

3.8 Community Services

3.8.1 Schools

Existing Conditions

The Mahopac Central School District is comprised of four elementary schools, one middle school, and one high school. The Lakeview Elementary School, which would serve the project site is located on 112 Lakeview Drive, approximately three miles from the project site. It currently serves approximately 640 students in kindergarten through grade five. The Mahopac Middle and High School complex is located on Baldwin Place Road approximately two miles from the project site. These schools would serve the project for the upper grade levels with projected enrollments for the 2009/2010 school year of 1,257 students and 1,752 students, respectively.¹

Table 3.8-1 Mahopac Central School District Enrollment For Schools serving the Project Site 2008-2009 School Year			
School	Grades Served	Approximate Student Age	2009-2010 Enrollment
Elementary Schools	K-5	5 to 10	2,109
Mahopac Middle School	6-8	11 to 13	1,257
Mahopac High School	9-12	14 to 18	1,752
TOTAL (approximate)			5,118

Table 3.8-2 shows the total enrollment, as reported to the New York State Department of Education in October of each school year, for the period 2004/2005 through the 2010/2011 projections. According to a District Enrollment Summary² total student enrollment in the District peaked in the 2005-2006 school year and declined slightly in 2006-2007 and 2007-2008. The low and median enrollment forecasts through 2010-2011 project a continued decline in enrollment, while the high enrollment forecast through the same period projects a stable enrollment.

¹ Mahopac Central School District Computation of Tax Levy and Warrant, August 27, 2008, provided by the Office of Assistant Superintendent for Business David Chapman.

² Prepared annually by Assistant Superintendent for Business, David Chapman, most recently May 6, 2010.

Table 3.8-2 Total Enrollment Mahopac Central School District		
School Year	Enrollment	Change in Number of Students
2004/2005	5,335	46
2005/2006	5,380	45
2006/2007	5,314	(66)
2007/2008	5,282	(32)
2008/2009	5,257	(25)
2009/2010	5,118	(139)
2010/2011	5,019	(99)
2011/2012	4,899	(120)
2012/2013	4,775	(124)
2013/2014	4,647	(128)
2014/2015	4,524	(124)
District Enrollment Summary, Business Office Mahopac CSD, May 7, 2010.		

The District's student to teacher ratio is 13 to 1.³ The professional full time staff includes six principals, six assistant principals, 409 teachers and 43 other professional staff. In addition, there are five part time teachers.⁴

Other full time staff in the District consists of 68 teaching assistants, 22 aides in programs for students with disabilities, six library support staff, 33 secretary/clerks, 47 maintenance workers, 99 bus drivers/mechanics, and 63 other support staff. In addition, there is one part time teaching assistant, and there are two part time secretaries.

According to the David Chapman, Assistant Superintendent for Business, enrollments are declining thus, there are no plans for staff or facility expansion. In addition to the enrollments listed for 2009/2010, the School District's Business Office⁵ reports 359 students who live within the district and attend private school, which represents approximately seven percent of the total student population.

The School District's budget for the 2009-2010 school year totals \$108,517,670 with \$74,023,536 being raised by the tax levy. The School District's enrollment for the 2009-2010 school year as reported to the New York State Department of Education is 5,118 public school students⁶, resulting in a per student cost from the tax levy of \$14,463.

The Northern Westchester and Putnam Board of Cooperative Education Services (BOCES) also provides high school students with special educational programs. This facility is located in Yorktown Heights. The Mahopac School District sends approximately 75 students to participate in BOCES programs.

³ Rose Marie Costa, Mahopac Central School District, Human Resources, correspondence, October 22, 2008.

⁴ Superintendent's Office, Mahopac Central School District, Basic Education Data System Form, 2008.

⁵ Meeting with Assistant Superintendent of Business, David Chapman May 7, 2010.

⁶ Enrollment Report prepared by Assistant Superintendent of Business, David Chapman May 7, 2010.

Potential Impacts

Based on population multipliers as published in Residential Demographic Multipliers⁷, as shown in Table 3.9-4, as a result of the proposal for 480 two bedroom residential units, a total of 85 school-age children are projected to reside within the Union Heights development. Based on the per student cost of \$14,463 calculated above, the proposed residential project would be projected to generate \$1,229,355 in costs to the Mahopac Central School District.

Development of the proposed project will result in a substantial increase in assessed value compared to existing conditions. Details of this projected assessment are detailed in Section 3.9. As a result of this increase in assessed value, a projection of future taxes, based upon the 2009-2010 school tax rates indicates the Mahopac School District will receive a total of approximately \$5,745,476. This total includes \$5,572,338 which goes directly to the school district and \$173,138 which goes to the district's library fund.

Costs to the School District as a result of the projected increase in enrollment associated with the project would be offset by projected annual school tax revenues from the proposed project. As described in Section 3.9 and shown in Table 3.9-6, approximately \$5,745,476, including library taxes, would go to the Mahopac Central School District, annually. The projected revenues presented are 2009-2010 School District tax rates. These rates are likely to increase over time.

As shown in Table 3.8-3 the Rutgers CUPR estimates the following breakdown for student distribution. This could result in approximately 49 new students at the Lakeview Elementary School and 18 new students to both the Middle School and High School. These new students would not all arrive in a single year but would be disbursed over the five year build out period.

As the enrollment information presented in Table 3.8-2 shows, upcoming projections indicate a reduction in students for which the district already has the facilities to accommodate. Thus, the anticipated growth of 85 students from the proposed project will not result in an impact to the district.

Grade	Multiplier	Total Students per Grade at Build out
K-2	0.06	25
3-6	0.06	24
7-9	0.03	18
10-12	0.03	18
Total	0.18	85
Source: Rutgers CUPR, June 2006.		

As the projected enrollment forecast shows a stable or declining enrollment, and which was confirmed by the Assistant Superintendent of Business, David Chapman, the additional students from the proposed development are expected to be absorbed by the school district without significant impact or effect on school capacity or future staff requirements.

⁷ Rutgers University, Center for Urban Policy Research, Estimates of the Occupants of New Housing; June 2006.

Mitigation Measures

The school population increases for the proposed development are not anticipated to have significant impacts on the school district. The potential for an increase in school aged children, as stated above would generate costs of \$1,229,355 to the school district, will be offset by the tax revenues, approximately \$5,745,476, realized by the school district from the Proposed Action, leaving an annual net benefit of approximately \$4.5 million to the school district. These revenues will provide the School District with more than four and a half times the financial resources necessary to educate the 85 students projected to be generated by the project.

Should the projected enrollment forecasts be too conservative and additional staff or facilities are needed in the future, the surplus tax revenues collected from the Proposed Action could be used by the school district to offset increased costs. Therefore, no mitigation measures are proposed.

