1. Background

This document has been completed by the Brighton Conservation Board (the Board) to fulfill the requirements of Brighton Town Code Section 223-5 and NYS General Municipal Law Section 239 to maintain a current index of open space within the Town of Brighton. The original open space index was completed in 1973. At that time, the Town identified 23 separate areas of open space within the Town of Brighton and included recommendations for future development or use of each site. In 1995-1996, the original open space index was updated, remapping the sites and providing additional technical information about each site inventoried. This report updates the 1995-1996 study. For the current update, a total of 25 separate open space areas have been mapped for this index. These areas are shown in Figure 1 and described in Table 1.

The goals for open space planning are set forth in the Town's most recent Comprehensive Plan, Comprehensive Plan 2000. The quality of life in Brighton is greatly enhanced by the presence of a diversity of open space types, including public parks, natural landmarks such as Pinnacle Hill and the Genesee River, wetlands with abundant wildlife, woodlots and forests, trout streams, floodplains and the Erie Canal. Since the completion of the 1995-1996 update, the Town has acquired approximately 328 acres of land for parkland and preservation, and has increased the amount of land protected by conservation easements. The Town is now responsible for managing more open space than ever. This document was prepared to provide technical information on open space sites in the Town of Brighton. It has not been designed as a policy document, although some usage precautions, site linkage and preservation opportunities are presented where appropriate.

It is recommended that the Open Space Index should be updated at least every ten years or sooner in response to changes in the Town. The Open Space Index is an important supporting document for the Comprehensive Planning process.

2. Introduction

Since the first Open Space Index was completed in 1973, the Town of Brighton has become the crossroads of Monroe County. With its central location, access to the I-390 and I-590 expressways (both constructed since 1973), several State highways, the Erie Canal, the Genesee River, three County parks, three colleges, and numerous businesses and commercial areas, developers found Brighton to be very attractive. As a result, open space is a valuable commodity in the Town of Brighton.

What is open space? Open space is undeveloped land--land that has been left in a natural, open condition either by chance or by intent. Open spaces may include public parks, active or abandoned agricultural lands, golf courses, floodplains, wetlands or other lands where structures have not been built. New York State defines open space as "any space or area characterized by (1) natural scenic beauty or, (2) whose existing openness, natural condition, or present state of use, if retained, would enhance the present or potential value of abutting or surrounding urban development, or would maintain or enhance the conservation of natural or scenic resources."

The Town of Brighton is intimately involved in the management of open space on several levels. The Town Board determines the need for preservation of open space with zoning decisions and land acquisitions for parks or other public purposes. The Planning Board influences the use of open space on privately owned lands by administering zoning regulations, including the environmental protection overlay district regulations, and by recommending appropriate uses for cluster development. The Zoning Board of Appeals also has a limited role in the management of open space by reviewing variances to setback requirements and use restrictions. The Parks and Recreation Department manages Town parks and recreation programs. The Department of Public Works manages open spaces dedicated to infrastructure uses.

Just as the Town protects the health, safety, and welfare of its citizens by providing certain physical infrastructures such as roads, sewers, and water lines, it also has a responsibility to preserve and protect the environmental infrastructure of the community, which includes open space. Open lands protect the public health and welfare by cleansing the air and water, by providing areas for aquifer recharge, flood water storage, agricultural production, wildlife and waterfowl habitat, and by adding scenic beauty to the lives of residents . These services can be as important to the well-being of the town's citizens as the more widely recognized components of its infrastructure.

Comprehensive Plan 2000 stated the following goals for open space planning:

"Provide for the active and passive recreational needs of current and future town residents:

¹New York State General Municipal Law, Chapter 24, Article 13, Section 247, paragraph 1.

Preserve, in their natural state, open space areas that have significant natural value;

Ensure that acquisition and development of open space areas are responsive to the fiscal implications of such actions;

Protect sensitive environmental areas, including wetlands, floodplains, watercourses, woodlots, steep slopes, and wildlife habitats and migration corridors:

Provide pedestrian and bicycle linkages among parks, recreation areas, and neighborhoods and between neighborhoods and commercial areas." ²

The Town has actively addressed the goals listed above. Since the completion of the last Open Space Index update in 1996, the Town has acquired approximately 328 acres of parkland and has increased the amount of land protected by conservation easements to approximately 35 acres. Fifty acres of parkland in central Brighton (Buckland Park) is nearing completion as an active recreation area. In 2007 an additional 71 acres was acquired adjacent to Buckland Park, expanding total park acreage to ±121 acres. Much of the rest of the land acquired since 1996 will be used for passive recreation only, to ensure the preservation of the natural features of the land. These lands include:

- Corbett's Glen Nature Park: ±53 acres in eastern Brighton (Open Space Index Area 4) containing one of Brighton's most significant and historic natural areas. Trails, benches and limited parking areas have been installed to facilitate passive recreation within the site.
- Meridian Centre Park expansion: ±38 acres adjacent to Meridian Centre active recreation park in central Brighton (Open Space Index Area 14). Trails have been created in the additional parkland, which is used for passive recreation.
- Lynch Woods: <u>+</u>75 acres in western Brighton (Open Space Index Area 2), to be used for preservation and passive recreation.
- The Lehigh Valley Trail: ±25 acres on the site of the former Lehigh Valley RR adjacent to Lynch Woods (mapped on Open Space Index Areas 18 and 27), on which a multi-purpose trail has been created, providing a pedestrian link between East River Road and Brighton-Henrietta Town Line Road.
- ±16 acres in central Brighton (Open Space Index Area 22), adjacent to the recently approved (2005) Park Place housing development. A major portion of NYS wetland BR-10 and a number of smaller federal jurisdictional wetlands are located on this parcel. Its acquisition by the Town ensures the protection of the wetland urban ecology within and surrounding the wetland.

² Town of Brighton. 2001. Comprehensive Plan 2000, Town of Brighton, Monroe County, New York, p. 7.

To ensure that acquisitions were supported by the community and to responsibly fund any acquisitions, the Town, in 2002, approved the issuance of a bond for parkland acquisition. The bond resolution was preceded by a public referendum that verified the strong public support for the resolution and for the acquisition and development of parkland in the Town.

The overall goal of using open space to enhance the Town as a residential community and maintain property values is an underlying tenet of land use planning in Brighton. The Conservation Board works to assure that sensitive environmental resources such as wetlands, steep slopes and woodlots are identified and protected during the site review process. The treatment of open space greatly determines the quality of life within the community.

The public's interest in the preservation and acquisition of open space is recognized in Section 247 of the New York State General Municipal Law. Towns are authorized to acquire and preserve public open space under this law.

The value of local open space planning and preservation is recognized in New York State law. Under Section 239-x of NYS General Municipal Law, towns, villages and cities are specifically authorized by New York State law to establish conservation advisory councils. One of the many responsibilities of the Conservation Advisory Board is to advise the local governing body on natural resources issues and to prepare an open space inventory and map, which together comprise an open space index. Once the index is adopted by the Town Board, the Conservation Advisory Council then becomes a Conservation Advisory Board, and is authorized under Section 239-y of New York State General Municipal Law to conduct advisory environmental reviews of any project that comes before the local planning board which impacts the open lands described in the index.

Under Section 223-5 of the Brighton Town Code, the Conservation Board is specifically empowered to "oversee the maintenance of an up to date inventory or index of all open space in public or private ownership within the municipality..." Open spaces include natural landmarks, glacial and other geomorphic or physiographic features; streams and their floodplain, swamps, marshlands and other wetlands; unique biotic communities, scenic and other open areas of natural or ecological value. The Board is also required to maintain records of the ownership, and present and proposed use of such open areas. The purpose of this document is to provide a base of information for recommendations by the Board for the preservation and/or use of these open spaces. In addition, the Board is authorized to ensure that the index is updated on a regular basis; identifying and evaluating the open space planning objectives as stated in the most current Town Master Plan; providing recommendations as to the most appropriate use or development of open space areas; and recommending land uses that would be consistent with areas identified in the index and other plans.

This document is the second update to the original 1973 Open Space Index. For the purposes of this document, open spaces consist of public or private lands that

³ General Code Publishers Corporation. 1996. Code of the Town of Brighton, County of Monroe, State of NY. Vol. II. Comprehensive Development Regulations, Ch. 223, p. 223:3

are (1) open in character; and (2) are at least ten (10) acres in size. A few smaller parcels were included because the parcels were determined to have a particular value worthy of inclusion in the inventory. Several additional open space areas, including power line and railroad rights of way, school sites, and golf courses have not been specifically inventoried because it is unlikely that these open spaces will be developed under their current committed uses. These sites include: Rochester Gas & Electric ROW, Harley School, Brighton Central School District Lands, Penfield School District Lands, Pittsford School District Lands, McQuaid Jesuit High School Lands, Monroe Community College Campus, the Erie Canal corridor, and Hillel School.

Table 1 lists the areas included in the 2005/2006 Open Space Index Update inventory, along with the approximate acreage of public and private lands within the areas. Also indicated in the table are areas that were inventoried for the 1995/1996 Open Space Index that have subsequently been removed from the inventory.

