insurance Corporation (FDIC-FCO) for 16 months, where he reviewed environmental reports, prepared scopes-of-work for site assessments, and provided technical advice to FDIC employees related to environmentally compromised assets. Dr. Rockwood has designed, conducted, and evaluated numerous surface water and groundwater monitoring programs. His prior research includes a laboratory study of the effects of low pH and aluminum on dragonfly nymphs and a field survey of the impact of chlorinated sewerage effluent of algal periphyton community dynamics. Dr. Rockwood is the co-author of a text book on aquatic biology, and is the principal author of three peer-reviewed research publications in the field of aquatic toxicology that address the effect of low pH and aluminum on nymphs of the dragonfly *Libellula julia*. Dr. Rockwood has served as the Editor of the AMWS Newsletter from November 2004 to October 2010 and as Assistant Editor from May 2003 to November 2004 and October 2010 to January 2012. He has served as President of the Association of Massachusetts Wetland Scientists from November 2013 to the present.

Education: Doctor of Philosophy (Ph.D.): Aquatic Pollution Biology – Plant and Soil Sciences
University of Massachusetts at Amherst, 1989
Bachelor of Science (B.S.): Environmental Sciences, *Summa Cum Laude*
University of Massachusetts at Amherst, 1984

Professional Affiliations: Society for Freshwater Science
Sigma Xi, Full Member
Association of Massachusetts Wetland Scientists, Voting Member
Society of Wetland Scientists
Massachusetts Association of Conservation Commissioners

Certifications: Society of Wetlands Scientists Professional Wetland Scientist, Certification Number 1349
OSHA Health and Safety Training, 40-Hour Training, 29 CFR 1910.120
OSHA Health and Safety Training, 8-Hour Supervisor Training
OSHA Health and Safety Training, 8-Hour Refresher Training

APPENDIX K. DRAFT NORTH 40 AREA – PRELIMINARY TRAFFIC STUDY
DATED 9/30/14

DRAFT

Date: September 30, 2014
To: Hans Larsen, Executive Director
Meghan Jop, Deputy Director
From: Kien Ho, PE, PTOE
Tyler de Ruiter, EIT
Subject: North 40 Area - Preliminary Traffic Study

BETA Project #: 4505-12

As part of the North 40 project, BETA Group, Inc. has conducted a preliminary traffic study of the surrounding area roadways. This preliminary traffic study focused on evaluating the existing traffic operational conditions and identifying the deficiencies of the surrounding roadway systems adjacent to the North 40 site. The study area, shown in Figure 1, included:

- Weston Road Corridor between Route 9 and Central Street (Route 135)
- Central Street (Route 135) Corridor between Bacon Street and Weston Road
- Adjacent residential roads

The study also explored solutions to mitigate the deficiencies. The findings of this preliminary study were presented at a North 40 Public Meeting on Tuesday, September 9th, 2014. The preliminary study and findings are discussed as follows.