3.8.2 Police/Fire/Emergency Medical Services

Police

Existing Conditions

For the Town of Carmel, police protection is provided by the Carmel Police, Putnam County Sheriff's Office, and the New York State Police. The Carmel Town Police Department answers all 911 calls within the Town of Carmel. Additional assistance, if required, is provided by the Putnam County Sheriff's Department and the New York State Police. Typical response times depend on the location of the nearest patrol car.

The Carmel Police Department is located on McAlpin Avenue in Mahopac approximately three miles from the site. The Department employs 35 officers and eight civilians to serve the Town, with a population of 35,000. It receives approximately 25,000 calls per year.

According to Chief Johnson, the Department's staffing and facilities are inadequate to handle current demand. He has submitted requests to the Town Board for the expansion of the Department's staff and facilities for four years and there has been "no substantial change in either."

The Putnam County Sheriff's Department is headquartered at Three County Center in Carmel, approximately eight miles from the project site. The County Sheriff's Department handles approximately 3,500 calls for service annually. The Sheriff's Department has a minimum of one patrol car assigned to a sector that includes the Hamlet of Carmel 24 hours a day. The approximate response time of responding units is from five to 20 minutes depending on the location of the patrol car relative to the call for service.

The County Department has 83 full time law enforcement officers. The service area ratio for the Sheriff's Department is one deputy to 1,200 persons for Putnam County.⁸ The planning standards ratio for police personnel provided by the Urban Land Institute (ULI) in their 1994 *Development Impact Assessment Handbook*, is two police per a population of 1,000. The current staffing of the Sheriff's Department falls below this standard.

The New York State Police Troop K Barracks is located on US Route 22 in Brewster, approximately 15 miles from the project site. It houses 21 troopers, four investigators, and three

⁸ Sheriff Donald B. Smith, Putnam County Office of the Sheriff. Correspondence September 17, 2008.

sergeants serving the Towns of Southeast, Patterson, Carmel, and Kent, and the Village of Brewster. The Barracks receives approximately 5,400 calls for service per year. According to Sergeant/Station Commander Marlogio of the Troop K Barracks, there are currently no plans to expand its staff, facilities or equipment.⁹

Potential Impacts

According to Chief Johnson of the Carmel Police, the proposed development would require more around the clock police services than a single zone project because it combines commercial and residential uses. Further, because the staffing and facilities are currently insufficient for the existing demand and approved projects in the Town, they would be insufficient for the proposed project as well.

The Putnam County Sheriff's Department anticipates no significant impacts to their ability to provide police protection to the proposed Union Place. The Department notes that Putnam County's rapid and continued growth will undoubtedly result in the need for more law enforcement in future years.

While the proposed development would not require expansion of the State Police Barracks staffing, equipment, or facilities, Sergeant/Station Commander Marlogio of the Troop K Barracks recommends considering constructing a small space for a State Police Satellite Station within the project to enhance security. In addition, in reviewing the site plan he recommended that good lighting be provided on trails and in playgrounds, that there be a designated Landing Zone area for helicopter landing in support of emergency medical and police services, and the installation of call boxes be considered on the trails and in the proposed residential portion of the development.

Residential Impacts

The proposed project is expected to increase the resident population of the Town of Carmel by 1,031 persons. Based on standards contained in the Development Impact Assessment Handbook (Urban Land Institute (ULI), 1994), it is estimated that two police officers are required per 1,000 residential population. The projected 1,031 residents to be introduced in the Town of Carmel would generate a need for 2.1 police personnel. It should be noted, however, that the ULI multiplier incorporates an inherent, non-residential employment workforce that a residential population would be expected to introduce. Part of this workforce would be expected to be employed within Union Place, and those impacts should be considered as part the impact of the proposed commercial development.

Commercial Impacts

For the purpose of comparison in assessing the demand for police protection services that the commercial portion of the proposed development may generate, a summary of police call data for shopping centers and hotels in the area is discussed below.

The Danbury Police Department provided call data for the years 2007 and 2008 for two hotels in Danbury that are comparable in size and service to the hotel proposed for Union Place. From Spring Hill Suites, a 106 room hotel at 30 Old Ridgebury Road, Danbury Connecticut the police received a total of 14 calls in 2007 and 2008 combined (seven calls in each year). The calls were for a range of incidents, including property damage, noise disturbance, motor vehicle

⁹ Chief Michael Johns, Town of Carmel Police Department. Correspondence August 30,2008.

accidents, larceny, and Driving Under the Influence. Two of the fourteen calls required medical assistance. From Hilton Garden Inn, a 158 room hotel at 119 Mill Plains Road, Danbury, Connecticut, the police received 29 calls in 2007 and 2008 combined (16 calls in 2007 13 calls in 2008). The incidents included a range similar to those for the Spring Hill Suites. Four of the total calls were requesting medical assistance and one fire department assistance. Based on the call data from the Danbury Hotels, the proposed Union Place hotel, which includes 90 rooms, would be expected to generate approximately seven calls annually.

Mahopac Village, located directly east of the project site on US Route 6, is an approximately 150,000 square foot shopping center with an A&P supermarket, a bank, and smaller retail stores and restaurants. The Mahopac Police responded to a total of 107 calls in 2007 and 2008 combined (43 in 2007 and 38 in 2008) from Mahopac Village. The majority of calls are listed as "commercial alarms," which are alarms at the businesses to which the police are required to respond, and include false alarms. The police data base does not record separate data on false alarms. Other calls included requests for assistance for traffic and parking incidents, suspicious persons, burglary, 911 emergency and various other calls. The call data report includes "hang up" calls for 911 assistance. In the two year period, five calls were "Aided" calls, where medical assistance was required, and there were five fire alarms in the two years combined.

The proposed project would include 493,000 square feet of retail and 10,000 square feet of community space. Comparing the number of police calls from Mahopac Village to the total 493,000 square feet of retail and 10,000 square feet of community space proposed provides an estimate of the number of calls that these uses at Union Place would generate. The average number of calls annually for 2007 and 2008 at Mahopac Village was 41, or 0.00027 per square foot. Based on this multiplier, the 493,000 square feet of retail and 10,000 square feet of community space at Union Place would generate approximately 136 calls per year.

The proposed 475,000 square feet of office space would be expected to generate additional calls. The higher number of alarms and incidents such as larceny that occur at a retail center would not be expected in an office environment. The amount of turnover in the stores and in the parking areas would be expected to result in a greater impact on police services than office use. Nevertheless, a range of incidents would be expected to require police services to the offices and the associated parking areas.

In addition to the call data acquired from the Carmel Police and the Danbury Police, the Environmental Impact Statement completed for the Stateline project in Southeast (Accepted June 20, 2008) provides additional statistics from the approximately 370,000 square foot Highlands Shopping Center in Brewster Highlands and the Southeast Executive Park, which are included here for comparison.

