SECTION 4

DESCRIPTION OF EXISTING ENVIRONMENTAL SETTING

4.0 INTRODUCTION:

This section of the DGEIS describes the existing environmental conditions on the Project Site and in the surrounding vicinity. SEQRA requires an Environmental Impact Statement (ñEISò) to include a description of the environmental setting of a project site and areas to be affected by a proposed project at a level of detail that is sufficient to understand the impacts of a proposed action and the evaluated alternatives.[1]

4.1 TOPOGRAPHY, GEOLOGY, AND SOILS:

4.1.1 Topography:

The Project Site is located within the Erie-Ontario Lake Plain physiographic province of New York. This physiographic region has little relief and is characteristic of an abandoned lakebed. The region includes three plains (Ontario, Huron, and Erie), which are separated by the east-west trending Niagara, Portage and Onondaga escarpments. The Town is located in the Salina Lowland of the east-west trending Huron plain and is bounded by the Onondaga and Niagara escarpments, which are comprised of more resistant rock. No unique landforms or geological formations exist on or in the vicinity of the Project Site.

Topography on the Project Site averages approximately 600 feet above sea level (ñaslò). In general, the topography gradually drops approximately 10-13 feet in elevation from south to north across the Project Site. Overall, the topography of the Project Site is relatively level, with

[1] See 6 NYCRR Part 617.9(b)(5)(ii).

the exception of previous modifications resulting from the construction, operation, and maintenance of the private golf course that closed on December 31, 2014, including the golf tees, fairways, hazards, greens, ponds and cart paths. In addition, Ellicott Creek meanders along portions of the eastern boundary of the Project Site. The natural topography in the vicinity of the Project Site also has been influenced by previous development of sites adjacent to and in the vicinity of the Project Site, including residential neighborhoods to the east and west of the Project Site, the UB North Campus, and the Audubon Recreation Center and Golf Courses (Par 3 and 18-hole) to the north and northeast of the Project Site.

4.1.2 Geology and Soils:

A detailed analysis of geology and soils on the Project Site was performed by Empire Geo-Services, Inc. (ñEGSIò) in February 2014 (Refer to Appendix Volume I, Letter D, ñGeotechnical Evaluation Reportò).

Bedrock in the vicinity of the Project Site consists generally of gray, medium hard, sound, thinly bedded to bedded shale rock of the Camillus shale formation, with occasional partings, seams and layers of gypsum. The depth to bedrock on the Project Site ranges from approximately 13.5 to 62.5 feet as evidenced by refusal in 30 soil borings conducted by EGSI in connection with its comprehensive geotechnical analysis of the Project Site.

The *Soil Survey of Erie County* (U.S. Department of Agriculture, Soil Conservation Service www.websoilsurvey.nrcs.usda.gov) identifies the following soil types as existing on the Project Site: Claverack loamy fine sand, Cosad loamy fine sand, Lakemont silt loam, Odessa silt loam, Schoharie silt loam, Teel silt loam, and Urban land-Odessa complex series, with Odessa,

Claverack and Cosad being the predominate soil types.[2] Of these soil types, only Lakemont is considered hydric soil, although hydric inclusions are possible in Cosad, Odessa, and Teel soils series. For a depiction of soil types at the Project Site, refer to Figure 4-1, Project Site Soil Types Map, located at the end of this Section 4 of the DGEIS. The soil types that exist on the Project Site are described as follows:

- The **Claverack series** consists of very deep, moderately well drained soils formed in sandy deposits that overlie clayey lacustrine sediments. They are nearly level to sloping soils in shallow deltas on lake plains.
- The **Cosad series** consists of very deep somewhat poorly drained soils formed in sandy deposits that overlie clayey lacustrine sediments. They are nearly level soils on lake plains.
- The **Lakemont series** consists of deep, poorly drained and very poorly drained soils of lake plains. They are nearly level soils formed in very slowly permeable reddish colored clayey lacustrine sediments.
- The **Odessa series** consists of very deep, somewhat poorly drained soils formed in clayey lacustrine deposits. These soils are in moderately low areas on lake plains.
- The **Schoharie series** consists of very deep, moderately well drained soils formed in clayey lacustrine sediments. They are on glacial lake plains and uplands mantled with lake sediments.
- The **Teel series** consists of very deep, moderately well drained soils on floodplains. They formed in nearly level silty alluvial deposits.
- The **Urban Land-Odessa complex** consists of nearly level areas of urban land and somewhat poorly drained Odessa soils. This complex is on relatively flat landscapes in the City of Buffalo and surrounding metropolitan area, including the Town of Amherst.

The results of the soil borings conducted by EGSI were consistent with the mapped soils

[2] Source: U.S. Department of Agriculture, Soil Conservation Service www.websoilsurvey.nrcs.usda.gov.

information.[3] Specifically, the soil borings conducted by EGSI indicate native soils consist of glacial till deposited silty clay, clayey silt, silt and silty or clayey sand soils overlying the shale bedrock. In most cases, the soil borings indicated the presence of surface topsoil and man-placed fill or disturbed indigenous soils above native soils, and this is consistent with topographic modifications associated with golf course construction.

The Project Sponsor also retained the services of C&S Companies, a national engineering and environmental remediation consulting firm, to perform a Phase 2 Environmental Site Assessment (ñPhase 2 ESAò) of the Project Site that included soil borings and testing for the presence of potentially hazardous chemical compounds associated with the historic application of pesticides and herbicides given the utilization of the Project Site as a golf course and country club (refer to Appendix Volume IV, Letter R, ñPhase 2 Environmental Site Assessment & Soil/Sediment Sampling Reportò). The Phase 2 ESA included fifteen (15) separate soil samples across the Project Site that were intentionally located to provide a random sampling of rough areas, fairways, and the course greens. While the lab analysis included testing for the presence of approximately 29 separate potentially hazardous chemical compounds associated with pesticides and herbicides, an evaluation of arsenic concentration was also included in the analysis. Arsenic is a semi-metal element in the periodic table that is odorless and tasteless.

Arsenic-containing (ñarsenicalò) pesticides such as monosodium methane arsenate, lead arsenate, sodium arsenate and calcium arsenate were historically used for treating lawns and ornamental turf and were commonly used at golf courses.[4] As such, when testing for potentially

[3] See Appendix Volume I, Letter D, ñGeotechnical Evaluation Reportò.
[4] EPA. ñArsenical Pesticides, Man and the Environment.ò 1972.

hazardous chemical compounds associated with the application of pesticides and herbicides, it is standard procedure to additionally include arsenic within the analytical panel. The results of the Phase 2 ESA showed that while no potentially hazardous chemical compounds associated with pesticides and herbicides presented in any of the fifteen (15) soil samples, all 15 soil samples tested positive for the presence of arsenic. It is important to note that arsenic occurs naturally in rocks and soil, water, air and plants and animals. It can be released into the environment through natural activities such as volcanic action, erosion of rocks and forest fires, or through human actions.[5]

When consumed or inhaled in highly concentrated amounts, arsenic can pose health risks to humans. As such, the New York State Department of Environmental Conservation (ñNYSDECò) and Environmental Protection Agency (ñEPAò) have established maximum arsenic level concentrations for public drinking water and within soil. As per Subpart 375-6: Remedial Program Soil Cleanup Objectives (ñSCOò) of the NYS Environmental Conservation Law, the NYSDEC has developed SCO Tables that identify the maximum concentration of certain chemical compounds and metals that can be present within soils for particular land uses. Specifically, the NYSDEC has identified an SCO for arsenic level concentration for industrial uses of 16 ppm. In terms of unrestricted residential uses, the NYSDEC has identified an SCO for arsenic level concentration of 13 ppm.[6]

In terms of arsenic concentration levels at the Project Site, five (5) soil samples presented with levels of arsenic that exceeded the NYSDEC SCO values, ranging from 16.4 ppm to 66.3

[5] EPA. ñBasic Information about the Arsenic Ruleò, 2012. Available at: http://water.epa.gov/lawsregs/rulesregs/sdwa/arsenic/Basic-Information.cfm.

[6] New York State Department of Environmental Conservation. ñEnvironmental Conservation Law-Subpart 375-6: Remedial Program Soil Cleanup Objectives.ò December 14, 2006.

ppm. For a discussion regarding the potential environmental impacts associated with the arsenic containing soils exceeding NYSDEC SCO values, please refer to Section 5.1.2 of this DGEIS. For a discussion of remediation options and mitigation measures available to manage the arsenic containing soils exceeding the NYSDEC SCO values, please refer to Section 6.1 of this DGEIS.

4.2 WATER RESOURCES:

The Project Site lies within the Tonawanda Creek Watershed, a major tributary watershed to the Niagara River / Lake Erie Watershed. Tonawanda Creek, which forms the Townôs northern boundary with Niagara County, flows to the west and drains large portions of the Town. Portions of Tonawanda Creek have been historically channelized as part of the Erie Canal. Ellicott Creek, which extends along portions of the eastern boundary of the Project Site, is the largest tributary of Tonawanda Creek and flows northwest through the Town. Ellicott Creek discharges into a channelized section of Tonawanda Creek, near where Tonawanda Creek flows into the Niagara River.

4.2.1 Surface Water Resources and Quality: Wetlands and Watercourses:

4.2.1.1 Water Resources:

In order to identify and evaluate potential water resources (wetlands and watercourses) on the 170-acre Project Site, the Project Sponsor retained Earth Dimensions, Inc. (ñEDIò). EDI conducted in-depth background research regarding vegetation, soils and hydrology and subsequently conducted a field investigation of the Project Site. The field investigation conducted by EDI was performed using methods for the delineation of federal wetlands as specified in the U.S. Army Corps of Engineers (ñUSACEò) *Wetlands Delineation Manual* (1987) and *Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region* (October 2009).

The purpose of EDIôs analyses was to identify water resources on the Project Site and determine whether such water resources were subject to federal or state jurisdiction, pursuant to Section 404 of the Clean Water Act (Federal Wetlands) and/or Article 24 (Freshwater Wetlands)

of the New York State Environmental Conservation Law. A complete copy of the Wetland Delineation Report prepared by EDI is provided at Appendix Volume I, Letter A, ñWetland Delineation and Evaluation Reportò. The results of the EDI investigations of on-site water resource conditions are as follows:

After reviewing New York State Department of Environmental Conservation (ñNYSDECò) freshwater wetlands mapping, EDI determined that there are no mapped state-designated jurisdictional wetlands within or directly adjacent to the Project Site. However, based on analyses of National Wetland Inventory maps and soil survey information, EDI determined that an in-depth field investigation would be necessary to assess the potential for jurisdictional federal and state wetlands on the Project Site.

EDIôs on-site investigation, which was performed in September 2012, resulted in the identification of 11 wetland, pond, and creek areas, totaling approximately 7.4 acres of the Project Site. These surface water resources identified on the Project Site by EDI include Ellicott Creek, as well as 10 small non-jurisdictional wetland areas. The predominant surface water associated with the Project Site is Ellicott Creek, which comprises approximately one-third of the eastern boundary of the Project Site.

In addition to Ellicott Creek, there are 10 other areas on the Project Site that EDI determined satisfy the three criteria for classification as federal wetlands (refer to Figure 4-2, Project Site Delineated Wetlands and Waterways Map, located at the end of this Section). These include four small open water wetlands (palustrine open water [ñPOWò] wetlands) on the Project Site, otherwise known as water hazards, ranging in size from 0.160 acres to 1.02 acres; three hardwood swamps (palustrine forested [ñPFOò] wetlands) ranging in size from 0.058 to 0.660

acres; two emergent wetlands (ñPEMò) with sizes of 0.052 and 0.173 acres; and a scrub-shrub (palustrine scrub-shrub [ñPSSò]) wetland with a size of 0.229 acres.

Because the 10 small wetland areas on the Project Site are isolated, non-navigable, intrastate waters, the Wetland Delineation Report prepared by EDI contained its professional opinion that these areas are not subject to the jurisdiction of the USACE pursuant to Section 404 of the Clean Water Act. On April 22, 2013, the USACE issued its Jurisdictional Determination (ñJDò) stating that the small, isolated wetland areas on the Project Site are not subject to its jurisdiction. More specifically, the JD issued by the USACE stated a determination had been made ñé that there is no clear surface water connection or ecological continuum between Wetland 1 through 10 on the parcel and a surface tributary system to a navigable water of the United States. Therefore, these waters are considered isolated, non-navigable, intrastate and not regulated under Section 404 of the Clean Water Act. Accordingly, you do not need Department of Army authorization to commence work in these areas.ò A copy of the JD issued by the USACE is provided at Appendix Volume I, Letter B, ñJurisdictional Determinationò.

In addition, because none of the on-site wetlands are large enough to cross the NYSDEC minimum threshold of 12.4 acres, the small isolated wetlands are not subject to the jurisdiction of the NYSDEC (refer to Appendix Volume I, Letter C, ñE-mail Communication from Charles Rosenburg of the NYSDECò). Complete descriptions of the small non-jurisdictional wetlands on the Project Site are found in in the Wetland Delineation prepared by EDI at Appendix Volume I, Letter A of this DGEIS.

The Habitat Assessment Report prepared by EDI dated October 30, 2014 included a response to the comment contained in the Planning Departmentôs Memorandum dated September

3, 2014 indicating the Initial DGEIS submitted on July 14, 2014 did not mention the presence of NYSDEC Freshwater Wetland BN-01 approximately one half mile south of the Project Site. Page 9 of EDIôs Habitat Assessment Report prepared by EDI provided information regarding NYSDEC Freshwater Wetland BN-01 by stating as follows:

> ñNYSDEC Freshwater Wetland BN-01 is identified by NYSDEC as a 10.8 acre Class II invasive species/shallow emergent marsh community. The wetland is dominated by common reed (*Phragmites australis*) and other invasive plant species. The wetland is located between the abandoned Lehigh Valley Railroad and Interstate 290. Any proposed development within the project site will not negatively impact NYSDEC wetland BN-01 because historic water flow is to the northwest and does not intersect Ellicott Creek until approximately 2 miles north of the project area near the University of Buffalo North Campus. Therefore, water flow from within the investigation area cannot enter the NYSDEC wetland. The Lehigh Valley Railroad grade is elevated and prevents any overland water flow from the wetland to the northeast. NYSDEC Wetland BN-01 is part of a dendritic water pattern that is flowing north and northwest, ultimately ending at Ellicott Creek and then Tonawanda Creek.ò

The analysis of NYSDEC Freshwater Wetland BN-01 by EDI as described above demonstrates that the proposed redevelopment of the Project Site as a mixed use neighborhood will not result in any potential adverse impacts to this off-site wetland.

There have been submissions to the USACE questioning the validity of its JD issued on April 22, 2013 including letters submitted to the USACE from the owner of 54 Frankhauser Road dated July 31, 2014 and September 17, 2014, and a letter by the Town Supervisor to the USACE dated October 10, 2014. Copies of these letters are provided in Appendix Volume IV, Letter Z3.2, Z3.3, and Z1.6.

The letters submitted to the USACE by the owner of 54 Frankhauser Road questioned the USACEôs determination that Wetland 9 is not subject to federal jurisdiction. Wetland 9 is located on the southwest portion of the Project Site and consists of approximately .160 acres. The questions

raised in the letters submitted to the UASCE by the owner of 54 Frankhauser Road were thoroughly evaluated by EDI. On September 30, 2014, Scott Livingstone of EDI submitted a letter responding to the letters submitted to the USACE by the owner of 54 Frankhauser Road. A copy of the letter is provided in Appendix Volume IV, Letter Z4.2, ñLetter, Livingstone to Ammons RE: ACOE JD.ò Mr. Livingstoneôs letter summarized the reasons that it remains EDIôs professional opinion that Wetland 9 is not jurisdictional since it is not hydrologically connected to the off-site drainage feature on 4176 and 4188 Sheridan Drive, which are properties located to the west of the Project Site on the opposite (west) side of Frankhauser Road. Mr. Livingstoneôs letter also discusses information obtained by the Townôs Engineering Department regarding the existing storm sewers along Frankhauser Road and in the immediate vicinity of the Project Site. As mentioned in Mr. Livingstoneôs letter, the Engineering Department evaluated its records and conducted an on-site inspection demonstrating there is not a hydrological connection between Wetland 9 and off-site wetland areas on 4176-4188 Sheridan Drive. A copy of the evaluation conducted by the Engineering Department consisting of topographic measurements and supporting photographs is attached to Mr. Livingstoneôs letter. The drainage ditch which infrequently carries flow from the Wetland 9 flows westward to a 30 inch storm sewer along the east side of Frankhauser Road, which then flows south to Sheridan Drive while the drainage feature flowing through the back yards at 4176-4188 Sheridan Drive flows in a northwesterly direction and then into a storm sewer in the rear of 59 Sunrise Boulevard. The letter issued by Mr. Livingstone substantiates EDIôs professional opinion and the USACEôs JD that Wetland 9 is an isolated, non-navigable, intrastate water not subject to federal jurisdiction by stating,

ñIn Ms. Koerberôs September 17, 2014 letter, she indicates that it was her understanding that the channel was historically a running stream which connected the features on both sides of Frankhauser Road. In order to evaluate this position, we have attached a series of aerial photos dated 2011, 1951 and 1920ôs, respectively. The irrigation pond (W9) can be seen in the 2011 aerial photo but had not yet constructed in the 1951 or 1920ôs aerials. Most importantly, however, no channel is present in either the 1951 or 1920ôs aerial photos in the vicinity of the present day pond, which demonstrates there was not a historical connection between the present day pond and the drainage feature on the west side of Frankhauser Road.ò

The letter submitted to the USACE by the Town Supervisor dated October 10, 2014 included a memorandum issued by the Town Engineer dated October 9, 2014 raising concerns relative to the validity of the USACEôs JD (ñTown Engineer Memoò). More specifically, the Town Engineer Memo claimed the underground drainage pipes installed by the former owner of the Project Site to convey flood water from the manmade golf course ponds to Ellicott Creek provides ñdirect, unobstructed and uncontrolled hydraulic connectivityò to Ellicott Creek. The memo further asserts that based upon the supposed hydraulic connectivity resulting from flood water alleviation drains to Ellicott Creek that the USACE should re-evaluate the JD issued on April 22, 2013 by which these areas were determined to be ñisolated, non-navigable, intrastate waters not regulated under Section 404 of the Clean Water Act.ò More specifically the Town Engineer Memo stated,

ñIt is the opinion of this office that wetland areas W2/3, W4, W5, W6, W7/8 and W11 all exhibit hydraulic connectivity and therefore possible ecological continuum between each other and Ellicott Creek. It is also our opinion that via the drainage system, that all of these wetlands directly affect Ellicott Creek and in turn, are all directly affected by Ellicott Creek recharge during times of seasonal rain/snow-melt events, as confirmed through conversations with numerous Westwood members, staff and surrounding neighbors. As a result of this hydraulic connectivity, we believe that these wetland areas should be reevaluated by the Army Corps of Engineers.ò

Following receipt of the correspondence from the Town Supervisor, the Project Sponsor

attended a meeting with representatives of the USACE and Scott Livingstone of EDI at the Project Site on November 10, 2014. The purpose of the site visit was to evaluate the initial findings of the USACE as contained in its JD in light of the comments in the Town Engineer Memo issued on October 9, 2014. The site visit confirmed that Wetlands W2, W5, W7, and W8 are clearly not connected to the subsurface drainage system nor are they in any way connected to Ellicott Creek as represented within the Town Engineer Memo. Please refer to Figure 4-3, Project Site Subsurface Drainage System (located at the end of this Section 4) for the in-field verified mapping of the existing subsurface system.