Table 1. Summary of Open Space Inventory Sites*

Site Number	Site Name	Privately Owned Acres	Town Owned Acres	Other Publicly Owned Acres	Comments
1	Weymouth Creek Gully	<u>+</u> 21	<u>+</u> 12	<u>+</u> 41	Includes portion of old Brighton Sewage Treatment Plant
2	Lynch Woods	<u>+</u> 88	<u>+</u> 75	0	Largest private portion owned by University of Rochester
3	Pinnacle Hill	<u>+</u> 33	0	0	Owned by Hillside Children's Center; Recommended for acquisition in 2000 Comp Plan; listed in 1996 Monroe County EMC PESA Study ⁴
4	Corbett's Glen	<u>+</u> 23	<u>+</u> 53	0	Site of Corbett's Glen Nature Park:Listed in Monroe County EMC PESA Study
5	Brighton Landfill	0	<u>+</u> 54	0	
6	Heberle Estate	<u>+</u> 3	0	<u>+</u> 38	Includes undeveloped portion of Ellison Park
7	Heberle Stables	<u>+</u> 12	0	<u>+</u> 51	Town of Brighton acreage only
8	Elmwood Avenue Borrow Pit	<u>+</u> 86	0	0	Portion of site recommended for acquisition in 1990 Master Plan. Entire site recommended in Comprehensive Plan 2000
9	Devisser Nursery	10.8	0	0	Removed from inventory, see p. 9
10	Mercy High School	64-	0	0	Removed from inventory, see p. 9
11	Heatherstone Area	<u>+</u> 27	0	0	
12	French Road- Canal Area	<u>+</u> 61	0	0	
13	Gonsenhauser- Groos Tract	<u>+</u> 154	<u>+</u> 121	0	Site of Town's Buckland Park, remainder primarily open fields and former pastures
14	Meridian Centre Tract	<u>+</u> 103	<u>+</u> 57	0	Site of Town's Meridian Centre Park
15	Town Line/Canal Tract	<u>+</u> 126	<u>+</u> 6	0	

⁴Monroe County Environmental Management Council, Preservation of Environmentally Sensitive Areas Committee. 1996. *Preservation of Environmentally Sensitive Areas in Monroe County*. 50 pages.

16	Town Park Area	<u>+</u> 46	0	<u>+</u> 59	
17	RIT Lands	<u>+</u> 103	0	<u>+</u> 6	Floodplain lands adjacent to Genesee River
18	West Brighton Open Space	<u>+</u> 234	<u>+</u> 14	<u>+</u> 164	Large area of wetlands and floodplain along Genesee River and Red Creek; regionally important stormwater retention area
19	Brookside Area	<u>+</u> 8	0	0	Low lying floodplain area next to Brookside School and West Branch of Allen's Creek; Recommended for acquisition in Comprehensive Plan 2000
20	Persimmon Park	<u>+</u> 12	<u>+</u> 10	0	Site of Town's Persimmon Park; includes portion of former Ellwanger Barry nursery
21	Stowell Conservancy	<u>+</u> 47	<u>+</u> 14	<u>+</u> 70	Site of Town's Stowell Nature Conservancy; Includes some Monroe County owned lands
22	St. John's Home/Maxion Farms	<u>+</u> 53	<u>+</u> 25	<u>+</u> 66	Town has acquired wetlands adjacent to approved housing development
23	Lac De Ville- McQuaid Area	<u>8+</u>	0	0.00	Removed from inventory, see p. 9
24	Edgewood Avenue/Canal Area	<u>+</u> 3	0	0	
25	French Road Radio Station	<u>+</u> 16	0	0	
26	Rustic Village Area	<u>+</u> 19	0	0	
27	UR Lands/Lehigh Valley Trail	<u>+</u> 94	<u>+</u> 12	<u>+</u> 41	Former Lehigh Valley RR bed acquired by Town for Lehigh Valley Trail
28	Wilson Family Farm	<u>+</u> 11	0	0	Centrally located within developed area

^{*} Acreages shown as obtained from best available information

Figures. The figures (maps) on the following pages show graphically the locations of the Open Space Inventory Sites listed in Table 1 and the extent of wetlands and Environmental Protection Overlay Districts (EPODs) on the sites.

Figure 1: Open Space Inventory Sites

Figure 2: Steep Slope EPOD & Floodplain Areas, Sites 1, 4-7

Figure 3: Woodlot EPOD & Wetland Areas, Sites 1, 4-7

Figure 4: Steep Slope EPOD & Floodplain Areas, Sites 3, 8, 11-16, 19, 20,

22, 24, 25, 28

Figure 5: Woodlot EPOD & Wetland Areas, Sites 3, 8, 11-16, 19, 20, 22, 24,

25, 28

Figure 6: Steep Slope EPOD & Floodplain Areas, Sites 2, 17, 18, 21, 26, 27

Figure 7: Woodlot EPOD & Wetland Areas, Sites 2, 17, 18, 21, 26, 27

3. Purpose

The purpose of this inventory is to provide information on open spaces to Town staff, Board members and others that will assist in the development review process and facilitate sound land use planning decisions. The inventory includes information on site location, ownership, physical features such as streams, soils and slopes as well as proximity to sanitary sewer and water services, and natural features such as plant communities. Site planning data such as zoning and land use information and potential linkages with other open space or cultural features are also included. This document is meant to be used as a reference to identify sensitive environmental features, and potential environmental hazards for open spaces which may be affected by development proposals. Use of this database during the development review process will streamline the Town's administrative procedures and facilitate good land use planning and sound management of the Town's sensitive environmental resources.

4. Changes Since 1996 Affecting the Open Space Index

1996 Open Space Sites Removed from Update

Site 9, Devisser Nursery - This 10.8 acre site was re-subdivided in 2000 to create a lot of 3.5 acres and one of 7.3 acres. The smaller lot remains occupied by the Devisser Nursery. The 7.3 acre parcel has been developed for a church. The church development retains the majority of the lot as open space, including lawn/landscaped area and undisturbed buffer areas.

Site 10, Mercy High School - This 64 acre site was subdivided into three parcels and partially rezoned in 2004. A 31 acre parcel was created that is occupied by the Sisters of Mercy/Mercy High School. The remaining parcels, 7 and 24 acres in size, are under development as a mixed-use residential/senior housing/senior care complex. A significant aspect of the approval of this project was the grant of a conservation easement to the Town of 13 acres in size on the 24 acre parcel. The easement encompasses federal wetlands and woodlot areas on the site and will protect these areas from future development.

Site 23, Lac De Ville - McQuaid Area - This 8 acre site is split, with 2.5 acres on the east side of Lac De Ville Boulevard and 5.5 acres on the west side of the boulevard. The area on the west side has been acquired by McQuaid HS and has been developed as a soccer field. The 2.5 acres on the east side of Lac De Ville is currently open space, but several development proposals have been made and it is likely that this area will be developed in the near future.

1996 Open Space Sites Re-Mapped for the 2006 Index

The boundaries of sites 1, 7, and 27 have been re-mapped to include adjacent areas of Monroe County-owned land. Some of these areas are designated by the county as parkland and some are not. However, their inclusion provides context for the open space areas mapped on Town and private land.

Site 27 has also been re-mapped to clarify that a parcel on East River Road, occupied by the former St. Agnes school but containing significant open area, is included in the current update.

Site 2 has been re-mapped to include an area to the east that is currently undeveloped open space.

Site 14 has been re-mapped to exclude a parcel which has been developed for the Summit at Brighton senior housing facility.

Site 18 has been re-mapped to include the Lehigh Valley Trail area and to clarify that parcels along Park Circle Road, which are primarily developed, are not included in the current update

Site 22 has been re-mapped to exclude a parcel which has been developed for St. John's Home senior housing/care.

Site 26 has been re-mapped to exclude a parcel developed for office use.

Opens Space Acquisitions

Since 1996 the Town has acquired approximately 328 acres of open space to add to the Town's parkland inventory. These acquisitions are listed in Part 2, Introduction, of this report.

Wetland Updates

Since the 1995-1996 update there have been changes in the mapping and designation of several important wetlands in the Town.

66 acres, primarily on site 2, Lynch Woods, has been mapped as a NYS wetland (this designation was pending during the 1995-1996 update)

An application by a potential developer was made to NYSDEC to de-list 11 acres of NYS wetland on site 22, St. John's/Maxion Farms (wetland BR-10). Upon investigation, NYSDEC determined that BR-10 was a wetland of unusual local importance, and that it would retain its NYS wetland designation. Seven acres of this wetland, along with adjacent federal wetlands, is now part of a 16 acre parcel owned by the Town, acquired as part of the approval of an adjacent apartment development. The majority of the rest of BR-10 is located on a Town conservation easement adjacent and to the south of the Town-owned parcel.

The approximately eight acre federal jurisdictional wetland located on site 20, Persimmon Park, is under consideration for NYS wetland designation, which would greatly increase the protection of the site.