The Highlands Shopping Center, a retail development, contains several anchor businesses including a Kohl's department store, Linens-n-Things home goods store¹⁰, Home Depot home improvement store, Michaels craft store, and Marshall's department store, as well as numerous secondary retail stores and restaurants. The Southeast Executive Park is an office complex that houses several medical and financial services. Each development has a single access drive from NYS Route 312. The access drives are approximately 500 feet from each other. As a note, the Metro-North Railroad Southeast train station, which generates a high volume of traffic to the Highland Shopping Center area, is located at the end of Independent Way, just south of the

¹⁰This space is currently vacant.

shopping center. Therefore, the data obtained would present a worst case scenario comparison to the proposed development.

According to the records, the Sheriff's Department responded to 32 calls for service in 2006 at addresses included in the Highlands Shopping Center. An additional eight responses did not contain a specific address listing, but were identified as being along Independent Way and were assumed to result from the retail center. Of the 40 total responses, 14 responses were due to the automated alarm systems of the commercial facilities. An additional ten responses were motor vehicle lock-outs and five responses were due to traffic accidents. Four calls were associated with larceny or theft.

According to the records, the Sheriff's Department responded to 15 calls for service in 2006 at the Southeast Executive Park. The Sheriff's Department responded to approximately 26,000 total calls for service county-wide in 2006. All responses to the Highland Shopping Center and Southeast Executive Park resulted in a total of 61 police responses or 0.2 percent of the total calls to the Department in 2006.¹¹

The report on the Highlands project notes that the proximity of that development near the Metro North Railroad Station may result in a higher than average number of calls for the shopping center.

Mitigation Measures

Part of the taxes generated by the project would be distributed to the law enforcement agencies serving the area, as discussed in Chapter 3.9, Socioeconomic a total increase of approximately \$21,704,093 from taxes is expected. This additional revenue will provide capital for increasing staff size or purchasing equipment, should that be required as a result of the Proposed Action, or to accommodate unrelated residential and/or commercial development in the future.

The proposed project will result in the need for an additional two Town of Carmel Police officers. In the current Town budget, the midrange salary for a Police officer is \$54,750¹² It is expected that a portion of the \$945,030 in property tax revenue will be available to cover this cost. The site will be subject to routine patrols by the law enforcement agencies serving the area.

In addition to the police protection provided by the local forces, other measures of site security will be provided by each of the retail establishments based on individual needs. Each store will have its own internal security system including burglar alarms, which would be directly connected to the Town of Carmel Police Department, as well as security cameras. Some of the stores may also choose to hire their own security personnel. The stores will also have exterior lighting to help deter criminal activity. Parking areas will be illuminated as an additional security measure. It is expected that the major stores at Union Place will be served by private security guards on an as needed basis, possibly with car patrols during nighttime hours.

¹¹Stateline Retail Center: Draft Environmental Impact Statement Volume I, June 20, 2008. Prepared by Tim Miller Associates.

¹²E-mail correspondence with Eileen Brennan, Principal Account Clerk, May 7, 2010, included in Appendix B for reference.

Fire

Existing Conditions

The fire and emergency medical services for Mahopac and Mahopac Falls are provided through the Town of Carmel by the Mahopac Volunteer Fire Department and the Mahopac Falls Volunteer Fire Department. The Putnam County Bureau of Emergency Services provides a supplementary ALS (advanced life support) service which augments the services that the local Fire and EMS agencies provide. There is a county-wide Mutual Aid agreement in place in Putnam County, which is a plan to allow assistance between all County Fire Departments. The Officer-in-Charge of the fire has the capability to request assistance whenever it is deemed necessary.

The Mahopac Falls Fire Department provides service to Fire Protection District #1, with a population of approximately 10,000. It would provide protection services to approximately 90 percent of the site, including all of the commercial portion of the proposed Union Place development. The Main Station, located at 17 Lucaro Lane in Mahopac Falls, is the station nearest to the project site. The response time to the site from that location would be approximately 2-4 minutes. Response time from the substation located at Austin Road and Bullet Hole Road would be approximately 4-6 minutes.

The Department has 90 active firefighters, who are all volunteers, and its equipment consists of 3 tanker/pumpers, 1 tanker, 1 pumper, 1 rescue truck, 1 brush truck, 1 utility truck, 1 dive trailer, and 1 hovercraft (for dive team and ice rescue). In 2006 and 2007 the Department received 279 and 308 calls respectively.

The Mahopac Volunteer Fire Department provides service to District # 2, which includes the area of the site proposed for the Union Heights residential development. The Department consists of 130 members, who are all volunteers. According to Chief James Grundman, it has three chief's cars, two- 2500 gal pumper tankers, two 1000 gal pumpers, one heavy rescue, one 95-foot tower ladder, one brush truck, two NYS certified ambulances. Of the Department's three fire houses, the closest to the project site is Station #2, located approximately one half mile away. The headquarters is located on Route 6, approximately four miles from the project site, and Station #3 is located 7 miles away. Response times to the site average 5-6 minutes. The department responds on average to 1,100 calls a year (700 EMS calls, 400 fire calls).¹³

Potential Impacts

The proposed development will meet the required fire protection measures, as defined in the New York State Uniform Fire Prevention and Building Code, including water pressure and sprinklering. The site plan would require Planning Board review and approval. During this site plan review process, the Planning Board is expected to refer the refined project plans to the Board of Fire Commissioners for final review to confirm that the site plan continues to adequately address all fire concerns, such as building access, emergency vehicle circulation through the site, and water supply access.

The proposed access roads are designed to accommodate fire engines and truck traffic. For the commercial portion of the project, four vehicular access routes are proposed: two from Baldwin Place Road, and two from US Route 6, as shown on the site plan. All internal roadways are

¹³Email correspondence, February 26, 2009.

designed to accommodate delivery traffic, as such all turning radii to access the buildings are large enough to handle vehicles with larger turning radii than fire apparatus. In conformance with building codes, fire lanes about the buildings to provide full access for emergency vehicles and services.

None of the existing buildings on the property would be preserved, therefore no proposed building would be located adjacent to an existing one. Seventeen buildings are proposed. The maximum building height would be five stories and the largest building used as corporate office space, the anchor, would be approximately 420 feet long and approximately 350 feet wide.

Additional calls for service to the Union Place project would be anticipated. Based on planning standards contained in the Urban Land Institute's 1994 Development Impact Handbook, 1.65 fire personnel per 1,000 population is required to serve a new population and the projected 1,031 new Union Place residents would generate a demand for 1.7 personnel. As noted in the discussion of police services above, the ULI multiplier incorporates an inherent, non residential employment workforce that a residential population would be expected to introduce. Part of this workforce would be expected to be employed within the commercial portion of Union Place, and those impacts should be considered as part the impact of the proposed commercial development. The impact of the proposed Union Heights residential portion of the property would be served by the Mahopac Volunteer Fire Department. The Current population of the Town of Carmel is estimated at 34,384 persons. This population is served by the 220 volunteers in the two fire companies which service the Town. Based upon the ULI multipliers above this population would require 58 firefighters, thus the area is already well protected.