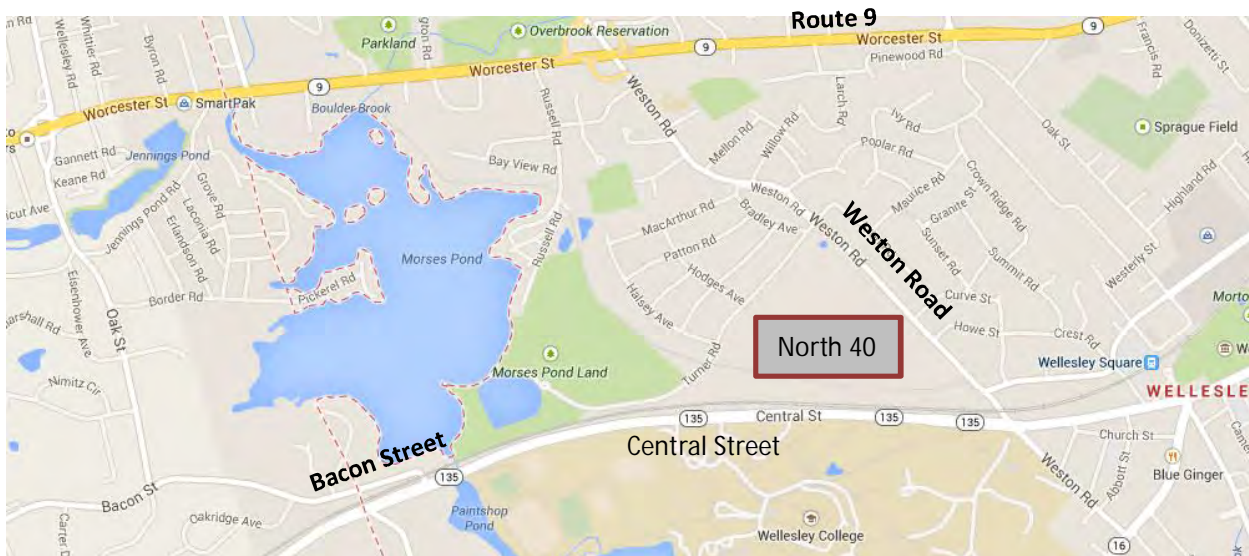


Figure 1: North 40 Study Area (Source: Google Maps)

EXISTING CONDITIONS

To conduct the preliminary study of the North 40 area roadway traffic conditions, we utilized historical traffic data for the Weston Road and Central Street corridors from several previous traffic impact and roadway studies. In addition, new traffic data were collected from September 15, 2013 to September 20, 2014. The data revealed that the Average Daily Traffic (ADT) on Weston Road is approximately 15,500 vehicles per day. Based on these volumes, it was determined that the intersection of Weston Road and Central Street operates with Level of Service (LOS) F with long queues on Weston Road and Central Street. For example, the queue for Weston Road southbound extends beyond Curve Street. This intersection serves as a crossroads between Route 135, which serves as a regional east/west connector, and Weston Road which functions as a major north/south connector from Route 135 to Route 9. It is known that Weston Road is used as a bypass for vehicles traveling on Route 9. Vehicles exit the congested Route 9 and travel southbound on Weston Road to Route 135 and split eastbound or westbound accordingly. In addition, Weston Road is used as a connection to/from Route 30 in Weston, MA.

Given the high volumes in the peak hours and the existing number of travel lanes for each approach, the Weston Road and Central Street intersection is currently operating over capacity. The data showed the intersection is processing 2,300 vehicles in the commuting peak hours, but can only physically handle 1,800 vehicles in the commuting peak hours. For this intersection to operate at or below capacity approximately 500 vehicles will need to be removed from the intersection.

Several alternatives were developed to improve the operational capacity at this intersection. Alternatives 1 & 2 explored methods to accommodate the 500 vehicles within the intersection by creating additional lanes and adjusting signal operations with the adjacent intersection of Linden Street at Weston Road. Alternatives 3, 4, 5, and 6 explored the option of diverting the 500 vehicles from the intersection of Central Street and Weston Road. Since Weston Road travels over the CSX/MBTA railroad tracks adjacent this intersection, all six alternatives will require coordination with the MBTA and CSX. These alternatives are discussed as follows:

ALTERNATIVE 1 – WESTON ROAD SOUTHBOUND RIGHT TURN LANE (FIGURE 2)

This alternative explored options to add more lanes to the intersection of Weston Road and Central Street to alleviate the poor operating conditions. The traffic volume data revealed that each approach processes high volumes in the peak hour, approximately 400 vehicles per hour to 975 vehicles per hour. Based on this information, we evaluated the potential for lane additions by examining the right-of-way impacts caused by widening the roadway for each approach. The right-of-way information provided by the Town's GIS mapping shows that Central Street and the Weston Road northbound approaches to this intersection have very limited right-of-way to add any additional travel lanes. Given the lack of right-of-way and the potential significant impact to businesses and abutters, adding lanes is unfeasible for these three approaches. The Weston Road

southbound approach consists primarily of a bridge structure with potential right-of-way to add an additional lane. Currently, this approach consists of one travel lane in the southbound direction and one travel lane in the northbound direction. Due to the heavy turn volumes on the Weston Road southbound approach, an exclusive right turn lane and a shared through/left lane is proposed under this alternative. This configuration requires widening the existing bridge over the MBTA Commuter Rail and CSX Freight Rail. Currently the bridge provides a pavement width of approximately 30 feet from curb to curb. Given this width, it is not possible to provide for three lanes of traffic over the bridge as the truck turning radii onto the bridge encroaches on the opposing travel lane. The short bridge span, approximately 200 feet, coupled with the steep 10% vertical grade also prevents the existing bridge from being striped for three travel lanes. Therefore, to add a right turn lane the bridge will require widening by at least seven feet. The seven feet widening would allow for an exclusive right turn lane for southbound vehicles wishing to travel on Route 135 westbound.