Wetlands W3, W4 and W6 are the three Man-Made Golf Course Ponds connected to the underground drainage system. These three ponds are multi-purpose man-made ponds constructed approximately fifteen years ago to provide water hazards within the golf course, water for irrigation of the course, and general aesthetics. It is important to note that in an effort to research the final underground drainage system design and permit requirements, the Project Sponsor requested a copy of the necessary Plumbing Permit for these improvements from the Town of Amherst Engineering Department. Following a review by the Engineering Department, it was confirmed that no such Plumbing Permit was in fact officially issued to authorize the installation of the underground drainage system as it currently exists.[7] It is also important to note that on June 29, 2015 the USACE and Environmental Protection Agency officially issued a Final Rule defining

[7] Pursuant to Section 83-5-2 of the Town Code of the Town of Amherst (titled ñPlumbing permitò), ñNo person, firm or corporation shall commence any plumbing, drainage or sewer contracting work in any building, structure or parking lot or on any premises, or cause the same to be done, without first obtaining a separate plumbing permit or quick permit from the Commissioner of Building for each such occurrence. When authorized by the Commissioner of Building, a quick permit application may be filed in the Building Department in accordance with procedures established by the Commissioner of Building.ò

which water features are intended to be regulated under Section 404 of the Clean Water Act (ñCWAò). The Final Rule interprets the CWA to cover those waters that require protection in order to restore and maintain the chemical, physical, or biological integrity of traditional navigable waters, interstate waters, and the territorial seas. While the Final Rule was enacted as of June 29, 2015, the effective date of the revised ruling clarifying the scope of waters of the United States was made effective as of August 28, 2015.[8] Within the Final Rule, the agencies added exclusions for groundwater and erosional features, as well as exclusions for some waters that were previously identified as possibly being found jurisdictional under proposed rule language where this was never the agencies' intent, such as stormwater control features constructed to convey, treat, or store stormwater. These exclusions reflect the agencies' current practice, and their inclusion in the rule as specifically excluded furthers the agencies' goal of providing greater clarity over what waters are and are not protected under the CWA. The three man-made golf course ponds in question were clearly constructed as stormwater control features designed to convey, treat, or store stormwater while providing ornamental and aesthetic value for the previously existing golf course.

In conclusion, based on the site visit conducted by USACE personnel on November 10, 2014 and consultations with EDI, a reputable wetlands and soil consultant, it remains the Project Sponsorôs position that Wetlands W2, W5, W7, and W8 are not subject to federal jurisdiction as evidenced by JD issued by the USACE on April 22, 2013.

4.2.1.2 Surficial Water Quality:

[8] Federal Register. *Clean Water Rule: Definition of "Waters of the United States"*. Volume 80, Final Rule 37053-37127. Friday, August 28, 2015. Available online at: https://www.federalregister.gov/articles/2015/06/29/2015-13435/clean-water-rule-definition-of-waters-of-the-united-states#h-10.

Ellicott Creek is classified by the NYSDEC as a Class B watercourse, which indicates its best use is for primary and secondary contact recreation and fishing. The water quality is suitable for fish, shellfish, and wildlife propagation, but is not suitable for human drinking. Ellicott Creek has a drainage basin of approximately 110 square miles. Within the vicinity of the Project Site, Ellicott Creek is a low-gradient stream with average annual flows of approximately 100 cubic feet per second (ñcfsò). NYSDECôs Stream Biomonitoring Unit conducted an investigation of Ellicott Creek in 2001 to assess general water quality and to determine the general nature and extent of water quality issues.[9] One of the sampling stations used during the survey conducted by the NYSDEC was located just north of Sheridan Drive, in the immediate vicinity of the Project Site. At this location, the width of Ellicott Creek was measured to be 20 meters, the depth was 0.2 meters and the velocity was 110 cm/sec. Bottom substrate was comprised of rubble (40%), gravel (20%), sand (20%) and silt (20%).[10] Based on composition of the biological communities (refer to Section 4.3.4 Wildlife and Fisheries), the water quality was determined to be moderately impacted.

The New York Power Authority also investigated surface water quality in Ellicott Creek in 2005 as part of a larger study of water quality in the Niagara River and its tributaries.[11] Turbidity levels ranged from 17.89 to 25.04 Nephelometric Turbidity Unit (ñNTUsò) during wet weather periods and 8.07 to 16.1 NTUs during dry weather, with levels higher in upstream locations. Average dissolved oxygen levels ranged from 7.34 mg/L to 8.23 mg/L with upstream locations reporting higher dissolved oxygen levels.

[9] Source: NYSDEC, Division of Water, NYS Major Drainage Basins (October 2012).
[10] Source: NYSDEC, Division of Water, Ellicott Creek Biological Assessment, page 19 (March 15, 2002).
[11] Source: URS Corporation and Gomez and Sullivan Engineers, PC, August 2005.

4.2.2 Groundwater Resources and Quality:

Based on a review of NYSDEC data, the Project Site is not underlain by any mapped principal or primary aquifers. Groundwater at and in the vicinity of the Project Site is not used for public drinking water supply.

Groundwater was investigated as part of the geotechnical evaluation of the Project Site conducted by EGSI (refer to Appendix Volume I, Letter D, ñGeotechnical Evaluation Reportò). As part of its geotechnical analysis, EGSI installed three groundwater observation wells. Results indicate that a permanent groundwater table may be present at 17 to 22 feet beneath the surface, although perched water is present in the upper soils, in some instances within a few feet of the surface.

4.2.3 Floodway and Floodplains:

Certain areas within the eastern portion of the Project Site are located within the 100 year floodplains of Ellicott Creek, as designated by the Federal Emergency Management Agency (ñFEMAò). Figure 4-4, Project Site FEMA Floodplain and Floodway Map, located at the end of this Section, illustrates the current location of the 100 year floodplain and floodway on the eastern portion of the Project Site. FEMA defines the Base Flood Elevation as the computed elevation to which floodwater is anticipated to rise during the Base Flood (commonly referred to as the 100-year flood). The Base Flood Elevation is calculated by comparing historical information with current topographical measurements. (For a detailed methodology of FEMAôs base flood plain calculations, refer to ñManaging Floodplain Development Through The National Flood Insurance

Programò).[12]

The 100-year base flood elevation of Ellicott Creek varies from 596 feet at the south end of the site to 594 feet at the north end of the site as shown on the Town of Amherst Federal Insurance Rate Map Community-Panel Numbers 360226-0012 and 360226-0009 both dated October 16, 1992. The 500-year floodplain elevations range from 595 feet on the southern portion of the site to 593 feet on the northern portion. The floodway extends approximately 150 feet from the edge of the bank of Ellicott Creek across the entire expanse of the creek within the Project Site. It is important to note that while Figure 4-4 provides a depiction of the current FEMA regulated Flood Insurance Rate Map (ñFIRMò) applicable to the Project Site, as of December 2009, FEMA has undertaken a Flood Insurance Study (ñFISò) for Erie County. The purpose of the FIS is to investigate the existence and severity of flood hazards and potentially revise and or update previous FISôs/FIRM maps for the geographic area of Erie County which includes the Town of Amherst and Village of Williamsville.[13]

The revised FEMA issued FIRM map that has been preliminarily issued as a function of the FIS findings has resulted in a vastly reduced 100 Year Floodplain boundary for the Project Site. While this revised boundary is not the official FIRM map of record at this current time, FEMA has previously suggested that they will be requesting official adoption of the revised FIRM map from local jurisdictions, to include the Town of Amherst, within 2015.

[12] Available online at: http://www.fema.gov/media-library-data/20130726-1535-20490-8858/is_9_complete.pdf.

[13] Federal Emergency Management Agency. *Flood Insurance Study- Erie County, New York (All Jurisdictions)*. December 31, 2009. Available online at: https://www.rampp-team.com/county_maps/new_york/erie/erie_ny_fis_tables1.pdf.

Prior to the implementation of flood control improvements described below, Ellicott Creek had a history of flooding. According to the USACE, the March 1960 flood, which affected approximately 3,220 acres in Amherst, is considered the flood of record.

According to FEMA, the area most prone to flooding along Ellicott Creek in the Town of Amherst is the downstream portion of the creek located between Maple Road and Niagara Falls Boulevard. For more than a century, federal, state and local governments have implemented flood control mitigation measures to prevent or minimize flood damage in the Town. For example, in 1932, the Town improved the Ellicott Creek channel upstream of the Village of Williamsville and, in the late 1950s, the USACE cleared a 6-mile portion of Ellicott Creek between Sheridan Drive and Sweet Home Road. Further, in 1965, Erie County completed construction of a diversion channel in Ellicott Creek Park in the Town of Tonawanda (from Ellicott Creek to Tonawanda Creek), which was constructed to reduce the potential for flooding within the Town.

The most important Ellicott Creek flood control mitigation project was authorized thorough the Amherst Flood Damage Reduction Project (ñFlood Projectò). The Flood Project consisted of approximately 2.1 miles of creek channel enlargement, construction of a reinforced concrete floodwall on the right bank in the Maple Road area, implementation of three diversion channels, installation of multiple new flap gates and gate wells, upgrading of storm drains and general erosion protection at multiple locations.[14] The project was designed to provide protection from floods that have an average recurrence interval of 100 years with a discharge of 17,400 cubic feet per second (ñcfs.ò). Construction of flood protection improvements on Ellicott Creek in the Towns

[14] New York State Department of Environmental Conservation. *Amherst Flood Damage Reduction Project Summary*. http://www.dec.ny.gov/docs/water_pdf/fcpprjamhrst.pdf.

of Amherst and Tonawanda began in July of 1986 and were completed in November 1989, representing a total investment of $8,015,179 toward flood control and alleviation work.

4.3 BIOLOGICAL RESOURCES:

4.3.1 Vegetation and Wildlife:

Of the approximately 170-acre Project Site, approximately six acres are occupied by the existing WCC clubhouse and associated facilities including parking spaces. Approximately 140 acres of the Project Site consists of the developed private golf course that closed on December 31, 2014, consisting of mowed lawn and scattered trees along the fairways. The remaining 24 acres of the Project Site are comprised of several small areas with natural vegetation, including upland and wetland hardwood forests, successional old field areas and areas dominated by scrub-shrub vegetation. In order to properly evaluate the existing vegetation and wildlife at the Project Site, EDI investigated the vegetated non-jurisdictional wetland areas as described by in its Wetland Delineation Report (refer to Appendix Volume I, Letter A, ñWetland Delineation and Evaluation Reportò), as well as upland areas that have not been manicured to the extent found on the private golf course fairways, greens and tees. Additionally, EDI performed site vegetation, biological resource and wildlife assessment investigation of the Project Site (Refer to Appendix Volume IV, Letter Q, ñSite Vegetation & Wildlife Investigation Reportò).

4.3.2 Vegetation:

The Wetland Delineation Report prepared by EDI includes a summary of the vegetation that exists on the Project Site and as mentioned above in Section 4.3.1, a majority of the Project Site in its current existing condition consists of mowed lawn. According to the Wetland Delineation Report, the existing vegetation on those portions of the Project Site not consisting of mowed lawn consists of the following:

- Successional old fields: The plant species include: hawthorn (*Crataegus spp*.), gray dogwood (*Cornus racemosa*), green ash (*Fraxinus pennsylvanica*), silky dogwood (*Cornus amomum*), buckthorn (*Rhamnus frangula*), willow (*Salix bebbiana*), Kentucky bluegrass (*Poa pratensis*), old field cinquefoil (*Potentilla simplex*), Virginia strawberry (*Fragaria virginiana*), annual ryegrass (*Lolium perenne*), timothy (*Phleum pretense*), common self-heal (*Prunella vulgaris*), poverty rush (*Juncus tenuis*), winter bentgrass (*Agrostis hyemalis*), white old-field aster (*Symphyotrichum pilosus*), Canada goldenrod (*Solidago canadensis*), garden vetch (*Vicia sativa*), flat-topped goldenrod (*Euthamia gramnifolia)* and red maple (*Acer rubrum*).

- Successional shrubland: The plant species include: green ash, Norway spruce (*Picea abies*), black walnut (*Juglans nigra*), box elder (*Acer negundo*), glossy buckthorn (Frangula alnus), wild raspberry (*Rubus ideaus*), white old-field aster, Canada goldenrod, Canada thistle (*Cirsium canadensis*), curly dock (*Rumex crispus*), dames rocket (*Hesperis matronalis*), stinging nettle (Urtica dioca), common motherwort (Leonurus cardiac), climbing nightshade (*Solanum dulcamera*), white vervain (*Verbena urticifolia*), Fullerôs teasel (*Dipsacus sylvestris*) and summer grape (*Vitis aestivalis*).

- Successional upland forest: The plant species include: green ash, American basswood (*Tilia americana*), red oak (*Quercus rubra*), pin oak (Quercus palustris), eastern cottonwood (*Populus deltoides*), American elm (*Ulmus americana*), red maple, hawthorn, black willow (*Salix nigra*), black cherry (*Prunus serotina*), black walnut, box elder, common buckthorn (*Rhamnus cathartica*), glossy buckthorn, tatarian honeysuckle (*Lonicera tatarica*), multiflora rose (*Rosa multiflora*), Allegheny blackberry (*Rubus allegheniensis*), dames rocket, white snakeroot (*Ageratina altissima)*, Virginia creeper (*Parthenocissus quinquefolia*), poison ivy (*Toxicodendron radicans*) and summer grape.

According to the Wetland Delineation Report prepared by EDI, the additional species found in the emergent marsh community include: redosier dogwood (*Cornus sericea*), calico aster (*Symphyotrichum lateriflorum*), white panicle aster (*S. lanceolatum*), purple loosestrife (*Lythrun salicaria*), and sedges (*Carex spp*.). Shrub-swamp communities also included silver maple (*Acer saccharinum*), broom sedge (*Carex scoparia*), soft rush (*Juncus effusus*), wollgrass (*Scirpus cyperinus*), fox sedge (C. vulpinoidea), green bulrush (*Scirpus atrovirens*) and boneset (*Eupatorium perfoliatum*) and the additional species found in the hardwood swamp community include fowl mannagrass (*Glyceria striata*) and sweet woodreed (*Cinna arundinacea*).

In terms of unique specimen trees or vegetated areas, EDI performed a field investigation of the entire Project Site and evaluated the individual vegetative communities throughout. The complete listing of all tree specimens located on the Project Site is contained within the Site Vegetation & Wildlife Investigation Report. The in-depth investigation conducted by EDI concluded that the Project Site currently does not contain any trees that would be characterized as unique due to size or species.[15] While large northern red oak are present within the successional northern hardwood communities of the Project Site, none of these trees on the Project Site is larger than average growth according to EDIôs analysis.

[15] See Appendix Volume IV, Letter Q, ñSite Vegetation & Wildlife Investigation Reportò- page 11.

4.3.3 Invasive Vegetative Species:

During EDIôs comprehensive evaluation of the on-site vegetative communities, many invasive plant species were identified. The relevant section of EDIôs Habitat Report based on its evaluation of invasive vegetative species stated as follows:

> ñDuring the investigation, many invasive plant species were identified. Species specifically noted and mapped were purple loosestrife, narrowleaf cattail, common buckthorn and glossy buckthorn. Species identified in lesser amounts that are not considered noxious, but are introduced, included reed canary grass, Tatarian honeysuckle, chicory, Canada thistle and spotted knapweed.
>
> All of the successional northern hardwood and successional shrubland communities identified had scattered occurrences of glossy and common buckthorn. Glossy buckthorn is more common in the wetter areas with denser canopy cover, such as the forest sections. Common buckthorn is more common in the shrubland community. Treating and removing both species of buckthorn is straight forward. During the winter months (when the plant is dormant), a combination of cutting the stem and herbicide application with stump oil is very effective. A follow up foliar (leaf) treatment is recommended for the 2 growing seasons following the initial treatment. Tatarian honeysuckle can be treated the same way as buckthorn species. Typically, these areas do not need to be replanted with native plants because there is already a canopy cover of desired species.
>
> Purple loosestrife and narrowleaf cattail were identified in all shallow emergent marsh communities. The open water communities are surrounded by dense populations of narrowleaf cattail, with scattered purple loosestrife. It is likely that the hybrid cattail (*Typha x glauca*) is present on site due to scattered populations of the native broadleaf cattail. Removal of purple loosestrife and narrowleaf cattail is much less successful than buckthorn species. EDI recommends that invasive species be mowed during construction to prevent seed heads from maturing and potentially spreading fresh seed on areas of exposed soil. The newly developed areas will be seeded at the completion of final grading, which will help in preventing invasive species from growing. EDI also recommends that topsoil with invasive species present not be used during any aspect of development. Topsoil with invasive species should be removed from the site and clean topsoil should be used in its place. Aquatic plugs (sedges, arrowhead, iris, etc.) can be used to revegetate the new topsoil. With established populations, the roots are nearly impossible to completely remove. Planting native trees that will eventually outgrow and choke out the purple loosestrife and narrowleaf cattail is another option, but the timeframe is not desirable. Any work such as this in a jurisdictional wetland requires a permit from the U.S. Army Corps of Engineers.

Invasive plant species found in successional old field and shrubland communities included reed canary grass, Tatarian honeysuckle, chicory, Canada thistle and spotted knapweed. These species can be managed with a mowing schedule. Brush-hogging the areas will prevent seeding from occurring, and native species can become more dominant. Tatarian honeysuckle can be treated with similar methods as buckthorn; a winter cutting and spraying schedule will prevent new sprouts in the spring. The remaining herbaceous species can be mown as previously suggested, or native shrub species can be planted to eventually out-compete the herbaceous species.ò

4.3.4 Wildlife and Fisheries:

Based on the existing habitat types present on the Project Site, a variety of wildlife species commonly found in suburban environments could inhabit or use portions of the Project Site and the nearby surrounding vicinity. These include mammals such as white-tailed deer, red fox, gray fox, raccoon, skunk, opossum, red and gray squirrel, chipmunk and woodchuck. In addition, smaller mammals, such as deer mice, voles, moles and shrews are likely to be present.

Birds likely to use portions of the Project Site may include: robin, blue jay, bluebird, gold finch, song sparrow, house sparrow, house finch, downy woodpecker, hairy woodpecker, red-bellied woodpecker, phoebe, red-eyed vireo, warbling vireo, starling, chickadee, tufted titmouse, junco and perhaps wood warblers. Canada goose, mallard and wood duck may be found along Ellicott Creek and raptors (e.g., red-tailed hawk and horned or barred owl) may be found in the hardwood forest habitat.

Herptiles could occur in both upland and wetland habitats. Herptile species may include: garter snakes, ribbon snakes, northern water snakes, painted and snapping turtles, bull frog, green frog, leopard frog, and perhaps some salamanders such as red efts and spotted salamanders.