The commercial portion of the development would be expected to generate calls at a rate comparable to other retail, hotel and office uses in the area. Based on the police call data requested for the analysis of police services provided above, there were five fire alarms requiring a police response at Mahopac Village for the combined years of 2007 and 2008, no additional data is available.

As described above, the approximately 370,000 square foot Highland Shopping Center on Independent Way in Brewster Highlands was used in the Environmental Impact Statement for the Stateline project as a comparison for emergency service calls. According to the Putnam County Emergency Operations Center (EOC) records, the Brewster Fire Department responded to 45 calls for service in 2006 along Independent Way. The majority of responses were for medical assistance, totaling over 44 percent, or 20 calls. Of the 45 responses, 14 were due to the automated fire alarm systems of the commercial facilities. Fires and gasoline spills generated three responses each, while four responses were traffic accidents. The remaining call was to stand-by for assistance.

The location of the Metro-North Railroad Southeast train station, at the end of Independent Way, generates a high volume of traffic to the Highlands Shopping Center area and it is believed that due to the number of commuters utilizing the train station, a high percentage of the Department responses are related to individuals traveling to and from the train (as so noted by the EOC director).

All public buildings proposed in the Union Place development would incorporate a fire sprinkler system. Fire protection for each building would be provided by individual systems. It is expected that the buildings would contain the appropriate fire sprinkler system per the Building and Fire Codes of the State of New York. Although the fire system has not yet been fully designed, as it is largely dependent on specific building design details and site layout, it is anticipated that the

fire protection system would be self contained and include a 200,000 gallon above ground storage tank and fire pumps that would supply water to individual building sprinkler systems. The use of a water storage tank(s), specifically sized for the sprinkler systems, would minimize the need to draw groundwater during a fire event.

According to Ann Link, 1st Assistant Chief for the Department, the proposed development would require the expansion of the existing equipment, possibly a ladder truck. In her review of the project plans, Chief Link commented that the project should:

- Meet all fire codes
- Provide a hydrant system for fire extinguishment
- Provide a fire Knox Box system (a high-security key box system, designed to give firefighters and emergency services immediate access to locked buildings, elevators, and other secured areas) for all commercial buildings

According to Chief Grundman of the Mahopac Volunteer Fire Department, the manpower of the department would not be expected to increase, but the Department would be expected to require supplemental equipment, including a tower ladder.¹⁴ During the site plan review stage, the plans will be transmitted to the fire district for review to ensure that adequate prevention measures, access, and fire fighting capacity is incorporated in the plan. Hydrant locations, emergency service aisles, fire suppression equipment, and other fire protection measures will be incorporated into the layout. In his review of the project plans, Chief Grundman commented that as the project plans are finalized they should include the following:

- Size of water mains and any above or below ground storage tanks
- Locations of fire hydrants
- Elevators specifications and locations
- All elevators should be keyed alike
- Knox boxes on all commercial rentals, buildings, etc.
- Road widths throughout complex
- Building heights
- Diameter of all roadway circles. (Fire trucks vary in turning radius.)
- Distances between all buildings as well as marked fire zones
- Identification of any below ground, building, or rooftop parking¹⁵

Mitigation Measures

All residential buildings in the proposed Union Place project will meet applicable standards of the New York State Uniform Fire Prevention and Building Code, and will also adhere to applicable regulations of the Code of the Town of Carmel.

The proposed access road is designed to accommodate fire engines and truck traffic from US Route 6 in the event of an emergency. Emergency access is available to all buildings within the Project. Fire lanes will be provided in front of all buildings.

An Engineer's Report, included as Appendix I has been prepared which addresses the proposed water system for union Place, including consideration of fire protection. An above

¹⁴Telephone interview, February 25, 2009.

¹⁵Email correspondence, February 26, 2009.

ground water storage tank is shown on the site plan located in proximity to the Union Heights portion of the project.

Fire hydrants will be kept clear of snow and will be marked for easy location. The water mains and fire hydrants on the subject site will be maintained and serviced regularly in accordance with standards set forth by the Carmel Fire Inspector.

The two Mahopac Fire Department's existing equipment and mutual aid agreements are sufficient to handle the proposed Union Place's fire protection needs. As noted earlier, the Town's current population is approximately 34,384 persons. The proposed Project is expected to generate an additional 1,031 persons, for a total population of 35,415 people. The Urban Land Institute (ULI) planning standards for fire vehicles is 0.2 fire vehicles per 1,000 population. This would indicate the need for a total of 7 fire trucks between the two districts. The Mahopac Fire District has 6 full size fire trucks, in addition to other rescue vehicles, including one 95-foot tower ladder; and the Mahopac Falls District has 5 full size vehicles in addition to other rescue equipment. Upon completion, the ratio of population to fire trucks will be more than 3 vehicles per 1,000 population.

The majority of the Project Site is currently vacant with the exception of the Mahopac Farm in the southern part of the site, and generates \$2,753 in annual tax revenue to the Mahopac Falls Fire District and \$870 to the Mahopac Fire District. The proposed Project would increase the assessed value of the project site and thus the Fire District, to a projected \$156,179,525, and would make an additional \$153,449 and \$239,950 available to the Mahopac Falls and the Mahopac Fire Commissioners respectively, for budget purposes. This revenue represents more than 50 times the current tax revenues to both the Fire Districts generated by the Union Place project. This additional revenue would provide both operating and capital funds for increased appropriations, without any increase in the tax rate by the Fire Commissioners.

The period of time over which a fire district may finance the purchase of a fire truck or other apparatus is based upon the period of probable usefulness of the apparatus. The period of probable usefulness of fire apparatus is based upon the cost of the apparatus: (1) Five thousand dollars or less, financing may not exceed a period of five years; (2) more than five thousand dollars, financing may not exceed ten years; and (3) in excess of fifty thousand dollars, financing may not exceed twenty years.

A new ladder truck with an aerial height of 100 feet could be purchased for around \$650,000. At a five percent interest rate, amortization of \$650,000 to cover the expense of an aerial truck, over a twenty-year period would result in an annual expense of approximately \$50,000. Projected annual tax revenue to the Fire Districts from the proposed Project is an additional \$153,449 and \$239,950 available to the Mahopac Falls and the Mahopac Fire Commissioners respectively. The projected revenue would provide sufficient funds to amortize the cost of a new aerial truck for either or both Fire Districts.

Ambulance

Existing Conditions

The Putnam County Emergency Operations Center (EOC) was developed to handle emergency "911" calls. Dispatchers at the EOC have sophisticated computer systems that allow them to

pinpoint the location of the call and dispatch the appropriate emergency medical assistance, providing the quickest and most suitable response.

The Mahopac Falls Fire Department provides emergency medical services to the area including the portion of the project site that would be developed for commercial uses, as described above. The emergency medical service equipment is stationed at the Main Station at 17 Lucarro Lane in Mahopac Falls. There are currently 65 active EMS personnel in the Department and 21 active EMTs. They had 536 and 530 calls in 2006 and 2007 respectively. Their equipment consists of 2 Basic Life Support (BLS) Ambulances.

