PATTERSON CROSSING RETAIL CENTER

FINAL ENVIRONMENTAL IMPACT STATEMENT

VOLUME I

NYS ROUTE 311 at INTERSTATE 84 EXIT 18

Towns of Patterson and Kent, Putnam County, New York

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PATTERSON CROSSING RETAIL CENTER
Final Environmental Impact Statement

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INTRODUCTION

This Final Environmental Impact Statement (FEIS), prepared pursuant to the State Environmental Quality Review Act (SEQRA), provides responses to agency and public comments received by the lead agency on the Draft Environmental Impact Statement (DEIS) prepared for the Patterson Crossing Retail Center project, Town of Patterson, Putnam County, New York. The FEIS has been prepared in accordance with Section 8-0101, et. seq. of the Environmental Conservation Law and the regulations promulgated by the New York State Department of Environmental Conservation (NYSDEC) thereunder, which appear at 6 NYCRR, Part 617.

The Applicant prepared a Draft Environmental Impact Statement (DEIS) in response to a Positive Declaration issued by the Town of Patterson. The DEIS scope was established by a scoping outline developed by the Patterson Planning Board, acting as lead agency, in cooperation with all other involved agencies and interested parties. The accepted scope outlining the information to be covered in the DEIS as adopted on April 14, 2005 is provided in Appendix A of the DEIS.

The DEIS was originally submitted to the Town of Patterson on November 30, 2005 for completeness review. Based upon comments received from the lead agency and its consultant, the Applicant submitted a revised DEIS to the Planning Board on May 24, 2006. Additional revisions, made to address subsequent Town comments, were submitted, reviewed for content and adequacy with respect to the scope, and approved by the Town prior to the resubmission of the finalized DEIS on July 27, 2006. The lead agency then issued a Notice of Completion for the DEIS and a Notice of SEQRA Hearing on July 27, 2006. The Planning Board conducted Public Hearings on the DEIS on September 13 and September 14, 2006. The written public comment period was closed on September 25, 2006.

The FEIS consists of this volume, a CD containing the FEIS Appendices, the accompanying set of drawings, and the DEIS, which is hereby incorporated by reference as part of this document.

The plan revisions described below and throughout this FEIS have been prepared in response to comments received during the SEQRA review process. No significant adverse environmental impacts are anticipated from these revisions. Plan revisions have resulted from comments from the Attorney General's Office, the New York City Department of Environmental Protection, the public, and groups including Riverkeeper, Croton Watershed Clean Water Coalition and the Putnam County Coalition to Preserve Open Space, among others. Revisions to further mitigate impacts were completed by refining the Stormwater Pollution Prevention Plan (SWPPP), reducing site disturbance, modifying the site access road, relocating the emergency access drive, and reducing the amount of development proposed on the project site. The plan revisions evaluated herein include less impervious surface and less development.

Summary of Proposed Action

The Applicant, Patterson Crossing Realty, LLC, proposes to construct an approximately 382,560 square foot retail center and a 28,000 square-foot garden center, referred to as Patterson Crossing Retail Center ("the Proposed Action"), on approximately 90.5 acres of predominantly undeveloped land that straddles the border between the Town of Kent and the Town of Patterson in Putnam County, New York (see DEIS Figure 2-1, Regional and Local Settings of the DEIS). The Applicant's initial plan, as presented to the Town in May of 2003,

proposed a 425,700 retail center with a roughly 28,200 square foot garden center. Upon further investigation, the Applicant modified the plan to that originally proposed in the DEIS; a 405,850 square foot retail center with a 28,200 square foot garden center. The scale of the project was again reduced to the square footage noted above in response to public and agency comment on the plan presented in the DEIS.

The introduction of large scale retail stores that would offer a broader range of goods and products than are currently available in the County responds to the demand for such retail services, both locally and in Putnam County as a whole resulting from population growth. As stated in the DEIS, the proposed project would enhance the convenience of comparative shopping for County residents and would also make certain goods available, including electronics, sporting goods and some durable goods, that are presently not available locally.

A schematic layout of the modified project is presented in FEIS Figure 1.3-4 and in the larger scale drawings at the rear of this FEIS. The project site's location, at the crossroads of Interstate 84 and NYS Route 311, make the project site ideally suited for major retail uses that will draw patrons from other parts of the County and greater region.

The property consists of 16.4 acres in the Town of Kent that are commercially zoned, and 74.1 acres in the Town of Patterson that are zoned Industrial (57.9 acres) and R-4 residential (16.2 acres). No structures are proposed in the residential zone which is located in the southern portion of the site.

The project site is located in the New York City regulated watershed and consists predominately of second growth woodlands that were former pasture land. Single family residences in the Town of Kent and the Town of Patterson abut the site to the west. The site currently contains a cellular telecommunications facility near its southern end that will remain in operation. Approximately 27 acres of the site would remain undisturbed and 33 additional acres would be revegetated and landscaped.

The majority of the new construction (380,560 square feet of retail, management, office and meeting space and a 28,200 square foot garden center) associated with the Patterson Crossing Retail Center is proposed within the Industrial District of the Town of Patterson, while a small portion of the proposed building development (1,700 square feet of retail and a 300 square foot Putnam County Sheriff's Substation) and the proposed site access would be located in the Commercial District in the Town of Kent. Retail is a permitted principal use within the Kent Commercial District. The retail uses proposed within the Industrial District of the Town of Patterson are permitted uses subject to special use permit approval.

The proposed retail uses at the Patterson Crossing Retail Center would be housed in four separate buildings within the eastern and central portion of the site (See FEIS Figure 1.3-4). The remainder of the site would support parking areas, stormwater management facilities and associated infrastructure. Approximately two third of the site (about 60 acres) would be retained as open space composed of undisturbed, revegetated and landscaped areas.

The Proposed Action has been modified as a result of the comments received during the Public Hearing on the DEIS from the public, agencies and interested organizations. Modifications to the project occurred pursuant to input received during meetings the Applicant held with the New York State Department of Transportation, the Putnam County Department of Planning, Development & Public Transportation, and the Watershed Inspector General for the New York

State Office of the Attorney General along with the Riverkeeper as well as a separate meeting with the New York City Department of Environmental Protection and discussions with NYSDEC. Input from the first two agencies were used to develop plans and mitigation to offset impacts related to the changes in traffic related to the Proposed Action. The latter four groups provided input and direction on developing a plan to conservatively assess potential stormwater impacts and develop mitigation both on and off the project site to address water quality concerns. As a result, the proposed retail area has been reduced by approximately 23,900 square feet and the overall building area reduced by roughly 31,800 square feet from the Plan presented in the DEIS. The project now includes approximately 8,220 square feet for management, office and meeting space and a 300 square foot substation for the Putnam County Sheriff's Department.

The project changes made in response to comments have reduced the area of proposed impervious surfaces, resulted in further improvements to the SWPPP, and reduced potential environmental impacts related to slope and watercourse disturbance and buffer encroachment.

Revisions to the plans are, in part, a result of meetings that were held in the Spring of 2007 between the Applicant, the Attorney General's Office, Watershed Inspector General (WIG) and the Riverkeeper. The initial meeting with these two parties involved a review of the project plans that were presented in the DEIS and discussion of environmental concerns and goals to be used in revising the plans. This included reducing the project footprint, using the Simple Method and related analytical approach as recommended by the WIG to determine pre- and post-development pollutant loads and assessing the potential to reduce existing off-site drainage problems as part of the project plan. The Applicant also considered potential impacts to water quality based on secondary growth impacts related to population changes and future worker housing needs. Subsequently, the plans were modified to reduce the overall square footage of the retail center and the building footprints and enhance the originally proposed stormwater management facilities on-site. These modifications were presented to the Watershed Inspector General and Riverkeeper. In addition, off-site improvements to address existing pollutant issues from Interstate 84, NYS Route 311 and surrounding areas were incorporated into the Proposed Action. Correspondence related to these meetings can be found in Appendix A of this FEIS. Refer to the February 27, 2007, March 27, 2007 and October 18, 2007 correspondence from the Applicant and the June 1, 2007 from the Applicant's Planner to Mr. James Tierney and Mr. Charles Silver in Appendix A, Correspondence, for a summary of the meetings, additional analyses performed, project related traffic improvements, and modifications to the project.

These revisions were further reviewed and refined based on a meeting between the Applicant and the NYCDEP in February of 2008 as well as discussion with the NYSDEC. The revisions to the Plan provide increased phosphorous reduction in the stormwater runoff from on- and off-site sources. Refer to Appendix A for a copy of a letter from the Applicant's Engineer to the NYCDEP summarizing the discussions at that meeting.

A number of matters were discussed that included the amount of impervious surface, the proposed total disturbance planned, and secondary impacts including phosphorous loading. In response to the request from the Attorney General's office, the Applicant's engineer has performed additional phosphorous loading calculations employing the site specific Simple Method. The project has also been modified and enhancements are now proposed that include on- and off-site stormwater treatment facilities beyond those required to satisfy NYCDEP and NYSDEC regulatory requirements. In addition, the Applicant investigated the use of modeling software to assess the potential for secondary growth impacts related to the project. After

extensive conversations with economists and one of the top economic impact assessment modeling software companies, it was determined that existing models capable of providing the desired data were not available.

As part of the Proposed Action, traffic and stormwater management improvements beyond those required to offset impacts related to the project would be funded and implemented, in whole or in part, by the Applicant. Presently several intersections have been identified as currently having failing levels of service under existing or future No-Build conditions, (Terry Hill Road at NYS Route 311, the Interstate 84 westbound ramp at NYS Route 311, and the Interstate 84 ramp eastbound at NYS Route 311). Beneficial intersection improvements needed to address these future and existing, long-standing traffic deficiencies would be constructed in conjunction with the project.

For many years, Lake Carmel has suffered from heavy pollutant loading from surrounding roadways including Interstate 84 and NYS Route 311 and residential developments, including one specific development on and in the vicinity of Concord Road. As part of the Proposed Action, beneficial stormwater treatment practices both on- and off-site are proposed to reduce existing runoff related pollutant loads that contribute to water quality degradation of Lake Carmel and the East and Middle Branch Reservoirs. Improvement measures to treat stormwater from Interstate 84, NYS Route 311, Concord Road and the Putnam County Highways Facility would be constructed as part of the development of the Patterson Crossing Retail Center.

Existing erosion in the Middle Branch Reservoir/Lake Carmel watershed in the Town of Kent has caused many tons of sediment to enter the Lake and further degrade its water quality. Eliminating these existing sources of erosion and sedimentation on and near the project site, and controlling erosion and sedimentation throughout construction, are integral components of the Patterson Crossing Retail Center project and will improve and protect the Lake's water quality.

The revised Patterson Crossing Retail Center development plan, and Erosion and Sediment Control Plan included in the revised SWPPP (FEIS Appendix F), include specific measures to eliminate existing erosion, and to prevent erosion during construction. These measures far exceed the requirements set forth in the New York State Standards and Specifications for Erosion and Sediment Control (Standards and Specifications), those required by NYSDEC General Permit for Stormwater Discharges GP-0-08-001, and those required by General Permit GP-93-06 which is incorporated into the Watershed Rules and Regulations (WR&R) by reference. While there is no obligation under any regulation to address ongoing erosion issues under the Proposed Action, the Applicant would construct "extra" stormwater improvements designed to attend to the existing stormwater problems. The measures to repair the eroded channels included in the Proposed Action will not be implemented if the project is not constructed.

As discussed in detail in the DEIS, and the revised SWPPP (Appendix F herein), untreated stormwater, the majority of which originates in the Town of Kent, discharges from Concord Road and has created a severely eroded channel (See FEIS Figure 4.5-5, Eroding Drainage Channel From Concord Road). This channel continues to be a significant source of sediment, and the pollutants that adsorb to the sediment, including phosphorous, to Lake Carmel and the reservoir. This chronic erosion is evidenced by FEIS Figure 4.5-5, and can be seen in aerial photographs dating as far back as 1964. The Applicant notes that while the discharge of

stormwater from Concord Road has generated many tons of sediment that have entered Lake Carmel, no steps have been taken to repair the eroded channel or to prevent the resulting sedimentation. Although not required to do so, the Applicant is willing to repair the channel and eliminate the constant source of sediment in the lake.

Like the ongoing erosion of the channel created by stormwater discharged from Concord Road, accelerated erosion of the bed and banks of the channel that conveys stormwater along NYS Route 311 to the Middle Branch Croton River (See FEIS Figure 4.5-6, Eroding Drainage Channel Along NYS Route 311) continually adds to the sediment, and other pollutant loads entering the Lake and the Middle Branch Reservoir in the Town of Kent. Again, the Applicant notes that no measures have been taken to eliminate this chronic source of sediment in the Lake Carmel watershed. Although not required to do so, and as with the Concord Road drainage ditch, the Applicant is willing to stabilize the NYS Route 311 drainage channel.

To eliminate this source of pollutants, including phosphorous, from the NYS Route 311 drainage channel, the Applicant proposes to reshape, and rip rap, the eroding channel from the outfall of the proposed stormwater drainage system to a point approximately one hundred feet west of the outfall. The rip rap channel will convey stormwater discharged from both the new outfall, and that which originates on Concord Road, flows across the project site, and enters the channel. In so doing, the improvements will reduce sediment, and other pollutants, including but not limited to phosphorous, that currently enter Lake Carmel and the Middle Branch Reservoir, thereby benefiting the lake's ecology, surrounding residents, Lake Carmel users, the New York State Department of Transportation, the Town of Kent, and the New York City public drinking water supply. The Applicant notes that no credits were taken in the Stormwater Pollution Prevention Plan for the phosphorus removed by these improvements, even though they will significantly reduce the phosphorus load presently entering Lake Carmel and Middle Branch Reservoir. The Applicant notes that the channel does not constitute waters of the United States as defined in Section 404 of the Clean Water Act. As such, no authorization from the United States Army Corps of Engineers is required to complete the repair project.

The Applicant notes that only 28 acres of the 90.5 acre site currently drains to Lake Carmel. Section 4.6 (Wetlands, Streams and Waterbodies) indicates that stormwater runoff from 19 percent of the proposed impervious surface shown on the site development plans included in the DEIS would have drained to Lake Carmel after treatment by the proposed stormwater management facilities. Subsequent to the acceptance of the DEIS, the site development plan was revised to reduce the area of impervious surface. As now proposed, stormwater from only 4.4 acres, or 14.2 percent of the total thirty-one acres of on-site impervious surface would discharge to the Lake Carmel/Middle Branch Reservoir watershed.

In an effort to reduce post construction runoff, approximately 22 acres of the 90 some acre Patterson Crossing Retail Center site will be maintained in its existing condition and an additional 31 acres will be revegetated and landscaped. Combined, these vegetated areas will occupy more than 59 percent of the site and allow for continued infiltration of runoff. In addition, following development of the site, stormwater runoff from the 4.4 acres of impervious surfaces draining to Lake Carmel will be treated prior to discharge in order to reduce both peak discharge rates and post construction increases in pollutants.

The revised project layout and stormwater management system have been specifically developed to reduce post-construction phosphorous loads from the site to below pre-development levels. Further, the proposed project now includes on-site and off-site

stormwater treatment practices that reduce phosphorus loading to each of the two reservoir basins including Lake Carmel. The on-site stormwater will be treated by a series wet ponds shown on the plans that accompany this FEIS. To further reduce phosphorus loading to both of the reservoir basins, off-site wet ponds are now proposed to treat runoff from off-site drainage areas shown on FEIS Figure 4.5-4.

The off-site improvements, which far exceed the requirements of federal, State, City, and municipal regulations, will treat currently untreated stormwater discharging from the residential development to the west of the project, a portion of NYS Route 311 and the entry and exit ramps to and from Interstate 84, as well as the Putnam County Highways Facility (PCHF). This approach to treating off-site stormwater will advance the goals of the TMDL program and assist the Towns in meeting their Total Maximum Daily Load obligations. Implementing the proposed project will achieve an overall reduction in phosphorous loading in New York City's drinking water supply watershed of 8.28 lbs/yr.

Stormwater runoff discharging to the Middle Branch Reservoir includes the runoff from the northern portion of the site including the access road, and the off site runoff from NYS Route 311 and Interstate 84, as well as the residential development north of Lake Carmel. As detailed in Appendix F of the SWPPP, Supplemental Phosphorous Loading Calculations, following treatment of runoff from these areas total annual phosphorus load discharging to the Middle Branch Reservoir would be reduced from 30.90 lbs to 23.24 lbs.

Stormwater runoff discharging to the East Branch Reservoir includes the majority of the stormwater runoff from the proposed development, as well as, the undeveloped hillside to the south of the proposed development. Existing runoff discharging to the East Branch Reservoir includes untreated stormwater from the PCHF. The treatment of stormwater at the PCHF now proposed will provide an overall reduction in phosphorus loading following construction of the project of 7.66 lbs./yr. Also detailed in FEIS Appendix F, annual phosphorus loads to the East Branch Reservoir would be reduced from 10.08 lbs to 9.46 lbs following construction of the project.

The Operation and Maintenance Plan included in the Patterson Crossing Retail Center SWPPP specifies a schedule for the long term inspection and maintenance of all stormwater management facilities. Implementing the maintenance procedures specified in the plan will be the responsibility of a management and maintenance company that will be paid for by the property owner(s) through the rental revenues collected by the management company. Overall responsibility for maintaining the stormwater management facilities will, in accordance with New York State Department of Environmental Conservation's August 2003 Stormwater Management Design Manual, be vested with a responsible authority by means of a legally binding and enforceable maintenance agreement that is executed as a condition of plan approval.

As required by the NYSDEC SPDES General Permit GP-0-08-001, inspections will be conducted by an independent qualified Professional retained by the Applicant to ensure that all erosion and sediment control practices are properly maintained and in good working order. These measures also would be monitored during construction by the NYCDEP, and by representatives of the Town(s) paid for by inspection fees funded by the Applicant pursuant to the Town Code. Also as require by the Town Code, the Applicants will provide to the Towns of Patterson and Kent the required construction security and/or erosion control bond used to insure the proper installation and maintenance of erosion and sediment control measures and

completion of site restoration. As such, the effectiveness of the stormwater facilities will be maintained long term.

Proposed Modifications to the Site Plan

Modified Project Layout

The current proposal, described within this FEIS, at 382,560 total square feet is approximately 23,290 square feet less than the plan presented in the DEIS and 43,140 square feet less than the plan presented to the Town in May of 2003. Unlike the previous plan, this proposal includes non-retail related areas for management space, offices, meeting space and a Putnam County Sheriff's Department Substation. The current plan further reduces the area of impact through the incorporation of two story buildings that will house retail uses (Buildings E, F and G), management space, offices and meeting space. The meeting space would be managed by the retail center but could be used by the community for meetings or other functions, or made available to the public for similar uses.

The proposed 2,000 square foot building will be served by a separate subsurface treatment system (SSTS) located to the north of Building H. This area was found suitable to serve the needs of the project. Prior investigations, which indicate the capacity of the area at 2,000 to 3,000 gallons per day, can be found in Appendix E of the DEIS.

It is noted that the building locations, footprints, and square footage may be altered as the final plans are developed. If such modifications result in construction activity staying substantially within the same limits of disturbance set forth in the DEIS and this FEIS, similar impervious surface areas, and no new significant adverse environmental impacts, no further environmental review will be required. It is important to note that identifying lease agreements and evaluating prospective tenants is key to a successful project, and at times, the lease agreements are not finalized until construction is well underway. It is recognized that prospective tenants may require a drive through. This element may be incorporated into the plan during the site plan review, most likely in retail Building C in Patterson or Building H in Kent. Because of potential for changes in consumer markets, it is noted that the specific types of retail businesses projected in this FEIS (e.g. Wholesale warehouse, home improvement, electronics) may change during negotiations with tenants.

The modified project would generate less traffic than the proposal evaluated in the DEIS. Trip generation projected by the current Proposed Action would be 82 fewer trips in the p.m. peak hour, and 110 fewer trips in the Saturday peak hour.

The modified Site Plan (Drawing SP-1 attached) includes a modification and widening of the access road to NYS Route 311. Changes to the access road include the extension of the two exiting lanes and the addition of a second lane for traffic entering from the Patterson Town line into the site. The new building configuration eliminates the pattern of drives required to provide access for the truck route and the northern most building pad shown in the DEIS plan. These changes improve the internal traffic circulation of the proposed development and reduced impervious surface area. Traffic along the truck route would be restricted to delivery and emergency vehicle use only. The configuration of the truck route creates an alternative emergency route for all but the northern most portion of the site access (between the truck route entrance and NYS Route 311) which can be utilized should the main access road be blocked to traffic. The use of the emergency access road from the site to Concord Road would

be required should the access road between NYS Route 311 and the truck route be blocked or at the discretion of the emergency services personnel.

Another modification to the Proposed Action involves the relocation of the emergency access road from Echo Road at the existing entrance to the telecommunications facility to Concord Road from a centrally located point on the west side of the proposed development. The new emergency access drive location would intersect Concord Road at a point just to the south of its intersection with Woodstock Road. The relocated emergency access road will provide a shorter, more direct route from NYS Route 311 to the site through the existing road network. The reconfiguration shortens the distance from the road network into the site and places responders at a more central location. Such a rerouting will benefit emergency responders in all weather conditions and reduce the overall amount of land disturbance required to build the road. The visual impacts related to the relocation and reconfiguration of the proposed emergency access road have been evaluated and the plan now includes a curved road with plantings on either side to mitigate impacts. As such, the new emergency access road is an improvement in many ways over that proposed previously.

A low level lighting system or one activated by a sensor along the emergency access road was considered by the Applicant. Based on the extremely infrequent use of such an access, that emergency vehicles using the road will have the appropriate lighting, and that responders also will likely have access to temporary lighting, the Applicant believes such a measure is unwarranted.

Emergency access gates will be locked to prevent unauthorized use; emergency responders such as the local fire department will have keys for the gates.

Emergency access from Fair Street into the project site was investigated. Although frontage on this road exists, the change in elevation from the road to the developable portion of the site exceeds 40 percent in areas. These grades severely limit the construction of a viable access drive into the site, which generally should be around eight percent for safety reasons. Steep slopes in this area also prohibit the siting of the stormwater features required to treat the runoff from the access, on the project site. Off-site installation of stormwater management facilities is not possible due to the location of prior development in the area and the limited distance to a viable point of discharge for the treated stormwater. Finally, the New York State Electric and Gas right of way, which runs across the project site in this area, can not be disturbed. This right of way separates the proposed development from the roadway.

The modified plan incorporates a second level (Buildings E and F) at the entrance to the retail center. Only the north end of the buildings will be two stories because of the topography in the area. With regard to fire calls, the Patterson Fire Department has advised the Applicant of its intent and readiness to be the responding agency for emergencies on the project site (see Appendix B of the DEIS for documentation). There is a county-wide Mutual Aid agreement in place in Putnam County, 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, but the Patterson Fire Department as responding agency has indicated that they are adequately equipped to respond to fires whether they are on the property within the Town of Kent or the Town of Patterson.

As for responses to other emergency calls at the retail center, primary police response will be from the Putnam County Sheriff or State Police unless the Town of Kent adopts a policy that

allows the Kent Police Department to respond to calls from the Patterson Crossing Retail Center, or is requested to respond as a matter of mutual aid. The Town of Kent Police Department would only be required to respond to those calls originating in the small portion of the retail center that lies within the Town of Kent. The Kent Police Department does not have authority to respond to traffic infractions and other types of violations outside of their jurisdiction.

A Putnam County Sheriff's Substation is proposed to be built on the property within the town of Kent. Alternately, the substation could be sited in the building containing the management, office and meeting space located in the Town of Patterson. The proposed substation floor plan, which was developed based on input from the Putnam County Sheriff's Department, has been provided to the Sheriff for review. The County Sheriff's Department also noted that the substation will be staffed as appropriate (refer to the letter from the Applicant to the Putnam County Office of the Sheriff on February 4, 2008 and the letter from the Putnam County Office of the Sheriff dated February 14, 2008 in Appendix A of this FEIS).

As a result of the analysis of police services in this FEIS it can be conservatively estimated that less than 70 calls for emergency response would be generated per year by the Patterson Crossing Retail Center. The Putnam County Sheriff's Department, and the New York State Police would respond to the majority of these calls. The number of calls requiring a response from the Town of Kent Police would likely be limited further since, as described above, a Putnam County Sheriff's substation is proposed on site.

The modified plan includes a combination of elements in the design that will address impacts on the neighboring residential properties. The Applicant has proposed walls, fencing, and landscaping to reduce noise and screen views.

The retail buildings located between Interstate 84 and Concord Road/Vernon Drive residences will act as a noise barrier for the existing traffic noise from Interstate 84. Since there is a gap between the proposed wholesale warehouse store and the home improvement center, the Applicant has proposed 10 foot high sound barrier wall to provide a more continuous noise barrier along the Interstate. On the west side of the property, a six foot high sound barrier fence has been proposed along the 50 foot reservation area running parallel to the property line.

To screen views of the retail center from the neighboring properties in critical areas a double or triple row of evergreen trees is to be planted in addition to the six foot high fence. The trees would be six to ten feet at the time of planting. Configuration of the planted evergreens will be addressed during the project's final site plan review. At the property boundary between the Town of Kent portion of the property, an additional section of fence is provided to screen views across the property to the proposed site access road.

Modified Project Architecture

In response to concerns expressed regarding the potential visual impacts that would result from development of the Proposed Action, the Applicant has significantly modified the plan to incorporate measures that will reinforce the position of the proposed development as the gateway into the Towns of Kent and Patterson at the NYS Route 311 and Interstate 84 interchange. The project has been reduced in scale, buildings reconfigured and the site plan has been modified to incorporate conceptual architectural details and gateway features that are designed to improve the visual character of the retail center in relation to the Kent/Patterson

community. A presentation assembled by the Applicant's architectural consultant, Street-Works LLC, which is reproduced in Appendix M herein, illustrates the improvements and features being considered in the Patterson Crossing Retail Center plan. The proposed plan enhancements incorporate a number of design concepts, generally encompassing the following key points: enhancement of the image of the gateway to Kent and Patterson; attractive entry to the project site, with a public outdoor plaza as a focal point; well designed pedestrian connections to all stores; sensitive lighting and signage designs; and a conceptual rural architectural style throughout the project. The aesthetic features being considered include lighting, signage, stone walls, fences, color, landscaping, and conceptual rural architectural style and features to break down the scale of the proposed buildings. It is noted that the Patterson Crossing Retail Center Plan Enhancements illustrated in Appendix M are conceptual framework designs and further project-specific architectural details will be developed as part of the final plans for the project.

Project Conformance with County and Regional Planning

The Proposed Action will contribute to stemming the flow of retail sales tax dollars out of Putnam County addressing the Putnam Paradox and the Shop Putnam Initiative. Refer to Section 3.0 herein for details on the Putnam Paradox and Shop Putnam Initiative.

County Executive Robert J. Bondi, in his State of the County address of 2007, recommended that Putnam County raise its sales tax rate from the current 3.5 percent to 4.0 percent to avoid eliminating essential services. According to Mr. Bondi, the "...sales tax recommendation will yield $12 million dollars per year, based on actual collections in 2006, which represents 10 percent of the 2007 gross operating budget" and without the sales tax increase, the County Executive stated that "...the total tax levy increase for 2008 will be 66%..." not including costs unknown at the time of his address.

In his 2008 address, the County Executive stated the following:

> "Commercial growth has long been an issue in our County and the lack of smart, environmentally safe commercial growth has hurt us tremendously. We, at the County level, have sought to advocate for projects that meet this requirement but we find that we are rebuffed at every turn-by territorial town boards, by special interest groups and, worst of all, misinformation about projects and proposals. What we see happening in our County – ever increasing needs by our expanding population and a dearth of commercial outlets that would generate the sales tax revenue to provide them – is the culmination of these types of roadblocks. We will continue to advocate for projects such as Patterson Crossing…and other projects that have yet to be unveiled. Imagine the better financial situation that Putnam County would be in if even just one of these projects had been approved and built five years ago."

The Proposed Action would contribute significant retail sales dollars to the County helping to reduce future County tax increases on residents.

The New York Metropolitan Transportation Council (NYMTC) released its Annual Report titled "Our Vision for a Growing Region" in March of 2008. NYMTC is involved with transportation planning in the New York City Metropolitan area and has made recommendations for development of future and existing transportation infrastructure to accommodate forecasted population and economic growth. The Council considers "...congestion, mobility, environmental

quality, economic vitality and quality of life..." in its sustainablity planning efforts.[1] This year's Annual Report, which covered New York City, Suffolk and Nassau Counties on Long Island and all of Putnam, Rockland and Westchester Counties, identified ten special growth areas across the region. Broadly speaking, NYMTC's "...common vision is of a region where future growth is focused, to the greatest extent possible, in the ten desired growth areas.

The growth area chosen in Putnam County is the intersection of NYS Route 311 and Interstate 84 (Exit 18) where the Patterson Crossing Retail Center is proposed. It is estimated that this, along with the other nine growth areas, could provide the region with upwards of 70,000 residential units, 90 million square feet of commercial space and as many as 360,000 new jobs to accommodate the anticipated growth in regional population of roughly 2 million people by the year 2030. The Council envisions commercial development similar to that the intersection of NYS Route 312 and Interstate 84, The Highlands, for the Exit 18 Growth Area. The proposed Patterson Crossing Retail Center supports NYMTC's vision that, if implemented, would offset some of the pressure future regional growth will place on the transportation network and assist the region's leaders in fulfilling the goals they've identified in the annual report.

Project Conformance with Town Comprehensive Plans and Zoning

Town of Patterson

The proposed project conforms fully with the Town of Patterson Comprehensive Plan and zoning ordinance, except for signage, which designates the majority of subject site as a commercial parcel.

In June 2003, the Town of Patterson rezoned 22.75 acres of the 77 acre Cushman Property (almost one third of the parcel) from Industrial (I) to Residential (R4) with a four acre minimum lot size. The adjacent neighborhood is presently built out at 1/8 to 1/4 acre lots. The new four acre zoning for the 22.75 acres is 16 to 32 times more restrictive than permitted in the adjoining neighborhood.

In addition, the new zoning district boundary line traversed an area that was zoned industrial and proposed for commercial development in compliance with the previous zoning map. With the new setbacks and coverage area limits resulting from the zoning change, the permitted building size would have dropped from approximately 833,000 square feet to roughly 480,000 square feet, a reduction of nearly 43 percent.

After further review and consideration a modified zoning boundary was proposed, which the Town Board subsequently adopted. This boundary was consistent with the boundary between the adjoining residential neighborhood and the long standing industrial zone. This modification left the roughly sixteen acres immediately adjacent to the existing neighborhoods in both the Towns of Kent and Patterson zoned residential as intended by the Town of Patterson in its original rezoning of the land and returned the remaining portion of the 22.75 acres, that which is not contiguous to the existing homes, to industrial.

It should be noted that all residences that abut the project site will be buffered by a reservation area that will be legally protected from development by the Applicant. In these ways, in addition to those presented above and elsewhere in this FEIS, the Applicant and the Town of Patterson

[1] The New York Metropolitan Transportation Council. March 2008. Our Vision for a Growing Region: Annual Report.

have protected the Lake Carmel residential neighborhood from the impacts associated with the Proposed Action to the maximum extent practicable.

Town of Kent

The Town of Kent portion of the subject site which has been zoned Commercial (C) for many years, also targets the site for a commercial use. The 1990 Master Plan for the Town of Kent designates the site as commercial as well. As such the Proposed Action complies with the Town of Kent planning and zoning except for signage. Refer to Appendix P for a full assessment of the project's compliance with the existing Town of Kent Zoning Code. Project compliance with the 1989 version of the Town's Comprehensive Plan is addressed in the project specific DEIS. The Town of Kent is updating its Comprehensive Plan the draft of which continues to call for commercial development on the project site. However, at the time of this writing, the considered changes have not been adopted by the Town.

Appendix Q contains responses to The Town of Kent comments on the project's compliance with the code, included in Appendix P, as well as those on the balance of the recent site plan application.

The Town Board of the Town of Kent has contemplated rezoning the Kent portion of the Patterson Crossing Retail Center site from commercial (C) to residential (R10). The Town is also proposing a major amendment to its zoning code, through Local Law Number 4, which includes two provisions, Section 77-6(D) and 77-65. The proposed amendment and provisions are discussed in detail below.

The Kent portion of the project site has been master planned and zoned for commercial use for over twenty years; the Patterson Crossing Retail Center project has been proposed for over five years. Prior to the Proposed Action, another retail application for the subject site, the Patterson Pavilion retail project, was proposed. Since a portion of the project site, approximately 16 acres, is located in the Town of Kent, project applicants as well as representatives from the Town of Patterson have always looked to include the Town of Kent in the site development process. For instance, the Patterson Supervisor approached the Kent Supervisor when the Patterson Pavilion was proposed, offering to share real estate tax revenues from the proposed development with the Town of Kent. Similar offers followed with the proposal of the Patterson Crossing Retail Center. Kent has not pursued any of these offers. Furthermore, in the initial stages of the Patterson Crossing Retail Center project, the Applicant sought guidance from the Town of Kent regarding retail options for the Kent parcel, options that would generate tax revenues for the Town. Kent failed to provide any direction regarding the Kent parcel and potential retail opportunities even though the site is zoned for retail use.

In spite of this history of planning for this site, which includes a substantial investment of capital and time, the Kent Town Board just this past year (2007) proposed revisions to both the Kent Zoning Map (the "Zoning Map") and Kent Zoning Ordinance (the "Zoning Ordinance"), that when considered together represent a clear effort to stop the Patterson Crossing Retail Center project and may overall present significant development impacts to the Town and County, if approved. The Kent Town Board introduced these potential actions only after the Applicant spent many years and millions of dollars in the design and review of a project, including the reduction of retail proposed within the Town of Kent from approximately 15,000 square feet to 2,000 square feet. While the originally proposed 15,000 square foot retail development in the Town of Kent would not result in significant impacts as documented in the DEIS, after much

criticism was received from the Town of Kent the Applicant made the decision to reduce the amount of development proposed for the Kent portion of the project site to 2,000 square feet. The Applicant can, as per the DEIS, build a 15,700 square foot retail building on the site; currently a 2,000 square foot building is proposed. If the building size is increased from 2,000 square feet to a maximum of 15,700 square feet, the Applicant will install three rows of evergreens plus the noise barrier fence to mitigate any noise or visual concerns.

The Proposed Action, as designed, complies with the current and long-standing master plans and zoning in both the Towns of Kent and Patterson with the exception of the proposed signage.

Not until recently, at the point the Applicant nearly reached the end of a very lengthy and costly environmental review process under SEQRA, did the Town of Kent indicate that it might consider rezoning the portion of the project site in Kent from its long-standing commercial district to a residential district. As set forth below, the contemplated rezoning is not based on sound planning, and the Applicant believes that the Town of Kent ~~is~~ has considered the rezoning for the sole purpose of stopping the proposed Patterson Crossing Retail Center (see letters dated March 12, 2007 from Camarda Realty Investments LLC and March 14, 2007 from Shamberg Marwell Davis & Hollis, P.C. as well as all referenced letters contained in Appendix A herein). This belief is based, in part, on the Town of Kent's attempted recent treatment of another land use application crossing municipal boundaries, where it tried to prevent access over the Kent portion of the project to the majority of the developable property in an adjacent municipality.

The potential zoning map change and the two zoning text amendments under consideration by the Town of Kent are presented and discussed below.

1) Rezone the subject site in Kent from Commercial to Residential (R-10).

Pursuant to the State of New York General Municipal Law Section 239-m, the proposed changes to the Town's zoning ordinance were referred to the Putnam County Department of Planning, Development & Public Transportation (County Planning) for review. The Commissioner of County Planning has sent three letters (see Appendix A, Correspondence for letters dated January 23, 2007, March 12, 2007 and June 20, 2007) to the Town of Kent concluding that this proposed zoning change would be "inappropriate" and result in "adverse countywide...and municipal implications", in large part because the County believes that such residential zoning would be inconsistent with existing land uses and existing and other proposed zoning along the corridor and because the Patterson Crossing Retail Center proposal is currently under review by both the Towns of Patterson and Kent.

Kent's potential zone change from commercial retail to residential R-10 would also be inconsistent with Putnam County's goals for economic growth. There are no other large tracts of vacant land proximate to an intersection between Interstate 84 and a State road that will permit this scale of commercial development. The Putnam County Planning Department, in its 239 review, pointed out the inconsistency of the proposed Kent Zoning with the economic goals of the County, as well as the land use inconsistency associated with a residential zone at this location (see correspondence dated March 12, 2007 in Appendix A). That being the case, the Town of Kent would therefore, need a majority plus one vote to adopt the proposed amendments, if it continues to pursue residential zoning of the Kent portion of the Patterson Crossing Retail Center site.

Further, the commercial development of this property is consistent with the aims articulated in the Town's determination that the Kent Interim Development Law was necessary. Specifically, the Kent Town Board has noted:

> "That the increased growth and development of residential developments are placing severe pressure on available water supply, open and recreational space, community character, natural resources, and transportation infrastructure of the Town...The Town also desires to expand its commercial and business tax base to help diversify and stabilize the Town's revenue fund. Increasing the number and type of taxable non-residential development would reduce the tax strain experienced by property owners due to a general lack of commercial land use in the Town. The City of New York is also actively purchasing land and development rights in the Town as a means of protecting its water supplies, but at the cost to the Town of further reducing the lands available for revenue producing non-residential uses."

Also, with respect to the town of Kent's consideration to zone the site to R-10, it is the Applicant's view that changing the zoning of a property on a municipal boundary line next to a State Highway and a Federal Interstate from commercial to R-10 does not represent sound regional planning principles, particularly when lands to the rear are targeted for commercial use. Moreover, lands in Kent across NYS Route 311 to the north are also zoned commercial and have been for over twenty years. The land potentially proposed for R-10 zoning is not well suited to small residential lots with individual wells and septic systems. This area is further ill-suited for R-10 zoning because of the lack of municipal sewer. The R-10 zoning district would appear to be in direct conflict with the Town of Patterson's targeted use of the larger portion of the site for commercial economic development.

The Applicant would like to note that the Proposed Action has been before both Towns in concept or in formal application form for over five years and while the Town of Kent Planning Board recognized in a July 29, 2004 letter (Appendix A, Correspondence) that the Proposed Action would introduce a potential conflict in land use, it took no action to rezone the project site or surrounding lands.

It is noted that subsequent to the above identified potential change to the Town zoning map, Kent released a draft Comprehensive Plan dated March 2008 reflecting input from the Comprehensive Plan Committee and Kent's Planning Consultants. The "Zoning Option - Southern Kent" and "Future Land Use" figures contained in this document depict the portion of the project site in the Town of Kent as commercial. While this indicates that the Comprehensive Plan Committee and Town's Planning Consultants agree that the subject property should remain commercial, this draft has not yet been adopted by the Town, and remains subject to change by the Kent Town Board.

2) Enact a new Section 77-6(D) that states:

> ***No driveway, street, or road, whether private or public, which exclusively serves or supports a lot located in another district, which lot is used for any use prohibited in the district in which the driveway, street or road is located, shall be used to provide access to said lot. (Proposed Local Law No. 4 at 1);***

It is noted that the proposed access road location from the State highway through the subject parcel in the Town of Kent is the only drive access that functionally works for the development

of the subject site, whether it be developed for retail or an industrial use. A potential access to the site through the residential neighborhood to the west would not be suitable for the traffic (car, delivery truck and tractor trailer) associated with a large-scale commercial or industrial development. Steep slopes down to Fair Street do not make this a viable and functional access for commercial or industrial use. In addition, due to physical constraints, the stormwater basin required to treat runoff from an access road in this location could not be constructed. In addition, tractor trailers would not be able to traverse the slopes and curves required to build the access road in this area. While the project site fronts on the Interstate 84 eastbound on-ramp, this would not be a functional or permitable form of access due to existing steep slopes and the fact that the ramp right of way was acquired by the NYS DOT "without access" (meaning connection to the ramp is not permitted).

In a letter dated July 29, 2004 (Appendix A, Correspondence), the Town of Kent recognized that the "...sole point of access to the project site is via Route 311..." Denying access to NYS Route 311 through the Kent portion of the property would, in essence, land lock the subject site and totally constrain its highest and best use or any other permitted use by preventing the site's development.

The Putnam County Department of Planning, Development & Public Transportation ("County Planning"), sent a letter dated October 9, 2007 which disapproved Local Law No. 4, with regard to Section 77-6(D), County Planning states:

> The provision would potentially prevent the development of a lot or lots in a district when the use that a lot owner wants to establish and which may be allowed in a properly zoned district is not permitted in the district which the driveway, street, or road may have to traverse in order to access the lot. For example, a property owner could not construct a residential unit on a lot owned in a residential zone when the only access to the lot is from a driveway, street, or road that passes through a commercial zone. Under the provision proposed, the owner could not develop his/her property for a residential unit in a zone that allows residential units. This provision has the potential of land locking parcels by denying access and adversely impacting the county's tax base by denying potential future development. (October 9, 2007 County Planning Letter at 2).

While there would be no impact on the Patterson Crossing Retail Center upon the adoption of this provision under the current commercial zoning, the proposed rezoning from commercial to residential would result in a significant adverse impact on the development potential of Patterson Crossing Retail Center's property. Once the property is rezoned from its long standing commercial zoning to residential and the revised Section 77-6(D) is applied, the access road could not be constructed through the Kent portion of the project as proposed to access the areas zoned industrial in the Town of Patterson.

As set forth earlier in this Chapter, this is the only way to access the Patterson portion of the property. Accordingly, the rezoning and text amendments together work to landlock the Patterson portion of the property and make it inaccessible.

When considering this provision with the proposed rezoning of the Kent portion of the project from commercial to residential, the only logical conclusion is that the Kent Town Board is advancing these amendments in a piece meal fashion as a thinly disguised attempt to stop the Patterson Crossing Retail Center project.

Lastly, it should be noted that the Proposed Action complies with Section 77-6D under the existing code which states, "No driveway shall provide access to a lot located in another district, which lot is used for any use prohibited in the district in which such driveway is located." The proposed entrance road to the Patterson Crossing Retail Center is not a driveway and this road will not provide access to a lot located in another district that would be used for a use prohibited in the district in which the road is located. As the Patterson Crossing Retail Center site is bounded by NYS Route 311, Interstate 84, Fair Street and residential development, the entrance road would provide access to only those uses proposed for the retail center, which are permitted in the existing zoning districts, and would not provide access or other connection to uses outside of the project site. The Proposed Action would no longer comply with the code if the proposed rezoning and text amendments are adopted by the Town of Kent .

3) Enact a new Section 77-65 that attempts to redefine "principal use" as follows:

> ***The main or primary use of a lot. Except for designated mixed uses and multiple retail uses within a shopping center only one principal use is permitted per lot, all other uses, unless otherwise specifically allowed pursuant to this Chapter, being excluded. If a lot is devoted exclusively to road, driveway, or infrastructure improvements that serve or support a principal use on a separate lot, such improvements shall be deemed equivalent to the principal use which they serve or support.***

These changes have no sound planning purpose, appear to be presented in bad faith, and seem to be intended solely and selectively to frustrate the Patterson Crossing Retail Center proposal. The Kent Town Board's intentions here are transparent. This definition turns a road, driveway or an infrastructure improvement into a principal use if that road, driveway or infrastructure is passing through one lot to reach a principal use on a second lot.

As discussed by Putnam County Planning, "This provision has the effect of allowing no development on a lot other than a road, driveway, or infrastructure improvements that serve or support a principal use on a separate lot," since only one principal use is permitted on a property (see Appendix A, October 9, 2007 County Planning Letter at 2). There is no rational basis for such a provision, let alone any empirical basis. Finally, the provision would appear to relate to public roads and infrastructure as well, leaving the legality of such a provision highly questionable.

Discussion of Proposed Kent Zoning Amendments

The above noted zoning initiative contemplated by the Town Board of the Town of Kent through the potential zoning map change from C to R10 and Local Law Number 4's two provisions, Sections 77-6(D) and 77-65, clearly shows the Kent Town Board's desire to stop the Patterson Crossing Retail Center project.

As if the Town Board's intent to stop the project is not clear enough from these amendments, one Kent Town Board member at a recent Town of Kent candidates forum publicly stated that the Kent Town Board should use its power of eminent domain to stop the Patterson Crossing Retail Center project by taking title to the Kent portion of the project. This current Town Board member did not state any public purpose or need for taking the Kent portion of the Patterson Crossing Retail Center project through eminent domain.

Members of the Town Board went so far as to try and pass a resolution, a copy of which is also included in Appendix A, rejecting the County Planning findings and suggesting that the Town Board did not have to consider them, in clear violation of the specific provisions of the General Municipal Law (see attached letters from the Applicant dated September 14, 2007 and Shamberg Marwell Davis & Hollis, P.C. dated October 29, 2007 to the Kent Town Board in Appendix A, Correspondence, setting forth why the Kent Town Board's resolution is in direct contravention of the General Municipal Law). While the Town Board voted on this resolution, the absence of two members resulted in a non-vote.

There are no sound planning reasons for the proposed rezoning from commercial to residential – the only reason for the Kent Town Board to advance this potential rezoning is to try to stop the Patterson Crossing Retail Center project.

There is simply no good reason to rezone the Kent portion of the project site from commercial to residential. There is a large land mass in the Town of Kent that is already zoned residential and such lands are situated in areas that are of a lower intensity land use and therefore more suitable to a residential living environment. There is no need being addressed by the potential rezoning of the Patterson Crossing Retail Center site to R-10 other than to block the commercial use of the site.

The Town of Kent has limited lands for commercial use and there is no land in town that is as well served by the existing road network (i.e. NYS Route 311 and Interstate 84). In fact, the recent moratorium enacted in Kent is to find opportunities to create more commercially zoned property, not less. Relevant language from the Kent moratorium law is noted below and in Appendix P herein.

> "That the increased growth and development of residential developments are placing severe pressure on available water supply, open and recreational space, community character, natural resources, and transportation infrastructure of the Town...The Town also desires to expand its commercial and business tax base to help diversify and stabilize the Town's revenue fund. Increasing the number and type of taxable non-residential development would reduce the tax strain experienced by property owners due to a general lack of commercial land use in the Town. The City of New York is also actively purchasing land and development rights in the Town as a means of protecting its water supplies, but at the cost to the Town of further reducing the lands available for revenue producing non-residential uses."

The Interim Development Law establishing the moratorium became effective in November of 2005 and has been extended four times, the last time for a six month period to commence upon filing Local Law No. 4 of 2007 on September 27, 2007.

The potential rezoning of this site to R-10 is in direct opposition to this stated goal of the town. Relevant language from the Kent moratorium law is provided above and in the Appendix. To date, none of the zoning amendments in Kent have been formally enacted. The Kent land at the present time remains in a commercial zoning district, as it has been for many years.

Running the access road from NYS Route 311 over the Kent portion of the project to the Patterson portion will not facilitate additional development off the access road. The project site is not contiguous to any other vacant land, as it is developed on all four sides with roads or development. Interstate 84, NYS Route 311, and Fair Street surround the project site, along

with a fully built out residential community on the opposite sides of Concord, Echo and Vernon roads.

In view of the above, the Applicant and the Town of Patterson have reviewed options that would allow the Patterson Crossing Retail Center project to legally proceed, despite the transparent effort by the Town of Kent to stop this project. Since the potential impacts of the proposed action would not change from those set forth in the SEQRA review, all impact evaluations and mitigation measures identified would remain accurate and valid. Nonetheless, in the interest of full disclosure of potential options for proceeding with this application, the following discussion is presented that sets forth the potential implications of these choices.

Options for Patterson Crossing Retail Center Lands Within the Town of Kent

Annexation of the Kent Parcel by the Town of Patterson

Annexation is an option available to the Applicant. It is commenced by filing a Petition for Annexation by the property owner of the lands in Kent, to the Kent Town Board and the Patterson Town Board.

New York State General Municipal law sets forth specific steps for annexation which would include a joint public hearing by both boards. The gist of the public hearing is for the Board's to ascertain if the annexation is in the over-all public interest. Testimony at such a hearing would include the long standing goals for the land, set forth in Kent's comprehensive plan (which target it as a commercial site), Kent's attempt to block the land use in Patterson which would have adverse tax implications to the Town of Patterson and the local school district (both the Kent and Patterson portions of the subject site lie within the same school district), Putnam County's economic goals for property and sales tax revenues, improvements to the local State and County road system, as committed to by the Applicant that would not occur without the Patterson Crossing Retail Center project, and improvements to stormwater systems and reduction in the existing degradation of Lake Carmel that is occurring due to unmanaged stormwater runoff, that also would not occur without the Patterson Crossing Retail Center project.

If the municipalities do not agree on the annexation, General Municipal Law requires the matter to be taken up by the NYS court system, pursuant to GML Section 712. The Court will permit the annexation where it is found to be in the public interest. The Court must weigh "the benefit or detriment to the annexing municipality, to the territory proposed to be annexed, and to the remaining governmental units from which the territory would be taken."

There are many court cases that address annexation, and some are very similar to the situation in Patterson. In the Board of Trustees of Village of Warwick v Town Bd of Warwick, 244A.D.2d 332, 663 NYS2d 297 (2d Dep't 1997), a case factually on point, the Village of Warwick sought to annex 10.2 acres of land from the Town of Warwick. There, the property in the Town was undeveloped, but abutted a commercial development in the Village. Annexation was found to be in the overall interest of the public. In approving that annexation, the Second Department held that - much like the Patterson Crossing Retail Center project - the public interest would be served by the annexation of the property and its subsequent development as a shopping center, since it would significantly increase the land's assessed value and would generate substantial real estate revenue for the Village, the local school district and the Town. In

addition, the Court held that the shopping center would "significantly increase local employment opportunities and would provide the Village with greatly needed and desired services.

There are other factors that would support annexation. The long standing zoning of the site in Kent for commercial presents a "unity of purpose" between the Kent site and the Patterson site, which allows retail. The lands in Kent across from the site are also zoned commercial, therefore the use in Kent would be consistent with the character of the community. The rezoning by Kent would be inconsistent with the County's goals for economic growth and would potential thwart such growth on the lands in Patterson. There are very few sites proximate to Interstate 84 and served by the State's investment in infrastructure that could serve as a substitute for the Patterson Crossing Retail Center site. Finally, the Kent site is not well suited for small residential lots on account of the lack of municipal sewers, the presence of steep slopes and regulated wetlands and watercourses. Land on the State highway, this close to Interstate 84, is best suited to a non-residential use. Residential use of the land would cost the school district rather than benefit the district.

Should this option be pursued by the Town of Patterson, there would be a minor shift in tax revenues from the town of Kent to Town of Patterson. Taxes generated by the site to Kent at the present time are very low, on the order of $650 per year, and the proposed 2,000 square foot building would not result in a marked increase in ratables so this impact will have no bearing on Kent finances. However, since the lands would be in Patterson and Patterson would become responsible for providing services, there should be no increased costs to the town of Kent. Taxes to the local school district would continue to be a benefit under this scenario since the Patterson property is in the same school district as the Kent property. The entire Town of Kent is in the Carmel School District, where 100 percent of the school taxes from the proposed project would be paid. Accordingly, Kent is receiving 75 percent of town taxes into their school district even though the portion of the proposed development (2,000 square feet) within the Town of Kent is significant less than development proposed within the Town of Patterson (380,560 square feet of retail, management, office and meeting space and a 28,200 square foot garden center). The other benefits set forth in this SEQRA proceeding regarding traffic and stormwater improvements would serve everyone in the vicinity of the project area.

Transfer of the Kent Parcel to Putnam County

Putnam County could secure ownership of the property any number of ways including purchase, gifting or taking for a number of reasons, including the siting of a senior citizen center.

A sketch of a senior center is provided on FEIS Figure I-1. The senior citizen facility could be a two-story structure, totaling 20,000 sf with 75 parking spaces.

While it is understood that the Applicant had preliminary discussions with the County concerning the possibility of siting a senior center on the subject property, no further discussion took place in over six months and the County is exploring other options. Not withstanding, the Kent portion of the project site remains a viable location for a senior center should the other options not work out.

A senior citizen facility at this location would serve all residents of the county. Kent and Patterson citizens, in particular, would benefit from the use being sited at this location.

The DEIS for the Patterson Crossing Retail Center examined construction in this area of the site. A retail building was originally proposed that straddled the town line. The footprint of this building in the Town of Kent, 15,700 square feet, would have been coupled with 62 parking spaces, resulting in a total land disturbance of 1.9 acres and 1.2 acres of impervious surface. This building would have been a single story with a footprint 5,700 square feet larger than the footprint for a senior citizen facility and required 0.2 additional acres of land disturbance along with 0.3 acres more impervious surface. The footprint of the senior center shown in FEIS Figure I-1 is smaller than that examined in the DEIS as are the number of parking spaces and impervious surface area.

A table comparing the senior citizen center to the retail facility as it was described and evaluated in the DEIS on the Kent portion of the site alone is set forth in Table I-1.

Table I-1
Retail Versus Senior Citizen Center Facility In Kent

	Retail Use In Kent	Senior Center In Kent
Footprint [2]	15,700	10,000
Total Square footage [2]	15,700	20,000
Parking Spaces [2]	62	75
Number of Stories [2]	1	2
Disturbance [2]	1.9 acres	1.7 acres
Impervious Surface [2]	1.2 acres	0.9 acres
Trip Generation*	67 (61) Weekday 91 (83) Saturday mid-day	33 during peak hours of weekday traffic; 54 during off peak hour of weekday traffic; 26 during Saturday peak hour [1]

Sources:[1] Institute of Transportation Engineers' Trip Generation , ITE Code 495 Recreational Community Center
[2] Insite Engineering, Surveying & Landscape Architecture, P.C. 2007.
* Includes trips internal to site.
(xx) Excluding retail to retail internal site trips based on ITE trip rates in Patterson Crossing Retail Center DEIS.