In an effort to completely evaluate the areas where mammals tend to establish habitats on the Project Site and also explore for the presence of any threatened or endangered species, EDI

included within its Site Vegetation and Wildlife Investigation Report an analysis of the mammals present, nesting areas and signs (tracks, scat, etc.). During its site investigation, twelve (12) species of mammals, reptiles and amphibians were identified by EDI. Those species included eastern gray squirrel (*Sciurus carolinensis*), eastern chipmunk (*Tamias striatus*), striped skunk (*Mephitis mephitis*), raccoon (Procyon lator), Virginia opossum (Didelphis virginiana), white-tailed deer (*Odocoileus virginianus*), eastern garter snake (*Thamnophis sirtalis*), eastern painted turtle (*Chrysemys picta*), American bullfrog (*Lithobates catesbeianus*), green frog (*Rana clamitans*), northern leopard frog (*Lithobates pipiens*) and American toad (*Anaxyrus americanus*).[16]

In terms of general nesting and settling areas, mammals were observed only within the successional northern hardwood and hardwood swamp communities, although they likely use the entire golf course when the site is not being actively utilized. The reptile and amphibian species were observed only within the open water and emergent marsh habitats. In general, the identified bird species were found present in the majority of vegetative communities throughout the Project Site. Ellicott Creek supports a number of fish species, and it is likely that the open water non-jurisdictional wetlands on the private golf course also support warm water fish species. The biological assessment of Ellicott Creek conducted by NYSDEC in 2001 sampled fish populations just downstream of the Sheridan Drive crossing in the immediate vicinity of the Project Site. Species recorded include: striped and spotfin shiner, central stoneroller, white and northern hog sucker, rock bass, smallmouth and largemouth bass and rainbow darter.[17]

[16] See Appendix Volume IV, Letter Q, ñSite Vegetation & Wildlife Investigation Reportò- page 12.
[17] NYSDEC ï Ellicott Creek Biological Stream Assessment ï 2001 Survey.

4.3.5 Listed Species and Critical Environmental Areas:

Based on a review of the New York Natural Heritage Program database, no fish or wildlife species listed by the NYSDEC or the U.S. Fish and Wildlife Service as threatened, endangered, or special concern are known to occur in the immediate vicinity of the Project Site.[18] Further, there are no state or locally designated Critical Environmental Areas in the Town.

The nearest significant natural area is the 270-acre Great Baehre Swamp Wildlife Management Area (ñWMAò), which straddles Hopkins Road (County Route 87) located adjacent to the Town park named by the Town Board in recognition of Army Staff Sgt. William R. ñBillyò Wilson III. This WMA is managed by the NYSDEC for day use recreational activities (e.g., biking, hiking and wildlife observation). This area is located approximately 2.4 miles northeast of the Project Site.

[18] New York Natural Heritage Program Database.

4.4 LAND USE AND ZONING:

The 170-acre Project Site is located within the central portion of the Town in a well-established suburban area characterized by diverse land uses. The use of land in the Town is governed by the Town of Amherst Zoning Ordinance (ñZoning Codeò)[19] as well as the Bicentennial Comprehensive Plan (ñComprehensive Planò), adopted on January 2, 2007, as most recently amended on February 28, 2011.[20]

The adopted Comprehensive Plan provides a long-range vision and framework for community planning as the Town prepares to celebrate its bicentennial in 2018. The Comprehensive Plan provides detailed information regarding the Townôs land uses, zoning, future land use plans, and other key planning elements, such as natural and cultural resources, economic development, transportation, infrastructure, housing and neighborhoods and community facilities. The following subsections briefly describe the general land use patterns in the region and in the Town as well as the existing land use patterns and zoning on and in the immediate vicinity of the Project Site. The subsections also include an assessment of the Towns future land use objectives, as detailed in the adopted Comprehensive Plan.

[19] See Town of Amherst Zoning Code: http://www.ccode360.com/15500238.
[20] See Appendix Volume II, Letter J, ñTown of Amherst Bicentennial Comprehensive Planò.

4.4.1 Town Land Use - Existing and Future Patterns:

Existing Land Uses:

The Town is located in the northern portion of Erie County, abutting Niagara County. The Town, which is situated northeast of the City of Buffalo and southwest of the City of Niagara Falls, is bordered by the Erie County towns of Clarence and Lancaster on the east; the Town of Cheektowaga on the south; the City of Buffalo on the southwest; the Town of Tonawanda and City of North Tonawanda on the west; and the Niagara County towns of Wheatfield and Pendleton on the north. Tonawanda Creek forms the boundary between the Town and the adjacent towns to the north in Niagara County.

Overall land use patterns in Erie and Niagara counties reflect the regionôs historical development, which traditionally concentrated along Lake Erie, within and near the cities of Buffalo and Niagara Falls. The regionôs most intensive commercial and industrial uses, as well as highest residential densities, remain focused in these cities.

The size of the Town of Amherst is approximately 54 square miles (including the areas of Eggertsville, Snyder, and the incorporated Village of Williamsville) and the land uses in Town as a whole are varied, reflecting the Townôs diversity. The Town developed as a suburb of Buffalo and, until the last quarter of the 20th century, the Town was primarily a residential community with significant areas of undeveloped land. However, over the past 40 years, the Townôs development and land use patterns have changed substantially, particularly as undeveloped and properties formerly utilized for agriculture have been converted to other purposes. As a result, although residential uses continue to be the predominant land use category in the Town, the community has evolved into a regional center with significant land devoted to businesses and higher educational

institutions.

Predominant land uses in the Town include the UB North Campus, which occupies 1,200 acres in the central western portion of the Town, along with the Audubon New Community that was created on approximately 2,400 acres adjacent to the UB North campus to accommodate growth resulting from the campus. Primary commercial and retail areas are located along major regional transportation routes, including Niagara Falls Boulevard and Transit Road (which form the Townôs western and eastern borders), Sheridan Drive, and, to a lesser degree, Maple Road and Main Street.

Historically, commercial and residential development first occurred in the southern portion of the Town, in Eggertsville, Snyder and the Village of Williamsville. As a result, these areas are characterized by traditional, mature, neighborhoods with associated small-scale commercial / retail centers. Over the past thirty to forty years, development has shifted to the Townôs central, eastern and northern areas. For example, central Amherst, which includes the Project Site, as well as UB North Campus and the Audubon Community, is characterized by newer residential subdivisions and commercial / retail centers that vary from neighborhood to regional in scale. The northern portion of the Town is comparatively less developed and large areas of the northern portion of the Town do not have necessary infrastructure to support development requiring sanitary sewer service. Open space and recreational areas, consisting of public, semi-public, and private uses are found throughout the Town. Figure 1-2 of Section 1 of this DGEIS illustrates the Townôs primary land uses, as presented in the Comprehensive Plan.

According to the Comprehensive Plan, in 2000, residential uses comprised 36.4% (12,492 acres) of the Townôs land area, commercial/industrial/office uses accounted for approximately

7.4% (2,520 acres), and vacant land occupied 18.9% (6,484 acres). Other categories of land uses in the Town include recreation/open space (3,678 acres, or 10.8% of the Townôs area); roads/utilities/water (4,843 acres, or 14.1%) and public/semi-public land (2,578 acres, or 7.5%).[21]

The Buffalo-Niagara International Airport is partially located along the Townôs southern border. The primary highways in the Town consist of: Niagara Falls Boulevard, Transit Road (both are north/south highways), Main Street, Sheridan Drive, Maple Road (both are east/west highways); and Millersport Highway, which is oriented in a northeast/southwest direction. Expressways include the Youngmann Expressway (Interstate 290), which traverses the Town in a northwest/southeast direction with entrances and exits at Niagara Falls Boulevard, Millersport Highway, Sheridan Drive and Main Street, the Lockport Expressway (Interstate 990) and the New York State Thruway (Interstate 90).

In January 2007, the Town Board officially adopted the Comprehensive Plan and all land use decisions must be reviewed for consistency with the Comprehensive Plan. A review of the land use decisions in the Town between 2008 and 2011 (latest data published in 2012) provides insight into the primary current land use trends in the Town. For example:

- Approximately 1/3 of all approved residential units were for senior housing.
- There is a potential demand for higher density residential uses (dormitories, senior housing) near the UB North Campus.
- Most commercial rezoning represented redevelopment or infill projects, with the majority of commercial rezonings occurring along major arterial roads. This redevelopment trend is expected to continue as undeveloped land in the Town becomes scarce.

[21] See Appendix Volume II, Letter J, ñTown of Amherst Bicentennial Comprehensive Plan,ò page 3-1.

Future Land Use:

The Comprehensive Plan predicts that, in the future, land use patterns in the Town will continue to change as a result of new development at the rural fringe, infill development and the redevelopment/revitalization of older parts of the Town. The Comprehensive Plan anticipates that commercial/industrial/office development will continue, accounting for approximately 10.5% (3,592 acres) of the Townôs land area. Based on projections of future demand for space in the Town, the Comprehensive Plan estimates that more than 4,827,500 square feet of commercial development will take place between the years 2000 and 2015. Residential development also is expected to expand, eventually comprising an estimated 50.7% (17,628 acres) of the Town. Table 4-1 below summarizes the Townôs projected land use distribution:

Table 4-1

Projected Land Uses: Town of Amherst

Category	Acreage	Percentage of Total Acreage
Agriculture	1,786	5.2%
Commercial – Retail	1,431	4.2%
Commercial – Office	910	2.7%
Industrial – Office	1,251	3.6%
Rural Residential	1,735	5.1%
Single-Family Residential	14,005	40.1%
Mixed Residential	1,209	3.5%
Medium Residential	679	2.0%
Mixed Use	1,266	3.7%
Recreation & Open Space	7,320	21.3%
Community Facilities	662	2.0%
Educational Campus	1,291	3.8%
Transportation	791	2.3%

Source: *Comprehensive Plan, Amended 2011.*

4.4.2 Existing Land Use - Project Site:

The proposed Westwood Neighborhood, an integrated mixed use neighborhood, is proposed for an approximately 170 acre site located at 772 North Forest Road, as well as two parcels with frontage on Maple Road at 385 and 391 Maple Road (totaling 0.56 acre). The Project Site is located in the central-western portion of the Town (refer to Figure 1-1 contained in Section 1 of this DGEIS), and is bordered to the south by Sheridan Drive; to the north by Maple Road and single-family residences that front on Maple Road; to the east by the Town-owned Audubon Par 3 Golf Course, Ellicott Creek, residential areas, and North Forest Road; and to the west by single-family residential areas along Fairways Boulevard and Frankhauser Road.

Land uses in the vicinity of the Project Site include existing residential subdivisions as well as community facilities such as the Audubon Par 3 and 18-hole golf courses, the Northtown Recreation Center and various commercial and retail uses concentrated primarily to the west of the Project Site along Sheridan Drive and Maple Road, near Interstate 290 and Millersport Highway. The privately-owned Park Country Club (golf course) is located southwest of the Project Site, along Ellicott Creek on the south side of Sheridan Drive.

The Project Site is currently vacant with no commercial or residential occupancy. Golf course operations ceased on December 31, 2014 due to the discovery of arsenic levels within the soils at the Project Site that will require remediation through the New York State Department of Environmental Conservation Brownfield Cleanup Program (for a further discussion of this process please refer to Section 6.1 of this DGEIS).

4.4.3 Zoning:

Figure 4-5, Town of Amherst Zoning Map, located at the end of this Section, illustrates generalized existing zoning in the Town. The Project Site was rezoned by the Town Board on July 7, 2014 from Community Facilities District (ñCFò) to Recreational Conservation District (ñRCò). Single-family residential zoning characterizes the neighborhoods to the east, west, and south of the Project Site. The New Community District (encompassing the UB North Campus and Audubon areas) is located in close proximity to the Project Site and extends to the north of the Audubon Golf Course. Commercially zoned areas are found near the Project Site along the north side of Maple Road opposite the Project Site and on the south side Sheridan Drive to the west of the Project Site near the I-290.

According to Section 5-9-1 of the Zoning Code, the purpose of the RC zoning classification is:

> ñTo provide a special zoning classification primarily for public, private and civic uses related to recreation and conservation.ò

The RC zoning classification allows the categories of land uses identified in Table 4-2 on the following page:

Table 4-2

Land Uses Permitted in the Recreation Conservation District Zoning District

RC	Permitted	Special Use
OPEN USES		
No open uses allowed		
RESIDENTIAL USES		
No residential uses allowed		
PUBLIC AND CIVIC USES		
Day-care center [Added 7-7-2014 by L.L. No. 22-2014]	✓	
Indoor recreation facilities		
Outdoor recreation facilities	✓	
Outdoor ice-skating facility	✓	
Outdoor tennis, racquetball or handball facility	✓	
Park or open space	✓	
Place of worship	✓	
Public or private golf course and country club [Added 7-7-2014 by L.L. No. 22-2014]	✓	
Public utility service structure or facility		✓
Swimming facility	✓	
Telecommunication facility		✓
Wildlife reservation or conservation area	✓	
COMMERCIAL		
No commercial uses allowed		
INDUSTRIAL		
No industrial uses allowed		

Since the preparation of the Townôs Comprehensive Plan began in 2000, the Town has adopted amendments to the Zoning Code to encourage infill redevelopment of older portions of the Town, to encourage mixed use projects, and to provide increased flexibility when planning the scale and massing of projects. As a result, mixed-use zoning districts and standards have been created in furtherance of the planning objectives in the Comprehensive Plan. For example, in 2010, the Town Board amended the Zoning Code to allow upper-story residential units in the General Business District (ñGBò). Similarly, the Traditional Neighborhood Development District (ñTNDò) was created in 2006 to encourage redevelopment and mixed use projects. According to Section 5-6-1 of the Zoning Code, the purpose of the TND zoning district, which is a Special Purpose and Overlay District, is to:

> ñProvide for new, greenfield development of full integrated, mixed-use, pedestrian-oriented neighborhoods that encourage walkability and minimize traffic congestion, sprawl, infrastructure costs and environmental degradation based on the following principles:
>
> A. Traditional neighborhood business districts have identifiable centers and edges that area consistent in scale and context with the surrounding neighborhood;
>
> B. Uses and housing types are mixed or in close proximity to one another;
>
> C. Density is highest in the center of the district and decreases with density from the center;
>
> D. Serve as a foci of community activity in Amherst;
>
> E. Are designed to encourage walking, biking, and use of public transportation as alternatives to automobile trips;
>
> F. Streets are interconnected and blocks are small; and
>
> G. Civic buildings and community facilities are given prominent sites in the neighborhood.ò

The principal uses permitted in the TND zoning district are listed in Table 4-3 below:

Table 4-3

Land Uses Permitted In the Traditional Neighborhood Development Zoning District

TND	Permitted	Special Use
OPEN USES		
No open uses allowed		
RESIDENTIAL USES		
Single-family detached	✓	
Attached dwelling (up to four units)	✓	
Patio home	✓	
Upper-story dwelling	✓	
Zero lot line home	✓	
PUBLIC AND CIVIC USES		
Civic association (upper story only)	✓	
Daycare center, nursery or other private school	✓	
Fraternal organization (upper story only)	✓	
Government structure or use	✓	
Library	✓	
Museum	✓	
Park or open space	✓	
Place for public assembly	✓	
Place of worship	✓	
Telecommunication facility		✓
COMMERCIAL		
Advertising agency	✓	
Animal grooming, animal hospital or veterinarian		✓
Antiques and second-hand merchandise store	✓	
Apparel and accessories store	✓	
Apparel repair and alterations and shoe repair shop	✓	
Bank	✓	
Bakery or confectionary shop (retail)	✓	
Beauty or barber shop	✓	

TND	Permitted	Special Use
Bed and breakfast	✓	
Book and stationery store	✓	
Contracting or construction services	✓	
Drug store	✓	
Food store	✓	
Hardware store	✓	
Home furnishing store	✓	
Home garden store	✓	
Jewelry store	✓	
Job printing or photography store	✓	
Ice store	✓	
Laundromat, cleaning and dyeing outlets and pickup	✓	
Liquor store	✓	
Office	✓	
Personal training facility [Added 2-4-2008 by L.L. No. 1-2008]	✓	
Photography studio [Added 2-4-2008 by L.L. No. 1-2008]	✓	
Printing and photocopying store	✓	
Radio or television station [Added 4-12-2010 by L.L. No. 2-2010]	✓	
Recording studio [Added 4-12-2010 by L.L. No. 2-2010]	✓	
Restaurant with outdoor dining	✓	
Restaurant without drive-through	✓	
Service station		✓
Sporting goods or bicycle store	✓	
INDUSTRIAL		
No industrial uses allowed		

The Townôs residential zoning districts allow a diverse range of options for residential development. The Multifamily Residential District Seven (ñMFR-7ò), which is proposed for the senior facility component of the mixed use neighborhood, allows high density senior development including adult care facilities, senior citizen housing, nursing homes, intermediate care facilities and single-family detached dwellings not on individual lots.[22] Similarly, the General Business District (ñGBò), which is proposed for only 1.4 acres of the Project Site to accommodate the proposed four-story hotel, is intended to provide ñcommunity centers within existing and proposed commercial nodes and mixed use activity centers for the location of commercial uses which serve a larger market area than a neighborhood centeré .and provide for community-wide needs for general goods and services and comparison shopping. Such uses require larger land areas, generate large volumes of traffic and may generate large amounts of evening activity.ò[23]

[22] See Section 3-13-2 of the Zoning Code.
[23] See Section 4-4-1 of the Zoning Code.

4.5 RECREATIONAL AND VISUAL RESOURCES:

4.5.1 Town-Wide Recreational Resources:

The Town has a well-established network of public and quasi-public recreational facilities, including indoor recreational areas, parks, and open space, as well as paved pedestrian trails and bicycle paths. In total, the Town has approximately 3,597 acres designated for public recreational purposes. Privately-owned golf courses (including the WCC, Country Club of Buffalo, Transit Valley Country Club and Park Country Club Golf Course) encompass an additional 965 acres.

The Town operates three public golf courses, totaling 301 acres as follows: Audubon Golf Course (500 Maple Road), Audubon Par 3 (475 Maple Road) and Oakwood Nine Hole Golf Course (3575 Tonawanda Creek Road). The Audubon Par 3 course abuts the Project Site to the northeast and the Audubon Golf Course is located directly north of the Project Site on the opposite side of Maple Road.

Primary indoor recreational areas (which also include outdoor facilities) are the Amherst Recreation Center [including Northtown Recreational Center (21.9 acres)], Clearfield Recreation Center (19.5 acres), Harlem Road Community Center (4.6 acres), North Amherst Recreation Center (93 acres) and the Amherst Center for Senior Services (59,000 square feet). Of these, the Amherst Recreation Center is the closest to the Project Site, and is located approximately 2 miles to the northwest.

The Townôs various public and quasi-public parks, open space, and conservation areas encompass a total of approximately 2,835 acres. Of this, approximately 1,156 acres are

identified as ñdevelopedò parkland, including the Great Baehre Conservation Area (totaling 410 acres), which is located approximately 2 miles northeast of the Project Site. The remaining parkland is classified as ñundevelopedò and includes the 1,306-acre Nature View Park, located in the northern portion of the Town, as well as Amherst State Park, located approximately 1.6 miles southeast of the Project Site. In addition, the Town has a network of paved pedestrian and bicycle paths including a trailhead with a public parking area located in close proximity to the Project Site on North Forest Road a short distance north of the intersection of Maple Road and North Forest Road.