Figure 2: Weston Road Southbound Right Turn Lane

The analysis revealed that the added right turn lane provides small relief to queues on Weston Road, but it does not provide any benefit to other approaches to the Weston Road at Central Street or Weston Road at Linden Street intersections. These intersections continue to operate with LOS F in the peak hours. This alternative will have right-of-way impacts at both the southern and northern ends of the bridge abutment areas.

ALTERNATIVE 2 – SIGNALIZE LINDEN STREET (FIGURE 3)

A large contributor to the queuing on Weston Road is due to the signalized flashing operation of the Weston Road and Linden Street intersection. This alternative explored the option of converting the flashing operation to a conventional full signal “Stop and Go” operation coordinated with the Weston Road and Central Street intersection.

This intersection currently contains a traffic signal in flash mode, which gives Weston Road a flashing yellow light and Linden Street a flashing red light. When a pedestrian activates the pedestrian push button, all approaches receive a solid red light until the pedestrian phase clears.

Due to the high volume on Weston Road, vehicles wishing to exit Linden Street must wait for gaps in traffic to make their turn maneuver. These gaps are inadequate which creates queue and increase delays. Left turns from Linden Street are particularly difficult due to the long queues on Weston Road. Depending on the drivers, this occasionally operates like a merge/zipper movement (e.g. one Linden Street car, one Weston Road car, one Linden Street car, etc.). Other times Linden Street vehicles will pull out into the intersection and block northbound Weston Road vehicles, decreasing the efficiency of the intersection. Similarly, vehicles attempting to turn left onto Linden Street block traffic on Weston Road. The roadway width on Weston Road is not wide enough to allow vehicles to overtake a vehicle waiting to turn left onto Linden Street unless that vehicle encroaches on the northbound lane. These instances increase queues on Weston Road such that some southbound signal phases at the Central Street and Weston Road intersection go unused.

It is important to note that as part of the Weston Road improvements project, previously completed, consideration was given to widen this section of Weston Road to allow room for through vehicles to bypass waiting left turn vehicles destined for Linden Street. Due to the right-of-way constraints the full widening was not feasible. In addition, the flashing signal was designed and installed to be easily converted for conventional signal operations should traffic conditions change.



Figure 3: Signalize Linden Street

As an effort to improve traffic operations, converting the flashing traffic signal at the intersection of Weston Road and Linden Street to conventional signal operations was examined. This signal would be coordinated with the signal at Central Street such that traffic traveling over the bridge does not negatively impact either intersection. Coordinating these two signals allows the Linden Street intersection to operate at LOS D however the Central Street intersection continues to operate at LOS F. The overall queuing problem on Weston Road southbound did not improve significantly. This alternative also increases queues on Central Street westbound which continue to spill back to Wellesley Square.

ALTERNATIVE 3 – LINDEN STREET EXTENSION (FIGURE 4)

Since Alternatives 1 & 2 do not provide significant improvements to the Weston Road and Central Street intersection, Alternative 3 examines diverting 500 vehicles from the intersection such that it would operate at or below capacity. Based on the traffic data, it was determined that the largest (and most logical) volume movements to be diverted in the peak hour are vehicles turning right onto Central Street westbound from Weston Road, and vehicles turning left onto Weston Road northbound from Central Street. To divert these volumes, a new 500 to 600 feet long roadway/bridge over the existing MBTA/CSX railroad tracks. The proposed bridge will be

approximately 600 feet west of the Weston Road and Central Street. This alternative would create a direct connection from Central Street to Linden Street, which can be referred to as the Linden Street Extension. The Linden Street Extension would receive all vehicles from Central Street eastbound destined north on Weston Road or eastbound on Linden Street. Likewise, all vehicles from Weston Road southbound or Linden Street westbound destined west on Central Street would also use the Linden Street Extension. These movements would not be required at the Weston Road and Central Street intersection, thereby improving the intersection operations from LOS F to LOS E.