SEQRA Background

In accordance with SEQRA, this FEIS provides written responses to substantive and relevant comments on the DEIS received by the lead agency during the public review period, including oral comments made at the September 13 and September 14, 2006 Public Hearings. Complete copies of all written comments received on the DEIS are included in Appendix B. A transcript of the Public Hearing is provided in Appendix C.

During the course of the DEIS public comment period, the letters listed in Table 1 on the DEIS were received from various agencies, interested parties and the public.

Table I-2
List of Letters Received on DEIS

Letter #	Author	Date
A1	Creighton Manning Engineering, LLP, Wendy C. Cimino, P.E., PTOE	09-21-06
A2	State of NY DOT Region 8, Glenn T. Boucher, Regional Highway Work Permit Coordinator	9-28-06
A3	Leggette, Brashears, & Graham, Inc., Thomas P Cusack, CPG Principal	9-20-06
A4	LRC Planning Services, LLC, Neil A. Wilson, AICP, Consulting Planner, Town of Kent	9-21-06
A5	New York State Thruway Authority, Darrin J. Scalzo	9-28-06
A6	The City of New York DEP, Marilyn Shanahan, Chief SEQRA Coordination Section	9-25-06
A7	Putnam County Department of Health, Joseph S. Paravati, Jr., Assistant Public Health Engineer	9-25-06
A8	Rohde, Soyka & Andrews Consulting Engineers, P.C., Michael W. Soyka, P.E.	9-8-06
A9	Stantec Consulting Services Inc., Ronald J. Gainer, P.E. & David J. DeBaie, P.E., PTOE	9-25-06
B1	Alder Consulting, John Canning, P.E., P.T.O.E., Senior Associates	9-7-06
B2	James Bryan Bacon Attorney & Counsellor at Law, James Bacon, Attorney for CWCWC and PCCPOS	9-25-06
B3	Conrad Geoscience Corp., John A. Conrad, Senior Hydrogeologist	9-25-06
B4	Croton Watershed Clean Water Coalition, Marian H. Rose, PhD, President, CWCWC	9-25-06
B5	David Clouser & Associates, David B. Clouser, PE, LS, NYS Professional Engineer No. 069334	9-21-06
B6	Putnam County Coalition to Preserve Open Space, Ann Fanizzi, Chair	9-25-06
B7	New York Public Interest Research Group, Cathleen Breen, Watershed Protection Coordinator	9-25-06
B8	Office of the State Attorney General, James M. Tierney, Watershed Inspector General/Assistant Attorney General & Charles Silver, Ph.D., Watershed Inspector General/ Scientist	9-25-06
B9	Riverkeeper, Christopher M. Wilde, Staff Attorney & Watershed Program Director, William Wegner, Watershed Analyst	9-25-06
C1	Carol F. Arnold	9-21-06
C2	Hugh Austin	9-21-06
C3	Putnam County EDC, Kevin Bailey, President	9-20-06
C4	Elena Bao	9-25-06
C5	Mary C. & Harold W. Barrett	9-22-06
C6	Fine Foods Party Planning, Charlotte Berwind	9-20-06
C7	Bruce & Gwyneth Blackwell	9-2206
C8	Harry Bourletos	9-18-06
C9	Joan Castiner	9-25-06
C10	Edmond A. Connors	9-13-06
C11	Danny Dolenk	9-27-06
C12	Edward C. Durkee	9-22-06
C13	Lynne Eckardt	9-23-06
C14	Sibyll Gilbert	9-24-06
C15	Hands Across the Border, Suzannah C. Glidden, Chair	9-12-06

Table I-2 - List of Letters Received on DEIS (Continued)		
Letter #	**Author**	**Date**
C16	Cynthia A. Granick	9-07-06
C17	Joseph & Rosemary Grasso	9-18-06
C18	Timothy Gregg	9-11-06
C19	Johanna Groepl	9-25-06
C20	Harry Hitner	9-24-06
C21	Janette James	7-4-06
C22	Lisette Depew-Kubie	9-21-06
C23	Daniel Kuchta	9-25-06
C24	Robert Ladau	9-12-06
C25	Sally Lake	9-24-06
C26	George Lanfranchi	9-25-06
C27	Robert E. MacDermant	9-19-06
C28	Ray Mainiero	9-13-06
C29	Thomas F. Maxson	9-16-06
C30	Kathleen (Mulvihill) McManus	8-16-06
C31	Kathleen McManus	9-25-06
C32	Anita Melpia	8-23-06
C33	Audrey Napierkowski	9-25-06
C34	Jean-Yves Noblet	9-22-06
C35	Oscom Communications, Rich Osmers, Owner	9-10-06
C36	Denize Paron	9-20-06
C37	Michael Cohen	9-08-06
C38	Melanie Pien, Stephen Pien, Alani Pien, Kai Pien	9-25-06
C39	George E. Pommer, P.E.	9-20-06
C40	Veronica Popovics	9-25-06
C41	David G. Reeves	9-22-06
C42	Virgini M. Reeves	9-22-06
C43	Julia Rellou	8-23-06
C44	Peter Riebold	9-22-06
C45	Michelle Ruvolo	9-20-06
C46	Rachel Schofield	9-19-06
C47	Charles & Grace Sisto	9-22-06
C48	Michael Somme	9-22-06
C49	Paul Spiegel	9-13-06
C50	Ronald & Sonya Taylor	9-25-06
C51	Judith Terlizzi	9-25-06
C52	William Ullman, LMSW	9-16-06
C53	Curt Vendel	9-09-06
C54	Michael Weitzner	9-24-06
C55	Terri Weltman	9-23-06
C56	Janet S. Wright	9-22-06
C57	Glenna C. Wright	9-24-06
C58	Edie Keasbey	9-14-06
C59	Karl Rohde	9-14-06
C60	Joe Ruocco	9-13-06
C61	Croton Watershed Clean Water Coalition, Oreon Sandler, P.E., Acting Executive Director	9-13-06
C62	Marsha Thompson, President of the Patterson Chamber of Commerce	9-14-06
C63	Croton Watershed Clean Water Coalition, Marian Rose President	9-13-06

The FEIS is arranged in sections, with comment summaries and responses arranged by subject area similar to the DEIS. A comment summary, in some cases, may incorporate more than one individual comment on the same subject, followed by a response to that comment. The sources of each comment are referenced. The format of the comments and responses is as follows:

Comment # (Source): Comment summary text.

Response #: *Response text.*

Comment/response numbers follow the sequence and numbering of chapters in the DEIS. In some cases numbers have been skipped as a result of combining like comments.

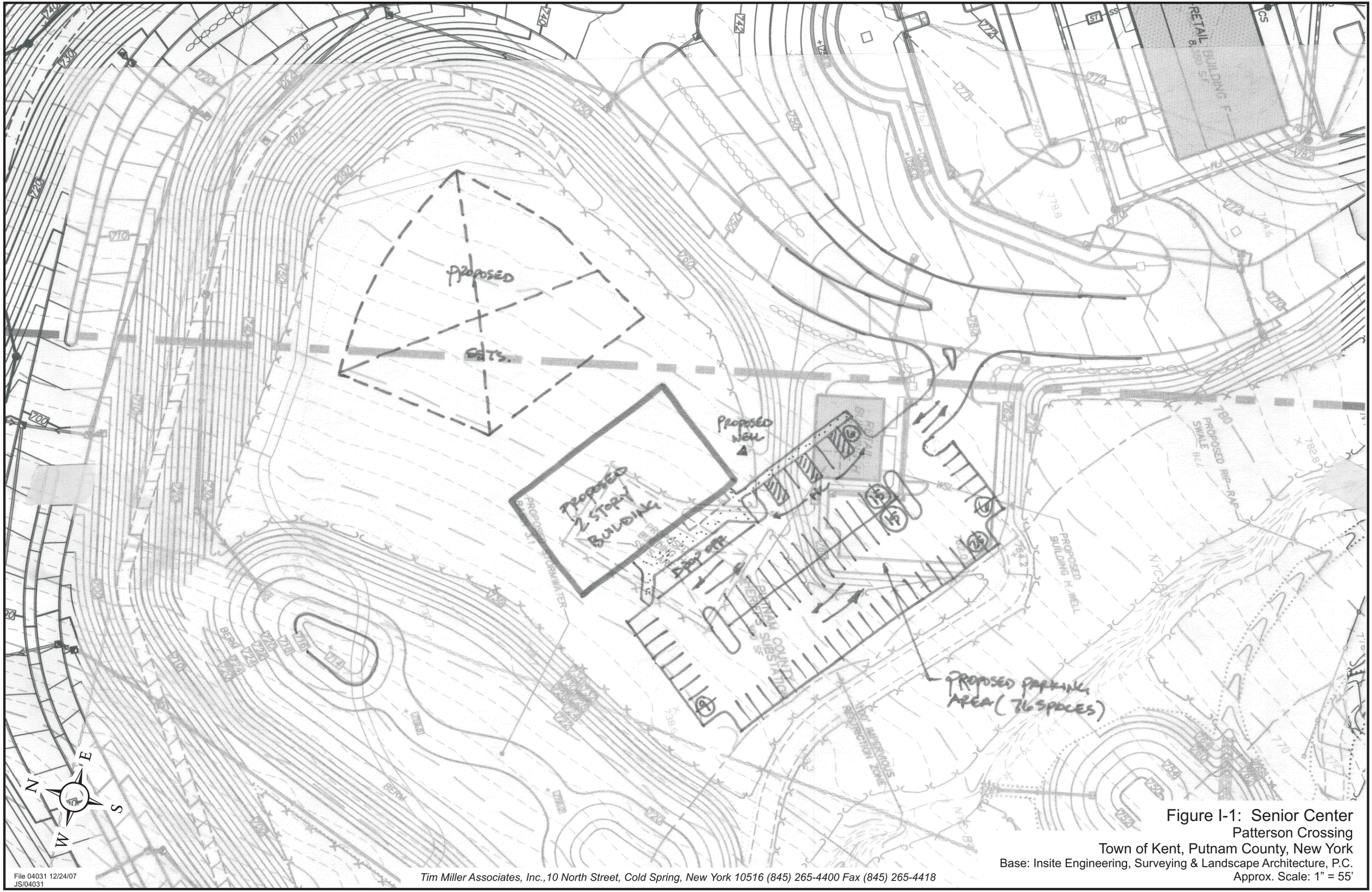

Figure I-1: Senior Center
Patterson Crossing
Town of Kent, Putnam County, New York
Base: Insite Engineering, Surveying & Landscape Architecture, P.C.
Approx. Scale: 1" = 55'

File 04031 12/24/07
JS/04031

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1.0 EXECUTIVE SUMMARY COMMENTS AND RESPONSES

1.1 Introduction

Pursuant to the New York State Environmental Quality Review Act ("SEQRA"), the Town of Patterson issued a lead agency status declaration and a positive declaration requiring the completion of environmental review of the Patterson Crossing Retail Center development project. The Town of Kent formally contested the Patterson Planning Board acting as Lead Agency in a letter dated July 29, 2004 (Appendix A). The letter was sent to the Commissioner of the New York State Department of Environmental Conservation requesting that a lead agency be designated. On December 13, 2004, the Commissioner concluded that "...based on the facts presented, that the Town of Patterson Planning Board should be lead agency for the conduct of the environmental review for the proposed Patterson Crossing Retail Center due to the local nature of the impacts and the broad scope of authority afforded to the Patterson Board under its site development plan review and erosion control permit processes. Refer to Appendix A for a copy of both the Town of Kent's and NYSDEC Commissioner's letters.

The Patterson Planning Board is required to examine the potential environmental impacts of the proposed action in its role as lead agency under SEQRA and in accordance with Article 8 of the Environmental Conservation Law and its implementing regulations (6 NYCRR Part 617). The Patterson Planning Board, as lead agency in this process, determined that the Patterson Crossing Retail Center development project may have significant adverse impacts on the environment and required the preparation of a "DEIS". The DEIS was prepared by the Applicant in conjunction with reviews by the Town and its advisors for adequacy with respect to its scope and content for the purpose of public review, and was accepted by the Patterson Planning Board as complete for public review on July 27, 2006. A Notice of Completion was issued on July 27, 2006 and the DEIS was issued for public review and comment. At that time, the DEIS was circulated to involved agencies and interested parties. A public notice advertising the date, time and location of the public hearing on the DEIS and the availability of the DEIS for public review was published in a newspaper of general circulation in the affected area (The Journal News) at least 14 days prior to the date of the hearing, pursuant to SEQRA (6 NYCRR § 617.12 (c)(2)). Notice of the public hearing and availability of the DEIS was also published in the New York State Department of Environmental Conservation's Environmental Notice Bulletin. In addition, the DEIS was posted on the Town's web page and hard copies were made available to the public at the Town of Patterson Library and the Town Clerk's office at the Patterson Town Hall, and in Kent at the Kent Public Library and the Town Clerk's office at the Kent Town Hall.

Public hearings on the DEIS were held on September 13 and September 14, 2006 in Patterson, New York, to afford the interested public the opportunity to provide oral testimony on the DEIS. The hearing was closed on that date and the period for submitting written comments remained open until September 25, 2006.

This Final Environmental Impact Statement (FEIS) includes a description of the proposed project, as modified, and summarizes and responds to all substantive and relevant public and agency comments received by the Lead Agency on the DEIS during the public review, as required the SEQRA (6 NYCRR § 617.9 (a) (3)). The FEIS includes the DEIS by referral.

Responses to public and agency comments are provided in the comment/response format and are organized by subject matter. Complete copies of all written comments received by

the Lead Agency on the DEIS and a transcript of the public hearing are included in the appendices.

The FEIS consists of this volume, including appendices on a compact disk and the, accompanying drawing set. This FEIS has been distributed in the same manner as the DEIS: the FEIS, in hard copy, was sent directly to each recipient on the SEQR mailing list. In addition, the FEIS has been posted on the Town's web page and hard copies of the document have been made available at the Patterson Library and Town Clerk's office in Patterson Town Hall, and in Kent at the Kent Public Library and the Town Clerk's office at Kent Town Hall. The Planning Board will make its final decision regarding the proposed project pursuant to SEQRA in a Statement of Findings no less than ten (10) calendar days following the filing of the FEIS, nor more than 30 calendar days after the filing of the FEIS (6 NYCRR § 617.11(a)).

1.2 Comments and Responses

Comment 1.0-1 (Letter A-8 Michael W. Soyka, P.E., September 8, 2006): While not directly related to the SWPPP, an easement from New York State is required to perform the excavation necessary to construct the main entry road. I saw no references in either the Executive Summary or the text that New York State has been approached and is willing to grant the necessary easements. Failure to obtain this easement will result in a different design at the entrance road.

> ***Response 1.0-1:*** *The Applicant and the Project Engineer have met with the NYSDOT regarding site access, its location, and traffic impacts. The NYSDOT is listed as an Involved Agency and will review all pertinent aspects of the proposed development during the SEQRA process. At this time issues regarding required easements and work permits have not been raised by the State. The State, in a letter of March 19, 2007, (see Appendix A), indicated certain details of the road improvement and site access drive would be determined as part of the Highway Work Permit Process and noted agreement, in concept, with the proposed access improvement. Grading issues were also discussed with the NYSDOT; the State indicated that the grading would not be a problem and would be included as part of the Highway Work Permit review.*
>
> *The Applicant will continue to work closely with the State and County transportation departments in order to finalize a roadway improvement program that meets with all regulatory agency requirements.*

Comment 1.0-2 (Letter C-33 Audrey Napierkowski, September 25, 2006): Air Quality impacts (pg. 1-24 DEIS) "A quantitative impact analysis related to construction activities was not performed. Operation of the facilities... would result in minor increases in air pollution burden." "Heating and AC systems may release small amounts of air pollutants that are insignificant and should not cause an exacerbation of standards or guidelines. The net air pollution burden is considered to be minimal." DEIS mitigation solution to decrease air pollution is to, "keep truck idling times limited to 5 minutes or less." Really - who is going to police truck idling times?

> ***Response 1.0-2:*** *Comment noted. Signs will be posted at loading docks indicating the idle time limits. The primary responsibility for conformity with such regulations rests first with the driver. Each tenant will have its own chain of responsibility to*

ensure regulations are followed. Either the Town Code Enforcement Officer or the police would have governmental jurisdiction on this matter.

Comment 1.0-3 (Letter C-33 Audrey Napierkowski, September 25, 2006): What scientific criteria did the developer use to back up his use of the terms "minor, may, small amounts, insignificant, should not, minimal" regarding impacts to this site? How can the developer declare that air quality impacts will be minimal if no site studies were done? Does stating it should not cause an exacerbation mean that it could cause an exacerbation of standards? How much is small amounts of air pollutants? By whose standards is the increase in air pollutants considered insignificant or minor? How can the developer mitigate the affects of construction dust on asthmatic residents living adjacent to the site?

Response 1.0-3: *A site specific, quantitative (microscale) CO air quality analysis was completed to evaluate future air quality from mobile sources (traffic) (see DEIS Appendix I). The intersection selected for the refined analysis was chosen to show a worst case scenario for all intersections. Analytical protocols were used to evaluate year 2010 air quality levels including traffic from the project. The impact analysis results indicate that CO levels for "Build" conditions will be within established NYS air quality standards for both 1-hour and 8-hour averaging periods. The modeling results were compared to the established air quality standards in the New York State Implementation Plan (SIP).*

Mitigation measures for dust control during construction are provided in Section 4.15.4 Mitigation Measures of the DEIS. These methods include:

- *Minimizing the area of grading at any one time and stabilizing exposed areas with mulch and seed as soon as practicable;*
- *Minimizing vehicle movement over areas of exposed soil, and covering all trucks transporting soil; and*
- *Spraying unpaved areas subject to traffic would be sprayed with water to reduce dust generation.*

Comment 1.0-4 (Letter C-33 Audrey Napierkowski, September 25, 2006): "No views from significant aesthetic resources have been identified that will be adversely affected by this project." (pg. 1-22 DEIS). Instead of looking at wildlife trees and stars in the night sky the residents who live adjacent to the project will be looking at walls, buildings and street lights. The developer doesn't consider this change in lifestyle to be an adverse affect.

Response 1.0-4: *While the development of the site would result in a proposed retail center where second growth forest presently exists, the Proposed Action would be consistent with both Towns' zoning with the exception of signage.*

Comment 1.0-5 (Letter C-33 Audrey Napierkowski, September 25, 2006): Traffic (pg. 1-10 DEIS)," the action is expected to generate 1,571 trips during the weekday peak hours." These same peak hours with additional truck traffic and site traffic coincides with Carmel Central School District's buses traveling the same roads bringing our children to and from school. Increased truck traffic with school buses present, raises safety concerns for our children which is not addressed. At present, some of our children spend 1 hr on the bus going in one direction to get to school or back home. Traffic back-ups, stopping for traffic lights, extending these bus trips is an extreme hardship to place on small children (especially

our 5 yr. old kindergarten students). Already long work commuting times will get even longer decreasing the quality of life for our working families.

> ***Response 1.0-5:*** *School bus traffic occurs early in the morning and early in the afternoon. These peaks do not coincide with the peak site traffic which would be late afternoon and midday Saturday. Refer to Response 4.8-25*.

Comment 1.1-1 (Letter #C4, Elena Bao, 09/25/06): The DEIS provides no context to weight the "benefit" of this $840,000 property tax figure. The DEIS must reflect that the 2006/2007 budget increased by $8,748,808 from the prior year (2005/2006). Patterson Crossing's property tax revenue would represent less than 1% of the CCSD budget 2006/2007. I would like to note that this paltry sum would not prevent property taxes from increasing when our school budget increases several million dollars annually. It would take over 11 Patterson Crossings to generate enough property tax revenue to offset the school budget increase we saw last year. Patterson Crossing will not yield the property tax revenue that would create a school tax burden reduction for residents for Patterson and Kent.

> ***Response 1.1-1:*** *The primary benefit of the Proposed Action is that the project, once completed, would generate continuing additional property and sales tax revenues for the Towns of Patterson and Kent, the taxing districts in which the site is situated, and property and sales tax to Putnam County as well as sales tax revenues for the State of New York and the Metropolitan Commuter Transportation District (MCTD). The Carmel Central School District (CCSD) would receive the largest tax property benefit from the Proposed Action.*
>
> *The project will generate significant school district revenues without generating costs. As a retail/commercial operation, the proposed development would not generate school aged children and therefore would not result in additional costs to the CCSD. The site presently generates approximately $35,492 in property taxes to the County, the Towns of Kent and Patterson, and affiliated taxing districts, including CCSD Future projected annual property taxes would be approximately $840,000 to these districts. The estimated school district tax revenues for CCSD would be $604,646 annually, a net increase of $579,137 with no additional direct costs associated with the proposed project.*
>
> *The increased tax revenues generated from the proposed development would not offset the increasing CCSD school budget nor would the proposed project generate enough tax revenues to reduce the school tax burden on district residents, as noted by the commentator. However, the Patterson Crossing Retail Center, a proposed retail/commercial operation, would create a greater school tax revenue than presently generated by the project site to the CCSD. No significant adverse impacts to the budget of the CCSD are anticipated. The Lead Agency is responsible for weighing benefits against impacts and sufficient information has been provided through the SEQRA process to allow a reasonable weighing to take place.*

Comment 1.1-2 (Letter #C-10 Edmond A. Connors, September 13, 2006): While the proposed project will, by the builders calculations, bring added revenue to the community, the builder is neglecting in this section to note that the project will also bring with it, added costs, as well. Presently, according to the builder's calculations the property already pays taxes of $56,000 to the County of Putnam, and the Towns of Patterson and Kent. It should be noted that the property as it exists costs the towns and county in question nothing, while

adding to the inherent beauty and environmental health of the neighborhood, towns, and county with which it exists.

Response 1.1-2: *Comment noted. The site will become a retail destination for the community and the surrounding region reducing travel times for many local shoppers. Retail operations generate minimal direct expenses to the Towns of Patterson and Kent. The project would not increase the local resident population, and thus not require any additional municipal expenses relating to social services, recreation services, or other residentially-induced expenses. The project would be served by a private water supply and septic treatment systems, and thus not require any connections to existing municipal infrastructure. Solid waste would be handled by private carters. Increased need for roadway maintenance would be limited due to the nearly direct highway access of the project; most of the traffic generated by the project would travel on Interstate 84, State routes or County roads, (see Chapter 4-8). The potential wear and tear and added maintenance on local town roads as a result of the project is not expected to be significant. A portion of the tax revenues collected by Patterson and Kent can be used by the local highway departments for maintenance of local roads.*

As part of the Proposed Action, traffic and stormwater management improvements beyond those required to offset impacts related to the project would be funded and implemented, in whole or in part, by the Applicant. Presently several intersections have been identified as having poor levels of service under existing or projected future conditions without the Patterson Crossing Retail Center project ("future No-Build conditions"), namely Terry Hill Road at NYS Route 311, the Interstate 84 westbound ramp at NYS Route 311, and the Interstate 84 ramp eastbound at NYS Route 311. Beneficial intersection improvements needed to address these future and long-standing traffic deficiencies would be constructed in conjunction with the project.

For many years, Lake Carmel has suffered from heavy pollutant loading from surrounding roadways and residential developments, including one specific development on Concord Road. As part of the Proposed Action, beneficial stormwater treatment practices both on- and off-site are proposed to reduce existing pollutant loads that contribute to water quality degradation of Lake Carmel and the East and Middle Branch Reservoirs. Improvement measures to treat stormwater from Interstate 84, NYS Route 311, Concord Road and the Putnam County Highways Facility would be constructed as part of the development of the Patterson Crossing Retail Center. Without the project, these beneficial traffic and stormwater treatment improvements would not be implemented.

There would be no cost to the Carmel Central School district because the proposed commercial development would not result in an increase in the number of school-aged children. In addition, the project would generate more than $550,000 in annual taxes for the school district with no additional direct costs.

It is unlikely that the project site would remain vacant in its undeveloped state for any long-term period. The commercial zoning of the majority of the subject site has been long established, giving indication that some sort of commercial development on the site has always been possible and anticipated. The proposed project conforms to the zoning requirements, with the exception of signage, and Master Plans of the Towns of Patterson and Kent.

Comment 1.1-3 (Letter #C-10 Edmond A. Connors, September 13, 2006): The builder insists that the project will reduce the amount of pollution released into the atmosphere of the area by reducing the miles the local populace will have to drive to shop. The builder has failed to note the vast increase in air pollution, light pollution, noise pollution, possible water pollution to the Middle Branch of the Croton River, as well as, manifold degradation to the quality of life experienced by the population of the region as "citification" of the rural environmental is foisted upon them.

Response 1.1-3: *The DEIS provides detailed studies and analyses of the potential impacts of the project, including those related to air, light, noise and water resources. Also refer to the related chapters in this FEIS for additional details on the impacts related to the reduced scale development plan.*

With respect to pollution of the Middle Branch of the Croton River, the Applicant notes that much of the elevated phosphorous in Lake Carmel is generated internally from anoxic sediments and inflows from the many nearby septic systems. A study conducted of Lake Carmel in 1987 (Diagnostic Feasibility Study for Lake Carmel, April 23, 1987) concluded that the greatest pollutant sources in that lake are internal and septic system effluent. A more recent study of Peach Lake (Peach Lake Wastewater Study, July 2004, prepared by Sterns & Wheler, LLC for Putnam and Westchester Counties, New York) had similar conclusions. Given Lake Carmel's setting and its similarity to Peach Lake, it is evident that the most significant sources of phosphorous in Lake Carmel that currently impact the quality of it's water, and threatens it in the future, are primarily internal and from septic systems surrounding the lake.

The nonpoint sources of phosphorous described above are evidently responsible for elevated concentrations of phosphorous in the lake reported in the 2002 Lake Carmel Water Quality Monitoring Report, Town of Kent, Putnam County, New York, prepared by Princeton Hydro, LLC (FEIS Appendix O). The report disclosed that the concentration of total phosphorous in a September 11, 2002 water quality sample taken from the lake was 0.07 mg/l (70 ug/l) indicating a euthrophic state and that phosphorous is likely the limiting nutrient for plant growth in the lake. Phosphorus concentrations exceeding 30 ug/l cause excessive algal growth in some lakes, and resulting eutrophication, or the process whereby a water body, such as Lake Carmel, that receives excess nutrients will stimulate excessive plant growth and decay (algae and other nuisance plants and weeds). This results in reduced dissolved oxygen in the water when dead plant material decomposes and can cause other waterborne organisms to die.

Approximately 28 acres of the project site is located in Lake Carmel's 8,251 acre watershed. This is only 0.25 percent of the area draining to the lake. More significantly, 69 percent of the stormwater from the project site is directed away from Lake Carmel; only 31 percent of stormwater flows to Lake Carmel. The proposed treatment of runoff from the site far exceeds any statutory requirements, and will improve water quality in the lake.

According to information available from NYSDEC's official web site, the Federal Clean Water Act requires states to periodically assess and report on the quality of waters in their state. Section 303(d) of the Act also requires states to identify

impaired waters, where specific designated uses are not fully supported. For these impaired waters, states must consider the development of a Total Maximum Daily Load (TMDL) or other strategy to reduce the input of the specific pollutant(s) that restrict waterbody uses in order to restore and protect such uses. Lake Carmel is included on the Final New York State 2006 Section 303(d) List of Impaired Waters (approved July 5, 2007). This list identifies septic systems as the source of elevated phosphorous in the lake.

Existing elevated phosphorous levels in Lake Carmel were identified in NYSDEC's Phase II Phosphorous Total Maximum Daily Load for Reservoirs in the New York City Water Supply Watershed (Delaware, Dutchess, Greene, Putnam, Schoharie, Sullivan, Ulster, and Westchester Counties), June 2000 (Phase II Report), which indicated that the most significant contributor of phosphorus to the Middle Branch Reservoir is the upstream load from the Lake Carmel sub-basin at 528 kg/yr. NYSDEC's subsequent March 2002 Nonpoint Source Implementation of The Phase II Phosphorus TMDLs in the New York City Watershed (TMDL Implementation Plan) further recognized existing elevated phosphorous levels in the lake. The TMDL Implementation Plan, which identifies sources of nonpoint phosphorous loads in certain New York City owned water supply reservoir watersheds, and strategies to reduce those loads, indicates, in addition to other things, that the Amawalk, East Branch and Middle Branch Reservoirs each have upstream lakes contributing to their phosphorus load. These lakes are "Lake Mahopac to the Amawalk, Peach and Putnam Lakes to East Branch Reservoir, and Lake Carmel to the Middle Branch Reservoir. These upstream lakes are areas where opportunities exist for phosphorus reductions particularly in the urban and septic categories. The most significant of these loads is the upstream load from Lake Carmel to the Middle Branch Reservoir, estimated at 528 kg/yr."

As detailed in FEIS Appendix F (SWPPP), total suspended solids, total nitrogen, and biological oxygen demand, and phosphorous loads in Lake Carmel as documented by NYSDEC, and identified in the Diagnostic Feasibility Study for Lake Carmel and the Lake Carmel Water Quality Monitoring Program, are expected to be reduced by the stormwater treatment practices that are proposed as part of this project on and off the project site.

Comment 1.3-1 (Letter #C4, Elena Bao, 09/25/06): The phrase "although extremely rare" is problematic. As a native of Kent, my family and most residents I know in the area have experienced serious well-related problems at some time or other. My family has had our well run dry, there have been several instances of inadequate water yield, and my family has also experienced problems as a result of neighbors drilling deeper wells. Blasting in this area WILL create well problems based on the history of this area with our wells. The fact that the Applicant is stating that blasting will create well problems in "extremely rare" circumstances is false and minimizes this extremely serious and extremely expensive impact. The Applicant must correct this paragraph to accurately reflect the well situation in this area. Further, the Applicant is indicating that there will only be a commitment to mitigate well-related blasting impacts that occur to properties within 500 feet of the blasting site. This is unacceptable and this range needs to be increased to at least a 1-mile radius.

Response 1.3-1: *When wells are shallow and do not intercept sufficient fractures to maintain a water supply during extended drought conditions yields can decrease or wells can stop yielding water altogether. The DEIS statement that it is "extremely*

rare" for blasting to result in impacts to wells is based upon professional experience and discussions with Health Department officials in three counties. The Applicant has selected a radius of 500 feet from the area of proposed blasting for pre-blast inspections. This radius is based upon technical studies and professional blasting standards, as described below.

Extensive research has been conducted over the last 40 years on the effects of blasting on structures and wells by the Office of Surface Mining (OSM) (part of the US Department of the Interior), universities and private groups.[1] Ground vibrations from blasting, measured as Peak Particle Velocity (PPV), is typically the major concern for potential off-site damage. Research has led to the development of vibration standards and techniques to greatly reduce the risk of off-site impacts. Currently, a PPV of 0.5 inches per second is commonly used as a vibration standard to avoid off-site damage (this can be equated to the vibrations of a loaded truck or bus passing within 50 or 100 feet of an observer). This standard will be used as a maximum ground vibration at the Patterson Crossing Retail Center site property line during construction.

Several factors contribute to ground vibration at a given location. These factors include; 1) the weight or volume of the explosive, 2) blast configuration (drilled holes, open face, etc.), 3) geology and soil overburden, and 4) distance between the blast and the point of concern (house or well). According to information provided by the Oregon Department of Transportation (DOT), distance and the amount of explosive are the most influential factors related to vibrations. While the distance between the blasting site and an off-site home or well cannot always be controlled, the amount of explosive and its configuration can be controlled by the blasting contractor. Carefully controlled test blasting, with monitoring by seismographs will be used to assess vibrations in the specific rock type and geologic setting at the Patterson Crossing Retail Center site. The test blasting will then be used to design the amount and configuration of the required blasting, thereby minimizing the potential for damage. Properly designed and executed blasting events will not result in damage to off-site structures and wells.

Several studies have been conducted to assess the effects of blasting on drinking water wells.[2] In summary: 1) When blast induced ground vibrations are less than approximately 1.0 inches per second, the response in the well is limited to a slight temporary variation in water levels (1.2 to 2.5 inches) and no change to the capacity of the well was observed, 2) Vibration measurements made at the surface and at the bottom of the well indicate the vibrations are always lower at the bottom of the well or decrease at depth, 3) All data collected indicate that a ground vibration limit of 2.0 inches per second PPV is adequate to protect the well from any significant damage (again, ground vibrations will be limited to 0.5 inches per second at the property line for the Patterson Crossing Retail Center Project).

According to the Oregon DOT, "Studies have concluded that there are little to no significant long-term mechanical changes in an aquifer that could be attributed to blasts detonated at distances greater than 500 feet from observation wells.

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[1] Rock Blasting and the Community, Oregon Department of Transportation

[2] Froedge, D.T., Blasting Effects on Water Wells, Proc. Ninth Conf. on Explosives and Blasting Technique, Int. Soc. of Explosive Engineers, 1983 and Comparative Study of Domestic Water Well Integrity to Coal Mine Blasting Summary Report, Office of Surface Mining Reclamation and Enforcement, 2002

As described above, the Applicant has selected a distance of 500 feet from the area of blasting as a distance for pre-blasting inspections. This distance is based upon several technical factors described below.

1) Controlled Test Blasting: Controlled test blasting is the only reliable method to establish how ground vibrations will dissipate in a specific bedrock type or geologic setting. Prior to construction, test blasting will be conducted with small blasting charges at least 800 feet from the western property line, and measured with seismographs to determine the amount of vibration loss over distance through the rock at the Patterson Crossing Retail Center site. The size of blasting charges for construction will then be calibrated to avoid damage by limiting all vibrations to less than 0.5 inches per second at the property line located approximately 100 feet from the blast site.

2) Limitation on Ground Vibrations at the Property Line: Several residences along Vernon Drive are located approximately 100 feet from potential areas of blasting. The blasting program for the Patterson Crossing Retail Center will be designed to avoid damaging those residences closest to the area of blasting. The Applicant has proposed to limit ground vibrations to 0.5 inches per second at the property line. This threshold will minimize the potential for damage to those residences adjacent to the property line located roughly 100 feet from the blast site. Any residence located further from the property line would have proportionately less potential for damage.

3) Loss of Vibration over Distance: Ground vibrations dissipate or become lower with distance from the actual site of the blasting. This vibration loss over distance varies depending upon rock type and soil cover as described above. The test blasting program will ensure that ground vibrations will be at acceptable levels at the property line which lies roughly 100 feet from the blast site. At 500 feet from the area of blasting, ground vibrations would be considerably less than 0.5 inches per second or well below established thresholds for potential damage to structures or wells.

In summary, a ground vibration limit of 0.5 inches per second at the property boundary will minimize the potential for damage to off-site residences and wells at a distance of 100 feet. The 500 foot radius from the area of blasting extends up to 400 feet beyond the property line and provides neighbors and the Town with a reasonable and conservative area for blasting monitoring.

Comment 1.3-2 (Letter #C4, Elena Bao, 09/25/06): The DEIS must list the various factors that could influence the 22-gallon yield per minute. For instance, could adverse blasting impacts lessen this yield? Could a "dry session" lesson this yield? Could increase demand from surrounding wells decrease this yield? The Applicant is stating "no adverse impacts to groundwater are expected" - however this particular geographic area is historically an area where well/water related issues occur on a frequent basis. Further, the Applicant states here that is proposed mitigation measures "may" prevent future groundwater impacts. "May" is just not good enough when there are hundreds of homes adjacent to the Patterson Crossing project site depending on that groundwater source to continue living in their homes. The Applicant must research this matter further.

Response 1.3-2: *The Patterson Crossing Retail Center wells were tested for 72 hours at a sustained pumping rate of 22 gallons per minute each, for a total of 44*

gallons per minute. The estimated water demand for the project is 10.4 gallons per minute. The pumping test demonstrated more than adequate water for the project with no off-site impacts.

Blasting impacts to well yields are unlikely (see Response 1.3-1 above). Extended periods of drought can affect wells if they are not deep enough or do not intercept sufficient fractures. Water supply for the development would be provided by, three bedrock wells to be installed on the Patterson Crossing Retail Center site. Two of these wells have been drilled to a depth of 805 feet and 705 feet, with a static water level at 50 feet and 61 feet, respectively. The Patterson Crossing Retail Center wells were purposely drilled to the noted depths to ensure well yields in all conditions. The nearby residential wells are drilled to depths ranging from 150 to 500 feet. The Patterson Crossing Retail Center wells were drilled a minimum of 600 feet from any private residential well. The third well will be installed on the Kent portion of the project site to supply the estimated 400 gpd (0.28 gpm) required for the 2,000 square foot building to be built in Kent; it will also comply with all state and local requirements.

Increased demand from surrounding wells could influence well yields, but based upon the testing done at the Patterson Crossing Retail Center site, this is not likely to occur.

Comment 1.3-3 (Letter #C4, Elena Bao, 09/25/06): The recent appearance of "cat tails" on the Entry/Exit ramps of exit 18 indicate the impacts to wetlands resulting from recent activity on the Patterson Crossing project site are already occurring. As such, the Applicant must contact the USACE for a Jurisdictional Determination. The new, undocumented wetlands at the entry/exit ramps of Exit 18 must be addressed by the appropriate agency(ies) and the results of that investigation must be properly reflected in the DEIS. Further, it should be stated how many feet Lake Carmel is from Patterson Crossing site. Failure to quantify the lake's proximity to the project site understates the potential impacts to this aquatic resource.

Response 1.3-3: *Wetlands have not been identified within the area of concern documented in the comment. Further, the area noted in the comment is over 100 feet from the project site. This drainage area, which extends from the intersection of NYS Route 311 to beyond the end of the east bound on-ramp, is an artifact of the development of Interstate 84 and results from stormwater runoff from the road surface. The conditions that support hydrophytic vegetation in this relatively narrow strip along the on-ramp is likely due to a lack of maintenance of the drainage swales along NYS Route 311 and the interchange ramps. The area directly adjacent to the project site along NYS Route 311 would normally flow to a closed drainage system on the east side of the road. Maintenance of existing state-owned rights-of-way are not the responsibility of the Applicant.*

Existing erosion and sedimentation caused by improperly managed stormwater along the project site's frontage on NYS Route 311, has been addressed as part of the stormwater management plan for the project (Refer to the project SWPPP in Appendix F). This work is not required to meet the City or State stormwater regulations. It will be implemented by the Applicant to eliminate the existing erosion and reduce down stream sediment loading and water quality impacts to Lake Carmel.

As for the vegetation in the drainage area, the vast majority is common reed grass (Phragmites australis), an invasive plant that often colonizes wet, disturbed areas

similar to those found along roadways where stormwater collects. This species forms monocultures, out-competing more desirable wetland species even in natural wetland areas. There is a strip of this drainage area that does support cattails. It is not unusual for cattails, a highly opportunistic species, to become established in an area of compacted soils where stormwater runoff collects. Construction and grading activities associated with the entry ramp provide conditions where both of these species can survive. The growth of this vegetation along the on-ramp is not at all related to conditions on the project site as suggested in the comment.

With regard to the need for a U.S. Army Corps of Engineers (USACE) Jurisdictional Determination and or Permit: as this area is not on the project site and the Proposed Action would not result in its dredging or filling, there is no requirement for USACE involvement. In past correspondence from the USACE (see Appendix A herein) the USACE's position is as follows: "If the applicant can design the project to completely avoid waters of the United States, including wetlands, then written authorization from this office would not be necessary. In addition, if no written authorization would be necessary, no written confirmation of the limits of Corps jurisdiction would be necessary, either."

The shortest distance between the project site and Lake Carmel is approximately 650 feet. The potential for impacts to aquatic resources resulting from the project site is fully mitigated by the implementation of the proposed SWPPP. The treatment of stormwater runoff from on-site impervious surfaces, as well as that from currently untreated sources off-site, will result in a post construction reduction in pollutant loading in downstream water resources.

As indicated in NYSDEC's 303d Impaired Water List, the Phase II Report, the TMDL Implementation Plan, and the Diagnostic Feasibility Study for Lake Carmel and the Water Quality Monitoring Report existing phosphorous levels in Lake Carmel far exceed those that the lake is able to assimilate, and nonpoint sources of phosphorous, in the form of effluent from septic systems on the numerous small lots that surround the lake, untreated stormwater, and anoxic sediments in the lake, represent the most significant short- and long-term threats to the vitality of Lake Carmel and its ecology. Also see Response 1.1-3 concerning existing pollutant loads in Lake Carmel and potential impacts on the lake from the project.

Comment 1.3-4 (Letter #C4, Elena Bao, 09/25/06): The Applicant does not acknowledge that there is a potential for failure of the stormwater treatment systems as it relates to drainage to Lake Carmel. Failure of the stormwater treatment system could result in a tremendous financial burden on the taxpayers of the Lake Carmel Park District. Residents of the park district have already funded a $500,000 lake clean-up in recent years. The Lead Agency should require that the Applicant provide funding in escrow to protect park district residents from having to carry the financial burden of mitigation in the stormwater system fail at Patterson Crossing.

Response 1.3-4: *Refer to Responses 1.1-3 and 1.3-3. The Applicant understands the importance of constructing the proposed stormwater management facilities in accordance with current City and State regulations and guidelines. Properly installed facilities will adequately treat stormwater quality as required by the governing agencies. Pollutant loads in stormwater will be reduced primarily by settling in the proposed detention ponds which have been designed in accordance with New York*

State and City regulations. There are no mechanical components included in the stormwater management system that would be subject to failure. As such, the risk of system failure, and subsequent need for remedial measures, is remote.

As discussed above, numerous areas surrounding Lake Carmel are densely developed with small lots that have individual septic systems in close proximity to the lake. As further noted above, the septic systems in these developments are a significant source of contamination in the lake. In his 2006 State of Putnam County Address, County Executive Robert Bondi noted that in keeping with the County's commitment to protect its environment, the County established a Putnam County Septic Repair Program. The program, which began on October 17, 2005, is designed to help homeowners with failed septic systems in certain portions of New York City's drinking water supply watershed. The County Executive further noted that the Septic Repair Program is working in cooperation with the County Health Department, and NYCDEP (which funds the program), and proposed modifications to the program and increased funding, so that the County could more quickly extend the benefits of the program to Lake Carmel, and other water bodies.

Were Lake Carmel to be contaminated as a consequence of the failure of the stormwater management system, the failure, and source of the contamination, would likely be the subject of an investigation by Federal, State, and New York City agencies. The outcome of any such investigation could result in remediation order(s) that would be the responsibility of the property owner, the Applicant, and/or other parties responsible for the contamination, to implement at their expense.

Finally, the Applicant will engage the services of a Certified Erosion and Sediment Control Professional (CPESC)/Certified Professional in Stormwater Quality (CPSWQ), or other equally qualified professional, to oversee construction of the proposed stormwater management facilities. The CPESC/CPSWQ will be responsible for ensuring compliance with the Erosion and Sediment Control Plan and that the stormwater management facilities are constructed as designed and as approved by NYSDEC and NYCDEP.

Comment 1.3-5 (Letter #C4, Elena Bao, 09/25/06): There used to be a pond located on the project site. This pond is no longer on the site according to the DEIS. What happened to the pond and did the pond disappear while the site property was under the Applicant's control? "Before and after" photos would ascertain whether any changes have occurred to the waterbodies on the site while this property was under the Applicant's control. This matter should be investigated given that there does appear to be indications that same waterbody on the project site has been diverted in recent years. The evidence of this diversion can be seen on the East Bound Entry Ramp of Exit 18 and also on the West Bound Exit Ramp of Exit 18- "cattails" are growing along these ramps in places they were not growing a few years ago.

Response 1.3-5: *Please see the response to Comment 1.3-3. Aerial photographs from 1962 and 1969 (Figures 1.3-1 and 1.3-2 respectively) do not show a pond or any open water feature on the project site. Figure 1.3-3, an aerial photograph from 2004 also shows no open water on the site.*

Comment 1.3-6 (Letter #C4, Elena Bao, 09/25/06): The Applicant appears to have a misunderstanding of nature. Wildlife doesn't "relocate". The Applicant should state the truth

here which is that the majority of the wildlife on the site will be destroyed or will perish due to loss of habitat.

> ***Response 1.3-6:*** *Comment noted. Construction activities will alter wildlife habitat. The removal of habitat will result in loss or displacement of wildlife relying upon said habitat. There have been no recorded reports that nearby habitats are saturated to their carrying capacities from local, State or Federal agencies that would monitor these conditions. Areas of the site will remain available for local relocation of some individuals. As demonstrated by the short list of bird and animal species that were actually observed on this site, the property does not support a large population or high biodiversity of wildlife species. All of the species observed are common in the local and regional ecosystems. Displacement of individuals to adjacent properties, particularly for the bird species, is likely, but the effect on the overall population is expected to be negligible. Loss of other individuals, through predation, human interaction or loss of habitat, may also occur. This is not, however, to suggest that the loss of regionally common wildlife habitat and diminished site wildlife populations of common local species can be characterized as a significant adverse environmental impact for purposes of SEQRA. None of the species observed have highly specialized habitat requirements.*

Comment 1.3-7 (Letter #C4, Elena Bao, 09/25/06): The Applicant needs to clearly outline that certain "nuisance species" will make the Patterson Crossing retail center their new home. Specifically, rats and other scavenging rodent species. The surrounding area is a densely populated residential community so there is a public health issue that needs to be explored in this DEIS relative to the influx of rodents which will accompany a large scale retail/restaurant use on this site. With trash comes the rodents and an accurate description of the anticipated impact and mitigation plans are needed in this DEIS.

> ***Response 1.3-7:*** *Section 4-10 (Utilities) of the DEIS states that all of the refuse storage facilities would be screened and covered in order to minimize potential impacts relating to nuisance animals, the description of which includes rodent populations. Supplemental measures, which may include additional fencing and the use of traps, would be employed as needed.*
>
> *For food service operations within the proposed development, the compliance with Putnam County Department of Health Food Service Protection Program regulations, designed to protect the public health from adverse impacts of the operation of food service facilities, would be implemented. Inspections conducted by the Department of Health are expected to enforce all applicable regulations related to refuse handling and storage and pest control at these facilities. Finally, this is a dry retail project; restaurants are not included in the proposal.*

Comment 1.3-8 (Letter #C4, Elena Bao, 09/25/06): Throughout the DEIS, the Applicant makes it a point to indicate that certain traffic will "only be traveling the 880 feet between the I-84 Exit Ramps and the project site entrance". I suspect the Applicant is attempting to imply that traveling this "itty bitty" distance won't cause any traffic problems. However, this is not the case. There is a very real storage queue problem in this 880 feet and also on the I-84 ramps. I have serious concerns the proposed traffic lights will create a serious gridlock problem given the enormous increase in traffic hourly Patterson Crossing will generate, particularly during peak hours. I have read the traffic study, and admittedly, have had a very difficult time understanding the data. But what I do understand is how traffic in that area

works given I have lived in this town my entire life and I get on and off Exit 18 every day of the week. I can't for the life of me figure out how traffic modifications proposed will enable any flow of traffic given that thousands of additional cars will be added to the existing traffic flow.

Response 1.3-8: *FEIS Appendix J notes that the peak hour traffic volume, based on the updated plan, is anticipated to be 1736 additional vehicles on the network. The total number of site generated trips associated with the updated plan is approximately 5 percent (110 vehicles less than under the DEIS plan. Of all the traffic traveling to and from the site, approximately 60 percent would travel between the project site and Interstate 84. The remainder of the vehicles entering and exiting the site consist of a smaller and smaller number the further the distance traveled from the site. Thus, the further the intersection from the project site the fewer number of vehicles traveling through.*

Plans for roadway improvements have been submitted to the NYS DOT and, in concept, the DOT believes that the modifications will enable the adequate flow of traffic. Refer to Chapter 4.8, Transportation, Table 4.8-2 and Figures K-3 and K-4 in Appendix K of this FEIS for text and a depiction of the proposed improvements. Site traffic would exit the site via two exiting lanes. There will be two turn lanes for entering vehicle, and a traffic signal at the new intersection with NYS Route 311. The Interstate 84 ramp intersections with NYS Route 311 would be the only other two intersections handling more than 30 percent of the site traffic. These intersection would be improved by the Applicant as noted elsewhere in this report.

The traffic study indicates that most traffic will not travel through local residential areas but along NYS Route 311 through intersections the Applicant will improve. Furthermore, the analysis shows that there is, as noted in the comment, existing delays at the NYS Route 311/Interstate 84 interchange, which will also be addressed by improvements funded by the Applicant.

Comment 1.3-9 (Letter #C4, Elena Bao, 09/25/06): Patterson Crossing's traffic conditions would require major modifications at almost every intersection within a 2 mile radius of the site. This is an obvious indication that the project will bring an unreasonable level of traffic to the area. The Applicant feels this project justifies the alteration of our entire roadway system and also feels it's appropriate for taxpayers to fund this project. Why should the state, Putnam County, Paterson, and Kent be forced to fund a private development? Not only is this project shamefully over-scaled, it will impose exorbitant traffic modification costs on to the state, county, and our towns. And to avoid insult to injury, the Applicant must prepare a supplemental traffic impact study which includes a detail cost analysis for these modifications. The Applicant cannot be permitted to plan his project in a fashion which relies so heavily on taxpayer funding. The Applicant must commit to funding all traffic/road modifications.

Response 1.3-9: *Of thirteen intersections studied (twelve existing and the proposed project access road off of NYS Route 311), eight have been considered for improvement, four in the Town of Patterson and four in the Town of Kent. The twelve existing intersections studied are shown on Figure 4.8-1 in the DEIS.*

Based on the results of the analysis performed as part of this environmental review, existing and future traffic conditions necessitate road improvements regardless of

whether the Proposed Action is developed. In order to offset poor level of service under each of these conditions, the Applicant will help fund improvements to several intersections including, the westbound ramps from Interstate 84 to NYS Route 311 (level of service F under Existing Conditions) and the eastbound ramps from Interstate 84 to NYS Route 311 (level of service F under No Build Conditions).

In addition, the Applicant will bond two potential traffic signals should they be warranted and permitted after the project is developed. To that end, the Applicant has agreed to place $200,000 ($100,000 per traffic signal) in escrow with the Towns of Patterson and Kent and monitor the intersections of NYS Route 311 and NYS Route 164 (in Patterson) and NYS Route 52 and Barrett Hill Road (in Kent) annually for a period of three years after the Patterson Crossing Retail Center is open. The $100,000 per signal is an estimate based on current costs. The Applicant will agree to an escalator provision in the escrow agreement that would require the Applicant to cover the actual costs associated with the signal installation(s) above the estimated $100,000 placed in escrow.

If traffic volumes warrant and the NYS DOT permits installation of a traffic signal at one or both of these intersections, those funds, which will have been transferred to the NYS DOT, may be used for that improvement. If after three years, no signal is approved, the escrow would be returned to the Applicant.

The NYS DOT has already agreed to (unrelated to the Proposed Action) improve the intersection of NYS Route 164 and NYS Route 311. The NYS DOT advises that under the Transportation Improvement Plan (TIP) certain improvements, previously identified (unrelated to the Proposed Action) at this intersection, will be funded by the State. As noted in their letter of March 19, 2007 (see Appendix A) the improvement timing would be accelerated. This improvement is entirely under the NYS DOT jurisdiction as these are both State roads. Currently, the NYS DOT will not permit a signal at this intersection. A letter from the NYS DOT indicating their agreement with the proposed traffic mitigation plan is contained in Appendix A, Correspondence.

Funding to improve the NYS Route 52 and Barrett Hill Road intersection with a left turn lane had been included in a past version of the NYS DOT TIP. However, this improvement has been removed from the 2008-2012 TIP indicating that it is not expected to be required and is not currently a priority. It should be noted that the Barrett Hill Subdivision project, traffic from which would have used Barrett Hill Road, is no longer proposed.

The Applicant has discussed improvements to NYS Route 311 intersections with Terry Hill Road and Fair Street with the County. The Fair Street improvement calls for widening the curb radius and the Terry Hill Road improvements call for adding a right turn lane from Terry Hill Road, left turn lanes from NYS Route 311 and a traffic signal.

The Terry Hill Road and NYS Route 311 intersection (level of service F under Existing Conditions) is proposed to be improved by the County to address current deficiencies unrelated to the Proposed Action. A letter from the County indicating this commitment is contained in Appendix A, Correspondence. The Applicant and the County are working on finalizing an approach to fund the minor work proposed for the NYS Route 311/Fair Street intersection.

The five remaining intersections studied do not require improvement related to the Patterson Crossing Retail Center. In Patterson these are:

- *NYS Route 311 at Ludingtonville Road and*
- *Fair Street at Terry Hill Road*

In Kent these are:

- *NYS Route 311 at Ludington Court,*
- *NYS Route 311 at Long Fellow Drive and*
- *NYS Route 52 at Horse Pound Road.*

It is noted that the Applicant proposing the Kent Manor project (273 townhouse units on Nichols Street in the Town of Kent), has made a commitment to monitor the NYS Route 52 intersection with Horse Pound Road (Intersection 11) and install a center lane improvement if required and permitted by NYS DOT.

