

L. Fiscal

1. Existing Conditions

a) Current Taxes Generated On-Site

The Site currently generates \$31,349 in property taxes, as described in Table III.L-1 below. The market value for the property, as per the Town of Somers 2013 tax roll, is \$1,218,269, with an assessed value of \$158,375. A copy of a recent tax bill is included in Appendix L.

**Table III.L-1
Year 2013 Tax Rates and Tax Liability**

Tax Lot 17.15-1-15.1/ Residential Vacant Land	Assessed Value (AV)	Tax Rate per \$1,000 AV	Taxes Due
Westchester County	\$158,375	27.571945	\$4,367
Town of Somers	\$158,375	13.732403	\$2,175
Somers Fire	\$158,375	5.171511	\$819
Total County & Town Taxes			\$7,361
Somers Central School District	\$158,375	151.461719	\$23,988
Total			\$31,349

Source: Tax bills for tax lot 17.15-1-15.1.

b) Existing Costs for School District and Town Services

School District

The Somers Central School District (SCSD) 2013/14 school budget is \$83,783,994, including \$30,610,474 (37%) for instruction (see SCSD 2013/14 Annual School Budget page 4 in DEIS Appendix L). According to the School District, there are 3,317 students currently enrolled in the four public schools. The enrollment has slightly declined in the past few years. See Chapter III.I for details and letter from SCSD in Appendix C. The overall per pupil expenditure is \$25,259, based on current enrollment of 3,317 students. However, this amount includes several categories, such as central administration, building and grounds maintenance, and instruction costs. Of these, the \$30,610,474 in instruction costs are directly related to enrollment, and using that figure, the per pupil expenditure for instruction is \$9,234. Adding to that the cost of employee benefits (\$20,870,933) and transportation (\$5,164,008), the total would be \$56,645,415. This figure divided by the enrollment of 3,317 = \$17,077 per student. Building maintenance and general administration do not fluctuate with modest changes in enrollment. This cost per student figure is further adjusted by 86.5% to \$14,772, since 86.5%



of the school tax revenue is from real estate taxes (the rest is from State aid and other sources).

Town Services

The Town of Somers 2014 budget is \$13,902,597. Of this amount, the budget for various community services are as follows: \$798,932 Somers Police Department (\$39 per person); \$2,642,560 Somers Fire District (\$129 per person); \$741,983 Parks and Recreation (\$36 per person); and \$3,324,003 Highway Fund (\$163 per person). The “per person” expense is based on a Town population of 20,434 as per the 2010 US Census, and is summarized in the table below, as requested in the Scoping document. Note that only approximately 49% of the Town’s budget is paid through property tax. Analysis is limited to these services (Police, Fire, Parks and Recreation, and Highway) because these are the services directly related to shifts in population.

**Table III.L-2
Year 2014 Town Service Cost Per Capita**

Service	Budget	Town Population	Cost per Capita
Somers Police	\$798,932	20,434	\$39
Somers Fire District	\$2,642,560	20,434	\$129
Somers Parks & Recreation	\$741,983	20,434	\$36
Somers Highway Fund	\$3,324,003	20,434	\$163

Source: Town of Somers 2014 Budget and US Census 2010

2. Anticipated Impacts

a) Tax Revenue to Be Generated

Residential Community

The Proposed Concept Plan includes the development of 80 condominium homes. Since the project will be a condominium, the roads and utilities will be privately maintained (as well as the open space), and no town services will be required for maintenance of such (snow plowing, road paving, basin maintenance, utilities). The homeowners will contribute to common charges for maintenance of these facilities and all the common areas via a homeowners association (HOA). In New York State, condominium units typically pay about half of the property taxes that are paid by comparable “fee simple” homes where the property includes a house and lot. This is based on State law, which requires condominium residences to be assessed by the municipality as if they were rental properties, except in certain municipalities which are approved assessing units



and have elected the “homestead tax option.” An “approved assessing unit” is a municipality that has completed a revaluation of all property in the municipality in accordance with applicable State regulations. The Town is not an approved assessing unit.

As required by State law, the methodology for calculating property taxes of condominiums is the income capitalization approach, which is based on an assumption of the income (rents) that the property owner would receive if the units were rentals. Actual valuation by the Town Tax Assessor will occur much later in the project approval process. The valuation will rely on an income-based approach, which will take into account how much income the property could produce if rented, operating expenses, insurance, maintenance costs, and an expected rate of return. For purposes of this DEIS, a general estimation of property taxes was performed using existing data on the nearby Heritage Hills development.

In review of Heritage Hills condominium full market values, the median full market value is approximately 40% of listed sale prices, which reflects valuation as a condominium (see Appendix L for supporting data). The listing value is assumed to represent a figure that is closer to what the true “market” value would be if the home was in conventional fee-simple ownership. Therefore, on average, a condominium would be expected to generate approximately 40% of the annual property tax generation as a fee-simple home of comparable cost.

The relationship between market value and assessed value (AV) is dictated by the equalization rate. For the Somers 2013 assessment roll, the uniform percent of value is 13.80% of full market value (i.e., a property with a full market value of \$500,000 would have an assessed value of \$69,000.) The assessed value is used as the base figure for calculating annual property taxes.

It is expected that the proposed units would have an average market price of approximately \$700,000¹. Assuming a 40% of sales price ratio (consistent with the median from the Heritage Hills samples) to approximate condominium “market value” for assessment purposes and applying the 13.80% equalization rate, each unit would be expected to have an assessed value of approximately \$38,640 ($\$700,000 \times 40\% = \$280,000$; $\$280,000 \times 13.80\% = \$38,640$ per unit). Assessed value for the 80 residential units would be \$3,091,200 ($\$38,640 \times 80$).

The project site is subject to real property taxation by the County, Town of Somers, the Somers Central School District and the Somers Fire District. The 2013

¹ See Appendix L for list of comparable town house sales prices.

tax rates for those taxing jurisdictions are presented in table III.L-3 below. In total, the residential component of the project would be anticipated to generate approximately \$611,864 in annual property tax revenue, with per-unit average property tax of approximately \$7,648 ($\$611,864 \div 80 = \$7,648$).

Grocery Store

A review of local shopping centers, including Somers Towne Centre, the Super Stop & Shop in Somers Commons, and two shopping strips located nearby on Route 202, revealed an approximate \$5.50 in taxes per square foot of retail space (see Appendix L for data). Applying this rate to the proposed grocery store results in approximately \$104,500 ($\$5.50 \times 19,000$ square feet) in annual property taxes and an assessed value of \$527,944². See Table III.L-3 for the distribution of annual property taxes.

As shown below, combined with the residential portion of the Site, the development is anticipated to generate a total of \$716,365 in annual property taxes. ($\$611,864$ residential + $\$104,500$ grocery = $\$716,365$).

**Table III.L-3
Potential Property Tax Generation
(2013 Tax Rates)**

District	Tax Rate per \$1000 AV	Assessed Value Residential	Residential Tax Generation	Assessed Value Commercial	Commercial Tax Generation	Total Taxes (Resid. + Commercial)
County	27.571945	\$3,091,200	\$85,230	\$527,944	\$14,556	\$99,787
Town	13.732403	\$3,091,200	\$42,450	\$527,944	\$7,250	\$49,700
School	151.461719	\$3,091,200	\$468,198	\$527,944	\$79,963	\$548,161
Fire	5.171511	\$3,091,200	\$15,986	\$527,944	\$2,730	\$18,716
Total	197.937578	\$3,091,200	\$611,864	\$527,944	\$104,500	\$716,365

Source: Westchester County Tax Commission, 2013-2014 School District Tax Rates, 2013 Town Tax Rates (<http://www.westchestergov.com/property-tax-rates>)

Sales Tax

Sales taxes will be generated at the proposed grocery store, based on statutory requirements. The grocery store would collect sales taxes for New York State and Westchester County. Sales taxes are distributed to New York State (4%), Westchester County (3%) and the Metropolitan Transportation Authority

² $\$104,500$ estimated taxes \div 197.937578 tax rate per 1,000 \times 1,000 = $\$527,944$ assessed value.

(0.375%). The Town of Somers does not directly receive sales tax revenue; however the County does remit a portion of local sales tax revenue to the Town and School District.

Sales tax at the proposed grocery store is expected to be approximately \$300,000 (\$25,000 per month). The table below shows the sales tax distribution. Sales taxes are not generated by residential development.

**Table III.L-4
Anticipated Sales Tax Generation**

	Sales Tax Components				
	New York State	Metropolitan Transportation Authority	Westchester County	Local Share**	Total
Annual Taxable Sales*	4%	0.375%	1.50%	1.50%	7.375%
\$4,067,797	\$162,712	\$15,254	\$61,017	\$61,017	\$300,000

Source: DeCiccio

* Taxable sales amount includes only items that are taxed. Certain food items are exempt as per New York State tax law.

**Note: The local share does not all accrue to the local government; it is allocated between the County and all of the local governments and school districts. The local component is split proportionally among the municipalities based on population.

Anticipated Costs of Community Services

The table below describes potential costs for Town services. It is noted that, the Town tax rate is just one revenue source for the Town, therefore, the table below estimates the approximate percentage of property tax revenue that is paid through property tax. For example, the Town’s 2014 general fund is budgeted for \$8,525,559, of this total, 34%, is funded by property taxes. The Town’s Police Department budget is \$798,932. Assuming that 34% of this total is funded by the tax rate, \$271,637 of the Police budget is funded by taxes, which is \$13 per person. The Site is expected to generate approximately 241 people, which would then cost approximately \$3,133.

Analysis is limited to these services (Police, Fire, Parks and Recreation, and Highway) because these are the services directly related to shifts in population. Also, some costs are considered fixed. For example, a change in population will not create a change in the salaries for employees such as the Town Clerk or the Supervisor.

**Table III.L-5
Potential Additional Costs for Services**

Service	Budget	Town Population	Approx. % Funded Through Tax Rate	Cost per Capita	Project Population	Potential Project Cost	Comments
Somers Police	\$798,932	20,434	34%	\$13	241	\$3,133	Project anticipated to offset any additional cost to Police. Per capita police costs attributable to the proposed project are expected to be lower than indicated, since the development will be able to be served by the existing police department personnel with no additional capital equipment or special services required for the anticipated population.
Somers Fire District	\$2,642,560	20,434	100%	\$129	241	\$31,089	Project will adhere to all local fire regulations. The fire district will not incur any additional costs related to special services or new equipment.
Somers Parks & Recreation	\$741,983	20,434	34%	\$12	241	\$2,892	Costs for parks and recreation will be offset by the \$695,750 in recreation fees from the project. (See Section III.L.2.c below.) The population of the proposed development is likely to have fewer school age children than a typical single family home in Somers, thereby reducing the per capita recreation costs.
Somers Highway Fund	\$3,324,003	20,434	84%	\$137	241	\$33,017	The internal roadways of the residential development will be private roads, to be maintained by a Homeowners Association (HOA). Therefore, no Town services would be utilized for maintenance or snow plowing of these roadways, resulting in significantly lower per capita costs than indicated for the Town as a whole, which is largely comprised of single family homes. Taxes generated for the Highway Fund would contribute to the maintenance of the Town-wide street network and are anticipated to cover any costs incurred by the increase in traffic on local streets. The driveway and parking lot of the grocery store would also be privately maintained.
Total						\$70,131	

Although any new development would require some Town services and associated costs, the actual costs directly attributable to a condominium development would be less than for a single family subdivision, given the



demographics of the anticipated population, the service needs and the private roads provided on-site. Projected taxes and fees would offset any Town costs.

School district costs would similarly be less than taxes generated from the proposed development. As previously noted, the instructional cost per student in the Somers School district is estimated at \$14,772 per student. It is anticipated that the Proposed Action would generate approximately 37 students (see Chapter III.I, Community Services). Therefore, the cost of instruction for these students is estimated to be \$546,564 (37 students x \$14,772). The methodology used for this impact analysis uses the portions of the school budget for student instruction, employee benefits and transportation and subtracts the portion from state aid. A significant portion of the school budget consists of buildings and grounds, administrative and capital costs, which in the Applicant's opinion, would not be affected by the addition of a small number of students. Since the proposed development is anticipated to generate approximately \$548,161 to the School District, a net benefit of \$1,597 would be provided annually to the School District.

b) Projected Fees to Heritage Hills Water and Sewer District

Expansion of the Heritage Hill Sewer District and Water District to include the Site will increase the number of users to those districts. Given the capacity to serve exists (see Chapter III.K, Utilities) the increased number of users will pay into the districts to obtain services, covering their own costs to the private utility. Water rates are established by the NYS Public Service Commission. Sewer rates are established by the Town Board. Rates are based upon established rate making practices and procedures.

If the Site was developed under existing zoning, the lots would have individual wells and septic systems, therefore, individual homeowners and/or the homeowners association would be responsible for maintaining these systems. If the existing MFR-H district were applied, the Heritage Hills Sewer District and Water District would be expanded therefore, costs would be covered by user fees (same as the Proposed Action).

As described in Chapter III.B, Zoning, the only other site eligible for the new MFR-DH district is a 4-acre site located near the intersection of US Route 202 and Route 100. Due to its size, this site would only be permitted to develop commercial uses with the MFR-DH district and would not be permitted to be redeveloped under the existing MFR-H district. If redeveloped with commercial uses as permitted in the MFR-DH district, it is expected that the site would be included in the Heritage Hills Water and Sewer District and user fees would cover costs to the private utility.



c) Anticipated Recreation Fees

The Town of Somers collects a fee for new residential development, which contributes to a town-wide fund for open space, parks and recreation facilities. The fee per new single family residential lot is currently \$11,500. In this case, pursuant to Town Code §55 and Town Code §170-114D, the recreation fee for multi-family dwelling units is 85% of the adopted recreation fee per newly created building lot for dwelling units with 3 bedrooms, and 70% for dwelling units for 2 bedrooms. Therefore, the fee per 3 bedroom residential unit would be \$9,775 ($\$11,500 \times 85\%$) and for 2 bedroom residential unit would be \$8,050 ($\$11,500 \times 70\%$). Therefore, the recreation fee collected by the Town from the Applicant would be \$695,750 (30 units x \$9,775) + (50 units x \$8,050).

If the Site was developed with the existing R80 and R40 mapping, ten single-family homes could be constructed (see chapter IV, Alternatives), which would generate \$115,000 (10 homes x \$11,500) in recreation fees. This would be \$580,750 less than the amount anticipated with the Proposed Action.

If the MFR-H floating district were applied to the site and 109 multifamily dwelling units (all two-bedroom units) were constructed, then \$877,450 (109 units x \$8,050) would be generated in recreation fees. This would be \$181,700 more than the amount anticipated with the Proposed Action. According to Town Code §55, the Town Board may waive, in whole or part, recreation fees for affordable housing, so the projected amount could be reduced. (See Alternative B4 in Chapter IV, Alternatives, for additional details regarding application of the MFR-H floating district).

d) Cumulative Taxes Generated

As described in Chapter III.B., Zoning, one other site in the Somers hamlet has been identified as potentially eligible for the proposed MFR-DH floating district. With application of the MFR-DH floating district, this site could produce a maximum of 26,332 square feet of retail, which would generate approximately \$144,826 in taxes (26,332 sf x \$5.50 tax per sf). Sales tax revenue cannot be predicted because it depends on the type of businesses that would locate here. This site is already developed with a small commercial strip under existing zoning and generates approximately \$23,455 in annual property taxes. This site is not eligible for the existing MFR-H district due to its size.



e) Jobs to Be Generated by Proposed UsesTemporary/Construction Jobs

It is estimated that approximately 100 full time equivalent (FTE) construction jobs will be generated at the site, over a construction period of up to 36 months (see Chapter II.E for construction discussion).

Permanent Jobs

It is estimated that the grocery store would employ 25 people per shift for three shifts. No permanent jobs are anticipated from the residential, except for contractors providing maintenance of the property (i.e., landscaping, snow removal, road maintenance).

The number of temporary and permanent jobs to be generated by the proposed Project would benefit the Town but would not be substantial enough to have a significant impact on growth or character of the community.

f) Affordable Housing

The MFR-DH includes provisions for a small grocery store in the Somers hamlet as a community benefit (unlike MFR-H which only permits residential uses). The proposed MFR-DH is different from the MFR-H in that it does not include an affordable housing component.

The Town of Somers is obligated to provide 188 affordable housing units as a result of using approximately \$4 million in Westchester County Legacy Funds for the Town's acquisition of the Angle Fly Preserve. If the Town does not provide the affordable housing units, the Town will have to pay back half of the grant to the County.³ The fiscal obligations of the Town of Somers relative to the Town's acquisition of Angle Fly Preserve utilizing County Legacy Funds and their repayment conditions are not related to the Somers Crossing project. (See also Chapter III.A, Land Use for further discussion of affordable housing, and how it relates to the Town's Comprehensive Plan and Westchester County Planning initiatives).

g) Tax Comparison

Under existing zoning, Residential R-80 and R-40, the Site would generate approximately \$190,000 annually. If the Site was developed with MFR-H zoning, approximately \$586,970 would be generated. Fiscal impact of a plan utilizing the

³ Sources: The Journal News 1/26/07, www.lohud.com 10/11/13, Somers Daily Voice 2/20/13.



existing MFR-H floating district is further described above and in Chapter IV, Alternatives. Sales tax would not be generated with existing or MFR-H zoning because commercial uses would not be included. The proposed Project is estimated to generate approximately \$716,365 in annual taxes.

3. Mitigation Measures

The proposed Project would result in a net positive impact for the taxing districts, including the Somers Central School District. The development is anticipated to generate a combined total of \$716,365 in annual property taxes (\$611,864 residential + \$104,500 grocery = \$716,365).