The University of Rochester is currently (2006) proposing development on site 27, U of R Lands/Lehigh Valley RR. During the review of this proposal, NYSDEC reviewed the wetland delineation report prepared for the project. NYSDEC determined that a wetland area on the project site, east of the Lehigh Valley RR Trail and north of Crittenden Road, was connected to an

off-site wetland on Monroe County property to the west, together making one wetland of 17.8 acres, which qualifies for NYS wetland designation (wetlands greater than 12.4 acres in size). NYS is currently in the process of adding this wetland, designated BR-18, to the NYS wetland inventory through an amendment of the wetland map. The wetland delineation report also confirmed several other wetland areas on the project site that did not meet NYS requirements for designation; a determination will need to be made whether any of these wetlands constitute US Army Corps of Engineers jurisdictional wetlands.

Environmental Protection Overlay District (EPOD) Amendments

In 2000, The Watercourse and Floodplain Protection District map and regulations were amended to include Crittenden Creek in west Brighton and the West Branch of Allens Creek in central Brighton.

State Environmental Quality Review Act (SEQRA) Local List

In 1997, the Town Board adopted a Local Law amending the SEQRA list of Type I actions, those actions that are more likely to require the project sponsor to prepare an Environmental Impact Statement. The amended list includes: physical alteration of 10 or more acres occurring within sites listed in the Brighton Open Space Index, as well as 11 other project types not previously listed as Type I actions. The amended list is included in the Appendix of this document.

Comprehensive Plan 2000

Comprehensive Plan 2000, adopted in 2001 and scheduled to be updated following completion of the 2006-2007 Open Space Index Update, provides a foundation for the formation of policies and land use regulations within Brighton; the open space goals of the plan are listed on page 2. Two other important components of the Comprehensive Plan are the Open Space and Recreation Plan and the Trails Plan.

Open Space and Recreation Plan

The Open Space and Recreation Plan component of the Comprehensive Plan recommends 10 areas for acquisition by the Town, comprising approximately 400 acres of land. The plan also includes descriptions of the characteristics of the areas and, where appropriate, whether an area is suitable for active or passive recreation. All or parts of five of these areas (in Open Space Index areas 2, 4, 13 & 22), approximately 195 acres, have been acquired since completion of the Comprehensive Plan. Part 2 of this report (Introduction) lists the areas acquired since 1996.

Trails Plan

The Trails Plan component of the Comprehensive Plan describes existing multiple use trails and footpaths within the Town and recommends areas where the development of trails would be desirable and potentially feasible. Since the completion of the plan, the abandoned right-of-way formerly used by the Lehigh Valley RR, located in west Brighton, has been acquired and developed as a gravel trail extending from East River Road to Jefferson Road; the trail continues in towns to the south. Footpaths have been developed in Corbett's Glen Nature Park in east Brighton and in Meridian Centre Park in central Brighton. The Corbett's Glen development includes boardwalk areas over wetlands, handicap trail access, and two small public parking areas for access to the park. Another footpath that will be completed soon will be located on property under private development located west of the S. Clinton Avenue / Elmwood Avenue intersection.

Open Space Acquisition Study / Environmental Impact Statement

The Open Space Acquisition Study was created in 2002 together with the environmental review of its impacts on the Town. The purpose of the plan was to further the implementation of the Open Space and Recreation Plan component of Comprehensive Plan 2000 by: (1) identifying which of the areas recommended for acquisition and/or development in the Open Space and Recreation Plan were currently feasible for acquisition; (2) for the feasible areas, proposing which were currently proposed for recreational development (either active or passive), and providing plans for that development; (3) proposing recreational plans for areas already owned by the Town; (4) presenting an estimate of costs and a proposed funding method for acquisition and development recommendations; (5) providing for public review and comment on the proposed acquisition strategy. A referendum was held in conjunction with the Study that demonstrated strong public support for the acquisition plan.

The Study identified seven parcels for acquisition, totaling approximately 344 acres. All or part of four of the proposed parcels (in Open Space Index areas 2, 4 & 13), approximately 170 acres, have been acquired to date (May 2007). Two of these parcels have been developed for active or passive recreation, along with two previously owned parkland parcels. Part 2 of this report (Introduction) lists parcels acquired since 1996.

Town Forestry Plan

That Brighton values the benefits of its trees is evidenced by the creation of the Town Tree Council in 2002, and the Town's designation in 2003 as an official "Tree City USA" by the National Arbor Day Foundation. Since its formation, the tree council has completed the Town of Brighton Forestry Plan and a Tree Risk Survey Report. The purpose of the Forestry Plan is to provide specific guidelines and policies on tree management for use by Town officials as well as Brighton homeowners, with the goal of ensuring the protection, preservation and management of Brighton's forest for future generations. The Tree Risk Survey Report, completed in December 2005, provided for a professional evaluation of trees located in the right-of-way of Town streets within a defined area around Twelve Corners. The purpose of the survey was to identify trees with defects present that may pose a risk to people and property and make management recommendations to reduce those risks.

5. Methods of Open Space Preservation and Management

This document is meant to be used as an administrative tool in reviewing development proposals for affected open space parcels and in evaluating sensitive environmental resources. Specific open space management techniques have not been proposed for each open space site. Instead, inventory sheets include data on environmental features, potential linkage opportunities and specific amenities offered by each site. How these opportunities are managed and the environmental resources protected is specific to each development proposal. Therefore, the following section presents a general overview of open space preservation and management techniques, and a discussion of how these techniques have been used in Brighton.

Open space preservation methods fall into four main categories: acquisition, easements, zoning and private agreements.

5.1 Acquisition

Ownership of land involves the receipt of title to a specific parcel of land and certain usage rights that traditionally accompany the land. Fee simple acquisition of a property is the outright purchase of the land and all of the development rights that go with it. This is the open space preservation method of choice when no other alternative is available to maintain a key area in open space use. It is appropriately used where important environmental resources are threatened, or where prime recreational land is vulnerable to development. Fee simple acquisition is the simplest but most expensive method of open space preservation.

The Town may also acquire lands through donations by gifts or wills. Individuals or corporate entities may choose to donate lands to the Town for open space purposes (e.g., parkland, conservancy) either as an outright gift, as in the case of Stowell Conservancy, or in a will. Either way, the Town (or other open space management organization) receives title to the land, and all the development rights that go with it.

Transfer of Development Rights (TDR) is a method whereby a landowner may retain the underlying title to a property while selling the development rights to another individual or corporate entity. Other underlying open space use rights remain with the land. These rights might include the right to farm, hunt, fish, camp, or maintain a woodlot. The development rights become a separate property interest which can be sold to a landowner whose property is better suited for more dense development (larger number of units per acre). Transfer of Development rights permits all or part of the density potential of one tract of land to be transferred to a noncontiguous parcel, even if the two parcels have different ownerships. The Town of Brighton Code does not presently permit the transfer of development rights.

Purchase of development rights is an expensive but effective method of preserving open space. A municipality might purchase the development rights for a particular parcel of open space, while maintaining the property

in private ownership. Since the development rights are only a portion of the value of a property, the cost of purchasing development rights may be less than the cost of fee simple acquisition of a parcel.

Formation of special park districts is another way to set aside open lands and maintain open space. The cost of acquisition and maintenance is added to the taxes paid by residents of the special park district. This technique is useful where there is intense interest in preservation of a particular parcel or resource by nearby residents. Undeveloped park districts are useful when open space is of value to adjacent or nearby residents. The formation of a special park district allows the charge back of expenses through tax bills if and when the Town is forced to intervene to correct a maintenance problem in the open space.

The use of land trusts is a method of open space acquisition that can operate independently of government. In this case, an organization buys or accepts a parcel for donation using funds acquired through donations. The organization agrees to preserve the land in open space use. Where timing is critical to a transaction, a private organization can purchase the land and hold it for later donation to a public entity. The use of private land trusts also provides great flexibility in transferring or purchasing development rights. Two examples of land trusts active in New York State include the Nature Conservancy and the Genesee Valley Land Trust.

5.2 Easements

The use of easements provides the Town a flexible and low-cost means of preserving open space in key areas. Section 247 of the New York State General Municipal Law allows municipalities to acquire interests and rights in real property for the preservation of open space. Easements may be of several types:

Conservation easements: the owner of a parcel grants the Town an easement, promising to keep the parcel in open space use; the easement is considered to be perpetual unless a specific time period is described in the easement agreement. In return, the owner receives a tax abatement for the duration of the easement. If the owner develops the property during the easement period, he faces severe tax penalties. This method is useful to protect highly taxed open space parcels from development. The Town of Brighton has implemented a conservation easement in the case of the Brandon Woods subdivision, adjacent to the Brighton Town Park. In this case, a 100 foot wide easement was required by the Town as a condition of development adjacent to the Town Park. In another case, the Town acquired a conservation easement along the east bank of Allens Creek adjacent to Corbett's Glen Nature Park. This easement permits public access to the creek for fishing. The Town also has obtained other conservation easements, primarily in conjunction with development proposals, to ensure buffer areas between commercial and residential or park areas or to permit public passage through developed areas.

Access Easements: public agencies responsible for the construction and maintenance of utilities and other public works often take easements

across private property to maintain these facilities. Towns may take drainage easements across private properties to maintain essential stormwater drainage channels or stormwater detention/retention facilities. Other access easements may be required for installation and maintenance of sanitary sewer lines, water lines or roadways. Towns may also obtain easements across private properties to maintain pedestrian access to trail facilities such as the Erie Canal Towpath or other established trail systems. Utilities such as Niagara Mohawk and Rochester Gas and Electric Corporation often take permanent access easements across properties to maintain and erect power lines. Use of access easements maintains long, narrow strips of open space and is useful where linkage between open space resources is desired.