Several medical facilities serve the project area. The Putnam Hospital Center (PHC) is located on Stoneleigh Avenue in Carmel, New York, approximately five miles from the project site. According to their website, PHC is a 164-bed not-for-profit acute care hospital offering medical, surgical, psychiatric, pediatric and obstetrical/gynecological care, as well as 24-hour emergency services and home health care. The Hudson Valley Hospital Center (HVHC) is located just east of the City of Peekskill limits, on Crompond Road in Cortlandt Manor, approximately nine miles from the project site. HVHC has emergency facilities and provides a full range of medical services with specialty clinics for maternity, radiology, surgery, cardiology, breast care, arthritis and rehabilitation. Additional hospitals are located in Danbury Connecticut and Montrose, Beacon, and Poughkeepsie, New York.

Potential Impacts

As described in the previous discussion of fire services, the building and site design would comply with the applicable code, including emergency access and building dimensions. The individual spaces of the proposed development (i.e. retail stores, office spaces and community space) would have standard operating procedures for employees responding to emergency situations within the stores, as well as emergency first aid kits. No specific air lifting provisions are proposed as part of this project. Should the air lifting of trauma patients be required at Union Place space, one of the parking areas could be utilized.

The standard for Emergency Medical Services, according to the Urban Land Institute's 1994 Development Impact Handbook, is 4.1 full-time personnel and 1 vehicle per population of 30,000. The introduction of 1,043 persons in the Town of Carmel results in potential added demand for 0.14 EMS personnel overall, and 0.034 vehicles.

According to the call data acquired from the Carmel Police regarding Mahopac Village, five "Aided" calls were received in 2007 and 2008 combined. The call data for the approximately 370,000 square foot Highlands Shopping Center described above, indicated that the Brewster Volunteer Fire Department and Ambulance Corps responded to 20 calls for emergency medical services to properties listed at addresses along Independent Way in 2006. The call volume in that case was considered to be significantly elevated by the proximity of the Highlands Shopping Center to the Metro North Railroad Station. However, using this elevated rate of calls, one per 18,500 square feet annually, a worst case scenario for the Union Place Project was derived. For the 503,000 square feet of retail and community space in approximately 27 calls would be anticipated, and the entire 1,358,600 square feet of the mixed use portion of the development would be expected to receive roughly 73 calls annually.

According to Ann Link, 1st Assistant Chief of the Mahopac Falls Fire Department, the proposed development would result in the need for more EMTs and possibly an all terrain vehicle for the proposed trails and bikeways. It is noted that the Applicant believes the composition and width

of the trails, bike paths and associated shoulder are expected to accommodate standard emergency vehicles. In reviewing the project proposal she noted that roadways should be wide enough for all vehicles and elevators for EMS personnel access should be provided if needed for commercial buildings two stories or higher.

No significant impacts to emergency medical services are anticipated as a result of the construction of Union Place. Tax revenues generated by the Proposed Action could be used to supplement emergency service resources.

Mitigation Measures

The taxes generated by the Union Place Project that would be distributed to the Mahopac Falls Volunteer Fire Department and the Mahopac Fire Department, total approximately \$397,022. This additional revenue would provide funding to augment emergency service protection, if required in the future.

3.8.3 Solid Waste

Existing Conditions

Solid waste is currently generated on the site by three residences and other uses (See 3.8-16). The Town of Carmel does not collect refuse and recyclables. Private carters licensed by the Town provide these services and transport refuse to the Charles Point Resource Recovery plant, waste-to-energy facility in Peekskill, which is operated by Wheelabrator Westchester, L.P.

Potential Impacts

The projected solid waste generation calculations for the proposed development are provided in Table 3.8-4. The project is expected to generate approximately 1,665.9 tons of solid waste material per year. Of this amount, approximately one third is expected to include recyclable materials. The solid wastes and recyclables would be transported by private contractor to the existing disposal facilities in Peekskill, NY, this is discussed further below. No municipal trash collection services are proposed for this development.

Table 3.8-4 Solid Waste Generation Calculations					
Use	Rate (tons/day)	Unit	Calculation (tons/day)	Calculation (tons/year)	
Retail/Office	0.001	per employee (2,739)	= 2.739	x 365	= 999.7
Residential	0.00175	per resident (1,043)	= 1.825	x 365	= 666.2
				TOTAL	= 1,665.9
Source: Urban Land Institute's (ULI) Development Impact Handbook (1994) Chapter 3.9 Socioeconomic.					

Compactors and refuse storage areas would be located in the rear of the proposed Union Place commercial buildings and in selected common space locations within the Union Heights residential area. The dumpsters will not be visible from off-site properties due to screening, landscaping, and existing woodland vegetation to be retained. All of the refuse storage facilities would be screened and covered in order to minimize potential impacts relating to appearance, odors or nuisance animals. Supplemental measures, which may include additional fencing and

the use of traps, would be employed to control nuisance animals if ever necessary. Dumpsters would also be emptied regularly; twice per week for all uses that include the preparation and/or sale of food and once per week for all other garbage facilities.

The solid waste collection points and storage at the proposed Union Place development would meet all the requirements of the Code of the Town of Carmel. The final site plans will depict locations and identify types of solid waste collection facilities on the project site.

Mitigation Measures

Solid wastes would be collected and transported by private contractors to the RESCO resource recovery facility in Peekskill, NY. These materials will be inspected and recyclables will be separated from the remainder of the waste stream that becomes fuel for the waste-to-energy facility at RESCO. Ash material is landfilled at the Westchester County ash landfill in Cortlandt, NY.

Source reduction and recycling at the individual proposed commercial operations will help to minimize the wastes produced at the proposed development. A significant amount of packaging materials, including pallets and boxes, can be diverted from the waste stream and reused by delivery trucks. Recyclable only collection facilities and refuse storage dumpsters will be provided for all of the individual stores. Recyclable only collection cans and trash cans will also be provided for store patrons in various external locations between the stores and parking areas as well as in common space locations throughout Union Heights.

3.8.4 Water Service

Existing Conditions

Currently, the water supply system for the project will be private with the potential to dedicate it to the Town at some point in the future. Once dedicated, it could remain as a new, stand alone district or, as part of a consolidation, become an extension of an existing district.

The Union Place property currently has eleven (11) bedrock wells that have been recently drilled but are not yet in use. Other wells that are currently in use as potable drinking water supplies include two older bedrock wells that service the existing residences on the Zipkin Property. These wells are pumped at less than five gallons per minute (gpm), the typical demand for a single family residences. The Mobil Station, located on the corner of US Route 6 and Baldwin Place Road also has one bedrock potable drinking water well. This well provides less than five gpm since it is only used to supply drinking and lavatory water to the Mobil Station.