Using a methodology based solely on the portion of the school budget for student instruction compared to the calculated tax revenues to be generated, the estimated tax surplus from the project for the School District is approximately \$1,597 per year. The economic benefits to the Town would include tax revenues and other positive impacts to the local economy including employment at the proposed grocery store. There will be no additional costs to the Town Highway Department for on-site roads since they will be privately maintained. The additional 241 persons utilizing Town roads and facilities will have a minimal impact on Town roads. It is anticipated that recreation costs due to the condominium development will be offset by the recreation fees paid by the Applicant. Likewise, it is expected that the increase in police costs and fire district costs will be offset by property taxes generated by the development. Therefore, it is not anticipated by the Applicant that the Project would result in any significant adverse impacts to the taxing districts.

The additional demand for police officers and emergency services workers is not significant and thus, does not create any adverse impact fiscally. As previously noted, according to published multipliers, an additional 0.398 fire personnel, 0.04 EMS Full-Time personnel, and 0.482 police personnel would be demanded from the Proposed Project. These increases are not considered significant.



M. Visual Resources and Community Character

1. Existing Conditions

a) Definition of Study Area

The study area for visual resources and community character includes locations along public roadways from which the Somers Crossing Site is in direct line of sight. The study area therefore includes portions of US Route 202, NYS Route 100, and the interior of the Towne Centre at Somers shopping center. Exhibit III.M-1 shows this study area and provides a key to the photographs used in the visual resources and community character analysis. (See also Chapter III.N, Historic Resources, for visual analysis relative the historic resources in the vicinity). Traveling east on Route 202, the Site can be seen starting at about Fireman's Field (see photograph 3). As shown in Photograph 5, traveling west on Route 202, the Site frontage can be seen beyond the sign for the Towne Centre shopping center. Traveling south on Route 100, the Site frontage can be seen just beyond the shopping center (see Photograph 9). Traveling north on Route 100, the Site cannot be seen until just beyond the State Police barracks on the left (see Photograph 7).

b) Existing Visual Conditions

Views of Site from Surrounding Roadways

Existing visual conditions on the Project Site have been photographed (showing both "leaf-off" and "leaf-on" conditions) as viewed from adjacent streets, at various viewpoint locations. These locations are indicated on Exhibit III.M-1, Photograph Key, and are listed with their descriptions below.

Corridor Views of Site from US Route 202 (See Photographs 1, 2, 3, 4, 5, and 6)

All views of the Site frontage along US Route 202, including views from the roadway, Fireman's Field, Towne Centre entrance, and Heritage Hills Drive, are views of vacant woodlands.

Photographs 1 and 2 show views along Route 202 along the frontage of the Site. Photograph 1 is looking east, Photograph 2 is looking west. Photograph 3 is a view from Fireman's Field looking east toward the Site. Photograph 4 is the view west on Route 202 taken near the entrance to Towne Centre at Somers with a view to the intersection of Heritage Hills Drive. Photograph 5 shows a view of the existing entrance to the Towne Centre at Somers and adjacent office building.

Photograph 6 shows the view from Heritage Hills Drive looking directly south into the Site frontage at Route 202.

Corridor Views of Site from NYS Route 100 (See photographs 7, 8 and 9)

Views of the Site from Route 100, whether northbound or southbound, are of vacant woodlands. The view corridor is primarily pastoral, and forested; typical of the wooded areas of northern Westchester, and there is no distant view. The topography of the Site is lower than the elevation of the roadway, as it is on the Somers Towne Centre site as well. Wooded lands on the east side of Route 100 opposite the site frontage rise up in elevation from the road.

The visual experience from the perspective of a driver traveling north towards Somers Town House along NYS Route 100 is that of vacant woodlands on the left. The Somers Town House can be seen in the distance but is not prominent until just past the Site frontage. Photographs 7 and 8 are views toward the site, from Route 100. Photograph 9 is a view looking south on Route 100, from the vicinity of the shopping center. (See also Chapter III.N, for visual impacts in the context of historic structures).

Along the Route 100 site frontage, there are existing stone walls that roughly follow the property line, parallel to the road. There is another stone wall on the Site which runs from Route 100 in an east-west direction (perpendicular to Route 100) parallel to the common property line with Somers Towne Centre to the north (see Exhibit II-4, Site Constraints for location of wall).

Views from Towne Centre at Somers Shopping Center (See photographs 10 and 11)

Views of the Site from the interior of the adjacent shopping center are of vacant woodlands, although some wetlands can be viewed on the northern portion of the Site from the parking lot. The topography of the Site slopes down from the southern edge of the shopping center. Photograph 10 is a view toward the Site from the southern edge of the parking lot of the shopping center looking toward the wooded site. Photograph 11 is a view from the parking lot toward the Site in the vicinity of the existing stormwater pond constructed on the Somers Crossing Site to accommodate drainage from the shopping center.

c) Character of Existing Development Immediately Surrounding the Site

To the south of the Site on Route 100 is primarily vacant lands, with the only existing development in immediate vicinity being the NYS Police barracks located on the west side of Route 100, as well as the Mobil station and office park south

of the Police. The Police building is a single-story brick building partially surrounded by a flagpole, parking lot and mowed grass. Also along Route 100 south of the Site (on the east side of the road) is the IBM property which is either wooded or landscaped lands as viewed from Route 100. No IBM buildings can be seen from the immediate area of the Site on Route 100. The entrance to IBM contains a traffic signal, located south of the Mobil station, but north of the intersection with Route 138. The Somers Crossing Site is not visible from this intersection.

Adjacent to the east and north of the Site is Towne Centre at Somers shopping center. The center is comprised of one-story, mostly white, retail buildings. The center is partially screened from view along Route 100 due to a lower elevation than the roadway and a landscaped buffer. The retail buildings are mostly hidden from view along Route 202 because they are set back far from the entrance. The primary entrance to the shopping center is on Route 100, just north of the Site, and there is a secondary entrance on Route 202. The two-story Towne Centre at Somers Professional Building fronts directly on Route 202 (see Photograph 5 and Exhibit III.N-3, HR-5).

The flagpole cell tower (wireless telecommunications facility) on the adjacent shopping center site is located in the southwest corner of that site, approximately 30 feet from the wetland on the Subject Site (within the regulated wetland buffer) and approximately 20-25 feet from the site property line at the closest point. See Photographs 12a and 12b.

Some parts of the Site near Route 202 are visible from the Somers Hamlet Historic District. See Chapter III.N, Historic Resources, for a delineation of the historic district and a visual analysis relative the historic resources in the vicinity including photographs (See Exhibits III.N-2 and III.N-3).

The character of the hamlet is varied, with buildings of recent construction as well as historic structures. In addition to the photographs included in Chapter III.N, additional photographs of buildings in the vicinity are provided in Exhibit III.M-3 (Character Photographs), showing both the older buildings in the historic district to the east and more recent structures closer to the Site.

Photograph 13 shows the entrance to the hamlet from Route 100. Buildings with historic character include St. Luke's Church (Photograph 14), the Elephant Hotel which is now the Somers Town Hall (Photograph 15 and Photograph HR-1), the commercial development across from the Elephant Hotel on Route 100 which is a mix of old and new resources (Photograph 16 and Photograph HR-2), houses located on a small lane behind Bailey Park (Photograph 17), and the houses used

for residential and commercial on US Route 202 (Photographs 18 and 19 and Photograph HR-4). More recent structures include commercial (Citibank) buildings on Route 100 (Photograph 20) and US Route 202 (Photographs 21, 22, 23, 24, and 25) as well as the fire station (Photograph 26). Photograph 27 shows the entrance to Somers Towne Centre from US Route 202. The Towne Centre retail buildings are mostly hidden from view from public roads due to distance, elevation and tree cover.

No lighting is currently on the Site, so the light level is the same as the existing, undeveloped conditions. The adjacent Towne Centre at Somers has 14-foot high pole lights throughout the parking lot. Existing site lighting at the Towne Centre does not currently affect immediately surrounding properties.

d) Existing Local Regulations or Policies

The portion of the Site fronting on Route 202 is located in the R40 zoning district and the portion of the Site fronting on Route 100 is located in the R80 district. Both districts require a minimum front yard of 40 feet. The MFR-H district requires a setback for structures of at least 75 feet from any street line and 100 feet from a common property line with land in an adjoining single-family residence district. Required landscape screening is regulated in Section 170-34 of the Town Code. Specifically, as related to the proposed project, Section 170-34.C. states "...all off-street parking and loading areas subject to site plan approval by the Planning Board shall include at least one shade tree of not less than four inches caliper for each six parking spaces. This is in addition to ground cover, shrubs and hedges which are to be provided in appropriate locations where they will not interfere with safe sight distance for pedestrian or vehicular circulation."

Scenic resources are regulated in Section 138 of the Town Code. Section 138-13.A.(1) states that for scenic roadways "each property adjacent to a scenic roadway shall maintain an area 30 feet in width extending from the right-of-way line into the property in a state recognized by the Town Board in its designation of the scenic roadway. Within such area, there shall be no significant disturbance, such as building, grading or clearing..." Exceptions to this regulation include "access corridors" and "customary and/or minor landscaping activity". As of this writing, the Route 100 corridor in the vicinity of the Site has *not* been designated as a "scenic roadway" by the Town.

The Town's 1994 Comprehensive Master Plan states as objectives "the designation and protection of scenic road corridors should be pursued aggressively" and "landscape plans and programs must be an integral component

of all subdivision and site plan reviews.” (Page 8.) In the Comprehensive Plan Update (2005 – which was never completed or adopted as of this writing), the Route 100 corridor in this vicinity was discussed as a scenic roadway to be preserved with a buffer of 50 to 100 feet (Draft Recommendations for the Somers Hamlet Business Center map). However, this scenic designation has *not* been made by the Town.

2. Anticipated Impacts

Anticipated Changes in Visual Character and Impacts to Views

The proposed zoning will permit development on the Site as described in the Concept Plan in this DEIS; including 80 multifamily units on the south end of the Site and a neighborhood grocery store and related parking on the northern portion of the Site. The limit of disturbance line for this concept plan is indicated on Exhibit III.D-3. This limit indicates the loss of natural vegetation (approximately 16.1 acres) on the primarily wooded site to be cleared for the proposed development. This will change the visual character of the Site from wooded to partially developed, portions of which will be visible from travelers on Route 100 and Route 202 in the vicinity of the project frontages on those roads. However, in addition, approximately 10.58 acres (approximately 40% of the site) are anticipated to be preserved in perpetuity in permanent natural open space.

The proposed structures would be partially visible post-construction, especially in the “leaf off” condition during the winter months. Some of the residential structures would be partially visible from Route 100; particularly the second story and roofs of the closest units to the roadway. The grocery store would not likely be visible from Route 100.

The parking lot for the grocery store, and the entry road to the north would be visible from Route 202. The residential community would not likely be visible from Route 202.

Proposed Visual Conditions and Conceptual Architectural Elevations

A conceptual elevation for the proposed residential units is provided as Exhibit III.M-3A. The color, scale (height and mass) and architectural style of these residential buildings has not specifically been determined, but will be designed to fit in with the character of the Somers Hamlet area.

Similarly, the color, scale (height and mass) and architectural style of the grocery store has not been finalized, but it will be designed to fit in with the character of the Somers Hamlet area and Route 100 and 202 frontages. Typical elevations at

a similar new neighborhood grocery store are included in Exhibit III.M-4, Photographs of Typical Grocery Store Character, to illustrate the anticipated village style/character of the grocery store.

Cross sections with lines of sight from public roadways were prepared to illustrate the proposed conditions relative to 1) Route 202 and the proposed grocery store; and 2) Route 100 and the proposed residential development. See Exhibit III.M-5 for the key to the cross section locations.

Cross Section A-A' (see Exhibit III.M-6) illustrates a section through the north end of the site showing the relationship between Route 202 and the Site, showing the grocery store parking lot, the proposed lawn over the stormwater facility (underground/not visible) and the natural open space to the south. Here, the closest parking is proposed 75 feet from the property line along Route 202, with lawn and landscaping in between the parking and the road.

Cross Section B-B' (see Exhibit III.M-6) illustrates the cross section through (from north to south) Route 202, the parking lot, the grocery store building, and the open space. This cross section shows the 205+ foot distance from the road to the front of the grocery store structure, and the relationship to the parking lot, building height, and the open space behind the building. In this area of the Site, the topography is relatively flat from the road through the parking lots. The store is set back significantly from the road, and would be visible from the immediate area, but not as immediately visible as a driver along Route 202 travelling from the east, since there is over a 190-foot distance from the Route 202 right-of-way to the storefront (as shown in Cross Section B-B); however, the store would be in a direct line of sight for a driver travelling from the west. The closest cars in the parking lot would be approximately 20 feet from the front property line on Route 202. This parking area would be visible from a driver travelling on Route 202. This is consistent with other structures and parking areas along the south side of Route 202. Existing building and parking setbacks¹ in the hamlet vicinity are as follows:

South Side of Route 202:

- Older houses are set back 10-20 feet from the roadway with parking located in the rear of the building (see Photographs 18 and 19).
- The auto body shop is set back 25 feet from the roadway; parking has no setback from the roadway (Photograph 23).
- The fire station is set back 95 feet from the roadway; the parking lot is set back 10 feet from the roadway (Photograph 26).

¹ Distances are approximate; measured from aerial photography.

- The Towne Centre at Somers Professional Building is set back 20 feet from Route 202 with parking located in the rear (Photograph 27).

North Side of Route 202:

- Heritage 202 is set back 100 feet from the roadway; parking is set back 30 feet (Photograph 25).
- 253 Route 202 is set back 75 feet from the roadway; parking is set back 15 feet from the roadway (Photograph 24).
- 257 Route 202 is set back 50 feet from the roadway; parking is not set back from the roadway (Photograph 22).
- 265 Route 202 is set back 60 feet from the roadway; parking is set back 10 feet from the roadway (Photograph 21).

Cross Section C-C' (see Exhibit III.M-7) illustrates the relationship between the existing shopping center parking lots and the proposed adjacent residential units. The existing parking lot approaches to within 10 feet of the property line in certain locations. The proposed residential units would be 60 feet from the property line. Existing vegetation is proposed to remain where possible and supplemented to screen the parking lots from the new units. This supplemental planting would be field located during construction to most appropriately screen views from new units to the parking lot.

Cross Section D-D' (see Exhibit III.M-7) illustrates a cross section through Route 100 and the closest residential units to that street. There is a large vertical separation (approximately 20 feet) between the road and the units, which is visible in the cross section. A 75-foot buffer will remain between the road and the units, and the hillside will be landscaped to stabilize the slope and provide screening between the units and the road. (See Exhibits II-6A and II-6B for Conceptual Landscape Plan).

This relationship between the road in this area and the units is very similar to the relationship between Route 100 and the parking lots at the Somers Towne Centre shopping center. The parking lots at the shopping center are substantially lower in elevation and the landscape buffer screens the cars from the traveler on Route 100. The 75-foot landscaped buffer is within the recommended 50-100 foot wide buffer recommended in the Draft Comprehensive Plan Update (not finalized or adopted) and conforms with the Section 138-13.A.(1) regulations for designated scenic roadways. Designated scenic roadways are required to maintain an area of non-disturbance for 30 feet from the right-of-way line with certain exceptions including access corridors and minor landscaping. On the Proposed Concept Plan, the area within 30-feet of the Route 100 corridor will not be disturbed except for

the proposed access to the Site and an area for a by-pass drainage line which will be re-planted after disturbance. The proposed plan complies in this way, even though the Route 100 corridor in the vicinity of the Site has not been designated as a “scenic roadway” by the Town. There are no aesthetic resources or scenic views designated by the community on the Site.

Cross Section E-E’ (see Exhibit III.M-8) also illustrates a cross section through Route 100 and the residential units, extending all the way through to the wetland/proposed open space in the west side of the Site. The units closest to Route 100 have a proposed finished floor elevation (FFE) of 256’ and the road at elevation 280’. The units further west, beyond the drainage facility, have FFE of 249’ and 246’, then beyond that is the open space with an elevation of 240’. The units are “stepped” down the sloped site to follow the existing grades.

The Applicant contends that the cross sections, photographs, elevations, concept plan and narrative herein are adequate to describe the future proposed visual relationships between the public roadways and the site conditions after construction. Photo simulations were prepared for a previous application on this site (Somers Woods²), which was a similar plan in terms of unit location, bulk and the proposed intersections with Route 100 and Route 202. These photo simulations have been included in Appendix N, for reference.

Photo simulation View 1 (view directly south from Heritage Hills Drive) has the roadway in the same location as the proposed entry road on the Somers Crossing plan. However, this image was not included in Appendix N since it varies considerably from what is proposed and is therefore not relevant to the current project.

Photo simulation View 2 is a view from the adjacent Towne Centre at Somers parking lot south toward the residential units. In the Somers Crossing proposed condition, this view would look at the rear of units 21 through 26, not the front of units as shown here.

Photo simulation Views 3, 4 and 5 all show views from Route 100 toward the residential development. These views, while not exactly the same as the proposed plan, all indicate the general character of the future views toward the residential units as seen from Route 100 in leaf on and leaf off conditions. The images are similar in the general context of how visible the residential structures would be from Route 100 given the proposed floor elevations, the vegetated buffers to remain and the unit height being very similar to the proposed. It is

² Somers Woods (Preliminary) DEIS, November 2010, Co-Applicants Somers Woods Development, LLC and Urstadt Biddle Properties, Inc.

noted that the Applicant intends to use more muted colors and materials (probably not white, as shown here) to help the structures visually blend into the wooded area. The off-site flagpole cell tower (wireless telecommunications facility) on the adjacent shopping center site is approximately 150 feet from the closest proposed residential unit to the south (see Exhibits III.M-5, Cross Section Key, II-4 Site Constraints, II-5, Conceptual Site Plan and engineering plans for location of cell tower). The pole will likely be visible in the wintertime through the trees, but is not anticipated to have an adverse impact on the new residential units.

The proposed MFR-DH district requires a 75-foot building setback, the same as required in the MFR-H district. The Proposed Concept Plan conforms to existing local regulations and policies as well as the proposed MFR-DH regulations. The impact on the forested Route 100 corridor is not anticipated to be significant.