Figure 4: Linden Street Extension

The Linden Street Extension would require a new signal on Central Street. This new signal would only require two phases. One phase would give westbound vehicles green time, and the second phase would stop westbound vehicles to allow eastbound vehicles to turn left onto the new Linden Street Extension. Eastbound through vehicles would always receive a green signal phase. All vehicles exiting the Linden Street Extension would be restricted to right turns onto Central Street and would be yield controlled. This new signal and the two existing signals at Linden Street and Central Street would be coordinated to maintain efficient traffic flow. Preliminary analysis shows that this alternative improves the Central Street at Weston Road intersection to LOS E, with LOS D at Linden Street and reduces queues on Weston Road.

One of the benefits to this alternative is it provides vehicles on Central Street (Route 135) direct access to Linden Street and vice versa. The new Linden Street Extension will also be more attractive for vehicles destined to the Linden Square shopping area than continuing on Central Street through Wellesley Square via Crest Road. Therefore, the Linden Street Extension alternative has the potential to divert some Central Street eastbound and westbound through vehicles from the Square area as well as the two key turn movements discussed above. A disadvantage to this alternative is that it provides little benefit for the North 40 parcel as it is located south of the parcel separated by the Electrical Sub Station.

ALTERNATIVE 4 – BRIDGE CONNECTION TO CURVE STREET (FIGURE 5)

Since Alternative 3 provides little benefits to the North 40 Parcel, Alternative 4 was developed to provide a connection to the North 40 Parcel. It provides a similar bridge connection approximately 1,500 feet west of the Central Street and Weston Road intersection. The alternative would create a road through the North 40 parcel and meet Weston Road at Curve Street forming a conventional four legged intersection. This bridge connection to Curve Street maintains the same principle of removing lefts and right turns from the Central Street at Weston Road intersection noted above. The intersection of Curve Street was chosen as a viable connecting point because it is approximately halfway (1,200 feet) between Central Street and Turner Road. The spacing of this new intersection (which could also be the future North 40 driveway) between the two Turner Road and Central Street intersections will provide the most ideal location for managing traffic along the Weston Road corridor. While a detailed traffic analysis has not been performed, the direct connection to Curve Street may require a traffic signal and could potentially encourage cut-through traffic on Curve Street. Currently due to the Weston Road traffic queues from the Linden Street and Central Street intersections, Curve Street is being used as a cut through to Linden Street. The potential for increased cut-through traffic will need to be fully investigated as part of a detailed analysis.

Similar to Alternative 3, the bridge connection will cross over the existing MBTA/CSX railroad tracks. At this location Central Street is approximately five feet higher in elevation than the railroad tracks. This elevation difference is fairly consistent approximately 300' to 400' east of this location. However, the difference in elevation increases to the west of this location. For example, the Central Street is approximately 15 to 20 feet higher than the railroad tracks at the Wellesley College Entrance Driveway (signalized intersection) location. Due to the low grade difference between the railroad tracks and the Central Street roadway, a longer bridge span will be required in order to meet the required vertical clearance (20 feet) by the MBTA. While this study assumes a bridge connection over the existing MBTA/CSX Rail tracks, an at-grade crossing was also briefly explored. From a safety standpoint, the at-grade crossing scenario will be a concern for the MBTA/CSX, however, this option should not be ruled out.

The benefit to this alternative is that it provides direct access to the North 40 parcel such that any potential development may feed into this access roadway. A disadvantage is that it does not

explicitly provide a direct connection to Linden Street; however, an optional connection, displayed in Figure 5 as a broken yellow line, can be accommodated. This Linden Street connection can be achieved north of the existing Electrical Sub Station.



Figure 5: Bridge Connection to Curve Street

Based on the Town's GIS mapping, the Linden Street connection can be provided with no right-of-way impacts. Another disadvantage to this alternative is that it proposes the addition of two new signals (one on Central Street and one at Curve Street). Under this alternative, the existing flashing signal system at Linden Street will be converted to a conventional traffic signal particularly if the Linden Street connection is made available.

ALTERNATIVE 5 – BRIDGE CONNECTION FROM WELLESLEY COLLEGE

The following two alternatives (5A and 5B) examine reducing the number of new signalized intersections and connections to Turner Road. With this insight, the existing signalized intersection of Wellesley College at Central Street was considered. In this alternative, a new bridge is proposed across from Wellesley College into the North 40 parcel, in which a new access road would run through the parcel to the connection with Curve Street. Similar to Alternative 4, an optional extension road shown as a yellow broken line could be used to connect with Linden Street. This alternative adds only one signal at Curve Street, while two existing signal systems would need to be

reconfigured, (Linden Street and Wellesley College driveway). Alternative 5 (A or B) provides the most benefit to the North 40 parcel as it includes a circumference type of roadway system along the southerly site that could provide ample room for site driveways connectivity while still providing the traffic bypass from the Central Street at Weston Road intersection.