The Townôs 2004 *Recreation and Parks Master Plan* proposed a classification of neighborhood, community, and passive parkland and recommended that the Town maintain an overall standard of 4.25 acres of publicly accessible neighborhood and community parkland per 1,000 population.[24] At the time of the preparation of the Recreation and Parks Master Plan, the existing supply of parkland averaged 3.98 acres per 1,000 population. The ñpassive parksò category was not correlated to population. The Recreation and Parks Master Plan recommended the development of various additional neighborhood and community facilities, including soccer fields, softball diamonds, basketball courts, tennis courts, and nine additional public golf holes (at Oakwood Golf Course). Within the Recreation and Parks Master Plan, the Project Site was identified as being located in a portion of the Town where such neighborhood or community parkland was sufficient for the population.[25]

[24] See Comprehensive Plan: http://www.amherst.ny.us/pdf/planning/complan/entirepdf.
[25] Refer to the Master Plan, Map 7-2.

4.5.2 Site-Specific Resources:

The Project Site has historically been used exclusively for private recreational purposes. The use of the Project Site as a members-only private golf club dates to 1929 and the Project Site was operated continuously as the Westwood County Club from 1946 until December 31, 2014. The WCC provided open space, in the form of the private golf course and the riparian areas along Ellicott Creek, but none of the private open space was accessible to the public.

The Project Site is characterized by minimal topographic relief; does not offer any unique views or vistas; and, does not encompass any designated aesthetic resources. Because both the Project Site and surrounding areas are relatively flat, there are no elevated vantage points to or from the Project Site, and views are generally limited by a combination of existing vegetation and existing development in the vicinity of the Project Site.

4.6 SOCIOECONOMICS:

The Town of Amherst is one the largest suburbs in Erie Countyôand one of Western New Yorkôs primary employment centers. The Town boasts an increasing population, as well as a diverse economic base, supported by a strong white-collar labor market and key employers such as SUNY-UB and Ingram Micro.

4.6.1 Population and Housing:

The Buffalo-Niagara Falls Metropolitan Statistical Area (ñMSAò), which encompasses both Erie and Niagara counties, reported a 2010 population of 1,135,509. Approximately 80% of the MSA population resides in Erie County, which includes the City of Buffalo and the Town of Amherst. The population in both counties has reduced for the past four decades, including a 3% decrease between 2000 and 2010.

Erie Countyôs 2010 population of 919,040 represents a continuing decline from the 2000 population of 950,265 and the 1990 population level of 968,584. The Countyôs overall population decline can be attributed primarily to the downward trend in the City of Buffaloôs population, which decreased from 328,123 in 1990 to 259,384 in 2010. In the near future, the populations of both Buffalo and Niagara Falls are expected to continue to decline; however, this reflects an expected migration from these urban centers to the surrounding suburban areas. As a result, the 2018 population of Erie County is projected to increase slightly to 937,308.[26]

In contrast, over the past thirty years, the Townôs population has continued to grow. According to the 2010 Census, the Town of Amherst reported a population of 122,366, an increase

[26] Erie County Industrial Development Agency 2014.

of approximately 5% over the 2000 population of 116,510 and 9.5% over the population of 111,711 that was reported for the Town in the 1990 Census.[27] The 2012 Statistical Abstract as per the United State Census Bureau estimates the Townôs population at 123,252. The Townôs population accounts for approximately 13.4% of the total population of Erie County.

In the future, the Townôs population is expected to continue to grow and is projected to increase by an estimated 9% to 19% (127,264 to 138,839) by 2020. A majority of this growth is anticipated to occur in the northeast portion of the Town and the student population associated with the UB North Campus is also expected to increase in connection with the continued implementation of UB 2020 Plan. A byproduct of this growth is projected to include the need for new or expanded facilities and services to serve the population in the central and northern parts of the Town.[28]

In 2013, there were approximately 420,000 housing units in Erie County, an increase of approximately 4,100 housing units since 2000. Approximately 64% of these housing units consist of owner-occupied dwellings. Through 2018, the housing stock in Erie County is projected to continue to increase to 430,995 units, including approximately 6,000 additional owner-occupied units. Median household income in Erie County (2008-2012) was approximately $49,977 and the average number of persons per household (2008-2012) was 2.34.[29]

The 2010 Census reported that the Town of Amherst had 51,094 total housing units, an increase of 9% over the 46,803 units recorded in the 2000 Census. Of these housing units, 48,568 (95.1%) were occupied, while 2,526 (4.9%) were vacant. Approximately 72% of the Townôs

[27] U.S. Census Bureau.
[28] Town of Amherst Bicentennial Comprehensive Plan.
[29] U.S. Census Bureau; ECIDA 2014.

occupied housing units were owner-occupied, while 28% were rented. The average household size of owner-occupied and renter-occupied units was 2.49 and 1.95, respectively.[30]

Median household income in the Town is approximately $68,018 and median family income is $91,264 (in 2012 dollars). The median per capita income is $35,641.

4.6.2 Economy and Employment:

The Buffalo-Niagara Falls Metropolitan Statistical Area (ñMSAò) currently has a total civilian labor force of approximately 566,000. Within this MSA, annual job rate growth is typically lower than the national average. For example, between 1990 and 2010, employment in the MSA grew by only 1.3% (representing approximately 8,245 new jobs), compared to a national job growth rate of 22.2% during the same 20 year period. Since 1990, the labor force in the MSA has fluctuated between approximately 600,100 and 565,000. The unemployment rates in the MSA and in Erie County are approximately 7.4% and 6.4%, respectively.[31]

Over the past forty years, the regional economic focus has shifted significantly, with employment in the manufacturing sector declining from 30% in 1970 to 8% in 2010. Correspondingly, employment in MSA in the services sector grew from 16% in 1970 to 44% in 2010. Health and education also account for an increasingly larger share of regional economic activity. In addition, trade with Canada continues to be an important part of the regional economy.

During the economic downturn that began in 2008, the MSA had job losses comparable to New York State as a whole (3.8%), but these were substantially less than the 6% national decrease. The regionôs housing market also did not suffer during the recession, with home prices in the

[30] U.S. Census Bureau 2012.
[31] Federal Reserve Economic Data, ECIDA 2013.

Buffalo metropolitan area continuing to appreciate slowly but steadily. Since 2010, private-sector employment in the MSA has increased modestly, with growth occurring principally in education, health services, and construction.[32]

In the future, the regional economy is expected to continue to concentrate around key growth sectors, including the health and life sciences, advanced manufacturing (e.g., renewable energy, medical devices, pharmaceuticals), and tourism (e.g., related to Niagara Falls, college and professional sporting events).

In contrast to the overall MSA, the Townôs economy has grown considerably over the past forty years and remains strong, accounting for an estimated 80% of the net, new jobs created within the region.[33] As reported in the 2010 Census, the Townôs civilian labor force totaled 63,681, with an unemployment rate of 5.5%. Further, the number of permanent at-place jobs in the Town expanded, over the past 20 years, from 38,800 to 75,600.[34]

The principal employment sectors for the Townôs work force are educational services, health care and social assistance, professional services, retail trade, finance and insurance, real estate, and arts, entertainment and recreation. The Town has more than 24 office and technology parks, offering a variety of corporate spaces. Further, the Town is home to the 1,200-acre UB North Campus, which has an enrollment of 30,000 students. UB is a major contributor to the Town and regional economies, providing employment, research opportunities, and cultural amenities. In addition, the Amherst Industrial Development Agency (ñAIDAò) promotes economic development via the economic development services and programs it offers. Projections for the

[32] Federal Reserve Bank of New York 2014.
[33] Amherst Industrial Development Agency, 2014, Amherst Facts, www.amherstida.com, Amherst, NY.
[34] Town of Amherst Bicentennial Comprehensive Plan, 2011.

Townôs future economic growth indicate that approximately 6.9 million square feet of non-residential (commercial, retail, office, industrial) space could be added by 2020, with an associated in-place work force of 103,844 (a 37% increase) by 2020.[35]

Considering the retail and commercial development spaces associated with the proposed mixed use neighborhood, the Project Sponsor utilized the services of MJB Consulting (ñMJBò), an award winning national retail real estate consulting firm, to evaluate existing market conditions surrounding the Project Site and provide an opinion regarding the capacity of the local market to absorb the retail/neighborhood business space within the proposed mixed use neighborhood (refer to Appendix Volume IV, Letter Y, ñRetail Market Study & Tenanting Strategy Reportò).

The scope of work for the report included a review of available data on the structure and trajectory of the regional economy and an analysis of demographic and sales-leakage data for the specific primary trade area of the Project Site as well as the general Buffalo-Niagara Metropolitan Statistical Area (MSA). MJB found that as of 2015, within the Project Site primary trade area, there are an estimated 103,111 residents- a number that has been growing since 2000 and is expected to continue increasing until at least 2020. A relatively high percentage possesses a B.A. degree or more (53%) and works in a creative class job (also 53%). Not surprisingly, both median household income (roughly $79,000) and median home value (approximately $215,000) are well above metro-wide averages.[36]

4.6.3 Municipal Revenues (Taxes):

[35] Town of Amherst Bicentennial Comprehensive Plan, 2011

[36] Based on figures from Nielsen-Claritas and analyzed by MJB Consulting. See Appendix Volume IV, Letter Y, ñRetail Market Study & Tenanting Strategy Reportò, Page 5.

The Project Site is subject to Erie County, Town of Amherst and Williamsville Central School District property taxes. The Townôs property tax is based on a 100% equalization rate. The current rates for the primary county and town real property tax are listed in Table 4-4 below:

Table 4-4

Real Property Tax Rates: Erie County and Town of Amherst

Taxing Jurisdiction	Tax Rate
Erie County	
• County Service Rate	4.733953
• Library Rate	0.466967
Total County	**5.200920**
Town of Amherst	
• General Town Rate	3.090743
• Highway Tax Rate	1.129590
Total Town	**4.220333**
Other	
• Williamsville Central School District	**18.855180**
• Snyder Fire Department	**1.026120**

Source: *Erie County Real Property Tax Services, 2014; Town of Amherst 2014.*

In addition, the Town imposes real property taxes for water, sewer, and central alarm services. In 2014, the overall property tax revenues resulting from the Project Site including Town, County and School District taxes amounted to $84,723**.**

Erie County and New York State impose a combined 8.75% sales tax on the price of goods and services. Of this 8.75%, 4% accrues to New York State, 1.75% is dedicated to Erie County, and 3.8% is allocated to cities, towns, villages and school districts in Erie County.

4.6.4 Cost of Community Services:

To properly evaluate the existing scope and cost of community services, the Project Sponsor retained the services of the Center for Governmental Research, Inc. (ñCGRò) to analyze the total operating budget of the Town of Amherst and Erie County and then determine the allocation of the cost of services on a per capita and per housing unit basis.[37] This methodology included an analysis of those costs that would be considered fixed or variable dependent on population and household growth as well as commercial development. Table 4-5 below provides a summary of the current cost of community services as derived from Townôs 2013 Adopted Budget as well as the total community services cost as derived from Erie Countyôs 2013 Budget

Table 4-5

Cost of Community Services: Town of Amherst and Erie County

Marginal Operational Budget Fund	Cost per New Person (per capita)	Cost per New Housing Unit	Cost per Commercial SF
Town of Amherst			
Townwide General (A Fund)	$23.79	$130.51	$0.09
Part Town (B Fund)	$0.01	$12.97	$0.02
Community Fund (C Fund)	$0.06	$15.26	$0.03
Highway Fund (D Fund)	$0.00	$43.80	$0.04
Lighting Fund (E Fund)	$0.00	$0.00	$0.00
Fire Fund (F Fund)	$0.00	$0.00	$0.00
Sewer Fund (G Fund)	$0.00	$0.00	$0.00
Drainage Fund (H Fund)	$0.00	$0.00	$0.00
Water Fund (I Fund)	$0.00	$0.00	$0.00
Town Total	**$23.86**	**$202.53**	**$0.18**
Erie County			
County Total	**$65.93**	**$44.80**	**$0.06**

[37] See Appendix Volume IV, Letter X, ñRevised Economic & Fiscal Impact Analysisò, Page 20.

4.7 CULTURAL AND HISTORIC RESOURCES:

In order to identify the potential for the Project Site to contain historic or archaeological resources, the Project Sponsor commissioned Heritage Preservation & Interpretation Inc. to conduct a cultural resource investigation of the Project Site (refer to Appendix Volume I, Letter E & F, ñPhase 1A & 1B Cultural Resources Investigationò). Initially, a Phase 1A investigation was conducted. This study, which was conducted in 2012, focused on research concerning the distribution of known archaeological sites within 2 miles of the Project Site and the correlation of these sites by type, cultural affiliation, and proximity to water resources.

However, because the siteôs long-established use as a private golf course, the cultural resource consultant could not definitively determine the extent to which portions of the Project Site had previously been disturbed, although it was acknowledged that virtually all of the Project Site has previously been disturbed to some extent over time as a result of the golf course grading, landscaping and related improvements.

As a result, additional studies, consisting of a Phase 1B investigation of the Project Site, were performed to assess the archaeological sensitivity of the Project Site. Taking into considering the active use of the private golf course and the fact that the planned mixed use neighborhood will not have any impacts on the riparian area near Ellicott Creek, the cultural resource consultant identified eight areas of the Project Site for field inspection and testing. In November and December 2013, a total of 100 shovel tests were excavated in seven of the eight areas; one area was eliminated from detailed testing after the analysis conducted by the consultant found a high level of past disturbance. Of the 100 shovel tests that were taken, prehistoric artifacts were found in only eight, while one test was positive for historic artifacts (domestic items).

The cultural resource investigations performed on the Project Site are described in detail in the Phase IA Cultural Resource Investigation Report and Phase IB Cultural Resource Investigation Report. These reports have been provided to New York State Office of Parks, Recreation and Historic Preservation (ñOPRHPò) for review and comment, in accordance with Section 14.09 of the New York State Parks, Recreation, and Historic Preservation Law. On June 10, 2014, the OPRHP issued a letter which concurred with the recommendation of Heritage Preservation & Interpretation Inc. for a Phase 2 Site Evaluation or avoidance of the Westwood Prehistoric 1 Site, the Westwood Historic site and the Westwood Prehistoric 3 site.[38] The OPRHP letter acknowledged that it had no further concerns with the evaluation of the Prehistoric 2 site or for any other portions of the Project Site.

In accordance with the agreement and recommendation of OPRHP, Heritage Preservation & Interpretation Inc. (ñHPIò) also completed a Phase 2 Cultural Resource Investigation Report of the Project Site dated December 2014 (refer to Appendix Volume IV, Letter T, ñPhase 2 Cultural Resources Investigation Reportò). The purpose of the Phase 2 cultural resource investigation conducted by HPI was to conduct more detailed analysis of the Prehistoric 1 and 3 Sites as recommended within OPHRPôs comment letter dated June 10, 2014 based on its review of the Phase 1A & 1B Cultural Resources Investigation prepared by HPI and to also evaluate the Westwood Historic Site, as described in more detail below.

The Prehistoric 1 Site is located along the south bank of a former channel of Ellicott Creek and its location is depicted at Figure 1 of HPIôs Phase 2 Cultural Resources Investigation Report. The Phase I shovel tests of this area conducted by HPI had recovered twenty-seven pieces of chert

[38] See Appendix Volume I, Letter G, ñCultural Resources Investigation Comment Letterò

debitage. The initial Phase 2 testing conducted by HPI consisted of the excavation of additional shovel tests. The Phase 2 shovel tests were intended to provide information on the site's extent, to identify differences in artifact frequency/ density, and to determine the level of previous disturbance at this location. HPI conducted thirty eight shovel tests of the Prehistoric 1 Site and its immediate vicinity during the Phase 2 testing and the location of the Phase 2 shovel testing is depicted at Figure 2 of the Phase 2 Cultural Resources Investigation Report.

According to HPI, the Phase 2 shovel tests showed a wide disparity in artifact density existed across the Prehistoric 1 Site. The more intensive testing of this area conducted by HPI revealed the area was much more disturbed than HPI had been previously noted during its Phase 1 investigation. In addition to the thirty eight shovel tests, two 1m x 1m test excavation units were also excavated by HPI to obtain a larger sample of artifacts and to continue in the attempt to identify subsurface features and/ or diagnostic artifacts that could provide information about site function and date(s) of occupation. Test units were placed by HPI near shovel tests where very high artifact frequencies had been recorded. Soils removed from excavation units were sifted through 1/4-inch mesh hardware cloth screens. Based on the analysis of the intensive testing, HPI concluded that none of the shovel tests or test excavation units produced artifacts diagnostic of a specific archaeologically defined culture. HPI determined that all of the pre-contact artifacts recovered from the Prehistoric 1 Site could be attributed to the manufacture and/or maintenance of stone tools and that almost the entire artifact assemblage consisted of chert debitage- flakes and core fragments or shatter.[39] The only non-chert artifact recovered by HPI was a rough stone piece

[39] Table 1 and 2 of the Phase II Cultural Resource Investigation Report consists of an inventory of the results of the intensive Phase 2 testing of the Prehistoric 1 Site conducted by HPI.

identified as a bi-pitted hammers stone. HPI indicated that the distribution of artifacts at the Prehistoric 1 Site suggests the construction of the golf course impacted the original site area.

Based on its comprehensive Phase II testing of the Prehistoric 1 Site, HPI concluded this site is not considered eligible for inclusion on the National or State Registers of Historic Places and HPI has recommended no further testing at this site.

The location of the Prehistoric 3 Site is depicted at Figure 1 of HPIôs Phase 2 Cultural Resources Investigation Report. The Phase I shovel tests of this area conducted by HPI had recovered seven chert flakes and a single piece of chert shatter. Four supplemental shovel tests were excavated in the immediate vicinity of the initial shovel test locations and two of the supplemental tests were positive for additional prehistoric artifacts consisting of 15 chert flakes in the test done to the west and a single chert flake/shatter to the south. Based on the occurrence of multiple items in several tests, which HPI indicated is not that common a situation when conducting Phase 1 testing, HPI concluded that this area should be evaluated more thoroughly. As part of its Phase 2 testing, HPI conducted shovel tests and then excavated on a 5 meter grid in an attempt to determine site limits, the density of artifacts across the site, and to attempt to expose any subsurface features that might be present. After conducting eleven shovel tests, HPI determined that additional work at the Prehistoric 3 Site was not warranted.[40] Based on its comprehensive Phase II testing of the Prehistoric 3 Site, HPI concluded this site is not considered eligible for inclusion on the National or State Registers of Historic Places.

[40] Table 3 of the Phase II Cultural Resource Investigation Report consists of an inventory of the results of the intensive Phase1 and 2 testing of the Prehistoric 3 Site conducted by HPI.

Within the Phase 2 Cultural Resource Investigation Report, HPI also evaluate the Westwood Historic Site, which HPI first identified by the presence of a remnant field stone foundation located immediately to the east of the tee for the 10th hole of the former golf course. The location of the Westwood Historic Site is depicted at Figure 1 of HPIôs Phase 2 Cultural Resources Investigation Report. Given the presence of the asphalt golf path at this location, HPI utilized an electronic metal detector in an effort to determine if there was a distinct limit to the scatter of historic materials surrounding the foundation of the former building located at this site. HPI conducted a series of shovel tests was excavated on a five meter grid to obtain a preliminary view of the distribution of artifacts across the site. A total of fifteen tests were excavated and these shovel tests produced a wide assortment of historic materials as well as a corner- notched chert projectile point. The shovel tests conducted by HPI indicated that historic artifacts were scattered across the area.[41]

In order to evaluate this site further, HPI located test units 1 and 2 to obtain views of part of the foundation and to determine if there was a builder's trench associated. Excavation of these tests was also aimed at obtaining a sample of artifacts which could be compared to determine if a significant difference existed between items recovered inside versus outside the foundation. HPI initially believed the foundation consisted of two separate segments: a larger rectangle on the southwest and a narrow rectangle on the northeast.