Potential Impacts of Proposed Lighting

Proposed lighting is described in concept on Exhibit II-7, Conceptual Lighting Plan. The Conceptual Lighting Plan is designed to keep the development safely and attractively lit without impacting neighboring properties or creating unnecessary impacts. The Conceptual Lighting Plan (see Exhibit II-7), shows proposed outdoor light fixtures for both the residential community and the grocery store. Internal roadways and parking lots would be lit by 16-foot high lamp posts with 175-watt luminaires. The residential units would each have wall mount lighting with 25-watt luminaires. The foot candle symbols on Exhibit II-7 indicate the anticipated light intensity.

The closest proposed light fixtures to Route 100 would be the low-watt wall mount lights on the residences, approximately 75 feet from the roadway, and the closest lamppost would be over 100 feet from Route 100. These lights would not impact Route 100 or create glare. The lampposts in the parking lot of the proposed grocery store would be approximately 10 feet from Route 202 and, as shown on Exhibit II-7, Conceptual Lighting Plan, could potentially spill some light onto Route 202. All exterior lights on the property, however, would use the latest technology designed to minimize glare and night sky impacts. Significant impacts due to site lighting are not anticipated.

3. Mitigation Measures

The proposed architecture is intended to conform to the general character of the Somers hamlet, by providing related styles, materials and colors. A Landscape Plan and a Lighting Plan will both be designed to minimize impacts, and provide mitigation to the disturbed areas of the Site. The grocery store is set back approximately 205 feet from the street,



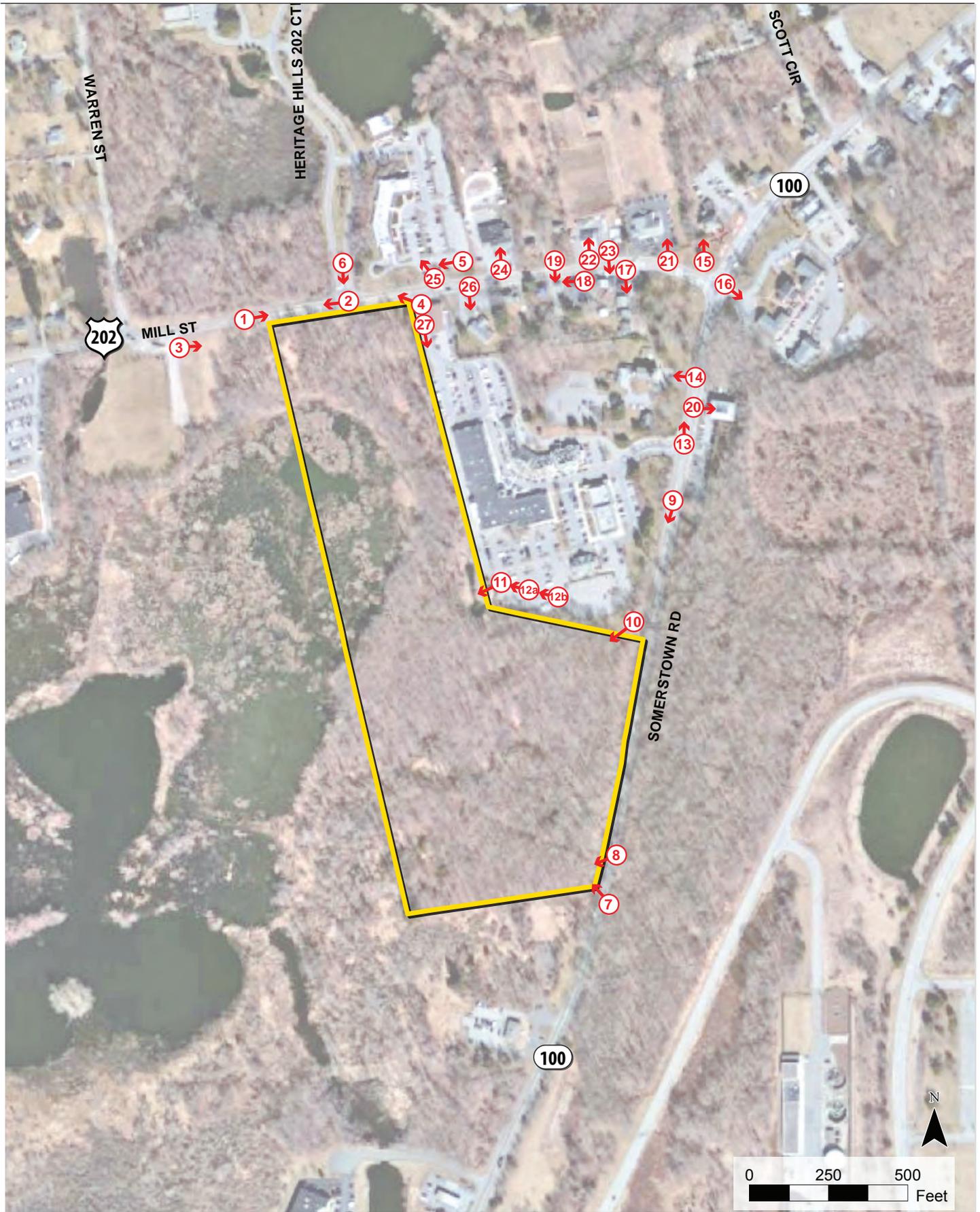
making it less prominent in the immediate view shed of Route 202, although the parking lot is likely to be visible, given it is as close as 20 feet to Route 202.

The residential units are set back from Route 100 by a minimum of 75 feet (conforming to standards) and also are substantially lower in elevation than the roadway. This, in combination with the landscaped buffer that will be provided between the units and the road, will mitigate the impact of partial views to the structures and primarily retain the character of the pastoral, forested approach that is evident today. In addition, building materials and colors will be chosen to minimize impacts to the surroundings.

An alternative streetscape on Route 202, with the Grocery Store immediately adjacent to the road (with parking behind), is described in Chapter IV. This would provide a different visual character on Route 202 in the hamlet.

The Project is consistent with relevant local regulations and policies governing setbacks, buffers and views.





SOMERS CROSSING
Somers, New York

Photograph Key

Exhibit
III.M-1

Photo 1 Leaf On

View of US Route 202 along the Site frontage looking east (Site on right).



Photo 1 Leaf Off

View of US Route 202 along the Site frontage looking east (Site on right).



Photo 2 Leaf On

View of US Route 202 along the Site frontage looking west (Site on left of road).



Photo 2 Leaf Off

View of US Route 202 along the Site frontage looking west (Site on left of road).

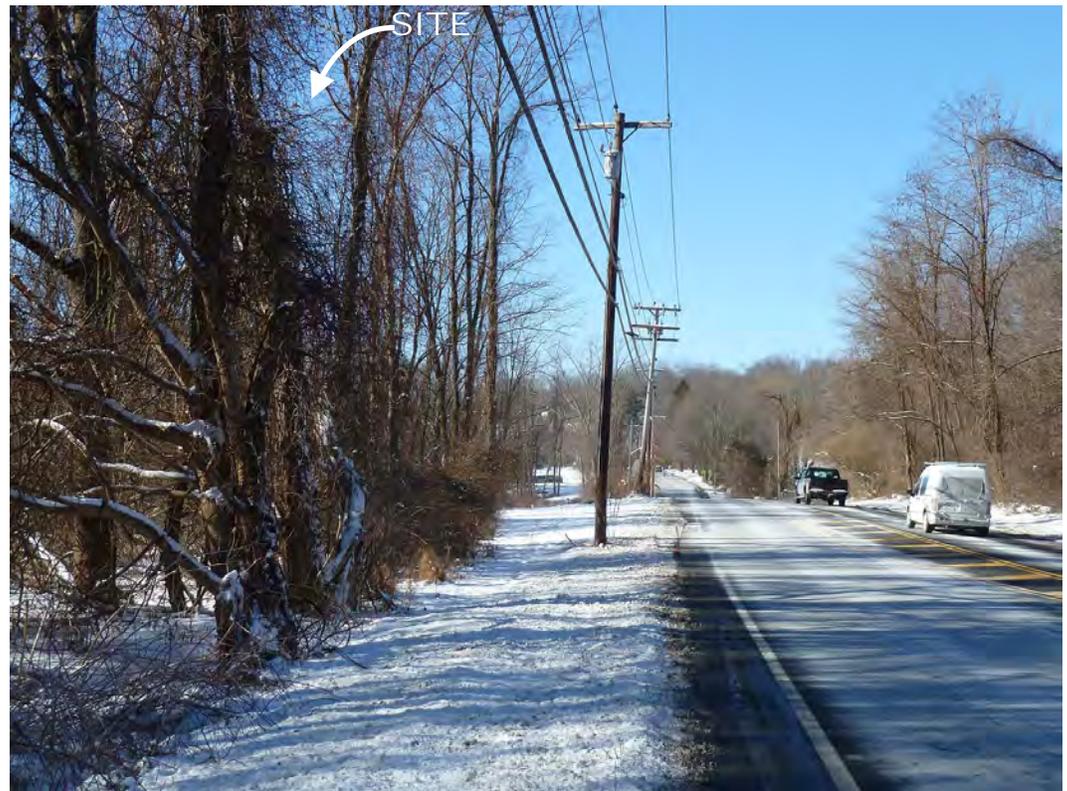


Photo 3 Leaf On

View toward the Site from the entrance to Fireman's Field looking east.



Photo 3 Leaf Off

View toward the Site from the entrance to Fireman's Field looking east.



Photo 4 Leaf On

View toward the Site from the US Route 202 entrance to Towne Centre at Somers. (entrance to Heritage Hills on the right).

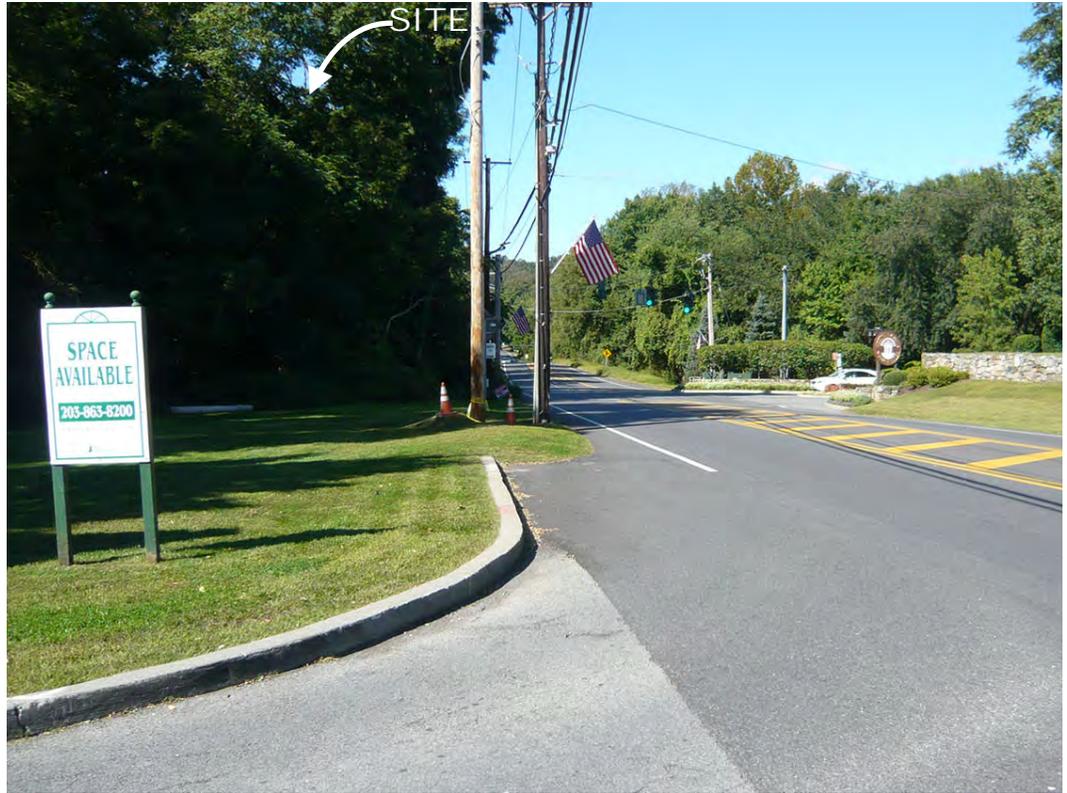


Photo 4 Leaf Off

View toward the Site from the US Route 202 entrance to Towne Centre at Somers. (entrance to Heritage Hills on the right).



Photo 5 Leaf On

View from US Route 202 looking west at the Towne Centre at Somers entrance and the northeastern portion of the Site.



Photo 5 Leaf Off

View from US Route 202 looking west at the Towne Centre at Somers entrance and the northeastern portion of the Site.



Photo 6 Leaf On

View of the northeastern portion of the Site (site frontage) looking south from Heritage Hills Drive.



Photo 6 Leaf Off

View of the northeastern portion of the Site (site frontage) looking south from Heritage Hills Drive.



Photo 7 Leaf On

View from the southernmost corner of the Site on Route 100 looking northwest across the Site.



Photo 7 Leaf Off

View from the southernmost corner of the Site on Route 100 looking northwest across the Site.



Photo 8 Leaf On

View of the Site from Route 100 looking south at the proposed entrance to the Site.



Photo 8 Leaf Off

View of the Site from Route 100 looking south at the proposed entrance to the Site.



Photo 9 Leaf On

View of the Site opposite the Towne Centre at Somers entrance on Route 100 looking south.



Photo 9 Leaf Off

View of the Site opposite the Towne Centre at Somers entrance on Route 100 looking south.



Photo 10 Leaf On

View of the Site from the southern portion of Towne Centre parking lot looking south.



Photo 10 Leaf Off

View of the Site from the southern portion of Towne Centre parking lot looking south.



Photo 11 Leaf On

View of the Site from the northern portion of the Towne Centre parking lot looking west.



Photo 11 Leaf Off

View of the Site from the northern portion of the Towne Centre parking lot looking west.



Photo 12a

View south of cell tower
from Somers Towne Centre
parking lot.



Photo 12b

Further view south of cell
tower from Somers
Towne Centre parking lot.



Photo 13

Hamlet entrance from Route 100 looking north (parking from 332 (Citibank) Route 100 on right, and St. Luke Church on the left.)



Photo 14

St. Luke's Church on Route 100.



Photo 15

The Elephant Hotel, now Somers Town Hall, is a National Historic Landmark and located in the center of the hamlet at the intersection of Route 100 and US Route 202.



Photo 16

Bailey Court, a commercial center with a residential character located across Route 100 from the Elephant Hotel/Somers Town Hall.



Photo 17

Multifamily homes located on the short street behind (east of) Bailey Park off US Route 202.



Photo 18

Commercial and residential uses along the south side of US Route 202.



Photo 19

A single-family home on the south side of US Route 202.



Photo 20

332 Route 100, a commercial building including Citibank.



Photo 21

Retail uses with parking located on US Route 202, (265 Route 202) adjacent to the Elephant Hotel/ Somers Town Hall.



Photo 22

Produce market and a pet grooming business located on the north side of US Route 202 (257 Route 202).



Photo 23

Autobody repair shop located on the south side of US Route 202.



Photo 24

Retail/office uses with parking on the north side of US Route 202.



Photo 25

Heritage 202, a retail center on the north side of US Route 202, next to the entrance to the Heritage Hills community.



Photo 26

Fire Station located on the south side of US Route 202 including a wide expanse of pavement along the roadway.



Photo 27

Entrance to Somers Towne
Centre from US Route 202
(Site on right).





Source: Boniello Land and Realty, Ltd.

SOMERS CROSSING
Somers, New York

VHB Engineering, Surveying and Landscape Architecture, P.C.