As mentioned previously, at this location Central Street is approximately 15 to 20 feet higher in elevation than the railroad tracks. The required bridge span for this location (approximately 200 feet to 300 feet) is not as long when compared to Alternative 4 due the large grade elevation, however, a grade crossing approach will be challenging due to the large elevation and short approach section (less than 100 feet) from the railroad track to Central Street.

Alternative 5A – Bridge Connection to Turner Road (Figure 6)

Alternative 5A proposes a connection from the site access road to Turner Road. This connection is proposed under the concept that spreading traffic out over multiple areas will reduce queues and improve traffic conditions overall. This alternative would provide three means of access from Central Street to Weston Road: at Linden Street, at Curve Street, and via Turner Road. This alternative may increase traffic impacts to the Turner Road neighborhood.



Figure 6: Bridge Connection to Turner Road

Depending on the outcome of the North 40 Project development, the connection to Turner Road could be used as a bicycle/pedestrian/emergency vehicle access pathway rather than a typical roadway for general traffic use. The pathway would ensure that the neighborhood is still accessible but it will not increase traffic. If the Turner Road connection is used for general traffic, the existing pedestrian signal at Weston Road will need to be converted to a full traffic signal.

Alternative 5B – Bridge Connection to North 40 (Figure 7)

This alternative is identical to Alternative 5A but removes the vehicle connection to Turner Road. This would require vehicles to access and egress the North 40 parcel via the intersections of Wellesley College at Central Street and Weston Road at Curve Street. Similarly, the vehicles bypassing the Central Street and Weston Road intersection will also utilize these two new intersections. Consistent with Alternative 4, an optional connection road to Linden Street (shown in broken yellow lines in Figure 7) could be provided.



Figure 7: Bridge Connection to North 40

This alternative reduces the number of new traffic signals to one and has no direct traffic impact to the Turner Road neighborhood but still requires a new bridge over the MBTA railroad tracks.

ALTERNATIVE 6 – RUSSELL ROAD CONNECTION (FIGURE 8)

This alternative examines other roadway networks within the study area to provide an alternate route for vehicles on Route 9 to access Central Street (Route 135) in an effort to relieve traffic congestion on Weston Road. The only nearby roadway that can provide a parallel connection other than Weston Road is Russell Road. This alternative explores connecting the new roads discussed in Alternative 5 with Russell Road and Route 9. The Russell Road connection would require connecting Halsey Avenue to meet up with Turner Road as shown in Figure 8. The major disadvantage to this alternative is that it requires significant right-of-way and neighborhood impacts.



Figure 8: Russell Road Connection

Upon examining the traffic data at the Route 9 and Weston Road intersection, it was found that approximately 250 vehicles during the peak commuting hour originated from Route 9 eastbound continued to Weston Road southbound. Based on the small traffic volumes that will be diverted via the Russell Road connection, it was determined that this alternative is not recommended due to the small benefits that would be achieved and the high design/construction cost and significant right-of-way and neighborhood impacts.

SUMMARY

This preliminary traffic study of the North 40 area traffic conditions explored ways to mitigate the traffic operational problems on Weston Road, particularly at the intersection of Weston Road at Linden Street and Central Street. Traffic data for this area have shown that the intersection is currently operating over capacity by approximately 500 vehicles. Alternatives 1 & 2 explored methods to accommodate the 500 vehicles within the intersection by creating additional lanes and adjusting signal operations, however these two alternatives provide little traffic congestion relief. To improve operations at this intersection traffic volume must be diverted. Alternatives 3 to 6 explore methods of diverting vehicle movements from this intersection, including: a new bridge connection to Linden Street, a new bridge connection to Curve Street, and a new bridge connection at the Wellesley College entrance driveway. For comparison purposes, a summary table of pros and cons for each of the six alternatives was developed as shown in Table 1. An order of magnitude construction cost associated with each of the Alternatives was developed. These costs do not include any right-of-way acquisition costs.