As a result of the Proposed Action and the agreements with the State and County, the Patterson Crossing Retail Center can be viewed as a catalyst to progress area transportation projects. The Applicant is not concealing the traffic modification costs, as these costs will largely be born by the Applicant. Costs were not computed for the DEIS. The DEIS provided an outline of the potential work that needs to be done with and without the Project. It should be noted that all projected improvements would occur at State or County intersections. Therefore, there are no improvement projects that would result in costs to the Towns.

The Applicant would like to point out that beneficial intersection improvements needed to address future and long-standing traffic deficiencies would not be constructed in the near term without the project. Without the development of the Proposed Action, when the State and County do schedule these needed improvements, the associated costs would be funded by tax dollars, not by private capital.

Comment 1.3-10 (Letter #C4, Elena Bao, 09/25/06): The Applicant minimizes the noise impacts which will result from the Patterson Crossing by failing to acknowledge that several hundred residents will be adversely impacted by the noise generated by the proposed Patterson Crossing retail center, not just the 25 or so residents who live on Concord Rd, Greenridge Court, or Vernon Drive. The DEIS must adequately reflect the number of households and citizens who will experience the adverse noise impacts so this impact can be weighed appropriately. Further, the unique "acoustic properties" of the Lake Carmel Park District valley must be discussed in the DEIS as anyone who lives in the valley around Lake Carmel will tell you that the sound is enhanced in this area. For instance, I can hear truck traffic on Route 52 on the other side of the lake on Amawalk Road. The DEIS must take these acoustics into consideration and weigh noise impacts within the context of the unique geographic location of the area.

Response 1.3-10: *The Lake Carmel community in the vicinity of the Patterson Crossing Retail Center site will experience noise from the project during construction and after the project is developed. Those noise impacts were analyzed and*

discussed in the DEIS and were projected to be within acceptable levels according to State and Federal noise criteria.

The residents on the western side of the Patterson Crossing Retail Center project are on the eastern slope that extends to Lake Carmel. Residents on such a slope may be subject to noise which travels across the lake and up the slope. The Patterson Crossing Retail Center project is located on the opposite side of the hilltop and the majority of the site faces east towards Interstate 84. As a result, noise impacts would not be significant.

Comment 1.3-11 (Letter #C4, Elena Bao, 09/25/06): Patterson and Kent have local noise ordinances. What is to be done if the noise levels during the construction phase and post-build phase of Patterson Crossing exceed the maximum noise level allowed under local ordinances? Will it just be "too bad" for residents of the Lake Carmel Park District if project generated noise level exceeds the allowable level?

Response 1.3-11: *Noise complaints during construction can be directed to the Town of Patterson or Town of Kent Code Enforcement Officer or respective Town Engineers. The Applicant and Applicant's construction manager will also address noise complaints by neighbors.*

As required by the project Scope, an analysis of the noise generated during operation of the Proposed Action was included in Chapter 4.10 of the DEIS. No Significant Impacts related to the retail center were identified.

Comment 1.3-12 (Letter #C4, Elena Bao, 09/25/06): Construction beginning at 7am will be invasive to residents. Those who have neighbors that mow their lawn this early in the morning can attest to how irritating this noise is at such early hours of the day. As such, construction should not begin before 9am and should cease at 4pm Monday thru Friday. Construction should not occur on Saturdays as residents typically spend the weekends at home and should not have to contend with construction noise on the weekends.

Response 1.3-12: *Construction activities and times of operation will be carried out in accordance with the applicable Town Codes. Refer to Response 1.3-13 for information on the restrictions and limitations applied to construction activities.*

Comment 1.3-13 (Letter #C4, Elena Bao, 09/25/06): Under NO circumstances should blasting take place before 9am and all blasting should cease at 4pm. Further, construction activity schedule blasting activity at appropriate intervals so that the noise is "spread out" over reasonable time frames so as not to inundate the surrounding residential community with sustained blasting noise.

Response 1.3-13: *The Blasting Mitigation Plan states that blasting operations will be limited to the hours of 8 a.m. to 5 p.m., Monday through Friday. Blasting will NOT be conducted between 5 p.m. and 8 a.m. weekdays or at any time on Saturday, Sunday, or on specified holidays. Further, mechanical rock removal and rock processing will be limited to the same hours as blasting. The Applicant notes that blasting noise is not a sustained occurrence as described in the comment. Blasting noise is generated over a very short (seconds) duration. The following is a list of all holidays during which construction, including blasting mechanical rock removal and rock processing, would be prohibited.*

- *New Year's Day*
- *Dr. Martin Luther King Jr. Birthday*
- *President's Day*
- *Easter Day*
- *Memorial Day*
- *Independence Day*
- *Labor Day*
- *Yom Kippur*
- *Columbus Day*
- *Election Day*
- *Veteran's Day*
- *Thanksgiving Day*
- *Christmas Day*

To further offset potnetial impacts related to site preparation work, a berm will be constructed surrounding the area(s) where mechanical rock removal and/or processing is required.

Comment 1.3-14 (Letter #C4, Elena Bao, 09/25/06): Crime impacts has not been addressed in this DEIS. Patterson Crossing will result in increased crime of all types including, but not limited to shoplifting, credit card fraud, theft in stores/homes, breaking/entering into store/homes, loitering on the site and in surrounding residential neighborhoods, trespassing onto the project site and on private residential property, vandalism of the project site and in surrounding residential communities, traffic accidents and violations occurring not just "to and from" the retail center but elsewhere in the surrounding roadways resulting from the sizable increases in traffic levels, and potentially assault and/or rape. The Applicant must provide crime case study data derived from developments built close to residential developments. Without this data we cannot assess the safety/quality of life issues which crime impacts will impose on residents. Further, the DEIS must assess crime in terms of how it will translate into additional police costs. The Applicant should provide current crime statistics for this area as a context in which to discuss anticipated crime.

Response 1.3-14: *Police statistics relating to calls for service from a comparable commercial development were acquired from the Putnam County Sheriff's Office. Due to its size and type of retail stores, the Highlands Shopping Center in Brewster, in the Town of Southeast, was used for comparison purposes.*

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 on Independent Way and were assumed to result from the retail center. It should be noted that the Metro-North Railroad Southeast train station is located at the end of Independent Way and generates a high volume of traffic to the area. Of the 40 total responses, a total of 14 responses, were due to the automated alarm systems of the commercial facilities. An additional ten responses, were related to motor vehicle lock-outs, while five responses, resulted from traffic accidents. Three calls were for larceny or theft at the center while only one call was for suspicious activity.

Additionally, information pertaining to off-site calls for police service for the Highlands Shopping Center was obtained from the Sheriff's Department. Although it is difficult to quantify how many off-site calls for service are a result of the retail development, the Department's response records were reviewed for calls to locations at addresses listed along NYS Route 312. Out of 139 total Department responses in 2006 for locations on NYS Route 312 in this area, only one response was within one half mile of the Highlands Shopping Center and 21 responses within one mile. The majority of the calls within one mile of the Center, 15 of the 21 or 71 percent, were to the address 185 Route 312, which is an office complex housing several medical and financial services. Based on this information, it appears that there are few off-site impacts to police services generated by the Highlands Shopping Center; similar conditions would be anticipated as a result of the proposed Patterson Crossing Retail Center.

Refer to Response 4.11-1 for the breakdown of police calls.

Comment 1.3-15 (Letter #C4, Elena Bao, 09/25/06): Despite the Patterson Fire Department's "agreement" to provide coverage to all of the Patterson Crossing retail center site and their assurance that they have the manpower and the equipment to handle the job, The DEIS must include analysis of whether this agency is able to and equipped to provide the promised services. Their ability to respond is a matter of life or death so this matter must be researched and documented in the DEIS accordingly. An "agreement" between the Applicant and the Patterson Fire Department in this matter simply will not suffice. A cost analysis must also be included in the DEIS for the fire services that the Patterson Crossing project site would require so that we can adequately assess the impacts on the county's and our town's fire resources from a personnel and budgetary standpoint. We also should have data which supports the fire-fighting needs that a development like Patterson crossing would require in the context of its proposed tenants. For instance, what is "stored" on the Patterson Crossing site will impact the potential for fire hazards (i.e.,warehouse etc).

Response 1.3-15: *The Patterson Fire Department would be the expert in assessing their abilities and limitations to provide fire protection services. The Department indicated they are able to provide the necessary protection. As the project site is situated in the Fire District, the Project would generate tax revenues accordingly. These revenues could be used to purchase equipment and offset costs incurred by the Department in the future.*

Specific demand in future services can only be speculated based on historic records elsewhere. Statistics relating to calls for service from a comparable commercial development were acquired from the Putnam County Emergency Operation Center (PCEOC). As with police protection service demand, the Highlands Shopping Center on Independent Way in the Village of Brewster was used for comparison purposes. The PCEOC was not able to provide the number of responses by address, so all calls to locations on Independent Way were obtained. In a phone conversation[3], Thomas Lannon, Director of the Putnam County Emergency Management, noted that these statistics include calls generated by the Southeast Metro North train station, which he stated would be a significant percentage of the total calls.

[3] Thomas Lannon, Director, Putnam County Emergency Management/911, phone conversation, January 12, 2007.

According to the PCEOC records, the Brewster Fire Department responded to 45 calls for service in 2006 on Independent Way; about one per week. This includes EMS responses. 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 related to traffic accidents. The remaining call was to stand-by for assistance.

Comment 1.3-16 (Letter #C4, Elena Bao, 09/25/06): The DEIS must discuss how much providing "911" emergency service to Patterson Crossing will cost Putnam County. The DEIS should include data from similar developments and estimate how many "911" calls we can expect from Patterson Crossing annually. The Applicant must estimate the cost of this emergency service and also determine whether our county will need to contract additional emergency personnel/services.

Response 1.3-16: *See Responses 1.3-14 and 1.3-15 for information on the number and types of emergency calls that could be expected at the Patterson Crossing Retail Center.*

While the specific cost per fire response is not known, the magnitude of Fire Department calls for the comparable Highlands Shopping Center combined with other uses along Independence Way -- if assumed for the Patterson Crossing Retail Center site and divided between the two involved Fire Departments -- does not indicate the potential for significant increases in cost for fire protection services as a result of the Patterson Crossing Retail Center project.

Comment 1.3-17 (Letter #C4, Elena Bao, 09/25/06): "overlap" means a resident will be given a choice to buy from one retailer over another retailer when these retailers offer similar goods. This "choice" doesn't yield an increase in "net" sales revenue. The fact is that all of Patterson Crossing's retailers will overlap in significant ways with existing local retailers. Some of the overlaps I can think of are:

1. Costco overlaps with all supermarkets in Kent, Patterson, and Carmel.
2. Costco overlaps with all pharmacies in Kent, Patterson, and Carmel
3. Home Goods overlaps with Linens & Things, Kohl's, Marshall's, and Kmart
4. Patterson Crossing clothing store overlaps with Marshall's, Kohl's, and Kmart
5. Lowe's overlaps with Home Depot and Dills
6. Lowe's Garden Center overlaps with Kent Nursery, Dill's, and the garden center at Home Depot
7. Patterson Crossing electronics store overlaps with Radioshack and Kmart
8. Patterson Crossing Coffee Shop overlaps with Deliland, Lake Carmel General Store, Hess Mart (Exit 17), and Dunkin Donuts
9. Tire Center at Costco overlaps with Mavis Discount Tire in Carmel and the various locally owned autobody shops on Route 6 and Route 52.

Response 1.3-17**:** *As noted in the DEIS, Chapter 4.12, Socioeconomics, an overlap in goods and services provided by the Patterson Crossing Retail Center is anticipated primarily in the home improvement sector. However, it should be noted that the Dill's Best store has been closed since the Fall of 2006 for reasons unrelated to the Proposed Action. Some overlap may occur with the businesses located in the Highlands Shopping Center in the Town of Southeast. Retail sales at the Patterson*

Crossing Retail Center in these overlap areas would therefore not increase sales revenue for the County.

The development of a retail center can be expected to draw patrons to the area, since the proposed Patterson Crossing Retail Center will serve local residents as well as shoppers traveling from surrounding towns and counties. This would result in an overall increase in the net retail sales in the area and possibly increased business for local retail stores. Some Patterson Crossing Retail Center patrons traveling from Pawling and other points to the east who might not otherwise be in the area, will pass the existing businesses and may be inclined to stop and comparison shop. Refer to Response 1.3-18 below.

Comment 1.3-18 (Letter #C4, Elena Bao, 09/25/06): "The adverse effects of big-box development on local businesses is a well-documented phenomenon. We know that big-box development puts local competitors out of business because small business cannot compete over the long-term with a big-box conglomerate. Is the Applicant suggesting here that if our small businesses can't "hang with the big-box stores" that the livelihoods of these small business owners, who are taxpaying residents of Putnam County, have to just "find something else" to do to make their living and support their family? Our local business people are decent, hardworking people who are invested in this community. I believe that local officials should promote commercial development that helps the small business rather than cripples them. Big-box retail development is not the answer for our community.

Response 1.3-18**:** *Comments noted. The way that retail goods are delivered to the consumer is constantly changing as is readily revealed in any historic review of retailing in the United States over the past 50 to 75 years. The introduction of department stores impacted local down towns, as did discount stores, the US interstate system, the so called big-box "category killers", and most recently Internet sales.*

The proposed project is expected to have an overall positive economic effect on nearby commercial centers in the Lake Carmel and Patterson Hamlets as noted in Section 4.12, Socioeconomics of the DEIS. Highway oriented businesses such as gas stations and convenience stores along travel routes to the Patterson Crossing Retail Center are expected to see an increase in business. Some patrons of the proposed retail center would be expected to make purchases at local shops and take advantage of area restaurants and services.

At the same time, the introduction of approximately 374,000 square feet of leasable retail space may draw some shopping dollars away from the surrounding commercial areas for some existing retailers that have a high degree of overlap with the goods and services to be provided at Patterson Crosssing Retail Center. This overlap could lead to secondary displacement of local businesses. Although unlikely, should secondary displacement occur, the vacated site would most likely be reused by another commercial establishment allowed pursuant to zoning.

The proposed project is not expected to significantly alter the character or local economies of the surrounding downtown areas. The location of the site at the crossroads of Interstate 84 and NYS Route 311, largely isolated visually from the surrounding Hamlet areas, make it ideally suited for large scale retail development.

By increasing local spending and economic activity, and increasing the range of goods and services offered to Patterson, Kent and Putnam County residents, the proposed project is expected to strengthen the county's economy as a whole. Long-vacant commercial sites in the hamlets may actually become occupied in the future with this increase in local business activity, due to the need for ancillary services for patrons and employees of the retail center.

Comment 1.3-19 (Letter #C4, Elena Bao, 09/25/06): Competition is not expected to cause land use blighting? The Applicant fail to mention in this DEIS that there are on Route 311, Route 52, and Route 6 eleven blighted commercial spaces. In light of the current blight situation in Kent and Carmel, I would say that blight is an issue for this area and that avoidance measures for land-use blighting are warranted for this project and need to be discussed in this DEIS.

***Response 1.3-19**: As noted, there are several vacant commercial store fronts along the above mentioned corridors. This vacant status, however, does not constitute blight along these corridors. While store turnover and vacancies have occurred in these areas as well as throughout the Hudson Valley for various reasons (i.e. competition, market changes, rent increases), there is little documented evidence that "blighting" has occurred.*

In the vicinity of the vacant Lake Carmel Hardware Store there is no evidence of blight. Adjacent businesses and nearby commercial uses have remained viable in the vicinity of this vacant store front.

The Dill's Best store, which was vacated in 2006, also does not appear to have had a blighting effect on the NYS Route 52 corridor. Furthermore, a new salon (Hair Palace 2) opened across from the former Dill's Best Store in 2007 and the businesses in the vicinity of this vacant building continue to operate.

The Patterson Crossing Retail Center project is not expected to cause closures due to secondary economic effects. Vacancies have occurred without the proposed project and demonstrate that such occurrences can happen with or without retail development. However, limited store closures have not appeared to have a significant impact on community character.

The DEIS examines the effects of the proposed project on existing area businesses, and the population and character of the surrounding community. The DEIS did not identify significant potential for displacement of businesses or residents from the Proposed Action. For further information related to potential business effects, refer to Response 4.12-1 .

Comment 1.3-20 (Letter #C4, Elena Bao, 09/25/06): Mr. [Robert] Bondi's fiscal mis-management of Putnam County is a topic of much concern in Putnam County at the present time. I would like to note here that it was inappropriate for Mr. Bondi (whose son is employed by the Applicant) to endorse the Patterson Crossing project as early as 2005 with no information about the potential adverse impacts this development would impose on our community. The Applicant's use of Mr. Bondi's endorsement in this DEIS is no credit to this project given that our County Executive has a history of endorsing projects that fail and which cost taxpayers hundreds of thousands of dollars annually. Bottom line? I don't trust Robert Bondi's financial judgement based on his obvious lack of business acumen. Mr.

Bondi's endorsement of Patterson Crossing means nothing from a "project credibility" standpoint.

Response 1.3-20**:** *Comment noted. This opinion has no bearing on the analyses presented in the Draft and Final EISs.*

Comment 1.3-21 (Letter #C4, Elena Bao, 09/25/06): No party has ever performed a study to determine WHY Putnam Residents are spending 2/3 of their disposable income outside of Putnam County. The Applicant and Putnam County Executive Robert Bondi would like Putnam residents to believe the Putnam Paradox is due to "lack of shopping opportunity". However there is no data to support this claim as no consumer spending habit studies in Putnam have been performed. Neither the Applicant or Mr. Bondi are in a position to propose a "cure" for the Putnam Paradox when they have no evidence that "lack of shopping" is what causes consumers to spend elsewhere! Only when we truly understand consumer spending habits in Putnam we can commit to actions to slow the issue. To permit the Applicant in the DEIS to jump the naive and self-serving conclusion that Putnam residents need Patterson Crossing because they "don't have enough places to shop" is inappropriate and unacceptable. For the purpose of this DEIS, the Applicant's feeling about what causes the Putnam Paradox are an unsubstantiated "opinion" that doesn't belong in the DEIS.

Response 1.3-21**:** *Comment noted. The phrase Putnam Paradox was coined in response to the way Putnam residents spend their disposable income. Marc Goloven, an economist for JP Morgan Chase, conducted research that showed that two-thirds of the disposable income generated by Putnam residents is spent outside of Putnam County resulting in the loss of tax revenues annually to neighboring municipalities[4]. "Every time a resident of Putnam County drives across the border into Connecticut, Westchester, Dutchess or other neighboring municipalities to shop, they take their sales tax dollars with them. So, instead of Putnam County receiving the sales tax collected on goods and services bought, other municipalities benefit from such purchases[5]"*

The U.S. Census Bureau reports that 2002 Retail Sales Per Capita for Putnam County totaled $6,994, compared to per capita sales for Dutchess County ($10,744), Orange County ($11,323), Westchester County ($12,589) and Fairfield County ($15,569).[6]

The project would be supportive of existing policies of the County such as the "Shop Putnam" initiative (supports smart commercial growth in Putnam County), and statements of Putnam County Executive Robert J. Bondi from his 2004 State of the County Address and County 2005 Budget Message, as described on page 3-3 of the DEIS. The concrete cause or cure for the Putnam Paradox may not be known at this time but based on the above, including the statements from County Executive Bondi and the shopping pattern survey conducted, the Applicant believes that the Proposed Action would comply with the Shop Putnam initiative and work towards correcting the

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[4] "What does this mean to you and your family ", Putnam Paradox. 18 April 2007 <http://www.putnamcountyny.com/paradox/main.htm>

[5] "What is the Putnam Paradox", Putnam Paradox. 18 April 2007 <http://www.putnamcountyny.com/paradox/main.htm>

[6] U.S. Census Bureau (http://quickfacts.census.gov/qfd/states/36/36079.html).

Putnam Paradox by offering new retail shopping opportunities within Putnam County for its residents and beyond.

Comment 1.3-22 (Letter #C4, Elena Bao, 09/25/06): Traffic modifications, police service, emergency response services, fire services, road maintenance costs associated with massive traffic volume increases, cost associated with the failure of any and all mitigation systems put in place at the Patterson Crossing project. All of these things cost money, and a significant amount of money at that. It is unacceptable that the Applicant to state this project will not generate "significant costs" to the state, county, Patterson, Kent and the Lake Carmel Park District. It is unacceptable that the Applicant fail to itemize or estimate any of the costs associated with the Patterson Crossing project in the DEIS. The Applicant must be compelled to prepare a supplemental economic impact statement to fully explain the economic impacts of this project. Without this supplemental, this project cannot be "weighed" appropriately.

***Response 1.3-22**: Refer to Response 1.1-2. Costs of community services related to the project are described in DEIS Chapters 3.0 and 4.11. The project is expected to result in a net fiscal benefit, including substantial school tax revenues without incurring significant costs to the School District or the Towns of Kent and Patterson or other tax jurisdictions.*

The DEIS includes a fiscal impact analysis and evaluation of anticipated costs of municipal services necessary to serve the proposed project. Additional demands on municipal services are expected to be offset by projected tax revenues.

Comment 1.3-23 (Letter C-10 Edmond A. Connors, September 13, 2006): In previous sections, notably Sec 1.1 Para 1, the builder states that the project will encompass 90.5 acres with 22 acres to remain undisturbed during construction phase. In this section the builder goes onto assert that the project will just generate approximately 119,00 cubic yards of rock, which will be excavated by, in the builders words "some blasting", and by other means. If the total of 22 acres of undisturbed area is subtracted from the 90.5 acres of the total project, one can clearly see that the excavation will take place over an area of 68.5 acres. When one does a bit of simple math- there are 43,560 square feet to the acre, take that and times it by 68.5 acres, then we see that 2,983,860 square feet of ground will be affected by "some blasting", ripping, or hammering. That area affected is over 51 official American football fields and that is including the goal areas of every one of those fields. Now to the builder's estimate of the rock that be removed. The builder estimates that there will be 119,000 cubic yards of broken stone generated by the construction. From our high school days we know that there are 27 cubic feet in one cubic yard. When you multiply the 119,000 cu. yards by 27 you find that are 3,213,000 cubic feet of stone to be removed. It sounds like a lot but you will see in a moment, it is not. Not when you consider spreading that stone harvest of those 3.2 million cubic feet of material over an area the size of 68.5 acres, remember that is nearly 3 million square feet . When you say you will harvest only 3.2 million cubic feet of stone from an area 3 million square feet it means that you can "cut" into the stone only, 1.076 feet deep average, over the entire area estimated. However, there is a total drop in elevation of 52 feet from the western boundary of the project property to the back of the proposed Building-" B " The builder says he plans to level the property using cut and fill method. You will need a 25-foot cut on the high side to fill a 25-foot trough on the low side to accomplish the leveling here. In our simple calculation, remember we only cut a mere 1-foot, not the 25 necessary to put this project on the level. It would appear that after doing this bit of simple math here, the builder's calculations seem to be terribly flawed. All of these

elevations can be seen by the builder's study of the ground elevations, as submitted in this DEIS (EX-1). That 52-foot difference in elevations is over more than half of the area of buildings, and parking lots of the project. So you can only "cut" a mere 1.07 feet on average from the existing land, and you have to level a site with more than a 52 foot difference in elevation, it would seem to any fool with a sharp pencil and more than half a deck to play with, that more than a paltry 119,000 cubic yards of rock will be disturbed. Mind you, this site is one with a rather shallow earthen cover over rock throughout a large portion of the site. Ledge appears at the surface over much of the site, which is some indication of the amount of rock that will be disturbed. It would appear that the builder has misstated the amount of blasting it take to remove such a huge mountain of solid stone. By my reckoning, the builder's estimates of the amount of blasting to be done, and the amount of material to be moved around, are not optimistic; but rather they seem to be downright misleading, and no amount of "cut and fill" would seem to ever get this mess on the level!!!

Response 1.3-23: *Contrary to the commentor's statement, the borings indicate the majority of the site has a deep earthen cover and ledge appears at the surface only in one small area of the site. The 119,000 cubic yards of rock noted in the comment above and on page 4.1-2 of the DEIS represents only a portion of the anticipated earthwork. Further, the area of potential blasting does not include the entire area of disturbance (68.5 acres) nor the entire area of potential rock removal but includes only a portion of the area identified by subsurface investigations as potentially requiring the removal of rock.*

The cut and fill analysis performed for the DEIS plan shows that the site earthwork, which includes both rock removal and soil excavation, would result in approximately 700,000 cubic yards (cy) of cut and roughly 454,000 cy of fill. As noted by Marilyn Shanahan of the NYCDEP, balancing of cuts and fills is fundamental to proper site planning, land use, engineering, and construction management. Balancing of cuts and fills is also an important factor in project economics, as it is expensive to export fill material, thereby adding significant financial incentive to balance cut and fills on site. To meet the goals recognized by Ms. Shanahan, and control project costs, the project engineer has raised the site development building pads to balance cut and fills to the maximum extent practicable. The modified plan presented in this FEIS will result in the cut of approximately 590,000 cy of material and the fill of 565,000 cy yards of material leaving about 25,000 cy yards for export off-site.

One by product of this balancing of cut and fills will be a reduction in the amount of rock that needs to be removed; it will measurably reduce the surficial area and volume of rock to be removed. Per the project engineer's calculations, the raising of the building pads in the area where rock removal will be required reduces the volume of rock cut by approximately 50 percent. This will reduce the area of potential rock removal from the afore-mentioned 11 acres to approximately 9.8 acres.

Earthwork on the site will be balanced to the greatest extent practicable to reduce the potential environmental impacts associated with grading and rock removal, to reduce construction costs, and to facilitate use of excavated materials within the project thereby avoiding or minimizing the need to export material from the property. As with all land development projects, the cut materials that are determined to be physically (geotechnically) unsuitable for use during development of the project site will be removed.

Comment 1.3-24 (Letter C-10 Edmond A. Connors, September 13, 2006): In the discussion on groundwater resources in this section, brief mention is made of, "pump tests and test wells, and how no adverse effects were noticed on the off site wells that were being monitored". What wells were being monitored? I live right across Concord Drive, less than 500 feet from all this testing, and my well was not being monitored. I know of no wells that were monitored during the period when the test wells were being drilled. There are neighbors whose homes are on property that directly abuts the said project, and their wells were not monitored. However, the underground blasting that was done as part of those tests shook their homes, and no mention made of that by the contractor either. In fact, it was during this same period of time that I was experiencing a silting problem with my own well. I reported it to the department of health, and upon testing by them it was found that there was not only a problem with muddy water, but also high loads of bacteria were found in the well. This is the first time in all the years since we moved in to this home, since the mid 1950's, that there was ever this kind of problem with the well. I paid to have the well sterilized and install new piping, a foot-valve, and well-head gasket. All of which were installed by the professionals from Albert Hyatt & Sons", and there has been no problem since. If there were any way to prove that the testing done by the gang from Camarda and Company caused the problem with my well, I would have moved to cause an action to have held them liable. Unfortunately, the fact that they were the only ones doing massive drawdown of the water table at the time, and that there has never been a problem with my well before this incident is not sufficient proof of their culpability in the matter. Since they did not monitor a sufficient number of wells in the area during this experiment, there is just no way to prove they are responsible. That is precisely the problem that everyone whose source of clean water might be damaged by the project will encounter; unless the contractor is forced to monitor all the wells in the area affected by their unusual thirst for this most precious limited resource. Had the builder done due diligence prior to the initial testing, and monitored all the wells within 500 feet is indeed not enough of a distance from their test wells to account for the effect a drawdown of 10,000 gallons a day might have on the neighboring wells. That amount of blatant squandering of a groundwater resource, along with the blasting of the rock layer and the inherent disturbance to the unconfirmed water table, the disturbance of the recharge area, and the other admitted adverse environmental impacts on the geology of this area, may, in their totality, spell disaster for all of use whose very lives depend on our wells. Will the people responsible for this impending and yet without adequate monitoring, impossible to quantify disaster, pay to mitigate the damage they will most certainly cause. Perhaps they should post a permanent bond creating a water district for the individuals who find themselves within the area of influence of this egregious waste of such a critically important natural resource? There are families homes and lives intimately involved here. Since I have already had a problem in association with the project - and since Camarda's gang were the only ones messing around with the water table at that time - am I now to believe, that by some leap of faith and change in attitude by the players, that I am now protected? I am not comfortable with the chances of being blessed with a favorable outcome, unless the builder will be made to legally assume all responsibility, in advance and by written agreement, be made to post a permanent bond, to repair or replace the water supply of any family within ½ mile of their project, 500 feet indeed - a damn well is more than 500 feet deep, for heavens sake!

> ***Response 1.3-24:*** *Private residents in proximity to the project water production wells were selected for monitoring because those wells had the highest likelihood of showing drawdown impacts. All of the homes on the east side of Concord Road and Vernon Drive, abutting the project site were sent a letter requesting permission to monitor their wells. Letters were sent to 40 property owners and of the 13 positive responses, eight private wells were monitored.*

The list of private monitoring wells for the pumping test was reviewed and approved by the Putnam County Department of Health, as indicated by the letter dated January 18, 2005 (see FEIS Appendix A). The number and location of monitoring wells was determined to be adequate by the Department of Health. The plan was explained in detail in Chapter 4.4 of the DEIS and in the Water Supply Report (Appendix H of the DEIS). The homeowners monitored during the pumping test are shown in Figure 4.4-2 of the DEIS.

The commentor's well was not selected for monitoring because private wells closer to the pumping wells on the east side of Concord Road were more suitable for monitoring. The Patterson Crossing Retail Center wells are sited a minimum of 600 feet from any private residential well in order to minimize potential impacts.

The 72 hour pumping test did not show any influence or drawdown in the eight private wells were monitored on adjacent properties, as agreed upon by the Putnam county Health Department*, during the test. This indicates that the Patterson Crossing Retail Center wells and off-site private wells are not hydrogeologically connected. The project wells were pumped at 22 gallons per minute each, which is 4.2 times the estimated water demand. Even at this high level of pumping there was no recorded influence on off-site wells.*

Wells were drilled for the purpose of finding water and running the pump test for the proposed development; no blasting was conducted.

Pursuant to the Blasting Mitigation Plan, residences within 500 feet of the blasting site may request a Pre-blast Survey. The survey would determine the condition of any structure and document any existing damage or other physical factors that could reasonably be affected by the blasting. Wells within the 500 foot range would be included in the pre-blast survey and would involve monitoring of the subject wells two weeks prior to blasting through two weeks after the blasting is completed. It is recommended that any resident eligible for this service request the pre-blast survey (to be paid for by the contractor).

Note, the pre-blast survey notice will be sent to owners of properties within 500 feet of the blast site by regular and certified mail. Owners will have 21 days to respond to the notice. If the notice is not responded to within the 21 day period the owner will forfeit the right to a Pre-blast Survey. The Applicant will conduct the pre-blast survey within 60 days of the accepted notice.

Comment 1.3-25 (Letter C-12 Edward Durkee, September 22, 2006): "Any documented impact to the private of local wells would be remedied by the blasting contractor".

This fact simply allows the developer to be immune from consequences. While the sub-contractor might be well intentioned, the reality is that the public and those whose wells may be directly affected would be left with the burden of proof and costs of litigation to recover for damages. Obviously, this is something impossible for many families and certainly would end up costing the Towns of Kent and perhaps Patterson. The Planning Board should insist that a plan be in place that guarantees remediation, and protects against these costs prior to any approval.

Response 1.3-25: *As noted on page 4.1-3 of the DEIS, pre- and post- blast surveys are to be conducted as a part of the blasting procedure. These surveys would be performed at the cost of the developer and provide documentation to assess any damages incurred. Normally, copies of the surveys are submitted to the developer, the resident and the Town. One of the purposes of using a certified blasting contractor is to ensure that they have the appropriate State required damage insurance. Refer to Response 4.1-4.*

Comment 1.3-26 (Letter C-12 Edward Durkee, September 22, 2006): "Establishing a thorough maintenance and repair program Assigning responsibility for the maintenance program."

This is a crucial aspect of controlling the long term environmental and financial impacts of this project. Who will be providing the funds and guaranteeing the fulfillment of long term commitments to maintain and repair?

Response 1.3-26: *A property management company would handle all maintenance and repairs as needed once the site is in operation. Funding for maintenance, including but not limited to; landscaping; lighting; stormwater management facilities; and snow removal, is accumulated from rental income or management fees paid by the commercial tenants.*

Snow will be removed from the parking areas and walkways and stored in the perimeter overflow parking spaces.

Comment 1.3-27 (Letter C-12 Edward Durkee, September 22, 2006): 'The project will require approximately 10,740 gallon per day or 7.5 per minute.... Can this be a realistic number? Let us conservatively assume that there are at least 20 toilets in use throughout the entire 400,000 sq. ft. project. If half are in use at any given time, that's more than what is being claimed for the entire project. A more realistic projection must be investigated.

Response 1.3-27: *The estimate of daily water use of 15,000 gallons, 10.4 gallons per minute remains conservatively the same as that presented in the DEIS. See the water usage table in the revised Water System Report (Appendix G).*

As stated in the DEIS Chapter 4.4, "[t]he reference design standards for water and wastewater flows provide general design flows covering a broad range of usage categories. The New York State Department of Conservation (NYSDEC) publication "Design Standards for Wastewater Treatment Works, 1988" provides two alternatives for establishing design flows: hydraulic loading rates tables ***or*** *water usage data. In either case a daily design flow rate must be calculated. The daily design flow rate is a conservatively high estimate of daily flow used by the engineer in the design of the water and sewer infrastructure. As such, actual flow rates are expected to be lower than those noted above.*

In order to establish design flows, it is acceptable to use actual flows multiplied by a factor of safety of 1.5, or design flows based on published hydraulic loading rates. The design flows for the subject project have been calculated based on actual water usage data from retail stores similar to the proposed Patterson Crossing Retail Center uses. . The Applicant's Engineer obtained actual water usage data from retailers in the region including BJ's, Sam's Club, Lowes, Home Depot, Village Paint, Radio

Shack, Rockaway Bedding, Pier 1 Imports, CVS, Rite Aid, Payhalf, Michael's, AC Moore, Linens N Things, Bed Bath & Beyond, Toys R Us, Best Buy, Dick's Sporting Goods, Kohls and Gander Mountain as a basis for determining the actual water demand of the potential retail establishments at Patterson Crossing Retail Center.

As documented in the DEIS, "...the applicant would agree to appropriate controls to assure each user's wastewater flows fit the project' design flows. One such control would require each specific user present the Town Building Department with a wastewater design flow at the time they apply for their building permit, or with any change in occupancy. This will allow for the monitoring of design flow to assure that all users wastewater generation falls within the system design capacity. It should be noted that actual water and wastewater flow metering/monitoring will be required as part of the water and sewer permitting with the PCDOH, NYCDEP and NYSDEC. This metering/monitoring will provide an assurance that the actual project flows do not exceed the system design capacity."

The scenario presented by the commentor regarding the number of bathrooms and the frequency of use are unfounded assumptions. As noted, the volume calculated for the project are based on actual regional retailer data with the applied safety factor and the required volumes in the above identified document.

Comment 1.3-28 (Letter C-12 Edward Durkee, September 22, 2006): "Project would be accessed by a two lane... drive..."

In reviewing the summary of numbers provided in the more detailed Traffic and Transportation section (see section 41) as well is in the Appendix sections dealing with traffic in Vol. II, I was having a difficult time correlating the statistics provided in the scattered sections of information.

I am perplexed how a single 2 lane access road is going to handle the tremendous increase in traffic volume. The peak hour estimate of trips entering and exiting the site is approximately 2100 vehicles PER HOUR. This translates into at least 35 cars per minute. Even without taking into account the built in queuing delays controlled by the suggested traffic light, or the and East and West Bound 311 through traffic, these numbers mean that if you are waiting to get in or out of the complex and wait only 3 minutes, there will be 90 more cars trying to do the sample stacked up behind you and so on.

***Response 1.3-28**: The peak hour traffic on a typical Saturday has been reduced to 2042 vehicles. The Applicant is now proposing multiple turn lanes to handle traffic turning into and out of the site. (See FEIS Figure 1.3-4).*

As noted in FEIS Appendix J, the delay exiting the site even on a Saturday during the holiday season would be less than 70 seconds, not 180 seconds. The 95th percentile exiting queues during that same period are anticipated to be less than 16 vehicles per lane. The left turning vehicles into the site and right turning vehicles out of the site can move together in one phase and in fact should have the bulk of the turning volumes. A second phase has both exiting lanes moving simultaneously in concert with the right turning lane into the site. A third phase would have vehicles turning into the site, thus during all phases site traffic can be moving.

Comment 1.3-29 (Letter C-19 Johanna Groepl, September 25, 2006): What does the applicant mean with some? This is ambiguous language and does not state clearly how much blasting will be done. Question to answer: How much property is there that needs a greater than 4 feet cut and therefore would be blasted?

Response 1.3-29: *The DEIS states on page 4.1-2 that 119,000 cubic yards of rock would need to be removed. This volume has been reduced by roughly 50 percent under the modified plan presented herein. The area within which rock removal would likely be required under the modified plan is limited to approximately 9.8 acres down from the 11 acres documented in the DEIS and would result in an associated reduction in the volume of rock to be blasted. Refer to Response 1.3-23.*

Comment 1.3-30 (letter C-28 Ray Mainiero, Submitted September 13, 2006): Potential impact-states that, "noise impacts as a result of construction activities are, intermittent, short-term, temporary impact". What does the applicant mean when he says, "intermittent, short-term and temporary impact". Exactly how long will the rock crunching and grinding go on? What decibel levels can be expected by the residents next to this project?

Response 1.3-30: *Construction noise is described in DEIS Section 4.9.5 Future Conditions. The use of the term "short-term" applies to project construction tasks and the use of equipment in any given location, which will vary greatly over the construction period and with the construction activity (e.g. land clearing, building interior construction, or paving) and the distance to a receptor.*

The use of the words "intermittent" and "temporary" describe the variable nature of the use of construction equipment throughout the work day and the cessation of construction activities on a daily basis and during holidays and weekends.

It is estimated that the rough grading for the site will be completed within six to nine months and the rock crusher would be operated during that period. After the finished grades for the site development are substantially reached, no rock crushing would be needed and the use of that equipment and the resultant noise would cease.

Noise levels at the property line during construction are projected to range between 65 dBA and 90 dBA, depending upon the actual location of construction equipment.

Refer to Responses 1.3-12, 1.3-13 and 1.3-32 for information on the restrictions applied to construction activities.

Comment 1.3-31 (letter C-28 Ray Mainiero, Submitted September 13, 2006): Noise levels have been measured to be between "64 DBA and 90 DBA". However, decibel levels recorded by individuals living next to the proposed site, have been measured to be normally 55 dB, and at times, as high as 80 dB. How much will rock crunching, grinding, cranes, bulldozers, diesel trucks, etc.? Add to that, all the chain saws roaring from the cutting down of thousands of trees.

Response 1.3-31: *See Response 1.3-30 above and DEIS Section 4.9. The 65 to 90 dBA referenced noise level is estimated noise during construction. These levels are based upon the actual noise generated by different construction equipment.*

Comment 1.3-32 (letter C-28 Ray Mainiero, Submitted September 13, 2006): Presently, the town of Patterson's noise ordinance states that noise levels over 60 dB are in violation of the noise ordinance code. How can this project be allowed if it will continually violate this code, both during and after construction? Will the town of Patterson enforce their very own code every time a violations performed? (Keep in mind that supervisor Michael Griffin was quoted as saying that he intended to protect the rights of the citizens who were going to be threatened by a dog kennel in their area. Will he not offer the same rights for the individuals' residing next to the Patterson Crossing site?

Response 1.3-32: *The Town of Patterson Noise Control Law (Chapter 109) regulates noise generated by building and construction activities under Sections 109-5A, B and C. Sections 109-5A and B establish that noise, as measured at the property line closest to the origination of the noise, "shall not exceed 65 dBA between 7:00 a.m. and 8:00 p.m. Prevailing time on weekdays, including Saturday, or 45 dBA during the hours of 8:00 p.m. And 7:00 a.m. Weekdays, all day Sunday or on holidays."*

Section 109-5C states the following:

> *"...any building or construction activity, including the clearing and removal of trees or other site preparation work, which is audible outside of a building or structure is prohibited on holidays and between the hours of 8:00 p.m. to 7:00 a.m."*

Construction activities and the operation of construction equipment are an expected and required consequence of any new residential, commercial or industrial project, and cannot be avoided. It is important to note that noise impacts as a result of construction activities are an, intermittent, short term, temporary impact, dependent on the construction activity and the proximity to the local receptors and will cease upon completion of the construction phase of the project.

It is anticipated that nearby residences on surrounding local roads, primarily Vernon Drive and Concord Road would experience temporary elevated noise levels for intermittent, short term periods during future construction of the retail development. 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. Construction activities would be limited to times between 7:00 a.m. and 6:00 p.m., Monday through Saturday, exclusive of Sundays and defined holidays. Typically, construction activities would be expected to cease prior to 6:00 p.m.

Refer to Response 1.3-13 for a list of holidays and additional prohibitions applied to blasting, mechanical rock removal and rock processing and Chapter 4.9, Noise in the DEIS and here in the FEIS for details and analyses of construction noise related to the Proposed Action.

Comment 1.3-33 (Letter C-31, Kathleen McManus, September 25, 2006): The DEIS states that "No man-made noise is currently generated on the Patterson Crossing Retail Center property, since the site is undeveloped." It continues to state that "Project operation related noise levels would be associated with a variety of on- and off-site factors, which would include normal vehicular traffic, truck deliveries for commercials merchandise, snow plowing and shoveling, garbage disposal activities, heating and air-conditioning equipment." I

find it completely unacceptable that my family and neighbors must go from having no man-made noise on the adjacent site to what is being projected as a constant stream of noise, night and day, from construction to routine site operation.

> ***Response 1.3-33:*** *The project site is being developed in accordance with the Towns' Comprehensive Plans and in conformance with existing zoning requirements with the exception of signage. Potential noise impacts were analyzed in Chapter 4.9 of the DEIS. The issue of "acceptability" is subjective and varies tremendously from person to person. It does not represent zoning or environmental criteria that can be quantified.*

Comment 1.3-34 (Letter C-31, Kathleen McManus, September 25, 2006): "The emergency access drive would be gated at both ends to prevent unauthorized use." In the event of an emergency, how is an emergency vehicle going to get through the locked gate? Will every agency have a key for the gate? Or will vehicles actually drive through and break the gate? In a true emergency, there should not be any delays in being able to get through the gate to gain access to the emergency access drive.

> ***Response 1.3-34:*** *Emergency access gates will be locked to prevent unauthorized entrance to the site. Emergency responders such as the local fire department will have keys for the gates. It will be up to the responsible departments to determine whether a universal key will be used for these locks.*

Comment 1.3-35 (Letter C-31, Kathleen McManus, September 25, 2006): I also share concerns with the Kent Police Department with the use of our property for unauthorized access to the site, and general security at the retail center. Will the developer accept moral and financial responsibility for additional security measures along the fence line if it turns out that there are pedestrians scaling the fence or cutting/damaging the fence to create a shortcut to the site?

> ***Response 1.3-35:*** *It is highly unlikely that pedestrians will be scaling the fence to access the site. The Applicant would consider creating a pedestrian path along the emergency access for local residents should the Town recommend same. However, encouraging the use of the emergency access as a pedestrian route may result in negative impacts to the adjacent property owners.*
>
> *The property management firm tasked with the daily operation of the site would address any deficiencies with regard to the fence line. Any unlawful activities that compromise neighborhood security may be addressed by the tenants and local law enforcement agencies.*

Comment 1.3-36 (Letter C-31, Kathleen McManus, September 25, 2006): Under Mitigation Measures, the developer interjects his own opinion that this project "would enhance the quality of life." I don't believe convenience is a quality of life.

> ***Response 1.3-36:*** *Comment noted. "Convenience" is considered by many to be a quality of life criteria. This is why people live or relocate to areas near public infrastructure, recreational resources, public transportation or friends and family.*

Comment 1.3-37 (Letter C-31, Kathleen McManus, September 25, 2006): The DEIS states "no views... Have been identified that will be adversely affected by this project." Just

about every paragraph in the Executive Summary of the DEIS ends with these or similar words. It is quite clear that in the developer's opinion there are no adverse affects or minimal impacts, but to those of us adjacent to the project, it has lifelong impact. We should not have to compromise for the convenience of others.

Response 1.3-37: *Comment noted. This site has been targeted for non-residential development for many years by both Towns. The Proposed Action would result in the development of the project site in compliance with both Town's zoning (with the exception of signage) and planning documents.*

It should be noted that development, by its very nature, always results in unavoidable changes and that the intent of a DEIS is not the encyclopedic presentation of information but to assess those changes that may be viewed as significant in nature.

The intent of SEQRA is not to force a property owner to develop a plan that presents no impacts but one that avoids and minimizes significant adverse environmental impacts to the maximum extent practicable and mitigates those significant impacts that cannot be avoided or minimized. The Lead Agency in reviewing the document must weigh many factors including both negative and positive impacts that result from a Proposed Action. It is the Applicant's opinion that the Proposed Action meets these intentions.

Significance is defined in Section 617.7c of the SEQR regulations. That definition follows:

§617.7 Determining significance

(c) Criteria for determining significance.

(1) To determine whether a proposed Type I or Unlisted action may have a significant adverse impact on the environment, the impacts that may be reasonably expected to result from the proposed action must be compared against the criteria in this subdivision. The following list is illustrative, not exhaustive. These criteria are considered indicators of significant adverse impacts on the environment:

(i) a substantial adverse change in existing air quality, ground or surface water quality or quantity, traffic or noise levels; a substantial increase in solid waste production; a substantial increase in potential for erosion, flooding, leaching or drainage problems;

(ii) the removal or destruction of large quantities of vegetation or fauna; substantial interference with the movement of any resident or migratory fish or wildlife species; impacts on a significant habitat area; substantial adverse impacts on a threatened or endangered species of animal or plant, or the habitat of such a species; or other significant adverse impacts to natural resources;

(iii) the impairment of the environmental characteristics of a Critical Environmental Area as designated pursuant to subdivision 617.14(g) of this Part;

(iv) the creation of a material conflict with a community's current plans or goals as officially approved or adopted;

(v) the impairment of the character or quality of important historical, archeological, architectural, or aesthetic resources or of existing community or neighborhood character;
(vi) a major change in the use of either the quantity or type of energy;
(vii) the creation of a hazard to human health;
(viii) a substantial change in the use, or intensity of use, of land including agricultural, open space or recreational resources, or in its capacity to support existing uses;
(ix) the encouraging or attracting of a large number of people to a place or places for more than a few days, compared to the number of people who would come to such place absent the action;
(x) the creation of a material demand for other actions that would result in one of the above consequences;
(xi) changes in two or more elements of the environment, no one of which has a significant impact on the environment, but when considered together result in a substantial adverse impact on the environment; or
(xii) two or more related actions undertaken, funded or approved by an agency, none of which has or would have a significant impact on the environment, but when considered cumulatively would meet one or more of the criteria in this subdivision.

(2) For the purpose of determining whether an action may cause one of the consequences listed in paragraph (1) of this subdivision, the lead agency must consider reasonably related long-term, short-term, direct, indirect and cumulative impacts, including other simultaneous or subsequent actions which are:
(i) included in any long-range plan of which the action under consideration is a part;
(ii) likely to be undertaken as a result thereof; or
(iii) dependent thereon.

(3) The significance of a likely consequence (i.e., whether it is material, substantial, large or important) should be assessed in connection with:
(i) its setting (e.g., urban or rural);
(ii) its probability of occurrence;
(iii) its duration;
(iv) its irreversibility;
(v) its geographic scope;
(vi) its magnitude; and
(vii) the number of people affected.

Comment 1.3-38 (Letter C-31, Kathleen McManus, September 25, 2006): "Any documented impact to private local wells caused by the project construction including as a result of blasting, will be remedied by the blasting contractor." It should be highlighted that the developer is ultimately responsible for any impact to private local wells and, should the blasting contractor be unable to remedy impacts, the developer should assume that responsibility. How can we be assured that remedies will happen as quickly as the impact occurred? Are we going to get into challenged arguments about what is "well documented" in terms of "documented impacts to wells?" I find the comment made under Mitigation Measures in Section 1.3.4 of the Executive Summary - "Blasting performed by qualified and experienced contractors rarely results in damage to nearby wells" - is a generalized

statement. What is the statement based on? How can I take assurance that this is indeed fact?

> ***Response 1.3-38:*** *The Blasting Contractor retained to complete the blasting is required to be licensed by NY State and carry insurance sufficient to cover all claims for damage to private property. The Town Building Inspector or any professional hydrogeologist retained by the Town (and funded by the Applicant) would be the arbitrator for claims to damage to wells and would determine what is "documented".*
>
> *The statement, "Blasting performed by qualified and experienced contractors rarely results in damage to nearby wells", is based upon discussions with experienced blasting contractors and Health Department Officials. Interviews in 2006 with specialists at the Putnam County, Orange County, and Westchester County Departments of Health have indicated no recorded incidents of well failure as a result of blasting activities in those counties. This is notable in light of the fact that blasting has occurred almost daily in all three counties during the construction season.*

Comment 1.3-39 (Letter C-41 David G. Reeves, September 22, 2006): 1.3 Potential Impacts and Proposed Mitigation 1.3.8 Traffic and Transportation. The DEIS should clarify the statement "With the noted improvements, all studied intersections should perform at or better than level of service D, the minimum level of service recommended by NYDOT for signalized intersections", in regard to unsignalized intersections and intersections where the applicant is not committing to improve the intersection. Where is the correction made to the DEIS report as recommended by your consultant?

> ***Response 1.3-39:*** *The text in the accepted version of the DEIS reads: "With the installation of the road and intersection improvements identified in section 4.8.4, all studied signalized intersections should operate at or better than level of service D, the minimum level of service recommended by NYSDOT for signalized intersections.*
>
> *With the noted improvements, all studied unsignalized intersection are anticipated to perform at level of service D or better with the exception of Longfellow Drive/NYS Route 311 intersection, which should perform at level of service E. A reduction in this aniticipated delay at this intersection is expected as traffic diverts to an adjoining intersection (intersection of Terry Hill Road and NYS Route 311) which is to be signalized."*
>
> *Unsignalized intersections have a different standard of delay than signalized intersections.*

Comment 1.4-1 (Letter C-31, Kathleen McManus, September 25, 2006): Under the No-Build Alternative, the DEIS states that such a scenario would not support the Putnam County Draft Master Plan ("Vision 2010") "since it would not provide residents the opportunities to live and work locally." A retail project such as the proposed project does not provide such opportunities as well. Retail jobs are not known for being high-wage jobs and have a high turnover of personnel. "The Putnam Paradox" is really the misconception that retail development is the "cure-all" for tax relief when, in fact, our focus should be on bringing in firms and businesses that can offer sustainable jobs (i.e. The Mount Kisco Medical Group facility on Route 312). People spend their discretionary income where they work. If they can work in Putnam County, they can spend their money here. We don't need 24-hour, open-all-night retail to be the quick-fix for this void.

Response 1.4-1: *The Applicant would like to note that while many people shop for certain goods in close proximity to their jobs, many purchases are made on weekends at retailers close to their residence. Offering additional retail opportunities in close proximity to resident's homes will reduce the vehicle miles traveled to make those weekend purchases.*

Costs of community services related to the project are described in DEIS Chapters 3.0 and 4.11. The project is expected to result in a net fiscal benefit, including substantial school tax revenues without incurring significant costs to the School District or the Towns of Kent and Patterson.

The DEIS includes a fiscal impact analysis and evaluation of anticipated costs of municipal services necessary to serve the proposed project. Additional demands on municipal services are expected to be offset by projected tax revenues.