Townhouse Front Elevation

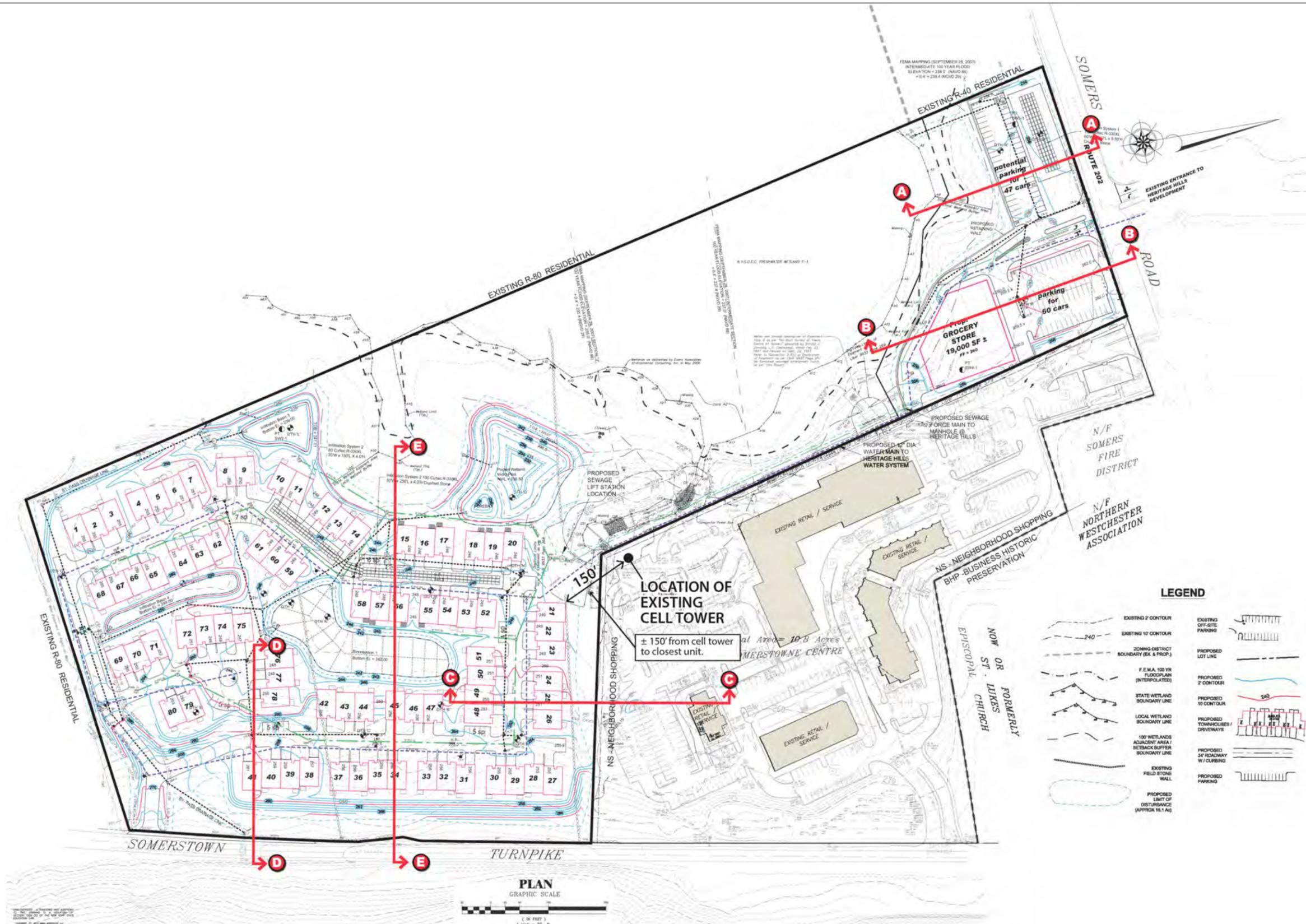
Exhibit
III.M-3A

**DeCicco's
Armonk, New York**



**DeCicco's
Armonk, New York**





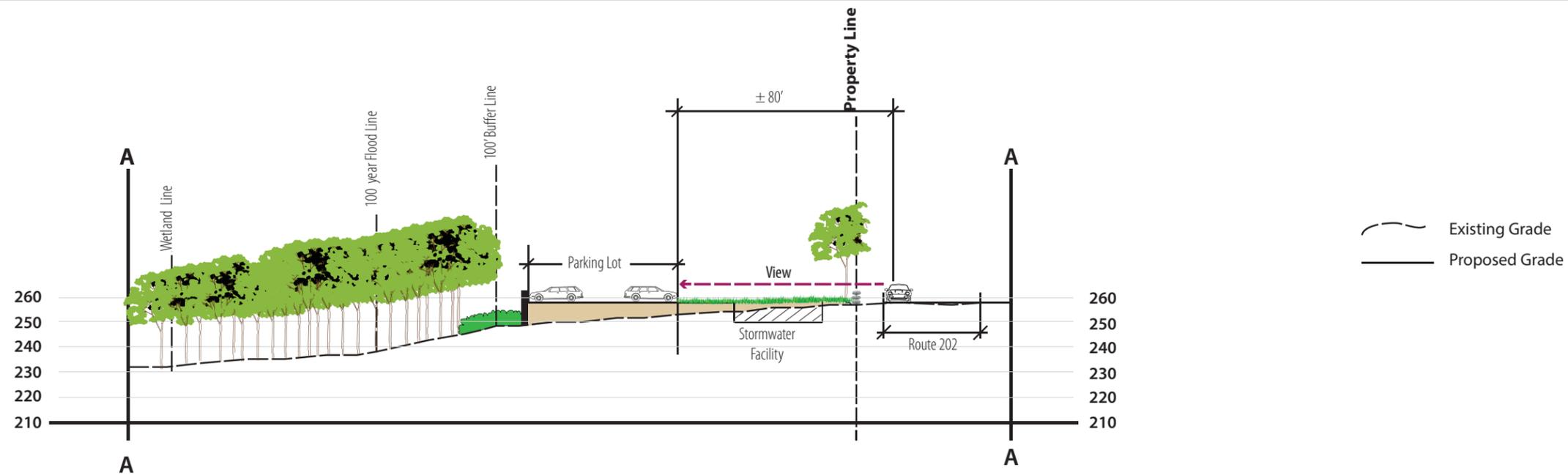
Source: Bibbo Associates, LLP

SOMERS CROSSING
Somers, New York

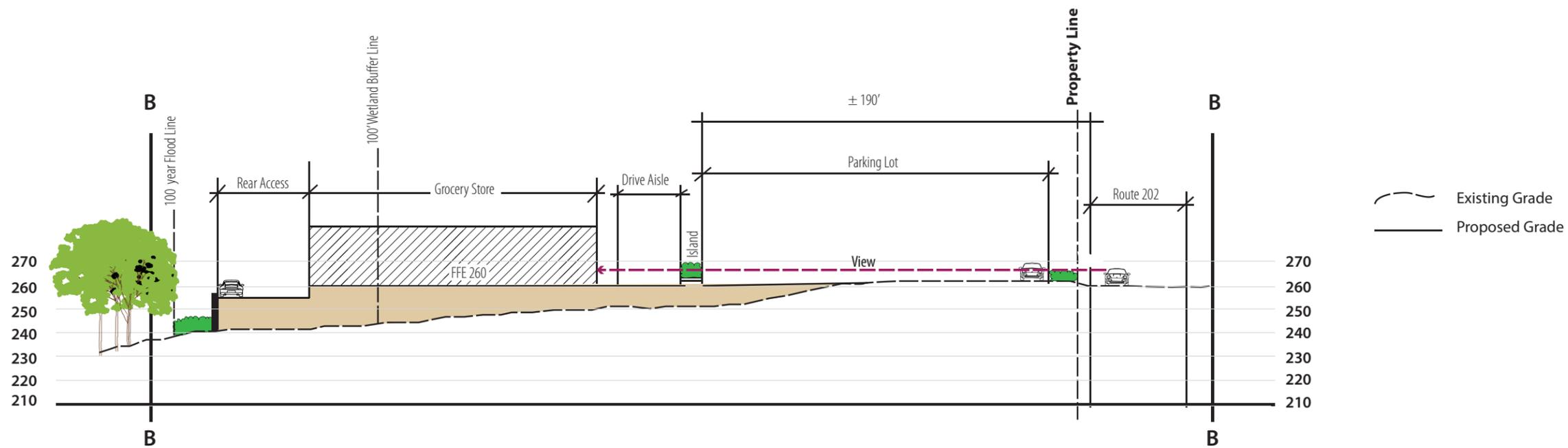
VHB Engineering, Surveying and Landscape Architecture, P.C.

Site Cross Section Key Map

Exhibit
III.M-5

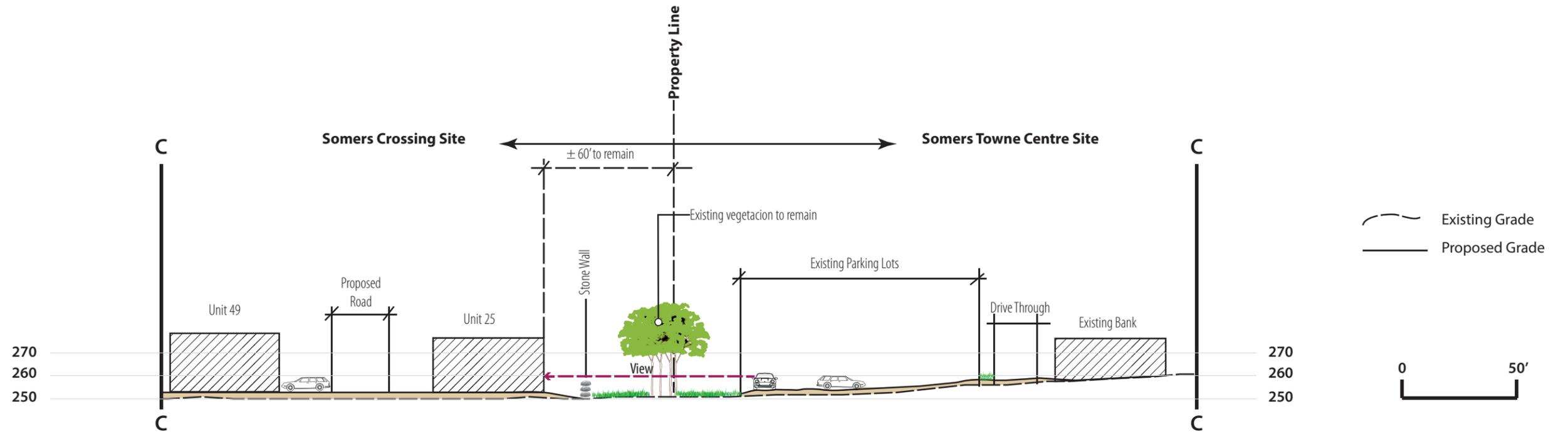


CROSS SECTION A-A' - ROUTE 202

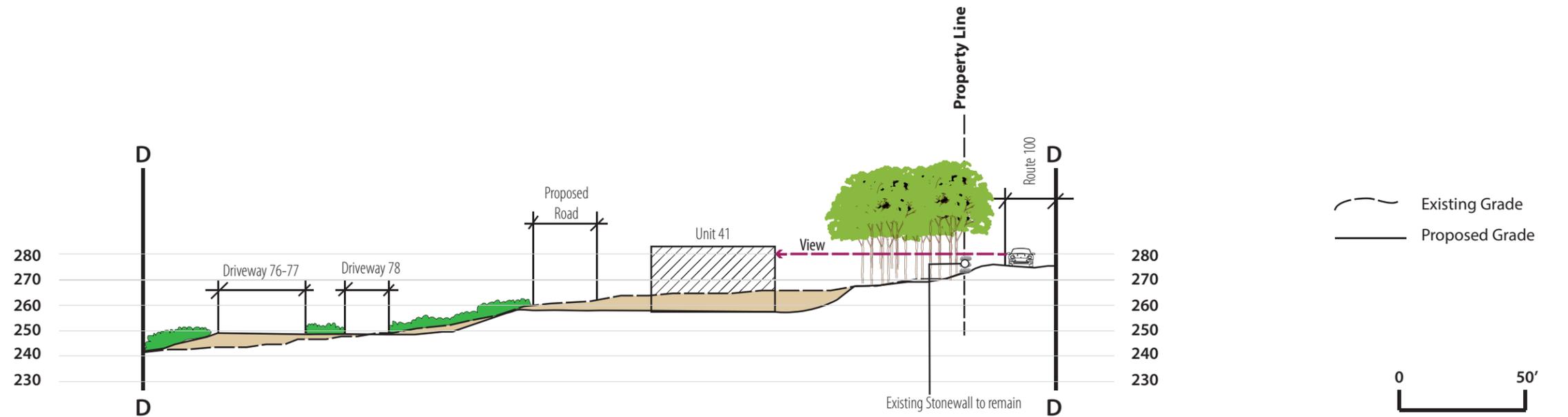


CROSS SECTION B-B' ROUTE - 202

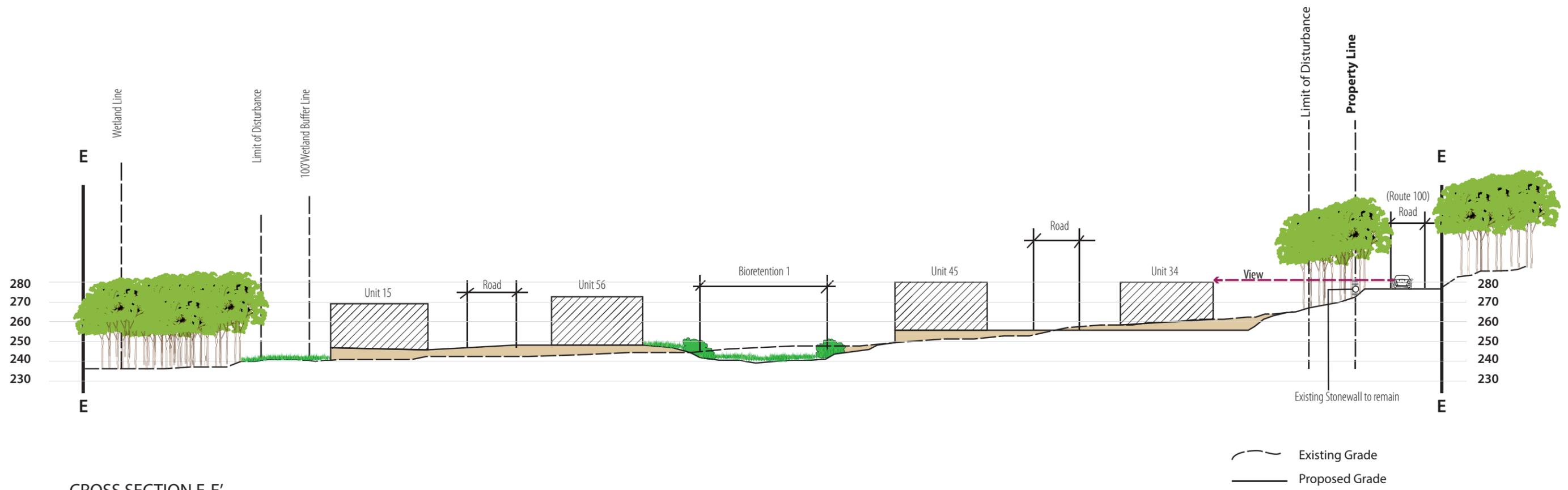




CROSS SECTION C-C' - SHOPPING CENTER/RESIDENTIAL



CROSS SECTION D-D'



CROSS SECTION E-E'

N. Historic Resources

1. Existing Conditions

This Site has been the subject of previous development applications, and cultural resource investigations have been conducted. These previous studies are included in Appendix J of this DEIS for reference, and historic resources are described below. In 2010, NYSOPRHP¹ reviewed these previous documents, and at that time declared that the archeological investigation of the Site was complete (see letter from Ken Markunas at NYSOPRHP, in Appendix J, and Chapter III.O, Archeological Resources). Regarding historic resources, Mr. Markunas stated that he would like NYSOPRHP to review the DEIS, building elevations and site plans before offering their final opinion on the project relative to the Elephant Hotel (National Historic Landmark) and the Somers Hamlet Historic District. Since NYSOPRHP is an interested agency, they will receive this DEIS, and therefore will have an opportunity to review again, in the context of this application for Somers Crossing.

a) Previous Cultural Resource Studies

A 1995 study of the Site, titled *Cultural Resources Investigation of The Oaks at Somers Property, Town of Somers, Westchester County, New York*, was completed by Ed Lenik and Nancy Gibbs. While the report was finalized and printed in 1995, the actual documentary research and 128 shovel tests were conducted from 1989 through January of 1995.

In 2010, Historical Perspectives, Inc. (HPI) completed additional field testing and a historic resources assessment for a Draft Environmental Impact Statement (DEIS) for the Somers Woods Development, LLC. HPI's specialists, like Lenik and Gibbs, meet the professional qualifications of the National Park Service's 36CFR 61.

A memorandum prepared by HPI in December 2013 confirms that the formerly approved technical reports on cultural resources sensitivity are applicable to the established Somers Hamlet Historic District (SHHD) and the currently proposed Somers Crossing design (see memorandum in Appendix J). HPI's professionals conducted a site inspection in December 2013, and reviewed the Somers Crossing plans and Area of Potential Effect (APE), (80 unit plan with grocery store, dated 11/22/13), to ensure the applicability and validity of the prior archaeological and historic resources conclusions and recommendations.

¹ New York State Office of Parks, Recreation and Historic Preservation

b) Historic Resources in the Area and Somers Hamlet Historic District

Historic resources in the area of the Site are described, mapped and illustrated in detail in the previous reports located in Appendix J, as well as in the summary of historic resources (prepared by HPI), below.

Situated in the northern part of Westchester County, Somers was formed in 1734 from portions of Cortlandt Manor². The van Cortlandt family conveyed 240 acres of land to Hachaliah Brown of Rye in 1762, constituting the first land transaction in Somers (NRHP, 2004:8.1). The Brown parcel was located in what has become the center of Somers.

The emerging community was officially incorporated as “Stephentown” on March 7, 1788, named in honor of Stephen Van Cortlandt. The village name was changed to Somers in 1808 as acknowledgment of the “intrepid and gallant” actions of Captain Richard Somers, a hero of the Tripolitan War (French 1861:705). This name change also put an end to twenty years of lost mail and confusion for many, since there existed, at that time, other towns within New York that also boasted the name “Stephentown” (Scharf, Vol. II, 1886: 469-470).

Three prominent ridges run north to south through the town, the land sloping in a southeasterly direction. Well-watered plains in the intervals between the ridges provided ideal agricultural land. Though the rich soils of the plains and intervals were advantageous for farming, cattle and sheep grazing was much more productive for the early settlers of Somers. Purchased and brought in from outside the county, lean cattle and sheep were fattened on farms in Somers, and were then driven to New York City markets via the Croton Turnpike. The Croton Turnpike, organized in 1807, was a toll road until 1849 (Ibid.: 488). It ran southeast through the town, ending at Ossining. This form of cattle/sheep trade flourished and reached its peak in approximately 1850.

The community of Somers evolved, in a linear fashion, along major intersecting roads: the Danbury, CT to Peekskill, NY Turnpike, a critical east – west corridor (today’s U.S. Route 202), and the Croton Turnpike (today’s N.Y. Route 100). *“In this favorable location the hamlet became a popular stopping place for travelers and cattle drovers. Taverns and inns, as well as a smithy, wagon shop and general stores, provided the required services. Cattle in transit would be accommodated in surrounding pastures; a number of farms fronted on the road and were*

² The early “Somers” portion was Cortlandt Manor’s lot #5, lot #6, lot #7, south lot #5, south lot #6, half of lot #7, and part of north lot #8. Cortlandt Manor was divided into three districts around the time of the Revolution, with Stephen Town and Yorktown designated as the Middle District, and called “Hanover” (Scharf 1886: 470).



incorporated into the hamlet. Craftsmen, artisans and laborers gravitated to the hamlet for the work opportunities it presented, and their housing fleshed out the community. Churches, schools and cemeteries appeared as the hamlet evolved into a town center.” (NRHP, 2004:8.1) By 1810 the *Somers Museum* newspaper was being published by Milton F. Cushing (French 1861:697).