5.3 Protective Zoning

Several types of zoning methods are available to protect open space resources within a community. The Town of Brighton regulates the kinds of uses that are allowed on lands through zoning. Zoning is used to regulate land uses as well as the intensity or density of the use, and the siting of development on the land. Zoning regulations include an official map of the municipality divided into districts or zones with a text describing the regulatory requirements for each zone.

Zoning ordinances can require developers to be subject to site plan approval. Site plan approval requires a review of the design for a proposed development on a parcel of land and ensures the site layout meets the established criteria for site plan approval. Site plan approval is used to assure that development in a specific area will be done in harmony with existing development. The process can determine requirements for parking, vegetative screening, buffering, or protection of scenic vistas.

Conditional use permits are also used by the Town to control certain uses which are conditional within specific zoning districts. Zoning ordinances list certain land uses which are permitted within a specific district. For example, in a residential district, a single family home may be considered an "of right" use, which is allowed without any further permits, as long as the lot meets the site requirements. Uses which require a conditional use permit are typically those which may be compatible with the intended uses of the zone, but which could have adverse impacts that require special review and/or mitigation before being approved. Conditional use permits may be used to control site specific factors such as signage, outdoor storage, parking, landscaping, and to protect sensitive environmental features identified in environmental protection overlay districts.

In the Town of Brighton, the most commonly used form of zoning protection is the Environmental Protection Overlay District (EPOD). Article XIV of the Brighton Town Code establishes environmental protection overlay districts for steep slopes (EPOD 1), woodlots (EPOD 2), watercourses and floodplains (EPOD 3) and waste disposal sites (EPOD 4). These features are mapped on an officially adopted set of maps. The underlying zoning of an area is not changed by the environmental overlay. However, the development standards or procedures of the

underlying zoning are superseded by more stringent requirements, or special project review criteria which minimize the potential adverse effects on the resource. Areas within EPODs can only be developed at the underlying zoning density if it can be demonstrated by design that the valued environmental resource will not be impaired, or will be impaired to the minimum extent necessary. Further discussion of Brighton's Environmental Protection Overlay Districts is found in Section 6.6 of this report.

Cluster development is permitted by Section 278 of New York State Town Law. Section 278 allows for "the modification of the applicable zoning ordinance...to preserve the natural and scenic qualities of open lands." This provision is generally utilized to reduce the size of individual lots in order to increase the amount of open space on a parcel being subdivided. A Section 278 review may be undertaken by the Planning Board, if in its judgment, such a review "would benefit the Town."

Section 278 allows for relief, at the discretion of the Planning Board, from all aspects of the applicable zoning ordinance with the exception of permitted uses and the overall number of permitted building lots or dwelling units. To demonstrate compliance regarding the total number of lots, an applicant can submit a plan demonstrating a layout which meets all applicable zoning requirements with the requested number of lots accommodated. Alternatively, an applicant could calculate the number of permitted lots by first subtracting the undevelopable acreage from the total parcel size and then applying the permitted density to the remaining acreage.

The common open space that is left after clustering development may be managed by a number of means, such as a homeowners' association, local government or a land trust. Access and use for such lands are decided on a case by case basis.

Large lot zoning is a method that is used to reduce residential zoning density, preserve open space, and protect environmental attributes of land. Most "large lot" zoning districts require a minimum lot size between 2 and 40 acres in size. Large lot zoning has been used by communities such as the Towns of Perinton and Mendon to restrict development in areas that have limited or no access to public water or sewers, or by the Town of Chili to limit development in flood hazard areas. The disadvantage of large lot zoning is that it can lead to the loss of community diversity, and create rural sprawl. The use of large lot zoning may be appropriate in certain parts of the Town of Brighton, but may not be appropriate in other areas. Following the adoption of Comprehensive Plan 2000, the Town implemented a recommendation of that plan by creating a new residential zoning district (Large Lot Residential) with a minimum required lot size of one acre, twice the previous maximum residential lot size required. This district was mapped over a number of environmentally sensitive areas

⁵NYS Department of Environmental Conservation. *Local Open Space Planning: A Guide to the Process.* (Draft for External Review). December, 1994, p. 91.

within the Town to decrease environmental impacts in those areas by decreasing the density of potential future development.

Incentive Zoning is permitted under Chapter 209 of the Brighton Town Code. The purpose of this section is to offer incentives to applicants who provide amenities that assist the Town to implement specific physical, cultural, and social policies in the Master Plan. All zoning districts are eligible for zoning incentives. Applicants may offer passive and active open space and related improvements, parks, cultural or historic facilities or other amenities as incentives for changes of use, increases in lot coverage or residential or non-residential unit density, changes in setbacks or height, or other changes in Comprehensive Development Regulations provisions. Incentive zoning has been used to provide open space for the Blossom Road Housing project, to finance master planning studies for the Stowell Conservancy and Persimmon Park sites, and to protect natural features and provide public amenities in conjunction with several other development projects.

Performance Standard Zoning is a technique that establishes zones which are based on allowable environmental impacts to sensitive environmental resources rather than on specific allowable uses. The technique provides a way for a municipality to maintain control over development impacts and to ensure that development will occur only in ways in which the natural resources will not be severely damaged. Rapidly changing technology can create new industries, making it difficult in some areas for a municipality to establish effective zones based on specific land uses. In such communities, the performance standard approach may be appropriate.

5.4 Agreements

Several types of private and private-public partnership agreements have been developed to preserve and manage open space resources. Two types of agreements are commonly used in Brighton to manage open space that is maintained in common ownership: homeowners' associations and restrictive covenants. Open space associated with condominium developments, office parks, industrial parks, and other developments can be owned and administered by an association of owners within that development. These homeowners' associations are generally set up by the developer. Purchasers of lots within a development pay a fee at the time of purchase, and an annual fee thereafter to pay the costs of maintenance of lands administered by the Homeowners' Association. Agreements are made to preserve and maintain sensitive environmental features within the development, and to provide recreational opportunities for residents or occupants of the site. Homeowners' associations incur no costs to taxpayers, maintain affected open space on the public tax assessment rolls, and can be used flexibly to manage the open space resource. The downside to open space areas maintained by homeowners' associations are that they remain private properties, and therefore not accessible to the public, and the quality of management provided to these open spaces may be extremely variable. Without direct, on-site supervision, these open space resources can become a nuisance to the community.

Restrictive covenants are a flexible way of preserving open space in private ownership. The Town of Perinton has used restrictive covenants to protect steep slopes, wetlands, watercourses, and floodplains from inappropriate development. As an example, the Town may place restrictive covenants on properties that include portions of federal or state jurisdictional wetlands. Restrictive covenants may prohibit the placement of garages, driveways, decks and other appurtenances in the 100 foot buffer zone of New York State designated freshwater wetlands. Where restrictive covenants are used, the restrictions should be written into the deed of the affected property to assure that future owners are aware of its presence. Restrictive covenants also run with the property. It is difficult to remove the agreement if it is in the deed.

6. Methods and Resources

This document was originally prepared by the Brighton Conservation Board during 1995 and 1996, and was updated by the Conservation Board in 2006/2007. Inventoried open space areas are summarized in Table 1 on page 6. A detailed inventory of parcel ownership, physical and natural features, land use characteristics and recommendations, and special site characteristics was originally completed on 28 open space sites; this number has been reduced to 25 sites for the current update (see Section 4 on page 9). With two exceptions, all of the sites contain contiguous open lands larger than 10 acres in size. One site smaller than ten acres (Site 19) is included because it has been identified as a potential candidate for acquisition; another (Site 24) is included because of its location adjacent to the Erie Canal.

Parcels included in the inventory are identified by tax account numbers. Open space sites consist of single tax parcels or a combination of all or portions of several tax parcels, in private or public ownership. Two categories of public ownership were established for this inventory: (1) Town owned open spaces and (2) other (State or County) owned open spaces. Town owned open spaces include Town parks as well as Town-owned, non-park open spaces, such as the Brighton Landfill and the former Brighton Sewage Treatment Plant site. Brighton Town Park, located on Westfall Road, is shown as "other publicly owned open space" because it is leased by the Town from the New York State Department of Transportation. The State of New York retains the title to this parcel. State- or County-owned open spaces include parkland and non-park open space, as well as the Monroe Developmental Center property on Westfall Road (in Open Space Site 22).

Ownership records stated in the inventory are generally current as of July, 2005. Property transfers occurring after July, 2005 have not been included unless specifically called to the Board's attention.

To produce the 25 individual Site Maps, the six Environmental Maps, and the one Overall Map for the 2006-2007 Open Space Index Update, the Brighton Planning Department used primarily digital maps and associated databases digitized and produced by Monroe County Geographic Information System Services Division (MCGISSD) from existing USGS, FEMA, NYS, Monroe County and Town paper maps. The maps produced by Monroe County were incorporated into the Town's ArcviewTM GIS system for mapping and analysis. The map layers and data used

included parcel information, streams and waterbodies, streets and highways, Woodlot and Steep Slope Environmental Protection Overlay Districts (EPODs), Flood Insurance Rate Map (FIRM), soil classification, NYS and federal wetlands, and topology. The Brighton Planning Department produced the digital Zoning Map used for zoning information.