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Figure 1.3-1: 1962 Aerial Photograph of Project Site
Patterson Crossing Retail Center
Town of Patterson and Town of Kent,
Putnam County, New York
Source: EDR
Approx. Scale: 1" = 600'

File 04031 10/02/05
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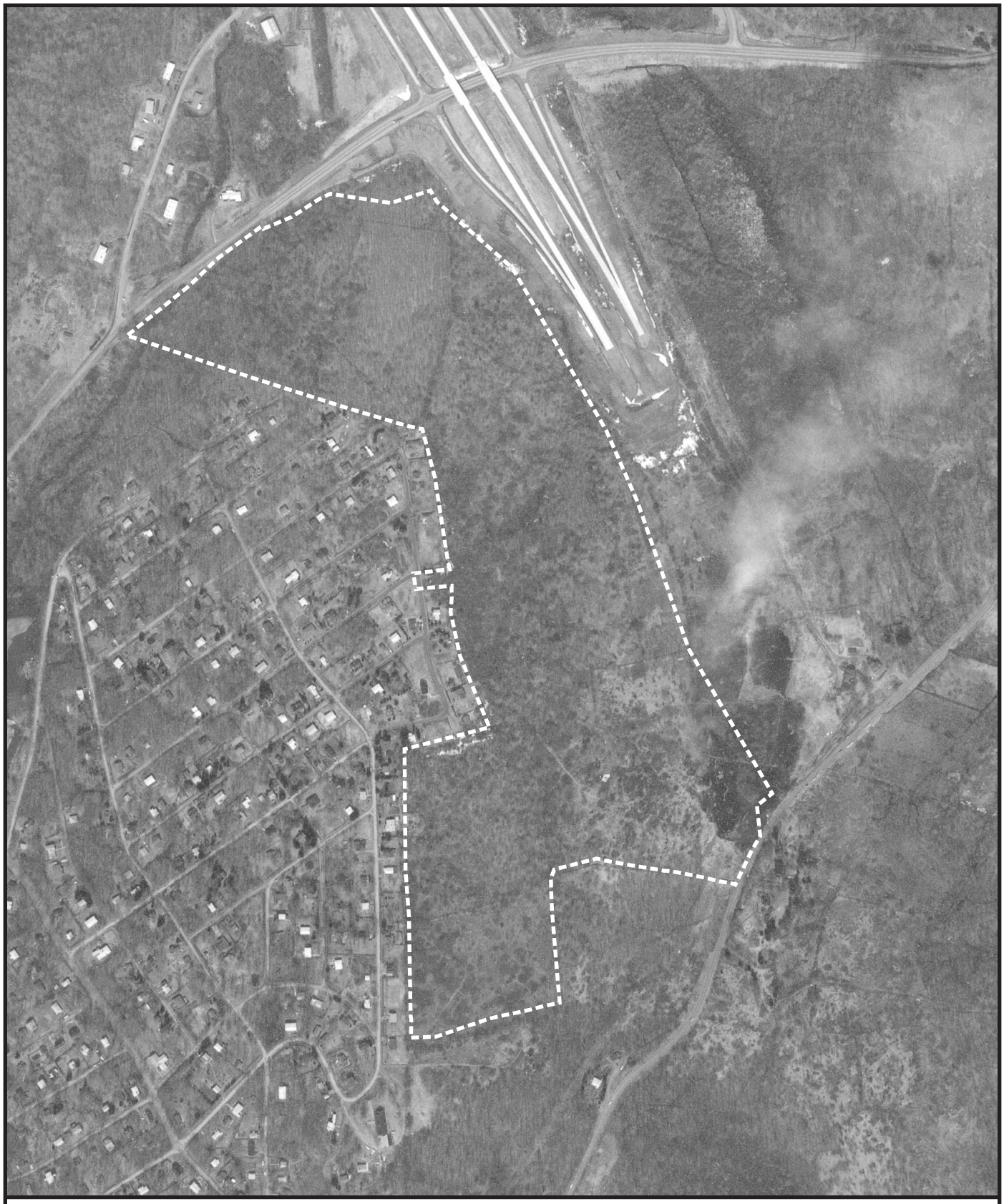

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Figure 1.3-2: 1969 Aerial Photograph of Project Site
Patterson Crossing Retail Center
Town of Patterson and Town of Kent,
Putnam County, New York
Source: EDR
Approx. Scale: 1" = 600'

File 04031 10/02/05
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Figure 1.3-3: 2004 Aerial Photograph of Project Site
Patterson Crossing Retail Center
Town of Patterson and Town of Kent,
Putnam County, New York
Source: NYS GIS Clearinghouse, 2004 Aerial
Scale: 1 inch = 560 feet

File 04031 07/17/07

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Notes:

1. See parking and loading notes below.
2. The required number of parking spaces without applying specific user parking requirements is 2,055 spaces. The applicant has requested that the Patterson Planning Board reduce the number of required parking spaces in accordance with Section 154-73 of the town of Patterson Zoning Code.

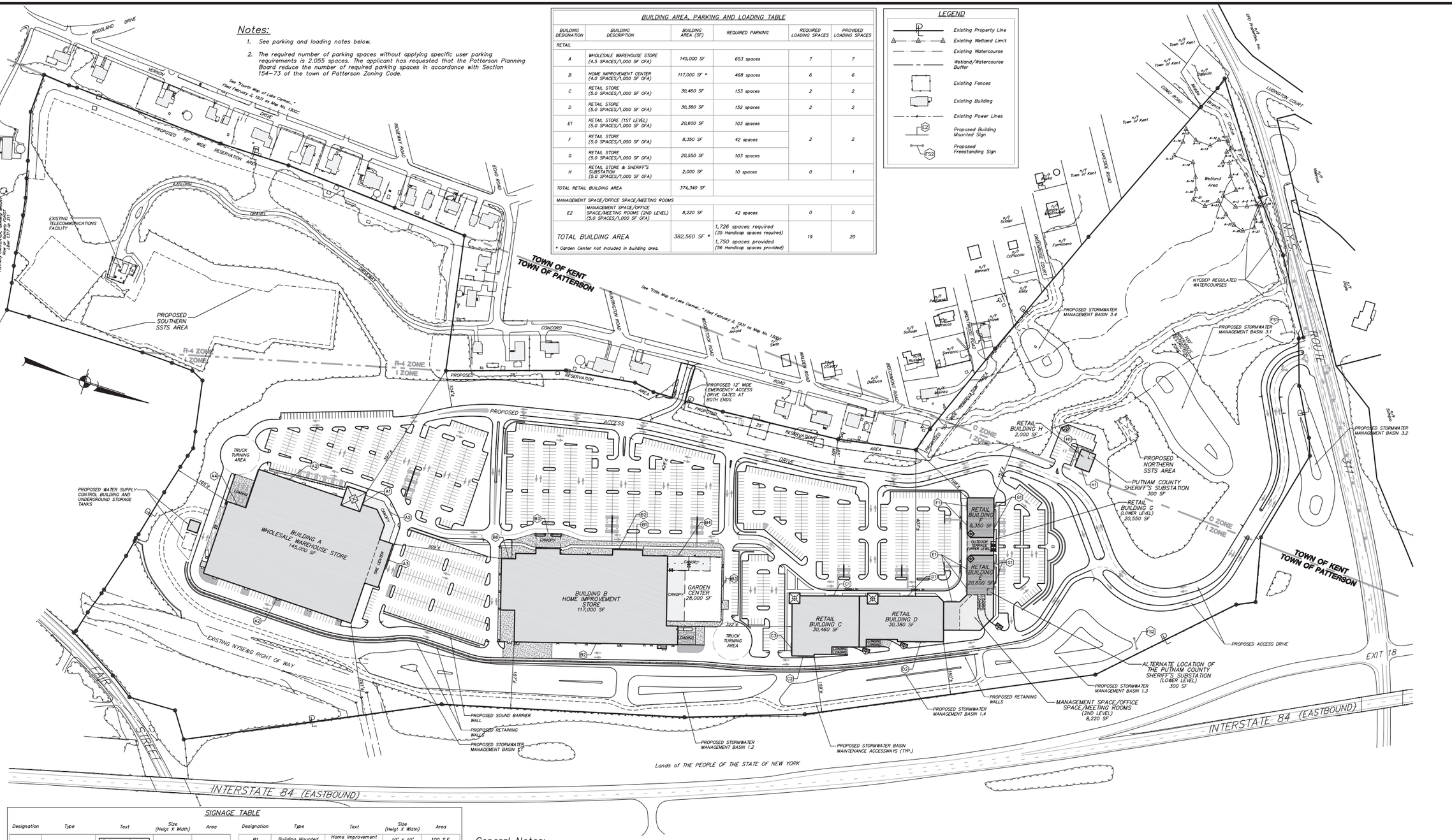
BUILDING AREA, PARKING AND LOADING TABLE

BUILDING DESIGNATION	BUILDING DESCRIPTION	BUILDING AREA (SF)	REQUIRED PARKING	REQUIRED LOADING SPACES	PROVIDED LOADING SPACES
RETAIL					
A	WHOLESALE WAREHOUSE STORE (4.5 SPACES/1,000 SF GFA)	145,000 SF	653 spaces	7	7
B	HOME IMPROVEMENT CENTER (4.0 SPACES/1,000 SF GFA)	117,000 SF *	468 spaces	6	6
C	RETAIL STORE (5.0 SPACES/1,000 SF GFA)	30,460 SF	153 spaces	2	2
D	RETAIL STORE (5.0 SPACES/1,000 SF GFA)	30,380 SF	152 spaces	2	2
E1	RETAIL STORE (1ST LEVEL) (5.0 SPACES/1,000 SF GFA)	20,600 SF	103 spaces	2	2
F	RETAIL STORE (5.0 SPACES/1,000 SF GFA)	8,350 SF	42 spaces		
G	RETAIL STORE (5.0 SPACES/1,000 SF GFA)	20,550 SF	103 spaces		
H	RETAIL STORE & SHERIFF'S SUBSTATION (5.0 SPACES/1,000 SF GFA)	2,000 SF	10 spaces	0	1
TOTAL RETAIL BUILDING AREA		374,340 SF			
MANAGEMENT SPACE/OFFICE SPACE/MEETING ROOMS					
E2	MANAGEMENT SPACE/OFFICE SPACE/MEETING ROOMS (2ND LEVEL) (5.0 SPACES/1,000 SF GFA)	8,220 SF	42 spaces	0	0
TOTAL BUILDING AREA		382,560 SF *	1,726 spaces required (35 Handicap spaces required) 1,750 spaces provided (56 Handicap spaces provided)	19	20

* Garden Center not included in building area.

LEGEND

- Existing Property Line
- Existing Wetland Limit
- Existing Watercourse
- Wetland/Watercourse Buffer
- Existing Fences
- Existing Building
- Existing Power Lines
- Proposed Building Mounted Sign (E2)
- Proposed Freestanding Sign (FS2)



SIGNAGE TABLE

Designation	Type	Text	Size (Height X Width)	Area
FS1	Free Standing (Town of Kent)	Patterson Crossing Home Improvement Center / Wholesale Warehouse Building C Store / Building D Store Building E Store / Building F Store Building G Store / Building H Store	16' X 20' (Each Side)	320 S.F. (Each Side)
FS2	Free Standing (Town of Patterson)	Patterson Crossing Home Improvement Center / Wholesale Warehouse Building C Store / Building D Store Building E Store / Building F Store Building G Store / Building H Store	20' X 24' (Each Side)	480 S.F. (Each Side)
A1	Building Mounted	Wholesale Warehouse	10' X 10'	100 S.F.
A2	Building Mounted	Wholesale Warehouse	4' X 50'	200 S.F.
A3	Building Mounted	Tire Installation	2' X 25'	50 S.F.
A4	Building Mounted	Receiving	2' X 14'	28 S.F.
B1	Building Mounted	Home Improvement Center	10' X 10'	100 S.F.
B2	Building Mounted	Home Improvement Center	4' X 50'	200 S.F.
B3	Building Mounted	Home Improvement Center	3' X 33'	100 S.F.
B4	Building Mounted	Garden Center	3' X 33'	100 S.F.
B5	Building Mounted	Tool Rental	2' X 14'	28 S.F.
C1	Building Mounted	Building C Store	5' X 30'	150 S.F.
C2	Building Mounted	Building C Store	5' X 30'	150 S.F.
C3	Building Mounted	Building C Store	5' X 30'	150 S.F.
D1	Building Mounted	Building D Store	5' X 30'	150 S.F.
D2	Building Mounted	Building D Store	5' X 30'	150 S.F.
E1	Building Mounted	Building E Store	3' X 20'	60 S.F.
F1	Building Mounted	Building F Store	3' X 20'	60 S.F.
G1	Building Mounted	Building G Store	3' X 20'	60 S.F.
H1	Building Mounted	Retail Store	3' X 20'	60 S.F.

General Notes:

1. Property boundary shown hereon based on survey by Insite Engineering, Surveying and Landscape Architecture, P.C.
2. Existing conditions and topography shown hereon taken from survey entitled "Topographic Map of Property prepared for Hudson Valley Reality Corporation" prepared by Badey & Watson Surveying and Engineering, P.C. dated May 14, 2001.
3. The wetland flagging shown hereon was field delineated by Tim Miller Associates, Inc. on xxx xx, xxxx, and survey located by Insite Engineering, Surveying and Landscape Architecture, P.C. on January 28, 2008.
4. D.E.P. Watercourses shown hereon were delineated in the field by the N.Y.C.D.E.P. and survey located by Badey & Watson Surveying and Engineering, P.C..

Parking & Loading Notes:

1. Required parking for retail uses in the Town of Kent is based on 1 parking space for each 200 square foot of building area.
2. The Town of Kent requires one (1) loading space at the first 5,000 SF of building area and an additional loading space at each 20,000 SF interval for retial uses.

GRAPHIC SCALE
100 0 50 100 200 400
(IN FEET)

Figure 1.3-4: Patterson Crossing Retail Center Site Plan

Patterson Crossing Retail Center
Town of Patterson and Town of Kent,
Putnam County, New York
Source: Insite Engineering, Surveying & Landscape Architecture, P.C., 2/04/08
Scale : As Shown

File 04031 3/25/08
JS/04031/FEIS Graphics

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2.0 PROJECT DESCRIPTION COMMENTS AND RESPONSES

Comment 2.0-1 (Letter A-4 Neil A. Wilson, AICP, LRC Planning Services, September 21, 2006): Page 2-5, the report references the 1989 Master Plan for the Town of Kent. The Town Master Plan in fact was adopted in May 1990. Is this a typographical error or was the analysis in this section done with an outdated draft?

> ***Response 2.0-1:*** *The conformance analysis in the DEIS for the proposed Patterson Crossing Retail Center development was prepared using the Town-provided 1989 Town of Kent Master Plan when in fact the most recent Town of Kent Master Plan was adopted in May, 1990.*
>
> *For the purpose of this FEIS, a conformance analysis of the Proposed Action with the Town's Master Plan was conducted using the adopted 1990 version. The project's conformance and consistency with the 1990 Master Plan is discussed in the Introduction of this FEIS.*
>
> *The Applicant acknowledges that updates to the Town of Kent Master Plan have been considered by the Town. These changes are presently under review and have not been adopted.*

Comment 2.0-2 (Letter A-4 Neil A. Wilson, AICP, LRC Planning Services, September 21, 2006): Page 2-6, the analysis of consistency with the Town of Kent Master Plan completely ignores the policy to "Provide for additional community oriented shopping facilities within the Town, while relying on surrounding areas for regional shopping needs". A regional shopping Mall such as the one proposed is inconsistent with the Master Plan policies.

> ***Response 2.0-2:*** *A regional shopping facility is not being proposed in Kent. In this regard, the surrounding area (Patterson) is providing the regional shopping opportunity, not Kent.*
>
> *The Land Use Plan included in the 1990 Kent Master Plan recommends commercial uses for the portion of the project site located in the Town of Kent. Patterson Crossing, as proposed, is a retail center, not a mall. The proposed development includes two retail anchor stores as well as several smaller community orientated retailers. Additionally, the modified Patterson Crossing Retail Center project now proposes one (1) 2,000 square foot building within the Town of Kent. The proposed building would include 1,700 square feet of retail space and 300 square feet for the Putnam County Sheriff's Department to utilize as a substation. In addition, the Proposed Action incorporates proposed retail center management, office and meeting space in the Town of Patterson portion of the development.*
>
> *The meeting space would be managed by the retail center management company for its use but could also be utilized by the community for meetings or other functions or made available to groups or organizations for similar uses.*

Comment 2.0-3 (Letter A-4 Neil A. Wilson, AICP, LRC Planning Services, September 21, 2006): Page 2-6, the document correctly identifies that the Master Plan envisions medium density residential uses for the site but does not provide any analysis.

Response 2.0-3: *The Kent Master Plan adopted in 1990 does not envision medium density residential for the project site but designates it and the surrounding area on both sides of NYS Route 311 as Commercial. Please refer to Response 2.0-1.*

The Applicant further notes that the portion of the project site located in the Town of Kent is zoned Commercial and the proposed retail use is a principal use permitted as-of-right in the Commercial District.

The Town of Kent has recently considered a zoning amendment that would target the Kent portion of the Patterson Crossing Retail Center site. This amendment would change the current commercial zoning designation to Residential (R-10). Pursuant to the State of New York General Municipal Law Section 239-m, the proposed changes to the Town's zoning ordinance were referred to the Putnam County Department of Planning, Development & Public Transportation (County Planning) for review. The Commissioner of County Planning has sent three letters in the past year (Appendix A, Correspondence) to the Town of Kent, concluding that this proposed zoning change would be "inappropriate" and result in "adverse countywide...and municipal implications", over this proposed zoning change. The County believes that residential zoning for this portion of the Patterson Crossing Retail Center site would be inconsistent with existing land uses and existing and proposed zoning along the corridor. Moreover, the Patterson Crossing Retail Center proposal is currently under review by both Towns of Patterson and Kent, and has been under review since at least early 2004.

Kent's proposed zoning change for the portion of the project site located in their Town from retail to residential would also be inconsistent with Putnam County's goals for economic growth. There are no other large tracts of vacant land proximate to Interstate 84 that will permit this scale of commercial development.

It is the Applicant's view that changing the zoning of a property on a municipal boundary line next to a State Highway and a Federal Interstate from commercial to R-10 does not represent sound regional planning principles, particularly when lands to the rear are targeted for commercial use. Moreover, lands in Kent across NYS Route 311 to the north are also zoned commercial.

The land proposed for R-10 zoning is not well suited to small residential lots with individual wells and septic systems. The R-10 zoning district would appear to be in direct conflict with the Town of Patterson's targeted use of the larger portion of the site for commercial economic development.

It is noted that subsequent to the above noted potential change to the Town zoning map, Kent released a draft Comprehensive Plan dated March 2008 reflecting input from the Comprehensive Plan Committee and Kent's Planning Consultants. The "Zoning Option - Southern Kent" and "Future Land Use" figures contained in this document depict the portion of the project site in the Town of Kent remaining as commercial. While this indicates that the Comprehensive Plan Committee and Town's Planning Consultants agree that the subject property should remain commercial, this draft has not yet been adopted by the Town, and remains subject to change by the Kent Town Board.

Comment 2.0-4 (Letter A-4 Neil A. Wilson, AICP, LRC Planning Services, September 21, 2006): Page 2-8, the analysis of compliance with the Town of Kent Zoning Law is incorrect since it does not consider the amendments adopted in July 2005 that set forth specific design criteria for commercial property. In particular, the July 2005 amendment includes both general and specific site design and architectural criteria and gives the Planning Board authority to analyze the architectural design of commercial buildings. The document must be revised to address the site design and architectural standards of the amended code.

Response 2.0-4: *The July 2005 revisions in the Town of Kent Zoning Code addressing specific site design and architectural review are contained in Chapter 77-60 Town of Kent Zoning Code (Site plan approvals). A full assessment of the projects compliance with the Town of Kent's existing Zoning Code is contained in Appendix P of this FEIS. Potential adverse impacts that could result from noncompliance with the noted provisions of the code are associated with visual resources.*

The site development plan and architectural design, for the 2,000 square foot building (Building H) proposed in the Town of Kent, which includes retail space (1,700 square feet) and a Putnam County Sheriff's substation (300 square feet), as presented in the Kent Site Plan Application (Figure A-01 in Appendix Q) has been designed in compliance with the Kent Zoning Code. The Applicant acknowledges that the design will be subject to the Town of Kent Planning Board review.

Additionally, as a result of this and other comments received on the plan presented in the DEIS, the Applicant and its consultants have expended a substantial amount of effort to reduce the scale of the project, reconfigure the buildings and modify the site plan to incorporate architectural details and gateway features that are designed to improve the visual character of the retail center in terms of its position in the Lake Carmel/Patterson community.

A presentation assembled by the Applicant's architectural consultant, Street-Works LLC, which is reproduced in FEIS Appendix M, illustrates the improvements and features being considered in the Patterson Crossing Retail Center plan. All are conceptual in nature and provide a general framework for the architectural design of the final project.

The proposed plan enhancements incorporate a number of design concepts, generally encompassing the following key points: enhancement of the image of the gateway to Kent and Patterson as permitted along NYS Route 311; attractive entry to the project site, with a public outdoor plaza as a focal point; well designed pedestrian connections to all stores; sensitive lighting and signage designs; and a rural architectural style throughout the project. These aesthetic features of the proposed project are illustrated in Appendix M.[1]

[1] It is noted that the Patterson Crossing Retail Center Plan Enhancements illustrated in Appendix M are conceptual designs and further project-specific architectural details will be developed as part of the final plans for the project.

Comment 2.0-5 (Letter A-4 Neil A. Wilson, AICP, LRC Planning Services, September 21, 2006): Page 2-10, the description of surrounding land uses implies that the ratio of residential to nonresidential land uses in proximity to the proposed site are roughly equal. The analysis should acknowledge that the predominant land use is residential and that the scale of residential development is significant. Lands to west of the proposed site are densely populated and a consistency analysis is required. The document should be revised to include a table that breaks down the residential and nonresidential properties by acreage.

Response 2.0-5: *DEIS Figure 2-3, Existing Land Use, accurately depicts existing residential and nonresidential land uses in the vicinity of the existing site, including the densely populated lands to the west of the property. As discussed in the DEIS, and shown on DEIS Figure 2-3, a mix of residential, commercial, office, transportation, and community facility uses, as well as vacant land, are present in proximity to the site.*

Abutting the site to the west is a grid of residential streets generally characterized by smaller single family residences constructed in the mid-to-late 20th century. The site is adjacent to the rear yards of 11 single family homes that front on Concord Road, located in the Town of Patterson. Also abutting the site to the west, in the Town of Kent, are 12 single family homes that have frontage on Vernon Drive. The triangular-shaped Town of Kent portion of the site abuts several single family homes that are located off the cul-de-sac of Brentwood Road. Brentwood Road terminates at the western boundary of the project site, as do other east-west running residential streets including Greenridge Court, Lakeside Road and Como Road.

Lake Carmel, which is surrounded by single family homes, is located between one quarter and one half mile to the west of the project site. The Hamlet of Lake Carmel, with its limited range of retail and service uses, is centered around NYS Route 52 in the Town of Kent, less than a mile to the west. Within one half mile of the site to the north and west are the Hamlets of Maynard Corners and Kent Corners, respectively. The municipal complex of the Town of Kent, including Town Hall, police station and library, and the recently constructed Kent Fire House, are located to the north on NYS Route 52. A neighborhood of single family homes is located north of Lake Carmel on the north side of NYS Route 311.

The Lake Carmel business district contains a cluster of commercial establishments on its eastern end, including a pharmacy, a bank, auto body shops, a used car dealership, medical offices and other retail uses spread out along NYS Route 52. Further to the west in the Town of Carmel is Carmel Plaza, a shopping center anchored by a ShopRite supermarket and containing approximately one dozen retail uses. Downtown Carmel contains office uses, restaurants, shops and the Putnam County Government Center (courthouse and offices).

Land uses proposed as part of the Patterson Crossing Retail Center project are consistent with the variety of mixed land uses along the commercial NYS Route 311 corridor. The majority of the site is designated for industrial and commercial use. Its location at the crossroads of Interstate 84 and NYS Route 311, which is a major east-west thoroughfare in Putnam County, make the site appropriate for the size and type of development proposed. As indicated through the project site's current zoning and in local planing documents, the project is consistent with plans and policies of local municipalities. A similar example, in terms of use and location, is the Highlands

Retail Center, located south of the project site at the crossroads of Interstate 84 and NYS Route 312.

The acreage of residential and nonresidential properties in the vicinity of the Patterson Crossing Retail Center project site should have no bearing on the proposed development which is consistent with the zoning of both Kent and Patterson with the exception of signage. However, the area of residentially versus non-commercially zoned property within a half mile of the project site and including the project site was calculated based on DEIS Figure 2-5. The total area of the residentially zoned properties in the noted area is approximately 131,716 acres and the area of non-commercially zoned properties is roughly 66,525 acres.

Comment 2.0-6 (Letter A-4 Neil A. Wilson, AICP, LRC Planning Services, September 21, 2006): Page 2-13, the description of the proposed site layout and building design does not consider the architectural standards as set forth in July 2005 amendments to the Town of Kent Zoning Law. In addition, the Town Master Plan calls for neighborhood scale commercial development that can be integrated into existing residential neighborhoods, while the proposed development is referred to repeatedly in the DEIS as a regional retail center. The inconsistencies between the types and scale of development deemed desirable for the Town of Kent and regional retail shopping mall almost one-half million square feet should be explained.

Response 2.0-6: *Development of the site, which lies in the Towns of Patterson and Kent, is guided, in part, by the applicable zoning laws of the Towns and the Towns' Master Plans. As such, the proposed development has been designed in accordance with those regulations and Master Plans.*

The proposed development in the Town of Kent includes one 2,000 square foot building (Building H), which will house retail space (1,700 square feet) and a Putnam County Sheriff's substation (300 square feet). Refer to FEIS Figure 1.3-4 and the attached Plan Set. That building will be designed to comply with the July 2005 amendments Section W (Architectural Review) of Chapter 77-60 (Approval of Site Plans) of the Town of Kent Zoning Code. The details of the building design is conceptual at this time, however the building design will:

- *Recognize compatible building forms indigenous to the community and surrounding neighborhood and shall consider the historic character of the town;*
- *Utilize materials with "good architectural character" that are "selected for harmony with traditional building materials."*
- *Screen mechanical equipment such as air conditioners and other utility hardware from public view.*

Refer to Responses 2.0-2 and 2.0-4 and Appendix M for a presentation of the design and architectural concepts under consideration for the retail center.

Comment 2.0-7 (Letter A-4 Neil A. Wilson, AICP, LRC Planning Services, September 21, 2006): Page 2-15, the description of parking and loading does not consider the standards of the July 2005 amendments to the Town of Kent Zoning Law.

Response 2.0-7: *Section Q of the July 2005 Chapter 77 of the Town of Kent Zoning Code, (Parking and Loading), generally prohibits the location of parking within front, side, and rear setbacks. The section also indicates that the Planning Board may require additional parking spaces beyond those noted in Article XI of Chapter 77.*

The Applicant notes that pursuant to Chapter 77 of the Kent Zoning Code, no parking is proposed within the setbacks and that the number of parking spaces is compliant with the code.

Comment 2.0-8 (Letter A-4 Neil A. Wilson, AICP, LRC Planning Services, September 21, 2006): Page 2-16, the description of access does not consider the standards of the July 2005 amendments to the Town of Kent Zoning Law.

Response 2.0-8: *As noted, the Proposed Action has been modified from the plan presented in the Patterson Crossing Retail Center DEIS in response to comments raised and concerns expressed during the review of the DEIS and to further mitigate the impacts associated with the project. This modification, which included a reduction in the total square footage of the project, also resulted in revised design of the proposed road access, which is a simplified version of the road access presented in the DEIS.*

The July 2005 amendments to the Town of Kent Zoning Code (Chapter 77) were reviewed to ensure compliance of the proposed development's access road within the Town of Kent and as proposed, the access road, is in compliance with these amendments.

The unobstructed site access road, of which approximately 600 to 700 feet are located in the Town of Kent, provides two lanes out of the site north of the Kent/Patterson Town Line and two lanes into the site south of that line. No parking is proposed along the site access road.

The total cross sectional pavement width of the access road has been established at 39 feet which is greater than proposed in the DEIS (30 feet). A median is provided along portions of the road to allow passing of disabled vehicles. A slope of two (2) percent is proposed for the first 50 feet of the access road, which is significantly less than the maximum six (6) percent permitted by the Town of Kent Code. The overall slope of the road does not exceed eight (8) percent at any point. This is less than the maximum ten (10) percent permitted by the Town Code.

The parking areas of nearly all the stores are interconnected by the road along the front of the major buildings permitting internal circulation without use of the main access road. Proposed parking areas do not exceed the maximum permitted five (5) percent slope.

The access road, as proposed, is in compliance with the 2005 amendments to the Town of Kent Code and is designed to work with the existing contours of the land within the Towns of Kent and Patterson.

Comment 2.0-9 (Letter A-4 Neil A. Wilson, AICP, LRC Planning Services, September 21, 2006): Page 2-17, the description of landscaping does not consider the standards of the July 2005 amendments to the Town of Kent Zoning Law.

Response 2.0-9: *The July 2005 amendments to the Town of Kent Zoning Law concerning landscaping are set forth in Section M of Chapter 77 of the code (Landscaping, Buffering and Site Treatment). The portion of the Patterson Crossing Retail Center project located in the Town of Kent will be landscaped in compliance with the noted code amendments as part of the site plan approval process. Refer to Drawings SP-2.1, SP-2.2 and SP-2.3 of the Plan Set attached to this FEIS for details.*

Additionally, the Street-Works presentation in Appendix M, illustrates the improvements and features being considered in the Patterson Crossing Retail Center plan. In particular, the Applicant proposes a design concept that reflects the historically rural architecture and pastoral landscape that exists in Putnam County. This design concept includes use of stone walls, fences, and tree plantings along the local circulation paths, the frontage on NYS Route 311 where permitted and the project entry drive.

Comment 2.0-10 (Letter A-4 Neil A. Wilson, AICP, LRC Planning Services, September 21, 2006): Page 2-18, the estimated daily water usage appears low especially in light of the description of the "wholesale warehouse store" (see page 2-14) as having a bakery and a food court.

Response 2.0-10: *The estimate of daily water use has been revised based upon actual water usage from local retailers with uses similar to those proposed for the Patterson Crossing Retail Center development (see updated Water System Report, Appendix G). The Water System Report evaluates water usage for the specific uses and square footage proposed in the current Site Plan. Water design flows have been revised to 15,000 gallons per day (gpd).*

As stated in the DEIS Chapter 4.4, "[t]he reference design standards for water and wastewater flows provide general design flows covering a broad range of usage categories. The New York State Department of Conservation (NYSDEC) publication "Design Standards for Wastewater Treatment Works, 1988" provides two alternatives for establishing design flows: hydraulic loading rates tables or water usage data. In either case a daily design flow rate must be calculated. The daily design flow rate is a conservatively high estimate of daily flow used by the engineer in the design of the water and sewer infrastructure.

In order to establish design flows, it is acceptable to use actual flows multiplied by a factor of safety of 1.5, or design flows based on published hydraulic loading rates. The design flows for the subject project have been calculated based upon actual water usage data obtained from regional retail stores similar to the proposed Patterson Crossing uses (See updated Water System Report, Appendix G and Wastewater Report, Appendix H) including BJ's, Sam's Club, Lowes, Home Depot, Village Paint, Radio Shack, Rockaway Bedding, Pier 1 Imports, CVS, Rite Aid, Payhalf, Michael's, AC Moore, Linens N Things, Bed Bath & Beyond, Toys R Us, Best Buy, Dick's Sporting Goods, Kohls and Gander Mountain.

Recognizing the fact that the project will be serviced by a subsurface sewage treatment system (SSTS) with an engineered available capacity, project wastewater flows will be limited to the 11,400 gpd design flow (11,000 gpd southern SSTS and 400 gpd northern SSTS). The system could be increased to 2,000 to 3,000 gpd to accommodate a building up to approximately 15,000 square feet if the Applicant chose to increase the building size.

The wastewater design flow (11,400 gpd) differs from the water design flow (15,000 gpd) due to water loss related to irrigation at the Home Improvement garden center. The difference also reflects a small amount of water (100 gpd) taken off-site from the Coffee Shop through coffee and soft drink sales (see Wastewater Report, Appendix H).

Future retail users must have wastewater flows which fit into the flow projections for the project. In order to assure the project wastewater design flow is not exceeded the Applicant would agree to appropriate controls to assure each user's wastewater flows fit the project's design flows. One such control would require each specific user present the Town Building Department with a wastewater design flow at the time they apply for their building permit, or with any change in occupancy. This will allow for the monitoring of design flow to assure that all users wastewater generation falls within the system design capacity. It should be noted that actual water and wastewater flow metering/monitoring will be required as part of the water and sewer permitting with the PCDOH, NYCDEP and NYSDEC. This metering/monitoring will provide an assurance that the actual project flows do not exceed the system design capacity.

Comment 2.0-11 (Letter A-4 Neil A. Wilson, AICP, LRC Planning Services, September 21, 2006): Page 2-19, the description of lighting does not consider the standards of the July 2005 amendments to the Town of Kent Zoning Law.

Response 2.0-11: *The July 2005 amendments to the Town of Kent Zoning Law concerning lighting are set forth in Section N of Chapter 77 of the code (Lighting). These amendments specify, in part, that:*

- *Exterior lighting shall enhance the building design and the adjoining landscape;*
- *The number of light standards and the intensity of lighting shall be appropriate to illuminate the location for safety without glare to adjoining properties, as determined by the Planning Board;*
- *Freestanding lights shall be appropriate to the design of structures and shall not exceed fifteen feet in height;*
- *Illumination at the property line shall not exceed 0.2 foot candles;*
- *To ensure that site lighting does not adversely affect neighboring properties, the Building Inspector and Zoning Administrator shall have the authority to require reasonable changes to the on site lighting fixtures to reduce and minimize glare and the splaying of light at the property lines and to assure continuous compliance with Section N of the code.*

All proposed lighting for the Patterson Crossing Retail Center, shown on Drawing L-1, complies with accepted industry guidance for parking lot lighting of the Illuminating

Engineering Society of North America and conforms with to all applicable requirements of Patterson and Kent Town Codes, including the standards set forth in the July 2005 Kent code amendments. Refer to Section 4.13 Cultural Resources, Response 4.13-10 regarding the lighting proposed for the Patterson Crossing Retail Center including after hours lighting.

Comment 2.0-12 (Letter A-4 Neil A. Wilson, AICP, LRC Planning Services, September 21, 2006): Page 2-19, the description of site coverage does not include any information as to how the "open space" will remain undeveloped for the life of the project. Taking "credit" for maintaining open space (or at least not putting more impervious cover over lawn and landscaped areas) carries with it responsibility to permanently restrict development of the open space area(s) to ensure that the original plan is carried out for the duration of the project.

Response 2.0-12: *As noted in Section 2.0 of the DEIS, a 25 to 50 foot landscaped Reservation Area is proposed along the neighboring properties to the west between the existing telecommunications facility access drive on the south and Brentwood Road on the north. This reservation area would contain a privacy fence 25 to 50 feet inside the Patterson Crossing Retail Center site separating the residential properties from the site. The fence line is depicted on the Site Plan (Drawing SP-1) and Layout and Landscape Plans (Drawings SP-2.1, 2.2 and 2.3) included with this FEIS. For a cross sectional view of the fence and plantings refer to FEIS Figure 4.13-5B. The fence and plantings would be maintained in good condition by the property management company that holds the contract for the upkeep of the retail center. Funding for maintenance is accumulated from rental income or management fees paid by the commercial tenants. The Reservation Area would be restricted from future development by the Applicant through the use of an easement or restrictive covenant.*

In addition, approximately 60 percent of the site would be maintained as open space (undisturbed area in addition to area that will be revegetated) following completion of the project. These areas are depicted on the site development plans and would be restricted from development by the conditions of the Town of Patterson and Town of Kent Site Plan approvals.

Comment 2.0-13 (Letter A-4 Neil A. Wilson, AICP, LRC Planning Services, September 21, 2006): Page 2-19, the discussion of construction phasing should include greater detail regarding the responsibility of owner to comply with the SWPPP requirements and the punitive measures available to state and local officials for failure to adhere to the SWPPP requirements. In addition, construction that will last 2-2½ years means that there will be large piles of material placed on the site for long periods of time while construction takes place. The discussion in this section needs greater detail as to how loose piles of material will be protected from run-off etc.

Response 2.0-13: *The responsibility to comply with the terms and conditions of the project specific SWPPP is set forth in Part VII (Standard Permit Conditions) of the NYSDEC General Permit for Stormwater Discharges from Construction Activities (GP-0-08-001), which also discusses the punitive measures that the State may impose for violations of the permit and its conditions. NYSDEC, NYCDEP, and the Towns of Kent and Patterson have the authority to enforce their specific regulations*

applicable to the control of stormwater during and following construction. To comply with GP-0-08-001, all site operators, contractors and subcontractors engaged in implementing the Patterson Crossing Retail Center SWPPP must sign a certification statement acknowledging their responsibility to comply with all terms of the permits.

The Patterson Crossing Retail Center SWPPP satisfies the requirements for coverage under GP-0-08-001, as well as the requirements of New York City's Watershed Regulations, which incorporate NYSDEC General Permit for Stormwater Discharges from Construction Activities GP-93-06 by reference. Both general permits require that a construction phasing plan be included in the SWPPP. Stockpiling of soil on the site will comply with the Standard and Specification for Landgrading (Figure 5B.24(2)) provisions of the April 2005 New York State Standards and Specifications for Erosion and Sediment Control (Standards and Specifications). That Standard and Specification requires that soil stockpiles be "shown on the plans" and that the stockpiles will be "subject to the provisions of the Standards and Specifications." Accordingly, the plans that accompany the Patterson Crossing Retail Center SWPPP depict the locations of all proposed stockpiles and specify the appropriate erosion and sediment controls and temporary stockpile stabilization procedures.

To further avoid impacts associated with erosion and sedimentation, construction staging operations will follow site development protocols that provide for rock generated on the site to be placed, and redistributed, in areas where structural fill, subbase, riprap and crushed stone is required in any phase of construction for the development of the site. The proposed preventative measures will serve as the primary means of avoiding sedimentation of water resources during construction of the project and will effectively control erosion and significantly reduce the potential for sedimentation that results from it. As such, potential impacts on down-gradient receiving surface water resources, including the Middle Branch and East Branch Reservoirs, will be minimized to the greatest extent practical.

Comment 2.0-14 (Letter A-4 Neil A. Wilson, AICP, LRC Planning Services, September 21, 2006): Page 2-21, the discussion of truck traffic unrealistically assumes that all construction equipment will arrive and depart from Interstate 84. It is likely that construction traffic will use local roads and analysis of the likely arrival and departure routes should be presented along with an assessment of road wear and damage as a result of such traffic.

Response 2.0-14: *The vast majority of the construction equipment would be transported by truck to the project site from a construction yard or other construction site using Interstate 84 to NYS Route 311. This route would be utilized by all construction traffic traveling along Interstate 84 from north-south routes such as Interstate 684, NYS Route 22, and US Route 9.*

Construction equipment would be mobilized to the site where it would remain until such time as the individual pieces of machinery have completed their respective tasks. Local road use during the construction phase would mainly result from construction workers commuting from the local area to the project site. A portion of these commuter trips is already on the network and should not result in impacts to the roadways. Non-local or regional construction commuter traffic would utilize highways and arterials to reach the project site.

The proposed improvements to NYS Route 311 from the Interstate 84 interchange to west of the site, the route over which the vast majority of the construction traffic is expected to travel, would offset the impacts to NYS Route 311 related to construction traffic. Construction traffic would be prohibited from accessing the site directly from Fair Street or Interstate 84.

Construction equipment traffic may also come from local contractors or local construction sites. There is a quarry on NYS Route 311 to the north (see Response 4.8-150) and other local businesses and local construction sites that may be a source of, or destination for, construction equipment. Such construction traffic would arrive using NYS Route 311 and possibly US Route 6.

As noted in response 4.8-120, there are overhead bridge limitations and one lane road widths that severely limit the truck traffic north of Interstate 84 into Patterson and US Route 22. NYS Route 311 north of NYS Route 164 also has a height limitation that would affect the size of construction vehicle that could utilize this route. For such vehicles, the alternative route would be to use Interstate 84 to NYS Route 311.

Responses 4.1-1 and 4.2-3 further discuss the reductions in materials to be removed from the site which would result in a subsequent reduction in truck trips.

Local town roads serving residential development would not see heavy construction equipment traffic unless the contractor has an existing yard or is already engaged in construction on that local road. In both cases those heavy construction vehicles are destined to use local roads whether or not the Patterson Crossing Retail Center is built.

There may be some construction vehicle traffic on Concord Road from the site during construction of the emergency access, however, due to the configuration of the road network in this area, the vast majority of vehicles and all large equipment would utilize the main access road. Any vehicles accessing Concord Road would return to the site using the emergency access and exit using the primary access to NYS Route 311. Construction vehicles would be prohibited from directly entering or exiting the site from Concord Road or nearby local roads except as directed by emergency services personnel.

The construction contractor would have responsibility for correcting any road wear or damage on local roads that could be shown to have resulted from construction traffic traveling to and from the site. NYS Route 311 between the site access and Interstate 84 will be improved as part of the traffic mitigation plan.

Comment 2.0-15 (Letter A-4 Neil A. Wilson, AICP, LRC Planning Services, September 21, 2006): Page 2-23, the hours of operation for construction should include a commitment that there will be no construction activity on any local, state, or national holiday.

Response 2.0-15: *Construction activities will be carried out in accordance with the applicable Town of Kent and Town of Patterson Codes. The following is a list of all holidays, during which construction, including blasting, mechanical rock removal and rock processing would be prohibited.*

- *New Year's Day*
- *Dr. Martin Luther King Jr. Birthday*
- *President's Day*
- *Easter Day*
- *Memorial Day*
- *Independence Day*
- *Labor Day*
- *Yom Kippur*
- *Columbus Day*
- *Election Day*
- *Veteran's Day*
- *Thanksgiving Day*
- *Christmas Day*

To further offset potnetial impacts related to site preparation work, a berm will be constructed surrounding the area(s) where mechanical rock removal and/or processing is required.

Comment 2.0-16 (Letter A-4 Neil A. Wilson, AICP, LRC Planning Services, September 21, 2006): Page 2-24, see our prior comments regarding compliance with the new site plan standards for lighting. In addition, the discussion of reduction of light intensity by 50% between the hours of 11:00 pm to 6:00 am should commit the applicant to implementing such a plan, and must not be presented as a plan that is merely being "considered". Over lit commercial parking areas represent a major intrusion into the quiet enjoyment of nearby residences and the applicant must commit to performing all that is necessary to mitigate such problems.

Response 2.0-16: *See Responses 2.0-11 above and 4.13-10 in Section 4.13* Cultural Resources.

Comment 2.0-17 (Letter A-4 Neil A. Wilson, AICP, LRC Planning Services, September 21, 2006): Page 2-25, the list of permits must be amended to include a wetland disturbance permit from the Town of Kent Planning Board.

Response 2.0-17: *There are no wetlands or watercourses on the Kent portion of the project site as defined by the Town of Kent Code. The Town Code (Chapter 39A-4) defines a watercourse as "(a)ny body of water flowing in an identifiable channel or course at least nine (9) months of the year." The existing drainage channel from Concord Road does not meet this definition. FEIS Figure 4.5-5 reveals the absence of flow in the channel during January 2008. The lack of base flow in this channel has been observed by several of the Applicant's consultants throughout the year.*

Wetlands are defined in 39A-4 as areas that "have a contiguous area of at least forty thousand (40,000) square feet..." The small wetland on the Kent portion of the site is less than 40,000 square feet and is therefore not a Town regulated wetland. The Applicant, however, remains sensitive to the environmental features of the site. The proposed stormwater basins originally sited within the drainage area have been relocated to points outside of any potentially regulated area. See the plan set

included with this FEIS for a depiction of the proposed location of the stormwater basins.

Comment 2.0-18 (Letter A-6 Marilyn Shanahan, Chief, SEQRA Coordination Section, September 25, 2006): The DEIS suggest that the amount of parking proposed is less than what would otherwise be required by town code (page 2-15). However, Table 2-3 and Figure SP-1 indicate that the project has more spaces than would otherwise be required by town code. If the applicant is proposing more parking than is required, adequate mitigation such as muti-level parking or overflow parking on pervious materials (e.g. gravel), should be included.

Response 2.0-18: *The number of parking spaces proposed is five more (0.3 percent) than the total required under the Town code (1,726 spaces). All stormwater from the parking areas will be treated prior to discharge offsite. A 0.3 percent increase in parking does not constitute a significant adverse impact. Multilevel parking is not planned. The plans also include low impact design elements including pervious parking spaces in certain areas, where appropriate to reduce the amount of stormwater running off of the proposed parking areas.*

The Patterson Planning Board has the authority to vary the amount of required parking.

Comment 2.0-19 (Letter A-8 Michael W. Soyka, P.E., September 8, 2006): While not directly related to the SWPPP, an easement from New York State is required to perform the excavation necessary to construct the main entry road. I saw no references in either the Executive Summary or the text that New York State has been approached and is willing to grant the necessary easements. Failure to obtain this easement will result in a different design at the entrance road.

Response 2.0-19: *The Applicant and the Project Engineer have met with the NYSDOT regarding site access, location, and traffic impacts. The NYSDOT is listed as an Involved Agency and is reviewing all pertinent aspects of the proposed development during the SEQRA process and the work permit process. Any necessary easements will be secured from the State prior to implementing the work permit.*

Comment 2.1-1 (Letter #C4, Elena Bao, 09/25/06): "Single family residences" doesn't cut it in terms of conveying what lies to the west of the project site. An accurate description of what lies to the west of this site is an extraordinarily densely populated rural residential lake community and the Lake Carmel Park District. This DEIS must absolutely identify the number of households and residents living within 1-mile, 2-mile, and 3-mile radius of the project site so that the population density of the surrounding community from a population perspective. This is extremely inappropriate given the close proximity of the Patterson Crossing project site to our residential community. The Applicant must correct this glaring omission in the DEIS by quantifying the residential households and population data as indicated above.

Response 2.1-1: *Refer to Response 2.0-5.*

Comment 2.1-2 (Letter #C4, Elena Bao, 09/25/06): The Applicant uses terms like "open space" and "reservation area" throughout the DEIS. Each time this term is in used in the DEIS, the Applicant must define what he means. If these terms indicate there will be legally recognized "conservation easements" created on the Patterson Crossing project site then it needs to state so specifically.

Also, the Applicant should concede here that the reason for 1/3 of the site remaining open space is because the site topography won't permit him to "build out" this 1/3. By failing to outline this fact here, the Applicant is giving the false impression that the site plan design was intended to allow for a third open space, which is false. The reason why open space is integrated into this project plan is because the Applicant is unable to build out the land. So let's not pretend that the Applicant is doing a service to the community by keeping "open space" on the property.

> ***Response 2.1-2:*** *The Applicant has modified the Proposed Action to reduce overall impacts. The total area of open space under the modified plan is 27.3 acres. Areas on the project site that would not be used for buildings, parking or internal roadways are considered open space. These areas are not proposed to be developed with any component of the Proposed Action. The reservation areas as discussed in the DEIS are the areas to be maintained as a vegetated buffer between the disturbed area of the site and the adjoining properties. The open space would include these reservation areas. The Applicant will draft an easement or restrictive covenant to limit use of this area, that will not require the relocation of existing uses and protect the area from future development.*

Comment 2.1-3 (Letter #C4, Elena Bao, 09/25/06): The Applicant has never developed a retail center project of "regional" proportions like Patterson Crossing. If the Applicant elects to include the resume/credentials in this DEIS then he should expressly state that the Patterson Crossing project is the first regional retail center site plan he has proposed. Failure to clarify this point gives a false impression that the Applicant has experience with mitigating adverse impacts of the magnitude described in this DEIS- he does not.

> ***Response 2.1-3:*** *The potential environmental impacts associated with Patterson Crossing Retail Center, and the necessary mitigation, are identified and evaluated pursuant to applicable local, State and Federal laws. The Applicant and his representatives, consultants and contractors and the various advisors to the Town have substantial experience in this process. The environmental impact analysis and related mitigation requirements for the Patterson Crossing Retail Center are very similar to the Applicant's numerous other projects located in the Hudson Valley region and the New York City Watershed.*

Comment 2.1-4 (Letter #C4, Elena Bao, 09/25/06): The Applicant must be factual in this DEIS relative to this matter. The re-zoning the Applicant references here is Local Law 1 of 2004, which was filed with the Department of State and adopted on 2/11/04 (not 2003). The Applicant should describe the nature of the zoning change which was *"The Zoning Map dated May 1, 2003 shall be amended such that the southerly I-R4 zoning boundary on the parcel identified as 33.223 shall be adjusted in a south-westerly direction".* In English, several acres on the Patterson Crossing project site changed from residential zoning to industrial zoning on 2/11/04 and as early as 4/2/04, the Applicant announced his intent to resurrect the Patterson Crossing project. These two events were clearly related and this

DEIS should accurately represent the relationship between the two. The Applicant's statement that the zoning change occurred as a result of "recommendations" unrelated to this project is misleading.

> ***Response 2.1-4:*** *Comment noted. Rezoning of parcels of land is the responsibility of the Town Board. The rezoning in question would have been reviewed by the Town prior to adoption.*

Comment 2.1-5 (Letter #C4, Elena Bao, 09/25/06): The Applicant states he has met "extensively" with residents and environmental groups relative to the Patterson Crossing project- this is false. There was an early "roundtable" discussion with environmental groups which amounted to nil since Mr. Camarda was unwilling to make any compromises on the project's scale. Mr. Camarda's interaction with residents has been limited due to vehement opposition from the community.

The Applicant's intent here is to insinuate that he has "compromised" with the community in Patterson Crossing's planning and this is false. The reality is that this project has changed little since originally proposed. The current plan is no less offensive to residents and environmental groups now than when it was first proposed. The applicant has always and continues to put his own needs before the needs of our community.

> ***Response 2.1-5:*** *The review of market conditions in the trade area of the site, and the willingness of the major retailers to locate at the site suggests, in fact, that the needs of the community have not been met. With respect to tax rateables, it is also clear that the goals of the County have not been met. This project would satisfy multiple community goals and needs.*
>
> *The Applicant has modified the development plan in response to comments and concerns expressed during the review of the DEIS. The current Proposed Action reduces the development square footage by 23,290 (roughly 6 percent) and impervious surface by 1.26 acres (approximately 1.4 percent) when compared with the DEIS plan and by 43,140 (over 11 percent) the development square footage when compared with the plan presented to the Town in May of 2003. A portion of the proposed buildings are now two stories which reduces the surficial area of impact of the Proposed Action.*

Comment 2.1-6 (Letter #C4, Elena Bao, 09/25/06): The "tire center" should also be mentioned here. I would also like to note here that the Applicant is very clear that his objective with respect to this site has always been to build a commercial retail center of a scale that is *as large as the site can tolerate.* The Applicant has never even considered scaling this project down so that it would be tolerable to the surrounding community. The result is that the Applicant continues to push a grossly overscaled project onto a community which simply cannot overcome the enormous adverse impacts that will result from this project - the project is just too large and too close to our densely populated lake community.

> ***Response 2.1-6:*** *In response to comments received during the public hearings and comment period, the Applicant has reduced the scale of the Proposed Action from a 405,850 retail center and 28,200 square foot garden center to a 382,560 square foot retail center and 28,000 square foot garden center. Included in the total square footage of the retail center is 8,220 square feet that would be divided between*

management space, offices, meeting space and an additional 300 square feet that has been set aside for a Putnam County Sheriff's substation. The scope of the project as proposed complies with current zoning (with the exception of signage) and comprehensive plans. Labeling it as grossly overscaled would an inaccurate characterization. The size of the project is actually smaller than what local land use laws would permit.

Comment 2.1-7 (Letter #C4, Elena Bao, 09/25/06): "Human Scale" lighting should be defined. I looked up this term but I could not find a definition for it.

Response 2.1-7: *Human scale lighting refers to the proposed unintrusive lighting scheme that has been designed to minimize impacts on residential properties in the vicinity of the site. An alternative would be stadium lighting or extremely high fixtures covering larger areas of land with fewer poles.*

Comment 2.1-8 (Letter #C4, Elena Bao, 09/25/06): Figure 2-1 does not adequately illustrate the "Regional & Local Setting". The Applicant should also include a map which clearly illustrates the boundaries of the Lake Carmel Park District with an overlay of the project site (this map can be obtained at Kent Town Hall). The Lake Carmel Park District map is critical in assessing the impacts of the Patterson Crossing project on the park district. The Applicant was highly remiss in falling to make even one reference to the existence of the Lake Carmel Park District in this DEIS. This legal entity exists, and the Applicant must acknowledge the park district's existence. Further, this DEIS needs to discuss in detail the statutory definition of "park district" and also include the "legal purpose" per the statutes for the creation of a park district. This project's impacts MUST be analyzed within the particular context of the park district and that district's whole purpose for existing because the project itself abuts the park district. The dominant regional characteristic of the surrounding residential community is that of a "park district". This needs to be addressed in the DEIS.

Response 2.1-8: *Lake Carmel Park District is a taxing district which includes many of the homes in the areas surrounding Lake Carmel. The District, which is established under Town Law as an "improvement district" (not a "park" per se), consists of privately-owned, residentially developed lands, public streets, and parkland along the shores of the lake. It provides benefits to the local residents largely in the form of access to the lake and its shoreline and the maintenance thereof. The residential development in this area can generally be characterized as single family homes located on small lots.*

Section 190 of Town Law provides that the town board may establish an improvement district for specified purposes, including for park land, and provide improvements or services in such a district, wholly at the expense of the district. The Lake Carmel Park District is such an improvement district established under Town Law for this purpose. Section 198 of Town Law provides that the Town Board has authority to establish and oversee improvement districts, and has authority to acquire, manage, and improve land in an approved park district. The Town Board may expend funds for the proper maintenance of such district for the use, convenience and enjoyment of the inhabitants of such district, and may grant licenses and privileges for any use of such property. The Town Board may adopt general rules and regulations for the government and protection of the improvement

district. The Town of Kent manages Lake Carmel as a recreational resource through tax revenues obtained from Lake Carmel Park District property owners.

The Applicant contacted Kent Town Hall (Town Clerk and Assessor's offices) and Putnam County Real Property Services, however no map defining the legal boundaries of the Lake Carmel Park District was available or known to exist. FEIS Figure 2-1 shows the project site on a map of the parcels located in the Lake Carmel Park District based on data provided by the office of Putnam County Real Property Services.[2]

The western boundary of the Patterson Crossing Retail Center site borders Lake Carmel Park District. However, the proximity of the project site to the district has no effect on the purpose of the district. Further, as stated in DEIS section 4.13, given the orientation of the project site on the north and east sides of a ridge, potential visibility of the site from local vantage points is notably limited by the topography, and therefore, potential visibility of the site from points west is limited to the immediately adjacent properties and local roads. (Refer to Response 4.13-10.)

Comment 2.1-9 (Letter #C4, Elena Bao, 09/25/06): The Applicant states here that construction vehicles will access the site from I-84 but in other sections of this DEIS states specifically that local contractors will be accessing the site from local roads. As such, this is a false statement.