Table 1: North 40 Preliminary Traffic Study Alternatives Comparison

Alternatives	LOS	Intersection	Pros	Cons	Order of Magnitude Cost Estimate*
Existing Conditions	F F	<ul style="list-style-type: none">Central StreetLinden Street		<ul style="list-style-type: none">Exceeded intersection capacityLong queues (to Curve St on Weston Rd)	
Alternative 1 - Weston Road Southbound Right Turn Lane	F F	<ul style="list-style-type: none">Central StreetLinden Street	<ul style="list-style-type: none">Increases capacity for right turns.Minor queuing improvements on Weston Road southbound	<ul style="list-style-type: none">Requires bridge widening the bridgeBridge widening costsCannot accommodate future development trafficOverall intersection operational problem	<ul style="list-style-type: none">\$1.5M - \$2.0M
Alternative 2 - Signalize Linden Street	F D	<ul style="list-style-type: none">Central StreetLinden Street	<ul style="list-style-type: none">Improve operations for vehicles exiting Linden StreetAllows for bridge queues to be metered between two signalsLess cost since Linden St signal already exists	<ul style="list-style-type: none">Queue problemCannot accommodate PM conditions (LOS F)Cannot accommodate future development traffic	<ul style="list-style-type: none">\$1.5M - \$2.0M
Alternative 3 - Linden Street Extension	E D	<ul style="list-style-type: none">Central StreetLinden Street	<ul style="list-style-type: none">Removes lefts and rights from Central Street/Weston Road intersection (500 vehicles)Weston Road bridge widening not requiredDirect connection between Linden Street and Rte. 135Improve overall traffic operations	<ul style="list-style-type: none">Construct a new bridge and two signalsRequires property easements/takingsBridge, roadway, and signal construction costsRequire traffic signal at Route 135Limited benefit to the North 40 site	<ul style="list-style-type: none">\$3.0M - \$3.5M
Alternative 4 - Bridge Connection to Curve Street		<ul style="list-style-type: none">Central StreetLinden StreetCurve Street	<ul style="list-style-type: none">Removes lefts and rights from Central Street/Weston Road intersectionConnects Curve Street to Route 135Provides a roadway connecting to the project siteWeston Road bridge widening not requiredImprove overall traffic operations	<ul style="list-style-type: none">Require new bridge, roadway, and signals at Curve and Route 135Requires easements/takingsMay require signaling Curve St at Weston RdRequires property easements/takingsBridge, roadway, and signals construction costs	<ul style="list-style-type: none">\$4.0M - \$4.5M
Alternative 5A - Bridge Connection from Wellesley College to Turner Road		<ul style="list-style-type: none">Central StreetLinden StreetTurner RoadCurve Street	<ul style="list-style-type: none">Removes lefts and rights from Central Street/Weston Road intersectionConnects Turner Road to Route 135Connects Route 135 to Weston RoadProvides direct connection to the North 40 siteWeston Road bridge widening not requiredImprove overall traffic operations	<ul style="list-style-type: none">Turner Road neighborhood impactRequire new bridge, roadway, and upgrade existing signal at Wellesley CollegeRequire full signal/re-design at intersection of Turner and WestonBridge, roadway and traffic signal Construction costsMay require signaling Curve St at Weston RdRequires property easements/takings	<ul style="list-style-type: none">\$5.0M - \$5.5M
Alternative 5B – Bridge Connection from Wellesley College to North 40		<ul style="list-style-type: none">Central StreetLinden StreetTurner RoadCurve Road	<ul style="list-style-type: none">Removes lefts and rights from Central Street/Weston Road intersectionNo Turner Road neighborhood impactsLess cost (No upgrades to Turner Rd at Weston Rd)Connects Route 135 to Weston RoadProvides direct connection to North 40 siteWeston Road bridge widening not requiredImprove overall traffic operations	<ul style="list-style-type: none">Require new bridge, roadway, and upgrade existing signal at Wellesley CollegeMay require signaling Curve St at Weston RdBridge, roadway and traffic signal construction costsRequires property easements/takings	<ul style="list-style-type: none">\$5.0M
Alternative 6 – Bridge Connection from Wellesley College to Russell Road		<ul style="list-style-type: none">Central StreetLinden StreetRussell Road	<ul style="list-style-type: none">Reduce approximately 250 vehicles from Weston Road	<ul style="list-style-type: none">Significant neighborhood impactsSignificant right-of-way impactsConstruction cost of Russell Road connectionMinimum cost benefits	<ul style="list-style-type: none">N/A
				Note: All Alternatives require coordination with MBTA/CSX	* Excludes right-of-way acquisition costs