The individual Site Map boundaries were digitally produced in ArcviewTM by the Planning Department, starting with the boundaries used for the 1995-1996 update and modifying these boundaries to reflect development changes since the previous update. The boundaries were also redrawn to include Monroe County property contiguous to the open space sites.

Copies of this report and the inventory data sheets have been stored in Wordperfect 11 digital format so that the information in the report and the inventory sheets can be similarly updated as needed.

Information contained on the inventory sheets was gathered from numerous sources. For the current update, information included in the 1995-1996 update inventory sheets was reviewed and modified as necessary based on changes to site boundaries, physical changes to the sites, or comparison to current information sources. Each source is identified and its use or limitations to use are described in the following paragraphs.

6.1 Real Property Tax Maps/Tax Assessment Records

Real Property tax maps are digitally produced and updated regularly by the MCGISSD; updates are based on information received from Monroe County Real Property Tax Services Division. The Town regularly receives updated digital parcel maps from Monroe County. Updated parcel information is digitally obtained from the Town Assessor's office and is then added to the individual parcels. Ownership of each parcel was obtained using this information.

Parcels are identified using map numbers, block and lot numbers. For example, a parcel identified as 148.16-01-01 would be found on tax map number 148.16, within block 1 and individually identified as lot 1.

6.2 U.S. Geological Survey 7.5 Minute Topographic Quadrangle Maps

Topographic maps of the entire United States have been prepared by the U.S. Department of the Interior, U.S. Geological Survey (U.S.G.S). Topographic maps show ground surface contours and elevations, major roadways, vegetation and marsh areas, bodies of water (ponds, lakes, streams), and major cultural features such as public buildings and parks. The scale of each map is one inch (on the map) equals 2000 ft. on the ground. Contours are shown by lines connecting points of equal elevation. The vertical distance between contour lines is five feet on maps for the Brighton area. Features such as Pinnacle Hill, the Genesee River, and the Erie Canal are clearly identified on topographic maps. These maps were used to determine maximum and minimum elevations and to identify water resources, vegetation and cultural features within each open space site. Four quadrangle maps cover the Town of Brighton: Rochester East,

Rochester West, West Henrietta and Pittsford, New York. (Note: This information from the 1995-1996 update is assumed to be current and was reviewed only where boundary changes occurred between the 1995-1996 and 2006-2007 updates)

6.3 New York State Freshwater Wetlands Maps

New York State regulates certain activities (e.g., filling, draining, placement of utilities) in wetlands larger than 5 hectares (12.4 acres) under the authority of Article 24 of the Environmental Conservation Law. New York's laws define wetlands based on the presence of certain types of vegetation (cattails, reed canary grass, silver maples, etc.). These areas were mapped using aerial photography from the 1970's transferred onto a U.S. Geological Survey base map by the New York State Department of Environmental Conservation. Each county has an officially adopted set of freshwater wetland maps. Occasionally, new wetland areas are discovered, as was the case with the BR-16 wetland, identified during project review of a proposed development for the Lynch Woods site (Site 2). In this case, the wetland formed as a result of the abandonment of agricultural fields containing poorly and somewhat poorly drained soils. With the cessation of agricultural activities, tile drain and open ditch drain systems were no longer cleaned out on a regular basis. As a result, silt collected in the drain systems, and the drains no longer worked as originally designed.

Four NYS Freshwater Wetland quadrangle maps cover the area of the Town of Brighton: Rochester East, Rochester West, West Henrietta, and Pittsford. As mentioned previously, the NYS wetland maps for Brighton have been digitized by the MCGISSD, and these digital maps were used to confirm/update information from the 1995-1996 Open Space Index Update (see maps following page 8 for graphic representation of wetlands). However, because the mapped wetlands have not all been ground-delineated, and because wetland boundaries drawn in the late 1970's and early 1980's may have changed as a result of site conditions (streams may have been diverted, agricultural lands may have been abandoned, etc.). Developers of open space sites with NYS regulated wetlands should be advised of the need to have the State and federal wetland boundaries accurately delineated.

6.4 National Wetland Inventory Maps

The National Wetland Inventory mapping program was conducted by the Department of Interior's Fish and Wildlife Service to identify and inventory waterfowl and wildlife habitats during the mid- to late 1970's and early 1980's. Wetland cover types (e.g., flood plain deciduous forest, cattail marsh, etc.) were identified from high altitude aerial photographs taken between 1978 and 1985 by the U. S. Department of Agriculture, and by using hydric soil information from county soil survey maps. This information was compiled onto U.S. Geological Survey topographic base maps, and verified using aerial overflights and spot checks in the field. Because the mapping was done for habitat assessment purposes and not for regulatory purposes, the maps did not receive any regulatory review.

The National Wetland Inventory maps show wetlands down to one acre in size, categorizing them by vegetation cover type, wetland system type, water regime and substrate. The information is accurate, but should be field checked before using these maps for regulatory purposes. The maps are used as a tool by the U.S. Army Corps of Engineers in reviewing activities covered by the Clean Water Act under Section 404.

As mentioned previously, the national wetland maps for Brighton have been digitized by the MCGISSD, and these digital maps were used to confirm/update information from the 1995-1996 Open Space Index Update (see maps following page 8 for graphic representation of wetlands).

Developers should be advised of the need to delineate federal and State regulated wetlands if development is proposed on an affected open space site.

6.5 Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM) and Flood Hazard Boundary Maps

The U.S. Army Corps of Engineers completed flood studies for the Genesee River and several of its tributaries during the 1960's and 1970's. Further flood studies were conducted by the Federal Emergency Management Agency for Irondequoit Creek and its larger tributaries (Allen's Creek and Buckland Creek). Flood Insurance Rate Maps (FIRM) and Flood Hazard Boundary Maps are published and distributed by the Federal Emergency Management Agency.

Land in the Town of Brighton has been classified into one of four zones of flood hazard: (1) Floodway - land area required to conduct the flow of runoff resulting from the 100 year intensity storm (one chance in 100 of occurring during a given calendar year): (2) Zone A - 100 year flood plain; (3) Zone B - 500 year flood plain; (4) Zone C - land area that would not be affected by either a 100 year or 500 year flood. The locations of these areas of flood hazard are shown on the Flood Insurance Rate Maps.

Flood insurance rate maps show the base flood elevation at given points along certain watercourses (e.g., the Genesee River, Red Creek, Buckland Creek, Allen's Creek, and Irondequoit Creek). Open space parcels with extensive areas of 100 year and 500 year flood plain are located in West Brighton, and along Allen's Creek and Irondequoit Creek. These areas store flood water runoff during high intensity rainfall events and during spring snow melt and release it slowly into streams as the high water recedes. Development or placement of fill in these flood plain areas could reduce the flood water storage capacity of these areas, and could cause water to flood areas further upstream as a result of this development.

Flood plain information was reviewed to identify potential flood hazard areas within each open space site. Where flood plains or floodways have been identified on open space parcels, developers should be required to conduct more detailed flood plain boundary studies or to design development to minimize or avoid adverse environmental impacts to other properties.

As mentioned previously, the floodplain map for Brighton has been digitized by the MCGISSD, and this digital map was used to confirm/update information from the 1995-1996 Open Space Index Update (see maps following page 8 for graphic representation of flood hazard areas).

6.6 Environmental Protection Overlay District (EPOD) Maps

The Town of Brighton Zoning Code has defined four Environmental Protection Overlay Districts to provide special controls over land development located in sensitive environmental areas (ref. Article XIV, Brighton Town Code, 1993). Environmental protection overlay districts have been established to protect steep slopes (EPOD 1), woodlots (EPOD 2), watercourses and floodplains (EPOD 3) and waste disposal sites (EPOD 4). Overlay maps show the general locations of these environmentally sensitive features. These maps are not to be used to delineate specific boundaries of the overlay districts. Field investigations or other environmental analyses are required to determine specific boundaries of these overlay districts. Environmental protection overlay district regulations are superimposed over other zoning district regulations. If an open space site includes part of an environmental protection overlay district, that portion of the site may be subject to special conditions such as reduced densities, increased setbacks or other requirements to minimize or avoid adverse impacts to the identified sensitive environmental features.

Information for the steep slope overlay map was developed from the Monroe County Soil Survey and U.S. Geological Survey topographic maps. Steep slopes are defined as slopes greater than 15% (15 ft. vertical rise over a horizontal distance of 100 ft.). Woodlots larger than one acre were identified from aerial photographs. Watercourse information was developed from U.S. Geological Survey topographic maps. Floodplain locations were transferred from the Flood Hazard Boundary Maps. The waste disposal site map includes both suspected and confirmed waste disposal sites identified by the Monroe County Environmental Management Council and Inactive Hazardous Waste Disposal Sites identified by the New York State Department of Environmental Conservation.

Environmental protection overlay district maps were reviewed for each open space site. The presence of EPOD's were recorded for each open space site.