Also, it's a false statement that site-generated traffic will be "directed away from the residential roads to the west". The Applicant is failing to concede here that patrons who live in the Lake Carmel Park District, Kent, and Carmel would enter and exit the project site from the west. The reality here is that ALL road to the west of the project site are RESIDENTIAL roads because this project site borders the most densely populated lake community in Putnam County. Route 311 and Route 52, although major roadways, both abut the shoreline of Lake Carmel. As such, the Applicant's statement that site generated traffic will be directed away from residential streets to the west is false.

Response 2.1-9: *See Response 2.0-14. Non-local construction traffic would utilize Interstate 84 to commute to the area and access the site at the construction entrance on NYS Route 311 located just under 900 feet from its interchange with Interstate 84. Local contractors would use Interstate 84 as well as other arterials (NYS Route 311, NYS Route 164, etc.) and more local throughfares to reach the site, however, the only construction access to the site will be on NYS Route 311. Aside from the local patrons who would travel on NYS Route 311 westbound, the majority of the site generated traffic would travel eastbound on NYS Route 311 from Interstate 84. NYS 311 and NYS Route 52 are not residential roadways.*

Comment 2.1-10 (Letter #C4, Elena Bao, 09/25/06): The reality here is that the Applicant has failed to design or scale back this project in ways compatible with the needs of the community which is why the majority if residents living within 3 miles of the site oppose the project. So let's not kid ourselves here - the proposed action is designed to be financially

[2] The perimeter outline of the mapped parcels in FEIS Figure 2-1 generally coincides with the hand drawn boundary of the District on an undated map entitled "Lake Carmel", with a street key entitled "Lake Carmel Property Owners Association", that was provided to the Applicant by the Town of Kent. Neither the map provided by the Town nor FEIS Figure 2-1 are considered "official" maps of the legal boundaries of the Lake Carmel Park District.

viable for the Applicant - *period*. An Applicant interested in creating a project compatible with the community's needs would propose *viable* lesser build alternatives and *realistic* alternative uses for the site in this DEIS. The alternatives the Applicant has put forth in this DEIS make a mockery of the SEQR process and indicate that the Applicant's only concern is HIS objectives and His "bottom line".

Response 2.1-10: *See Response 2.1-5. Refer to Chapter 5.0 of this FEIS and specifically Responses 5.0-3 and 5.0-4 for information on the alternatives developed and assessed.*

Comment 2.1-11 (Letter #C4, Elena Bao, 09/25/06): The Applicant states here that the site is appropriate for the size of development proposed. This is incorrect - SEQR will determine whether the "size" of the project as proposed is appropriate for the site - it is not the Applicant's place to presume this. The applicant also states that the zoning justifies the proposed action - again, although the zoning allows a retail use, it is SEQR which will determine whether or not the project is consistent with plans and policies and it's not the Applicant's place to presume this.

Response 2.1-11: *Comment noted.*

Comment 2.1-12 (Letter #C4, Elena Bao, 09/25/06): The Applicant is over-stating the market area. This development will only likely draw patrons from a 10 mile radius. The reality here is that the retailers the Applicant is proposing for Patterson Crossing already have stores or a category competitor in Dutchess, Westchester, and Connecticut. A wholesale warehouse anchor at Patterson Crossing won't draw patrons from Dutchess, CT, or Westchester as these places already have their own warehouses:
Costco Warehouse - Brookfield CT (21 Miles From Project Site)
Sam's Club: Fishkill, NY (17 Miles From Project Site)
BJ's Club: Wappingers Falls, NY 12590 (22 Miles From Project Site)
BJ's Club: Yorktown Heights, NY 10598 (18 Miles From Project Site)
Sam's Club: Elmsford, NY (40 Miles From Project Site)

Response 2.1-12: *Patrons are expected to travel from all the areas identified in the DEIS and in the above comment as the proposed Patterson Crossing Retail Center would be a shorter drive from portions of these areas than the existing retail establishments noted. Comparison shoppers are likely to visit the Patterson Crossing Retail Center in cases where a category competitor is located within a similar driving time.*

Comment 2.1-13 (Letter #C4, Elena Bao, 09/25/06): It is completely unacceptable for three truck loading areas for the "Kent buildings" to be situated adjacent to the residential community due to the adverse noise impacts from the trucks. The Applicant needs to change the site plan so that the truck loading area for the Kent buildings are located adjacent to I-84 (the same as the truck loading areas for the Patterson buildings).

Response 2.1-13: *The modified site plan reduces the commercial development on the "Kent" portion of the property from approximately 14,950 square feet of retail to 1,700 square feet of retail and 300 square feet for a Putnam County Sheriff's Substation. The refuse area for this smaller building pad would be located on the western aspect of the building.*

Comment 2.1-14 (Letter #C4, Elena Bao, 09/25/06): The applicant designed truck access on the western side of the "Kent buildings". It is completely unacceptable to have a truck access route to the west of the Kent buildings due to the noise proximity of the residential community. The truck access belongs on the other side of the Kent buildings so that the residents will be less impacted by the truck noise.

Response 2.1-14: *The modified development plan does not call for a truck loading area associated with the remaining 2,000 square foot building in the Town of Kent. Refer to response 2.1-13.*

Comment 2.1-15 (Letter C-44, Peter Riebold, September 22, 2006): The paragraph also states that there is "increasing public demand for commercial facilities," but it cites no evidence of this or any study that reached this conclusion. The DEIS also does not explain why "commercial facilities" need to be a shopping center.

Response 2.1-15: *The proposed plan for the Patterson Crossing Retail Center has evolved over three years as a result of meetings with local leaders, neighboring residents, and environmental groups. Early outreach for the proposed project began in April 2004 and included presentations to the Town Boards of the Towns of Kent and Patterson. The strong buying power of households in the Towns of Kent and Patterson, in Putnam County in general, and in immediately surrounding parts of the region, was demonstrated through U.S. Census Bureau statistics and through proprietary surveys of area spending patterns, which were conducted as part of the DEIS. Surveys of available retail offerings in the local hamlets surrounding the project site also documented the need for the project, with businesses in the Hamlets of Patterson and Lake Carmel being generally locally oriented and limited in terms of their variety of goods and hours of operations.*

As stated in the DEIS, Putnam County is one of the fastest growing counties in New York State and in the past 20 years, Putnam County has experienced substantial residential growth. Major retailers that would provide a wider range of goods and retail services (including longer hours of service) than local store locations mentioned above, have not located to the county in significant numbers.

Demand for such retailers in Putnam County, as stated in the DEIS, is generally met through stores in neighboring counties (including Fairfield County, Connecticut), resulting in an export of shopping dollars and the need for residents to travel unnecessarily long distances to meet some of their shopping needs. Furthermore, retailers generally locate in an area where population growth has already occurred and can therefore sustain the substantial investment in land, construction and infrastructure that would be required for a retail center such as the Patterson Crossing Retail Center.

Demographic data, market surveys, included in the DEIS as well as local municipal policies articulated in local and county comprehensive plans all support the need for the proposed project. Moreover, no retailer will make the investment to locate to a particular site without substantial and strong market demographics and sales potential that support such an investment. The proposed project will provide residents

with shopping variety and convenience, and will significantly reduce local residents' needs to travel outside of the area for certain purchases.

Comment 2.1-16 (Letter C-44, Peter Riebold, September 22, 2006): The paragraph states that the sound barrier wall and concrete block wall will be situated between the eastern border of the site and Interstate 84 and would act as sound barrier for the homes to the west of the site. It must be noted that while these walls may arguably dampen the sound to the west, they will also reflect and amplify Interstate 84 noise in an eastward direction, causing increased unwanted highway noises to the residential community on the eastern side of I-84.

Response 2.1-16: *As noted in the DEIS, noise from Interstate 84 would reduce over the distance to the sound barrier. Noise that is reflected back (some noise waves would bend over the barrier) would also undergo reductions with distance as it travels back toward Interstate 84. It is not anticipated that any noise reflected by the noise barrier would be noticeable over the ambient Interstate 84 noise level or cause any significant impact to residences on the opposite side of Interstate 84.*

Comment 2.2-1 (Letter B-2 James Bacon, Attorney for CWCWC and PCCPOS, September 25, 2006): The Zoning Code states for a Regional Retail Center that "Access shall be only from a State or County Road." The access point into the Town of Patterson is from an adjacent parcel in the Town of Kent. Therefore, a use variance is required. (§154-11(A)). **[Similar comments were found in the public during DEIS public hearings: Public Hearing, Jim Bacon (9.13.06)]**

Response 2.2-1: *The project site is accessed from NYS Route 311, a State Road. A use variance is not required.*

The proposed access road from NYS Route 311, a state highway, is the only access that functionally works for the development of the subject site, whether it be used for retail or industrial purposes. Access to the site through the residential neighborhood to the west of the site would not be suitable for a large scale commercial or industrial development. The traffic generated by the developed site would be too great to route through the network of streets to the west of the project site.

The project site has frontage on the Interstate 84 eastbound on-ramp. This frontage would not provide a functional or permissible form of access for a number of reasons. First, the ramp right of way was acquired by the NYS DOT "without access" meaning connection to the ramp is not permitted. Since the current access road plan which has a separate driveway connection to NYS Route 311 in excess of 800 feet from the interstate interchange, has been found feasible and has been conceptually approved by the NYSDOT, there is little likelihood of an approval for the somewhat unusual ramp/access road configuration that would be required to gain access to the site from this area. Next, there are significant grades and steep slopes in the proximity of the existing ramp and in order to build a new ramp and introduce a new access road, major rock and earth cuts in excess of 40 feet would be required to accommodate both roadways while maintaining a ramp grade acceptable to the FHWA. In addition, the Applicant does not own the land over which the access road would need to be sited. Finally, site and ramp left hand turn storage capacity would be restricted by the physical constraints of the area and the Interstate, thereby limiting the ability of the

intersection to accommodate future traffic increases and concentrating even more traffic at the intersection.

Both emergency and main access roads from Fair Street into the project site were investigated. Although frontage on this road exists, the change in elevation from the road to the developable portion of the site exceeds 40 percent in areas. These grades severely limit the construction of a viable access drive into the site. Steep slopes in this area also prohibit the siting of the stormwater features required to treat the runoff from the access on the project site. Off-site installation of stormwater management facilities is not possible due to the location of prior development in the area and the limited distance to a viable point of discharge for the treated stormwater. Finally, the New York State Electric and Gas right of way, which runs across the project site in this area, should not be disturbed. This right of way separates the proposed development from the Fair Street.

In a letter dated July 29, 2004 (Appendix A, Correspondence), the Town recognized that the "...sole point of access to the project site is via Route 311..." Denying access to NYS Route 311 through the Kent portion of the property would, in essence, land lock the subject site and totally constrain its highest and best use or any other use by preventing the site's development.

Comment 2.2-2 (Letter B-2 James Bacon, Attorney for CWCWC and PCCPOS, September 25, 2006): The access drive is 3,500 feet long - approximately 2,900 feet is in the Town of Patterson. Whether defined as a street or driveway it needs an area variance. The Town Code limits cul-de-sacs to 1,500 feet (§138-32(F) and limits driveway lengths to 2,000 feet. (§138-31 (A)). **[Similar comments were found in the public during DEIS public hearings: Public Hearing, Jim Bacon (9.13.06)]**

Response 2.2-2: *Comment noted. Chapter §138 of the Town of Patterson Code pertains to the subdivision of land and roads. No subdivision of land or road is proposed as part of the Proposed Action. The noted length restrictions do not apply since, in the Town of Patterson Code, the maximum length of 2,000 feet for a driveway applies only to one- and two-family homes. The access drive into the project site traverses a Commercial (C) Zoning District within the boundaries of the Town of Kent. The project site is accessed from NYS Route 311. According to the Town of Kent Zoning Code (Article VII, Commercial Districts), there are no specific access requirements or restrictions for this zoning district. No variances from the Town of Kent are required for the access road proposed for the Patterson Crossing Retail Center.*

After passing through Kent, the proposed access drive enters an area in the Town of Patterson which is zoned Industrial (I). The Patterson Crossing Retail Center is a Regional Retail Center and requires a special use permit per Article XIX, Special Permits for Nonresidential Districts (§154-111 - Regional Retail Center). There are no road length restrictions for access roads for an Industrial Zoning District nor for special uses (i.e. Regional Retail Center) within a nonresidential district per the Town of Patterson Zoning Code. No variance would be required from the Town of Patterson for the proposed access road.

Comment 2.2-3 (Letter B-2 James Bacon, Attorney for CWCWC and PCCPOS, September 25, 2006): A use variance is also required because the Town Code prohibits using 8.7 acres of R-4 zoned property as an accessory use to service a commercial project. A commercial sewage field is not a residential use. This use is not allowable under the Code's Permitted Principal and Accessory Uses for the R-4 District. (§154-26 and 27). **[Similar comments were found in the following letters and from the following members of the public during DEIS public hearings: Public Hearing, Jim Bacon, (9.13.06) Letter B-4 Marian H. Rose, Ph.D., President, CWCWC, (9.25.06) and Letter B-5 David B. Clouser, PE, LS, David Clouser and Associates, (9.21.06)]**

Response 2.2-3: *The Town of Patterson Zoning Code does not prohibit the use of subsurface SSTS facilities in any of the Town's zoning districts.*

SSTS facilities are not addressed at all in the sections which regulate the uses in either a residential zone or in an industrial zone. Sections 154-26 (Uses in Residential Districts - Permitted Principal Uses); 154-27 (Uses in Residential Districts - Permitted Accessory Uses); 154-38 (Uses in Industrial I District – Permitted Principal Uses); 154-39 (Uses in Industrial I District – Permitted Accessory Uses). In fact, the use of SSTS facilities is not addressed in any of the zoning districts in the Town Zoning Code.

SSTS facilities are permitted in every district. This is obvious because such facilities need to be utilized in all zoning districts, including residential zoning districts. If the zoning code were interpreted as the commentor suggests and the proposed septic field is prohibited because such use is not specifically permitted under the cited provisions, then all homeowners seeking to install septic systems would be threatening to illegally use their property. This is clearly not the legislative intent of the Town Zoning Code and such an interpretation has never been previously utilized or implemented in the Town.

Nor would the use of an SSTS system in that portion of the site located in the R-4 district upset the "quiet, aesthetic residential character" of that portion of the property or the surrounding neighborhood. The SSTS facilities are underground and therefore not visible. There is nothing to see and there is no noise created. In addition, the surface of the land will, as a condition of approval, remain undeveloped. As a result, there is no impact on the neighboring residential neighborhood. In fact, the SSTS facilities on the property will do more to maintain the aesthetics of the environment than if it were utilized for residential development because such development would involve the construction of new homes and ancillary facilities in addition to the installation of a septic system(s). As currently proposed, the property will be retained as a vacant meadow.

The property will act as a natural buffer between the nearby residential uses and the Project. The SSTS will not alter the character or contour of the land, and its existence will be virtually undetectable by surface observation. There will be no adverse visual impact on the neighboring property owners resulting from the usage of the lot for an SSTS and the parcel will be re-vegetated as an open meadow. The quiet, aesthetic character will not be altered and the parcel will be entirely compatible with the residential nature of the R-4 district.

Comment 2.2-4 (Letter B-2 James Bacon, Attorney for CWCWC and PCCPOS, September 25, 2006): How does the project conform with the Town's Special Use Permit Standards and Guidelines (§154-93(A)(2)), which state: The ZBA determination "shall be made in accordance with the ... requirements of this chapter including the need to lessen congestion in the streets... to promote health and general welfare... to prevent overcrowding of land...to facilitate adequate provisions of transportation... [and] sewage.

Response 2.2-4: *The potential adverse impacts on various aspects of the Towns of Kent and Patterson were analyzed and evaluated in the DEIS. The proposed project would conform with the Special Permit requirements for a Regional Retail Center in a Non-residential District along with the bulk requirements of the Industrial District in the Town of Patterson.*

The "application for a special use permit allows for a more rigorous review of the development plans for uses which, by their nature, could have adverse impacts on the surrounding properties or community at large.[3]" Chapter §154-93 of the Town of Patterson Code is a set of standards and guidelines to be used by the Board of Appeals in determining the conformity of an application to the standards and guidelines set forth in §154-93 as well as Articles XVII through XIX. The Special Use Permit for Patterson Crossing for the development of a Regional Retail Center would ultimately be determined by the Board of Appeals.

Comment 2.2-5 (Letter B-2 James Bacon, Attorney for CWCWC and PCCPOS, September 25, 2006): The Town of Patterson Comprehensive Plan and Zoning Code do not envision a project anywhere near the magnitude of this project. The Zoning Code identifies a Regional Retail Center starting at 75,000 square feet. This project is 434,050 square feet, is 5.7 times the Zoning Code's figure, far beyond the size contemplated by the Code.

Response 2.2-5: *A 75,000 square foot project is not a regional retail center. It is too small. The Proposed Action conforms to the recommendations of the Town of Patterson Comprehensive Plan as well as to the bulk requirements of the Industrial District in the Town of Patterson. Recommendations included in the Comprehensive Plan pertaining to the proposed Patterson Crossing Retail Center project were evaluated in the DEIS. These recommendations do not include a limit on the square footage proposed for retail development.*

Article XIX (Special Permits), Section §154-111 (Regional Retail Center), of the Town of Patterson Zoning Code states that special use permit may be granted for a lot, not less than 40 acres in the Industrial District, for a retail center with a total building coverage exceeding 75,000 square feet. The Proposed Action conforms to the above requirements for the project site. It includes 57.9 acres of land located in an Industrial District and the square footage proposed for the Patterson Crossing Retail Center exceeds the minimum square footage (75,000 sf) required for a retail space. It is noted that the project has been reduced to 382,560 square feet (374,040 for retail, 8,220 for management, office and meeting space and 300 for a police substation.

Comment 2.2-6 (Comment number not used):

[3] Draft Comprehensive Plan, Town of Patterson, August 21, 2000

Comment 2.2-7 (Letter B-4 Marian H. Rose, Ph.D., President, CWCWC, September 25, 2006): Other zoning criteria that are not conformed with in this project are "The minimum setback of all buildings, structures, parking areas and access drives shall be 65 feet" (Section 154-111(B)) and that sixty-five feet from any rear or side property line shall be maintained as vegetative buffers. **[Similar comments were found in the following letter: Letter B-5 David B. Clouser, PE, LS, David Clouser and Associates, (9.21.06)]**

Response 2.2-7: *The closest developed area to the adjoining residences is the internal access road. At its most proximate point the road is 65 feet away from the property line. The area between the access road and the western property line is to be maintained as a vegetated buffer. An emergency access driveway to Concord Road is proposed, as is landscaping and fencing for screening adjacent properties and earthwork within the 65 foot setback along the western property boundary. At this time twenty five to fifty feet of the area adjacent to residences to the west, depending on location, will be held in reservation and restricted from future development by the Applicant through an easement or restrictive covenant.*

Within the western property line setback area there are surface improvements built by adjacent property owners that encroach upon the Patterson Crossing Retail Center site. The easement or restrictive covenant will protect this area from development and allow the existing uses to remain while preventing any additional development.

With the exception of the approximately 100 feet of the access road to the south of the Patterson Town line, all buildings, structures, parking areas and the remainder of access drive maintain a 65 foot setback along the eastern property boundary per Patterson Town Code. The area in the Town of Patterson where the proposed access road lies within 65 feet of the property line is along the Interstate 84 and NYS Route 311 corridors. This area lies along the front property line and therefore the 65 foot setback does not apply.

Comment 2.2-8 (Letter B-4 Marian H. Rose, Ph.D., President, CWCWC, September 25, 2006): The project does not conform to the requirement that "..total area of all impervious surfaces shall not exceed 50% of the total lot area." (Section 154-111(C)**.** With regard to impervious surfaces, Section 154-111 (c) states "All other dimensional requirements of the particular district are conformed to, except the total area of all impervious surfaces shall not exceed 50% of the total lot area." The Special Use Permit for a Regional Retail Center is allowed only in the "I" zoning district, therefore, this portion of the Town's Code applies only to that portion of the project that lies within the I zoning district. Therefore, the applicant must show that 50% or less of the development's total area in the I district is impervious. **[Similar comments were found in the following letter: Letter B-5 David B. Clouser, PE, LS, David Clouser and Associates, (9.21.06)]**

Response 2.2-8: *The modified development plan would limit the area of impervious surface to 30.2 acres in the Town of Patterson. With the project site encompassing 74.1 acres in the Town of Patterson, the impervious surface accounts for 40.8 percent of the entire site.*

Comments 2.2-9 (Comment number not used):

Comment 2.2-10 (Comment number not used):

Comment 2.2-11 (Letter B-5 David B. Clouser, PE, LS, David Clouser and Associates, September 21, 2006): Additionally, Section 154-111 (B) also states "Sixty-five (65) feet from any rear or side property line shall be maintained as a vegetative buffer, and shall not contain any surface or subsurface improvements including waste disposal system or utility lines. According to the proposed site plan, significant improvements are proposed within this 65 feet wide required vegetative buffer area along both the side and rear property lines. Since the property has frontage and is proposing access from State Route 311, the property line along Route 311 would customarily be considered the "front property line" of the development parcel. Therefore, all other property lines must be considered "side" or "rear" property lines with the 65 feet setback applying to these property lines, as referenced above.

According to the information shown on the proposed site plans, significant improvements are proposed within 65 feet of the property line along the eastern, southern and western boundaries where a vegetative buffer is required to be maintained. Specifically, Stormwater Detention Ponds, 1.1,1.2,1.3 and 1.4 (as well as the pond access drive) are all located within 65 feet of the eastern property line. Additionally, extensive grading, proposed wastewater disposal system and access drives will also be located within 65 feet of the southern and western property lines. Access drives, detention ponds, wastewater disposal and massive embankments/excavations (i.e., in excess of 40 feet deep rock cuts) certainly must be considered "surface improvements" and, according to clear provisions in the Town Zoning Code, may not be located within 65 feet of any side or rear line, per zoning code.

This is yet another aspect to the project layout proposal that does not meet Town Zoning code, specifically the requirements of the Special Use Permit. Accordingly, the project plans must be revised to meet the town zoning code minimum requirements or the applicant must seek variance from the Zoning Board of Appeals, prior to any serious consideration of the viability of this development proposal.

> ***Response 2.2-11:*** *The project also has road frontage on Como Road, Lakeside Road, Greenridge Road, Brentwood Road, Concord Road at two locations and Fair Street a County Road.*
>
> *For information pertaining to the improvements proposed within the required minimum 65 foot setback, refer to Response 2.2-7.*

Comment 2.2-12 (Comment number not used):

Comment 2.2-13 (Letter #C4, Elena Bao, 09/25/06) and Comment 2.2-16): Patterson's Comprehensive Zoning Plan imposes serious zoning incompatibility issues on the municipal border between Patterson and the Lake Carmel Park District. Patterson's zoning plan protects Patterson residents from adverse zoning-related impacts but fails to protect the Lake Carmel Park District residents from these impacts. This is wrong. There is densely populated residential community abutting the Patterson Crossing project site, yet Patterson zoned this site industrially and permits a regional retail center use for the zone with no square footage caps to speak of. This poorly-conceived zoning enables the applicant to propose a grossly overscaled project for the site with enormous potential to irreparably degrade the Lake Carmel Park District community. Patterson Crossing should be denied as the project's adverse impacts are too severe and the Applicant has not made a valid case to

support the existence of project benefits. A zoning amendment is warranted for this site to limit this scale and magnitude of adverse impacts that can result from development of these parcels. **[Similar comments were found in the following letter: Letter C-49, Paul Spiegel (9.13.06)]**

Response 2.2-13: *The Proposed Action complies with both Kent's and Patterson's zoning regulations and planning documents. It is not just Patterson that has targeted the project site for nonresidential development. The Town of Kent has designated the site as Commercial in both the zoning code and the 1990 Master Plan.*

It should be noted that retail projects abut residential development or are mixed with residential developments throughout the United States. It is untrue that they are incompatible land uses.

The portion of the project site located in the Town of Kent has been zoned Commercial for many years. In fact, the NYS Route 311 corridor is a mix of commercial and residential parcels and the majority of the properties in Kent along NYS Route 311 are zoned commercial.

The Proposed Action is expected to create a financially viable project that is compatible with the needs of the community and conforms to applicable zoning and land use regulations, including long-range plans for the area. The majority of the site is designated for industrial and commercial use. Its location at the crossroads of Interstate 84 and NYS Route 311, which is a major east-west thoroughfare in Putnam County, make the site appropriate for the size and type of development proposed. As indicated through the site's current zoning and in local plans, the project is consistent with plans and policies of the local municipalities.

Refer to Responses 1.1-2 and 1.1-3 for details on the existing impacts to the water quality, and ecology, of Lake Carmel resulting from the dense residential development around the lake, and the proposed improvements beyond those required by State and City regulations that will treat stormwater runoff on and off the site. These improvements will reduce the current pollutant, and sediment, load now impacting the lake and local reservoirs.

Comment 2.2-14 (Letter C-21 Janette James, July 4, 2006): I would like to know who is responsible for most of Route 311 suddenly being rezoned to commercial from residential? What is your plan for Patterson? Ugly strip malls and big box developments? What kind of town planning is that? Would you like to live next to Costco in CT?

Response 2.2-14: *The Town Boards are responsible for zoning regulations in their respective communities. The area has been zoned nonresidential for many years and its location at the intersection of an Interstate and State roadway lends it to commercial development.*

The Proposed Action has been extensively modified to incorporate design concepts and architectural elements intended not only to minimize its visual impact on the community but to enhance the gateway into the community. See Response 2.0-4 and Appendix M for information on the concepts that provide a general framework for the architectural design of the final project.

Comment 2.2-15 (Letter C-39, George Pommer, September 20, 2006): The following is pursuant to the submission for Patterson Crossing located on Route 311 in the Town of Patterson, NY.

According to Article I, Section 154-1 - Authority and Purposes of the Patterson Town Code, Paragraph I indicates that the Zoning Ordinance Plan is adopted for the purposes set forth in Article 16 - Town Law of the State of New York and more particularly, for the protection and promotion of public health, safety, morals and general welfare of the community in the following manner:

Paragraph A - Guiding the Future Development of the Town in accordance with Comprehensive plan of the Land Use and Population Density that represents the most beneficial and convenient relationship among Residential, Commercial, Industrial and Recreational area within the Town having regard to their stability for the various use as indicated by existing conditions in trends and population in the direction and manner of the use of land in building development and economic activity considering such conditions and trends both the Town and the relationship of the Town to the surroundings.

Obviously, the Board needs to carefully consider the relationship between residential and industrial areas in the Town and their relationship. In addition, Paragraph D indicates that the Board should protect the character and the social and economic stability of all parts of the Town and encourage the orderly and beneficial developments of the Town. According to the public meetings held on September 13 and 14, 2006, the social and economic stability between the new propose Patterson Crossing and the existing development directly adjacent to the proposed Patterson Crossing appear to significantly impact each other.

Paragraph E indicates that the Town Board has the responsibility for protecting and conserving the value of land throughout the Town and the value of buildings appropriate to the various districts established by this Chapter. Clearly, if Patterson Crossing is built, the value of homes adjacent to this development will decrease and the Board will not have fulfilled its duty for protecting and conserving the value of land as mentioned in this paragraph.

Paragraph F indicates that the Board shall bring gradual conformity of uses of land throughout the Town of Patterson to the Comprehensive Zoning Plan set forth in this Chapter and minimizing conflicts among the uses of land and building. Again, clearly there are conflicts between the proposed Patterson Crossing and the existing adjacent homes.

Paragraph G indicates that the Town Board is required to aid and encourage the wise use and sound management of groundwater systems, drainage basins, streams, lakes and ponds and all other natural resources throughout the Town in order to preserve the integrity, stability and beauty of the community. According to the Public Meeting held on September 14, 2006, it is clear that residents feel that the existing drainage basins within the wetlands area have been disturbed or compromised and that existing wells and other site features will also be compromised due to this project.

I strongly suggest that the Town Board carefully review its authority and purpose with regards to this project. It would appear that should the Board approve this project, litigation by the immediate adjacent residents would soon follow.

It would appear that the Board should make its decision with the utmost confidence to ensure that any proposed development is the correct use of this land and in developing this land the community can move forward into the future in prosperity and not unknowingly take on a hindrance or burden. If there are other options for developing this land which are better than those currently being proposed, the Board should identify those options and present them to the property owner. If the Board finds no better option, than those adversely affected by such a decision should be compensated.

Response 2.2-15: *As discussed in the DEIS, the Patterson Crossing Retail Center is not expected to significantly alter the character or local economies of its surrounding areas, or significantly alter the character of the Towns of Kent and Patterson. Refer to Response 2.0-4 for information on changes made in the modified plan to limit visual impacts to and enhance the gateway into the communities.*

The location of the site, at the Interstate 84 and NYS Route 311 interchange, largely isolated visually from the surrounding Hamlet areas, make it ideally suited for large scale retail development. By increasing local spending and economic activity, and increasing the range of goods and services offered to Patterson, Kent and Putnam County residents, the proposed project is expected to strengthen the county's economy as a whole and enhance the quality of life of its residents. Long-vacant commercial sites in the hamlets may actually become occupied in the future with this increase in local business activity, due to the need for ancillary services for patrons and employees of the retail center.

DEIS Figure 2.3 of that document, Existing Land Use, accurately depicts existing residential and nonresidential land uses in the vicinity of the existing site, including the densely populated lands to the west of the property. As discussed in the DEIS, and shown on DEIS Figure 2.3, a mix of residential, commercial, office, transportation, and community facility uses, as well as vacant land, are present in proximity of the site. Land uses proposed as part of the Patterson Crossing Retail Center project are expected to be consistent with the variety of mixed land uses along the commercial NYS Route 311 corridor. Refer to Response 2.0-5.

Patterson Crossing clearly has the potential to be a financial benefit to the Towns of Patterson and Kent by increasing the ratable tax base without increasing the number of school children, increasing employment opportunities for the Town's and surrounding area's residents, and providing additional shopping options and opportunities. There is no evidence to support the notion that retail projects depress residential values. It is more likely that the opposite would be true. Simply stated, some people wish to be isolated and travel greater distances for retail services. However, multiple others prefer to have restaurants, entertainment, and shopping conveniently located near their home.

Presently, there are no existing drainage basins within the wetland area on the project site. Off-site monitoring occurred over a total period of 14 days to assess the potential impacts of the Proposed Action on existing residential wells. The monitoring occurred prior to, during and after the pumping test of the project wells. The pumping test data resulted in no drawdown or influence on the existing residential wells monitored during the pumping test. It should be noted that the project wells were

pumped at a conservative 22 gallons per minute each, which is 4.2 times the estimated water demand of the Proposed Action.

Comment 2.3-1 (Letter #C4, Elena Bao, 09/25/06): There is no correspondence in this DEIS from any retailer the Applicant claims would be a tenant at Patterson Crossing. If the Applicant is promising, for example, a Costco then the Applicant should have a current letter from Costco in which the retailer expresses or reiterates their interest in becoming a tenant at Patterson Crossing. I don't think the Applicant should be claiming certain tenants are interested in this location when there aren't current letters of interest from retailers in the DEIS- these letters should be provided.

Response 2.3-1: *The process of identifying potential tenants for a proposed development is long, involved, essential to a successful project, and at times is not finalized until after construction is underway. In addition, these negotiations are confidential (between the developer and the potential tenant) and not disclosed until a formal agreement has been reached. Due to the nature of the negotiations, an expression of interest does not need to be expressed in written terms. Furthermore, as a result of the uncertainties inherent within the negotiation process, it is not only the actual tenants but also the retailer classifications (e.g. wholesale retail, home improvement, electronics, etc.) presented in this environmental review that may change prior to completion of the project.*

For these reasons, the DEIS does not identify particular retailers and the requested information can not be provided as part of this FEIS.

Comment 2.3-2 (Letter #C4, Elena Bao, 09/25/06): I find it laughable that the Applicant screens this area from view as if the view was the problem and not the booming truck delivery noise residents feet from this loading area we'll hear at all hours in the morning, day and night. This loading area shouldn't be on the west side of the buildings and should be designed for the opposite side of the buildings.

Response 2.3-2: *Based on comments received during the review of the DEIS, the Applicant has developed a modified site plan that reduces the commercial development on the Kent portion of the Property from approximately 14,950 square feet to 2,000 square feet. The potential for noise impacts related to delivery trucks and loading areas in the Town of Kent have been eliminated from the Proposed Action. The remaining loading areas would all be located on the eastern edge of the project site behind the proposed buildings.*

Comment 2.3-3 (Letter #C4, Elena Bao, 09/25/06): If Patterson Crossing is intended as a retail destination for the surrounding Kent community, then why wouldn't the Applicant include sidewalks in the planning of this project on Route 311? The Lake Carmel residential community adjacent to this project site is literally a ¼ mile away from the site entrance. I would think that the Applicant would encourage pedestrian and bike access to the Patterson Crossing project site given that this development is literally proposed right on top of our residential community. If this atrocity of a project should get approved, I would think the residents living in the immediate vicinity should have the option of walking or biking to the project site rather than being forced to drive the ¼ mile to the entrance of Patterson Crossing.

Response 2.3-3: *The Project does not include sidewalks along NYS Route 311 or the entrance road due to its length and grade in addition to the fact that there are no existing sidewalks adjacent to the project site along NYS Route 311 providing a defined sidewalk terminus. Retailers who are expected to tenant this site have advised that it is highly unlikely that customers will walk along the State road and up the access grade through Kent, a minimum of approximately 1,250 linear feet and an elevation change of approximately 100 vertical feet to the nearest retailer and upwards of 3,800 linear feet (just short of three-quarters of a mile) and over 175 vertical feet to the furthest retailer measured from the intersection of the site access road with NYS Route 311, then shop and carry goods home by walking. This matter will be discussed with the planning board during site plan review. The Applicant would offer to install bike/pedestrian path through the emergency access should the Town desire such. Encouraging the use of the emergency access as a pedestrian route may result in negative impacts to the adjacent property owners which may be undesirable to those residents that live adjacent or nearby to the emergency access. This issue will be discussed and finalized during the site plan review process.*

Comment 2.3-4 (Letter #C4, Elena Bao, 09/25/06): The emergency egress road width requirements for a project of this type and scale should be detailed here. 12 feet is very narrow and considering the scale of this project, a 12 foot wide egress seems too narrow to accommodate the massive amount of cars and trucks that would need to exit the site in an emergency service evacuation scenario. Also, it should be stated here whether the applicable emergency service agencies have approved the suitability of Echo Road as a mass-evacuation transit route given that it is a narrow and steep road. The width requirements for Echo Road also need to be stated in this DEIS if it is to be used as an emergency exit so that we may know whether residential property would need to be taken by eminent domain for widening.

Response 2.3-4: *The modified plan has relocated the emergency access road to a point on Concord Road near its intersection with Woodstock Road. This access is designed to be a secondary access for emergency vehicles to respond to the site should the main entrance be completely blocked in both directions. Should an event arise that results in the unlikely scenario where the public would need to be evacuated from the entire project site solely through the emergency access road, emergency personnel would coordinate a safe and controlled egress.*

Concord Road and Echo Road, the emergency route to Terry Hill Road presented in the DEIS, vary from about 17 to 20 feet wide; there are no plans to alter these roads. FEIS Figure 2-2 depicts both the emergency access road proposed in the DEIS under the original plan and the emergency access road proposed under the modified plan present in this FEIS. The relocation of the proposed emergency access road provides a shorter, more direct route from NYS Route 311 to the site through the existing road network and the reconfiguration shortens the distance from the road network into the site and places responders at a more central location within the site. Such a rerouting will benefit emergency responders in all weather conditions and reduces the overall amount of land disturbance required to build the road. Visual changes related to the new location for the emergency access road and the mitigation proposed to address these changes are addressed in Responses 2.3-5 and 4.13-6.

Comment 2.3-5 (Letter #C4, Elena Bao, 09/25/06): Since evergreen trees are being proposed as a viewshed mitigation for residents, the Applicant needs to state here how mature the trees planted will be. These trees should be of a sufficient height and cover to block residents' view of the big box atrocity in their backyard. Residents should not have to wait a few decades for these trees to mature to get relief from the ugliness of big-box buildings. Also, the site owner should be at all times contractually obligated to keep these trees in good health and replace any trees that would die with trees of sufficient height and width to protect residents' viewshed.

Response 2.3-5: *A schematic Planting Plan depicting the type and location of trees to be planted is included in the drawing set. A note regarding maintenance and replacement of trees has been added to Drawings SP-2.1, SP-2.2 and SP-2.3. The proposed plan specifies the buffer planting to be of two to three rows of evergreen trees, six to ten feet in height, and planted approximately twelve feet on center. Drawing SP 2.2 shows the particular planting proposed at the emergency access that is proposed to avert the view from Concord Road through the access road opening. The line of sight from Concord Road at this location is described and illustrated in FEIS section 4.13.*

It should be noted that, in addition to the evergreens, a solid six-foot high noise barrier fence is proposed to be installed along the property line between the adjacent residences and the proposed development in order to further offset visual and noise impacts.

Comment 2.3-6 (Letter #C4, Elena Bao, 09/25/06): It is silly for the Applicant to state he has chosen these uses to be sensitive to the water supply - this statement should be stricken from the DEIS. Also, the DEIS should give a better context of what water usage of 11,000 gallons per day means so that the figure can be understood by the average resident. For instance, the Applicant should state that the average home in this area uses "x" gallons of water per day. This way, those reading the DEIS will have a context in which to understand what 11,000 means to them and to our available water resources.

Additionally, I'm not convinced by the data the Applicant has presented that a 11,000 gallon per day draw on the aquifer will have "no impact". Per my understanding, there was an aquifer study performed for Putnam County by Chazen Associates within the last few years. The Applicant does not discuss groundwater resource impacts in this DEIS within the context of this aquifer study. Additional research is needed here given the sensitivity of this area due to this close proximity to a densely populated residential area.

Response 2.3-6: *In order to limit the volume of water required at the Patterson Crossing Retail Center the Applicant has limited the tenants to those considered essentially dry retailers. In order to maintain wastewater volumes below the limits of the SSTS, future users would need to be able to demonstrate that their water use needs fall within the limits set for the retail center.*

The Putnam County Groundwater Protection and Utilization Plan (The Chazen Companies, 2004) was referenced and discussed in the DEIS, Page 4-4-2. According to the Plan, the Patterson Crossing Retail Center site is located at the western edge of a higher yielding bedrock aquifer. The higher yielding aquifer corresponds with the Walloomsac Formation, which is composed of pyllite, schist and metagraywacke

rocks. These are generally fine grained metamorphic rocks. The majority of the project site is underlain by older biotite-quartz paragneiss bedrock, which is categorized by the Chazen study as having generally lower groundwater yields.

The pump test completed for the Patterson Crossing Retail Center water supply wells confirms that more than adequate water is available for the project, and that water usage for the project will not impact off-site private wells (see DEIS Section 4.4).

Comment 2.3-7 (Letter #C4, Elena Bao, 09/25/06): The source for this 270,000 gallons of water needs to be stated here. Will this 270,000 be drawn from the project site? If so, will it be drawn all at once or in stages to minimize impacts to residents? Also, will this massive water supply be periodically "changed out" or replenished? If so, how often and where will the old water go and where will the new water come from? This large supply of water needs to be described in detail and the management of this water supply must be detailed here as well.

Response 2.3-7: *The Applicant is committed to providing fire protection through incorporation of an on-site water storage system* capable of protecting the critical building, or building with highest fire protection needs, in the complex. Presently the critical building in the complex is the home improvement center. *The 270,000 gallon tank system noted in the DEIS is based on a conservative estimate provided by a home improvement center company. If this type of tenant does not lease space in the retail center or the final stored water volume is other than that presented based on the actual configuration of the proposed development, the storage tank system volume will be adjusted to provide fire protection for the modified critical building. The water to be stored in on-site underground tanks would be drawn over a period of time, at equal to or less than the anticipated rates that were used for pump testing purposes as noted in the DEIS. This supply would be solely for fire protection purposes and would be held once drawn until required for a fire emergency. Should this water be used to fight a fire, water will be drawn from the two on-site production wells at the appropriate rate in order to refill the tanks or refilled through water supply trucks delivering water from off-site; it will not be "changed out". There will be no discharge of this water to the on-site subsurface sanitary treatment system (septic system). The project water supply is described in Chapter 4.4 Groundwater of the DEIS.*

Comment 2.3-8 (Letter #C4, Elena Bao, 09/25/06): There is no discussion in this DEIS regarding the adverse impact of "odor" that will result from this massively-scaled sewage disposal system. Residents literally live feet from this sewage area. The odor of this septic area is a very serious issue that needs to be addressed in this DEIS.

Response 2.3-8: *Properly functioning absorption fields do not produce odors. Sanitary sewage effluent is contained underground and infiltrates further into the soil as it is treated.*

Comment 2.3-9 (Letter C-38 Melanie Pien, Stephen Pien, Alani Pien, Kai Pien September 25, 2006): During operation of the stores, these same groups will be subject to traffic and noise during even longer hours as stores stay open until 9 or 10 PM and deliveries can be expected to occur early in the morning Monday through Saturday for some stores and after hours for others. The DEIS offers to mitigate the noise of this by siting the delivery

areas as far from possible from the residences of Lake Carmel but there is no data here to support their contention that this mitigation is sufficient.

Though lighting will be minimized at night, per the DEIS, there is no indication regarding what time lighting will be minimized or how much it will be minimized.

> ***Response 2.3-9:*** *It is acknowledged that there will be deliveries and limited activity on the project site before and after business hours. Deliveries during these periods will be limited to the maximum extent possible. A noise study was completed for the site and is provided in Chapter 4.9 Noise of the DEIS. In addition to the mitigation of placing the loading docks and refuse collection areas on the east side of the buildings, a six foot high solid noise barrier fence and two to three rows of evergreens are proposed along the western property line to provide additional noise reduction.*
>
> *The lighting proposed for the Patterson Crossing Retail Center will be the minimum required to provide safety during operating hours and security after hours. All proposed lighting would comply with the lighting standards set forth in the Patterson Town Code for light levels at the property line adjacent to residential uses.*

Comment 2.4-1 (Letter B-8 James M. Tierney, Watershed Inspector General, September 25, 2006): Similarly, on DEIS page 2-21, item 5 states "after completion of each stage of site construction all lawn areas will be fine graded with a layer of topsoil and seeded with permanent lawn mix." These "stages" need to be further defined and incorporated into the phasing plan so that contractors and inspectors know when earth work at specific areas has been completed and when they should be stabilized.

> ***Response 2.4-1:*** *The term "stage", as used in the DEIS, refers to a particular phase of construction defined on drawing SP-4.1, Overall Phasing Plan, included with this FEIS. Lawn areas within each of the twenty-four phases of construction will be stabilized in accordance with the phasing notes on sheet SP-4.1. Refer to this drawing for the detailed project phasing plan.*

Comment 2.4-2 (Letter B-8 James M. Tierney, Watershed Inspector General, September 25, 2006): Maximum % of fines: Fines are small particles, such as clays, which should pass through a standard screen, in contrast to coarser particles that are retained. As displayed in Table 3, the maximum percent of fines range from 65 to 80 percent. In other words, the soils on this site provide a significant source of small particles sediment. It is imperative that this sediment is controlled on site, otherwise the fines will adversely impact water resources.

> ***Response 2.4-2:*** *The Applicant agrees that certain soils on the project site contain fines and therefore, controlling erosion to prevent impacts on surface water is very important. To mitigate potential impacts associated with disturbance of these soils, the Patterson Crossing Retail Center Erosion and Sediment Control Plan focuses on preventing erosion through the diversion of runoff, rather than containment of sediments that become mobile. The New York State Standards and Specification for Erosion and Sediment Control specifies that "...diversion of surface water away from exposed soils provides the most economic and effective erosion control possible*

since it is more advantageous to control erosion at the source than to design controls to trap suspended sediment."

Providing temporary runoff diversions will direct runoff away from exposed steep slopes and will reduce runoff velocities to non-erosive limits elsewhere on the site. Implementing the proposed sequence of construction and phasing included in the Erosion and Sediment Control Plan will further reduce the potential for erosion and sedimentation during construction on any steep slopes. As specified in the Erosion and Sediment Control Plan (see Drawings SP4.1, SP4.2, SP4.3, and SP4.4, Overall Phasing Plan and Sediment and Erosion Control Plans, respectively), these measures will serve as the primary means of avoiding sedimentation of water resources during construction of the project.

By reducing the area of disturbed soil through implementation of the sequencing and phasing plans, potential impacts associated with erosion and subsequent sedimentation that must be contained, will be adequately mitigated. In addition, runoff from areas outside of disturbances would be diverted away from disturbed soils to further prevent impacts resulting from erosion and subsequent sedimentation.

To ensure effective implementation of the Erosion Control Plan included in the SWPPP, construction activities will be overseen by a Certified Professional Erosion and Sediment Control (CPESC)/Certified Professional in Stormwater Quality (CPSWQ), or other equally qualified professional throughout the entire construction period.

Comment 2.4-3 (Letter #C4, Elena Bao, 09/25/06): It seems unrealistic that a project of this scale and magnitude would be completed in a 2-3 year timeframe. I believe the Applicant is understating the construction period for this project since it is clear from this DEIS that construction-related impacts will be quite severe for the residential community located adjacent to the site. The Applicant must provide a realistic timeframe in which this project will be completed. It would seem that 5-7 years would be more accurate. The Applicant needs to provide case-study data from similar development projects to estimate the time of completion for this project. Stating that the project will be built from start to finish in 2-3 years is just not going to happen.

Response 2.4-3: *The project engineers and the Applicant have determined the anticipated construction period based on a comprehensive knowledge of the tasks required and experience. There is no evidence to the contrary that this construction can not be completed in the proposed time frame.*

Comment 2.4-4 (Letter #C4, Elena Bao, 09/25/06): The Applicant says "except for local contractors". We need to have an understanding of the type of truck volume we would be dealing with. How many trucks can we expect? Which routes will they access the site? How will this impact traffic flow? And we need to understand exactly how long we can expect this construction generated traffic. How many years?

Response 2.4-4: *Construction truck traffic is anticipated to occur over the approximately 24 to 36 months of construction. The amount of traffic would vary depending on the specific construction operation. For example during clearing, grading and clearing operations, minimal off-site transport would be required. During*

building construction, material would have to be delivered and concrete transported to the site to construct the building pads. Daily, construction worker vehicles would be traveling to and from the project site.

The vast majority of construction truck traffic would be expected to access the project site from Interstate 84. Trucks arriving at the site along NYS Route 311 from the south would utilize the State roadways. Many of these trips are already on the system delivering to other locations in the area. The volume of construction worker vehicles will be well below the volumes of operations vehicles calculated as part of the traffic analysis. As such, construction related traffic will not have a significant effect on the local traffic patterns or levels of service of the studied intersections.

Comment 2.4-5 (Letter #C4, Elena Bao, 09/25/06): How else will water be used during the construction phase? And how much water usage are we talking about here during the construction phase? The Applicant includes no discussion whatsoever in this DEIS regarding the gallons-per-day water usage during the construction phase. This is completely unacceptable given this site's proximity to a densely populated residential community with a long history of water and well problems. The construction phase of this project would go on for many years. This DEIS must have a study which quantifies the estimated daily water usage on this site during the construction phase.

Response 2.4-5: *Water usage during the construction phase would be less than the operational phase as noted in the DEIS. During the construction phase water uses would include, dust suppression as an erosion control measure, equipment washing and irrigation of newly seeded areas. As the pump tests conducted at the proposed well sites yielded more water than required for the operational phase with no effect on local water supplies, water usage during the construction phase will result in no impact to area wells.*

Comment 2.4-6 (Letter #C4, Elena Bao, 09/25/06): The truck loading areas for the Kent buildings are not on the "east" side, they are on the west side. Given the coffee shop would be in Kent, residents can expect early morning delivery truck noise. This is unacceptable. There are no noise mitigation's proposed to protect these residents from truck delivery noise.

Response 2.4-6: *Refer to Responses 2.1-13 and 2.1-14.*

Comment 2.4-7 (Letter #C4, Elena Bao, 09/25/06): On page 2-21 It says and I quote *"Construction equipment will be restricted to those areas planned for development to reduce the impact on the soils and wooded areas to be undisturbed".* However here it says that all equipment that is brought to the site will remain on the site. Which is it?

Response 2.4-7: *The statements are the same. Construction equipment would be brought to and remain on the site until such time as their respective roles are complete. While on site, these machines would remain within the boundaries of the proposed development area (i.e. building pads, parking lots, and stormwater basins. The intent of the statement in the DEIS is to communicate that there would not be repeated, excessive transportation of equipment on and off the site and that the vehicles would not encroach onto areas of the site not subject to the construction activities.*

Comment 2.4-8 (Letter #C4, Elena Bao, 09/25/06): The Applicant states the majority of the construction workers will be local contractors from Kent and Patterson. Hence, the Applicant is conceding that the majority of construction truck traffic will be using our local roads to access the site rather than I-84. So, how many contractors does "151 person-years" equal so we can understand the construction-phase truck traffic impact? Elsewhere in this DEIS (Executive Summary), the applicant contradicts himself on this point by stating: *"Construction truck traffic would access Route 311 from I-84 and travel 880 feet to the project site entrance on the ate road except for local contractors. As a result, it is expected that heavy construction truck traffic would not travel local roads to reach the site thereby minimizing road damage and limiting impacts on town roads".* Hence, when the Applicant wants to understate the traffic impact he says the traffic will come from I-84...when the Applicant wants to overstate the employment benefits he says the majority of contractors will be local. The Applicant "flip-flops" like this all over the DEIS.

> ***Response 2.4-8:*** *The DEIS distinguishes between "construction truck traffic" (heavy earth moving and preparation equipment and large delivery trucks) and local contractors and constructions worker vehicle traffic (personal vehicles and small contract vehicles including vans and box trucks) as per the quote provided in the comment above. The earlier would arrive at the site from Interstate 84 and the latter from points throughout the area including Interstate 84. Volumes of all construction traffic combined would be far below the traffic generated by workers and patrons during the operational phase and as such would result in no significant impact to the local roads and no impact to the level of service of the studied intersections.*

Comment 2.4-9 (Letter #C4, Elena Bao, 09/25/06): The Final Scope requires that the Applicant include the following in this DEIS: "Discuss the expected, or anticipated cost of services and tax revenue generated by completed project for Patterson, Kent, Putnam County and Carmel Central schools". The Applicant's discussion and analysis of project-generated economic impacts in this DEIS is pathetic. The Applicant has failed to quantify any costs relative to this development as it relates to services as required in this Final Scope. This is unacceptable because it prevents one from being able to appropriately weigh expected to provide a full financial picture inclusive of every project-generated cost w/ respect to the state of NY, Putnam County, Kent, Patterson, and also Lake Carmel Park District. The supplemental economic impact statement must include various budget data for the county, municipalities, and the Lake Carmel Park District so that any anticipated revenues from Patterson Crossing can be weighed in their appropriate budgetary context.

> ***Response 2.4-9:*** *Retail development typically does not generate the same level of demand for municipal services as residential development. Costs to fire protection and police service providers are addressed in Chapter 3.0 of the DEIS. The evaluation of such potential cost impacts was done with the input of local service providers. No significant costs were identified that are not addressed either by measures that are part of the proposed project, or through projected increases in tax revenues. See Response 4.12-3.*

Comment 2.4-10 (Letter C-8 Harry Bourletos, September 18, 2006):
My question to you is, if this thing gets the go ahead and the blasting starts, who do I go after my water pressure starts to decrease or cuts off?

It was not questioned extensively, however, what would happen if we were to lose water? Would the board of health allow us to occupy our homes and for that matter how could we stay in our homes under those circumstances? Would homeowners have to wait until all blasting and construction (which could last several months) was completed for the responsible parties to even try to rectify the situation? For example, in the case of a compromised well, how could we be able to differentiate or prove if it had been affected by the blasting or general construction, or for that matter the drilling of new wells on the construction site? What lengths would we as homeowners be required to go to in order to prove cause and effect?

The same scenario applies to cracks in the walls of homes or possible breakage of collectibles within one's home, pictures falling off walls, etc. Will each homeowner be assigned a person who will monitor during blasting as well as being given a blasting schedule? Will all residents be provided with the name and number of each insurance carrier and the total amount of coverage the carriers will be insured for. What do we have to do to have an independent engineer take pictures of our homes and who will the burden of cost for the expense of an engineer fall on? There is talk of an initial test blast? If that goes awry, can we claim negligence on the part of the blasting expert?

If the builder and contractors have insurance, will residents who have claims end up in an insurance carrier war? How do residents actually prove cause and effect with certainty and not be subjected to unreasonable and lengthy scrutiny?