Community Water Supply Systems

Several community water supply systems are located in the area surrounding the Union Place property. These supplies are known as Society Hill, Chateau Ridge and Williamsburg Ridge. They have their own facilities, wells and infrastructure. A private company runs each water supply system. These systems are described in detail within Chapter 3.5.1, Groundwater.

Town of Carmel Water Districts

Several Town of Carmel water districts are located in the vicinity of the Union Place site. Information on these water districts was obtained through phone conversations with Mr. John

Karrel, P.E., the former Town of Carmel Town Engineer. Municipal Water District 4, 5, and 13 provide water to areas near the Union Place site. These districts use a combination of bedrock wells and surface water as sources for portable drinking water. More specific information pertaining to each district is provided in Chapter 3.5.1, Groundwater.

Non-Community Water Supplies

The remaining properties in the vicinity of the Union Place site utilize non-community water supplies or individual wells that are located on the respective properties. Commercial private wells near the site include: the US Post Office, Lupi Storage Facility, the Putnam Square Shopping Center, the William Koehler Senior Center, the Mahopac Senior Housing, the Mobil Station, Zipkin Property, Pine Grove Day Care, the Baldwin Meadows development, the NYSEG building, and South Putnam Animal Hospital. The water usage for the commercial properties is significantly less than the water usage for the residential communities.

Potential Impacts

The proposed water supply for the project, as stated above, is a private community water supply. Currently, eleven (11) wells have been drilled to supply the water. A 72-hour pump test outlined in Chapter 3.5.1 will demonstrate the sustainable yield of these wells. The average daily demand yield needed for the project is 135.6 gpm and the maximum daily demand, calculated as the twice the daily demand, is 271.2 gpm as shown in Table 3.5-2 in Section 3.5.1. During the 72-hour pump test surrounding community water supplies, non-community water supplies and municipal water supplies will be monitored for influence from the on-site groundwater wells. The pump test will determine if drawing water from the groundwater on-site will influence the water withdrawal in existing water systems near the project site.

There is a potential to use the surface water from Lake Mahopac as a potable drinking water supply. This water supply would require the construction of infrastructure to carry the surface water from Lake Mahopac to a treatment facility, which would also need to be constructed. Impacts related to the construction of such a system would require a utility easement and could result in very minor possible traffic and road impacts during the installation. Roadways would be returned to their predevelopment condition and configuration after the installation is complete. However, the Town of Carmel Water District No. 8 currently removes surface water from Lake Mahopac for drinking water use as discussed in Chapter 3.5.1. There is existing infrastructure, including 8-inch pipe, and excess water capacity within Water District No. 8 that may be available to supply water from Lake Mahopac to the Union Place Project. While the existing 8-inch pipe is large enough to convey this excess capacity to the Union Place Project some upgrades that may need to occur to make it possible for Water District No. 8 to supply this water to the Project are expanding the filter system and/or supply more storage capacity to the Town water district. For additional discussion on Lake Mahopac as a drinking water supply see Section 3.5.3.

Mitigation Measures

As documented in Chapter 3.5.1, the Town of Carmel Water District No. 8 uses Lake Mahopac as its potable drinking water supply. Water District No. 8 supplies water to Town of Carmel Water District No. 13, which is located adjacent to and north of the property. The excess capacity of Water District 8 is currently approximately 211,000¹⁶ gallons per day (gpd). As stated

¹⁶Information gathered from phone call with John Karrel, former Town of Carmel Engineer. Total capacity of Water District 8 is 375,000 gpd. 2007 water usage = 194,000 gpd, 2008 water usage = 151,000 and 2009 water usage =

above the water supply for this project must have the peak capacity to supply 390,540 gpd or 271.2 gpm. The excess capacity from Water District 8 cannot supply this amount. However, any groundwater developed on the site can be used to supplement what the Town can not provide and can be used to back up the system. Permission from the Town of Carmel would need to be obtained for this water district to supply water to the Union Place project.

The other existing community and non-community water supplies surrounding the area, and mentioned above, have limited water capacities and could not supply sufficient water to meet the estimated demand of the Union Place development.

3.8.5 Sewage Disposal

Existing Conditions

The subject property is undeveloped through its northern and eastern areas. The southerly area is developed with the Mahopac Farm complex (which once included a dwelling, general store, museum and theater), and the Mobil gas station on the corner of US Route 6 and Baldwin Place Road, as well as two-family dwellings which front on Baldwin Place Road. All of these facilities are serviced by existing subsurface sewage treatment systems (SSTS). The two separate two-family residences are serviced by an SSTS adjacent to the buildings; the Mahopac Farm complex is serviced by a single SSTS in the large lawn area south of the barns; and the Mobil gas station is serviced by an onsite SSTS. Under these current conditions, it is approximated that these structures have sewage disposal systems with a cumulative design flow in order of 3,000 gpd. As part of the subject project, all of these SSTS's would be eliminated and a new sewage treatment system would be provided as discussed below.

There is no centralized or public wastewater system currently set up to service the site. In the vicinity of the site, the following public wastewater systems exist: Carmel Sewer District #1 is located along Route 6 extending north of Clark Place; Carmel Sewer Districts #5 Hillsdale is located to the west along Route 6N; Carmel Sewer District #6 Ivy Hills, also located to the west off Archer Road; Carmel Sewer District #7 is located east of US Route 6 and north of Union Valley Road; and Somers Sewer District #1 is located immediately south of the site with service at the Somers Commons shopping center. There are also private centralized wastewater systems to the west servicing the Williamsburg Ridge Community, to the north servicing Mahopac Schools, to the east servicing Mahopac Village Center, and adjacent to the site which services the Society Hill Community.

Each of these Districts or Communities discharge to a centralized wastewater treatment plant (WWTP) which operates under a State Pollutant Discharge Elimination System (SPDES) permit issued by the NYSDEC. The WWTP's servicing Carmel Sewer District #1, Carmel Sewer District #7, Williamsburg Ridge, Mahopac Village Center, Mahopac Schools and Society Hill all discharge into the New York City East of Hudson (NYC EOH) Watershed and are subject to advanced treatment in accordance with NYC Watershed Rules and Regulations. This advanced treatment includes membrane filtration and phosphorus removal beyond the normal WWTP treatment process. The WWTP's treat wastewater to a level that allows the plant's effluent to be discharged into a receiving stream located within the watershed of a major drinking water supply. The level of treatment and SPDES permit conditions allow this discharge without ill effect to the environment or drinking water quality. The WWTP's serving Carmel Sewer District #5, Carmel Sewer District #6 and Somers Sewer District #1 discharge to portions of the Lower Hudson River Watershed and are subject to lesser treatment levels than the WWTP's

147,000, which is an average of 164,000 gpd for the three years. Leaving an excess capacity of 211,000 gpd.

discharging to the NYC EOH Watershed. Here again the WWTP's cleansed effluent is discharged to various waterbodies under SPDES permit controls designed to have no ill effects on human health or the environment.