During the second half of the nineteenth century, the advent of the railroad system and the increased demands of the larger population of the New York City led to a change of focus in Somers, from droving to dairy farming. Milk production almost entirely replaced the raising of cattle, sheep, and hogs, and became the leading industry in Somers. The first railroad branch (Harlem Line) to run through Somers opened in 1871, stopping in Goldens Bridge, Somers Center, and ending at Lake Mahopac. It was mainly a passenger line, though it also handled some freight. The second railroad branch (New York City and Northern Railroad) opened in 1879 in the western portion of town with stops in Amawalk and West Somers, before connecting with the New England Railroad in Brewster. This line handled mainly milk shipments for the markets of New York (Scharf, Vol. II, 1886: 488 - 489). These rail links bypassed the center of Somers.

For many years, Somerstown Plain had remained a major stage stop of the “Red Bird” and “Eagle” lines, as a transfer point for New York or Danbury. However, the nineteenth century advent of the railroad saw a shift not only to milk production, but also in the form of travel and in the tendency for the population and businesses to cluster near the rail stations. By 1886 the village size was still modest in numbers and contained only thirty-five homes. It remained an isolated enclave through the Post-World War II Era and into the relatively late twentieth century (NRHP, 2004:8/4).

Today, the old hamlet of Somers is a rare surviving element of the Westchester County’s nineteenth century rural heritage. The core of the surviving architecture of Somers was recognized in 2004 when the Somers Hamlet Historic District (SHHD) was approved for listing on the National Register of Historic Places. The SHHD, which is centered on the intersecting Routes 202 and 100 and stretches easterly to the intersection of Route 116, encompasses approximately 56 acres and contains 46 resources, of which 36 are contributing buildings. Included in the acreage are two side streets, Deans Bridge Road, at the east end of the SHHD, and The Lane off of Route 202 at the west end of the SHHD. (See Exhibit III.N-1, Somers Hamlet Historic District). Location of the Project Site in relation to the historic district is illustrated on Exhibit III.N-2, which is also the key to the photographs of Historic Resources (HR).



A major component of the SHHD is the Elephant Hotel, which was nationally recognized by listing as a single property on the NRHP in 1974. (See Exhibit III.N-3, Photograph HR-1.) Situated immediately north of the Routes 202 and 100 intersection at 335 Route 202, the Elephant Hotel was constructed between 1820 and 1825 by Hachaliah Bailey, a descendant of the Hachaliah Brown who first settled in Somers in 1762. It was Bailey's residence as well as a public lodging place and headquarters for his diverse businesses.

In approximately 1805 Bailey purchased the second elephant imported into North America. 'Old Bet', with other animals soon added to the troupe, formed the first traveling menagerie in the country (French, 1861: 705). Bailey, and many residents of the Somers area, imported other exotic animals and developed traveling shows. The showman P. T. Barnum referred to Bailey as the Father of the American Circus.

Bailey subsequently entered into a number of business ventures, including stage lines, farmland, and steamboat travel, as well as managing the local post office. However, when he built the elegant brick Elephant Hotel at the center of the village, he erected a monument in front to commemorate 'Old Bet'. (See Exhibit III.N-3, Photograph HR-2).

The building's significance comes from its association with the early history of the American circus. It is also an important example of a rural turnpike hotel in the Federal style. The building was purchased in 1927 by the Town of Somers for use as its municipal offices, and continues that use today. The NRHP states that the Elephant Hotel and the Old Bet Statue, which was erected in 1827 and still stands today, are in an extraordinary state of preservation and that its historic significance is plainly evident. In 2005, the Elephant Hotel was designated a *National Historic Landmark*³, acknowledging the hotel's national significance.

As noted above, the Site is located behind the existing Towne Centre at Somers. The Towne Centre, which has been fully operational for a number of years, separates the Area of Potential Effect (APE) from the SHHD. The extant commercial, multi-building shopping area, built in 1974 (built as Somerstown Center, with additions in 1991 as Towne Centre) abuts the western end of the SHHD, specifically the west and south side of the ca.1841 Greek Revival St. Luke's Episcopal Church/Parish House/Rectory complex. As built, the Town Centre recedes from both the Route 202 and Route 100 frontages due to a significantly lowered elevation for all activity areas (See Photograph HR-9). No Town Centre parking is allowed on the public routes; green setbacks (approximately 70 feet

³ Only about three percent of NRHP listings are National Historic Landmarks.

from the roadway at its shortest point) are adjacent to the Route 100 corridor, fully screening the one- and two-story retail structures (See Exhibit III.N-3, Photograph HR-13). The Town Centre's landscaped easement on the west side of Route 100 allows the St. Luke's white frame buildings to dominate the traveler's approach into the center of Somers. (See Exhibit III.N-3, Photograph HR-11.) Further, the St. Luke's property fully separates the extant Town Centre parcel from the other SHHD properties, e.g., Bailey Park, the Elephant Hotel, and the William Bailey Home.

On Route 202, the entrance to the Town Centre sits roughly opposite a similarly sized entrance into an elevated shopping area, the Heritage 202, which also dates from 1991. Heritage 202 is geared to serve the ca. 1972 Heritage Hills development on the north side of Route 202 – the county's largest planned residential community. Existing photographs (leaf on and leaf off conditions) of the site frontage are included as Exhibit III.M-2, Photographs 6, 1, 2, 3, and 4. A local fire department facility, including a wide apron of asphalt pavement, separates the Route 202 entrance into the Town Centre from the western edge of the SHHD. (See Exhibit III.N-3, Photograph HR-4.)

The Elephant Hotel is approximately 800 feet north of the Town Centre. The hotel, which currently contains the town hall, the Somers Historical Society and the Museum of the Early American Circus, is distinctly separated from the proposed development by the intersecting roadways and multiple, non-residential active lots (See Exhibit III.N-3, Photographs HR-2 and HR-3). The distance from the proposed grocery store to the Elephant Hotel is more than 850 feet along Route 202.

The Somers Central School, a National Register eligible property, is on Route 202 and west of the center of Somers and the SHHD. However, the school and its grounds are separated from the proposed construction site by a substantial regulated wetland, the Fireman's Field and public parking area, and a school bus parking field. (See Exhibit III.N-3, Photographs HR-6, HR-7, HR-8). The distance from the proposed grocery store to the Somers Central School, which is set well back from the highway and surrounded by a schoolyard, is more than 1,000 feet along Route 202.

2. Anticipated Impacts

The proposed residences fronting on Route 100 will be separated from the SHHD by the Town Centre complex and will not impact upon historic properties/districts or properties that are eligible for listing in the National Register.

Current design plans avoid visual and contextual impact of the proposed residential complex on the Route 100 corridor entrance into the SHHD's southeast corner by two design decisions. First, a 75-foot setback has been imposed on the Route 100 frontage. This setback will be vegetated, to retain the forested approach corridor evident today. Secondly, by maximizing the existing topographic changes and grading to contour the landscape, the residential unit foundations will be well below the street level. (See Chapter III.M, Visual Resources).

The adjacent Town Centre's landscaped buffer on the west side of Route 100, a 70-foot buffer at its shortest point, allows the St. Luke's Church white frame buildings to dominate the traveler's final approach into the center of Somers heading north on Route 100.

Further, the St. Luke's property fully separates the extant Town Centre parcel from the other SHHD properties, e.g., Bailey Park, the Elephant Hotel, and the William Bailey Home.

Due to the angle of the Route 202 corridor as it moves west from the center of the Somers Hamlet, the Elephant Hotel, an individual National Historic Landmark (NHL), will not be visually or contextually impacted by the addition of the proposed grocery store. As proposed, the neighborhood grocery store, fronting on a commercial strip along Route 202, will be the only new building within immediate public view from any local street. The store and two parking pads are separated from the west end of the SHHD by two active properties, a municipal fire station and a two-story frame office building.

The Towne Centre at Somers, which has been fully operational for a number of years, separates the area of potential effect from the SHHD. As built, the Town Centre recedes from both the Route 202 and Route 100 frontages due to a significantly lowered elevation for all activity areas. No Town Centre parking is allowed on the public routes; wooded buffers exist adjacent to the Route 100 corridor, fully screening the one- and two-story retail structures. On Route 202, the major entrance to the extant Town Centre complex sits opposite a similarly sized entrance into an elevated shopping area, the Heritage 202. A new local fire department facility, including a wide apron of asphalt pavement, separates the Route 202 entrance into the Town Centre from the western edge of the SHHD. It is likely that the new parking lot for the grocery store will be visible to a driver travelling on Route 202, as shown in Exhibit III.M-6, Cross Sections B-B and A-A. The parking lot is as close as 20 feet to the Route 202 right-of-way. However, the grocery store building is much further from the existing roadway (± 200 feet). These parking lots and the entry road to the grocery store will replace an existing wooded area that currently exists along Route 202.

As noted in 2010, the Elephant Hotel is approximately 800 feet northeast of the Town Centre and is distinctly separated from the proposed Somers Crossing by the intersecting roadways and multiple, non-residential active lots. The Somers Central School, a National



Register eligible property, is on Route 202 and well west of the center of Somers and the SHHD. As with the Elephant Hotel, the school and its grounds are distinctly separated from the proposed development.

The 2013 review of the updated state inventories and a pedestrian reconnaissance indicates that the prior conclusions on historic resources are still valid.

3. Mitigation Measures

There are no identified historic resources on the Project Site. According to the Applicant's consultant, Historical Perspectives, Inc., neither the proposed residences nor the proposed grocery store will impact upon historic properties/districts in the vicinity or properties that are eligible for listing on the National Register. Current design plans avoid visual and contextual impact of the proposed residential complex on the pastoral Route 100 corridor entrance into the SHHD's southeast corner by (1) imposing a 75-foot landscaped setback and (2) maximizing the existing grade and constructing the residential units well below the street level.

The proposed, low-rise neighborhood grocery store, fronting along Route 202, is the only new building that will be within immediate public view from any local street. According to the Applicant's consultant, Historical Perspectives, Inc., this store will not impact either the visual or historical context of the SHHD or the individual NHL, the Elephant Hotel.

A landscaped buffer will be provided along the Route 100 frontage, as described in Chapter III.M, Visual Resources and Community Character. No impacts to the historic hamlet area from lighting are anticipated, since any new fixtures will be specified so that they shield light so that it does not fall beyond property borders. Ambient light is not anticipated to create any significant adverse effect (see Chapter III.M, Visual Resources and Community Character).

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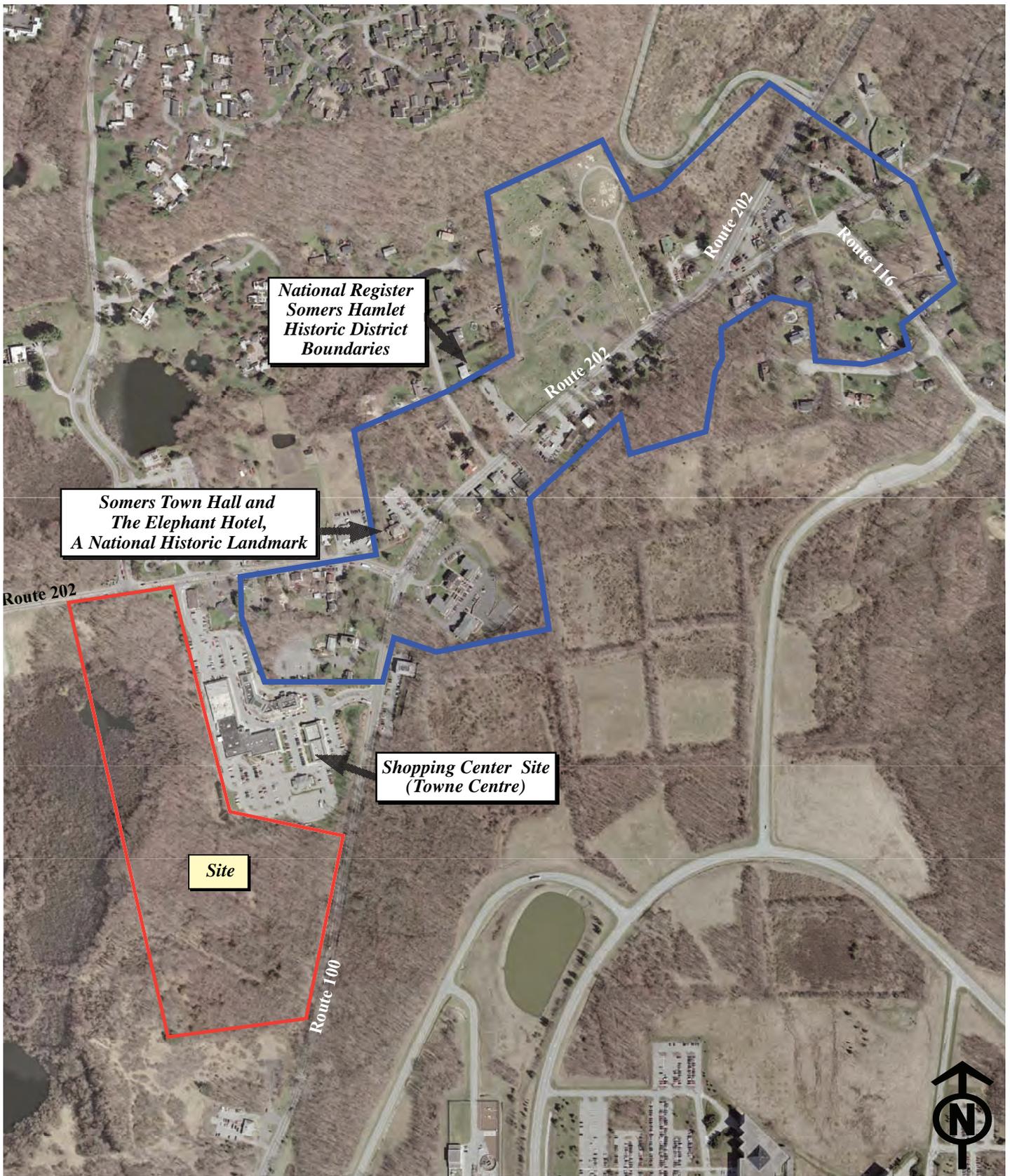
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SOMERS CROSSING
Somers, New York

**Site Boundary and
HR Photograph Key**

Exhibit
III.N-2

HR-1

Elephant Hotel/Somers
Town Hall, ca. 1825, a
National Historic Landmark
and in the Somers Hamlet
Historic District.
(View: northwest to south-
east).



HR-2

Intersection of Route 100
and Route 202 in the
Somers Hamlet Historic
District. (View: northwest to
southeast, from the Elephant
Hotel).



HR-3

Intersection of Route 100 and Route 202 in the Somers Hamlet Historic District. (View: northeast to southwest; Bailey Park on the right).



HR-4

Route 202 and western terminus of the Somers Hamlet Historic District. (View: northwest to southeast; Somers Fire Department parking lot visible on the right).



HR-5

Route 202 entrance into Towne Centre. Note that the land area beyond the Towne Centre entrance sign is the site of the proposed grocers store. (View: northeast to southwest).



HR-6

Somers Central School frontage on Route 202. (View: north to south).



HR-7

School bus parking field to the east of Somers Central School. (View: northwest to southeast across Route 202).



HR-8

Firemen's Field on Route 202. (View: northeast to southwest).



HR-9

Towne Centre parking lot.
Note the severe grading that delineates the Somers Hamlet Historic District boundary. (View: south to north, from Towne Centre toward the rear of the St. Luke's property).



HR-10

Route 100 frontage of proposed residential development, outside the Somers Hamlet Historic District. (View: northeast to southwest across Route 100).



HR-11

Route 100 frontage of proposed residential development and extant Towne Centre, outside the Somers Hamlet Historic District. (View: south to north across Route 100).



HR-12

View of Route 100 with Bailey Park on the right, within the Somers Hamlet Historic District. (View: northeast to southwest across Route 100).



HR-13

Intersection of Route 100 and Route 202. To the left is Bailey Park, and the Elephant Hotel grounds are to the right, both within the Somers Hamlet Historic District. (View: southeast to northwest).



O. Archaeological Resources

1. Existing Conditions

a) Summary of Previous Cultural Resources Reports

This Site has been the subject of previous development applications, and cultural resource investigations have been conducted. These previous studies are included in Appendix J of this DEIS for reference, and are described below. In 2010, NYSOPRHP¹ reviewed both documents, and at that time declared that the archeological investigation of the Site was complete.

A 1995 study of the Somers Crossing Site (at that time referred to as “The Oaks”), titled *Cultural Resources Investigation of The Oaks at Somers Property, Town of Somers, Westchester County, New York*, was completed by Ed Lenik and Nancy Gibbs from New Jersey. While the report was finalized and printed in 1995, the actual documentary research and 128 shovel tests were conducted from 1989 through January of 1995.

In 2010, Historical Perspectives, Inc. (HPI) completed additional field testing and a historic resources assessment for a Draft Environmental Impact Statement (DEIS) for the Somers Woods Development, LLC. HPI’s specialists, like Lenik and Gibbs, meet the professional qualifications of the National Park Service’s 36CFR 61.²

b) Area of Potential Effect³

The conclusion of both the above studies is that the Project Site, which has remained essentially the same through 2014, is not sensitive for either historic-era and/or precontact-era archaeological resources. Further, the recommendation of both studies is that further archaeological considerations, which are generally limited to the footprint of proposed impact (area of potential effect, “APE”), are not warranted. In a letter of 11/2/10, Ken Markunas, Historic Sites Restoration Coordinator of the NYSOPRHP, noted that the issue of archeology had been addressed relative to the formerly proposed Somers Woods project on this Site. The letter states that “...OPRHP has no further concerns regarding archeology[sic] and additional survey for the project is not warranted” (see letter provided in Appendix J).

¹ New York State Office of Parks, Recreation and Historic Preservation

² NYSOPRHP uses the published National Park Service standards as the requirement for professionalism.

³ Area of Potential Effect (APE) is the area within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties if such properties exist.