I question who and what monitors specifically will be in place for my well during the more traumatic dynamite blasting of the bedrock on this adjoining property for the proposed Patterson Crossing project? **[Similar comments were found in the following letter and from the following members of the public during DEIS public hearings: Letter C-9 Joan Castiner, (9.25.06); Public Hearing, Johanna Groepl (9.13.06); Public Hearing, Joan Castiner (9.13.06) and Public Hearing, Veronica Popovics (9.14.06)]**

> ***Response 2.4-10:*** *The DEIS and the Blasting Mitigation Plan (DEIS Appendix Q) identifies the Town Code Enforcement Officer and the Building Inspector as the responsible authorities in the case of complaints and damage due to blasting activities.*
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> *The Blasting Mitigation Plan invites residences within 500 feet of the blasting site to request a Pre-Blast Survey. See Response 1.3-1 regarding the technical justification for the selection of 500 feet as a distance for pre-blast surveys. The survey would determine the condition of any structure and document any existing damage or other physical factors that could reasonably be affected by the blasting. Wells within the 500 foot range would be included in the pre-blast survey and would involve monitoring of the subject wells two weeks prior blasting until two weeks after the blasting is completed. It is recommended that any resident eligible for this service utilize the pre-blast survey at no cost to them. Refer to Response 1.3-24 for additional information on the pre-blast survey.*
>
> *If damage is determined to have been caused by blasting, a Notice of Violation would be issued to the contractor. The Notice of Violation would provide time frames before a formal Violation is issued. Appropriate mitigation, including timeliness and monetary compensation, would be included in the formal Violation issued by the Town.*

Blasting rarely results in damage to offsite property. In the event this unlikely event occurs, the documentation resultant of the pre-blast survey, as copied to the contractor, resident and Town would aide in the insurance assessment.

Refer to Responses 2.4-17, 2.4-18 and 2.4-24.

Comment 2.4-11 (Comment number not used):

Comment 2.4-12 (Comment number not used):

Comment 2.4-13 (Comment number not used):

Comment 2.4-14 (Comment number not used):

Comment 2.4-15 (Letter C-19 Johanna Groepl, September 25, 2006): The applicant's DEIS states that the certified blasting contractors will adhere to all insurance needs of the company that is contracting them. How many contractors will there be? Will there be variation for each contractors' insurance covering different areas for different kind of damage? Will we be informed about each insurance individual coverage plan? What is the amount the contractors insurance will cover for the site-property and property outside the site plan?

Response 2.4-15: *The blasting required for the Proposed Action would generally be performed by a single blasting contractor. Regardless, the requisite insurance coverage necessary for this type of construction work is fairly standardized throughout the industry and any blasting contractor working on the project site would be required, by law, to hold the full compliment of insurance policies with coverage's commensurate with the work to be completed.*

Comment 2.4-16 (Letter C-19 Johanna Groepl, September 25, 2006): Under paragraph 39.7 the regulations talk about (d) *Notice of blast.* The certified blaster shall give timely notice of every blast to every person in danger thereof, and shall not denote any blast until all persons have been removed to safe locations. Does this mean, the whole responsibility for blasting safety lies within the blaster and not the developer, the town or other authorities?

Response 2.4-16: *The blasting contractor is the entity insured for the blasting activities and carries the main liability in regard to damage as a result of blasting. The general contractor and the developer assume overall site liability while the Town functions as an authority to regulate the blasting and issue violations if needed.*

Comment 2.4-17 (Letter C-19 Johanna Groepl, September 25, 2006): Firstly, I have to ask is anyone here suggesting here that blast impacts will stop at exactly 500 feet? Secondly, am I expected to ignore my neighbors who border the 500 feet and let them suffer from any blasting impacts that won't stop at 500 feet? How will my neighbors next to me, and houses further away from me, feel when they are suddenly terrorized by an air horn that will be sounded before the firing of the blast. I am within 50 feet of the site and am one of the 250 residents marked for notification. Privy to this information due to my location, I feel in order to maintain my good neighbor relations I need to have some means to notify my neighbors of any blasting I am made aware of. This should not be my job. This is the job of

the developer and the town who wants the development. The 500 foot-cut off is unrealistic and not neighborly at all. This un-neighborly behavior is endorsed by a developer who touted himself on how great his relationships are with the people neighboring this proposed development. **[Similar comments were expressed by the public during DEIS public hearings: Public Hearing, Johanna Groepl (9.13.06)]**

> ***Response 2.4-17:*** *The commentor is correct that it is the blasting contractor's responsibility to notify neighbors prior to blasting and a procedure has been provided to notify neighbors (Blasting Mitigation Plan, DEIS Appendix Q). The distance of 500 feet was selected as a reasonable distance to ensure that residents closest to the blasting would be notified and were aware of the activity. See Response 1.3-1 regarding the technical justification for the selection of 500 feet as a notification distance. Noise from the blasting would be heard at distances greater than 500 feet, but at lesser volume than those residents in close proximity to the site.*

Comment 2.4-18 (Letter C-19 Johanna Groepl, September 25, 2006): Blasting will be scheduled between 8 am and 5 pm Monday through Friday. For how long is not determined. How am I going to deal with this during those weekdays when my children may have an unexpected school schedule that does not fit with the timely notice of blasting? Or when one of my children comes down with a cold or flu, which neither they nor I usually have notification. What do I do when I have a long standing arrangement that can not be rescheduled to fit with blasting schedule? What are any of my elderly less mobile neighbors to do, who can't schedule being picked up before blasting? This state code talks about' ...blasting until all persons have been removed...'

The applicant needs to explain clearly what this entails. If for one reason or another people can not make the given time frame will people be moved by force? Will people who for one reason or another can not leave in the given time frame be left unattended in the danger zone? Will they be picked up by the local police? Can we expect deer and raccoons and our cats and dogs to get spooked out of their minds and run amok across our streets, causing us accidents of all sorts? What about if our dogs or cats get killed due to the blasting? **[Similar comments were found in the following letter and from the following members of the public during DEIS public hearings: Letter C-38 Melanie Pien, Stephen Pien, Alani Pien, Kai Pien (9.25.06); Public Hearing, Johanna Groepl (9.13.06)]**

> ***Response 2.4-18:*** *The blasting would not affect the day to day activities and schedules of the general public. The intent of the State code is to protect people in proximity to the blast from any potential rock debris that may have escaped blasting blankets. The vast majority of the time, the people concerned with this regulation are the blasting and site contractors. The need for those persons on site to vacate the premises is wholly dependent on the location of the actual blasting which does not encompass a large area and, certainly not areas off the project site. It is not the intent of the regulations to require the evacuation of residents during blasting. There would be no need for residents to evacuate their home during blasting activities.*
>
> *Given the multitude of activities within the community and on the site during the construction phase, it is very unlikely that wildlife would be spooked by a blast and run amok causing vehicular accidents.*

Comment 2.4-19 (Letter C-19 Johanna Groepl, September 25, 2006): The applicant's DEIS needs to address clearly how in practicality the pre-blasting safety procedures will be executed for all residents and all animals. What has the applicant in mind when he suggests "test blasting for blasting that will occur within 500 feet of existing off-site structures"? Not only will there be blasting, but also blasting tests. And off site structures really means family homes in Patterson, Kent, and Lake Carmel.

Homeowners within 500 feet of the blasting site can request a pre-blasting survey. I would think that an initial pre-blast survey in such cases is not sufficient and the applicant needs to provide and allow for additional pre-blast surveys before each blast that is done in proximity of those homes. **[Similar comments were expressed by the following members of the public during DEIS public DEIS public hearings: Public Hearing, Johanna Groepl (9.13.06)]**

> ***Response 2.4-19:*** *Refer to Responses 2.4-10, 2.4-17 and 2.4-18. The DEIS notes that the blasting survey would include post-blasting inspections as well.*

Comment 2.4-20 (Letter C-19 Johanna Groepl, September 25, 2006): Although the applicant's DEIS states that "blasting typically does not result in damage to existing foundations and wells, if the work is completed according to current industry standards", I know that foundations and wells are subject to damage from blasting and other means of breaking ground.

The applicants DEIS goes on to describe, in case of complaints, "current industry standards" will be used to determine if the damage was done by contracting blasting company. What does this really imply? Who or what determines which year or years will be accepted for "current industry standards"? What about structures that have been build before time of "current industry standards"?

In case of damage complaints, current industry standards will be used to determine if the damage was done by the contracting blasting company. What are these current industry standards? Who or what determines which year or years will be accepted for current industry standards? **[Similar comments were found in the following public during DEIS public hearings: Public Hearing, Johanna Groepl (9.13.06)]**

> ***Response 2.4-20:*** *Refer to Responses 2.4-10, 2.4-17, 2.4-18 and 2.4-24. Procedures and mechanisms previously identified are in-place in the event that damage results from blasting activities. References to current industry standards relates to determinations of cause. Age and condition of a structure is irrelevant to damage claims. Either the damage was or was not the fault of the contractor. Damage is assessed by the comparing pre- and post- blast surveys.*

Comment 2.4-21 (Comment number not used):

Comment 2.4-22 (Letter C-19 Johanna Groepl, September 25, 2006): What are the names, addresses and phone numbers where I can reaffirm or complain when protocol is not followed or damage is done. What is the expertise of the Building Inspector, the Town Code Enforcement Officer, or blasting contractor who are charged with the responsibility to interview the person involved "in case of specific blast damage complaints"? It is also important to note the record of the blasting contractor, as any monetary reparation for

damage according to contract will be settled between contractor and the property owner. Just remember, the applicant has left town by that point.

Response 2.4-22: *Refer to Responses 2.4-10, 2.4-17, 2.4-18 and 2.4-20.*

Comment 2.4-23 (Letter C-19 Johanna Groepl, September 25, 2006): Another ambiguous term used in the applicant's DEIS: sufficient surficial coverage for the blast area. What is meant by 'sufficient'?

Response 2.4-23: *Sufficient surficial coverage of the blast area would include the area of rock subject to the blast as well as a buffer around the impacted rock. The actual coverage would be dependent on the square footage of rock exposed and prepared for the blast. The intent is to provide blasting blankets over the entire potential fragmentation zone in order to contain rock debris.*

Comment 2.4-24 (Letter C-19 Johanna Groepl, September 25, 2006): Questions not answered but need answers by the applicant's DEIS:

- Where do residents wanting to avoid impact of blasting noise move to, for how long and who will carry the costs of our lives interrupted?
- Am I expected to leave my home every other day, days in a row and take my children and animals with me? Where do I take them to? Into my car? Into a Hotel? Who will pay for the costs of driving with my kids and animals around in the car?
- Where will my children do their homework on these days? The interruptions because of blasting schedules, will it affect their grades?
- If I can't prepare meals for myself and my family due to the blasting, who will pay for eating out?
- To avoid over-stressing our animals we can board them in kennels. Who will pay for kennel cost and for the vet costs, because my animals will need attending by a vet?
- What if someone's Post Traumatic symptoms get re-triggered by the blasting? Who will pay for the cost of mental health care? Will it be a fight between insurance and ourselves in the middle.

Response 2.4-24: *Refer to Responses 2.4-10, 2.4-17 and 2.4-18. Residents are not expected to nor required to relocate due to blasting activities. There are no known documented cases of children suffering academic impacts due to blasting activities. The impact related to blasting would be a short term noise impact lasting the duration of the blast and would not lead to the evacuation of nearby residents. Should a resident choose to relocate or drive around with their children and animals, it would be done at their own discretion and would not be considered an impact for which reimbursement would be required. Refer to the DEIS Chapter 4.9 Noise for a discussion of impacts and mitigation during construction operations.*

As blasting is of very short duration and does not have a high frequency pattern, the re-emergence of PTSD would be unlikely. An individual with concerns of PTSD should consult with their doctor to assess any activities that may be of concern.

Comment 2.4-25 (Letter C-19 Johanna Groepl, September 25, 2006): Even the applicant states that the Blaster will be responsible for any damage to my home and my well, but does not say who will pay for damage done to our animals, our lives, our peace of minds. Between

the applicant and the town of Patterson, who will be on the books for being financially responsible for any damage that will occur in these areas?

Response 2.4-25: *Refer to Responses 2.4-10, 2.4-17 and 2.4-18 and 2.4-24. There are no known documented adverse impacts to pets, significant impacts to lives, or permanent mental impacts to one's peace of mind as a result of blasting with site development. The blasting contractor is required to maintain insurance for any claims that may occur due to blasting activity.*

Comment 2.4-26 (letter C-38 Melanie Pien, Stephen Pien, Alani Pien, Kai Pien September 25, 2006): The mitigation plans do not indicate whether residents within 500 feet should be stockpiling water or making plans to evacuate their homes to protect their families every time blasting is planned. Nor does it discuss the length of time during which residents will be protected by the blasting contractor's obligation to deal with well and foundation problems. It does not address the issue of what to do if problems do not appear immediately after a blast. Are residents supposed to examine their homes after every blast? How soon after every blast? How often after every blast? What if they were not home during blasting? Will all damage from blasting be clearly visible to a homeowner at the time of blasting or must the hire an expert after each blast to ascertain whether there has been damage? How can they sell their homes if they should want to move during the blasting period?

Response 2.4-26: *Refer to Responses 2.4-10, 2.4-17 and 2.4-18 and 2.4-24. There are no known documented cases of residents not being able to sell their home due to blasting activities occurring in the area.*

Comment 2.4-27 (Comment number not used):

Comment 2.4-28 (Letter C-44 Peter Riebold, September 22, 2006): The developer must clarify whether blasting will take place on Saturdays or on national holidays.

Response 2.4-28: *The Blasting Mitigation Plan (Appendix Q) states that blasting would be limited to the hours of 8 a.m. to 5 p.m. Monday through Friday. No blasting would be permitted on Saturdays, Sundays, Holidays, or any other time not specifically permitted.*

Comment 2.4-29 (Comment number not used):

Comment 2.4-30 (Public Hearing, September 13, 2006, Johanna Groepl): In the applicant's DEIS it reads some blasting would likely be required. What does the applicant mean by some?

Response 2.4-30: *The DEIS states on page 4.1-2 that 119,000 cubic yards of rock would need to be removed. The site plan has been revised since that time and the building pad elevations have been raised to better balance the earthwork. As a result, the amount of rock removal has been reduced by approximately 50 percent from that presented in the DEIS. The area within which rock removal would potentially be required under the plan presented in the DEIS was limited to approximately 11 acres. This area has been reduced under the modified plan to approximately 9.8 acres and is depicted on Figure 4.1-1 herein. Refer also to Response 1.3-23.*

Comment 2.4-31 (Comment number not used):

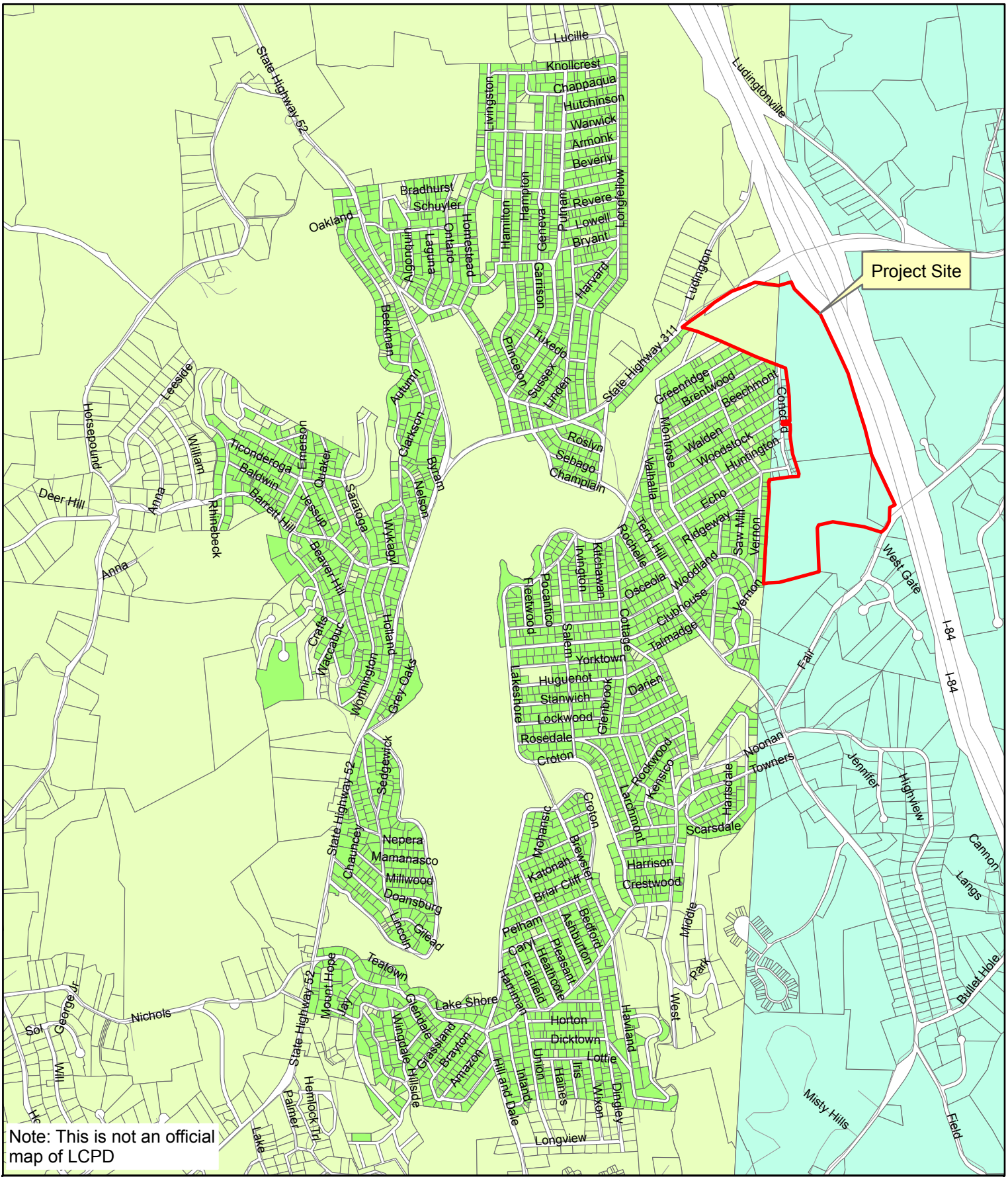
Comment 2.4-32 (Comment number not used):

Comment 2.4-33 (Public Hearing, September 13, 2006, Johanna Groepl): I would think one initial preblast survey is not sufficient and the applicant needs to provide and allow for additional preblast service before each blast that is done in proximity to those homes.

> ***Response 2.4-33:*** *One initial survey is used to establish a baseline of the property's/well's condition from which damage resulting at any point in the blasting process can be assessed. Redundant surveys would not afford residents any additional measure of protection.*

Comment 2.5-1 (Public Hearing, September 13, 2006, Joan Castiner): My biggest concern and question is where is the accountability that is so lacking in this DEIS? It appears that the profit motive far exceeds all the other considerations.

> ***Response 2.5-1:*** *Where the SEQRA regulations require the preparation of a Draft Environmental Impacts Statement (DEIS), the regulations also provide for the following to, in part, provide accountability 1) public adoption of a DEIS scope by the Lead Agency; 2) submission of a DEIS by the Applicant for completeness review by the Lead Agency; 3) acceptance of the DEIS by the Lead Agency; 4) public and agency review of (and issuance of comment on) the DEIS; 5) submission of responses by the Applicant to substantive comments submitted on the DEIS, in the form of a Final Environmental Impact Statement, (FEIS); 6) acceptance of a Final Environmental Impact Statement by the Lead Agency, and; 7) drafting and adoption of a Findings Statement identifying the potential environmental impacts anticipated from the Project and the adequacy of any proposed mitigation. This process has ensured accountability on the part of the Applicant and the Lead Agency.*



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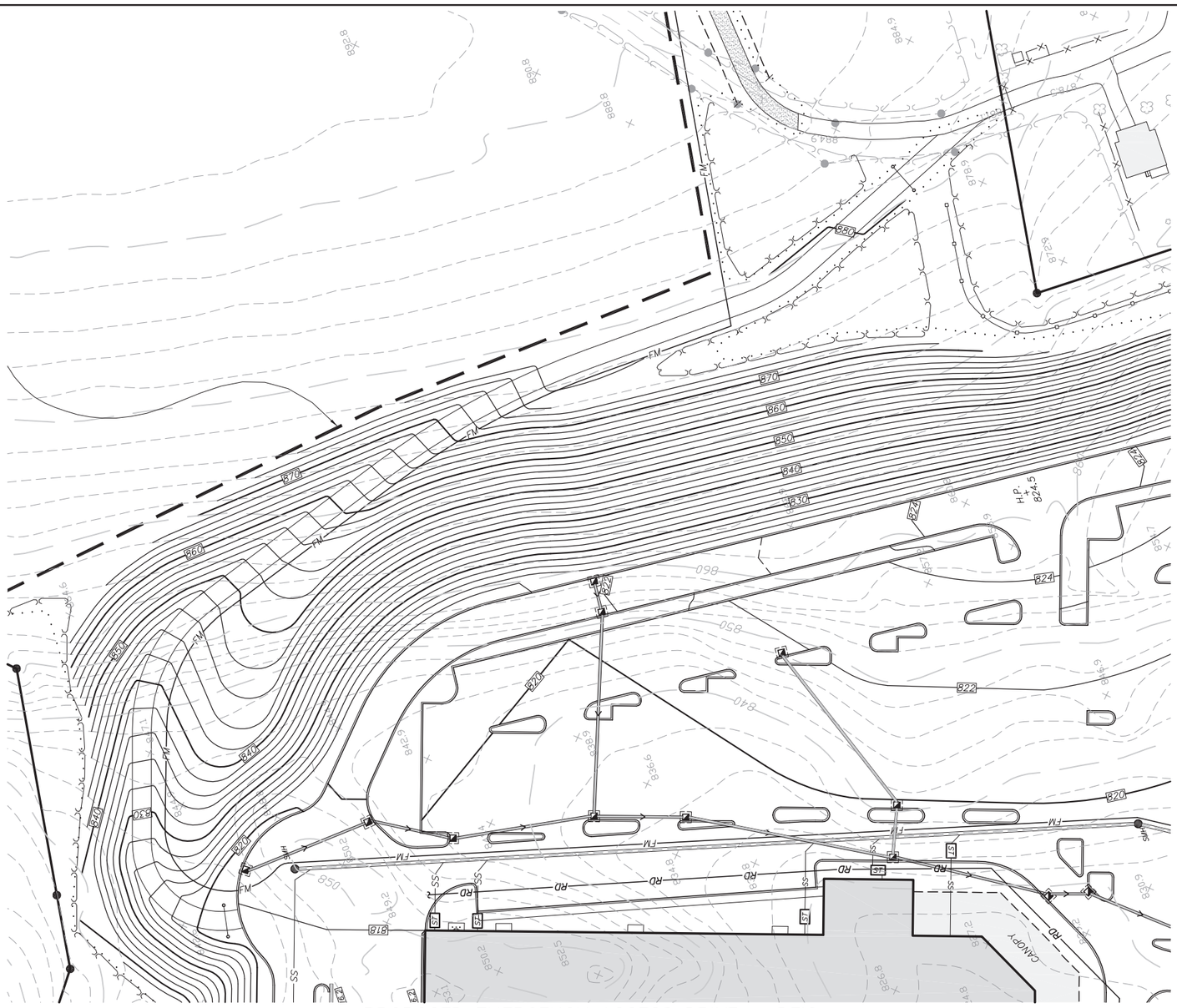
Legend

- Property Lines
- Lake Carmel Park District
- Town of Patterson
- Town of Kent

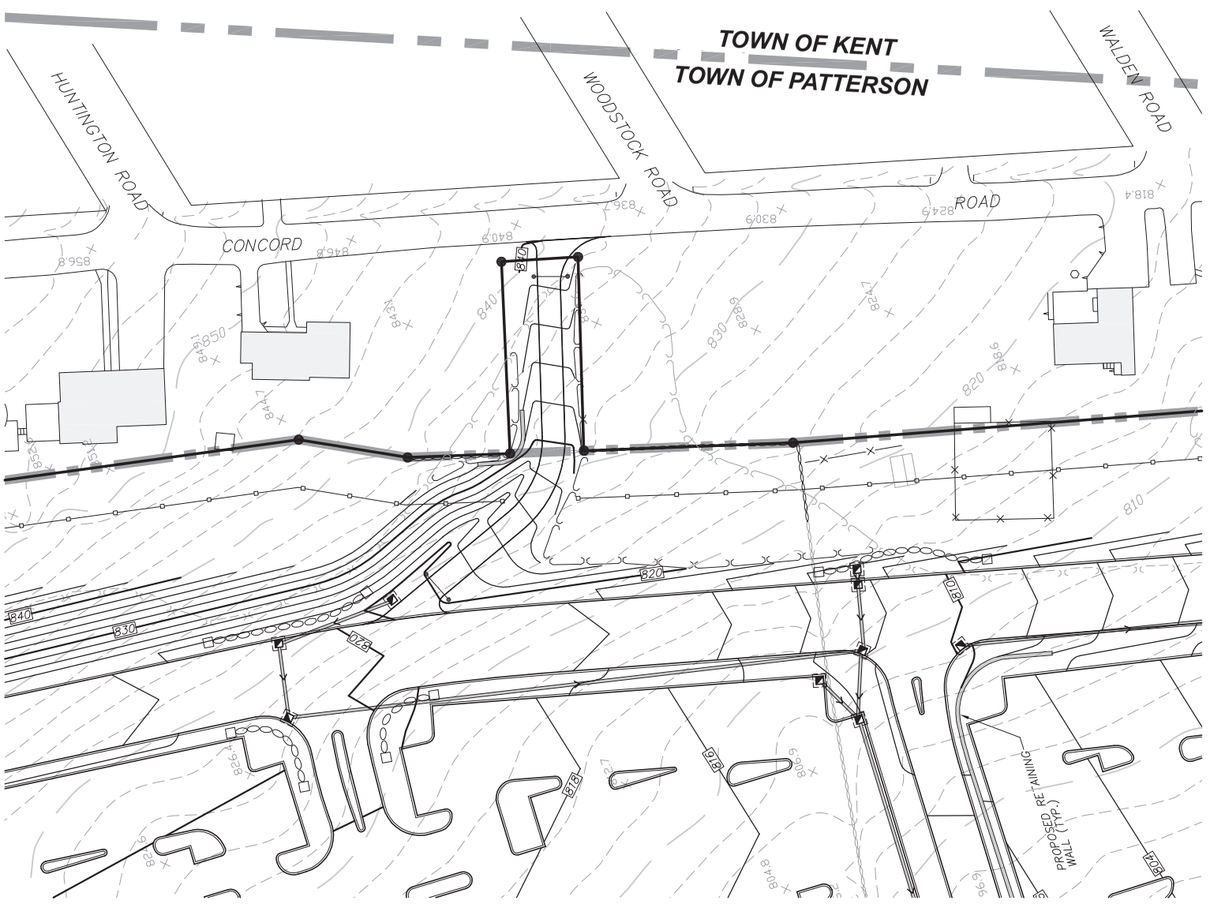
FS EQ: PattersonCrossing\GIS\ParkDistrict.Mxd

Figure 2-1: Lake Carmel Park District
Patterson Crossing Retail Center
Town of Patterson & Town of Kent, Putnam County, New York
Source: Putnam County Real Property Data
Scale: 1" = 1,600'

Tim Miller Associates, Inc., 10 North Street, Cold Spring, New York 10516, (845) 265-4400, Fax (845) 265-4418



PROPOSED EMERGENCY ACCESS DRIVE – DEIS
SCALE: 1" = 80'



PROPOSED EMERGENCY ACCESS DRIVE – FEIS
SCALE: 1" = 80'

Figure 2-2: Patterson Crossing Proposed Emergency Access Drives
Patterson Crossing Retail Center
Towns of Patterson and Kent, Putnam County, New York
Source: Insite Engineering, Surveying & Landscape Architecture, P.C., 12/12/07
Scale: As Shown

File 04031 1/03/07
JS/04031

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3.0 ECONOMIC AND SOCIAL BENEFITS COMMENTS AND RESPONSES

Comment 3.1-1 (Letter A-4, Neil A. Wilson, AICP, LRC Planning Services, September 21, 2006): Page 3-2, the analysis of estimated real property taxes assumes a constant amount of taxes being generated over time. In order to ensure the validity of this analysis the owner should commit to not seeking reduction(s) in the assessed valuation of the property and to not initiate tax certiorari proceedings seeking a reduction of taxes paid for a minimum fifteen year period.

> ***Response 3.1-1:*** *Comment noted. The Applicant may seek a reduction in the assessed valuation of the property or initiate tax certiorari proceedings seeking a reduction of taxes paid, if in its view, improper assessment methods are applied to the project.*

Comment 3.1-2 (Letter C-23, Daniel Kuchta, September 25, 2006): Page 2-2.2, 2nd paragraph in section 2.1.2 and figure 2-02 both indicate that tax lot 22.2-47 will be one of the project's 5 parcels. But table 3-1 on page 3-1 lists only 4 tax parcels and not 22.2-47. Why was 22-2.47 left out of table 3-1?

> ***Response 3.1-2:*** *Tax parcel number 22-2-47 should not have been included on DEIS Figure 2-2, Existing Tax Lots, or in the text on page 2-2.2 as it is not part of the project site. The project site consists of four tax parcels, as shown in revised Figure 2-2 at the end of this section. The three lots located in the Town of Patterson (22-3-1, 33-2-23, 24-2-3) have a combined area of approximately 74.1 acres. The tax lot in the Town of Kent (22-2-48) is approximately 16.4 acres.*

Comment 3.1-3 (Letter #C4, Elena Bao, 09/25/06): Where is the evidence that supports this amount of tax revenue being generated? I see no source data in this DEIS nor do I see an explanation of the methodology used to calculate these revenue projections. The Applicant must not claim revenue projections without providing data to support them. A supplemental economic impact statement is needed which should include a detailed analysis of how the retail sales projections for this project were calculated and how the corresponding sales tax revenue projections were arrived at.

> ***Response 3.1-3:*** *Sources of data used in the DEIS fiscal impact analysis and projections of sales taxes are indicated in DEIS Chapter 3.0, along with descriptions of the methodology used in calculating future property and sales tax revenues. Tables indicating future revenues are included with footnotes for the sources of data used. As stated on page 3-4, to project future sales at the proposed development, average sales per square foot for various shopping centers around the country were reviewed based on data compiled by the International Council of Shopping Centers.*

Comment 3.1-4 (Letter #C4, Elena Bao, 09/25/06): The applicant has failed to provide budgetary data for Putnam County to allow one to assess what the generation of this revenue actually means within the context of that county budget. The "proposed" 2006/2007 Putnam County budget is approximately $121 million (this is likely to be substantially larger once adopted in October 2006). The applicant should state in the DEIS that the newly proposed 2006/2007 Putnam County budget relies on sales tax revenue for 39% of the county budget.

According to reports from the NY State Comptroller, Putnam County's reliance on sales tax for revenue ranks 3rd out of 57 counties (the average county has sales tax reliance of 25%)! The NY State Comptroller warns that heavy reliance on sales tax revenue source is imprudent given that market conditions can make this revenue source vulnerable. Putnam County will likely be relying on sales tax for over 40% of the budget in 2006/2007, a substantially larger reliance than the majority of the other counties in NY. This project is not fiscally prudent given it would cause our county to rely on tax even more than we do now. **[Similar comments were found in the following letter and from the following members of the public during DEIS public hearings: Letter C-4 - Elena Bao (9.25.06); Public Hearing Comments: Karen Correll (9.14.06)]**

Response 3.1-4: *Significant costs to the County are not anticipated, as described in DEIS Chapters 3.0 and 4.12. The Applicant has no influence on whether the County relies on sales taxes to fund the County budget (Refer to Sections 4.11, Community Services and Facilities and 4.12, Economic and Social Benefits, of this FEIS regarding potential municipal costs) or on County fiscal policies. The project would be supportive of existing policies of the County such as the "Shop Putnam" initiative (which supports smart commercial growth in Putnam County), and statements of Putnam County Executive Robert J. Bondi from his 2004 State of the County Address and County 2005 Budget Message, as described on page 3-3 of the DEIS.*

County Executive Robert J. Bondi, in his State of the County address of 2007, recommended that Putnam County raise its sales tax rate from the current 3.5 percent to 4.0 percent to avoid eliminating essential services. According to Mr. Bondi, the "...sales tax recommendation will yield $12 million dollars per year, based on actual collections in 2006, which represents 10 percent of the 2007 gross operating budget" and without the sales tax increase, the County Executive stated that "...the total tax levy increase for 2008 will be 66%..." not including costs unknown at the time of his address.

In his 2008 State of the County address, the County Executive stated that "[i]f County revenue does not increase…real property tax payers will face a 22% property tax increase" in 2009. By providing local shopping opportunities and capturing exported tax dollars, the project will provide the County a new revenue source, which could be used to limit tax increases that have been required in recent years including the 18.5 percent increase in 2007 and 28 percent increase in 2008.

Whether or not one believes the County budget relies too much on sales tax, it is irrefutable that the proposed project will add significant revenue to the County budget.

Additionally, the Patterson Crossing Retail Center would also work towards correcting the "Putnam Paradox", a phrase that was coined by a Chase economist whose research showed that two thirds of the disposable income generated by Putnam residents is not being spent in Putnam County but outside County lines[1]. This lack of local spending results in Putnam County losing millions of dollars in sales tax

[1] Putnam Paradox. Putnamcountyny.com. 2006. 1 July 2007. <putnamcountyny.com/paradox>.

annually to neighboring municipalities [ex. Westchester, Dutchess and Fairfield Counties (CT)]. The Patterson Crossing project would not increase Putnam County's reliance on sales tax revenue but would rather recapture sales tax revenues lost from County residents spending out of the County and add significant reserves to the County budget.

Comment 3.1-5 (Letter #C4, Elena Bao, 09/25/06): The Applicant must not state this tax revenue will be "available for the county" because the Applicant has not performed a valid cost analysis for the Patterson Crossing project in this DEIS. Based on this DEIS, we have no idea whether ANY revenue will be available for our county because we don't know what the Patterson Crossing project will COST the state, the county, our towns, and the Lake Carmel Park District. **[Similar comments were found in the following letters: Letter C-4 - Elena Bao (9.25.06); Letter C-38 Melanie Pien, Stephen Pien, Alani Pien, Kai Pien (9.25.06); Letter C-44 - Peter Riebold (9.22.06)]**

Response 3.1-5: *Retail development typically does not generate a significant demand for municipal services as does residential development. Costs to community service providers addressed in Chapter 4.11 of the DEIS and Chapter 4.11 in this FEIS are based on commonly used planning data published by the Urban Land Institute. The evaluations of such potential cost impacts was done with the input of local service providers, including the Putnam County Sheriff's Department. Cost to community service providers is evaluated in terms of manpower needs and major equipment needs generated on a per capita basis. No significant costs were identified that are not addressed either by mitigation measures that are part of the proposed project, or through projected increases in tax revenues that could be applied against costs incurred.*

In addition, the project will not add school children to the Carmel Central School District. Carmel Central School District will receive an additional $579,137 in property tax revenues annually without generating any costs to the school district. The Carmel Central School District would welcome this additional revenue. All school tax revenues generated by the proposed project would go directly to offsetting existing school district costs and those related to future growth in the district.

Based on data compiled by the International Council of Shopping Centers on average sales per square foot, Chapter 3.0 on the DEIS projects that New York State will realize between $7.0 and $8.4 million in sales tax revenue. This revenue will become available to offset indirect costs to the State associated with the project.

Chapter 3.0 of the DEIS indicates that Putnam County is expected to receive $56,318 in additional property taxes per year, and between approximately $6.16 million and $7.38 million in annual sales taxes as a result of the proposed project. These sales tax figures are based on data compiled by the International Council of Shopping Centers and the likely tenants of the retail center.

The Towns of Patterson and Kent will also receive tax revenue from the proposed project. Property taxes collected by Town taxing jurisdictions in Patterson and Kent combined, including library and fire departments, will increase by $169,987 annually.

The project is not expected to result in any costs to the Lake Carmel Park District since as a commercial project, it will not use the resources of the Park District.

Comment 3.1-6 (Letter #C4, Elena Bao, 09/25/06): The Applicant has failed to provide budgetary data for the Carmel Central School District which would allow one to be able to assess what the generation of $600,000 in school taxes actually MEANS within the larger context of the entire budget. The 2005/2006 Carmel Central School Tax Budget was over $92 million. This fact needs to be included here to underscore that $600,000 is a pathetically small financial contribution given the enormity of the budget. The Applicant should also be required to outline the Carmel Central School District budget history for the last 5 years to demonstrate the trends in budget increases. Each year, our school tax budget has been increasing by several million dollars annually. Hence, a $600,000 (less than 1% of the budget) school tax contribution is not a contribution that can prevent school tax increases since the budgets increase many millions every year. I would like to not hear that this project's meager compensation of $600,000 annually in school taxes is most certainly not a justification for the destruction of the Lake Carmel Park District.

Response 3.1-6: *The project will generate school district revenues without generating any costs to the school district. As a retail/commercial operation, the proposed development would not directly generate any school aged children and therefore would not result in added costs to the Carmel Central School District. No adverse impact to the budget of the Carmel Central School District will occur from the additional annual revenue to the District generated by the project and therefore, no further analysis related to School District impacts is warranted. While the contribution of this project will have a beneficial effect on the ability of the District to fund its budget, this project cannot prevent future school tax increases.*

Comment 3.1-7 (Letter #C4, Elena Bao, 09/25/06): Patterson Crossing, according to various economic studies, will actually not be beneficial to the "Shop Putnam" initiative since many of our local small business will be put out of business by Patterson Crossing's big-box stores. I have included numerous studies in the Appendices of these written comments which clearly demonstrate the adverse impact of big-box development on the small business economy.

Response 3.1-7: *The DEIS examines the effects of the proposed project on existing area businesses, and the population and character of the surrounding community. The DEIS did not identify potential for significant displacement of businesses or residents. Please see Response 4.12-1 in Section 4.12, Economic and Social Benefits, for further information related to potential business effects. Big Box development is an international trend that results in greater efficiencies in the delivery of retail goods to the marketplace and lower prices. Big Box retail development appears to be highly desirable and the dollars spent in such establishments invariably results in increased sales tax revenues for local jurisdictions. It cannot be concluded that Big Box development adversely affects the economy as a whole, or replaces or eliminates other alternatives.*

Comment 3.1-8 (Letter #C4, Elena Bao, 09/25/06): The Applicant has failed to make any reference in this DEIS to the NY State sales tax exemption on clothing and footwear adopted in April 2006. Costco, the sporting goods store, the clothing store, and potentially the other "unnamed" stores at Patterson Crossing will sell clothing and footwear. Per my

understanding, clothing sales account for around 10-15% of annual sales at Costco. Clothing and footwear account for over 50% of annual sales at Sports Authority per their 2005 10-K. The Applicant needs to perform an analysis of Patterson Crossing's projected retail sales by "category" to identify how much of the revenue will be generated by clothing and footwear sales. Accordingly, the applicant must adjust the sales tax revenue projections to account for these sales tax exempt items.

> ***Response 3.1-8:*** *The DEIS assessment accounts for a reduction in potential sales tax revenues generated due to sales tax exemptions, in particular from a wholesale establishment. The amount of total sales taxes that would result if 12 percent of the sales fall in the exempt categories of food products, beverages, health supplements, drugs and medical supplies would be between $12.2 million and $14.6 million. This estimate with the food and health-related sales factored out is of the same order of magnitude as the gross estimate provided in the DEIS (between $13.9 million and $16.6 million) and results in no change in the underlying conclusions of the DEIS related to sales taxes, according to the Applicant. The project would still result in substantial sales tax revenues to the State, County and MTA. Refer to page 3-4 of the project DEIS.*

Comment 3.1-9 (Letter #C4, Elena Bao, 09/25/06): This table is all that is provided by the Applicant to show the financial impact of this project. This is just not good enough for the scale and magnitude of this project. We need to see the full financial picture.

> ***Response 3.1-9*** *Tax impacts and anticipated municipal costs of the project are described extensively in tables and in the text on pages 3-1 to 3-6, and pages 4.11-1 to 4.11-8 of the DEIS. The level of detail provided is considered by the Applicant to be sufficient for the purposes of SEQRA review of a project of this size.*

Comment 3.1-10 (Letter #C4, Elena Bao, 09/25/06): This is one of my favorite paragraphs in the DEIS as the Applicant freely admits that he doesn't know much at all regarding the financial impact of Patterson Crossing. Here, the applicant admits that his revenue projections in prior paragraphs may not be "net income" because sales that take place at Patterson Crossing will take place at the expense of local competitors. Then the Applicant says that he has no clue whether Patterson Crossing will generate "new" sales since consumer spending study for our area has never been performed. Laughably, the paragraph closes with "*it is projected, however, that the majority of sales taxes generated by the project will represent a net increase to taxing jurisdictions".* Classic Camarda! The Applicant just finished saying he has no research available to determine if there will be net economic benefit and in the next breath claims the project will yield net economic benefit! The bottom line here is there is no data in this DEIS which would indicate this project would yield net economic benefit to our state, county, or towns.

> ***Response 3.1-10:*** *Sales tax projections prepared for the DEIS provide an order of magnitude estimate that is consistent with the SEQRA requirements. The amount of future sales at the Patterson Crossing Retail Center that might otherwise occur within the County and State, as opposed to new sales, can not be determined at this time.*
>
> *However, the proposed development is expected to bring additional revenue through sales tax on retail purchases to Putnam County and New York State. According to the Applicant, and based on discussions with anticipated tenants, the majority of*

sales will be new sales, as opposed to sales that would have otherwise occurred at other local stores. With no significant costs to the County or State identified, further analysis of this issue is not warranted. Adverse impacts to local retailers are not anticipated from the development of Patterson Crossing Retail Center.

Comment 3.1-11 (Letter #C4, Elena Bao, 09/25/06): Here's the disclaimer: "Oh, by the way...this data might not be correct". I am also concerned by the statement *"based on the manner in which the property is actually developed and assessed".* Is the applicant admitting here he might not be around to develop the property? If the applicant gets a project approval, can we expect the Applicant to "flip" this property as he has done with his other projects? This would certainly explain why the applicant has not made himself accountable for mitigating any of the project-related impacts. Rather, he has pushed accountability onto other parties.

Response 3.1-11: *The DEIS analyzes all potential impacts of the project regardless of whether the Applicant develops the property or sells it. However, the project plan that is subject to approval is proposed to mitigate all identified impacts to the greatest extent practicable. The DEIS describes a range of mitigation measures that are proposed by the Applicant as conditions of approval. Should the project be built by another party, these same mitigation measures and other conditions of approval would still apply. The terms of the Patterson Crossing Retail Center site plan decisions and associated conditions are based on the merits of the application. Any conditions run with the land, not with the applicant.*

Comment 3.1-12 (Letter #C4, Elena Bao, 09/25/06): The applicant's extensive project-generated traffic infrastructure modifications as described in this DEIS have the potential of costing tens of millions of dollars. I fail to understand how this type of expense would be deemed a "minimal" expense. The Applicant needs to provide a detailed cost analysis of this project's traffic modifications in a supplemental traffic impact study or a supplemental economic impact study. Further, the general "maintenance" costs the applicant references here need to be itemized and quantified in dollars given the Applicant is conceding this will be a taxpayer expense.

Response 3.1-12: *A review of the DEIS found no reference to the costs of transportation improvements being "minimal". The FEIS introduction to Section 4.8 on Transportation and Appendix I provides additional details on infrastructure modifications, responsible parties and costs related to the proposed improvements.*

The Applicant will own and maintain the only new road, the site entrance, to be constructed as part of the subject project. The Applicant will also pay maintenance on the traffic signal at the private entrance road to the site. Current maintenance fees for the traffic signal are about $3,200 per year excluding energy costs.

There are no new Town roads nor turn lanes on Town roads being constructed. The Harvard Drive improvements may allow the Town of Kent to defer maintenance there.

The traffic analysis indicated the County geometric improvements at the intersection of Fair Street and NYS Route 311 and the intersection of Terry Hill Road and NYS Route 311 are needed regardless of the project and hence the project would not

imparting additional maintenance nor capital cost on the County, while it would generate additional County sales tax revenue to cover future maintenance.

The NYS Route 311 and NYS Route 164 geometric improvements would be accelerated but were anticipated regardless of this project. The NYS Route 311 and NYS Route 52 signal retiming) would not incur additional costs as they would be part of routine signal timing changes by NYSDOT. The State would be responsible for maintenance of turn lanes on NYS Route 311 and new traffic signals at intersections except the site driveway. With less than one lane mile added to the state system, overall maintenance costs would be in the tens of thousands of dollars with annual revenue generated expected to be in the $10 to $20 million range.

The capital costs left to the County and State are anticipated regardless of this project. The first annual tax revenue would cover the capital costs with most remaining available for other transportation and non-transportation related uses.

Comment 3.1-13 (Letter #C4, Elena Bao, 09/25/06): The Applicant is understating the impacts which will be imposed on the Kent Police. The police agencies involved here don't get to "choose" who responds to the calls at this project. The police agency that must respond to calls is the closest officer to the site at the time of the call. Given the Kent Police station is 1.5 miles from the site, this agency will by default have to respond to the majority of project-generated calls. Given that it is well-documented that retail centers increase police calls exponentially, we can expect that there will be a severe impact on the Kent Police. The Applicant must provide detailed data on how many calls per year will be generated by this project so that the impact on the Kent Police can be properly assessed. This impact needs to be translated to dollars in terms of the cost of additional resources for Kent Police. **[Similar comments were found in the following letter: Letter C4 Elena Bao (9.25.06);]**

Response 3.1-13: *No significant adverse impacts to the County Sheriff's services or the State police services were identified. It is acknowledged that the Town of Kent Police Department may incur minimal costs associated with responding to calls originating from the development proposed for the Kent portion of the Patterson Crossing Retail Center, however, these impacts would not be significant. As noted in the DEIS, the Town of Patterson does not have a police department. The Kent Police Department does not have jurisdiction in the development proposed for the Patterson portion of the proposed development.*

The Applicant has incorporated a Putnam County Sheriff's Department Substation in the modified plan. This substation would be located on site in the 2,000 square foot Building H proposed on the north end of the development in the Town of Kent or, alternately, within the building that would contain the management, office and meeting space. Based on input from the Putnam County Sheriff at a meeting with the Applicant, the substation floor plan has been developed and provided to the Sheriff for review. The Sheriff also noted that he will staff the substation as appropriate.

It is the Applicant's opinion that with the limited development (1,700 sf of retail and a 300 square foot County Police Substation within same building) proposed in the Town of Kent, it is reasonable to expect that the Proposed Action will not adversely impact the Kent Police Department.

As indicated on DEIS page 4.11-2, the Putnam County Sheriff's Department anticipates no significant impact to service as a result of the proposed project[2]. The Town of Kent Police Department has made comment regarding the impacts of additional traffic on the local road network, although Chief Smith of the Town of Kent Police Department noted that impacts not related to traffic were difficult to determine at this time.[3] Traffic impacts of the project are addressed in DEIS Chapter 4.11 and in this FEIS in Chapter 4.8.

The DEIS provided a quantitative estimate of anticipated impacts and costs for increased police services as a result of the proposed project. To assess the number of calls for police services that could be anticipated, standard police demand requirements, or multipliers, identified by the Urban Land Institute were applied to the proposed project. The proposed project would not increase the resident population of either the Town of Patterson or the Town of Kent, since it is a commercial development. Based on standards contained in the Development Impact Assessment Handbook (Urban Land Institute, 1994, page 261), it is estimated that two police officers per 1,000 population and 0.6 police vehicles are required to serve a residential population, with one fourth of that number resulting from the same number of non-residential employees. This equates to 0.5 police personnel and 0.15 police vehicles required per 1,000 workers for non-residential daytime population.

Approximately 488 workers are anticipated to be employed at the proposed facility after occupancy. This would result in an increase in demand of 0.2 police personnel and 0.07 police vehicles. Workers would be distributed over multiple shifts generally between the hours of 10 AM and 10 PM. The non-resident site population will also include patrons of the proposed stores. To provide a conservative estimate of demand for services, if all 1,731 proposed parking spaces were occupied by either workers or patrons, and assuming 1.5 people per vehicle, then the worst case site population would be expected to generate demand for 1.3 additional police personnel and 0.4 police vehicles, according to the ULI standards. It is noted that the increased demand placed on the Departments from the Patterson Crossing Retail Center development would represent an incremental increase in demand on existing services, rather than demand for new services in this area, which the ULI multiplier rates assess.

The potential additional demand for police services would be distributed between responders including the County Sheriff's Department, the New York State Police, and the Town of Kent Police. Actual demand for police protection services would likely be lower than the conservative estimate of additional demand described above for most periods during the year, since only during peak shopping times could all of the proposed parking spaces be occupied, which the above analysis assumes. Based on the conservative estimate, demand for police services equating to an additional officer and no additional police vehicles would be expected. Since there are three departments that would absorb this additional demand, no one Department would be expected to experience an increase in calls or demand for services requiring new staff or facilities. Based on salary information available for New York State Police, the starting salary of a state police trooper is $50,374 (see http://www.nytrooper.com-NYSPRecruitmentCenter:SalaryandBenefits).

[2] Letter from Chief Donald B. Smith, dated October 22, 2004 (Appendix B, Correspondence).
[3] Letter from Chief Donald L. Smith, Jr., dated October 14, 2004 (Appendix B, Correspondence).

The proposed project is expected to provide between $7 and $8.4 million in future New York State sales taxes, $6.2 to $7.4 million in County sales taxes, $7,403 in Town of Kent property taxes, and $56,318 in County property taxes, all of which would be available to fund additional police services required as a result of the project.

The distribution of police costs between the various departments involved in responding to the project site to some degree can not be determined at this time. However, the proximity of the Kent Police Department to the site of the proposed Patterson Crossing Retail Center does not necessarily mean that the Kent Police patrol cars will be the "closest car", since the Department patrols the entire Town of Kent, which extends nearly ten miles west of the project site. The Kent Police Department would respond to emergency 911 calls to the project site should they have a patrol car closer than the Sheriff's Department or New York State Police.

To further gauge potential impacts to police services in terms of anticipated calls per year, data on calls for police services from an existing Putnam County shopping center were obtained by the Applicant's consultants for comparison purposes. Due to its size and type of retail stores, the Highlands Shopping Center in the Village of Brewster (Town of Southeast) was analyzed.

The Highlands Shopping Center is located on Independent Way and contains several anchor businesses including a Kohl's department store, Linens-n-Things home goods store, Home Depot home improvement store, Michael's craft store, and Marshall's department store, as well as numerous secondary retail stores and restaurants. Police protection in Town of Southeast is provided by both the Putnam County Sheriff's Department and the State Police. Information regarding calls to the Putnam County Emergency Operations Center (PCEOC) in 2006 for police service for all locations along Independent Way is provided below, and is not differentiated by the department that responded. However, it should be noted that the Metro-North Railroad Southeast train station, located at the end of Independent Way, generates a high volume of traffic to the area and would likely also generate emergency calls to the PCEOC.

Table 3-1 911 Emergency Calls for All Police Services to Independent Way, 2006	
Type of Call for Service	***Number of Calls***
Assistance to other police or ambulance units or related	*37*
Non-Emergency	*30*
Auto Accident with Property Damage	*9*
Auto Accident with Injury	*4*
Harassment	*3*
Suspicious Activity/Persons	*3*
Public Assistance	*2*
Dispute/Disturbance	*2*
Disorderly/Intoxicated Persons	*2*
Response to Alarm	*2*
Motor Vehicle Lockout	*1*
Disabled Vehicle	*1*
Possession of Stolen Property	*1*
Theft of Services	*1*
Traffic Violations	*1*
Fire Alarm	*1*
TOTAL	***100***
Source: Putnam County Emergency Operations (911) Center, January 2007.	

Emergency calls to the PCEOC for Independent Way that, as stated above, would include calls originating from other locations along Independent Way including the Metro-North train station, totaled 100 calls during 2006. Nearly one third of all calls noted were identified as non-emergency calls.

The call data from Independent Way is generally representative to the proposed development. However, the added use of the Southeast Train Station in the above data would illustrate a worst case scenario for the Patterson Crossing Retail Center. Therefore, based on this call data, less than 70 calls for service per year requiring emergency response would be generated by the Patterson Crossing Retail Center, of which only a portion would be responded to by the Town of Kent Police Department since the Putnam County Sheriff's Department and State Police would also provide emergency police service.

While the specific cost per call is not known, the magnitude of anticipated calls for the Highlands Shopping Center combined with other uses along Independent Way -- if assumed for the Patterson Crossing Retail Center site and divided between the three involved service providers -- does not indicate the potential for significant increases in costs for police services as a result of the Patterson Crossing Retail Center project.

Comment 3.1-14 (Letter #C4, Elena Bao, 09/25/06): This whole paragraph is really quite a stretch. The applicant implies that residents are traveling long distances to shop because we

can't find what we need locally and implies we'll all drive less if Patterson Crossing is built. Silly. First off, 75% of Putnam residents travel an average of 45 minutes EACH WAY to work Mon-Fri as Putnam has few high-paying jobs for its professional and educated residents. Whether Patterson Crossing is built or not, residents will still be traveling 45 minutes each way to work! I hate to break it to the Applicant, but the reason most residents don't shop locally is because we're not in the county enough to shop here! We spend 1.5-2 hours in a car each day and 8 hours making a living. It's a no-brainer that Putnam residents tend to shop and do our errands where we work. To state that a $150 savings per year could be realized is ridiculous. I commute 2 hours a day to work which translate to fuel costs of about $300 per month. Patterson Crossing can't save me $ as it can't offer me high paying jobs close to home.