As mentioned previously, the EPOD maps for Brighton, with the exception of the waste disposal site map, have been digitized by the MCGISSD, and these digital maps were used to confirm/update information from the 1995-1996 Open Space Index Update (see maps following page 8 for graphic representation of floodplain/watercourse, woodlot and steep slope EPODs).

6.7 Town of Brighton Sewer Record Maps

The Town has recently (2005) created digital sewer record maps for use with the Town's GIS system that accurately show the placement of sanitary and storm drainage sewers within the Town. These maps were used to determine sewer information included in the individual site area data sheets.

6.8 Zoning Map

The Town's official zoning map and Town staff provided the most current zoning information for parcels included in the Open Space Inventory.

6.9 Land Use

Land use information for the parcels included in the Open Space Inventory was developed from site observations, use of recent aerial photographs, and consultations with Town staff and knowledgeable Town residents.

6.10 Aerial Photographs

Two sources of digital aerial photographs were used for site assessment. Geo-rectified (oriented and scaled to show proper positioning in relation to parcel and other digital maps) aerial photographs taken in 2002 were provided by Monroe County Geographic Services Division. These maps were used as base layers over which other digital maps (parcels, streams, etc.) were laid. These maps and aerials were projected using NAD 83 NY State Plane West coordinate system.

Higher resolution aerial photos taken in 2002 and 2003 were also obtained by the Town from Pictometry International Corp. While the Pictometry aerials were not used for overlay purposes, they provided ortho (overhead) and oblique (from an angle) views of the Site areas which could be used for analysis purposes.

6.11 Monroe County Soil Survey

The Monroe County Soil Survey was used to determine soil types mapped for each open space site included in the inventory. The major soil types mapped for each open space site are listed on each inventory form. Soil types have been divided into hydric soils, soils with potential hydric inclusions, and upland soils on the inventory forms. Hydric soils are generally poorly and very poorly drained mineral and organic soils typical of wetland areas. Soils with potential hydric inclusions are usually somewhat poorly drained mineral soils that may have localized areas of poor drainage too small to be mapped as a separate mapping unit (usually less than one acre). Table 2 lists hydric soils and soils with potentially hydric inclusions found in the Town of Brighton.

Table 2. Hydric Soils and Soils With Potential Hydric Inclusions

Hydric Soils	Soils with Potential Hydric Inclusions
Alluvial Land (Al)	Appleton loam or silt loam (ApA)
Canandaigua silt loam (Ca)	Churchville silt loam (ChA, ChB)
Edwards muck (Ed)	Cosad loamy fine sand (Cu)
Freshwater marsh (Fw)	Cut and fill land (Cw)
Halsey gravelly loam (Ha)	Lockport silt loam (Lp)
Lakemont silt loam (Le) and Lakemont silt loam, loamy subsoil variant (Lk)	Made fill (Mb)
Lamson very fine sandy loam (Lm)	Massena fine sandy loam (Mf)
Lyons silt loam (Ly)	Minoa very fine sandy loam (Mn)
Madalin silty clay loam (Ma)	Niagara silt loam (Ng) and Niagara silt loam, loamy subsoil variant (Nr)
Muck, deep (Mr) and Muck, shallow (Ms)	Odessa silt loam (OdA, OdB)
Sun fine sandy loam (Ss)	Ovid silt loam (Ov)
Wayland silt loam (Wg)	Ovid and Appleton silt loams (Ow)
	Pits and Quarries (Pu)
	Rhinebeck silt loam (Rb)

6.12 Water Quality Classification

All surface and groundwaters of the State of New York have been classified according to their highest and best use by the New York State Department of Environmental Conservation under 6 NYCRR Parts 700-705. The classification of each surface water course that runs through any open space site is included on the inventory sheet. Water classifications for surface waters are as follows:

Class AA Source of water supply for drinking, culinary or food processing purposes and any other uses. Waters are generally considered safe and satisfactory for drinking water purposes if subjected to approved disinfection treatment. No Class AA waters are located in the Town of Brighton.

Class A

Source of water supply for drinking, culinary or food processing purposes and any other uses. These waters, if subjected to approved treatment equal to coagulation sedimentation filtration and disinfection, with additional treatment if necessary, will meet New York State Department of Health drinking water standards and will be considered safe and satisfactory for drinking water purposes. No Class A waters are located in the Town of Brighton.

Class B

Highest and best use of waters is considered to be primary contact recreation and any other uses except as a source of water supply for drinking, culinary or food processing purposes. A special classification of B(t) is reserved for cold waters suitable for trout spawning. The Genesee River, portions of Red Creek north of Crittenden Road, and the Erie Canal are Class B waters of the State, while portions of Buckland Creek and Allen's Creek east of Winton Road, and Irondequoit Creek are classified as Class B(t) waters. All projects requiring the disturbance of the bed or banks of a Class B or B(t) stream will require an Article 15 Protection of Waters permit from the New York State Department of Environmental Conservation.

Class C

These waters are suitable for fishing and fish propagation. The water quality shall be suitable for primary and secondary contact recreation even though other factors may limit the use for that purpose. Red Creek, the West Branch of Allen's Creek west of Winton Road, and all other perennial streams in the Town of Brighton are Class C waterways. A special classification of C(t) is reserved for cold waters suitable for trout spawning. Waters with a Class C(t) classification require an Article 15 Protection of Waters permit for work involving the disturbance of the stream bed or banks.

Class D

The best usage of Class D waters is for fishing. The water quality shall be suitable for primary and secondary contact recreation even though other factors may limit the use for that purpose. Due to such natural conditions as intermittency of flow, water conditions not conducive to propagation of game fishery or stream bed conditions, the waters will not support fish propagation. This classification is reserved for most agricultural drainage ditches, swales and intermittent streams. No permits from the Department of Environmental Conservation are required for work in the bed or banks of Class D or Class C waters.

6.13 Other Sources

Some site inventories include information from historic technical papers, newspapers, and other miscellaneous sources. These materials are referenced in specific site data sheets.

7. Physiographic and Vegetation Resources of Brighton

7.1 Physiographic Features

The physiographic features of the Town of Brighton are result of the most recent glaciation which ended approximately 12,000 years ago. At one time, the entire surface of Western New York lay under a mantle of ice over 2,000 feet thick. The climate gradually warmed, the glacier began advancing and retreating with the seasons. Finally, as the rate of melting exceeded the rate of ice and snow accumulation, the glacier began its final retreat. The glacier carried massive quantities of powdered rock, sand, gravel and boulders with it as it scraped over the original land surface. Some of these materials were embedded in the ice, and others were carried as surficial materials. As the glacier melted, fast-flowing melt water deposited huge boulders and coarse gravels. Slower moving water deposited finer sands and silts. Finally, the quiescent backwaters of a series of pro-glacial lakes permitted the deposition of fine textured clays and silts in the lake plain that stretches southward into Henrietta from Pinnacle Hill.

The present-day Genesee River and its forerunner, the Irondo-genesee River which formed the Irondequoit Basin, are prominent features of the Brighton landscape. The Genesee River originates in Pennsylvania, and flows north through Brighton into Rochester and Lake Ontario. In Brighton, the Genesee River drains the western half of the Town through tributaries such as Red Creek. East of East Henrietta Road, surface water runoff flows into tributaries of Irondequoit Creek (Westfall Creek, Allen's Creek, and Buckland Creek).

The highest point in the Town of Brighton is Pinnacle Hill (Site 3) at approximately 748 feet above mean sea level. This feature is part of a kame-moraine deposit left by the retreating glacier. Kame-moraine features result from the localized advance and retreat of the ice front. Pinnacle Hill is the most prominent landmark in the Town, and is part of a series of kame-moraine hills stretching from the Village of Albion in Orleans County east to Brighton and then southward around Irondequoit Bay. Pinnacle Hill is comprised of a variety of sands, silts, gravels, and boulders, in deposits that may be sorted or unsorted by particle size. Near the summit, remnant shorelines from several pro-glacial lakes, including Lake Dana and Lake Iroquois, forerunners of today's Lake Ontario, are visible. This remnant shoreline of glacial Lake Dana is unique in Brighton.

Other remarkable physiographic features of Brighton include the spectacular Allen's Creek Valley preserved in Corbett's Glen (Site 4), the Irondequoit Creek and Bay wetlands (present in Ellison Park and in Sites

5, 6 and 7), and the steep, sandy slopes surrounding Irondequoit Bay. These sands were deposited as outwash during the retreat of the last glacier. These deposits are highly erodible, with slopes frequently exceeding 25%. The former course of the Genesee River is preserved in the Irondogenesee subsurface aquifer that runs northward through Brighton, discharging into Irondequoit Bay. This confined aquifer may be responsible for the numerous springs and seeps which occur throughout the area.

The presence of steep slopes around Irondequoit Bay limits the utility of this area for farming or development. The highly erodible nature of the soils and the presence of artesian springs require the use of sophisticated slope stabilization methods for construction. These same conditions create a marvelous variety of moisture, light and soil conditions, favoring the development of an especially diverse community of plants and animals.