Test Unit 1 of the Westwood Historic Site was placed in an area along the foundation at the point where the apparent two segments intersected and was located at the northwest corner of

[41] Figure 5 through 13 of the Phase II Cultural Resource Investigation Report consists of a distribution of the artifacts recovered by HPI based on its intensive evaluation of the Westwood Historic Site.

the foundation's southwest segment.[42] HPIôs evaluation of Test Unit 1 at a depth of up to 16 centimeters revealed the presence of small fragments of rust, some glass (pane and bottle fragments), ceramics (redware and whiteware), nails and nail fragments (both round and square forms), refuse bone, some coal cinder, and an item identified as a probable toy brooch. At a depth of 31 centimeters, a piece of bone that had been decorated with some rough checkering was encountered. Excavation of the item by HPI revealed this to be a bone handled knife. HPI photographed and removed the knife leaving a relatively large amount of soil attached underneath in an attempt to keep the artifact intact. HPIôs Report indicates the style is similar to other utilitarian pieces noted in the l8th and 19th centuries.

Test Unit 2 of the Westwood Historic site was a 1 meter by 1 meter unit located south of Test Unit 1. Based testing at this location revealed the presence of a relatively high count of artifacts (primarily glass, iron nails, refuse bones and a coil spring).[43]

Test Unit 3 of the Westwood Historic Site was located near a presumed entryway to the former building. Stones and stone fragments, brick and brick fragments were observed by HPI and the quantity of fragments at this location was considerably greater than in other tests and excavation. Artifacts recovered included an assortment of artifacts similar to those recovered elsewhere and glass fragments, ceramics, and nails constituted the majority of items. Other artifacts types were noted and included several that were not identified elsewhere including several spoons and a piece of ceramic recovered that HPI marked "Nippon Hand Painted". HPI

[42] Photographs of Test Unit 1 are provided at Pages 34 and 35 of the Phase II Cultural Resource Investigation Report.
[43] Photographs of Test Unit 2 are provided at Pages 34 to 40 of the Phase II Cultural Resource Investigation Report.

indicated that this is an extremely useful time marker since the dates for that specific label ran from circa 1891 to 1921. Additionally, this test, unlike the others, contained several whole and fragmented bricks.[44]

Test Unit 4 of the Westwood Historic Site was evaluated by HPI to investigate a wall segment identified in the shovel test at this location. Artifacts recovered by HPI at Test Unit 4 consisted primarily of ceramics, nails and nail fragments and both pane and bottle glass. Some refuse bone was also present and whiteware fragments. Among the whiteware fragments observed by HPI were pieces of several items that had a floral design and which extended to a depth of 56 centimeters below the surface.[45]

Pages 53 to 55 of the Phase II Cultural Resource Investigation Report prepared by HPI consist of its summary and recommendations. With respect Prehistoric Sites 1 and 3, based on HPIôs comprehensive analysis, it is HPIôs professional opinion that no further archaeological investigations of these sites is warranted. For the Westwood Historic Site, HPI determined that although the site is not considered eligible for the National Register of Historic Places, additional investigation would need to be performed consisting of more detailed mapping of the foundation area as well as additional test unit excavation to determine whether or not the foundation segments represent a single complex structural unit or if multiple periods of construction are involved.

[44] Photographs of Test Unit 3 are provided at Page 42 of the Phase II Cultural Resource Investigation Report.

[45] Photographs of Test Unit 4 are provided at Pages 44 to 46 of the Phase II Cultural Resource Investigation Report.

Based upon its review of the Cultural Resource Investigation Reports prepared by HPI, OPRHP issued correspondence to the Town of Amherst Planning Department on June 16, 2015 containing its opinion that the three archaeological sites identified are not National Register eligible. Furthermore, OPRHP confirmed that they have no further archaeology concerns with respect to the Project Site and as such are not recommending any additional archaeological testing.[46]

4.7.1 Evaluation of the Westwood Club House:

A Clubhouse and Golf Course Assessment Report has been prepared for the purpose evaluating potential historic resources on the Project Site including the existing Clubhouse building. A complete copy of this Report is provided in Volume IV, Letter P, ñHistoric Site, Buildings & Structures Review Reportò of this DGEIS.

Beginning in 1997, the Town of Amherst and the Amherst Historic Preservation Commission utilized the services Bero Associates Architects to complete a Reconnaissance Level Survey of Historic Resources (ñReconnaissance Surveyò) of the buildings in the Town. Additionally, in 1998, the Town utilized the services of Bero Associates Architects to complete an *Intensive Level Survey of Historic Resources*. The intent of both surveys was to identify and evaluate historic resources within the Town so they might be considered in future town planning and preservation planning.[47] Subsequently, in August of 2011, the services of KTA Preservation

[46] See Appendix Volume IV, Letter Z2.8, ñLetter, OPRHP to Town of Amherst Planning Department dated June 16, 2015.

[47] KTA Preservation Specialist. ñTown of Amherst Updated Reconnaissance Level Survey of Historic Resourcesò. *Town of Amherst Historic Preservation Commission*. Town of Amherst, August 2011. Web. 28 July 2014. See www.amherst.ny.us/pdf/committees/additional/historic/methodology.pdf.

Specialist (ñKTAò) were utilized to develop an Updated Reconnaissance Level Survey of Historic Resources (ñUpdated Surveyò). The Updated Survey was conducted as a joint effort between KTA and UB Archaeological Survey. The persons conducting the survey and involved in the historic research were all 36 CFR qualified.[48] The resumes of the principal investigators are included in Appendix 6 of the Updated Survey.[49]

The Updated Survey re-evaluates the properties included in the Reconnaissance Survey and documents their existing condition. The property selection criteria and guidelines used in the evaluation of properties as historic resources consider both the historic context and architectural fabric of properties. The selection criteria and guidelines were based on the local criteria for the designation of landmarks under the Town of Amherstôs *Local Law Establishing Regulations for Historic Preservation*,[50] and the National Register Criteria for Evaluation, which are contained in the National Park Service Publications: *National Register Bulletin, 15 Standards and Guidelines for Evaluation; Standards and Guidelines for Identification*, and *National Register Bulletin, 24, Guidelines for Local Surveys: A Basis for Preservation Planning*.[51]

A rating system was established to provide a basis of comparison for the relative merit of properties on a Town wide and regional context. The criteria considered when evaluating a property were: architectural significance ï locally, regionally and nationally; the architectural

[48] KTA Preservation Specialist. ñTown of Amherst Updated Reconnaissance Level Survey of Historic Resourcesò. Town of Amherst Historic Preservation Commission. Town of Amherst, August 2011. Web. 28 July 2014. See www.amherst.ny.us/pdf/committees/additional/historic/methodology.pdf.

[49] A copy of the Updated Survey can be downloaded from the following web page address: www.amherst.ny.us/govt/committees/govt_committeeadditional.asp?board_code=Historic.

[50] The local law establishing regulations for Historic Preservation is located in Chapter 121 of the Code of the Town of Amherst is available online at the Town of Amherst website at www.amherst.ny.us.

[51] KTA Preservation Specialist. ñTown of Amherst Updated Reconnaissance Level Survey of Historic Resourcesò. Town of Amherst Historic Preservation Commission. Town of Amherst, August 2011. Web. 28 July 2014.

integrity; the integrity of the setting or context, and the historic significance ï locally, regionally and nationally. It should be noted that a local resource might be given a higher rating despite a loss of integrity if the resource is rare and not well represented in the Town.

Each of the properties on the Annotated Lists (Appendix 1 and 2) within the Updated Survey has been assigned one of the following color codes:

- **BLUE-** Extremely high architectural and/or historic significance. These properties would likely also meet the criteria to be considered National Register eligible. A locally significant district. A resource that is rare and lacks individual distinction. All districts are considered Blue as are most farmsteads.

- **GREEN-** Above average architectural and/or historical significance. May have some alterations that compromise the integrity such as replacement windows. Would possibly meet the criteria for to be considered National Register eligible.

  YELLOW- Moderate architectural and/or historical significance. Has been altered, but still retains sufficient historic fabric to convey historic meaning. Important local resources. Would likely not meet the criteria for to be considered National Register eligible.

Additionally, the above three color ratings are further qualified by the following designations:

+ More significant than the average property within its color category.
- Less significant than the average property within its color category.

The evaluation of the Westwood Property and Clubhouse is included within Appendix 1 of the Updated Survey.[52] The Updated Survey identifies the reason for the Clubhouse inclusion as ñearly 20th century social/recreational architecture in Tudor Revival style (social history).ò The Project Site is further identified as a ñGreenò color code property, suggesting the property contains above average architectural and/or historical significance that would possibly meet the criteria for National Register consideration. It is important to note that the Description Section of the Update Survey only identifies changes that include the ñreplacement of some slate roof shingles with

[52] Refer to Figure C-1, Westwood Property & Clubhouse Evaluation (Appendix Volume IV, Letter P).

asphalt shingles and a large flat roof addition.ò The description section cited above fails to identify the significant alterations that have been made to the original clubhouse structure as a result of substantial exterior additions and renovations that have taken place beyond the period of potential cultural/historical significance and that have not been consistent with the appearance and material utilized for the original clubhouse structure. The existing portion of the existing Clubhouse Building is a potential historic resource and a description of the proposed preservation of the original Clubhouse building that would be incorporated into the redevelopment of the Project Site as a mixed use neighborhood consistent with the Preliminary Conceptual Master Plan is provided in Section 5.7.1 of this revised DGEIS.

4.8 TRANSPORTATION:

The Townôs transportation system includes a network of roads as well as bicycle and pedestrian paths and public transportation.

4.8.1 Vehicular Transportation:

Overall, the Town has a well-developed road network, consisting of interstate highways, state and county arterial and collector roads and local streets. The Project Site is located between Maple Road (County Route 192, a minor arterial) and Sheridan Drive (New York State Route 324, a principal arterial road), west of North Forest Road and east of Frankhauser Road and Fairways Boulevard (local streets).

To identify and evaluate the potential traffic impacts of the proposed Project, the Project Sponsor commissioned SRF Associates to prepare a Traffic Impact Study (refer to Appendix Volume IV, Letter W, ñRevised Traffic Impact Studyò). The study area for the Traffic Impact Study (ñTISò) consisted of the following 14 existing intersections:

1. Maple Road/Millersport Hwy Southbound (SB),
2. Maple Road/Millersport Hwy NB,
3. Maple Road/S. Maplemere Road,
4. Maple Road/Sandhurst Lane,
5. Maple Road/Donna Lea Boulevard,
6. Maple Road/N. Forest Road,
7. Sheridan Drive/Mill Street,
8. Sheridan Drive/N. Forest Road,
9. Sheridan Drive/Fenwick Road,

10. Sheridan Drive/Frankhauser Road,
11. Sheridan Drive/I-290 WB,
12. Sheridan Drive/Harlem Road,
13. Harlem Road/I-290 EB, and
14. N. Forest Road/Existing Country Club Driveway.

The following section summarizes the existing traffic conditions, as described in detail in the TIS prepared by SRF Associates.

Existing Roadway Network in the Vicinity of the Project Site:

Maple Drive (CR 192) is an urban principal arterial roadway under the jurisdiction of the Erie County Department of Public Works (ñECDPWò). Within the study area, motorists travel east and west using two lanes in each direction, a center two-way left-turn lane and auxiliary turn lanes at the intersections with Millersport Highway, S. Maplemere Road and North Forest Road. The posted speed limit is 45 miles per hour (ñmphò), and the Annual Average Daily Traffic (ñAADTò) is approximately 21,913 vehicles per day (ñvpdò), based on traffic counts collected by the New York State Department of Transportation (ñNYSDOTò) in 2010.

Sheridan Drive (NY 324) is classified as an urban principal arterial roadway under the jurisdiction of NYSDOT. Within the study area, motorists travel east and west using two travel lanes in each direction, a center two-way left-turn lane, and auxiliary turn lanes at the intersections with Harlem Road, I-290, Frankhauser Road, Fenwick Road, North Forest Road and Mill Street. The posted speed limit is 45 mph, and the AADT is approximately 39,724 vpd according to the most recent NYSDOT traffic counts conducted in 2011.

North Forest Road (CR 294) is a minor arterial roadway under the jurisdiction of ECDPW.

Within the study area, motorists travel north and south using one travel lane in each direction, with auxiliary turn lanes at the intersections with Maple Road and Sheridan Drive. The posted speed limit is 30 mph and the AADT is approximately 13,550 vpd based on traffic counts conducted by the Greater Buffalo-Niagara Regional Transportation Council (ñGBNRTCò) in 2008.

Harlem Road (NY 240) is classified as an urban minor arterial roadway under the jurisdiction of NYSDOT. Within the study area, motorists travel north and south using two travel lanes in each direction with auxiliary turn lanes at the intersections with Sheridan Drive and I-290. The posted speed limit is 35 mph and AADT is approximately 11,003 based on traffic counts conducted by NYSDOT in 2011.

The only potential highway improvement in the vicinity of the Project Site that is pending is the NYSDOT plan for a regional arterial management system along Sheridan Drive. The potential improvements would involve coordination of the traffic signals along this NYS Highway.

Existing Traffic Conditions in the Project Vicinity:

To determine the overall quality of current traffic operations, traffic data was collected by SRF Associates at each of the intersections within the study area. The data were collected during weekday morning (7:00 AM to 9:00 AM) and evening (4:00 PM to 6:00 PM) peak hours of travel, and were collected during typical weekdays (November 2012 and September 2013) when local schools and colleges were in session.[53]

The intersections within the study area were analyzed using *Synchro 7.0 Software*. This software uses the same thresholds for Level of Service (ñLOSò) as prescribed in the *2010 Highway*

[53] See existing traffic volumes detailed in Appendix Volume IV, Letter W, ñRevised Traffic Impact Studyò.

Capacity Manual, and is designed to consider the impacts of adjacent intersection operations and traffic signal coordination. The LOS at signalized intersections is defined in terms of delay. LOS criteria are stated in terms of delay per vehicle for the peak 15-minute analysis period.

The LOS at a signalized intersection is classified with a rating from óAô to óFô, with óAô representing the best conditions and óFô the worst. Descriptions of the various LOS ranges, as specified in the *2010 Highway Capacity Manual*, are included in the revised TIS located within Appendix Volume IV, Letter W.

Accident History / Investigation:

An accident analysis was conducted by SRF Associates in connection with its preparation of the TIS to evaluate the safety history of each of the 14 intersections in the study area. Accident data were compiled, based on information provided by NYSDOT, from March 2010 through February 2013. As detailed in Part IV of the TIS, a total of 165 accidents were documented at the 14 intersections. Of these, 82 were reportable with injuries, 61 were reportable with no injuries and 22 were non-reportable.

Using this data, the accident rates for each of the intersections in the study area were calculated and compared to the NYSDOT average accident rates for similar intersections (reported as accidents per million entering vehicles [ñAcc/MEVò]). Of the intersections in the study area, Maple Road / North Forest Road had the highest number of accidents (43) and the highest Acc/MEV rate of 1.09. This rate is considerably higher than the NYSDOT average Acc/MEV of 0.17 for comparable intersections. Rear end and left turn incidents accounted for the majority of accidents at this intersection.

In addition to Maple Road / North Forest Road, six other intersections in the study area

reported higher Acc/MEV rates than NYSDOT averages. These intersections were:

- Maple Road/S. Maplemere Road;
- Sheridan Drive/Mill Street;
- Sheridan Drive/N. Forest Road;
- Sheridan Drive/I-290 on/off ramp;
- Sheridan Drive/Harlem Road; and
- Harlem Road/I-290 southbound on/off ramp

4.8.2 Public Transportation:

Public (bus) transportation in the Town is provided by the Niagara Frontier Transportation Authority (ñNFTAò), which operates the Metro Bus system. In addition, the NFTA operates the Metro Rail system between downtown Buffalo and the UB South Campus, which includes park and ride facilities available to the Townôs residents. The Project Site is adjacent to the #49 NFTA bus route (Millard Suburban), which extends along Sheridan Drive between Millard Fillmore Suburban Hospital and the University Station in Buffalo. Other NFTA bus routes are available in the vicinity of the Project Site that offer options for transport to major points of interest in the Erie-Niagara counties area.

4.8.3 Bicycle and Pedestrian Circulation:

Bicycle and pedestrian networks, sidewalk and trails were analyzed within the Town of Amherst Bicentennial Comprehensive Plan Inventory and Analysis Report (ñInventory Reportò).[54] The Inventory Report makes reference to the Greater Buffalo-Niagara Regional Transportation

[54] See Town of Amherst Bicentennial Comprehensive Plan. Inventory and Analysis Report. December 5, 2001. Available online at http://www.amherst.ny.us/pdf/planning/compplan/iar.pdf

Council (ñGBNRTCò) Regional Bikeway Implementation Plan (ñRBIPò) for the Buffalo-Niagara region. Within the RBIP, generalized bicycle ratings (poor, fair, good, very good) are assigned by the GBNRTC to roadway corridors within the Town. These ratings were developed utilizing a formula for determining Bicycle Level of Service (ñBLOSò) that incorporates parameters for Annual Average Daily Traffic (ñAADTò), number of travel lanes, average outside land width, posted speed limit, pavement surface ratings, and land use.[55] Please refer to Figure 4-6 for a depiction of the Town of Amherst Recreational Trailways GBNRTC RBIP Ratings.

The most significant bicycle and pedestrian traffic in the locality of the Project Site would be north/south movement with the Village of Williamsville and the University at Buffalo North Campus serving as major activity centers and nodes that anchor the Project Site to the south and north. Therefore, North Forest Road serves as the primary north/south corridor for bicycle and pedestrian circulation in the vicinity of the Project Site. The portion of North Forest Road stretching south from Sheridan Drive to the Village of Williamsville has been identified as having a ñvery goodò rating while the portion of North Forest Road stretching from Maple Road to the north has been identified as having a ñgoodò rating. However, it is important to note that the section of North Forest Road stretching from the intersection of Sheridan and terminating at Maple Road has been identified as having a ñfairò rating only (the second worst rating of the value system). The Project Site represents an opportunity to create an off-road designated bicycle route and recreational trailway that would provide both bicyclists and pedestrians with a much safer and convenient link in the bike path and trail network.

[55] See Town of Amherst Bicentennial Comprehensive Plan. Inventory and Analysis Report. December 5, 2001 (page 7-4).

In terms of significant existing recreational trailways that are either adjacent or within close proximity to the Project Site, the Ellicott Creek Trailway has a trail head at North Forest Road, approximately .8 mile from the Project Site along Maple Road. The Ellicott Creek Trailway in the Town of Amherst stretches from the trail head at North Forest Road in a north westerly direction, ultimately crossing at Niagara Falls Boulevard into the Town of Tonawanda, terminating at Ellicott Creek Park. The Ellicott Creek Trailway is 7.2 miles in total length and also provides for a connection to the broader Canandaigua & Niagara Falls Rail-Trail, locally known as the Peanut Line Trail.