Response 3.1-14: *Comment noted. The Applicant would like to note that while many people shop for certain goods in close proximity to their jobs, many purchases are made on weekends at retailers close to their residence. Offering additional retail opportunities in close proximity to resident's homes will reduce the vehicle miles traveled to make those weekend purchases.*

Comment 3.1-15 (Letter #C4, Elena Bao, 09/25/06): As a resident of the Lake Carmel Park District, I will be forced by this project to accept a severely diminished quality of life as will the thousands of other residents in my community. So let me get this straight. The Applicant's Patterson Crossing will cause the destruction of the Lake Carmel Park District community so that this project's alleged revenues will preserve open space elsewhere, improve parks elsewhere, and to enhance the quality of life of residents elsewhere?

Response 3.1-15: *There is no evidence in the DEIS or in the public record that the Patterson Crossing Retail Center will cause the destruction of the Lake Carmel Park District community. The new retail stores at the Patterson Crossing Retail Center will have deep building setbacks and open space buffers, and other measures to address neighborhood impacts and maintain quality of life for area residents. The layout protects the character of surrounding areas to the extent feasible while providing a program of commercial development consistent with existing zoning. Downtown Carmel contains office uses, restaurants, shops and the Putnam County Government Center (courthouse and offices). Visual effects have been addressed through the inclusion of large areas of preserved open space buffer and the proposed layout that locates proposed buildings on the eastern portion of the project site, away from adjacent residences and in close proximity to the Interstate 84 corridor.*

While a portion of the site frontage borders NYS Route 311 west of Interstate 84, existing topography limits views into the project site from this roadway to the northernmost end of the property where only the entrance road will be visible. Chapter 4.13 of the DEIS describes potential visual effects of the project from this and all other public locations where the project may be visible. From the neighborhood to the west, Concord Road generally follows a small ridgeline so that the road itself is at a higher elevation than the land on either side of it, thereby limiting potential views onto the project site from roads and properties west of Concord Road. Mitigation measures addressing the appearance of the project are expected to minimize impacts related to its scale. As described on page 4.13-8 of the DEIS:

> *"The project plans call for preservation of a 25' wide (minimum) "Reservation Area", in its present condition, along the common property line with the adjacent Concord Road properties from Brentwood Road on the north end to the existing telecommunications facility drive to the south. A double row of evergreen trees is proposed 25 feet inside the property line along this side of the site to further buffer views into the project from adjoining properties, in addition to plantings of street trees (deciduous shade trees) along the proposed perimeter road. An eight foot high solid wood fence will be constructed along the residential edge of the preservation area to further limit views of the proposed retail center from the identified town roads.*"

The location of the project and proposed mitigation measures are expected to address increases in traffic, as described in DEIS Chapter 4.8.

Comment 3.1-16 (Letter #C4, Elena Bao, 09/25/06): Regarding the Patterson Chamber of Commerce - I would say that this organization's credibility is highly questionable given their unconstitutional actions this summer relative to the handling of the residents who were distributing anti-Patterson Crossing flyers in front of the Patterson A&P, The PCofC's endorsement of Patterson Crossing is hardly a credit to the Applicant given this organization's poor reputation in the community.

Response 3.1-16: *While it is the opinion of the commentor that Patterson Chamber of Commerce (PCofC) maintains a poor reputation within the community, the PCofC is a well established organization that is designed to advance the business, professional, commercial, industrial, civic, and general residential interests of the Town of Patterson and its trade areas according to its mission statement. The PCofC works to supply both small and large businesses with the tools to grow and succeed including advertising and networking opportunities[4].*

Comment 3.1-17 (Letter #C4, Elena Bao, 09/25/06): Why is a 1990 census being referenced here when there was a census performed in the year 2000? The Applicant must update this information with the most current data. The percentage of Putnam residents working outside the county is close to 80% and the average commute time one-way is close to 45 minutes. I'm also confused as to why employment data is provided for Patterson only. The Applicant should be providing employment data for Kent as well and I would say for Putnam County at large considering the Applicant claims Patterson Crossing's jobs are needed by all Putnam County residents. Additionally, I am confused as to why in a section about existing employment conditions Putnam County's current unemployment rate wouldn't be cited. Perhaps this number is not cited because the current unemployment rate in Putnam County is 3.8%, one of the lowest rates in the entire state! According to Putnam's unemployment rate, Patterson Crossing's jobs are just not needed, not to mention the fact that low-paying jobs like those that would be offered art Patterson Crossing would never meet the financial needs of a Putnam resident due to our cost of living.

Response 3.1-17: *According to the U.S. Census Bureau, median household income for the Town of Patterson in 2000 was $66,250. The DEIS provides 1980 and 1990 income data to indicate socioeconomic trends within the surrounding area. Updated*

[4] Patterson Chamber of Commerce. 9 July 2007. <www.pcofc.org>

estimates of household income relative to the potential trade area of the proposed stores is provided in DEIS Appendix C and on page 3-9 of the DEIS. The U.S. Census Bureau reports that the updated unemployment rate in Putnam County for the third quarter of 2006 remained at 3.6 percent. This rate of unemployment is consistent with other county unemployment rates in the northern parts of the New York metropolitan region, with some of the other surrounding counties where employees could potentially commute from having slightly higher rates of unemployment in the third quarter of 2006, such as Westchester County (4.0 percent) and Ulster County (4.2 percent).[5]

Refer to Chapters 4.12, 6.0 and 8.0 regarding employment impacts from the Proposed Action.

Comment 3.1-18 (Letter #C4, Elena Bao, 09/25/06): As stated above, with an unemployment rate of 3.8% in Putnam County, the "creation" of 516 low-paying jobs isn't a benefit to Putnam County or our towns. Since the Applicant is stating that "young people" would be employed at Patterson Crossing, the hiring practices of anticipated retailers need to be discussed in this DEIS so we can know for sure whether these retailers would employ young adults under the age of 18. Many big-box retailers do not offer employment to those under 18.

Response 3.1-18: *The DEIS did not state the age of "young people". Certain retailers hire people under the age of 18. Others do not. Hiring practices at the future stores will be consistent with labor laws and requirements with respect to the age of workers. People wishing to enter the job market, even when the pay scale is low, may have few options. These people may disagree that job creation at the Patterson Crossing Retail Center does not represent a benefit.*

Comment 3.1-19 (Letter #C4, Elena Bao, 09/25/06): I live in Putnam County. I could never afford to live on a wage of $9-$12 per hour. I would like to note that the Brewster Highlands retail center is in a perpetual state of hiring for the very same types of jobs Patterson Crossing would offer. The Brewster Highlands retail center is 4 minutes from the Patterson Crossing project site. I fail to understand how the Applicant can imply that retailers will find employees in the Putnam County employee pool.

Response 3.1-19: *As stated in the DEIS, The U.S. Department of Labor Bureau of Labor Statistics indicates that nonsupervisory retail industry workers earned an average of $12.26 per hour in February 2005 and for the leisure and hospitality industry, the average hourly wage was $9.03 in February 2005.*[6] *As noted, the quoted salaries are average salaries.*

With regard to the place of residence of lower income wage earners at the Patterson Crossing Retail Center stores, the DEIS indicates that lower income jobs at the proposed businesses are expected to be filled by workers currently residing in Putnam County and surrounding counties. Refer to Response 6.0-1 for a detailed response pertaining to the proposed development and potential affordable housing demands.

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[5] U.S. Census Bureau, New York State Unemployment Rate http://www2.fdic.gov/recon/ovrpt.asp?CPT_CODE=E40&ST_CODE=36&RPT_TYPE=Tables.

[6] U.S. Department of Labor, Bureau of Labor Statistics website, March 4, 2005.

A review of stores at Brewster Highlands reveals that 100 percent of the tenants have an operating staff and none have curbed their operating due to lack of available employees.

Comment 3.1-20 (Letter #C4, Elena Bao, 09/25/06): The figure on page 3-11 doesn't detail how many of these positions are full-time versus part-time. The table should break out part vs. full time to adequately illustrate the "job opportunities" at Patterson Crossing.

Response 3.1-20: *The proportion of part time versus full time employment opportunities is not known at this time, according to the project sponsor. However, as stated for the purpose of the impact assessment, the proposed development is expected to create job opportunities relating to approximately 226 person-years of employment (direct and indirect) during construction and 488 jobs (consisting of both full-time and part-time positions) when the Patterson Crossing Retail Center is in full operation.*

Comment 3.1-21 (Letter C-23 Daniel Kuchta, September 25, 2006): Page 3-1: The paragraph on Existing Tax Revenues states that "The annual property taxes currently generated by the project site are $56,735". This figure is not supported by data in both tables 3-2 and 3-3. This figure needs to be corrected or additional data supporting this figure should be supplied.

Response 3.1-21: *Comment noted. The correct amount of annual property taxes currently generated by the project site is $35,492, as shown in Tables 3-2 and 3-3.*

Comment 3.1-22 (Letter C-23 Daniel Kuchta, September 25, 2006): Page 3-1: The first paragraph of section 3.1.1 makes several statements and cites a newspaper article on a *proposed* budget speech as its source. The statements should be replaced with actual primary source data or removed altogether.

Response 3.1-22: *Comment noted. The full text of Putnam County Executive Robert J. Bondi's 2005 Budget Message can be found online at the following official Putnam County website address:*

http://www.putnamcountyny.com/countyexectutive/budgetmessage.html.

Comment 3.1-23 (Letter C-23 Daniel Kuchta, September 25, 2006): Page 3.2: The total combined property & school tax figure in table 3-2 has been incorrectly summed. The correct value (assuming the rest of the data is valid) should be $35,492 as seen in table 3-3.

Response 3.1-23: *Comment noted.*

Comment 3.1-24 (Letter C-23 Daniel Kuchta, September 25, 2006): Page 3-3 the second sentence "Currently, Putnam County generates significantly lower county tax revenues per capita through its sales taxes than other counties in New York State" is pure commentary and is not entirely true either. From the State Comptroller's report on sales taxes dated March 2006, there are only 16 counties that have higher sales tax revenue per capita and all of them are within a factor of two of Putnam County. Further Putnam County's sales tax revenue per capita is "significantly" above the State median. I pulled together the sales tax data by County published by Alan Hevesi and put together a per capita calculation. Putnam County ranks in the top third (16 out of 57) of highest revenue per capita at $365 per capita.

The State's median is $266 per capita. It's true that Putnam County is at about half of the revenue per capita of Nassau and Suffolk, $660 and $733 respectively. But these counties also have similar or, in the case of Nassau, much higher property taxes. But compared to other counties which have much more shopping (i.e. Westchester which is 18th on the list) Putnam County is doing quite well on a per capita basis. The DEIS should be changed to properly reflect the reality of this statement or have it removed altogether. **[Similar comments were expressed by the following members of the public during DEIS public hearings: Public Hearing Comments: Karen Correll (9.14.06)]**

Response 3.1-24 *Comment noted. However, the Applicant believes that the statement in the DEIS is accurate. The U.S. Census Bureau indicates in its 1997 Economic Census that Putnam County ranked 37th of 62 among New York counties in terms of total retail sales.*[7]

Comment 3.1-25 (Letter C-23 Daniel Kuchta, September 25, 2006): Page 3-3 second paragraph: This paragraph mostly quotes a speech by the County Executive and does not provide any information relating to sales tax generated by the project. This paragraph should be removed. Further, it mentions an open space bond which was rejected on the 2005 elections.

Response 3.1-25: *Information on projected sales taxes from the Patterson Crossing Retail Center is provided on pages 3-3 to 3-5 of the DEIS.*

Comment 3.1-26 (Letter C-23 Daniel Kuchta, September 25, 2006): Page 3-4 First paragraph contains commentary not related to the amount of sales tax to be generated by the project and should be removed.

Response 3.1-26: *In the Applicant's opinion, commentary contained in the cited paragraph, which related to Putnam County's "Shop Putnam" initiative, provides information related to sales tax benefits of the proposed project in the context of County policy related to the issue.*

Comment 3.1-27 (Letter C-23 Daniel Kuchta, September 25, 2006): Page 3-4 the second paragraph contains "the substantial increases in commercial ratable would also come with no increase in the resident population or the number of public school students." The developer must provide the data to substantiate the claim of no additional public school students!

Response 3.1-27: *See Response 4.12-7 and FEIS Chapters 6.0 or 8.0 regarding the potential for induced growth as a result of the project. No significant new residential construction to house future workers at the Patterson Crossing Retail Center is expected. Rather, workers would be expected to reside in existing housing in the area, or would be expected to commute to the site from outside areas where a larger supply of suitable available housing exists, such as Fishkill, East Fishkill, or the cities of Peekskill and Poughkeepsie or Danbury, Connecticut. As such, few, if any, school aged children would move into the area as a result of the development of the Proposed Action.*

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[7] U.S. Census Bureau, 1997 Economic Census, and 1997 population estimates, data available as of 11/19/99 for data issued since that date, or other areas, see www.census.gov/econ97 and www.census.gov/epcd/ec97/RANK97NY.HTM).

Comment 3.1-28 (Letter C-23 Daniel Kuchta, September 25, 2006): Page 3-3 the amount of State aid that a school district receives is related to the total value of the properties within the district. The higher the total value, the lower State aid amount. It is a complicated formula but this is the basic principle. Malls, such as Patterson Crossing, really raise the total assessed property value. While table 3-3 predicts that there may be an $579,000 contribution from the mall to the school district, the state aid portion will go down as a result. The DEIS should include an estimate of the state aid reduction and adjust the predicted benefit accordingly. **[Similar comments were expressed by the following members of the public during DEIS public hearings: Public Hearing Comments: Karen Correll (9.14.06)]**

Response 3.1-28: *Comment noted. Based on the projected equalization rate of 100 percent, the future assessed valuation, including land and improvements used in the analysis is $35,468,000. According to the study provided in the DEIS, the proposed project would contribute approximately $579,000 in taxes to the school district. According to Steve Golas, Senior Specialist at the State Aid and Financial Planning Service at Questar III BOCES, "based upon State aid formulas in place for 2007-08, an increase in Full Value of almost $35.5 million would result in a loss of $58,000 in total State Aid" (in an email addressed to Eric Stark, Interim Assistant Superintendent for Business Carmel Central School District, 1/3/08). According to Mr. Golas:*

> *"The projected increase in Full Value is not large enough to cause a major reduction in aid ratios and does not impact certain aids at all. Foundation is not impacted because Carmel is not receiving aid on the Foundation formula. Your district is receiving aid as a result of the Foundation "minimum aid guarantee" which provides districts with an increase annually of not less than 3 percent over the prior year base, capped at not more than 12.55% above the 2006-07 Foundation Aid Base by 2010-11.*
>
> *Building Aid ratios for Carmel are likewise not impacted, because your district receives Building Aid based upon the selected 99-2000 Building Aid ratio instead of the lower current RWADA aid ratio. The aid ratios reduced by an increase in Full Value include Excess Cost, Private Excess Cost, Transportation, BOCES and Computer Hardware/Technology.*
>
> *Please remember that State Aid formulas in any given year are based upon Full Value data that is three years old. For example, 2007-08 State Aid uses 2004 Full Value. Therefore, there will be a three-year delay from the time a new development goes on the tax roll to when the district sees an impact on actual aid. If the project in question goes in the tax roll in 2009, the first year of impact on State Aid would be 2112-13".*

Comment 3.1-29 (Letter C-23 Daniel Kuchta, September 25, 2006): Page 3-4 Fourth paragraph, the DEIS revises the sales tax revenue figure to account for the portion of Costco sales that are not taxable and lists 5 non-taxable items. But missing from this list is clothing which is exempt from NY State sales tax effective April 2006. The Costco exempt percentage needs to be corrected to account for the sales tax exemption on clothing. Costco gets about 10% of it's revenue from apparel. Therefore an additional $8M would be exempt

from the 4% State sales tax. This amount to a $0.3M reduction from this store only. **[Similar comments were found in the following letter: Letter C-23 Daniel Kuchta (9.25.06)]**

> ***Response 3.1-29:*** *Comment noted. The estimate of sales tax revenues provided in the DEIS is considered to be an appropriate order of magnitude estimate. Revision of the estimate based on the information indicated in this comment would not alter the underlying conclusion of the DEIS related to sales tax benefits resulting from the development of the Proposed Action. Refer to Response 3.1-45.*

Comment 3.1-30 (Letter C-23 Daniel Kuchta, September 25, 2006): Related to pages 3-4 and 3-5. Dutchess County has opted to participate in the exemption on sales tax on clothing. The DEIS needs to comment on the effect of this change in the tax code given the proximity to Dutchess County. **[Similar comments were expressed by the following members of the public during DEIS public hearings: Public Hearing Comments: Karen Correll (9.14.06);]**

> ***Response 3.1-30:*** *Dutchess County is one of the counties in New York State that has elected to exempt sales of clothing and associated purchases described above from its County sales tax. While this might present a competitive advantage for apparel stores in Dutchess County as opposed to Putnam County, it is not expected to affect the viability of the proposed project, or significantly affect the amount of sales taxes expected from the Patterson Crossing Retail Center, according to the Applicant and potential tenants for the project. Additionally, the retail center would allow local Putnam County residents to shop conveniently for a range of diverse products without having to travel a great distance or out of County. This would offset the increased costs related to increased price of gas associated with traveling further to purchase the same or similar products..*

Comment 3.1-31 (Letter C-23 Daniel Kuchta, September 25, 2006): Page 3-5 First paragraph, "Most are probably spending much larger amounts on these goods in other counties including Westchester and Dutchess..." This is pure speculation and should either be removed from the document or substantiated with data. **[Similar comments were expressed by the following members of the public during DEIS public hearings: Public Hearing Comments: Karen Correll (9.14.06)]**

> ***Response 3.1-31:*** *According to the Applicant, the lack of shopping opportunities in Putnam County is well known to County residents, and has been widely reported[8] (Also refer to Response 3.1-4, above). The U.S. Census Bureau reports that 2002 Retail Sales Per Capita for Putnam County totaled $6,994, compared to similar per capita sales levels for Dutchess County ($10,744), Orange County ($11,323) and Westchester County ($12,589).[9]*

Comment 3.1-32 (Letter C-23 Daniel Kuchta, September 25, 2006): Page 3-6: Table 3-5. All the data is for towns in Dutchess County only. The DEIS should include the data for towns in Putnam County or state why the Dutchess County data is relevant. The date of the source of the data in table 3-5 should be provided**. [Similar comments were expressed by**

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[8] Putnam Paradox. Putnamcountyny.com. 2006. 1 July 2007. <putnamcountyny.com/paradox>.

[9] U.S. Census Bureau (http://quickfacts.census.gov/qfd/states/36/36079.html).

the following members of the public during DEIS public hearings: Public Hearing Comments: Karen Correll (9.14.06)]

Response 3.1-32: *The DEIS indicates that the data is from the Town of Patterson Comprehensive Plan. Page 94 of the Town of Patterson Comprehensive Plan provides 1988 data from American Farmland Trust for Beekman and Northeast and 1989 data from Amenia, Fishkill and Red Hook from Scenic Hudson. Data for Putnam County towns is not provided in the Comprehensive Plan. The Dutchess County data was considered by the Town to be relevant in its analysis of the real cost of development, and is considered to be a valid source for the purposes of the DEIS evaluation of economic impacts of the proposed project.*

Comment 3.1-33 (Letter C-23 Daniel Kuchta, September 25, 2006): Page 3-6: Second paragraph: A portion of the tax revenues collected by Patterson and Kent can be used by the local highway departments for maintenance of local roads." According to Table 3-3, the towns will get $110K and $7K respectively. Even if these entire amounts are correct and devoted solely to road improvements, they will not amount to much. The developer should demonstrate that the amount that Kent receives would pay for more than a stripe line on a single stretch of road. The impact on the Towns roads will not be mitigated by minuscule amounts listed here. The DEIS needs to be revised to properly account for the impact to Town Roads and where the funding to mitigate these impacts is coming from.

Response 3.1-33: *Local residents are already traveling to and from stores using local roads to reach County and State roads. Patterson Crossing Retail Center will redirect some local shopping trips, and may draw in some local trips passing the site (passby trips). Passby trips by local residents do not increase wear on local roads. Redirected trips may shift local traffic to different roads on the local system with little overall impact to the local system. Given the current volumes on local streets (5 to 60 vehicles per hour in the peak hour) as indicated in the DEIS, the new local trips are unlikely to induce additional local road improvement needs, beyond current circumstances.*

For example, no additional peak hour trips to and from Ludington Court and Longfellow Drive are anticipated. Barrett Hill Road and North Terry Hill Road would be improved at the intersections with NYS Route 52 providing long term benefit to those local streets. For example, the Harvard Drive approach to North Terry Hill Road is suggested be improved (See FEIS Appendix K) at no cost to the Town of Kent. The signal at Terry Hill Road and NYS Route 311 would allow local traffic from Longfellow Drive and other local streets to use the new signal improving local access to NYS Route 311 without cost to the Town of Kent.

Also, the Barrett Hill Road approach to NYS Route 52 is unusually wide and would likely be reconfigured as part of the State plans to establish a left turn lane. These improvements are primarily safety improvements that would be supplemented by reduction in vehicle miles traveled for local residents by making shopping more convenient. Furthermore, future maintenance costs would be expected to remain similar to those under existing conditions. See Responses 3.1-12, above and 4.8-35, in Section 4.8.

Comment 3.1-34 (Letter C-23 Daniel Kuchta, September 25, 2006): Page 3-7 second paragraph plays down the cost of fire services and states that there will be no direct costs to the Towns. It further states that the project will contribute $27K and $1K to the Towns respectively. The developer needs to show the cost of a typical fire call to Patterson Crossing by each Town and then show how the cost is covered by the $27K and $1K amounts or provide a method of funding this impact. **[Similar comments were expressed by the following members of the public during DEIS public hearings: Public Hearing Comments: Karen Correll (9.14.06)]**

Response 3.1-34: *As with the additional evaluation of police service impacts provided in Response 3.1-13, standard impact multiplier rates provided by the Urban Land Institute have been applied to the proposed project to quantify the level of demand for additional fire and emergency medical services that would be expected from the proposed project. The proposed project would not increase the resident population of either the Town of Patterson or Kent, since it is a commercial development. Based on standards contained in the Development Impact Assessment Handbook (Urban Land Institute, 1994, page 261), it is estimated that 1.65 fire officers per 1,000 population and 0.2 fire vehicles are required to serve a residential population, with one fourth of that number resulting from the same number of non-residential employees. This equates to 0.4 fire personnel and 0.05 fire vehicles required per 1,000 workers.*

Approximately 488 workers are anticipated to be employed at the proposed facility after occupancy. This would result in an increase in demand of 0.2 fire personnel and 0.02 fire vehicles. Workers would be distributed over multiple shifts generally between the hours of 10 AM and 10 PM. The non-resident site population will also include patrons of the proposed stores. To provide a conservative estimate of demand for services, if all 1,731 proposed parking spaces were occupied by either workers or patrons, and assuming 1.5 people per vehicle, then the worst case site population would be expected to generate demand for 0.5 additional fire personnel and 0.05 fire vehicles, according to the ULI standards. It is noted that the increased demand placed on the Department from the Patterson Crossing Retail Center development would represent an incremental increase in demand on existing services, rather than demand for new services in this area which the ULI rates assess. The cost of an additional firefighter, should one be required, would be similar to that of the additional police officer described in Response 3.1-13, above or approximately $33,000.[10] With anticipated Fire District revenues in excess of $35,000, anticipated tax revenues from the proposed project would be expected to fully offset the additional costs of salary for one firefighter should such additional personnel be required.

For emergency medical services (EMS), The Development Impact Assessment Handbook (Urban Land Institute, 1994, page 261), provides a factor of 4.1 full-time EMS personnel and one EMS vehicle per 30,000 resident population. Again, non-resident population contributes one quarter of that value, equating to 1.025 EMS personnel and 0.25 EMS vehicles per 30,000 non-resident population. For the

[10] New York Times, "Housing Tighter for New Yorkers of Moderate Pay," Janny Scott, June 16, 2006, <www.nytimes.com>

proposed Patterson Crossing project, the 488 workers would result in an increase in demand of 0.017 EMS personnel and 0.004 EMS vehicles, while the full site population of 2,597 persons would result in an increase in demand of 0.09 EMS personnel and 0.02 EMS vehicles.

Statistics relating to calls for service from a comparable commercial development were acquired from the Putnam County Emergency Operation Center (PCEOC). As with police protection service demand, the Highlands Shopping Center on Independent Way in the Village of Brewster was used for comparison purposes. The PCEOC was not able to provide the number of responses by address, so all calls to locations on Independent Way were obtained. In a phone conversation, Thomas Lannon, Director of the Putnam County Emergency Management, noted that these statistics include calls generated by the Southeast Metro North train station, which he stated would be a significant percentage of the total calls. Therefore, by utilizing this data, which includes calls servicing the Southeast Train Station, comparatively to the Proposed Action and in order to calculate the potential impacts from the proposed development demonstrates a worst case scenario (greater potential impact).

According to the PCEOC records, the Brewster Fire Department responded to 45 calls for service in 2006 on Independent Way. This includes EMS responses. 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 related to traffic accidents. The remaining call was to stand-by for assistance. Table 3-2 shows the breakdown of responses by the Brewster Fire Department to addresses listed along Independent Way in 2006 by call type.

Table 3-2
Brewster Fire Department Response
to Independent Way, 2006

Type of Call for Service	***Number of Calls***
Medical Aid	*20*
Response to Automatic Fire Alarm	*14*
Vehicle Accident	*4*
Fire	*3*
Gasoline Spills	*3*
Stand-by	*1*
TOTAL	***45***

Source: Putnam County Emergency Operations (911) Center, January 2007.

Again, 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. It is believed that due to the number of commuters utilizing the train station, a high percentage of the Department responses were related to individuals traveling to and from the train (as so noted by the EOC director[11]). As such, these

[11] Thomas Lannon, Director, Putnam County Emergency Management/911, phone conversation, January 12, 2007.

numbers are considered a worse case scenario and the number of calls to the Patterson Crossing Retail Center would be lower.

While the specific cost per response is not known, the magnitude of Fire Department calls for the comparable Highlands Shopping Center combined with other uses along Independent Way -- if assumed for the Patterson Crossing Retail Center site and divided between the two involved Fire Departments -- does not indicate the potential for significant increases in cost for fire protection or other emergency services as a result of the Patterson Crossing Retail Center project.

Comment 3.1-35 (Letter C-23 Daniel Kuchta, September 25, 2006): Page 3-7 section 3.1.2. The second paragraph estimates a fuel savings of $150/year per household. A $3/gallon this is 50 gallons which translates to 1000 miles which translates to 50 trips using the information in this section. This implies that every household in the region makes one trip to the project each week. The DEIS should state that this is somehow consistent with the traffic study because it appears to imply an amount of traffic that is much larger than predicted. If this can't be correlated, then the benefit amount should be reduced.

Response 3.1-35: *The traffic study examines peak hour trips and the fuel savings evaluation examines trips over the entire year. The ITE Trip Generation estimate of only 10 percent of trips occur during peak hour means that on any given day during the peak hour one out of seventy houses would travel to the site. The passby traffic would be a portion of these trips. As the size of the facility has been reduced and the number of passby trips is potentially lower, the local benefit may be proportionally reduced as well. The data referred to in this comment are not inconsistent in the context of their use for separate evaluations of peak hour vehicular trips, and weekly shopping trips.*

Comment 3.1-36 (Letter C-23 Daniel Kuchta, September 25, 2006): Page 3-8: The third paragraph states "These revenues would be available for County public projects and programs, such as parks and open space preservation, and social services programs, resulting in an enhanced quality of life for county residents." There is no guarantee that the County will actually spend funds on any of these programs, especially if these same funds are needed for road improvements. This dubious benefit should be removed if it can not be substantiated with a written commitment from the county allocating funds to these programs should the project move forward.

Response 3.1-36: *Comment noted. However, the DEIS statement referenced above does not indicate any commitment on the part of the County to use its tax revenues from the Patterson Crossing Retail Center for parkland, open space preservation, or social programs. Rather, it states that the County revenues would be available for County public projects and programs such as these, which is not inaccurate. This statement would more accurately be worded as "potentially available."*

Comment 3.1-37 (Letter C-23 Daniel Kuchta, September 25, 2006): Page 3-8: The sixth paragraph cleverly includes businesses within an imaginary three mile radius so as not to include Highlands Mall which is just a few tenths of a mile outside of this imaginary boundary. This is fairly deceptive and this paragraph should be rewritten to include the Highlands Mall.

Response 3.1-37: *The Highlands Shopping Center is discussed on page 4.12-4 of the DEIS, noting that there would be little overlap of retailers.*

Comment 3.1-38 (Letter C-23 Daniel Kuchta, September 25, 2006): Page 3-10: Section titled "Employment opportunities during construction": This section only describes a number but not the types of jobs. The DEIS should list the types of jobs available and indicate, for example, whether certain of these will be union only type jobs which may not be available to all members of the surrounding community.

Response 3.1-38: *Types of construction jobs, as indicated on the website http://craftjobs.com, include the following: Boilermaker, Brick/Block Layer, Carpenter, Cement Finisher, Crane Operator, Draftspersons, Electrician, Engineers, Equipment Operator, HVAC Technician, Instrument Fitter/Calibration Instrument Technician, Industrial Startup Technician, Insulator, Ironworker, Laborer, Millwright, Pipe Fitter, Plumber, Project Supervision, Project Safety, Purchasing Agent, QC-QA, Rebar Rigger, Sprinkler Fitter, Surveyor, Welder, and Welding Inspector. The proportion of construction jobs that will be union jobs is not known at this time.*

Comment 3.1-39 (Letter C-23 Daniel Kuchta, September 25, 2006): Page 3 -10: Section titled: Employment opportunities during construction": The DEIS should show that the secondary effect multiplier of 1.5 is the correct factor to use.

Response 3.1-39: *The secondary effect multiplier of 1.5 is based on guidance from the Urban Land Institute's Development Assessment Handbook, a widely used source for impact assessment data related to fiscal and economic impacts. Page 123 of the Development Assessment Handbook indicates that the ratio of employment effects for traditional industries is 1.74, based on the State of New Jersey, Economic Policy Council and Office of Economic Policy, "Economic Impact Analysis: New Jersey Input-Output Model," 14th Annual Report of the New Jersey Economic Policy Council and Office of Economic Policy, 1981. A related 2004 article (by professors from the University of Iowa), provides an example of economic multiplier rates that support those used in the economic impact analysis for the Patterson Crossing Retail Center. This article states . . . "For example, an employment multiplier of 1.4 indicates that if one job is created (lost) by a new establishment, an additional 0.4 jobs are created (lost) in other sectors due to changes in business (indirect) and household (induced) spending."*[12]

Comment 3.1-40 (Letter C-23 Daniel Kuchta, September 25, 2006): Page 3-11: First paragraph: "Potential benefactors of these new jobs would include younger workers such as high school students and seniors." This is a misleading statement particularly with respect to high school seniors. The DEIS should indicate the fraction of available positions that can accept workers under the age of 18 and further indicate which stores do not hire anyone under 18.

Response 3.1-40: *With regard to New York State requirements, the New York State Department of Labor website indicates the following restrictions with regard to youth employment:*

[12] Mark Imerman, Daniel Otto, Georgeanne Artz, Iowa State University Department of Economics, "Health Care Employment and Income Impacts on the Economy of Tama County, Iowa," 8/30/04.

"Minors not yet 14 may not be employed at any time, neither after school nor during vacation.

Minors 14 and 15 years old may work after school hours and during vacations, but not in factory work. They may do delivery and clerical work in any enclosed office of a factory, and in dry cleaning, tailor, shoe repair, and similar service stores.

Minors 16 and 17 years of age, if not attending school, may work full time throughout the year. Factory work is permitted for minors 16 years of age or older."[13]

With regard to Federal labor laws, the U.S. Department of Labor indicates that according to the Federal Labor Standards Act (FSLA), "The basic minimum age for employment under the FLSA is 16. This means that under the FLSA child labor rules, with the exception of certain hazardous jobs, you can work for any number of hours, at any time of day, and in any occupation.[14]

Based on these rules and the associated lists of prohibited jobs for youth related to positions such as those involving heavy equipment and workplace hazards, employers at the Patterson Crossing Retail Center are expected to be permitted to higher younger workers including high school seniors for the majority of jobs at the proposed stores.

Comment 3.1-41 (Letter C-23 Daniel Kuchta, September 25, 2006): Page 3-11: Second paragraph: "an average of $12.26 per hour..." Averages are misleading. The DEIS should additional provide the minimum, maximum and median hourly wages and state if benefits are provided along with any of these jobs.

Response 3.1-41: *The salary data provided is for the applicable category of workers as defined by the U.S. Department of Labor. More recent average salary data for nonsupervisory retail sector workers available from the Department of Labor's website indicate that average salaries rose to $12.69 in January 2007. The Applicant believes that this is an appropriate general estimate for future workers at the project site, given that they will occupy positions ranging from sales clerks and shipping clerks to managerial positions. According to data obtained from the website of salary.hotjobs.com (www.salary.hotjobs.com/salarywizard), the median salary of a shipping clerk in the Lake Mahopac Zip Code where large scale retail facilities currently exist is $30,880. This equates to $15.29 in hourly salary. Average salaries of big box retailer employees have more recently been indicated in media reports as ranging from $10 per hour for Walmart Stores to $17 per hour at Costco stores.*[15]

Specific benefits packages of the future stores at the Patterson Crossing Retail Center will be determined by each individual employer. Benefits packages of large scale retailers vary by company, with some stores such as Costco providing substantial benefits packages for their employees. Costco's website indicates that

[13] (see http://www.labor.state.ny.us/workerprotection/laborstandards/workprot/schlattd.shtm).
[14] (see http://www.dol.gov/elaws/esa/flsa/cl/y17.asp).
[15] PBS, Nightly Business Report, "Street Critique", February 14, 2007, <www.pbs.org> (see http://www.pbs.org/nbr/site/onair/transcripts/070214d/.)

employee benefits include health and dental care, pharmacy and vision programs, life insurance, disability, and a 401(k) plan, among other benefits.[16]

Comment 3.1-42 (Letter C-23 Daniel Kuchta, September 25, 2006): Page 3-2: The existing Costs of Services paragraph contains "The existing cellular communications tower on the site generates 'de minimus' costs related to administration of taxes and ensuring emergency service access to the tower". The developer should provide the actual figures for these costs so that the 'de minimus' claim can be verified. **[Similar comments were found in the following letter and from the following members of the public during DEIS public hearings: Letter C-44 Peter Riebold (9.22.06); Public Hearing Comments: Karen Correll (9.14.06)]**

Response 3.1-42: *Specific costs to the Town related to provision of emergency services to the cellular communications tower are not known. The Applicant is not aware of any emergencies at this site that have required either police or fire department visits. The Applicant's consultants estimate that administration of taxes would require less than an hour of labor of staff from the Tax Assessor's and Receiver's office on an annual basis, although specific costs associated with such labor are not known, or considered to be appropriate for referencing in the DEIS since they would not affect the fiscal impact analysis and would be speculative.*

Comment 3.1-43 (Letter C-23 Daniel Kuchta, September 25, 2006): The DEIS makes heavy use of data from Claritas in Section 3 and Section C contains some of that data. But how valid is the Claritas data? For example, Claritas provides free company reports on it's website. The report for the Lowe's located in Newburgh has estimated annual store sales of $9.7M. The report for the Costco in Brookfield has estimated annual store sales of $31.1M. These two stores represent more than half of the Patterson Crossing mall but the Claritas data would suggest that the annual revenue is $40.8M which is far less than $200M predicted by the DEIS on page 3-4, 3rd paragraph. So either the Claritas data is not valid or the figure on page 3-4 is not valid or both. This contradiction needs to be addressed.

Response 3.1-43: *Claritas is a widely recognized and highly regarded source for comprehensive demographic and economic data, including retail sales data. The Applicant, however, cannot vouch for Claritas data accuracy. As indicated on DEIS page 3-4, to project future sales at the proposed development, average sales per square foot for various shopping centers around the country were reviewed based on data compiled by the International Council of Shopping Centers. Given the likely tenants for this project, the range of sales per square foot of retail space is projected to fall between $500 and $600. Annual sales at the proposed development based on these rates would thus range between $200 to $240 million.*

Comment 3.1-44 (Letter C-23 Daniel Kuchta, September 25, 2006): The economic and social benefits from Patterson Crossing did not include any effect from the Stateline Retail Center in Southeast. This analysis should be revised in light of this additional proposed project.

Response 3.1-44: *The Stateline Retail Center is in a preliminary stage of its review; the preliminary Draft EIS has not been deemed complete as of May 2007. Whether that project is ever implemented is yet to be determined and therefore it was not*

[16] (see http://www.costco.com/Service/FeaturePageLeftNav.aspx?ProductNo=10045087.)

considered to be part of the No-Build condition, or the future conditions without the Patterson Crossing Retail Center project. Additional retail development in the County will contribute to sales tax revenues and in general is viewed as a benefit. It could reduce sales taxes generated by the Patterson Crossing Retail Center if there is an overlap in goods offered within the Patterson Crossing trade area. Nonetheless, tax revenue would be generated to Putnam County.

Comment 3.1-45 (Letter C-38 Melanie Pien, Stephen Pien, Alani Pien, Kai Pien September 25, 2006): After supposedly providing support for its argument of tax benefits from the project the DEIS then provides a disclaimer noting that "...projected property and sales tax revenues are estimates as some of the actual uses and future tenants ...are not known at this time." (p.3-5). Additionally, it states that the proposed tax figures may differ from reality due to the "manner in which the property is actually developed and assessed." Thus, the DEIS, in its own words, reinforces the fact that tax benefits of the project are speculative at best. **[Similar comments were found in the following: Letter C-44 - Peter Riebold (9.22.06)]**

Response 3.1-45: *Projections of tax revenues are provided at a level of detail appropriate for the SEQR evaluation requested by the Planning Board in its adopted scoping outline (i.e. analysis for the Proposed Action included in the DEIS, Chapter 3.0, Economics and Social Benefits, was based on specific tenant categories including wholesale warehouse, retail). For the reasons indicated in the DEIS, actual revenues may change along with specific tenants, but this change would not be substantial.*

The order of magnitude of the projections provide a sufficient basis for the evaluation of anticipated costs and benefits of the proposed project needed for the Lead Agency to make a determination about anticipated socioeconomic impacts.

Comment 3.1-46 (Letter C-38 Melanie Pien, Stephen Pien, Alani Pien, Kai Pien September 25, 2006): While the developer couches the alleged benefits from the projected property tax revenues in terms of a windfall, monies from the tax revenues will have to go to the local highway departments to help maintain the roads that will be used by the traffic generated by Patterson Crossing (DEIS, p.3-6) and to other expenses associated with it such as emergency services that property taxes go to support.

Response 3.1-46: *See FEIS Sections 4.11, Community Services and Facilities and 4.12, Socioeconomic regarding costs of municipal services. The DEIS evaluates the potential for impacts to the infrastructure of the Towns of Patterson and Kent as a result of the proposed project, including roadway capacity and safety. Mitigation measures have been proposed to address potentially significant impacts. As indicated in Chapter 4.8, Transportation, most of the project generated traffic is anticipated to be from Interstate 84 traveling a quarter mile or less to the site access on NYS Route 311, hence the project site location is ideally suited to reduce traffic on non-interstate roadways, such as neighborhood streets. The remaining non-project traffic is mostly traveling on NYS Route 311 and NYS Route 52. See also response to comment 3.1-12.*

Comment 3.1-47 (Letter C-38 Melanie Pien, Stephen Pien, Alani Pien, Kai Pien September 25, 2006): Any sales tax figures included in the DEIS are speculative only. They

do not account for the fact that often space is not fully leased. In addition, a large percentage of purchases made at the wholesale club are tax free. (p.3-4.) **[Similar comments were found in the following letter and from the following members of the public during DEIS public hearings: Letter C-44 - Peter Riebold (9.22.06); Public Hearing Comments: Dan Kutcha (9.14.06)]**

> ***Response 3.1-47:*** *Comment noted. The DEIS qualifies the amount of sales taxes that are projected with statements regarding non-taxable sales, and County sales tax receipts that could be from sales that would otherwise be occurring within Putnam County without the proposed project. The amount of total sales taxes that would result if 12 percent of the sales fall in the categories of food products, beverages, health supplements, drugs and medical supplies would be between $12.2 million and $14.6 million. This estimate with the food and health-related sales factored out is of the same order of magnitude as the estimate provided in the DEIS (between $13.9 million and $16.6 million) and results in no change in the underlying conclusions of the DEIS related to sales taxes, according to the Applicant. The project would still result in substantial sales tax revenues to the State, County and MTA.*
>
> *A contingency for future vacancy has not been factored into the sales tax projections. It is noted that should the proposed stores be vacated, sales tax revenues would decrease proportionally with the amount of vacant floor area. However, significant cost impacts to County, State and MTA services are not anticipated and the loss of such sales tax revenues would not be expected to have a significant adverse impact on the County, New York State, the MTA, the Towns of Patterson and Kent, or other taxing jurisdictions.*

Comment 3.1-48 (Letter C-38 Melanie Pien, Stephen Pien, Alani Pien, Kai Pien September 25, 2006): Additionally, the Developer admits that existing business will be negatively impacted by Patterson Crossing. The DEIS notes that it will be duplicating services that exist at Brewster Highlands and at other more local businesses. This means tax revenues from Patterson Crossing will not all be **new** tax revenue but merely **shifted** tax revenue. The shifting will result in negative impacts to other business in Putnam.

> ***Response 3.1-48:*** *Significant adverse impacts to existing businesses were not identified in the DEIS. Please see Response 4.12-1 for further information related to potential business effects.*

Comment 3.1-49 (letter C-38 Melanie Pien, Stephen Pien, Alani Pien, Kai Pien September 25, 2006): According to the DEIS, because there is ample development in this area to support a retail center such as Patterson Crossing, it should be built. This section supplies facts from the U.S. Census and other organizations showing that this area is ripe for a development such as Patterson Crossing because of existing demographics. It does not provide any other reason for the development which makes this proposal particularly unappealing given that it will duplicate services and supplies that can be obtained easily in nearby stores both within and without the County. The DEIS fails to provide even one compelling social reason to support this project. The fact that a local business organization, the Patterson Chamber of Commerce, has expressed support for the project does not bolster the need for this project in anyway as the Chambers representation in this matter is limited to the interests of its members.

Response 3.1-49: *Comment noted. A compelling social reason to support the project would include the fact that the Town's of Patterson and Kent have targeted this site for commercial use in their comprehensive plans and zoning ordinances for many years. Implementation of the comprehensive plan through the construction of this project is consistent with leadership decisions in both Towns that have stood without change for many, many years. See Response 4.12-1 for further information related to potential business effects.*

Comment 3.1-50 (Letter C-38 Melanie Pien, Stephen Pien, Alani Pien, Kai Pien September 25, 2006): As for the jobs created, most will be low paying jobs with little future benefit for the occupants of these jobs. Many of the jobs, because of the need to use heavy equipment, would be restricted to those over 18 so high school students' opportunities for employment would be limited. The opportunity for seniors to be employed would also be limited by the physical quality of many of the jobs that will be created. In addition, at least some of the jobs that are to be created will be created at the expense of existing business which are expected to be put out of business by the overlapping services that Patterson Crossing will provide.

Response 3.1-50: *Please see Response 4.12-1 for further information related to potential business effects, and Response 3.1-40 regarding job restrictions for youth. Most jobs created by the Patterson Crossing Retail Center would not involve the operation of heavy equipment but would be typical retail sales and customer service related. These types of positions are within the legal and physical limitations of both teenagers and seniors.*

Comment 3.1-51 (Letter C-44, Peter Riebold, September 22, 2006): This paragraph states that the cost of fire and ambulance services "would not have a direct cost to Patterson or Kent." This is incorrect. All taxpayers in both towns pay taxes or fees to their local fire departments, which also provide ambulance services. These fees are included with the annual town property bills. In addition, Putnam County maintains contracts with providers of advanced life support services, which is paid by area taxpayers through their county property taxes. These services are not free. The paragraph also states that the shopping center would generate funds for the local fire department. As with the paragraph on road repair and police services, it must be noted that the project will generate an increased demand for municipal services and that any tax revenue diverted to pay for these new expenses lessens any beneficial economic impact the project would have on the community. It must be noted, that while the project may provide additional funds for fire and ambulance services, it will not provide additional manpower. Our local fire and ambulance services are staffed by volunteers.

Response 3.1-51: *The need for additional fire department manpower is not anticipated as a result of the Patterson Crossing Retail Center project. Tax revenues received by the Fire District would be available to offset whatever costs are deemed necessary, including the hiring of paid fire fighters should the District's needs warrant that in the future. Refer to Responses 3.1-5 and 3.1-34.*

Comment 3.1-52 (Letter C-44, Peter Riebold, September 22, 2006): The DEIS states that Patterson Crossing will offer a "wider variety of retail offerings than currently exists in Putnam County." The home center and bath-kitchen store will duplicate similar stores located 3 miles east in the Brewster Highlands Shopping Center. The services offered by the

other stores, such as clothing, food, and tires that will be offer in the warehouse store, can be found easily in other stores in Putnam County. The DEIS also states that there may be "lower vehicular emissions at the regional level" because Putnam County residents will shop near home. The reverse is true, however, because Patterson Crossing will actually attract shoppers from around the region, resulting in traffic on Putnam roads that would not be there otherwise. This can only increase vehicular emission in our area.

> ***Response 3.1-52:*** *Please see Response 4.12-1 for further information related to potential business effects. As indicated in Chapter 4.9, Transportation, most of the project generated traffic is anticipated to be from Interstate 84 traveling a quarter mile or less to the site access on NYS Route 311. Hence, the project site location is ideally suited to reduce traffic on non-interstate roadways, such as neighborhood streets. The project is not expected to result in air quality impacts that warrant mitigation.*

Comment 3.1-53 (Letter C-44, Peter Riebold, September 22, 2006): The developer states that most shoppers would access the shopping center via Interstate 84. The DEIS, however, provides no proof of this. The paragraph also states that "some additional visitors" will arrive on other roads. The DEIS provides no evidence to support the claims that shoppers will use one roadway over another. The paragraph does suggest that their will be increased traffic throughout the area as shoppers utilize gas stations, restaurants, or other local shops and services. The paragraph also states that some shoppers will be engaged in price comparison. This is an important point. Even local residents will travel to Danbury or Yorktown or Wappingers Falls to compare prices. The most likely destination for price comparison will the be Danbury/Brookfield area because of the diverse shopping opportunities and the lower sales taxes. Therefore, it cannot be guaranteed the local residents will make their purchases at Patterson Crossing.

> ***Response 3.1-53:*** *As demonstrated in Chapter 4.8 of the DEIS, most of the traffic destined for the Patterson Crossing Retail Center is expected to come from Interstate 84. There is simply no reason to expect people from outside of the immediate area would use local roads to access the site. Driver patterns have long been established by experience and people will pick the fastest and easiest route to their destination; in this case Interstate 84.*

Comment 3.1-54 (Letter C-44, Peter Riebold, September 22, 2006): The DEIS states that the Town of Kent master plan describes the need for additional shopping opportunities in the Town of Kent. The intent of the master plan, however, was to develop new shopping that would be located within the Town of Kent itself, thereby increasing property tax revenues for the Town of Kent as well as providing more convenient shopping for all Kent residents. Much of the new development was to be located along Route 52 and not along Route 311. The bulk of Patterson Crossing will be located within the Town of Patterson, with most property tax revenues to be sent to Patterson, not Kent.

> ***Response 3.1-54:*** *The goals and objectives of the Town of Kent Master Plan include providing for a variety of land uses in order to provide a balanced array of services in the Town (see page 38, Town of Kent Master Plan, 1990). The Master Plan also calls for development of a more diversified economic base and tax base (pages 81 and 84), to which the Patterson Crossing Retail Center project would contribute. With regard to regional shopping needs, the Kent Master Plan calls for relying on*

surrounding areas for regional shopping needs (see page 84). The Patterson Crossing Retail Center project being located within the adjacent Town of Patterson is consistent with that concept as well.

Comment 3.1-55 (Letter C-44, Peter Riebold, September 22, 2006): At least two of these businesses are not even located in Patterson, which puts broad meaning to the term "local." The DEIS does not indicate any support of Patterson Crossing among the general membership of the Chamber. Of the 73 members listed on the Chamber website, 33 list addresses that are not in Patterson. The Chamber, therefore, may not be the best source for opinions of what is right for the Town of Patterson. The DEIS should provide evidence that a vote was taken among general members supporting the Patterson Crossing project. It should also be noted that the developer of Patterson Crossing is a member of the Chamber, and, by virtue of his presumed wealth, is probably the most influential member.

Response 3.1-55: *Comment noted. Support from the Chamber of Commerce reflects the general support of its membership, according to the Applicant. Such support or lack there of does not alter the conclusions of the DEIS related to the environmental or socioeconomic effects of the project. The DEIS did not indicate that it was unanimously supported.*

Comment 3.1-56 (Letter C-44, Peter Riebold, September 22, 2006): The DEIS does not provide any evidence to support the claim that the majority of construction workers will come from the Towns of Patterson and Kent, or anywhere else. To imply that these construction jobs will provide local employment is highly speculative and misleading.

Response 3.1-56: *The construction workers for the proposed development are expected to come from a reasonable commuting distance (i.e. within a forty-five (45) minute commute of the project site).*

Comment 3.1-57 (Letter C-44, Peter Riebold, September 22, 2006): This calculation and its arbitrary multiplier of 1.5 is highly speculative and its use is not substantiated in the DEIS. It also does not list which local businesses or service providers would benefit from the construction expenditures. Also, since construction jobs are temporary and only last for the duration of the project, any beneficial impact to local businesses would only be short-lived. Any secondary jobs created would likely be low wage jobs (gas station attendant, convenience store clerk, fast food clerk, etc.) that would last as long as the construction jobs themselves.

Response 3.1-57: *Secondary employment jobs are distinct from construction related employment, and secondary employment related to construction period jobs. The long term jobs created by the project will generate long term secondary employment as a result of shopping, food sales, and auto-related purchases of the future workers at the Patterson Crossing Retail Center.*

Comment 3.1-58 (Letter C-44, Peter Riebold, September 22, 2006): Page 8-1 of the DEIS indicates that the number of permanent jobs is 549, not 516. The numbers need to be clarified.

Response 3.1-58: *Based on the modified plan presented herein, the number of permanent jobs is estimated at 488.*

Comment 3.1-59 (Letter C-44, Peter Riebold, September 22, 2006): The DEIS states that the shopping center will employ approximately 516 employees, but does not provide a breakdown of the types of positions or estimated salaries associated with those positions. The DEIS states that these jobs would provide employment "opportunities that do not currently exist in the area." While it is true that these would be new jobs, it is hardly true that these job opportunities do not currently exist in the area. It is the rare grocery store, department store, restaurant, or other retail store in eastern Putnam County that is not advertising for help.

Response 3.1-59: *The salary data provided is for the applicable category of workers as defined by the U.S. Department of Labor. More recent average salary data for nonsupervisory retail sector workers available from the Department of Labor's website indicate that average salaries rose to $12.69 in January 2007. The Applicant believes that this is an appropriate general estimate for future workers at the project site, given that they will occupy positions ranging from sales clerks and shipping clerks to managerial positions. According to data obtained from the website of salary.hotjobs.com (www.salary.hotjobs.com/salarywizard), the median salary of a shipping clerk in the Lake Mahopac Zip Code where large scale retail facilities currently exist is $30,880. This equates to $15.29 in hourly salary. Average salaries of big box retailer employees have more recently been indicated in media reports as ranging from $10 per hour for Walmart Stores to $17 per hour at Costco stores.*[17] *Please see Response 4.12-1 for further information related to potential business effects.*

Comment 3.1-60 (Letter C-49 Paul Spiegel, September 13, 2006): What studies have proven that placing such a project visible from an interstate would actually deter drivers to visit? If placing such a development with interstate visibility provides no real benefit, then it should be moved elsewhere, where there is no threat to a densely populated residential community. If a benefit is proven, then it should be located with the rest of the developing area at exit 19. Wouldn't the cost of putting a Costco in an area that already has the infrastructure make more sense and be more economical? What attempts have been made to place Costco closer to Brewster Highlands where the landscape has already been destroyed?

Response 3.1-60: *The location of the proposed project is considered to be appropriate in terms of protecting rural and residential areas of the Towns of Patterson and Kent, and is consistent with the Town's goals for the site as specified in its comprehensive plan and zoning ordinance. Visibility from the Interstate is considered to be beneficial and desirable from a retailers perspective. Locating retail development at intersections with an interstate reduces impacts associated with traffic that would result if the development was sited elsewhere. Refer to the Introduction, subsection Modified Project Architecture, of this FEIS for details pertaining to the proposed signage for the Patterson Crossing Retail Center.*

The Applicant does not own the property at Exit 19 off of Interstate 84 and therefore cannot offer retailers development options in that area.

[17] PBS, Nightly Business Report, "Street Critique", February 14, 2007 (see http://www.pbs.org/nbr/site/onair/transcripts/070214d/.)

Comment 3.1-61 (Letter C-58 Edie Keasbey, September 13, 2006): On page 3-4, Mr. Tim Miller states "the substantial increase in commercial ratables would also come with no increase in the resident population or the number of public school students." It is well known that increased shopping opportunities draws more residential development and that means more students. It is an accepted fact that residential development costs more for the services they receive than the taxes they pay. Why is it that every year we hear the same mantra, that this or that development means less taxes to pay but our taxes keep going up- and alarmingly so this year? Mr. Alan Hevesi, New York State Comptroller, states that sales taxes should not be counted on to balance budgets for the reason that sales taxes are not a steady revenue source because they are subject to fluctuating good and bad economic times. Just to add to this discussion in the next few months Patterson will be permitting 36 new houses on the Burdick Farm division and in the Carmel School district.