From Pinnacle Hill south to Jefferson Road, much of the Town of Brighton is comprised of glacial lake plain. The topography of this area is comparatively flat to slightly rolling, with isolated knobs present at the intersection of Westfall Road and Clinton Avenue (Site 16) and other locations. Surface drainage conditions in this glacial lake plain vary from moderately well drained silts and fine sands to very poorly drained silts and clays. Much of this area is underlain by a tight layer of compacted glacial till that severely restricts the downward percolation of water. This condition results in localized flooding during intense rainfall events and spring snow melt. The lake plain also blends in with the extensive floodplains of the Genesee River and Red Creek in West Brighton. These low lying lands were subject to flooding almost annually before the construction of the Mount Morris dam on the Genesee River in 1952. These frequent floods and tight soil conditions limit development in West Brighton to areas with good soil drainage and accessibility to public water and sanitary sewers.

7.2 Vegetation

The Town of Brighton contains a variety of diverse plant communities which occupy distinct ecological niches within the physiographic regions described. Communities represented in Brighton include riverine (flowing, non-tidal waters that lack persistent emergent vegetation, but may include areas with submerged or floating leaved aquatic vegetation) and palustrine (non-tidal, perennial wetlands characterized by emergent vegetation) wetlands, seasonally flooded forests and permanently flooded or saturated swamps, shrub swamps, successional old fields, shrub lands, and forested uplands. Swamps are defined as wetlands with at least 50% canopy cover of trees. Table 3 is a general summary of the vegetation communities found in the Town of Brighton.

⁶Miller, Todd S. 1987. *Unconsolidated Aquifers In Upstate New York-Finger Lakes Sheet*. U.S. Geological Survey, Water Resources Investigation Report 87-4122.

Table 3. Vegetation Communities of Brighton⁷

Plant Community	Example	Characteristic Species
Appalachian oak-hickory forest (upland)	Portions of Pinnacle Hill, steep slopes around Irondequoit Bay, Allen's Creek Valley	Red oak (<i>Quercus rubra</i>), white oak (<i>Q. alba</i>), black oak (<i>Q. velutina</i>), pignut hickory (<i>Carya glabra</i>), shagbark hickory (<i>C. ovata</i>), white ash (<i>Fraxinus americana</i>), red maple (<i>Acer rubrum</i>), eastern hop hornbeam (<i>Ostrya virginiana</i>), flowering dogwood (<i>Cornus florida</i>), witch hazel (<i>Hamamelis virginiana</i>)
Beech-maple mesic forest (upland transitional)	Brighton Town Park; Lynch Woods	Sugar maple (Acer saccharum), American beech (Fagus grandifolia), basswood (Tilia americana), white ash (F. Americana), yellow birch (Betula allegheniensis), red maple (A. Rubrum), American hornbeam (Carpinus caroliniana)
Silver maple- ash swamp	West Brighton wetlands	Silver maple (Acer saccharinum), green ash (Fraxinus pennsylvanica), black ash (F. Nigra), white ash (F. Americana), American elm (Ulmus americana), spice bush (Lindera benzoin), virginia creeper (Parthenocissus quinquefolia), and poison ivy (Toxicodendron radicans)
Red maple- hardwood swamp	West Brighton wetlands; Maxion Farms	Red maple (Acer rubrum), black ash (Fraxinus nigra), American elm (Ulmus americana), swamp white oak (Quercus bicolor), spice bush (Lindera benzoin), red osier dogwood (Cornus sericea), arrowwood (Viburnum recognitum)

⁷Information adapted from Reschke, Carol. 1990. *Ecological Communities of New York State*. New York Natural Heritage Program, NYS Department of Environmental Conservation, 95 pp. + figures.

Sedge meadow	West Brighton wetlands; Allen's Creek Valley, Irondequoit Creek and Bay wetlands	Tussock sedge (Carex stricta), other sedges (Carex spp.), bluejoint grass (Calamagrostis canadensis), sweetflag (Acorus americanus), spotted joe pye weed (Eupatorium maculatum), bulrushes (Scirpus spp.)
Shallow emergent marsh (water depth 6 in. to 3.3 ft.)	West Brighton wetlands; Allen's Creek and Irondequoit Creek and bay wetlands	Reed canary grass (Phalaris arundinacea), bluejoint grass (Calamagrostis canadensis), mannagrass (Glyceria spp.), sedges (Carex spp.), wild iris (Iris versicolor), water smartweed (Polygonum amphibium)
Deep emergent marsh (water depth 6 in6 ft.)	West Brighton wetlands; Allen's Creek and Irondequoit Creek and Bay wetlands; numerous drainage ditches and swales throughout the Town	Cattails (Typha latifolia, T. angustifolia), burreed (Sparganium eurycarpum), pond lily (Nuphar luteum), white water-lily (Nymphaea odorata). Disturbance species may include purple loosestrife (Lythrum salicaria) and reedgrass (Phragmites australis).
Shrub swamp	West Brighton wetlands; Maxion Farms; Stowell Conservancy	Red osier dogwood (Cornus sericea), silky dogwood (C. amomum), willows (Salix discolor, S. bebbiana, S. nigra, others), arrowwood (Viburnum recognitum)
Floodplain forest (hardwood forest found on mineral soils on low terraces of river floodplains and deltas)	Genesee River, Red Creek, Irondequoit Creek, Allen's Creek floodplains	Silver maple (Acer saccharinum), red maple (A. rubrum), sycamore (Platanus occidentalis), cottonwood (Populus deltoides), butternut (Juglans cinerea), black willow (Salix nigra), bitternut hickory (Carya cordiformis), swamp white oak (Quercus bicolor), black ash (Fraxinus nigra), basswood (Tilia americana)
Upland Successional shrublands	West Brighton open space; Maxion Farms; numerous others	Gray dogwood (Cornus foemina ssp. racemosa), raspberries (Rubus spp.), hawthorn (Crataegus spp.), serviceberries (Amelanchier spp.), chokecherry (Prunus virginiana), sumac (Rhus glabra, R. Typhina), nannyberry (Viburnum lentago), arrowwood (V. recognitum), multiflora rose (Rosa multiflora)

Upland successional old field	RIT Lands; Gonsenhauser-Groos Tract; others	Goldenrods (Solidago spp.), bluegrasses (Poa pratensis, Poa compressa), timothy (Phleum pratense), quackgrass (Agropyron repens), Queen Anne's lace (Daucus carota), wild strawberry (Fragaria virginiana), ragweed (Ambrosia artimisiifolia), hawkweeds (Hieracium spp.), asters (Aster novae-angliae; A. lateriflorus)
Dredge spoil wetland	Erie Canal basin, Lock 33	Cattail (<i>Typha latifolia</i>), purple loosestrife (<i>Lythrum salicaria</i>), reedgrass (<i>Phragmites australis</i>)
Farm pond/artificial pond	Maxion Farms; Elmwood Avenue Borrow Pit	Not classified
Marsh headwater stream	West Branch of Allen's Creek; parts of Buckland Creek	Water milfoil (Myriophyllum heterophyllum), coontail (Ceratophyllum dmersum), pondweeds (Potamogeton spp.), duckweed (Lemna minor), waterweed (Elodea nuttallii)
Midreach stream	Allen's Creek	Waterweed (Elodea nuttallii), sago pondweed (Potamogeton pectinatus)
Main channel stream	Genesee River	Variable, probably mosses (Fontinalis spp.), milfoil (Myriophyllum spp.)
Backwater slough	Irondequoit Creek wetlands	Waterweed (<i>Elodea canadensis</i>), milfoil (<i>Myriophyllum</i> spp.), pondweeds (<i>Potamogeton</i> spp.), waterlilies (<i>Nuphar</i> spp.)
Conifer plantations	French Road-Canal; Highland Park; Corbett's Glen; Maxion Farms- Monroe Developmental Center	Variable but may include Scotch pine (<i>Pinus sylvestris</i>), Norway spruce, white pine (<i>Pinus strobus</i>), red pine (<i>Pinus resinosa</i>), Austrian pine (<i>Pinus nigra</i>)

Many of the plant communities observed in Brighton do not precisely fit the categories assigned by Reschke (1990). Because of the extreme diversity of microhabitats available at Pinnacle Hill, Corbett's Glen and on the steep slopes surrounding Irondequoit Bay, numerous microcommunities are included within the broad categories defined by Reschke. For example, the presence of two unusual species at Pinnacle Hill was noted during a field visit: round leaf dogwood (*Cornus rugosa*) and what

appeared to be a local hybrid, osier dogwood (*Cornus rugosa x sericea*), which exhibited physical characteristics intermediate between those of the round leaf dogwood and red osier dogwood (*Cornus sericea*). Additional study is required to understand the ecological significance of these unusual plant associations. It is expected that additional unusual plant associations will be discovered in this process.

8. Special Features of Brighton's Open Space Sites

8.1 Values of Open Space

The value of open space has been stated in many documents, but its significance to our lives is summarized clearly by the 1995 New York State Open Space Plan⁸:

"The quality and character of the lives of the people of New York depend upon the quality and character of the land on which we live. Our ...rivers, forests,...natural landscapes, urban parks and historic resources shape the way we spend our leisure time, affect the long term strength of our economy, determine whether we have clean air and water, support the web of living things of which we are a part, and affect how we think about ourselves and related to other New Yorkers."