A 2013 review of the updated state inventories and a pedestrian reconnaissance by HPI in December 2013 indicates that the prior conclusions on archaeological sensitivity are still valid. Therefore, HPI has certified the current APE substantially conforms to the previous APE (see letter in Appendix J). However, if the APE of the finalized Somers Crossing design, including indirect effects, is altered and the APE does expand beyond the prior studies of 1995 and 2010, an archaeological field reconnaissance of the non-assessed land area is indicated.

2. Anticipated Impacts

The Somers Town Board, as Lead Agency under SEQR, established in the Scope for the Somers Crossing DEIS, that a new and complete Cultural Resources Evaluation will not be necessary for the currently proposed plan as long as the formerly executed and approved technical reports are valid and applicable to the Proposed Action plan.

A memorandum dated December 18, 2013 prepared by Historical Perspectives, Inc. (see Appendix J for memorandum as well as previously completed archaeological reports) confirms that the formerly approved technical reports on cultural resources sensitivity are applicable to the established Somers Hamlet Historic District (SHHD) and the currently proposed Somers Crossing design scenario and APE described as the Proposed Action in this DEIS. This HPI evaluation outlines the earlier findings on both archaeological and historic resources and the confirmation of those findings based on the currently proposed Somers Crossing site design.

3. Mitigation Measures

Since the cultural resource reports done previously for the Site (1995 and 2010) recommend no further archeological investigations, and the NYSOPRHP determined that archeological issues had been addressed in 2010, no mitigation is necessary. This has been reviewed and verified by HPI in 2013 relative to the current proposed action. In addition, NYSOPRHP is an involved agency, and that agency will review this DEIS and will have the opportunity to comment on the current proposal.

HPI has indicated that if the APE of the finalized Somers Crossing design, including indirect effects, is altered sometime in the future, and does expand beyond the prior studies of 1995 and 2010, an archaeological field reconnaissance of the non-assessed land area is indicated.

P. Air Quality

1. Existing Conditions

Study Area

An air quality impact analysis was performed to assess existing air quality conditions in and around the Project Site and potential air quality impacts from the proposed Somers Crossing project, including traffic-related and construction-related impacts. The purpose of the air quality analysis was to address the Scoping Document, and to demonstrate that the Somers Crossing project is in compliance with the 1990 Clean Air Act Amendments (CAAA) following the NYSDEC, NYSDOT, and the United States Environmental Protection Agency (USEPA) policies and procedures. The air quality analysis will determine if the proposed project will interfere with the attainment or maintenance of the New York and/or National Ambient Air Quality Standards (NAAQS) established by the Federal CAAA.

The NYSDEC has announced its new draft Greenhouse Gas (GHG) Emissions Policy. The policy calls for proponents of projects to quantify GHG emissions and to identify measures to avoid, minimize, and mitigate those emissions. The air quality analysis below utilizes the Town of Somers' spreadsheet program entitled "Development GHG Evaluator" to calculate vehicular traffic and building sources of GHG emissions for the existing, future no-build and build conditions. (See also Chapter III.Q, Climate Change/Greenhouse Gases).

The air quality impact analysis was coordinated with the project's traffic impact study and includes a localized (microscale, or "hotspot") study that evaluates the project-related concentrations (from vehicles traveling through congested intersections in the project area) of carbon monoxide (CO) at sensitive receptor locations. The intersections in the study area were ranked based on traffic volumes and level of service. Based on the ranking, the top intersection with the worst level-of-service (LOS) and the top intersection with the highest traffic volume was modeled. It is assumed that if the selected intersections do not show an exceedance of the NAAQS, the rest of the ranked intersections will not violate the NAAQS.

Air Quality and Pollutants of Concern

The Clean Air Act Amendments resulted in states being divided into attainment, maintenance and non-attainment areas, with classifications based upon the severity of their air quality problems. Areas of the country where air pollution levels persistently exceed the NAAQS may be designated as "non-attainment areas." The subject property is currently located in a maintenance area for CO, where the CO designation is moderate (>12.7ppm). The area will remain a Maintenance Attainment area for a 20-year period,



after which it can be re-designated to an Attainment area. A CO Maintenance area is an area in where the CO levels formerly exceeded the NAAQS, but have now been reduced and meet the NAAQS.

Westchester County is a “Previous Nonattainment Area” which is no longer subject to the 1-hour ozone standard as of June 15, 2005. As far as the 8-hour ozone status, Westchester County is designated as a non-attainment area for the 8-hour ozone. Westchester County is also in non-attainment for PM_{2.5} (for the 1997 standard) as of July 2009. Westchester County is in “attainment” for all of the remaining criteria pollutants (PM₁₀, lead, nitrogen oxide, and sulfur dioxide) for ambient (outdoor) air.

Air Quality Standards

The USEPA has established NAAQS that set limits on air pollutants considered harmful to public health. The State of New York has adopted similar standards as those set by USEPA, with the exception of lead, total suspended particulates (TSP), particulate matter (PM₁₀, PM_{2.5}), and hydrocarbons (Table III.P-1). The predominant sources of air pollution would be emissions of CO, VOCs, NO_x, PM₁₀, PM_{2.5}, and GHG.

CO is a product of incomplete combustion. As much as 95 percent of CO emissions in U.S. cities come from mobile sources¹. It is a colorless and odorless gas that prevents the lungs from passing oxygen to the blood stream. Brief exposure to high levels of CO can also impair vision, physical coordination, and the perception of time. The air quality analysis evaluated CO.

VOCs and NO_x are important pollutants because of their role in forming ozone, which is also referred to as photochemical smog. Both of these pollutants are emitted from vehicular sources. VOCs are evaporative emissions from unburned fuel. NO_x, a brownish gas with a pungent odor, is a product of high temperature combustion. It is a pulmonary irritant and short exposure may increase susceptibility to acute respiratory disease.

Particulate matter is a term referring to particles found in the air. Some particles are large enough to be seen as dust, soot, or smoke, while others are too small to be visible. The air quality analysis evaluated PM₁₀ and PM_{2.5}. PM₁₀ refers to particulate matter that is 10 micrometers or smaller in size. Similarly, PM_{2.5} refers to particulate matter that is 2.5 micrometers or smaller in size. Small particles can have adverse health effects because of their ability to reach the lower regions of the respiratory tract. Particulate matter comes from a variety of sources. Emissions from highway and non-road vehicles compose approximately 28 percent² of direct PM_{2.5} emissions from traditionally inventoried

¹ U.S. EPA. 2008. Latest findings on national air quality: Status and trends through 2006. EPA-454/R-07-007. Research Triangle Park, NC. <http://www.epa.gov/airtrends/2007>

² Environmental Protection Agency, *National Air Quality and Emissions Trends Report, 1999*, March 2001.



sources. Fuel combustion in power plants and industrial processes accounts for another five percent of PM. The largest direct source of PM is fugitive dust from paved and unpaved roads, agricultural and forestry activities, wind erosion, wildfires, and managed burning. PM is also formed indirectly in the atmosphere by the reaction of gaseous pollutants, such as NO_x. Table III.P-1 presents the NAAQS for criteria pollutants.

Mobile Source (Microscale) Analysis Methodology

The mobile source modeling followed the EPA's modeling guidelines.³ The traffic data was evaluated and the intersections that are currently the most congested and expected to experience an increase in project-generated traffic were identified. Emission factors were obtained from NYSDOT and were combined with the traffic data in EPA's mobile source model to calculate CO worst-case concentrations. The microscale worst-case concentrations from the mobile sources determined the maximum project's CO concentrations and were compared to the NAAQS.

The microscale analysis calculated maximum 1-hour and 8-hour CO concentrations in the project area during the peak CO season (winter). The EPA's computer model CAL3QHC Version 2⁴ was used to predict CO concentrations for each intersection. Receptor locations were selected near the congested intersections based upon areas where the public has access. The intersection receptors were placed at the edge of the roadway, but not closer than 10 feet (3 meters) from the nearest travel lane, as required by EPA. The results calculated at these receptor locations represent the highest concentrations at each intersection. Receptor locations farther away from the intersections will have lower concentrations because of the CO dispersion characteristics. The receptor locations that are along other roadways in the study area are also expected to have lower CO concentrations than the receptor locations at the intersection. The emission rates for vehicles traveling along these roadways are much lower than the emission rates for vehicles queuing at intersections.

The air quality study evaluates the air quality impacts of the vehicular traffic associated with the proposed Somers Crossing on the environment. The vehicle traffic represents the worst-case conditions which includes the increase in traffic volumes due to specific projects proposed for the study area, projected traffic growth over time, and future traffic associated with Somers Crossing. The air quality study utilized traffic and emissions data for future No-Build and Build Conditions. These data are incorporated into the USEPA air

³ *Guideline for Modeling Carbon Monoxide From Roadway Intersections*, US Environmental Protection Agency, Office of Air Quality Planning and Standards, Technical Support Division; Research Triangle Park, NC; EPA-454/R-92-006 (Revised); September 1995

⁴ *User's Guide to CAL3QHC Version 2.0: A Modeling Methodology for Predicting Pollutant Concentrations Near Roadway Intersections*, US Environmental Protection Agency, Office of Air Quality Planning and Standards, Technical Support Division; Research Triangle Park, NC; EPA-454/R-92-005; November 1992



quality models to generate air pollutant concentrations that demonstrate whether or not the proposed development would have air quality impacts.



**Table III.P-1
National (and Federal) State of New York Ambient Air Quality Standards**

Pollutant	Averaging Period	National (Federal) Standards				State of New York Standards	
		Primary Standards		Secondary Standards		Level	Statistic
		Level	Statistic	Level	Averaging Time		
Carbon Monoxide	8-hour	9 ppm	Maximum	None		9 ppm	8-hour
	1-hour	35 ppm	Maximum	None		35 ppm	1-hour
Lead ⁴	Quarterly Average	1.5 µg/m ³ (effective until 12/31/12)	Maximum	Same as Primary		None	
	Rolling 3 month average (2008 standard)	0.15 µg/m ³ (effective until 1/1/13)	Maximum	Same as Primary		None	
Nitrogen Dioxide	Annual	0.053 ppm	Arithmetic Mean	Same as Primary		0.05 ppm	Annual
	1-hour	0.100 ppm ⁵	3-year average	0.053 ppm : Arithmetic Mean		None	None
Total Suspended Particulates (TSP) ⁶	12 consecutive months	None	None	None		75 µg/m ³	Geometric Mean
	24-hour	260 µg/m ³	Maximum	150 µg/m ³	24- hour	250 µg/m ³	Maximum
Particulate Matter (PM ₁₀) ⁷	24-hour	150 µg/m ³	Maximum	Same as Primary		None	
Particulate Matter (PM _{2.5})	Annual	12 µg/m ³	Arithmetic Mean	Same as Primary		None	
	24-hour	35 µg/m ³ ⁸	3-year average	Same as Primary		None	
Ozone ⁹	8-hour (2008 stndrd)	0.075 ppm	3-year average	Same as Primary		None	
	8-hour (1997 stndrd)	0.08 ppm	3-year average	Same as Primary		0.08 ppm	Maximum
	1-hour	0.12 ppm	Not applicable in NYS ¹⁰			0.12 ppm	Maximum
Sulfur Dioxide	Annual	0.03 ppm	Arithmetic Mean	None	None	0.03 ppm	Arithmetic Mean
	24-hour	0.14 ppm	Maximum	None	None	0.14 ppm	Maximum
	3-hour	None	None	0.5 ppm	Maximum	0.50 ppm	Maximum
	1-hour	75 ppb	3-year average ¹¹	None	None	None	
Hydrocarbons (non-methane)	3-hour (6-9am)	None	None	None	None	0.24 ppm	Maximum



Table III.P-1 National (and Federal) State of New York Ambient Air Quality Standards: Sources/Footnotes

Sources: U.S. Environmental Protection Agency and State of New York Department of Environmental Conservation.

1	New York State also has standards for beryllium, fluorides, hydrogen sulfide, and settleable particulates (dustfall). Ambient monitoring for these pollutants is not currently conducted.
2	All maximum values are concentrations not to be exceeded more than once per calendar year. (Federal 1 hour Ozone Standard not to be exceeded more than three days in three calendar years).
3	Gaseous concentrations for Federal standards are corrected to a reference temperature of 25°C and to a reference pressure of 760 millimeters of mercury.
4	Federal standard for lead not yet officially adopted by NYS. Based upon the November 22, 2011 EPA designation for areas of New York State, which became effective on 12/31/11, the 0.15 µg/m ³ standard will be effective throughout New York State on 1/1/2013 will replace the previous level of 1.5 µg/m ³ . The 1978 lead standard (1.5 µg/m ³ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard (12/31/12 throughout New York State).
5	The 0.100 ppm standard is effective 1/22/2010. To attain this standard, the 3-year average of the 98th percentile of the daily maximum 1-hour average within an area must not exceed 0.100 ppm.
6	New York State also has 30, 60, and 90-day standards as well as geometric mean standards of 45, 55, and 65 µg/m ³ in Part 257 of NYCRR. While these TSP standards have been superseded by the above PM ₁₀ standards, TSP measurements may still serve as surrogates to PM ₁₀ measurements in the determination of compliance status.
7	Federal standard for PM ₁₀ not yet officially adopted by NYS, but is currently being applied to determine compliance status.
8	Federal standard was changed from 65 to 35 µg/m ³ on December 17, 2006. Compliance with the Federal standard is determined by using the average of 98th percentile 24 hour value during the past three years, which cannot exceed 35 µg/m ³ .
9	Former NYS Standard for ozone of 0.08 PPM was not officially revised via regulatory process to coincide with the Federal standard of 0.12 PPM which is currently being applied by NYS to determine compliance status. Compliance with the Federal 8 hour standards is determined by using the average of the 4th highest daily value during the past three years - which cannot exceed 0.084 PPM or 0.075 PPM, effective May 27, 2008).
10	(a) EPA revoked the 1-hour ozone standard in all areas, although some areas have continuing obligations under that standard ("anti-backsliding"). (b) The standard is attained when the expected number of days per calendar year with maximum hourly average concentrations above 0.12 ppm is ≤ 1.
11	Final rule signed June 2, 2010. To attain this standard, the 3-year average of the 99th percentile of the daily maximum 1-hour average at each monitor within an area must not exceed 75 ppb.



The three scenarios modeled are outlined below:

- 2013 Existing Conditions
- 2018 No-Build Conditions: Background growth and planned roadway improvements from 2013 to 2018
- 2018 Build Conditions: 2018 No Build Conditions plus Full Build of the proposed Somers Crossing project

The NYSDOT guidelines require that the air quality study be completed for all No-Build and Build alternatives which differ based on roadway geometry, traffic patterns or other factors affecting air quality in the area. These data are incorporated into the USEPA air quality models to generate emissions estimates that demonstrate whether or not the proposed development will have air quality impacts.

- **Background Concentrations**

The NYSDEC maintains an air quality monitoring system that collects concentrations of various pollutants within the State. The monitoring data was used to define the existing air quality levels, or background concentrations, within the Site and the study area. Background concentrations are ambient pollution levels from other stationary, mobile, and area sources. The total concentrations that each receptor location would experience under future build conditions include these background concentrations from other emission sources.

A review of the NYSDEC monitoring data indicates that the closest monitoring sites to the subject property which monitor CO is the New York Botanical Gardens. The 1-hour and 8-hour CO background concentration is at 3.0 ppm and 1.9 ppm respectively.

New York State Department of Transportation (NYSDOT) Environmental Procedures Manual (EPM)⁵ provides background concentrations and persistence factors for CO for each region in the State of New York. Westchester County, located in Region 8 under NYSDOT, has one-hour and eight-hour background concentrations of 3.7 ppm and 2.6 ppm respectively. These values are relatively consistent with the background concentrations recorded at the closest CO NYSDEC monitoring sites.

⁵ *New York State Environmental Procedures Manual*, New York State Department of Transportation, Environmental Analysis Bureau, January 2001.

- **Emission Rates**

All the vehicle emission factors used in the microscale analysis were obtained using the EPA's MOBILE 6.2 emissions model, the current preferred vehicle emission model. MOBILE 6.2 calculates CO emission factors from motor vehicles in grams per vehicle-mile. The CO emission rates used in this study were obtained from the NYSDOT table "Carbon Monoxide Emission Factor Table EF1." Emission factors for the microscale analysis were determined using the NYSDOT EPM recommended temperature of 43 degrees Fahrenheit for the winter season. The CO emission factors were calculated for idle and free-flow conditions based upon roadway travel speeds. An example of the emission factors are presented in Table III.P-2. These overall emission factors are determined by weighting the individual vehicle type emission factors of the NYSDOT table "Carbon Monoxide Emission Factor Table EF1." The values are weighted according to the "Vehicle Distribution by NYSDOT Region, NYSDOT Region 8."⁶

**Table III.P-2
Emission Factors for Carbon Monoxide¹**

Year	Idle	Non-Idle			
		15 MPH	20 MPH	35 MPH	40 MPH
2013	33.97	3.95	3.46	3.07	3.32
2018	29.41	3.42	2.99	2.66	2.88

¹ Based on NYSDOT EPM "Carbon Monoxide Emission Factor "Table EF1
Note: Overall Emission Factors calculated by weighting vehicle type emission factors of Table EF1.

- **Traffic Data**

The air quality study uses traffic data (volumes, delays, and speeds) developed for each analysis condition based upon the traffic analysis prepared for Somers Crossing.

2. Existing (Baseline) Conditions

The microscale analysis utilized the traffic (volumes and speeds) and emission factor data for the 2013 Existing and 2018 No-Build, and Build Conditions. These data were incorporated into air quality models to demonstrate that the proposed development will meet the 1990 CAAA and the New York State Implementation Plan (SIP) criteria. The 1990 CAAA and the New York SIP are documents that establish procedures and commitments to reduce air pollutants to clean the air. The CAAA require that a development not cause any new violation of the NAAQS for pollutants of concern, or increase the frequency or

⁶ "MOBILE6.2 CO Emission Factors For Project-Level Microscale Analysis" NYSDOT, *Environmental Science Bureau*, January 2009.

severity of any existing violations, or delay attainment of any NAAQS. Part 1 of the NYSDOT “Carbon Monoxide Emission Factor Table EF1” for the years 2013 and 2018 was used to calculate vehicle emission factors. This table was created using MOBILE6.2.