4.9 AIR QUALITY AND NOISE:

4.9.1 Air Quality:

Ambient air quality trends in New York State, as well as in the rest of the country, are tracked through a network of state/local and national monitoring stations. These stations generally compile information for the major (or ñcriteriaò) air pollutants for which National Ambient Air Quality Standards (ñNAAQSò) have been established for the following: sulfur dioxide, carbon monoxide, nitrogen dioxide, ozone, total suspended particulates, inhalable particulates (< 2.5 microns) and lead.

Air quality data for the State of New York are published annually by the NYSDECôs Division of Air Resources. The NYSDEC maintains one monitoring station in the Town that is located at 450 Maple Road, directly north of the Project Site. This station continuously monitors nitrogen dioxide and ozone. Monitoring stations located in Buffalo, Lackawanna, Tonawanda, and Niagara Falls track levels of other criteria pollutants.[56]

Erie County, including the Town of Amherst Project area, is within the Niagara Frontier Air Quality Control Region (ñAQCRò). The Niagara Frontier AQCR is presently designated as within attainment for all of the major pollutants monitored (i.e., the NAAQS are not presently exceeded in any parameter). For example, the Townôs monitoring station recorded levels of nitrogen dioxide that are substantially below the federal standard.

Effective January 2010, the U.S. Environmental Protection Agency (ñEPAò) determined that the Buffalo-Niagara Falls region had achieved attainment for the 1-hour and 8-hour ozone

[56] NYSDEC, 2000, Division of Air Resources, Region 9, 1999 Air Quality Report, Albany NY.

standards.[57] Previously, the region had been designated as a marginal non-attainment area for ozone precursors. In 2011 (the last year for which monitoring data are fully compiled), the Townôs monitoring station recorded some slight exceedances of the 1-hour federal standards for ozone, but did not exceed, on average for the three-year period (2009-2011) or the 8-hour standard (NYSDEC 2014).

4.9.2 Noise:

The Project Site is located within a developed suburban area where existing noise levels are typical of those characteristic of such environments. Noise levels can be expected to be variable throughout the day, with particular sound input from vehicular traffic on Sheridan Drive and Maple Road.

No significant noise generators (e.g., industrial facilities) are located in the immediate vicinity of the Project Site, although the Youngman Memorial Highway (Interstate 290) which carries high traffic volumes is located less than one mile to the west and northwest of the Project Site. The Buffalo-Niagara International Airport is located approximately 5 miles to the southeast of the Project Site. The various land use plans prepared by the Town in the past for the southeastern portion of the Town have identified noise levels resulting from the airport as a potential limiting factor for future residential development in this area.

Table 4-6 on the following page summarizes indoor and outdoor sound levels typical of different types of common activities or environmental settings.

[57] United States Environmental Protection Agency, 2014.

Table 4-6

Typical Noise Levels Associated with Different Indoor and Outdoor Activities

SOUND PRESSURE LEVEL (dBA)	SUBJECTIVE EVALUATION	COMMON OUTDOOR ENVIRONMENT OR SOURCE	COMMON INDOOR ENVIRONMENT OR SOURCE
140	Deafening	Jet aircraft at 75 ft	
130	Threshold of pain	Jet aircraft during takeoff at a distance of 300 ft	
120	Threshold of feeling	Elevated Train	Hard rock band
110	Extremely Loud	Jet flyover at 1000 ft	Inside propeller plane
100	Very Loud	Power mower, motorcycle at 25 ft, auto horn at 10 ft,	
90	Very Loud	Propeller plane flyover at 1000 ft, noisy urban street	Full symphony or band, food blender, noisy factory
80	Moderately Loud	Diesel truck (40 mph) at 50 ft	Inside auto at high speed, garbage disposal, dishwasher
70	Loud	B-757 cabin during flight	Close conversation, vacuum cleaner, electric typewriter
60	Moderate	Air-conditioner condenser at 15 ft, near highway traffic	General office
50	Quiet		Private office
40	Quiet	Farm field with light breeze, birdcalls	Soft stereo music in residence
30	Very quiet	Quiet residential neighborhood	Bedroom, average residence (without TV. and stereo)
20	Very quiet	Rustling leaves	Quiet theater, whisper
10	Just audible		Human breathing
0	Threshold of hearing		

Source: *Adapted from Architectural Acoustics (Davie M. Egan, 1988) and Architectural Graphic Standards (Ramsey and Sleeper 1984).*

4.10 COMMUNITY FACILITIES AND SERVICES:

The Town and the Erie-Niagara counties region as a whole are served by a full range of community facilities and services. These services, which are identified briefly below, are generally considered adequate to serve the Townôs population.

Police Protection:

The Town of Amherst Police Department, which is located at 500 John James Audubon Parkway (approximately 4 miles from the Project Site), is staffed by 154 officers and 35 full- and part-time employees. The Police Department provides services the Town as well as the Village of Williamsville and has been repeatedly recognized both locally and nationally for the high quality police protection services it provides to the Townôs residents.

Fire Protection:

Fire protection services in the Town are provided by 10 volunteer fire departments that staff 13 fire stations located throughout the Town. The Project Site is within the area served by the Snyder Fire District. Other nearby fire stations include the Eggertsville Hose Company and the Getzville Fire Company.

Health Care Facilities:

Millard Fillmore Suburban Hospital, which is located in the mixed-used center at Maple and Youngs Roads, is a 265-bed acute care teaching hospital. The hospital was expanded in both 1995, and again in 2008. A wide variety of other health care facilities are located in the region as well.

Educational Facilities:

There are three school districts located in the Town as follows: Amherst Central School District, Sweet Home Central School District, and Williamsville Central School District. The Project Site is located within the Williamsville Central School District (ñWCSDò). With 13 schools, serving the population within a 40-square-mile-area in three communities (Amherst, Clarence, and Cheektowaga), the WCSD is the largest suburban school district in Western New York. The Districtôs 2013-2014 enrollment is approximately 10,200 students in grades K-12. The Project Site is within the area served by Forest Elementary School on North Forest Road, Mill Middle School on Mill Street and South High School on Main Street.[58]

In terms of local libraries, the Town of Amherst belongs to the Buffalo & Erie County Public Library system, which consists of a Central Library and eight (8) branches within the City of Buffalo and extends to a network of twenty-two (22) contracting membersô libraries outside of the City of Buffalo within Erie County. The Amherst branch of the library system includes the following 4 libraries:

- Main Library at Audubon (360 John James Audubon Parkway, Amherst)
- Clearfield Branch Library (770 Hopkins Road, Williamsville)
- Eggertsville-Snyder (4622 Main Street, Snyder)
- Williamsville (5571 Main Street, Williamsville)

[58] Williamsville Central School District, April 2014, http://www.williamsvillevillek12.org/district.

Senior Services:

The Amherst Center for Senior Services (ñSenior Centerò) is located at 370 John James Audubon Parkway in a campus setting directly adjacent to the Amherst Police Station and the Audubon Public Library. The Townôs Senior Center is open to individuals aged 55 and older for an annual fee of $30; nearly 10,000 residents within the community are currently members. The Senior Center is also open under the same terms to non-residents of the Town of Amherst. Programs at the Senior Center include educational classes clubs, fitness activities, dining and entertainment programs. Additionally, the Senior Center provides support services with social workers who provide consultation on physical and mental health. Amherst Meals on Wheels operates out of the Senior Center and provides for two meals per day, 5 days a week for needy senior residents. Senior Outreach Services (ñSOSò) is also stationed at the Senior Center and services the Town of Amherst, Clarence and Newstead. SOS will dispatch case managers to senior residences to provide seniors with an assessment and connection to health and wellness services and programs throughout the community. The Senior Center also provides an inexpensive shuttle services with dedicated routes to common senior service points (i.e., shopping centers, medical centers, religious institutions, etc.) throughout the community.

Youth Services:

Beyond the expansive extracurricular and sports programs that are provided through the Amherst Central School District, Sweet Home School District and Williamsville Central School District, the Town of Amherst also provides separate parks and facilities for youth. The primary public Youth & Recreation Center is located at the Northtown Center at Amherst, located at 1615 Amherst Manor Drive, within one mile of the Project Site. Additionally, the Town of

Amherst manages the Clearfield Community Center (located at 730 Hopkins Road), North Amherst Recreation Center (located at 4415 Millersport Highway) and North Forest Park & Pool (located at 85 North Forest Road). The Town also provides a complete youth sports organization including baseball & softball, basketball, figure skating, football, hockey, lacrosse and soccer. The Town of Amherst Recreation Commission is responsible for oversight of existing youth and recreation services and planning for future improvements.

4.11 LIGHTING:

Given the previous use of the Project Site as a golf course, the site was largely devoid of site lighting except for approximately five (5) standard 20ô overhead lighting fixtures located within the parking areas directly adjacent to the clubhouse facility and associated outbuildings. Additionally, the buildings on the site have standard exterior wall lighting fixtures to provide security and access lighting for the perimeter areas. Please refer to Figure 4-7, Project Site Overhead Lighting Map, located at the end of this Section, for a depiction of the approximate overhead lighting fixture locations.

4.12 UTILITIES AND NON-TRANSPORTATION INFRASTRUCTURE:

The Townôs non-transportation infrastructure includes: sanitary sewers, storm sewers, electric lines, natural gas lines, water system and fiber optic cable. The Town provides sanitary sewer, storm sewer, and solid waste / recycling services to its residents. In addition, potable water is provided via the Townôs lease agreement with the Erie County Water Authority (ñECWAò). According to the Comprehensive Plan, these systems are generally adequate to serve existing and anticipated development within the Town.

4.12.1 Sanitary Sewer:

The Project Site is located within Consolidated Sanitary Sewer District 16. Sanitary sewer lines in the Town convey wastewater to the Townôs Wastewater Treatment Plant, which is located in the northwest portion of the Town at 455 Tonawanda Creek Road. The plant treats an average of 24.5 million gallons of sewage per day (ñmgdò).[59] In terms of the sanitary sewer infrastructure adjacent to the Project Site that would be utilized to provide sanitary service, there is an existing 36-inch truck sewer located on the north side of Sheridan Drive (ñSheridan Drive Sewerò). The Sheridan Drive Sewer ultimately connects to a 54-inch trunk sewer line known as the West Side Interceptor sewer. The West Side Interceptor flows north and ultimately deposits to the Town of Amherst Wastewater Treatment Facility located on Tonawanda Creek Road. The receiving 36-inch sewer on Sheridan Drive has a design capacity of 17.2 mgd while the West Side Interceptor sewer has a design capacity of 36.4 mgd.[60] According to Townôs flow meter data, the average and

[59] Town of Amherst online. *Engineering Department- Sewer Maintenance Division Overview*. March 2014. Available online at: http://www.amherst.ny.us/govt/govt_dept.asp?dept_id=dept_10&div_id=div_14&menu_id=menu_50.

[60] See Appendix Volume III, Letter L, ñPreliminary Engineerôs Report,ò page 3.

maximum daily flows in the 54-inch sewer are 8.05 mgd and 9.55 mgd, respectively.

In an effort to assess system capacity to manage sanitary sewer flows downstream from the Project Site, the Project Sponsor utilized the services of TECsmith, Inc., a local water and wastewater monitoring firm, to place flow monitoring equipment at specified sanitary sewer manhole locations. The flow monitoring data results have shown that during typical dry weather operating periods there is sufficient downstream sanitary sewer capacity to service the additional flows as calculated for the Project. However, the testing also revealed that during storm events that generate greater than a half inch of daily rainfall, there is a surcharge within the downstream sanitary system (please refer to Appendix Volume IV, Letter U, ñDownstream Sanitary Sewer Flow Monitoring Reportò). Section 5.12.1 of this DGEIS discusses the potential environmental impacts associated with this condition and Section 6.12.1 of this DGEIS discusses possible mitigation measures for sanitary sewer impacts.

4.12.2 Stormwater:

To manage storm water, the Town uses a network of storm sewers, ditches, creeks and detention ponds. In addition, the Town has developed a Stormwater Management Plan (ñSMPò), pursuant to federal and state regulatory requirements. The SMP was developed in coordination with the Western New York Stormwater Coalition (WNYSC) in accordance with the NYSDEC General Permit for Stormwater Discharges from Municipal Separate Storm Sewer Systems (GP-0-10-002).[61] In terms of the site specific stormwater characteristics, the topography of the Project Site is generally flat with some isolated areas of moderate slope. The site primarily slopes to the

[61] A complete copy of the Town of Amherst Stormwater Management Plan is available online at http://www.amherst.ny.us/pdf/engineering/environmental/stormwater_plan.pdf.

east and northeast towards Ellicott Creek, resulting in a typical sheet draining of surface stormwater runoff toward the creek. The majority of the property is hydrologically contained within the boundaries of the Project Site. The only off-site drainage areas flowing onto the Project Site consist of the rear yards of the adjacent properties on Frankhauser Road and the rear yards of the adjacent properties on Maple Road. No other significant off-site flows are known to impact the Project Site.[62]

To fully evaluate the existing site drainage patterns and available stormwater capacity, the Project Sponsor retained the services of Professional Civil Engineering, LLC to perform a Preliminary Drainage Analysis Report for the Project Site and proposed mixed use Westwood Neighborhood development. As detailed within the Report, the Project Site currently consists of six (6) delineated Drainage Area (DAôs). While the individual DAôs are fully described within the Report, the primary discharge points for stormwater from the Project Site are to the adjacent Audubon Par 3 Golf Course, Ellicott Creek, and existing stormwater receiver structures located along Frankhauser Road. Please refer to Figure 4-8, Project Site Stormwater Drainage Areas Map, located at the end of this Section for a depiction of the DAôs and their associated outlet points.

4.12.3 Water Supply:

The Project Site and surrounding land are located within the direct service area of the Erie County Water Authority (ñECWAò). The ECWA currently supplies water to the Town pursuant to a Lease Management Agreement.

The available water source for the proposed mixed use neighborhood is an 8 inch diameter

[62] See Section 3.1 Pre-Development Conditions of Appendix Volume IV, Letter V- ñRevised Preliminary Drainage Analysis Report (01.24.15)ò, Page 2.

water main located on the south side of Maple Road and a 16 inch diameter water main located on Sheridan Drive. Each of these water mains would be tapped and interconnected through the Project Site. These existing water mains are located within the ECWA direct service area. To evaluate the current capacity of the existing system, the Project Sponsor requested the ECWA conduct hydrant flow tests on April 24, 2014.[63] The hydrant flow tests confirmed that the existing representative static gauge pressures at the proposed points of connection to the water system are estimated to be approximately 92 psi at Maple Road and 84 psi at Sheridan Drive.[64] The Project Sponsor calculated average daily, maximum daily and peak hourly water service demands for the Project based on the total anticipated development density and unit counts. The results indicated that day-to-day operation pressures are sufficient and meet recommended Ten States Standards[65] and that the necessary fire flow can be obtained within the Project while maintaining a minimum residual pressure of 20 psi.[66]

4.12.4 Private Utilities:

The various private utilities that provide service to the Town in general and the vicinity of the Project Site are as follows:

[63] See Appendix Volume III, Letter L- ñPreliminary Engineerôs Reportò (refer to Appendix A of the Report for the ECWA Hydrant Flow Test Results).
[64] See Appendix Volume III, Letter L- ñPreliminary Engineerôs Reportò, page 5.
[65] The *Ten States Standards* are produced and periodically revised by a committee consisting of one representative from each of 10 states adjoining the Great Lakes as well as the province of Ontario, New York is one such member state. The manuals are intended to establish uniformity of practice among the several member states. The manuals are also generally accepted by the member states and consulting engineers practicing within said member states as the latest technical resource in good, safe design practice. The Ten States Standards reference manuals are available online at: http://10statesstandards.com/
[66] See Appendix Volume III, Letter L- ñPreliminary Engineerôs Reportò, page 7.

- Natural gas: National Fuel Corporation;
- Electrical Service: National Grid; and
- Communications: Verizon and Time Warner Cable.

National Fuel has provided a capacity confirmation letter to serve the anticipated natural gas demands for the proposed development.[67] The Project Site has access to an existing 8ò medium-pressure natural gas line along Sheridan Drive and the Site is currently serviced by a 2ò medium-pressure line along North Forest Road. Please refer to Figure 4-9, National Fuel Service Distribution Map, for a depiction of the existing natural gas infrastructure adjacent to the Site.

National Grid has provided a capacity confirmation letter to serve the expected electrical load generated by the proposed development.[68] National Grid recently finished construction of a new station at the end of Frankhauser Road in an effort to provide additional capacity and reliability in areas including Eggertsville, Snyder, North Bailey, Getzville, Swormville, East Amherst and the Village of Williamsville.[69] The new station and the lines it serves represent a $16 million capital investment made by National Grid. The station provides six distinct feeder lines that connect to the existing network in Amherst with additional capacity for two more feeder lines as spares for future growth and capacity. Depending on individual configuration, feeder lines can typically serve several hundred to more than one thousand customers at one time.

Time Warner Cable has provided a capacity confirmation letter to serve the proposed development with phone, internet, and cable television services.[70] Existing infrastructure adjacent

[67] See Appendix Volume IV, Letter Z2.10- ñNational Fuel Capacity Confirmation Letterò.
[68] See Appendix Volume IV, Letter Z2.11- ñNational Grid Capacity Confirmation Letterò.
[69] National Grid Online. ñNew National Grid Electric Substation to Provide Increased Capacity, Improved Reliability in Amherstò. August 2015. Available online at: https://www.nationalgridus.com/aboutus/a3-1_news2.asp?document=8613.
[70] See Appendix Volume IV, Letter Z2.12- ñTime Warner Capacity Confirmation Letterò.

to the Project site will enable Time Warner Cable to service the proposed mixed use project. Please refer to Figure 4-10, Time Warner Cable Service Distribution Map for a depiction of their existing infrastructure adjacent to the Project Site.

Verizon has provided a capacity confirmation letter to serve the proposed development with phone, internet, and cable television services as well.[71] Existing infrastructure adjacent to the Project site will enable Verizon to service the proposed mixed use project. Please refer to Figure 4-11, Verizon Telecom Service Distribution Map for a depiction of their existing infrastructure adjacent to the Project Site.

[71] See Appendix Volume IV, Letter Z2.13- ñVerizon Capacity Confirmation Letterò.