"We have the power to change the landscape, to conserve what is valuable to us as a people, or to destroy places which may be important to our future. How we manage change, how we protect and conserve open land and historic sites while providing space for the homes, commercial centers and industrial plants we need, will have a profound impact on future generations."

8.2 Economic Benefits

The presence of open space resources such as parks, hiking trails, golf courses, the Erie Canal, and other amenities provides an attractive environment for new development and maintains the economic viability of older areas. Businesses and industries seeking to relocate often search for communities with attractive open spaces and well-planned residential, commercial and educational resources. In Brighton, the proximity of Genesee Valley Park, the Brighton Town Park, and the Erie Canal provide an attractive setting for employees of local office parks, light industries and medical facilities.

Open spaces also generate economic benefits for the community by providing employment and industry. Agriculture, forestry, and tourism depend on having adequate open space to operate. Agriculture and forestry have been historic contributors to Brighton's economy. The economic importance of the Erie Canal, its Towpath, the County Parks,

⁸New York State Department of Environmental Conservation and Office of Parks, Recreation and Historic Preservation. 1995. *Conserving Open Space in New York State: A Summary of the Plan...1995*, p. 1.

and the Genesee River is growing. Businesses supporting travel on the Canal will grow as the State redevelops land uses along the Canal.

Protection of open space resources can help shape growth in a way which saves money on public services. Clustered development reduces the cost of utilities, transportation and public works construction and maintenance. Protected open space requires fewer community supplied services while providing recreational benefits to the community. Keeping development out of sensitive environmental areas such as floodplains avoids the necessity of costly repairs to structures and personal property damaged by floodwaters, and helps maintain good water quality in downstream areas.

8.3 Social Benefits

Parks such as Meridian Centre Park, Ellison Park, and the Brighton Town Park increase social cohesion within a community by providing locations for community activities and sports. Museums and historic sites enhance the public's understanding of the community's heritage and history. Having public parks in a community provides spaces for people to relax, think and play. The social benefits of passive and active recreation include stress reduction, physical fitness and increased job productivity. The educational value of the community's forests, wetlands, floodplains, and water resources cannot be overestimated. By preserving these resources and keeping them accessible to the public, we maintain an outdoor laboratory which can be used by children and adults alike to study nature.

8.4 Environmental Benefits

Marshes and swamps located along Irondequoit Creek and its tributaries protect the water quality of Irondequoit Bay and Lake Ontario by absorbing excess nutrients, and filtering pollutants and sediments before they reach the Bay. Undeveloped flood plains and low lying wetlands in West Brighton along Red Creek and the Genesee River absorb and store large volumes of stormwater runoff, releasing it slowly and protecting downstream development from flood damage. The spawning of trout and salmon in Allen's Creek and Irondequoit Creek every spring and fall confirms the benefits of keeping the waters clean.

Rare plants and unique geological features are preserved at Pinnacle Hill and Corbett's Glen. The Monroe County Environmental Management Council recognized the value of these two open space resources by including them in a 1996 report. Numerous microhabitat niches are found within these two sites. The steep, cool, north-facing slopes of Pinnacle Hill provide sheltered habitat for flowering dogwoods, which continue to bloom well into June. Springs emerge mysteriously from the side of Pinnacle Hill, creating niches for red osier dogwood and other species

⁹Monroe County Environmental Management Council, Preservation of Environmentally Sensitive Areas Committee. 1996. *Preservation of Environmentally Sensitive Areas in Monroe County*, pages 13 and 14.

usually found in marshes. Remnants of the shoreline of glacial Lake Dana can be seen near the top of Pinnacle Hill. This lake once covered all of Brighton except Pinnacle Hill. Small remnants of old growth white pines and other hardwoods in Corbett's Glen tantalize the imagination with the former majesty of the site. In addition, it contains a waterfall, unique in Brighton, which holds historic and cultural significance for all, especially Native Americans.

The wildlife value of large contiguous acreages of old fields reverting to shrubs and young hardwood forests located in Central and West Brighton is best explained by observation. Dense concentrations of berry bushes such as honeysuckle, highbush cranberry, and viburnums attract song birds and other fruit eaters. Plentiful tall grasses, sedges and cattails shelter many small mammals such as mice, voles, and rabbits.. Other inhabitants of these large open spaces include white tailed deer, raccoon, opossum, muskrat, and beaver. Occasionally one might glimpse a red fox in hot pursuit of a rabbit, or be treated to the sound of a coyote in full voice on a moonlit night. Even more rare is the sight of an elusive bobcat streaking through the snow on a winter morning.

The presence of ephemeral ponds and seasonally saturated wetlands is essential for the survival of amphibians. The overall health of the ecosystem is affirmed each spring with the renewal of the spring frog chorus.

The forests of Brighton also offer a diversity of habitat niches. Squirrels and other nut-eaters dine on the bountiful beechnuts and acorns found in Lynch Woods, and the Brighton Town Park woods. Great horned owls patrol the Town Park woods on cold February mornings, seeking the slow and hapless chipmunk or squirrel. Floodplain forests in West Brighton and other scattered woodlots throughout the Town provide habitat for numerous birds, browse and shelter for deer.

The ecological value of forested areas increases greatly with the contiguous area of forest. The overall health of the forest is improved with a larger area of habitat. The number of species of animals and plants inhabiting the community also increases with the size of the habitat unit. Based on these principles, the large contiguous acreage of mixed hardwood forest and successional old fields and shrub swamps found in West Brighton makes this area especially valuable.

Open space also provides linkage between widely separated habitats. Small corridors such as hedgerows, fence lines, power line and railroad rights of way, stream floodways and drainage ditches link important ecological features such as wetlands, ponds, forests and open fields. In Brighton, white tailed deer utilize the open space corridor of Persimmon Park to travel between evergreen forested areas in Highland Park and sheltered feeding areas on the flats below on the Rochester Psychiatric

¹⁰Hunter, Malcolm L., Jr. 1990. Wildlife, Forests, and Forestry: Principles of Managing Forests for Biological Diversity. Prentice-Hall, p. 138.

Center-Monroe Developmental Center property. Deer also utilize the Lehigh Valley Trail between Jefferson Road and the University of Rochester and the Niagara Mohawk power line to access marshy feeding areas. Shrubby hedgerows and fence lines often provide important shelter, feeding and resting areas for woodchucks, squirrels, and songbirds. Turkey buzzards, red tailed hawks and other avian predators are often seen patrolling the hedgerows for a potential meal.

Several natural corridors offer potential linkages between open spaces and other recreational/education features in the Town of Brighton. The Erie Canal Heritage Trail provides linkages to Brighton Town Park, Meridian Centre Park, and several residential neighborhoods and business areas. The Lehigh Valley Trail offers direct linkage between Rochester Institute of Technology and the University of Rochester, crossing much of West Brighton Open Space. The Niagara Mohawk power line right of way offers a potential link between the Town's Stowell Conservancy Lands and county-owned lands south of Crittenden Road. Buckland Creek offers a natural linkage between the former Maxion Farms (now St. John's Home) site and the Elmwood Avenue Borrow Pit (Site 8). A planned trail on the west side of the former Maxion property to be constructed in conjunction with the Park Place at Brighton housing project will provide a similar pedestrian connection without potential impacts on the wetlands. Other connections between Elmwood Avenue and Westfall Road utilizing hedgerows and public rights of way through the Rochester Psychiatric Center and Monroe Developmental Center properties and the Town's right of way (Powell Road) through the western half of the Berman Farms subdivision.

8.5 Open Space Preservation and Management Opportunities

Due to increasing development pressures, the Town of Brighton may lose its opportunity to manage, preserve and protect many of its important open spaces. This document highlights the importance of several of these sites. The quality of the Town's open spaces influences the quality of life in the community.

The Town of Brighton influences the preservation of privately owned open space through the use of zoning and land use controls such as cluster development, planned use developments, conditional use permits, environmental protection overlay districts, and conservation easements.

The Town has the ability to acquire land by fee simple purchase, donation, incentive zoning or condemnation. The Town acquired Persimmon Park (in OSU site 20) and the Stowell Conservancy (in OSU site 21) by donations. Corbett's Glen Nature Conservancy (in OSU site 4), Buckland Park (in OSU site 13), the Tuety Purchase (in OSU site 2), Meridian Centre Park expansion (in OSU site 14) and the Lehigh Valley Trail (in OSU sites 18 and 27) were acquired through fee simple purchase. The NYS wetlands in Open Space Index Update site 22 have been acquired through the incentive zoning process. The Town's Comprehensive Plan 2000 also recommended other sites for possible future acquisition, including the Elmwood Avenue Borrow Pit site (in OSU site 8), Pinnacle

Hill (in OSU site 3), the property adjacent to Brookside School (in OSU site 19), the Linden Tech site adjacent to Corbett's Glen (in OSU site 4), and a parcel between Meridian Centre Park and the Erie Canal (in OSU site 14).

Finally, the Town has an opportunity to forge links with private landowners and individuals for the purpose of open space management. Over the years, several citizen groups have expressed interest in establishing a trail system around and through the Town. By seeking cooperation with landowners willing to grant easements for trail purposes and by facilitating discussions between interested parties, the Town can become an active participant in the effort to establish a trail network. By linking the Town's open spaces, the maximum value of each area is realized.

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