The objective of the microscale analysis was to evaluate the CO concentrations at congested intersections in the study area. The existing and new intersections in the study area were ranked based on traffic volumes and level of service under the Build Condition. Typically, only the most congested intersections are modeled for CO emissions. This methodology follows the EPA Guideline for Modeling Carbon Monoxide from Roadway Intersections⁷. The intersections in the study area were ranked based on traffic volumes and level of service.

The weekday evening peak hour traffic was chosen in order to provide a conservative estimate of the worst case scenario pollutant concentrations. Local traffic volume is anticipated to be larger on the roadways surrounding the project during the evening peak hour, as compared to the morning peak hour or the Saturday peak hour. Larger volumes of traffic will generate more pollutants which will increase the pollutant concentrations. The traffic volumes used in the study are available in the exhibits of Section III.G. These exhibits show that evening peak hour volumes are the largest of the three scenarios for the study intersections.

The study area is delineated as two intersections which were selected to be modeled for the microscale analysis, one with the worst LOS (busiest intersection) and one with the highest traffic volumes. The results of the criteria analysis determined that one signalized intersection (Bailey Court at Route 202) had the highest traffic volumes and the unsignalized intersection (Bailey Court at Towne Center at Somers) had the worst LOS. The rankings of the intersections within the study area are provided in Appendix K. These two intersections, Bailey Court at Route 202 and Bailey Court at Towne Centre at Somers, are the two intersections that are analyzed in the microscale analysis. It is assumed that if these two intersections do not show an exceedance of the NAAQS, then none of the other intersections in the study area will show an exceedance either. This is based on the assumption that the lower traffic volumes and delays at the other intersections will have lower air quality impacts. Exhibit III.P-1, Microscale Study Area Intersections presents the air quality study intersections and the corresponding receptor locations.

The microscale analysis calculated maximum one-hour and eight-hour CO concentrations in the project area during the peak CO season (winter). The EPA's computer model

⁷ *Guideline for Modeling Carbon Monoxide from Roadway Intersection*, United States Environmental Protection Agency, Office of Air Quality Planning and Standards, EPA-454/R-92-005, November 1992.



CAL3QHC8 Version 2 was used to predict CO concentrations for each intersection. CAL3QHC predicts CO concentrations from vehicles in travel lanes and queues at intersections based upon analysis contained in the traffic analysis.

The one-hour CO concentrations were calculated directly using the EPA computer model, with evening peak hour traffic and emission data. The eight-hour CO concentrations were derived by applying a persistence factor of 0.70 to the one-hour CO concentrations. This persistence factor was also obtained from the NYSDOT EPM’s Table 8, “CO Background and Persistence Factors for NYSDOT Regions (Region 8: Westchester County).” It represents the average ratio of second highest eight-hour to second highest one-hour based on the evaluation of 1993-1997 CO monitoring data. The results of the microscale analysis for CO under the existing condition are shown in Table III.P-3. See Appendix K for microscale analysis data.

Table III.P-3
Existing Maximum 1-Hour and 8-Hour Carbon Monoxide (CO) Concentrations ¹
(Parts per million: ppm)

Intersections	Receptor ²	1-Hour	8-Hour
Bailey Court at Route 202	1 NE – Bailey Court	4.0	2.8
	2 SE – Somers Pharmacy & Surgical	4.0	2.8
	3 SW – Open Space	4.2	3.0
	4 NW - Somers Historical Society	4.1	2.9
Bailey Court at Towne Center at Somers	1 N – Putnam County Savings Bank/Parking Lot	4.1	2.9
	2 SE – Towne Centre at Somers Professional Building	4.0	2.8
	3 SW – Open Space	4.2	3.0

Source: VHB

- 1 The air quality study assumes that if these intersections meet the NAAQS, then all other intersections, regardless of alternative, which will have lower volumes and better levels of service, can be assumed to also meet the NAAQS. The concentrations are expressed in parts per million (ppm) and include a one-hour background concentration of 3.6 ppm and a persistence factor of 0.7 for the eight-hour. The one-hour and eight-hour NAAQS for CO is 35 ppm and 9 ppm, respectively.
- 2 See Exhibit III.P-1 for locations NW= Northwest, NE= Northeast, SE=Southeast, SW=Southwest

3. Anticipated Impacts

Future (2018) Proposed Project

The results of the microscale analysis demonstrate that all the CO concentrations for the 2018 No-Build and Build Scenarios would be below the one-hour and eight-hour CO NAAQS. Specifically, the predicted CO concentration at the receptor locations are below predicted concentrations for the 2013 Existing Condition. These reductions in CO

⁸ User's Guide to CAL3QHC Version 2.0: A Modeling Methodology for Predicting Pollutant Concentrations Near Roadway Intersections, US Environmental Protection Agency, Office of Air Quality Planning and Standards, Technical Support Division; Research Triangle Park, NC; EPA 454/R 92 006; November 1992.

concentrations can be attributed primarily to more efficient vehicles with enhanced emissions technologies as mandated by the Federal Motor Vehicle Exhaust Emissions Control Program for new vehicles entering the fleet. The results of the microscale analysis for CO under the future conditions are shown in Table III.P-4.

**Table III.P-4
Predicted (Future) Maximum 1-Hour and 8-Hour Carbon Monoxide (CO) Concentrations
(Parts per million: ppm)**

Intersections	Receptor ²		1-Hour Concentrations				8-Hour Concentrations			
			2013 Existing	2018 No-Build	2018 Build	2018 Build with Mitigation	2013 Existing	2018 No-Build	2018 Build	2018 Build with Mitigation
Bailey Court at Route 202	1	NE – Bailey Court	4.0	4.0	4.0	4.0	2.8	2.8	2.8	2.8
	2	SE – Somers Pharmacy & Surgical	4.0	4.0	4.1	4.0	2.8	2.8	2.9	2.8
	3	SW – Open Space	4.2	4.0	4.1	4.1	3.0	2.8	2.9	2.9
	4	NW - Somers Historical Society	4.1	4.0	4.0	4.0	2.9	2.8	2.8	2.8
Bailey Court at Towne Center at Somers	1	N – Putnam County Savings Bank/Parking Lot	4.1	4.0	4.0	4.0	2.9	2.8	2.8	2.8
	2	SE – Towne Centre at Somers Professional Building	4.0	4.0	4.0	4.0	2.8	2.8	2.8	2.8
	3	SW – Open Space	4.2	4.1	4.1	4.1	3.0	2.9	2.9	2.9

1 The air quality study assumes that if these intersections meet the NAAQS, then all other intersections, regardless of alternative, which will have lower volumes and better levels of service, can be assumed to also meet the NAAQS. The concentrations are expressed in parts per million (ppm) and include a one-hour background concentration of 3.6 ppm and a persistence factor of 0.7 for the eight-hour. The one-hour and eight-hour NAAQS for CO is 35 ppm and 9 ppm, respectively.

2 See Exhibit III.P-1 for locations NW= Northwest, NE= Northeast, SE=Southeast, SW=Southwest

The results demonstrate that all existing and future no-build and build carbon monoxide concentration will be below the NAAQS and no significant impacts are anticipated. Major development in the Somers hamlet is not expected, therefore, cumulative impacts are not anticipated to be significant. Also, the project alternatives, see Chapter IV.,

Alternatives, are similar enough in size and scope to the Proposed Action that additional studies are not warranted.

Construction Impacts

Construction activities associated with grading and excavation on the Site could result in temporary air quality impacts. Air quality in the area is not expected to be substantially affected by project construction because of the temporary nature of the construction and the confined construction area. The construction schedule is expected to extend up to a 36 month period. Emissions from the operation of construction machinery would mostly contain particulate matter (PM).

The Site is located in a non-attainment area for PM_{2.5}. The background concentrations have an annual average of 7.8 µg/m³ and a 24-hour average of 20.1 µg/m³ based on the Rockland County monitoring station. These values are below the NAAQS criteria of 12 µg/m³ and 35 µg/m³ respectively.

A preliminary construction schedule, equipment, and delivery amount were assumed in order to demonstrate that construction impacts to air quality would be negligible. Using emission factors developed from NONROAD, MOBILE6.2, and EPA AP42, overall PM_{2.5} emissions were quantified in terms of annual emissions. A planning level assessment of the construction activity and equipment to be used was modeled. Conservatively, a maximum average annual emission of 0.69 tons of PM_{2.5} per year was calculated by the spreadsheet model. This spreadsheet is provided in Appendix K.

In order to meet general conformity, the EPA has set forth “De Minimis” levels which dictate the amount of pollutant a project may generate annually. For PM_{2.5} in a non-attainment or maintenance area, this criteria is set at 100 tons/year. The PM_{2.5} emissions associated with construction are approximately 145 times less than the “De Minimis” criteria. Thus, construction activities associated with the project will not impact general conformity or public health. Nevertheless, emission mitigation techniques will still be employed throughout construction of the project as discussed further below.

4. Mitigation Measures

Construction Mitigation Measures

In an effort to reduce air quality emissions from temporary construction activities, the proposed project will require the construction contractors to adhere to all applicable regulations regarding control of construction vehicles emissions. This will include, but not be limited to, maintenance of all motor vehicles, machinery, and equipment associated with construction activities and proper fitting of equipment with mufflers or other regulatory-required emissions control devices. Additionally, the proposed project will contractually require the construction contractors to utilize ultra-low sulfur diesel fuel for



all off-road construction vehicles as an additional measure to reduce air emissions from construction activities.

The contractor will also be responsible for protective measures around the construction and demolition work to protect pedestrians and prevent dust and debris from leaving the Site or entering the surrounding community. Dust generated from earthwork and other construction activities like stockpiled soils will be controlled by spraying with water to mitigate wind erosion on open soil areas. Other dust suppression methods will be implemented to ensure minimization of the off-site transport of dust. There will be regular sweeping of the pavement of adjacent roadway surfaces during the construction period to minimize the potential for vehicular traffic to create airborne dust and particulate matter.

Mobile Source Mitigation Measures

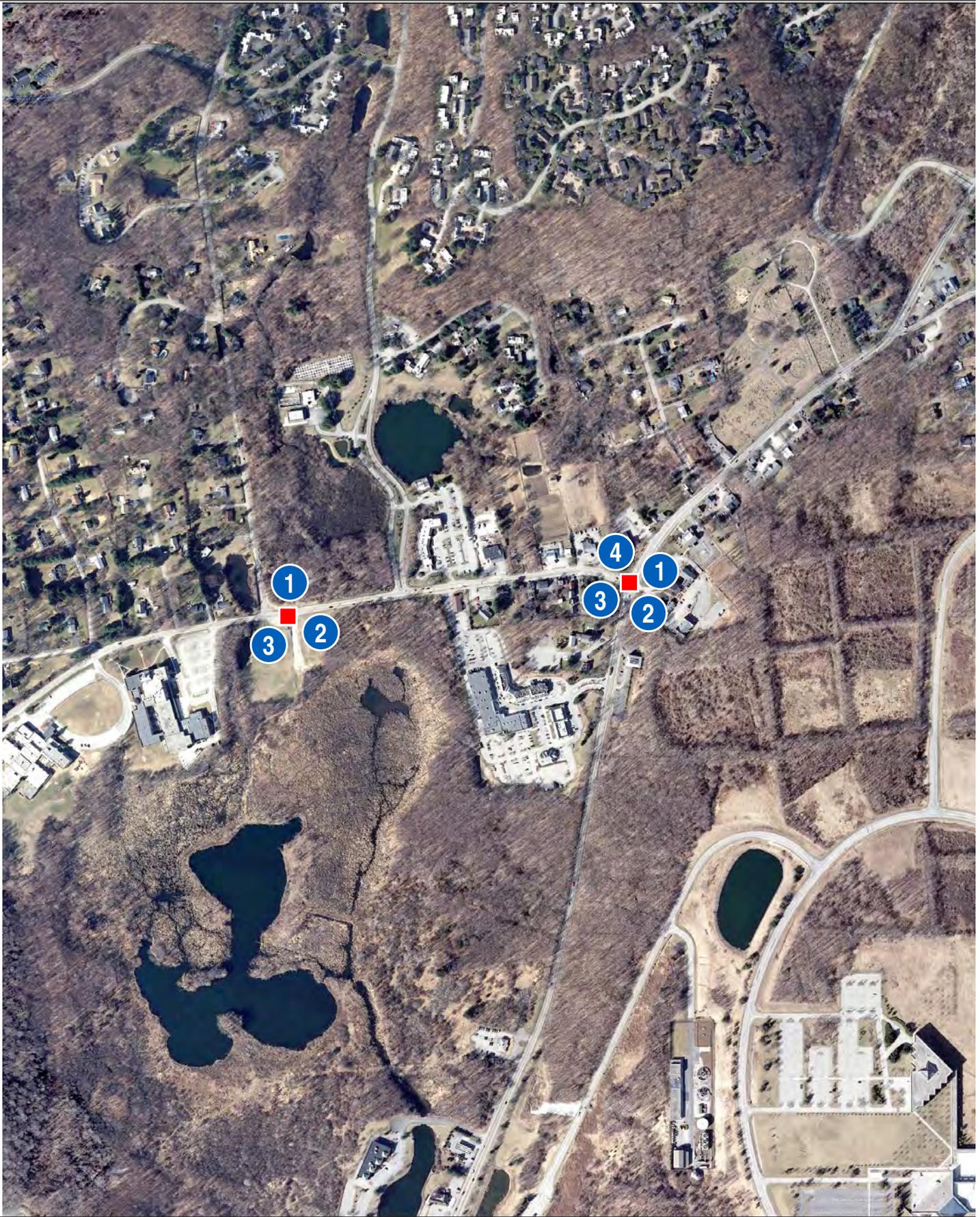
The microscale analysis evaluated impacts from project-generated motor vehicle traffic at the most congested intersections in the study area and the emissions associated with the project. State and Federal modeling procedures were used to determine the worst-case concentrations. The results demonstrate that all existing and future no-build and build carbon monoxide concentration will be below the NAAQS. The more CO concentrations are well below the NAAQS standards and the traffic mitigation proposed as part of the project further reduces the CO concentrations within the study area. Traffic mitigation measures proposed as part of this project include the following (more detailed information on the improvements can be found in Section III.G:

- Local signal timing improvements which will reduce delay and thus idling vehicle emissions;
- Alignment of the proposed site access with the opposite existing Heritage Hills driveway;
- Restriping to develop a separate westbound turn lane for entering traffic; and
- New pedestrian connections and walkways to reduce vehicle trips.

The air quality study demonstrates that the proposed Somers Crossing conforms to the clean Air Act Amendments because:

- No new violation of the NAAQS will be created
- No increase in the frequency or severity of any existing violations will occur, and
- No delay in attainment of an NAAQS will result.





SOMERS CROSSING
Somers, New York

Microscale Study
Area Intersections

Exhibit
III.P-1

Q. Climate Change/Greenhouse Gases/Energy

1. Existing Conditions

Global warming is recognized by scientists around the world as a public health and environmental concern. As atmospheric concentrations of greenhouse gases (GHG) rise globally, temperatures on earth are increasing. Human impacts on the climate system include increasing concentrations of atmospheric GHG (e.g., carbon dioxide, chlorofluorocarbons and their substitutes, methane, nitrous oxide, etc.), air pollution, increasing concentrations of airborne particles, and land alteration. While GHG emissions include several gases, Carbon Dioxide (CO₂) was selected for evaluation because it is the most significant component of project-related GHG emissions.

In an effort to address the rising concern and awareness of the potential negative impacts of global warming and GHG emissions, the NYSDEC, under the new *Greenhouse Gas Emissions Policy* issued in July 15, 2009, took the lead on assessing and potentially mitigating for impacts related to GHG emissions from new developments. The policy calls for proponents of new development projects to quantify GHG emissions and to identify measures to avoid, minimize, and mitigate those emissions. As directed by the NYSDEC policy, the following section (III.Q.2, Potential Impacts) assesses the Project-related GHG emissions from mobile sources and both direct and indirect stationary sources.

The Site is currently vacant land. Using the methodology described below, it is concluded that under the existing conditions, the total annual CO₂ emissions were estimated to be 3,356.4 metric tons per year. There are no direct emissions under the existing or the 2018 No-Build Conditions. This considers carbon sequestration offsets, all fuel consumption sources, and mobile sources.

2. Anticipated Impacts

This analysis utilizes the Town of Somers' spreadsheet program titled "Development GHG Evaluator" to calculate vehicular traffic and building sources of GHG emissions for the existing, future no-build and build conditions. The GHG emissions have been determined from both stationary and mobile sources as a function of fuel consumption. The on-site sources considered all fuel consumption (heating oil, gasoline, natural gas, electricity, etc.).

The mobile sources included passenger vehicles originating from the Project Site and/or heavy vehicles serving site operations. This includes passenger vehicles fueled by diesel as well as gasoline. A study by the NYSDEC has shown that passenger vehicles use on



average 99.7% gasoline, 0.2% diesel, and 0.1% other fuel types.¹ Even though the amount is small, these percentages have been applied to the passenger VMT values in the GHG Evaluator to more accurately represent the local vehicle fleet characteristics. In addition, the analysis has been considers using 2% Heavy-duty vehicles provided by the capacity analysis. These factors are reflected in the GHG Evaluator in Appendix K.

The GHG analysis presents an evaluation of the building operations of the Somers Crossing project and corresponding GHG emissions estimated in accordance with the Development GHG Evaluator (see Appendix K). The energy calculation accounts for central air conditioning in the residential units, as well as other electricity usage such as street lights and traffic signals. The Development GHG Evaluator estimates the motor vehicle and building operational GHG emissions and the measures that provide environmental benefits, such as the following transportation demand management measures:

- Employees of the on-site grocery store would have direct deposit at a bank,
- On-site employees at the grocery store will be offered significant incentives to reduce their need to commute.