Potential Impact and Mitigation

It is the current proposal of the applicant for the subject mixed use development to include on-site facilities to address the project's sewer treatment needs, with disposal of the treated effluent proposed to be directed offsite. Design flow for the mixed-use project is estimated at 195,270 gpd at full build out, as shown in Table 3.5-2 in the Groundwater Section, 3.5, of this document. The design flows/hydraulic loading rates for the Medium to Small Retail Spaces, Retail/Service Office, Office Space, Hotel, Restaurants, Residential and Playhouse uses are based on published hydraulic loading rates contained in the New York State Department of Conservation's publication *Design Standards for Wastewater Treatment Works 1988* (DEC88). The hydraulic loading rates for the two remaining uses onsite (Large nonfood Retail Space and Specialty Grocer) were not cited in DEC 88 and there for cannot be accurately extrapolated from the other use categories presented. Therefore, the hydraulic loading rates for these categories have been developed based upon research of similar use categories.

It is proposed to provide sewer service for the project with a centralized WWTP building, approximately 10,000 square feet in size, located in the central portion of the project site. The proposed location for the WWTP is isolated from any existing building and is far away from the residences proposed in Union Heights, at least 300 feet from any building proposed or existing on and off-site. The WWTP sits in the lowest point of the site, thereby mitigating visual impacts on and off the project site and is shown on Figure 3.8-1. This WWTP will provide advanced treatment of wastewater in accordance with local, regional, and state regulatory requirements. Wastewater will be collected throughout the project by a collection system consisting of a series of subsurface piping and manholes, as well as several pump stations. This system will collect wastewater from the various onsite buildings and convey the sewage to a centralized WWTP location. The WWTP will consist of an advanced treatment system providing tertiary treatment of project related sewage generating a highly cleansed effluent. Refer to the Wastewater Treatment Plant Report attached as Appendix I for further details on the treatment process.

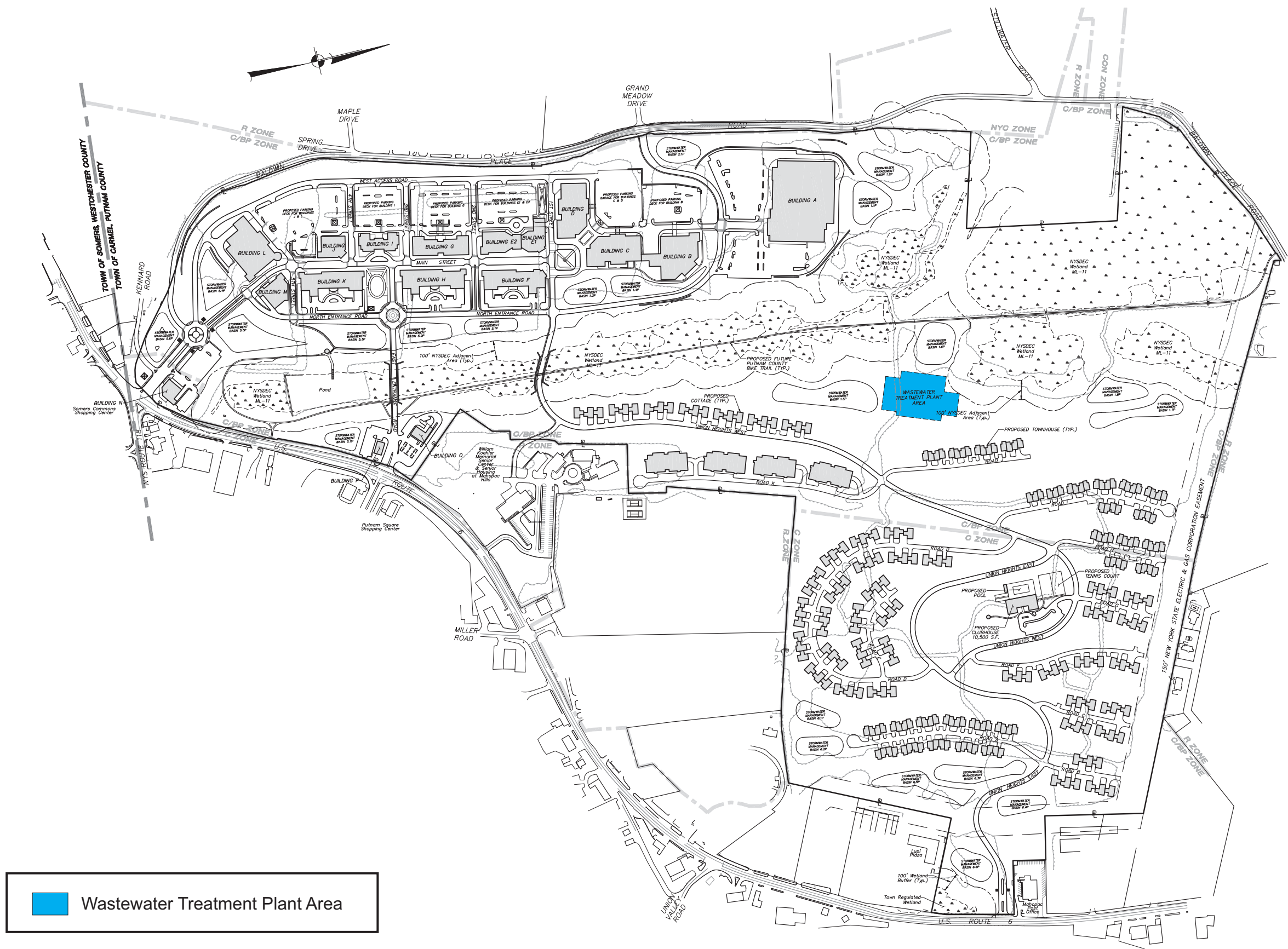
Since the project site is located within the NYCDEP EOH watershed, and the NYC Watershed Rules and Regulations currently prohibit new surface discharge of the effluent within the subject site, it is therefore necessary to convey the cleansed effluent from the proposed WWTP in a forcemain to a discharge point out of the NYCDEP watershed, as shown in Figure 3.8-2. It is envisioned that the forcemain will exit the western portion of the site and be routed within existing road rights of way to a point out of the watershed in the southwest corner of the Town of Carmel. Two NYSDEC Class C streams exist in this area which are suitable for discharge of the cleansed effluent. The easterly stream currently receives effluent discharged from WWTP's in Carmel Sewer Districts #5 and #6 under SPDES permits issued by the NYSDEC. The approximate location of the existing streams available to receive WWTP outfall is shown as Figure 3.8-2.

The project's WWTP discharge will also be regulated under a NYSDEC SPDES permit. It is envisioned that the WWTP effluent will be treated to meet NYSDEC intermittent stream effluent limits. Intermittent stream effluent limits are recognized by the NYSDEC as representing the highest degree of treatment that can reasonably be achieved outside of the NYC EOH watershed. Final design criteria will be established as this application progresses through the SEQRA and DOH permitting processes.