Map Unit Legend

Erie County, New York (NY029)			
Map Unit Symbol	**Map Unit Name**	**Acres in AOI**	**Percent of AOI**
CrA	Claverack loamy fine sand, 0 to 3 percent slopes	31.8	18.5%
Cv	Cosad loamy fine sand	25.9	15.1%
La	Lakemont silt loam	4.2	2.5%
Od	Odessa silt loam	64.7	37.7%
SaA	Schoharie silt loam, 0 to 3 percent slopes	2.6	1.5%
SaB	Schoharie silt loam, 3 to 8 percent slopes	22.7	13.2%
Te	Teel silt loam	10.0	5.8%
Ut	Urban land-Odessa complex	8.3	4.8%
W	Water	1.6	0.9%
Totals for Area of Interest		**171.8**	**100.0%**

Figure 4-1 – Project Site Soil Types Map

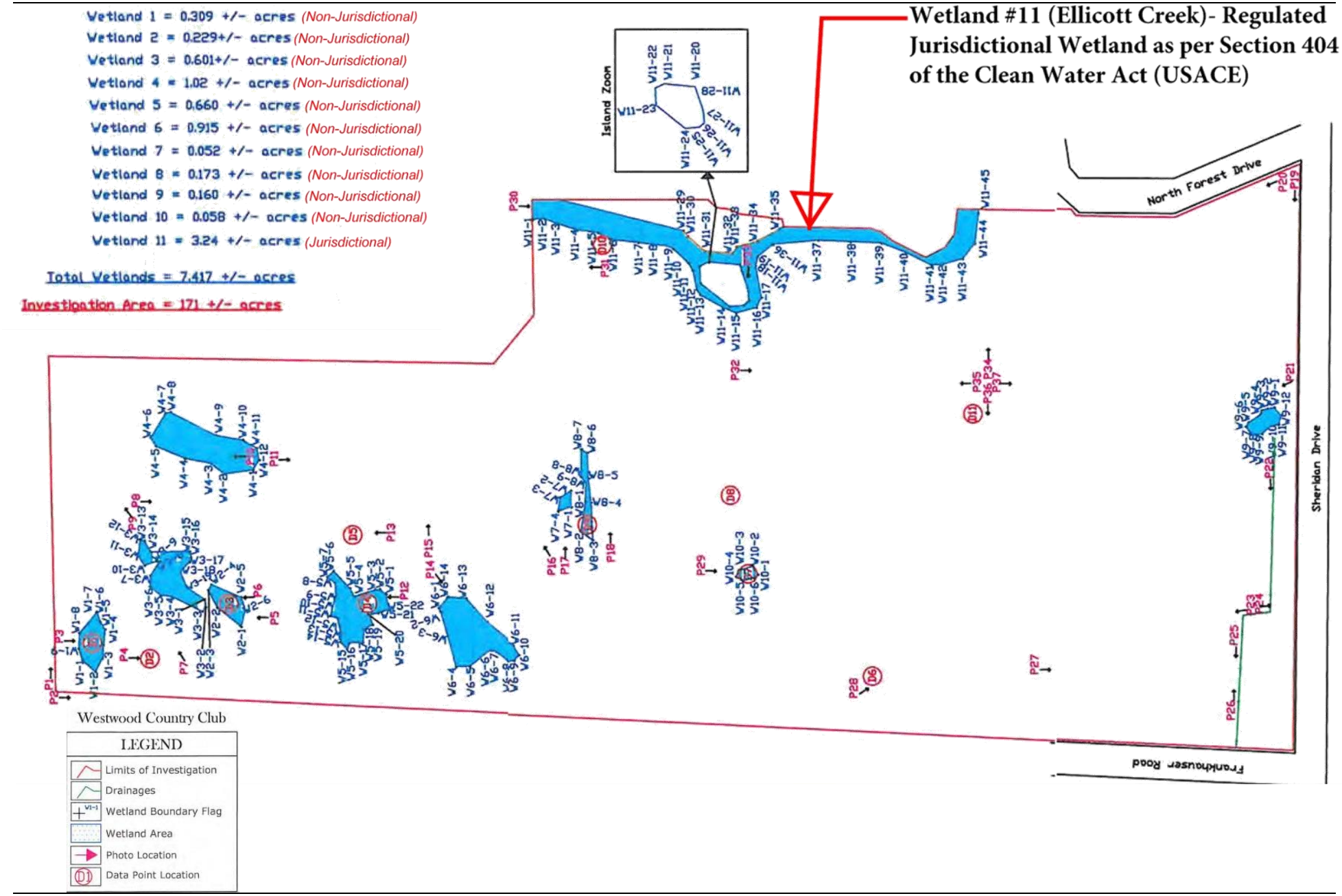


Figure 4-2 –Project Site Delineated Wetlands and Waterways Map

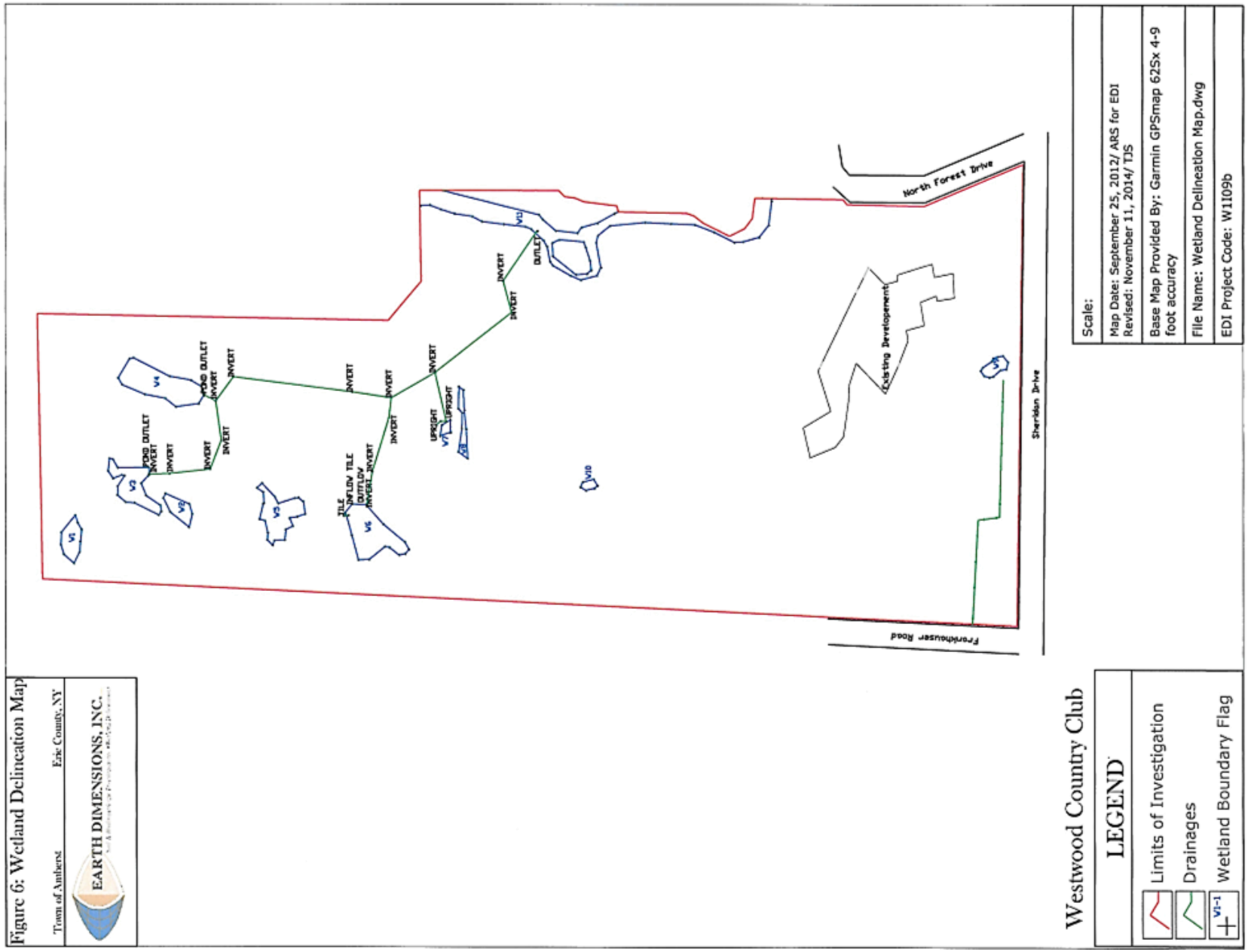


Figure 4-3 – Project Site Subsurface Drainage System

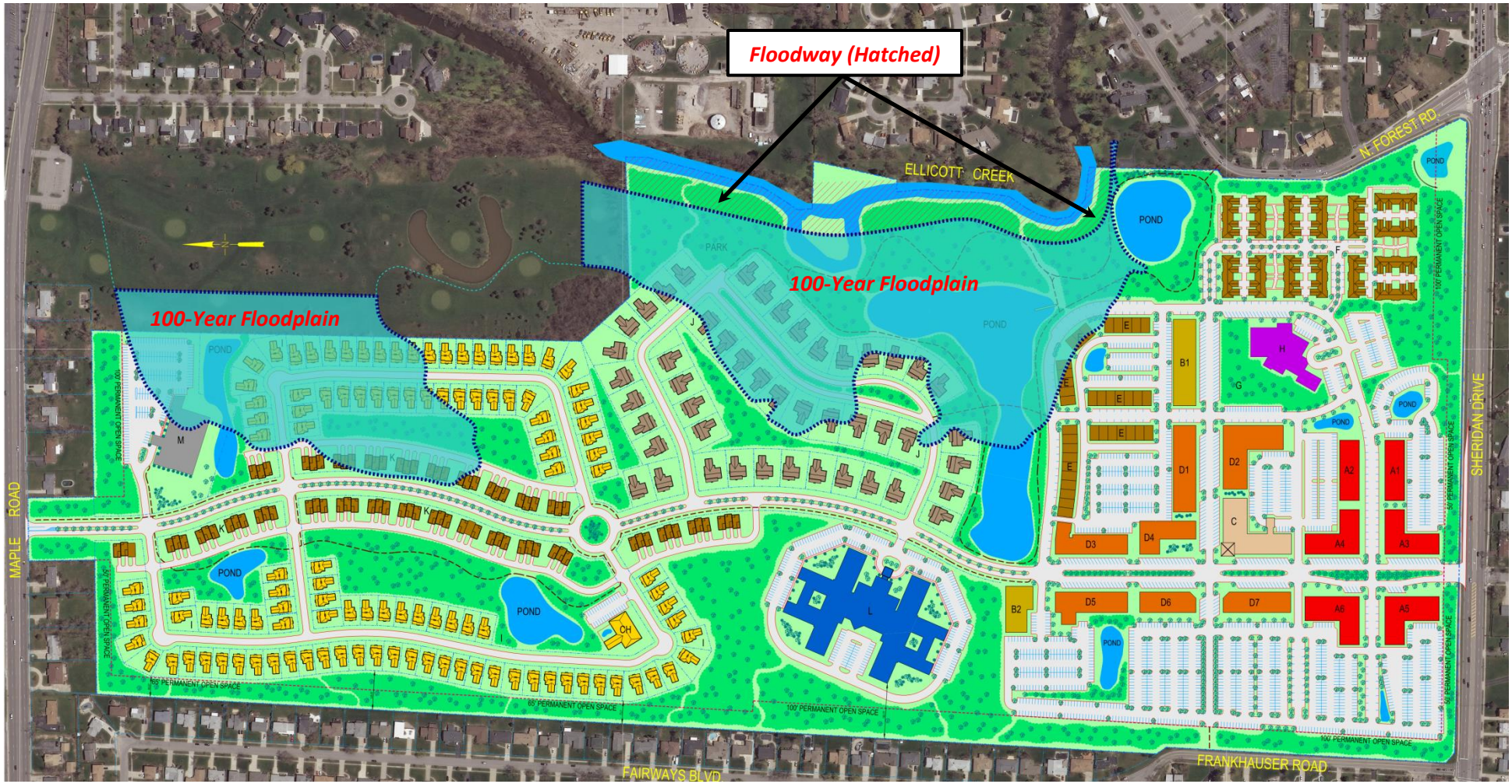
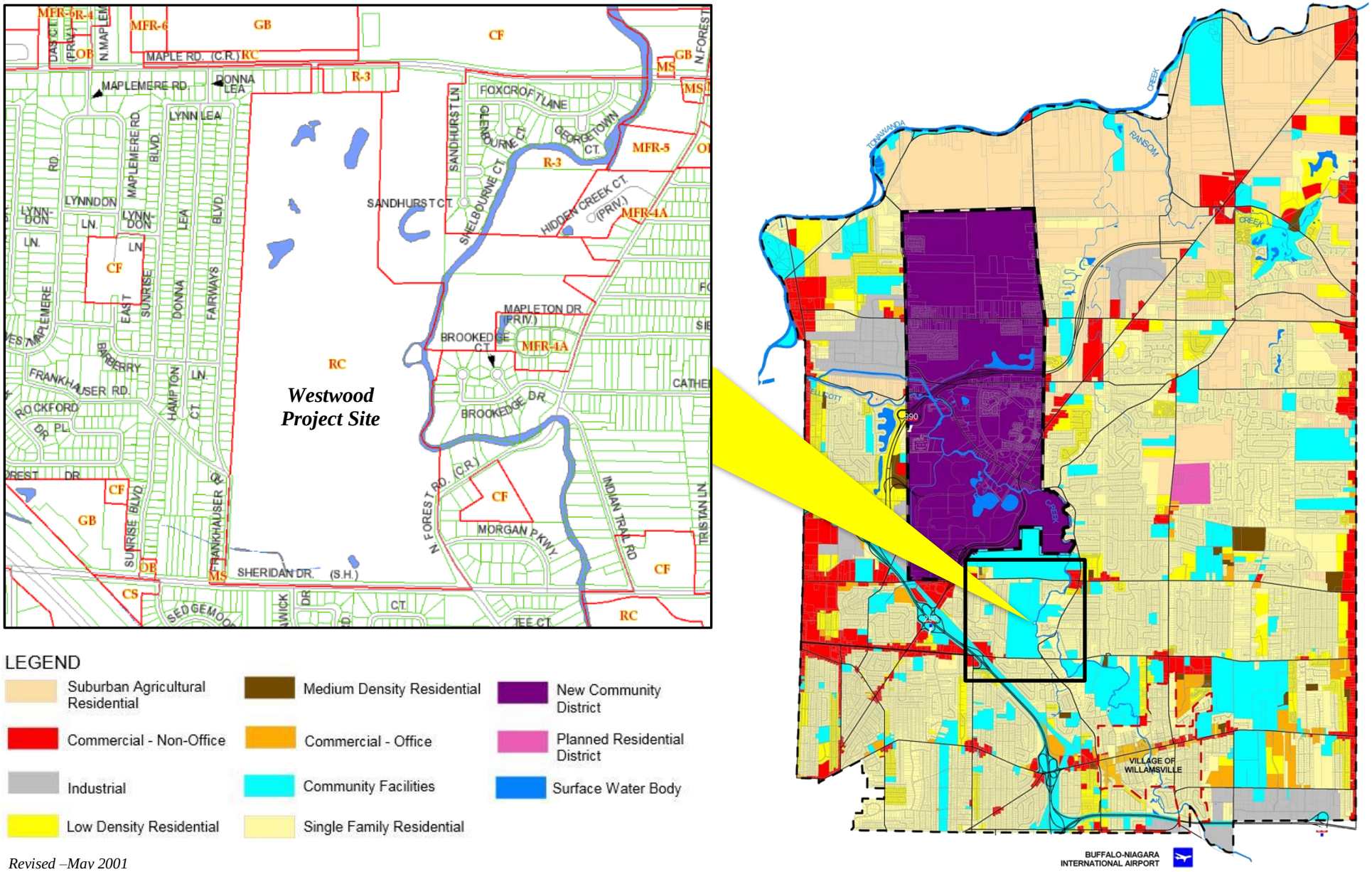