These measures are proposed to provide environmental benefits, and the applicant will encourage their implementation by the future operators/owners of the grocery store to the extent reasonably possible.

The vehicle miles traveled (VMT) was developed using estimated traffic demands from the Project's traffic impact analysis. Peak daily traffic volumes were multiplied by the individual link lengths to determine the VMT per day. These values were then multiplied by 365 days/year and summed across all the local links to get an annual VMT value. Since peak daily traffic was used, the annual VMT is a conservative estimate and represents a peak condition rather than an average condition. The VMT was refined to reflect more of an average condition by breaking the peak daily traffic into peak and non-peak periods to better reflect an average condition.

Greenhouse Gas Analysis Results

Under the 2018 No-Build Conditions, the total annual CO₂ emissions were estimated to be 3,593.4 metric tons per year. There are no direct emissions under the existing or the 2018 No-Build Conditions.

The future CO₂ emissions during the 2018 Build Condition are estimated at 5,133.8 metric tons per year (675.5 metric tons are residential direct (electrical), 127.1 metric tons are

¹ "New York State On-Road Motor Vehicle Emission Budget Moves Technical Support Documentation" New York State Department of Environmental Conservation, Division of Air Resources, *Bureau of Air Quality Planning*



commercial direct (electrical), 4,331.2 metric tons are from mobile sources), representing an increase of 1,540.4 metric tons per year of CO₂ emissions. In New York State, 89 percent of the total GHG emissions are CO₂ emissions, from which the majority (approximately 250 million tons) result from fuel combustion². The proposed project CO₂ emissions are extremely small compared to the New York State portion of over 250 million tons per year of CO₂. Table III.Q-1 presents a summary of the GHG analysis results for all conditions analyzed. The breakdown of the GHG emissions is presented in Appendix K.

Table III.Q-1
Greenhouse Gas (CO₂) Analysis Results (MT eCO₂/yr¹)

Pollutant	2013 Existing Condition	2018 No-Build Condition	2018 Build Condition	Project-Related CO₂ Emissions²
CO ₂ Emissions	3,382.4	3,593.4	5,133.8	1,540.4

1. MT eCO₂/Yr equals Metric Tons of Carbon Dioxide equivalents per year.

2. Represents the difference in CO₂ emissions between the Build and No-Build Conditions.

Note: This evaluation modeled only the GHG considerations associated with the proposed residential and commercial buildings and mobile sources resulting from the implementation of the project.

There will be no substantial changes from the completed build condition presented in this section to the five year future condition, since there are no proposed changes to the project five years after completion. The current plan envisions both the number of residential units and the size of the commercial property to remain the same. Additionally, traffic due to the project will not increase more than what the trip generation of the transportation section has projected. Since the inputs to the GHG Evaluator would not change, it is apparent that the overall equivalent CO₂ emissions will not change with the passing of 5 years.

3. Mitigation Measures

The proposed Somers Crossing project will not result in adverse air quality impacts (see Chapter III.P, Air Quality). The greenhouse gas analysis, using the Town of Somers' spreadsheet program titled "Development GHG Evaluator" demonstrated that the proposed project would result in insignificant increases in CO₂ emissions. There are no short or long term air quality impacts from the proposed Somers Crossing project. As a result, no additional air quality mitigation measures are proposed.

Many energy efficient factors and components of the project will help to reduce energy use in the long term and short term. The proposed structures will include building

² Draft New York State Greenhouse Gas Emissions and Trends (1990-2005) dated March 2007 and the New York State Greenhouse Gas Emissions Policy dated July 2009

principles and “green technology” with an emphasis on energy efficiency to the extent feasible.

The proposed residences would be designed to exceed the New York State Energy Conservation Construction Code which requires the use of energy efficient products in all new and renovated construction. The exterior walls and roofs of the structures would have thermal insulation so as to reduce heat loss in the winter and heat gain in the summer. The windows would be double paned, insulating glass for winter heating and low emissivity for summer cooling. Other “green building technology” design features that address greenhouse gas emissions and energy efficiency that are being considered include: spray foam insulation; blown fiberglass insulation in the attic areas; Energy Star compliant windows, doors, and appliances; energy efficient HVAC systems, light bulbs, hot water heaters and furnaces; caulking and sealing of top plates; infiltration tests; taped seams of all exterior house wraps; exhaust fans; programmable thermostats; split zone HVACs and geothermal wells for heating of the residences. The applicant is investigating the use of geothermal for heating of residential units, and they are installing this technology in other homes (single family) they are currently building. Geothermal heating/cooling is also being investigated for the neighborhood grocery store.

As an energy-efficient planning consideration, the residential project is to be built on a site which is directly adjacent to neighborhood shopping with pedestrian connections to be available, thereby reducing vehicular trips. Similarly, the neighborhood grocery store is proposed in an existing hamlet, adjacent to the new proposed residential, as well as opposite a large residential population at Heritage Hills, who could reduce vehicular trips by using the neighborhood store instead of driving 5 to 10 miles for groceries. In addition, as mentioned in Chapter II, Description of Proposed Action, bicycle parking will also be integrated into the plans, including bike racks at the grocery store. An extensive recycling program will also be implemented on-site.



R. Noise

1. Existing Conditions

Existing ambient noise conditions at the Site reflect surrounding land uses. As described previously (see Chapter III.A, Land Use), predominant surrounding land uses include: vacant lands (to the south and west), hamlet commercial uses and Heritage Hills (to the north), Somers Towne Centre and the IBM corporate office campus (to the east). The Site is not in the proximity of air/freight noise sources or any significant noise generating activity. Ambient noise at the Site comes primarily from vehicular traffic (predominately cars) in the shopping center, on Route 202 and on Route 100.

Sensitive noise receptors are facilities and uses that are dependent upon a state of serenity and quiet, or are uses that are particularly sensitive to noise levels. Land uses that are typically considered to be sensitive noise receptors would include: residences, schools, hospitals, churches, libraries and certain types of outdoor recreation areas such as nature preserves.

The Site is located in a developed hamlet area where most of the uses are commercial, office or vacant land; however, there are some sensitive receptors within ¼-mile of the Site that would potentially be subject to short-term construction related impacts. The following sensitive receptors were identified:

- A portion of Heritage Hills community to the north of the Site (residential)
- St. Luke's Church to the north and east of the Site

Although not within ¼-mile of the Site, it is noted that Somers Middle School is located approximately ½-mile to the west of the Site on Route 202, and would be considered a sensitive receptor.

The daytime sound levels for receptor locations along Route 202 and Route 100 are estimated to be around 55 dB(A) and would range to about 50 dB(A) toward the center of the Site. Similarly, the nighttime sound levels for receptor locations along Route 202 and Route 100 are estimated to be around 50 dB(A) and would range to about 45 dB(A) in the center of the Site.

The Town of Somers has a local noise ordinance (Chapter 123 of Town Code) which puts limitations on construction equipment noise, and on operation of landscaping equipment. For construction equipment, the Code indicates:

"It shall be unlawful to operate, cause to be operated or permit the operation of any equipment, machinery, tool or other device used in construction, building, grading, blasting, excavation or tree removal, that makes a noise or sound audible



beyond the property on which it is located, after 6:00 p.m. in the evening and before 7:00 a.m. in the morning.” (Section 123.3)

For landscaping equipment, the Code indicates:

“It shall be unlawful to operate, cause to be operated or permit the operation of a leaf blower, chain saw, lawnmower or other gardening or landscaping equipment, which is powered by a combustion engine, after 8:00 p.m. in the evening or before 7:00 a.m. in the morning.” (Section 123.4)

2. Anticipated Impacts

a) Construction Noise

Local ambient daytime noise levels would temporarily increase in the Site vicinity during construction of the proposed project. Noise generated during construction will be primarily from diesel engines that power equipment. Exhaust noise is usually the predominant source of diesel engine noise. Since noise during construction is a temporary impact, it will cease upon completion of the project. Noise levels of construction equipment likely to be used for the project are summarized in the table below.

**Table III.R-1
Noise Levels of Construction Equipment**

Equipment	Noise Level (dBA)				
	50 Feet	100 Feet	200 Feet	400 Feet	800 Feet
Cement Trucks	91	85	79	73	67
Front Loaders	79	73	67	61	55
Graders	85	79	73	67	61
Bulldozers	80	74	68	62	56
Pickup Trucks	60	54	48	42	36
Back hoes	85	79	73	67	61
Concrete Mixers	85	79	73	67	61
Pneumatic Rock Breaker	91	85	79	73	67
Hydraulic Rock Breaker	95	89	83	77	71

Sources: BBN, 1971, NYSDEC, 1974, NYPA, 1986

Typical site average sound levels for construction are presented in Tables III.R-2 and III.R-3. Table III.R-2 reflects the average sound level occurring when all of the construction equipment is operating on the Site at the same time, and Table III.R-3 reflects the average sound level when only the minimum equipment required is in operation. Construction noise levels are never steady in nature, but fluctuate depending upon the number and type of equipment in use at any given time.



**Table III.R-2
Typical Site Average Noise Levels by Construction Activity (dBA)
All Equipment at Site**

Construction Phase	Noise Level (dBA)				
	50 Feet	100 Feet	200 Feet	400 Feet	800 Feet
Excavation	89	83	77	71	65
Foundation	77	71	65	59	53
Erection	84	78	72	66	60
Restoration/Finishing	89	83	77	71	65

Source: BBN, 1971

**Table III.R-3
Typical Site Average Noise Levels by Construction Activity (dBA)
Minimum Amount of Equipment Required at Site**

Construction Phase	Noise Level (dBA)				
	50 Feet	100 Feet	200 Feet	400 Feet	800 Feet
Excavation	71	65	59	53	47
Foundation	77	71	65	59	53
Erection	72	66	60	54	48
Restoration/Finishing	74	68	62	56	50

Source: BBN, 1971

The level of impact from these construction noise sources depends upon the phase of the construction activities, the specific construction tasks and equipment used, as well as receptor distance from the construction site. The noisiest period of construction will occur during site clearing and grading activities, when sections of the Site are prepared for building. Such noise could be intrusive, but would have limited duration during the phases of project construction.

To the average person, an ambient noise level (Leq) increase of 2 to 3 dBA is barely perceptible; an increase of 5 dBA is noticeable; and an increase of 20 dBA or more is perceived as a dramatic change. Noise impacts are considered to be significant if the increase is more than 5 dBA, and this is likely to generate sporadic complaints from the community. An increase of more than 10 dBA is likely to generate more widespread complaints.

Construction related sound levels experienced by the critical receptors identified in the site vicinity will be a function of distance. As such, no one existing receptor will be exposed to the same sound levels over an extended period of time, as equipment are utilized on different portions of the Site. Occasional noise levels at the site property line are projected to range between 65 dBA and 90 dBA, depending on the actual location of construction equipment at any given time.



These elevated noise occurrences would be sporadic during the construction period. Noise levels actually experienced on a nearby property would be expected to be lower, accounting for distance from the noise source and other attenuating factors.

It is anticipated that nearby properties will experience temporary elevated noise levels at occasional periods during construction of the proposed residential buildings and grocery store. This is a temporary, construction-related, unavoidable impact.

b) Significant New Noise Sources

The new uses proposed on the Site will not generate significant new noise sources. The proposed development would result in a combination of residential, commercial, and open space uses on currently vacant land. The Project will introduce a new source of noise (compared with vacant land), but the proposed uses are consistent with the intended uses for the Site as well as with surrounding land uses. The primary source of new noise would be automobiles and traffic, as well as periodic use of landscaping equipment. The project will not increase vehicular trips or operations to such an extent as to significantly increase ambient noise levels within the vicinity of sensitive receptors.

The new residences on the Site, which are themselves sensitive receptors, will be constructed to attenuate exterior noise levels in accordance with the New York State Building Code. Construction will include double-glazed windows, insulation, and walls designed to reduce noise.

Similarly, the grocery store is proposed directly adjacent to an existing shopping center and parking lots. The new store will not significantly increase vehicular trips or operations to such an extent as to significantly increase ambient noise levels in the vicinity. The store is anticipated to generate ambient noise similar to that at the existing adjacent shopping center, including noise relative to normal operations and deliveries, at the grocery store. This includes noise from shoppers' cars, as well as from trucks at the loading function of the store. Recycling and solid waste functions are proposed to be interior functions, not a significant new noise source. Even though this will be a change from the existing conditions, it is not anticipated to be a significant adverse impact.

c) Blasting Noise

Blasting is not anticipated; therefore no noise from blasting will be generated. (See also Chapter III.B, Geology and Soils).



d) Increased Sound Level Due to Vegetation Removal

Removal of existing vegetation from the Site will not cause more noise to travel from the Site to adjacent properties.

e) Potential Noise Impacts on Future Residents

The proposed development would result in a combination of residential, commercial, and open space uses on currently vacant land. The project is consistent with the intended uses for the Site as well as with surrounding land uses. The project will not increase vehicular trips or operations to such an extent as to significantly increase ambient noise levels within the vicinity of sensitive receptors, including new residential development. The new residences on the Site will be constructed to attenuate exterior noise levels in accordance with the New York State Building Code.

Similarly, the grocery store will be added to the immediate vicinity of an existing shopping center and parking lots. The store will not significantly increase vehicular trips or operations to such an extent as to significantly increase ambient noise levels in the vicinity.

3. Mitigation Measures

Construction noise impacts will be temporary, and will be eliminated when construction is complete. The project will comply with the local noise ordinance, as well as using best management practices during construction. Construction activities and the operation of construction equipment are an expected and required consequence of any new construction project and cannot be avoided. During the construction phases of development, to minimize or eliminate adverse impacts due to equipment noise, all construction equipment used on site will be inspected periodically to ensure that properly functioning muffler systems are used on all equipment in accordance with the NYSDEC Best Management Practice (BMP) for reducing noise. While on the site, equipment should not idle unnecessarily, and construction activities should be limited to hours described in the Town Code. Based on these measures, the temporary increases in noise levels due to construction equipment usage and construction traffic will be minimized.

Although distance is a factor in noise reception, modification of site layout in order to reduce sound levels at the church to the northeast, the school to the northwest or Heritage Hills to the north is not necessary since construction noise will be temporary. This also applies to the site layout in the post-construction condition. Modifying the site layout to provide a greater distance from the grocery store or the homes to reduce sound levels at the church to the northeast, the school to the northwest or Heritage Hills to the north is not necessary since 1) the post-construction noise from the store or the



residences is not anticipated to be significant; and 2) increasing the distance from the new project and the sensitive receptors would not make a significant change in noise attenuation or post-development noise conditions.

Post-construction, the project is not anticipated to increase vehicular trips or operations to such an extent as to significantly increase ambient noise levels in the vicinity. Temporary noise impacts from landscaping equipment, if they were to occur, would be regulated by adhering to the hours permitted in the local Noise Ordinance (after 8:00 p.m. in the evening or before 7:00 a.m. in the morning).



S. Odor

1. Existing Conditions

a) Existing Odor Sources and Sensitive Receptors

There are no known significant odor sources or emissions within $\frac{1}{4}$ mile of the site, especially odors that could be routinely detected at the Site. The adjacent shopping center has storage of solid waste (garbage dumpsters) at the rear of the existing shopping center buildings and restaurants, but these are regularly collected and do not generate significant odors. In addition, the sewage treatment plant at Heritage Hills is located to the north of the Site, approximately $\frac{1}{4}$ mile away (See Exhibit III.S-1), but no significant odors from that facility can be readily detected at the Site¹.

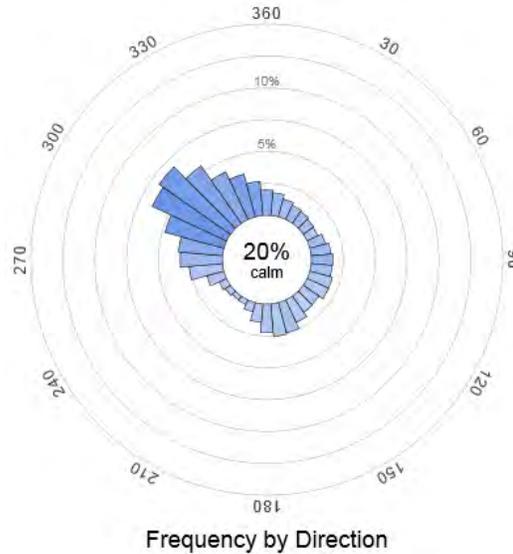
Sensitive receptors for odor within a $\frac{1}{4}$ mile of the Site would generally be the same as described in III.R, Noise, including the nearby St. Luke's Church, some of the closest residential units in Heritage Hills, and the Somers Middle School.

b) Prevailing Wind Directions

Wind is regularly measured at Westchester Airport, therefore, the wind rose below measures wind conditions at the airport, which is approximately 21 miles south of the Site. As shown in the wind rose, prevailing wind direction recorded at Westchester Airport is from the northwest. Therefore, it could be expected that any odors in the area would mostly blow from the northwest.

¹ Based on field visit in September 2013





Source: <http://windhistory.com/station.html?KHPN>, accessed 2/5/14. The source data are from the National Oceanic and Atmospheric Administration, compiled from 2006 to 2010.

2. Anticipated Impacts

a) Potential Odor Sources and Odor Associated with Solid Waste

Potential odor sources at the Site would include the solid waste storage areas. At the grocery store, the waste storage would be provided in dumpsters at the grocery store site at the northeast end of the site. These storage containers would be sealed, and would be emptied on a regular basis by private carters to prevent odors from escaping and impacting sensitive receptors.

At the residential units, solid waste would be stored in containers in the individual garages. Pick up for the residences would be by private carters, also at regular intervals to preclude odors.

The potential odor sources (dumpster locations) will be identified on final site plans.

3. Mitigation Measures

Since no significant adverse impacts are anticipated due to odors, no mitigation measures are proposed. The mitigation is designed into the project, by having sealed waste storage containers, and regular collection and pickups to avoid any significant adverse impacts from odors to nearby land uses.





SOMERS CROSSING
Somers, New York

**Potential Odor Sources/
Sensitive Receptors**

Exhibit
III.S-1