An alternative centralized sewage disposal option for the mixed use project would be connection to the adjacent Town of Somers Sewer District #1 sewer system which ultimately conveys wastewater to the Westchester County Peekskill Sewage Treatment Plant. Sewer collection infrastructure exists immediately south of the project site at the Somers Commons Shopping Center where sewage is collected and brought to a pump station which discharges to a forcemain which runs southerly within the US Route 6 right of way. This Town owned forcemain connects to the Peekskill interceptor sewer which ultimately discharges at the Peekskill Wastewater Treatment Plant. The Peekskill Wastewater Treatment Plant is a 10 million gallon per day facility. Currently it has a wastewater flow of approximate 7 million gpd meaning the plant has more than sufficient capacity. This alternative would need additional approvals from the Town of Somers and Westchester County. In order for the subject project to tie into this existing system, an analysis of the capacities of existing infrastructure would need to be undertaken.

The applicant acknowledges that alternative uses to the proposed mixed-use project include zoning compliant uses which are permitted in current underlying zones. Certain of these project alternatives include a commercial business park and retail center, which do not include any residential housing. This mix of commercial uses is considered to be a relatively dry sewer usage compared to the mixed use project. As such, it is possible that these alternatives could be serviced by an on-site subsurface sewage treatment system (SSTS), or a centralized wastewater treatment plant (WWTP) followed by an on-site subsurface sewage disposal system (SSDS).

Extensive subsurface exploration and soil testing has taken place throughout the subject site. The results of this testing indicates that the northeastern portion of the site has conditions suitable for an SSTS or SSDS. Refer to the hydrogeologist's report documenting the results of this investigation in Appendix C herein. Available SSTS or SSDS absorption area based on soil percolation and groundwater mounding is available in the order of 35,000-50,000 gpd. Therefore, the project could be supported by a 35,000-50,000 gallon a day SSTS, or a WWTP allowing for recycled gray water with a SSDS of 35,000-50,000 gpd. The gray water recycling would allow a project with a sewage usage in the order of 70,000-90,000 gpd.



Wastewater Treatment Plant Area

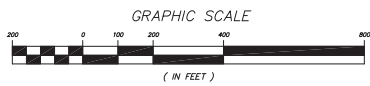


Figure 3.8-1: Location of WWTP
 Union Place
 Town of Carmel, Putnam County, New York
 Source: Insite Engineering, Surveying & Landscape Architecture, P.C.
 Drawing Date: 06/18/10
 Scale: As Shown

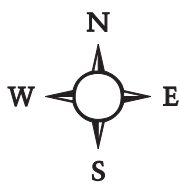
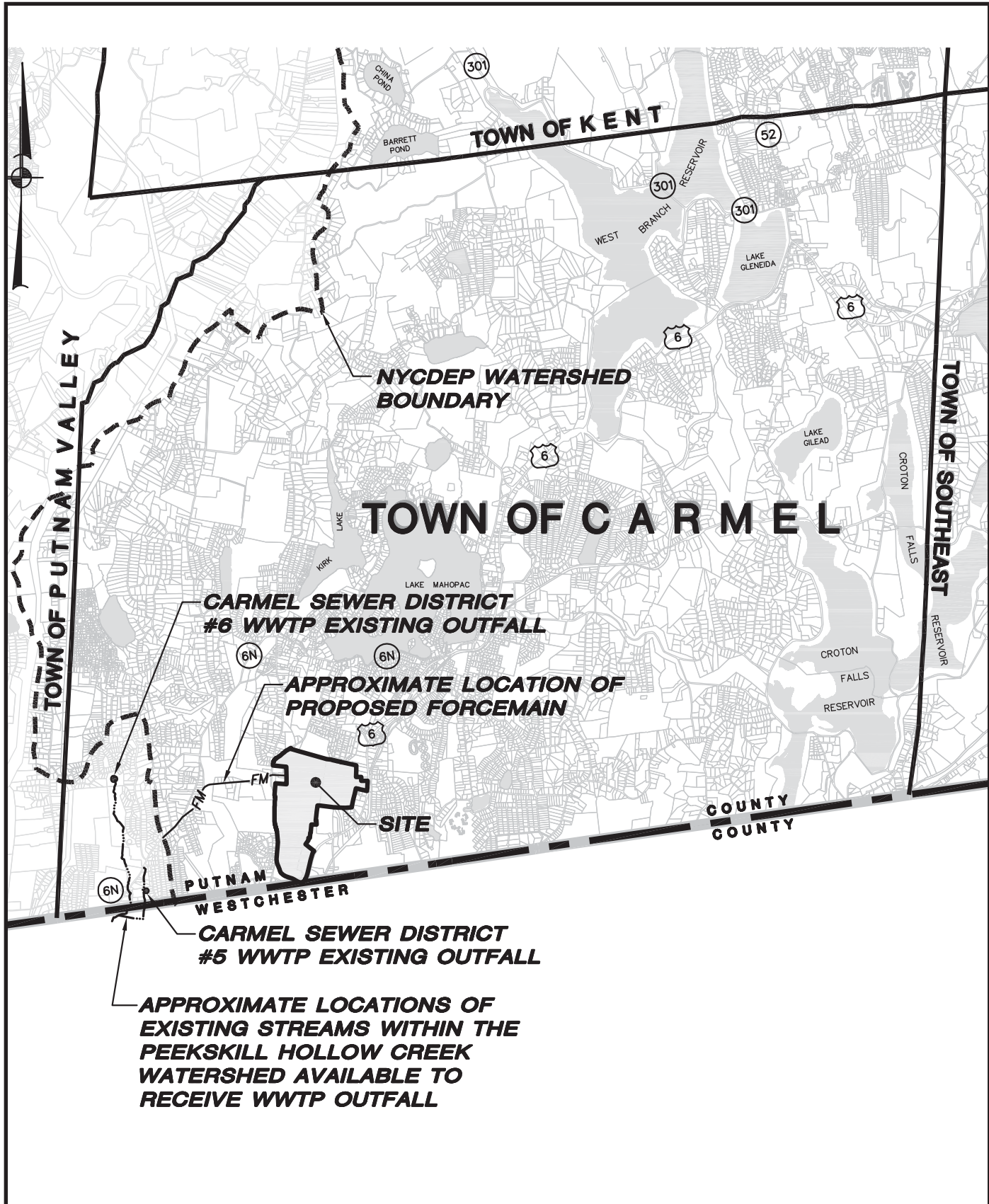


Figure 3.8-2: WWTP Discharge Location Plan
 Union Place
 Town of Carmel, Putnam County, New York
 Base Map: Insite Engineering, Surveying & Landscape Architecture, P.C.
 Date: 05/20/10
 Scale: 1" = 6,000'