Figure 4-4 – Project Site FEMA Floodplain and Floodway Map



Revised –May 2001

Figure 4-5 – Town of Amherst Zoning Map

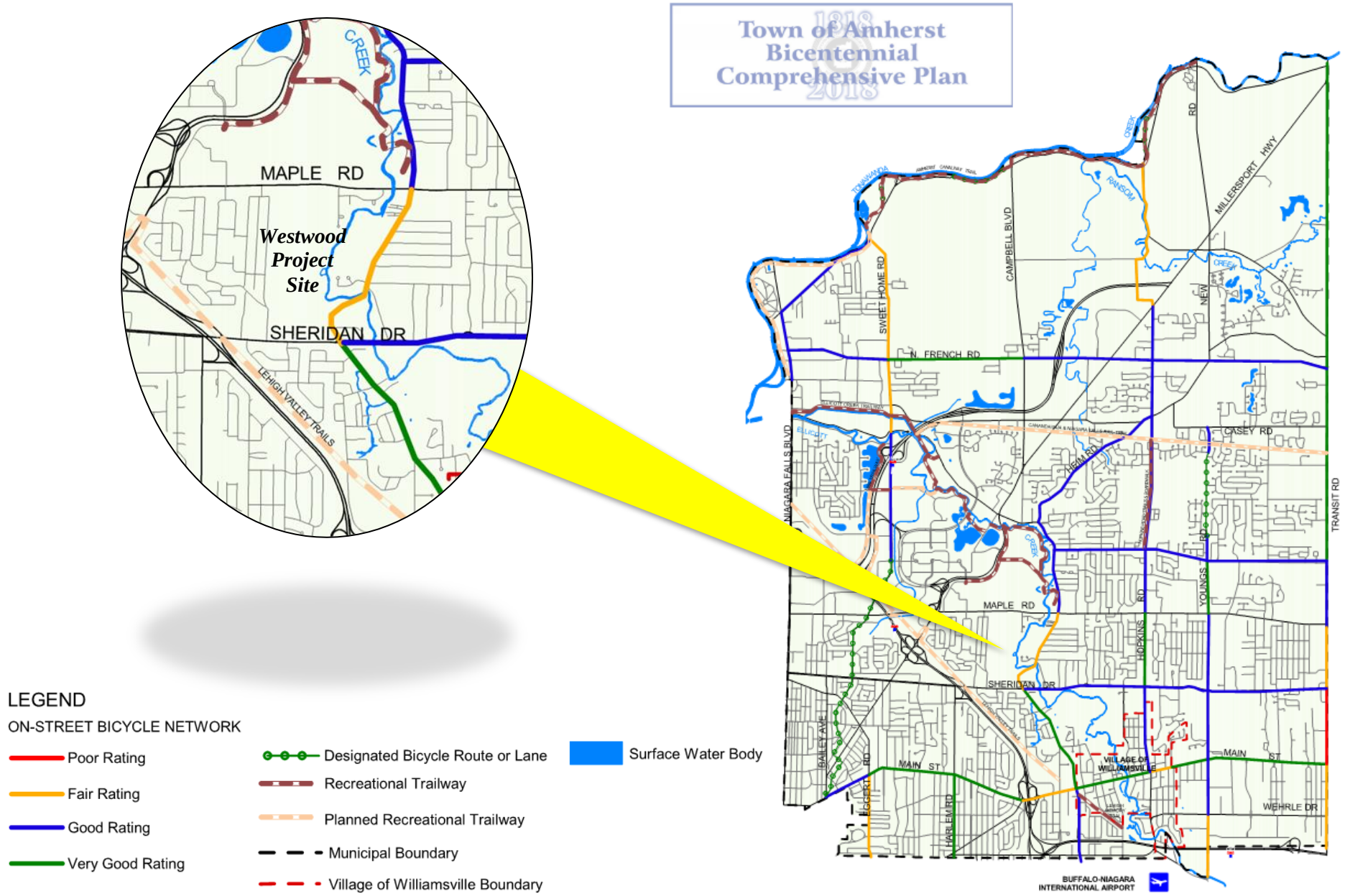


Figure 4-6 – Town of Amherst Recreational & Bicycle Trailway Ratings Map

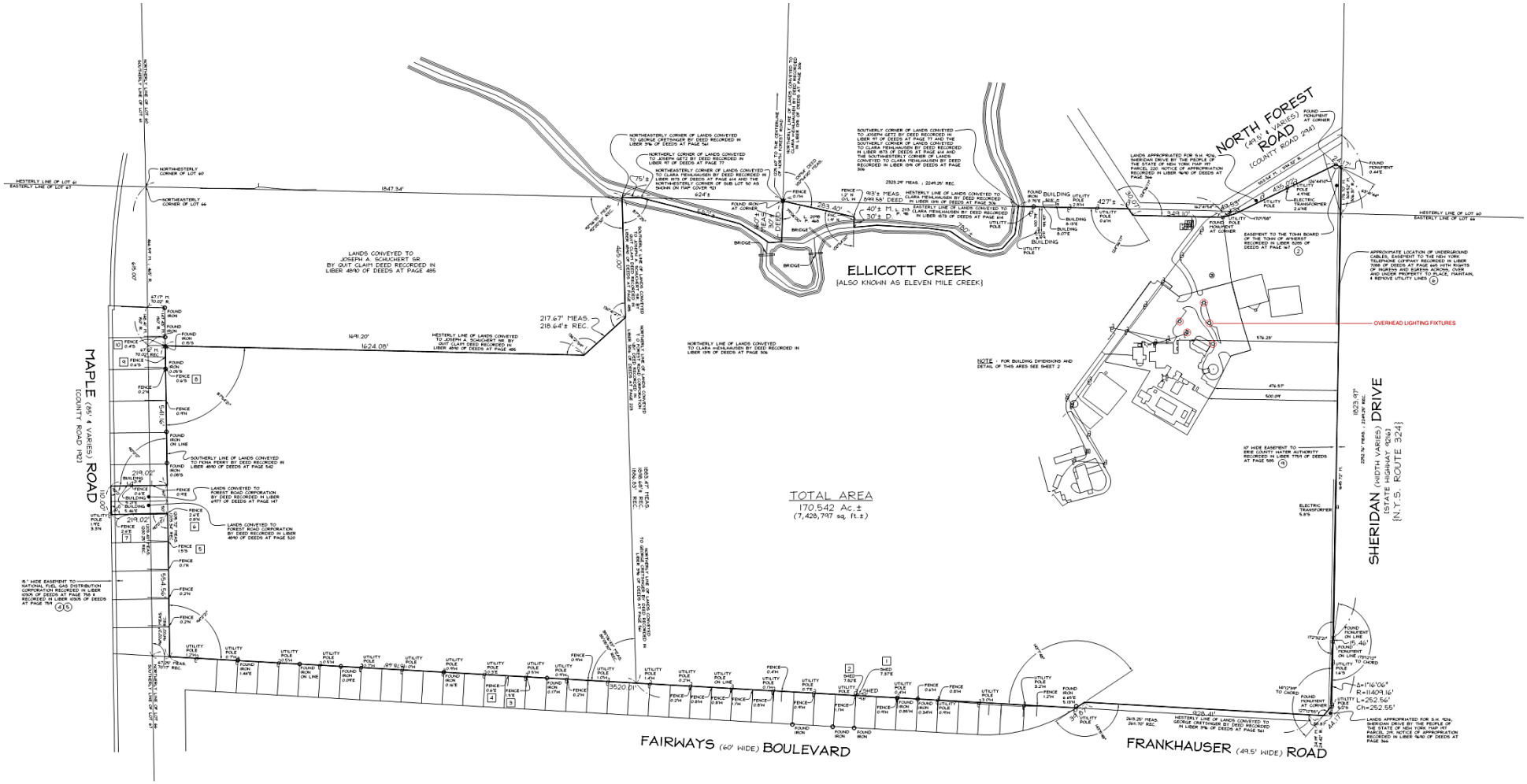


Figure 4-7 – Project Site Overhead Lighting Map

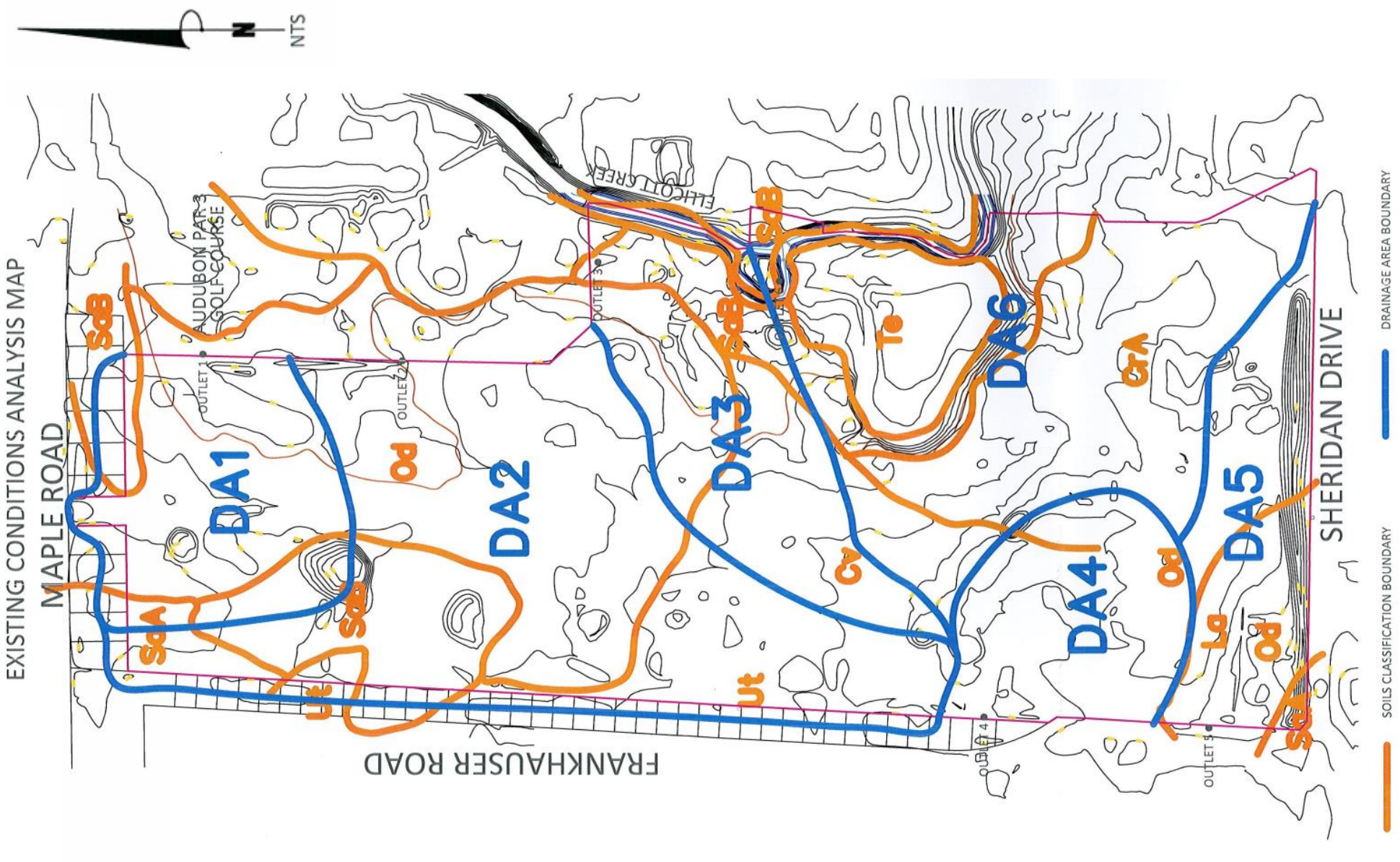


Figure 4-8 – Project Site Stormwater Drainage Areas Map

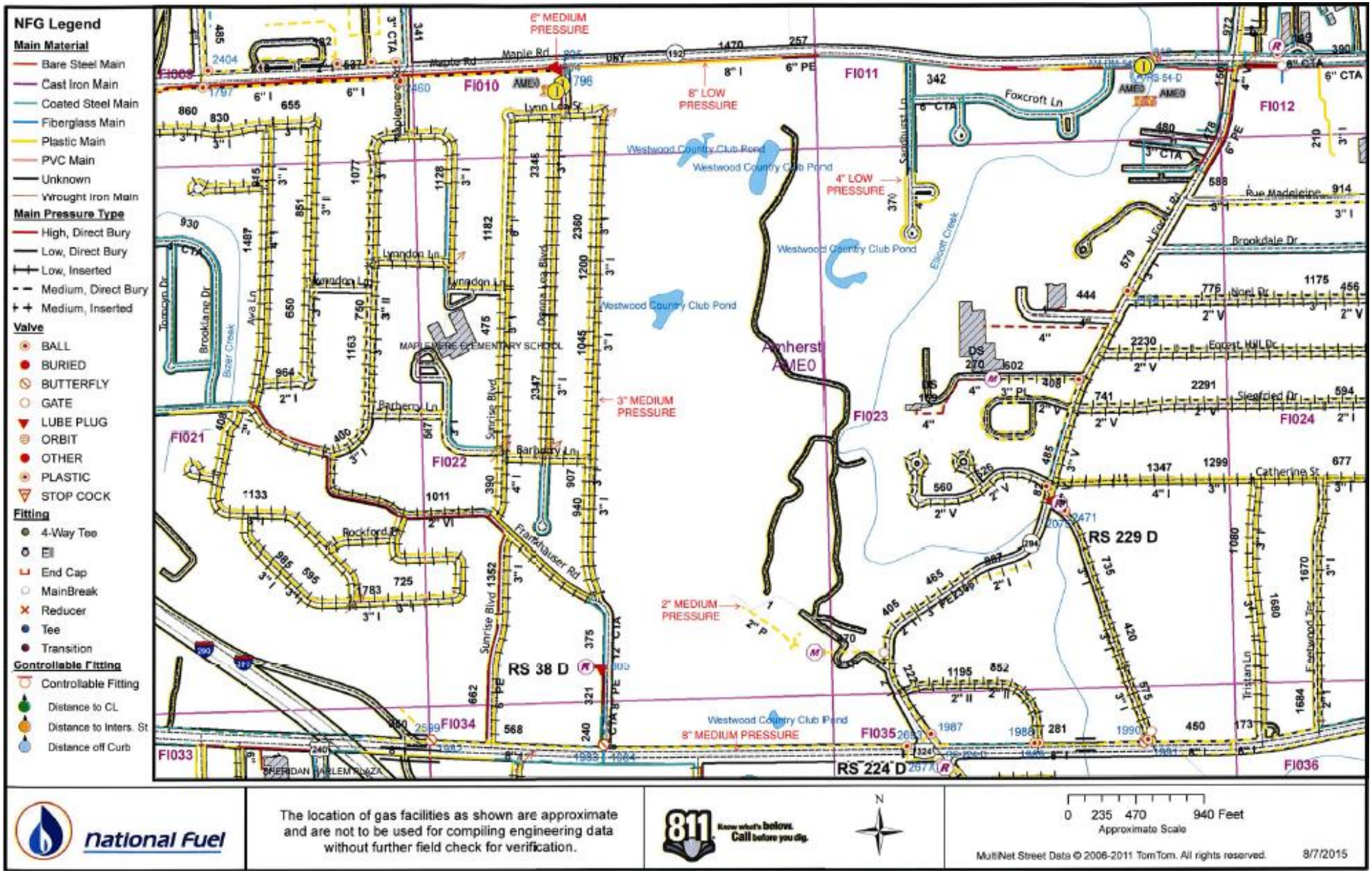


Figure 4-9 –National Fuel Service Distribution Map

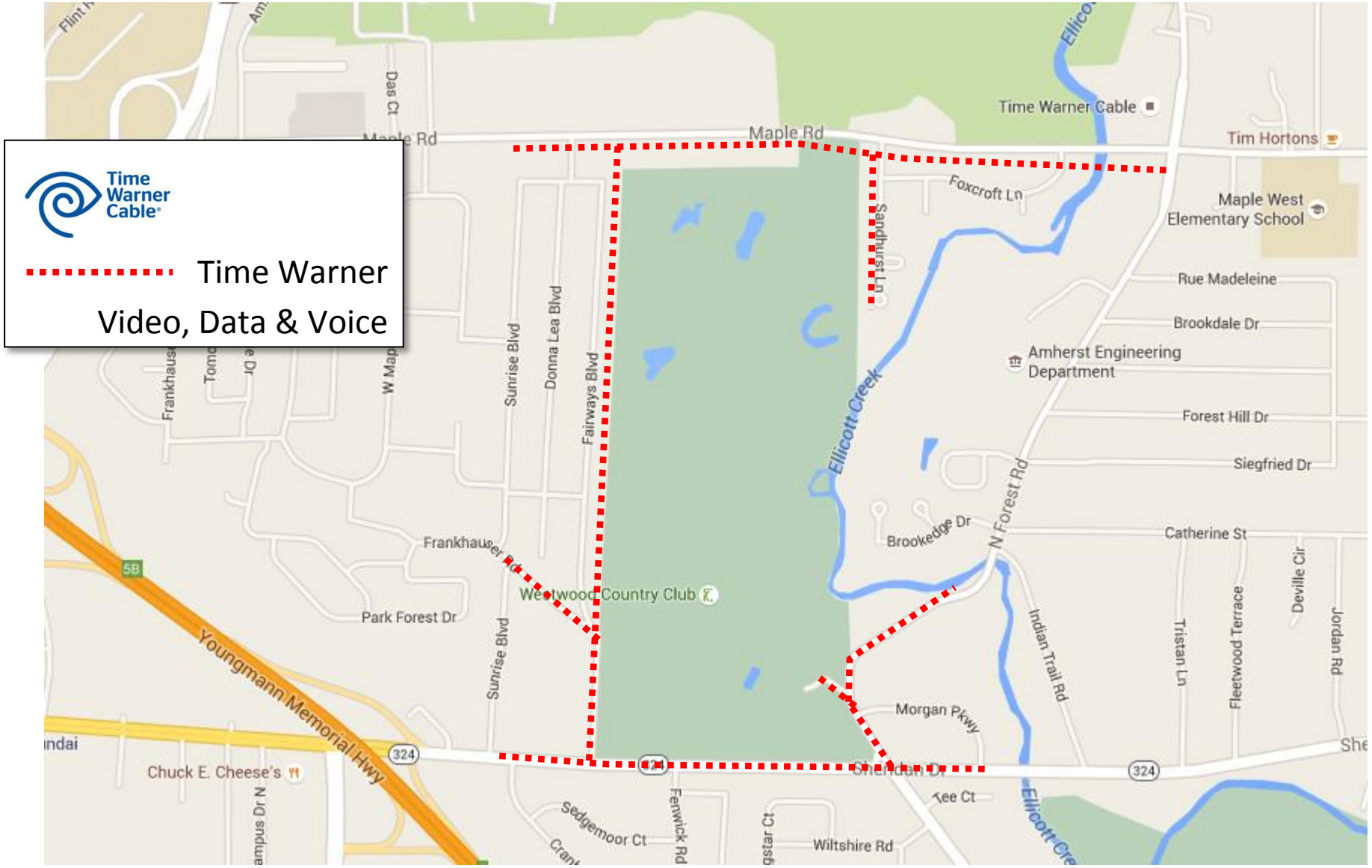


Figure 4-10 – Time Warner Cable Service Distribution Map

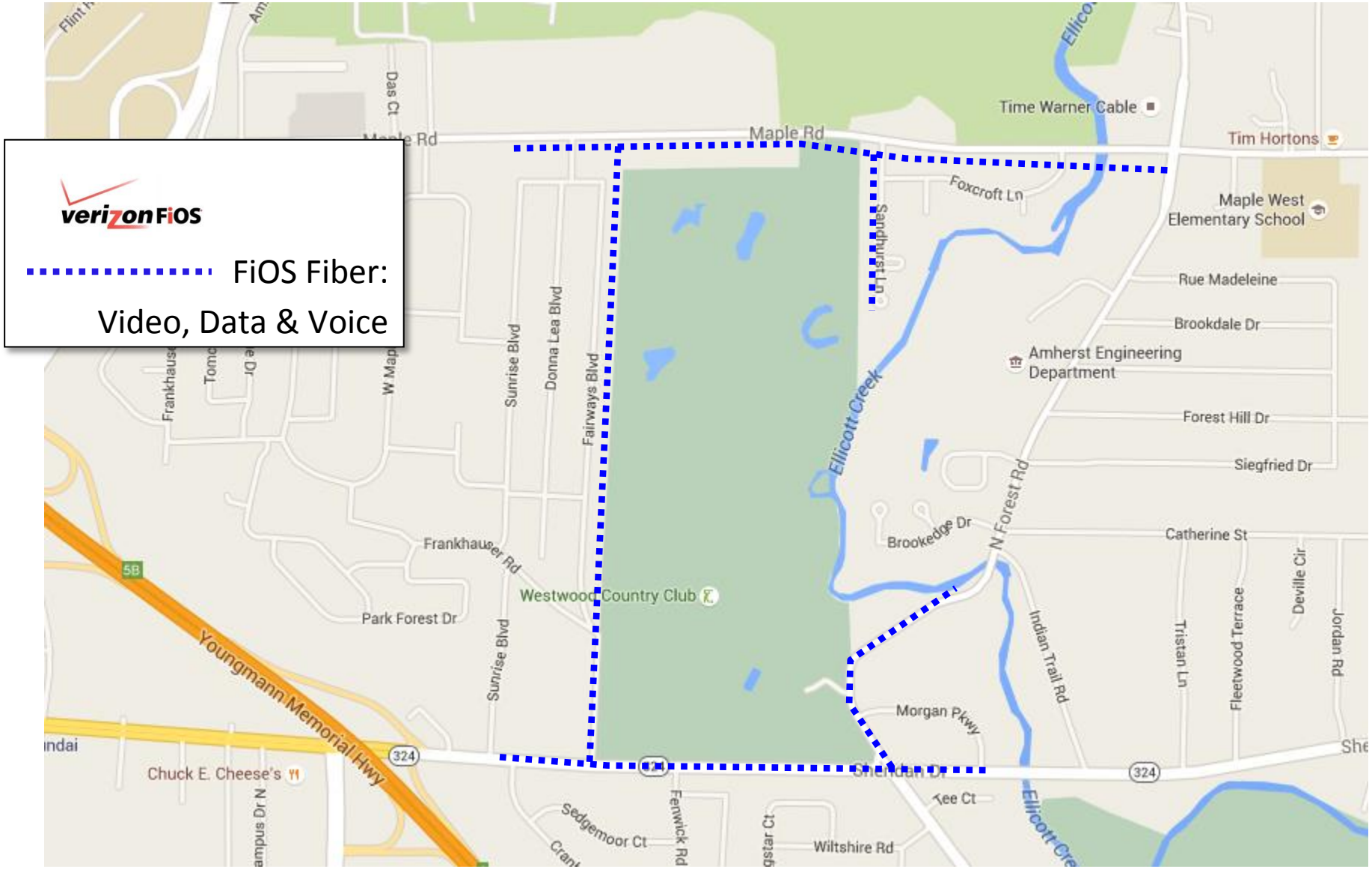


Figure 4-11 – Verizon Telecom Service Distribution Map