Response 3.1-61: *See Response 3.1-4, above and Chapters 4.12, Socioeconomic, and Section 6.0, Unavoidable Impacts and 8.0 Growth Inducing Impacts.*

Comment 3.1-62 (Public Hearing, September 14, 2006, Ms. Terlizzi): Page 3-9, there's no data to show local stores will benefit from this project.

Response 3.1-62: *Refer to Responses 4.12-1 and 4.1-4 in Chapter 4.12, Socioeconomics.*

Comment 3.1-63 Hearing, September 14, 2006, Karen Correll): First page 31, paragraph on existing tax revenues states annual property taxes currently generated by the project site are 56,735. This figure is not supported by the data in both tables 32 and 33. This figure needs to be corrected or additional data supporting this figure should be applied.

Response 3.1-63: *Comment noted. The correct amount of total existing property taxes is $35,492.*

Comment 3.1-64 Hearing, September 14, 2006, Karen Correll): Page 3-1, first paragraph of section 3.1.1 makes several statements and cites a newspaper article on a proposed budget speech as its source. The statement should be replaced with actual primary source data or removed altogether.

Response 3.1-64 *Comment noted. The full text of Putnam County Executive Robert J. Bondi's 2005 Budget Message can be found online at the following official Putnam County website address:*

http://www.putnamcountyny.com/countyexectutive/budgetmessage.html.

Comment 3.1-65 Hearing, September 14, 2006, Karen Correll): On page 3-2, the total combined property and school tax figure has been incorrectly summed. The correct value assuming the rest of the data is valid should be 35,492 as seen in table 3-3.

Response 3.1-65: *Comment noted. The correct amount of total existing property taxes is $35,492.*

Comment 3.1-66 Hearing, September 14, 2006, Karen Correll): On page 3-4, there's a second paragraph that contains the substantial increases in commercial ratable would also come into no increase in resident population or the number of public school students. The developer must provide the data to substantiate this claim.

Response 3.1-66: *DEIS Chapter 8.0 addresses the potential for induced residential growth. Contrary to the statement above, the DEIS does not indicate that no additional people will reside in the Town's of Kent or Patterson as a result of the proposed project. The DEIS clarifies that the majority of the future workers at the Patterson Crossing Retail Center are expected to commute from their existing residences in Putnam County and surrounding counties, and that those who might choose to move to Kent or Patterson would be likely to occupy existing housing stock, rather that induce significant growth of new residential development. Page 8-1 states the following with respect to this issue:*

> *"These [Patterson Crossing Retail Center] jobs would most likely be filled by residents of Putnam and the adjacent counties where the unemployment rate in 2005 was just over four percent. Since it is expected that the majority of these workers would live within commuting distance of the proposed project, no significant population increases would be expected. The number of future workers that would potentially relocate their households to the Town of Patterson or the Town of Kent to reside closer to their place of employment can not be determined at this time, however, any increase in local resident population due to the proposed project would be expected to be relatively small, and would not be expected to induce further growth. Existing and proposed housing resources within Patterson and Kent would be expected to accommodate any workers that could potentially relocate from outside the region."*

Retail projects do not generate school children. Residential projects do. And retailers do not locate a store in an area until the residential density within a trade area is sufficient to support the investment in land, construction, infrastructure and staff. That has occurred in the Patterson/Kent area. It is residential development that induces retail, not the other way around, with very few exceptions. Any inducement of secondary growth actually started with the residential population growth, that created the demand for goods and services.

See Response 4.12-8 and Chapters 6.0 and 8.0 for additional information on the potential for induced residential development.

Comment 3.1-67 Hearing, September 14, 2006, Karen Correll): On page 3-4, the bottom of this page list the sales tax rates for state, county and MPTD. The 4 percent state rate needs to be modified to point out the exception (inaudible) that went into effect on April 2006.

Response 3.1-67**:** *Beginning April 1, 2006, a year-round exemption from the four percent New York State sales and use taxes went into effect on the purchase of clothing, footwear, and items to make or repair exempt clothing, costing less than*

$110 per item or pair. However, reduced state sales taxes from the Patterson Crossing Retail Center as a result of this exemption would affect only State sales tax revenues, with no change to the underlying conclusions of the DEIS fiscal impact analysis, since no significant costs to New York State or services provided by the State Police were identified. While the percentage of sales that fall within this category is not known at this time, even without these revenues the project would still be expected to generate substantial State sales taxes. See Response 3.1-10.

Comment 3.1-68 Hearing, September 14, 2006, Karen Correll): The data of the source of the data in table 3-5 should be provided.

Response 3.1-68: *See Response 3.1-39. The data presented in Table 3-5 is from Scenic Hudson and American Farmland Trust, as summarized in the Draft Town of Patterson Comprehensive Plan 2000.*

Comment 3.1-69 (Letter #C4, Elena Bao, 09/25/06): Reduction of residential property value for residences in the surrounding community are a socio-economic impact not discussed at all in this DEIS. The reduction of property value is a MAJOR issue Kent residents face as it relates to development on the project site. The Applicant must incorporate the topic of reduced property values as a potential impact in his discussion of alternatives. We must be able to at a glance see to what extent each alternative will raise or lower residential property values. Reduced property values are a "hidden cost" of development of this type so this matter must not be ignored by the applicant.

Response 3.1-69: *Reductions in residential property values are not anticipated as a result of the proposed action. Nor have there been a historic trend that suggests that this has occurred elsewhere. Moreover, the new retail stores at the Patterson Crossing Retail Center are proposed with deep building setbacks. Visual effects have been addressed through the inclusion of large areas of preserved open space buffer on the western side of the site and the proposed layout that locates proposed buildings on the eastern portion of the project site, away from adjacent residences and along the Interstate 84 corridor. As such, the layout protects the character of surrounding areas to the extent feasible while providing a program of commercial development consistent with existing zoning.*

Chapter 4.13 of the DEIS describes potential visual effects of the project from public locations where the project may be visible. From the neighborhood to the west, Concord Road generally follows a small ridgeline so that the road itself is at a higher elevation than the land on either side of it, thereby limiting potential views onto the project site from public roads in the immediate area. Mitigation measures addressing the appearance of the project are expected to minimize impacts related to its scale, and impacts to property values of nearby residences. As described on page 4.13-8 of the DEIS,

> *"The project plans call for preservation of a 25' wide (minimum) "Reservation Area", in its present condition, along the common property line with the adjacent Concord Road properties from Brentwood Road on the north end to the existing telecommunications facility drive to the south. A double row of evergreen trees is proposed 25 feet inside the property line*

along this side of the site to further buffer views into the project from adjoining properties, in addition to plantings of street trees (deciduous shade trees) along the proposed perimeter road. An eight foot high solid wood fence will be constructed along the residential edge of the preservation area to further limit views of the proposed retail center from the identified town roads."

The homes that directly abut the project site where buildings are proposed, approximately one dozen homes, would have the most exposure to the new project as a result of their more direct views of the proposed facility. The Reservation Area, a strip of land that varies from 25 to 50 feet in width, would increase the buffer for these homes. Visual impacts to these residences backing on the proposed development would be offset with the construction of a fence and the planting of evergreen trees.

Enhanced access to a variety of retail stores may be seen as beneficial to some homeowners. It should also be noted that the presence of vacant commercially and industrially zoned land located adjacent to the west has existed for many years.

The build alternatives that were analyzed in the DEIS would have varying degrees of impact on the nearest adjacent residences. The Building Orientation Alternative would locate the proposed buildings closer to the westerly property line that abuts residences to the west. Because of the closer proximity of the buildings and loading areas, which would be located as close as approximately 150 feet from four of the existing homes there, and the absence of the Reservation Area, this alternative would have greater visual and noise effects on the nearest residences. The reduced development alternative with a smaller floor area, like the proposed action, would not be expected to have significant adverse effects on the residential properties to the west, and the change in size of the project would be unlikely to alter effects on the closest homes on the east side of Concord Road and Echo Road. The Light Industrial Alternative, with its larger buildings located closer to the nearest residences to the west, would have greater visual and noise effects on the nearest residences and would have increased potential for impacts on those residences in comparison to the proposed action.

Comment 3.1-70 (Elena Bao, Letter #C-4, September 25, 2006): I object to the using the phrase "job creation" in the DEIS as it relates to many of the jobs associated with Patterson Crossing. Patterson Crossing will create construction jobs, but the full and part time jobs "post build" will actually be drawing employees from competitors in the area. This doesn't constitute "new job" creation, but may actually result in the elimination of jobs as employees are forced to do more with less employees. Further, If Patterson Crossing puts local competitors out of business, that results in a reduction of net jobs. So it is not entirely accurate for the Applicant to state Patterson Crossing will "create jobs." It should state simply that there will be "x" amount of positions available at Patterson Crossing post build.

Response 3.1-70: *The additional jobs that are expected from the Patterson Crossing Retail Center project are considered to be an economic benefit. Indirect effects of the new employee population on existing businesses are discussed in Chapter 4.12 of the DEIS. Effects on the availability of workers for other area businesses as a result of the newly created jobs at the Patterson Crossing Retail Center would be similar to*

those of any major retail project. Employees would be expected to come from the pool of available workers in Putnam County and surrounding counties. Should there be fewer available workers in these areas than are needed to fill existing and proposed jobs, workers would be expected to be drawn from a larger area to meet demand. Within a 45 minute drive of the project site are urban centers with diverse labor forces that would be expected to fill the future jobs (i.e. towns of East Fishkill, Fishkill, Cortlandt, Poughkeepsie; cities of Newburgh, Peekskill, Poughkeepsie, White Plains and Danbury, Connecticut). Public transit enhancements and employee carpooling programs can be considered to improve access for workers that might need to travel considerable distances.

While the number of workers that might be switching jobs can not be determined at this time, it should be noted that if there are workers that might leave existing retail jobs for employment at the Patterson Crossing Retail Center, those workers would be doing so for improved job opportunities or circumstances, such as those related to salary, location of residence with respect to their jobs, or other factors, which would be a benefit to those workers. Workers switching jobs from other local establishments would likely be replaced by other workers from either the local available pool of available workers, including the unemployed, or by workers from surrounding counties.

4.0 ENVIRONMENTAL SETTING

4.1 GEOLOGY COMMENTS AND RESPONSES

Comment 4.1-1 (Letter A-4 Neil A. Wilson, AICP, LRC Planning Services, September 21, 2006): Page 4.1-1, the discussion regarding the results of the two geotechnical studies concludes that blasting would only be necessary in the "south-central portion of the site". This conclusion is inconsistent with the actual results of the test borings (in this case the 2004 study) which indicates that some of the holes were drilled to refusal which occurred at a depth of about five feet in the vicinity of buildings "F"-"I" and the detention basins. A review of the proposed grading plan indicates that this portion of the site would be excavated to a depth of greater than five feet to accommodate proposed improvements thereby indication that blasting is likely to be required across much of the site. This issue must be addressed in greater detail.

Response 4.1-1: *The area of potential rock removal was depicted on DEIS Figure 4.1-1. This figure shows an area that extends from the south-central portion of the site north towards the western boundary. As stated in the DEIS on Page 4.1-1: "Bedrock at the surface occurs in several locations on the site, primarily in the south central section of the property." No rock removal is anticipated in the area formerly proposed for the development of Buildings F through I.*

The DEIS states on page 4.1-2 that 119,000 cubic yards of rock would need to be removed. The site plan has been revised since that time and the building pad elevations have been raised to better balance the earthwork. As a result, the amount of rock removal has been reduced by approximately 50 percent from that presented in the DEIS. The area within which rock removal would potentially be required under the plan presented in the DEIS was limited to approximately 11 acres. This area has been reduced under the modified plan to approximately 9.8 acres and is depicted on Figure 4.1-1 herein. Refer also to Response 1.3-23.

Borings were conducted by Connecticut Test Boring, LLC (Connecticut Test Boring) in 2004. As stated in the DEIS these borings were conducted in the area of the access road, parking areas, and proposed stormwater basins. The proposed plan has been modified since the completion and acceptance of the DEIS. Buildings F through I are no longer located in the area addressed in this comment. In the newly modified plan one (1) building, Building H, is proposed in the vicinity of the formerly proposed Buildings F through I. Anticipated grading, or cut, is 6 feet to 14 feet in the area of Building H.

The borings performed in the northerly portion of the site, in the vicinity of the formerly proposed Buildings F through I, are boring numbers 22 to 32. These borings indicate that rock was encountered at a depth of 5.5 to 37 feet across the area. Based on a review of the existing embankment cuts adjacent to NYS Route 311 and Interstate 84 it does not appear that rock was encountered in past excavations. It is anticipated that some of the refusal documented in the subject boring logs could be attributed to encountering boulders. Certain borings do indicate a high potential for a presence of bedrock in the areas of the shallow excavations. Should bedrock be encountered in these areas and the rock could not be removed by mechanical means, the blasting protocol noted in the DEIS would be fully implemented.

Comment 4.1-2 (Letter A-4 Neil A. Wilson, AICP, LRC Planning Services, September 21, 2006): Page 4.1-1, with respect to the 2004 geotechnical study cited in this section the boring logs for holes 1, 3, 9 and 12 are missing from the report in Appendix D. We also note that the report in Appendix "D" consists only of the soil boring and contains no analysis of field conditions. The DEIS discussion also does not analyze the results of the 2004 boring study in as much as the DEIS is supposed to distill technical data into an understandable format this omission should be corrected.

Response 4.1-2: *The missing boring log is provided in Appendix E. Boring sites 1, 3, and 9 were never drilled by Connecticut Test Boring. The borings were pre-staked and pre-numbered on the property by the project engineer. Boring sites 1, 3, and 9 were areas of surficial bedrock, as noted by Chris DeAngelis of Connecticut Test Boring, so borings were unnecessary. However, Connecticut Test Boring kept the nomenclature set up by the project engineer and that is the reason it appears as though these three boring logs were omitted from the DEIS. The boring log for boring 12 was inadvertently omitted by Connecticut Test Boring; it has since been supplied to the Applicant and is provided in Appendix E, as stated above.*

The boring study conducted by Connecticut Test Boring in 2004 was completed to evaluate depths of overburden and depths to bedrock on the property and was not intended to be a geotechnical study, suggested by the comment. The information was used by the project engineer to estimate the amount of rock removal needed for the proposed project.

Comment 4.1-3 (Letter A-4 Neil A. Wilson, AICP, LRC Planning Services, September 21, 2006): Page 4.1-3, the discussion of the blasting mitigation plan must include a firm commitment to implement the plan as a condition of site plan approval. The elements of the plan should be placed on the site plan as detailed notes to ensure that the contractor(s) are aware of the requirements.

Response 4.1-3: *Comment noted. The Town of Patterson Planning Board, as the Lead Agency and the approval authority for the site plan, will require assurances that all applicable mitigation measures are implemented. This could include either notes on the plan or in another appropriate form (i.e., conditions of a resolution) as part of the site plan approval.*

Comment 4.1-4 (Letter A-4 Neil A. Wilson, AICP, LRC Planning Services, September 21, 2006): Page 4.1-3, the discussion of bonding must be expanded to address not only damage caused to buildings and other surfaces improvements, but damage to subsurface water supplies that are vital to the owners of the several hundred dwelling units that are in close proximity to the site. The details of the water supply monitoring and the contractor's liability needs to also address damage to water supplies that might not become apparent for days or even weeks after the blasting events.

Response 4.1-4: *The Blasting Mitigation Plan requires well monitoring for two weeks before and two weeks after blasting operations. The blasting contractor would be bonded for any and all possible damages including subsurface resources such as wells.*

Comment 4.1-5 (Letter A-4 Neil A. Wilson, AICP, LRC Planning Services, September 21, 2006): The mitigation plan should also state that blasting will not take place on any local, state, or federal holiday.

Response 4.1-5: *The Blasting Mitigation Plan states that blasting operations will be limited to the hours of 8 a.m. to 5 p.m., Monday through Friday. Blasting, along with mechanical rock removal and rock processing, will NOT be conducted between 5 p.m. and 8 a.m. weekdays or at any time on Saturday, Sunday, or the following holidays:*

- *New Year's Day*
- *Dr. Martin Luther King Jr. Birthday*
- *President's Day*
- *Easter Day*
- *Memorial Day*
- *Independence Day*
- *Labor Day*
- *Yom Kippur*
- *Columbus Day*
- *Election Day*
- *Veteran's Day*
- *Thanksgiving Day*
- *Christmas Day*

Comment 4.1-6 (Letter A-6 Marilyn Shanahan, Chief, SEQRA Coordination Section, September 25, 2006): It is not discussed in any depth what outcomes might be expected from bisecting water bearing rock or rock-soil interfaces during the course of construction. Rilling, formation of stream channels, seeps, and small wetlands are possible. These potential outcomes and the methods that will be used to prevent erosion and sedimentation associated with them should be provided in the Mitigation Measures section.

Response 4.1-6: *During construction, stormwater basins and erosion control measure will be installed in one of the initial phases of construction. All graded areas of the site will have surface water directed to those stormwater basins designed to accommodate appropriate storm events and to trap and store sediments. Any subsurface water encountered during construction would also be directed to these facilities in accordance with the project engineer's Sediment and Erosion Control Plan, Stormwater Pollution Prevention Plan, and construction drawings.*

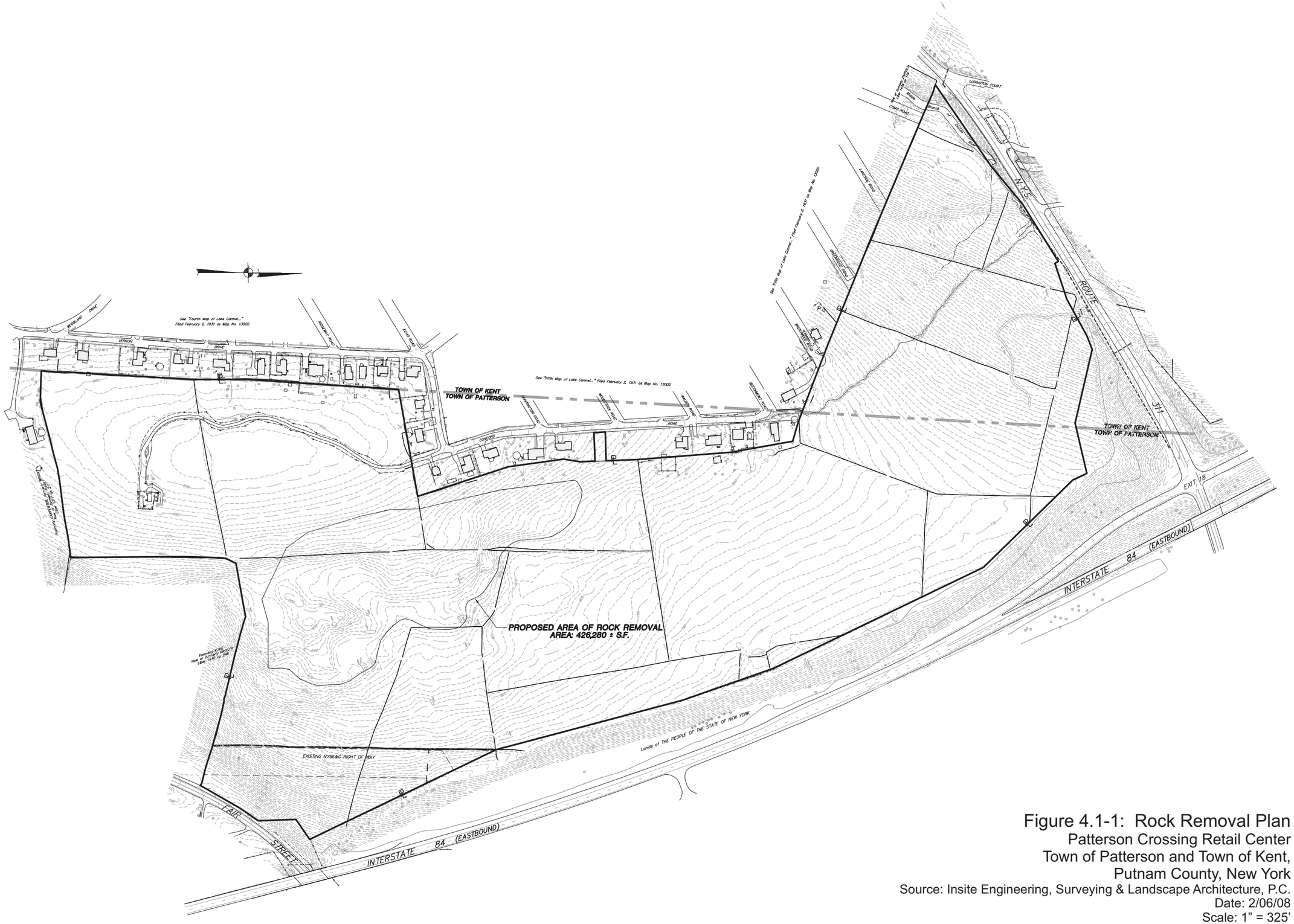

Figure 4.1-1: Rock Removal Plan
Patterson Crossing Retail Center
Town of Patterson and Town of Kent,
Putnam County, New York
Source: Insite Engineering, Surveying & Landscape Architecture, P.C.
Date: 2/06/08
Scale: 1" = 325'

File 04031 2/06/08
JS\04031\FEIS Graphics

4.2 SOILS COMMENTS AND RESPONSES

Comment 4.2-1 (Letter A-4 Neil A. Wilson, AICP, LRC Planning Services, September 21, 2006): Pages 4.2-1 and 4.3-1, these sections should include a table that identifies the acreage attributable to existing and proposed pervious/impervious conditions.

Response 4.2-1: *The SWPPP identifies 0.0 acres of impervious surfaces in the pre-developed condition and a total of 31.0 acres of impervious surface on the 90.5 acre project site in the post-developed condition - 30.2 acres within the Town of Patterson and 0.8 acres within the Town of Kent. Refer to table below for a breakdown of the impervious surface proposed in each soil category.*

Table 4.2-1
Impervious Surface Area by Soil Type

Soil Type	***Area of Impervious Surface Post-development***
Paxton	*30.0 acres*
Woodbridge	*0.2 acres*
Chatfield-Charlton	*0.8 acres*
Ridgebury	*0.0 acres*
Total Impervious Area	*31.0 acres*

Source: Insite Engineering, Surveying & Landscape Architecture, P.C.

Comment 4.2-2 (Letter A-6 Marilyn Shanahan, Chief, SEQRA Coordination Section, September 25, 2006): The DEIS states that Paxton soils comprise the majority of the area proposed for development, and the USDA identifies these soils as possessing potential limitations for development of roads, buildings, and excavations due to their characteristics. Although the impacts have been identified, and construction phasing and erosion and sediment control sequencing have been considered, the engineering methods to compensate for known limitations, (e.g. Construction phasing, erosion control, footing drains, or other drainage improvements) must be more specifically identified and described as to where and when they will be implemented in the construction phasing and erosion and sediment control sequencing.

Response 4.2-2: *The limitations of Paxton soils identified by the USDA are its relatively high erosion factor, steep slopes, and groundwater elevations, as identified in DEIS Table 4.2-1. The Project Engineer addressed these limitations with specific engineering methods proposed to control erosion and sedimentation during construction. These methods, as set forth in DEIS Section 4.2, include diversion of clean runoff around disturbed soils, timing of grading and construction to minimize soil exposure, retention of existing vegetation, stabilization of disturbed areas as soon as possible, minimizing the length and steepness of slopes maintaining low runoff velocities to protect disturbed areas from storm water runoff, trapping sediment on-site and prior to reaching critical downstream, establishing a thorough maintenance and repair program, assigning responsibility for the maintenance program, and construction of retaining walls.*

The above methods are typically used through the construction of proposed developments and are not limited to specific phases of the phasing plan. Most methods are adhered to so that the activities during each phase of the phasing plan conforms to erosion and sediment control methods. However, some phases are specific in nature, Phase 2B, 3A, and 4A are specific for the installation of temporary swales with stone check drains to divert runoff from disturbed areas.

In further regard to Paxton soils, the primary potential limitation for construction is the slope inherent with this class of soil. The development of the site includes a grading operation to create the relatively level building and parking lot pads. The project would remove a portion of the existing grades thereby eliminating this limiting characteristic. Concerns regarding wetness as a limiting factor would be handled by the inclusion of footing drains and curb underdrains discharging to the proposed storm sewer system. The limiting factor of frost action would be addressed by not placing frost laden soils as fill and using these soils for purposes other than subgrade fill for roadways and parking lots.

Comment 4.2-3 (Letter A-6 Marilyn Shanahan, Chief, SEQRA Coordination Section, September 25, 2006): In addition, in order to assess the listed engineering methods to compensate for the Paxton soil limitations and the stated reduction of construction activities on steep slopes for this proposed alternative, a cut and fill analysis must be added to the DEIS and considered in the construction phasing and erosion and sediment control sequencing. Balancing of cuts and fills is fundamental to proper site planning, land use engineering, and construction management.

Response 4.2-3: *The cut and fill analysis performed for the reduced development plan included in this FEIS, shows that the site earthwork would result in approximately 590,000 cubic yards (cy) of cut and roughly 565,000 cy of fill resulting in approximately 25,000 cy of net export.*

As noted by the commentor, balancing of cuts and fills is fundamental to proper site planning, land use, engineering, and construction management. Balancing of cuts and fills is also an important factor in project economics, as it is expensive to export fill material, thereby adding significant financial incentive to balance cut and fills on site. To meet the goals recognized above and control project costs, the project engineer has raised the site development pad to balance cut and fills to the maximum extent practicable. One positive byproduct of this balancing of cut and fills will be a reduction in the amount of rock that needs to be removed. The raising of the building pads of the home improvement center by approximately four feet and the wholesale warehouse by roughly six feet has measurably reduced the surficial area and volume of rock to be removed. This will reduce the area of potential rock removal to even less than the aforementioned 11 acre area, the volume of rock to be removed by roughly 50 percent and the amount of blasting required to remove the rock. Refer to Responses 1.3-23 and 4.1-1.

As stated above, the raising of the building pads has balanced the earthwork on the site to the greatest extent practicable to reduce the potential environmental impacts associated with grading and rock removal, to reduce construction costs, and to facilitate use of excavated materials within the project thereby avoiding or minimizing the need to export material from the property. As with all land development projects,

the cut materials that are determined to be physically (geotechnically) unsuitable for use during development of the project site will be removed.

Impacts associated with cut and fill operations on the site are largely related to erosion and sedimentation during construction. The earthwork to be conducted on the project site will be distributed through and balanced to the maximum extent practicable for each of the construction phases. Where this is not possible, appropriate areas would be set aside for storage of excess cut material. Construction phasing operations will follow site development protocols that provide for rock generated on the site to be placed, and redistributed, in areas where structural fill, subbase, riprap and crushed stone is required in any phase of construction for the development of the site. In order to offset potential impacts, the modified sediment and erosion control plan (Drawing SP 4.2-3, SP 4.2-3 and SP 4.2-4 of the attached plan set) addresses these issues.

Comment 4.2-4 (Letter A-6 Marilyn Shanahan, Chief, SEQRA Coordination Section, September 25, 2006): It is not clearly stated within the document whether topsoil and subsoil will be stockpiled separately. Replacement of topsoil is necessary for successful establishment of vegetation. If wetland soils are disturbed, wetlands and upland topsoil should be stockpiled separately to assure successful re-establishment of wetland and upland plants in their appropriate locations.

Response 4.2-4: *Site grading operations would include the separate stockpiling of topsoil, and subsoil. Stockpiles would be protected and stabilized in accordance with the Sediment and Erosion Control Plan including skirting of the pile and stabilization of the exposed soils. The Proposed Action does not involve disturbance of wetlands.*

Comment 4.2-5 (Letter A-6 Marilyn Shanahan, Chief, SEQRA Coordination Section, September 25, 2006): The text does not clearly state that a maintenance plan has been established for the period beyond construction of the development (although this is presented in Appendix F). As maintenance of erosion control structures must continue for the life of the development, the DEIS should explain the frequency of and responsibility for inspections following construction.

Response 4.2-5: *The DEIS includes a SWPPP containing a narrative Long Term Maintenance Plan to be implemented for the duration of the project. This narrative addresses the long term maintenance of permanent stormwater management facilities included in the SWPPP. It calls for a yearly spring inspection of all stormwater facilities. In addition, after major storm events, but not less than semiannually, the basins and outlets structures are to inspected for the following:*

- *Evidence of clogging of outlet structures*
- *Erosion of flow path through the pond*
- *Subsidence, erosion, cracking of tree growth on the embankments/berms*
- *Condition of the emergency spillway*
- *Accumulation of sediment around the outlet structures*
- *Adequacy of upstream/downstream channel erosion control measures*
- *Sources of erosion in the contributory drainage, which should be stabilized*

The SWPPP goes on to require that grass swales, graded pond accesses and berm side slopes and berms of the ponds are to be mowed annually and that swales and ponds be cleaned of accumulated sediments "every 10 to 20 years, or when 50 percent of their capacity has been reached."

The property management company would be the responsible entity for the periodic inspection and maintenance of the stormwater management facilities.

Comment 4.2-6 (Letter A-8 Michael W. Soyka, P.E., September 8, 2006): Refer to Volume 1 of the Draft Environmental Impact Statement: On page 4.2-7 it states that where concentrated (swale) flow from exposed surfaces is expected to be greater than 3 feet per second, hay bale (emphasis added) or stone check dams will be installed in the swale. The check dams will be placed so that unchecked flow lengths will not be greater than 100 feet (emphasis added). It is apparent that the author of this statement is unfamiliar with the contents of the New York State Standards and Specifications for Erosion and Sediment Control. Hay bale check dams are not an acceptable practice and do not appear anywhere in the Blue Book. In general, eliminate all references to hay bales. Hay bales dikes are to be used only where no other practice is feasible, and than as dikes, not dams.

Response 4.2-6: *The Applicant concurs. According to NYSDEC, hay bale check dams are no longer an accepted erosion and sediment control practice. All references to hay bale check dams will be removed from the final construction documents. It is acknowledged that the NYSDEC Standards and Specifications for Erosion and Sediment Control identify the use of a hay bale dike where no other practice is feasible. Although their use is not prohibited, it is anticipated that hay bales will not be used on site as they are less effective than other measures.*

Comment 4.2-7 (Letter A-8 Michael W. Soyka, P.E., September 8, 2006): A similar lack of knowledge exists about check dams. Check dams are not located on a maximum horizontal distance, but rather by their vertical separation. The check dams shall be spaced as necessary in the channel so that the crest of the downstream dam is at the elevation of the toe of the upstream dam.

Response 4.2-7: *Stone check dams will be spaced according to the formula set forth in* NYS Erosion and Sediment Standards and Specifications (August 2005)*. Refer to Drawing No. D-2 of the attached plans set for details of the stone check dam use and construction. Generally, theses structures are to be approximately two feet high at the center (reducing the number of dams to be installed), and therefore where specified, and would be shown on every two foot contour on the construction drawings.*

Comment 4.2-8 (Letter B-8 James M. Tierney, Watershed Inspector General, September 25, 2006): Review and revise the construction phasing plan so that no more than five acres are disturbed at one time in accordance with the State DEC General Permit. A phasing plan is described in Section 4 and shown on drawing SP-4.1. On DEIS page 4.2-5, the final paragraph states that "no greater than five acres" of soil will be disturbed during each phase - as is required by the State DEC general Permit. We reviewed a portion of the phasing plan with respect to the excavation of the "Entrance Road to Sta 1300." This would involve a maximum cut of 45 feet or more, with an estimated anticipated excavated volume of 120,370 cubic yards. This volume is to be removed and placed as fill for a pad at

the northern most building and parking lot. This operation alone would disturb over nine acres of soil, in contravention of State requirements. Thus, the entire phasing plan should be reviewed and more site specific operational details developed to insure that no more than five acres of soil will be disturbed on site during a phase.

> ***Response 4.2-8:*** *As recommended by the commentor, the phasing plan was reviewed and the refined phasing plan developed for the reduced development plan is included in the plan set provided with this FEIS as Drawing SP-4.1. This modified phasing plan addresses the above comment. Implementing the proposed sequence of the construction and phasing plan included in the Erosion and Sediment Control Plan will further reduce the potential for erosion (see Drawing SP-4.1, Overall Sequencing Plan). The proposed sequencing plan, which divides construction into twenty-four separate phases, will limit the area of disturbed soil at any time, thereby reducing potential impacts associated with erosion and sedimentation of on- and off-site water resources. The proposed sequencing also mitigates potential impacts on water resources by shortening the construction period and the length of time that any disturbed soils are subject to erosion.*

Comment 4.2-9 (Letter B-8 James M. Tierney, Watershed Inspector General, September 25, 2006): Do not use hay bale check dams; design and locate rock check dams using appropriate formula. In DEIS page 4.2-7, the first paragraph states that hay bale check dams could be used as an option to control flow velocity in swales. However, hay bale check dams are not allowed by the NYS Erosion and Sediment Standards and Specifications (August 2005) for swale erosion. As a result, hay bale check dams need to be replaced by an approved check dam. In addition, the final sentence in the paragraph states that "check dams will be placed so that unchecked flow lengths will not be greater than 100 feet", which implies spacing at 100' intervals. The spacing of check dams is critical to lowering the flow velocities in a swale to prevent erosion. The spacing of check dams must be calculated on a site specific basis using the formula shown on page 5A.23 of the above referenced standards.

> ***Response 4.2-9:*** *Refer to Responses 4.2-6 and 4.2-7. The Applicant concurs with the commentor. According to NYSDEC, hay bale check dams are no longer an accepted erosion and sediment control management practice. All references to hay bale check dams have been removed from the erosion and sediment control documents. The NYSDEC Standards and Specifications for Erosion and Sediment Control identify the use of a hay bale dike where no other practice is feasible. The reduced development plan included in this FEIS calls for the use of approved rock check dams. These dams have been spaced according the formula set forth in* NYS Erosion and Sediment Standards and Specifications (August 2005)*. Refer to Drawing D-2 of the attached plan set for details of the stone check dams and construction.*

Comment 4.2-10 (Letter B-8 James M. Tierney, Watershed Inspector General, September 25, 2006): In accordance with the SPDES General Permit GP-02-01, the soil boundaries shown in Figure 4.2-1 of the DEIS are required to be placed on sheets SP-3.1 to SP-3.3 of the Grading Plans.

Response 4.2-10: *Comment noted. Although soil boundaries placed on grading plans is not a requirement of the SPDES General Permit GP-02-01, soil types have been included on the revised Erosion and Sediment Control Plans, Drawings SP-4.2, SP-4.3 and SP-4.4.*

Comment 4.2-11 (Letter B-8 James M. Tierney, Watershed Inspector General, September 25, 2006): The silt fence shown at the roadway bench outlets on drawing SP 4-2 needs to be removed, as this practice is not to be used in concentrated flow areas (NYS Erosion and Sediment Standards and Specification (August 2005). The outlet of the swales should be stabilized with stone.

Response 4.2-11: *Comment noted. The plan presented in this FEIS does not call for the use of silt fence across channels of concentrated flow. Refer to the Engineer's Sediment and Erosion Control Plan (Drawing No. SP-4.2, SP-4.3, and SP-4.3). Instead the plans incorporate stone to stabilize the swale outlets.*

Comment 4.2-12 (Letter B-8 James M. Tierney, Watershed Inspector General, September 25, 2006): The slope of "the road slope bench/cutoff swale" is so steep (almost 8%) that a stone lining or turf reinforcement mat should be installed as a permanent practice to prevent future erosion. This would replace the stone check dams shown on the drawings. At this grade (8% slope), the check dams would have to be placed 25 feet apart if they were constructed two feet high.

Response 4.2-12: *Comment noted. The Engineer's Sediment and Erosion Control Plan presented in this FEIS includes rip rap swales in place of the stone check dams as a permanent practice to prevent future erosion at the road slope bench/cutoff swale.*

Comment 4.2-13 (Letter B-8 James M. Tierney, Watershed Inspector General, September 25, 2006): Based on the type of commercial land use proposed, a lot of concrete will be poured. As a result, a concrete washout area should be required to collect all of these discharges in one location, preferably away from the storm drain inlets or swales. Concrete washout areas are typically stone lined depressions that trucks drive into and are washed out.

Response 4.2-13: *As recommended by Mr. Tierney, area has been set aside for the washout of concrete transportation vehicles and is depicted on the modified plans. Refer to Drawing SP-4.1 of the Plan Set included with this FEIS.*

Comment 4.2-14 (Letter B-8 James M. Tierney, Watershed Inspector General, September 25, 2006): More Detailed Information is Needed to Assess Soils for Site Disturbance and Construction Impacts. Table 4.2-1 entitled "Soil Characteristics and Limitations" in the DEIS presents information on the soil codes, soil types, hydrologic group, permeability, erosion factors, and potential construction limitations. The information provided was compiled from data presented in the USDA SCS 1994 Soil Survey of Putnam and Westchester Counties, New York. General slope information for the entire site was provided in the DEIS in Table 4.3-1. However, what the DEIS lacks is sufficient detailed information concerning soils at the Project site. During this project's scoping document review process, we requested that the DEIS provide the percent and acreage of each soil type that was projected to be disturbed at the project site. This site specific information was not presented

in the DEIS. It is essential for a thorough evaluation of how the proposed disturbance and construction would impact site soils.

Response 4.2-14: *While the DEIS scope did not specifically require the percent and acreage of each soil type that was projected to be disturbed at the project site, in response to the comment, the project engineer has supplied the requested information for the revised (and smaller) development plan in tabular format below. The areas presented include both those to be permanently and temporarily disturbed.*

Table 4.2-2
Projected Disturbance by Soil Type

Soil Type	***Total Area Coverage (acres)***	***Total Area to be Disturbed (acres)***
Udorthents	*2.4*	*1.1*
Paxton	*66.7*	*60.1*
Woodbridge	*12.6*	*6.7*
Chatfield-Charlton	*7.6*	*3.3*
Ridgebury	*1.2*	*0*
Total Area	*90.5*	*71.2*

Source: Insite Engineering, Surveying & Landscape Architecture, P.C., 2007

Comment 4.2-15 (Letter C-25 Sally Lake, September 24, 2006): Sections 1.3.2 and 4.2, "Soils", estimates the need for fifty-eight thousand cubic yards more of cut than of fill for the earthworks for this project. The DEIS states that the final plan will "balance" the earthwork by raising the main development pad, thus avoiding the need to bring fill to or remove excavated materials from the site. It assumes that the balancing can occur without upsetting other aspects of the project as describe in the DEIS. For instance, the DEIS fails to say how the need for "large level building pads" (S1.3.3.) and erosion control will be met while avoiding the removal of cut. If this balancing cannot be achieved, there could be a need to remove significant excavated material from the site, resulting in additional traffic and burden to the roads, vehicle exhaust, and noise.

Response 4.2-15: *Subsequent to the submission of the DEIS, the grading plan has been revised to better balance the project site cut and fill volumes. Final elevations of the developed area have been provided in Drawings SP-3.1, SP-3.2 and SP-3.3. See Response 4.2-3.*

Comment 4.2-16 (Letter C-25 Sally Lake, September 24, 2006): The Final Scope for the DEIS calls for a "worst case scenario analysis of assumptions to be identified and discussed (General Guidelines #5). The DEIS does not provide such an analysis for the potential impact on soils and conditions related to the need to remove significant excavated materials from the site. The Applicant should be required to provide this analysis.

Response 4.2-16: *Refer to Response 4.2-3.*

Comment 4.2-17 (Letter C-42 Virginia M. Reeves, September 22, 2006): Erosion control for the homes south east side of Concord Road. The grade change from Concord Road and

the proposed roadway of the shopping center varies from 0'- 0" from the north side of the site to 44'- 0" +/- towards the south side of the site in line with lots #22, 23, 24 and 25 as shown on Insite Engineering Surveying, Vicinity Map dated 3-24-06, Revision #1 - noted Revised as DEIS Comments. What were the revised DEIS comments?

Response 4.2-17: *The erosion and sediment control plan had been revised to reflect comments on the Preliminary DEIS from the Town and the Town's consultants during its review for completeness prior to accepting the document for public review and comment; there were no "revised DEIS comments." The comments addressed by the revision dealt with erosion and sediment control practices utilized and shown on the plans at that time.*

4.3 TOPOGRAPHY COMMENTS AND RESPONSE

Comment 4.3-1 (Letter A-4 Neil A. Wilson, AICP, LRC Planning Services, September 21, 2006): Pages 4.2-1 and 4.3-1, these sections should include a table that identifies the acreage attributable to existing and proposed pervious/impervious conditions.

Response 4.3-1: *The SWPPP identifies 0.0 acres of impervious surfaces in the pre-developed condition and a total of 31.0 acres of impervious surface created on the 90.5 acre project site in the post-developed condition. Refer to table below for a breakdown of the impervious surface proposed in each slope category.*

Table 4.3-1
Impervious Surface Area by Slope Category

Slope Category	***Area of Impervious Surface Post-development (acres)***
0% to 8%	*17.6*
8% to 15%	*9.2*
15% to 25%	*3.2*
>25%	*1.0*
Total Impervious Area	*31.0*

Note: Total Site Acreage = 90.5
Source: Insite Engineering, Surveying & Landscape Architecture, P.C. 2007

Comment 4.3-2 (Letter A-8 Michael W. Soyka, P.E., September 8, 2006): See page 4.3-2. It states that it is anticipated that proposed slope cuts and slopes of 2H:1V (horizontal to vertical) will be stable if they are well drained. The Town of Kent Code requires that slopes be 3H:1V for slopes greater than 15%. Slopes of 2H:1V are proposed even though a wavier from 3H:1V requirement has not been requested.

Response 4.3-2: *The Applicant is aware of the permit required in accordance with Chapter 66, Steep Slope and Erosion Control Regulations of the Town of Kent. The Applicant will apply for a steep slopes disturbance permit in accordance with the Town of Kent Code for final Town approval before being able to disturb slopes considered to be steep. The Project is proposed to disturb 2.5 acres of slopes in excess of 15 percent, in the Town of Kent, to construct stormwater management facilities, for the 2,000 square foot Building H, associated parking and the site access road. It should be noted that the majority of the disturbed slopes will be graded to create ponds and then re-vegetated. The area where constructed slopes greater than 3H:1V are proposed totals 2.8 acres.*

Comment 4.3-3 (Letter A-8 Michael W. Soyka, P.E., September 8, 2006): Refer to page 4.3-3. It would seem that the author is not familiar with the recently adopted chapter 66, Steep Slope and Erosion Control Regulations of the Town of Kent. Steep slopes are now defined as all ground areas having a topographical gradient equal to or greater than fifteen percent (15%) measured by utilizing two (2) foot contours. The definition no longer refers to a rectangle measuring 75 feet by 25 feet as a part of the criteria for determining steep slopes.

Response 4.3-3: *References in the DEIS that refer to the 25 foot by 75 foot rectangle are in error and should be disregarded. The Applicant and engineer are aware of the most recent definition of steep slopes in the Kent Town Code. The slopes information included in Tables 4.3-1 and 4.3-2 of the DEIS were based on the definition of steep slopes identified in Chapter 66 of the recent Town of Kent Town Code.*

Comment 4.3-4 (Letter C-23 Daniel Kuchta, September 25, 2006): Figures 4.3-3 and 4.3-4 show that the emergency access road location includes a slope that is 25%+. Figure 4.1-1 shows the area of rock removal which does not appear to enclose the portion of the steep 25% slope that the emergency access road goes over. Will the emergency access road include a steep slope?

Response 4.3-4: *The maximum slope the relocated emergency access road will traverse is 12 percent.*

Comment 4.3-5 (Letter C-41 David G. Reeves, September 22, 2006): 4.3 Topography: A new figure (Figure 4.3-4, Steep Slopes Disturbance Map") has been added to respond to our prior comments. We merely noted that the slope ranges specified in the Key be revised to read ">15% and >20% for clarity. Where is the correction made to the DEIS report as recommended by your consultant?

Response 4.3-5: *DEIS Figure 4.3-4 was added to address a comment from the Town's Consultant requesting the presentation of Town regulated steep slopes. The original version of this figure included a different key. The comment the reader quotes was in response to the original version of the figure which did not include the requested designation* ">15% and >20%*". The version of the figure in the DEIS includes the requested information with the requested key. The slope disturbance per slope category is summarized below in Table 4.3-2 for the revised development plan. These numbers include areas of both temporary and permanent disturbance.*

Table 4.3-2
Disturbance to Slopes

Slope Category	***Approximate Acres Disturbed***
0% to 8%	*32.8*
8% to 15%	*24.4*
15% to 25%	*11.6*
>25%	*2.4*
Total Site Disturbance	*71.2*

Note: Total Site Acreage = 90.5
Source: Insite Engineering, Surveying & Landscape Architecture, P.C., 2007.

4.4 GROUNDWATER COMMENTS AND RESPONSE

Comment 4.4-1 (Letter A-4 Neil A. Wilson, AICP, LRC Planning Services, September 21, 2006): Page 4.4-6, see prior comment regarding the assumed daily water demand for the project. In particular, it appears the water demand for the "wholesale warehouse" is understated since the description of store operations includes on-site food preparation and a food court.

Response 4.4-1: *The project engineer has revised the Water System Report to provide actual water usage data from retail stores similar to the uses proposed for the Patterson Crossing Retail Center development (See updated Water System Report, Appendix G). This data was utilized to develop revised project water design flows, which are 15,000 gallons per day or 10.4 gallons per minute.*

Comment 4.4-2 (Letter A-4 Neil A. Wilson, AICP, LRC Planning Services, September 21, 2006): Page 4.4-1 and 4.5-1, the discussion of ground water and surface waters does not consider the 2004 "Putnam County Groundwater Protection and Utilization Plan" prepared by The Chazen Companies. The DEIS discussion should be revised to consider the analysis, conclusion, and recommendations of the Chazen report.

Response 4.4-2: *The DEIS discusses the Putnam County Groundwater Protection and Utilization Plan, prepared by the Chazen Companies on Page 4.4-2. Since the Plan primarily concerns groundwater protection and use, it is best discussed in Section 4.4, Groundwater, of the DEIS, and therefore it is not discussed in the Surface Water chapter.*

The Groundwater Protection and Utilization Plan provides specific recommended groundwater protection and management strategies. These recommendations are summarized below, as they apply to the Patterson Crossing Retail Center project.

- "Broadly applied aquifer management is recommended outside of highly concentrated centers. More General protection measures are recommended for all surrounding aquifer areas, including areas used for residential wells".

The Patterson Crossing Retail Center project includes aquifer management and protection measures, including wellhead protection, water saving features incorporated into the project design, management of wastewater flows, and a proposed off-site well monitoring program.

- "Proposed projects should evaluate whether they are self supporting. Self-supporting projects are preferred..."

The Patterson Crossing Retail Center DEIS provided a complete analysis of estimated project water demand compared to estimated groundwater recharge on the property. The project was shown to be self sustaining as recommended by the Groundwater Plan.

- "An improved pumping test protocol is recommended for proposed subdivisions".

This recommendation does not apply to the Patterson Crossing Retail Center project. The Groundwater Plan indicates that the "Existing Putnam County Health Department pumping test procedures for proposed Community Water System wellfields are adequately rigorous to ensure viability of such sources". The pumping test completed for the Patterson Crossing Retail Center project was a 72-hour test consistent with the requirements for Community water supplies. "Additional recommendations found in the report include programs to manage de-icing chemicals, discourage future use of buried home heating oil tanks, implement a program to identify sustainable septic system densities, and a discussion of a County-wide groundwater monitoring program".

The above recommendations do not apply to the Project, with the exception of the use of de-icing chemicals. The use of de-icing materials is discussed in Section 4.5.3 Surface Water - Future Conditions (page 4.5-15). Due to the project's location within the watershed, salt will only be used in limited areas for safety (such as sidewalks near store entrances and possibly along the access road, based on pavement conditions, which is only two percent of the pavement area). Sand will be used as needed for vehicle safety elsewhere throughout the retail center.

Comment 4.4-3 (Letter A-4 Neil A. Wilson, AICP, LRC Planning Services, September 21, 2006): Page 4.4-10, as previously noted the responsibility of the owner of the site to repair damage to neighboring wells should be firmly committed to as a condition of site plan approval. The discussion of liability in this section should be expanded to completely identify the process for evaluating and resolving damage claims.

Response 4.4-3: *Comment noted. A process for identifying impacts to neighboring wells from groundwater well pumping is provided in 4.4.4 of the DEIS, Groundwater Mitigation. The Applicant is responsible for the repair or replacement of any neighboring well that is damaged by the use and pumping of the Patterson Crossing Retail Center wells during the period of off-site monitoring, as determined by a hydrogeologist retained by the Town of Patterson. Such a condition will be noted in the Lead Agencies Findings Statement and as a condition of Final Site Plan approval. A summary of the Applicant's process for evaluating and resolving damage claims to off-site wells is provided below.*

1) If a local resident experiences a reduction or loss of well function as a result of Patterson Crossing Retail Center well usage, complaints would be filed with the Town of Patterson or Town of Kent Building Inspector as appropriate. Such complaints would then be forwarded to the Applicant. Complaints regarding potential well impacts would be limited to a reasonable distance, such as within 1,500 feet of the production wells, and to a period of two years following the complete build-out of the Patterson Crossing Retail Center development.

2) A hydrogeologic consultant (Consultant) retained by the Town and funded by the Applicant, will determine if the well impact is the result of project pumping or other factors, not related to the project.

3) In making a determination regarding whether the private well impact is the result of project pumping, the Consultant will review available pumping rates and water level data from the on-site production wells, off-site private well monitoring data, and data from the complainant's well.

4) If the Consultant determines that the reported well problem is not related to the use of the on-site production well, then the Consultant will refer the homeowner to a qualified well or pump contractor to remedy the problem. The homeowner will be responsible for the costs of the well or pump repair.

5) If the Consultant determines that the reported well problem is the result of on-site well usage, an appropriate remedy to the well problem would be implemented and funded by the Applicant. Potential remedies include:

- *lowering the well pump*
- *hydro-fracturing the well (increasing the size and extent of bedrock fractures by pressurized water).*
- *redeveloping the well*
- *deepening the existing well*
- *drilling a new well.*

6) The Consultant will provide the Town, the affected homeowner and the Applicant with information regarding the results of testing and potential remedies.

7) The Town of Patterson *will determine if a Bond is necessary to assure that homeowner complaints related to impacted wells are properly addressed. The Town of Patterson would determine the amount of the Bond and the length of time that it would be held.*

Comments from the public and the Lead Agency have also related to the potential damage to wells from construction blasting. The Blasting Mitigation Plan (Appendix Q) provides a detailed discussion of pre-blast well inspection and monitoring, the procedures for filing complaints with the Town of Patterson or the Town of Kent, and mitigation to offset blasting related impact to off-site wells. The procedures for determining if private off-site wells are damaged by blasting and the repair or replacement of private wells is similar to the procedures outlined above (see Appendix Q).

Comment 4.4-4 (Letter A-7 Joseph S Paravati, Jr., Assistant Public Health Engineer, September 25, 2006): It appears that the customer restroom usage in table 4.4-3 should be at 400 gal/day for each toilet provided, as per NYSDEC expected hydraulic loading rates.

Response 4.4-4: *As stated in the DEIS Chapter 4.4, "[t]he reference design standards for water and wastewater flows provide general design flows covering a broad range of usage categories. The New York State Department of Conservation (NYSDEC) publication "Design Standards for Wastewater Treatment Works, 1988" provides two alternatives for establishing design flows: hydraulic loading rates tables* ***or*** *water usage data. In either case a daily design flow rate must be calculated. The daily design flow rate is a conservatively high estimate of daily flow used by the engineer in the design of the water and sewer infrastructure.*

In order to establish design flows, it is acceptable to use actual flows multiplied by a factor of safety of 1.5, or design flows based on published hydraulic loading rates. The design flows for the subject project have been calculated based upon actual water usage data from retail stores similar to the proposed Patterson Crossing Retail

Center uses (See updated Water System Report, Appendix G). The Applicant's Engineer obtained actual water usage data from retailers in the region including BJ's, Sam's Club, Lowes, Home Depot, Village Paint, Radio Shack, Rockaway Bedding, Pier 1 Imports, CVS, Rite Aid, Payhalf, Michael's, AC Moore, Linens N Things, Bed Bath & Beyond, Toys R Us, Best Buy, Dick's Sporting Goods, Kohls and Gander Mountain as a basis for determining the actual water demand of the potential retail establishments at Patterson Crossing Retail Center.

Project wastewater flows will be limited to the 11,400 gpd design flow (11,000 gpd southern SSTS and 400 gpd northern SSTS), recognizing the fact that the project will be serviced by a subsurface sewage treatment system (SSTS) with an engineered available capacity (see revised Wastewater Report, Appendix H).

The wastewater design flow (11,400 gpd) differs from the water design flow (15,000 gpd) due to water loss related to irrigation at the Home Improvement Center garden center. The difference also reflects a small amount of water (100 gpd) taken off-site from the Coffee Shop through coffee and soft drink sales (see Wastewater Report, Appendix H).

Future retail users must have wastewater flows which fit into the flow projections for the project. In order to assure the project wastewater design flow is not exceeded the applicant would agree to appropriate controls to assure each user's wastewater flows fit the project's design flows. One such control would require each specific user present the Town Building Department with a wastewater design flow at the time they apply for their building permit, or with any change in occupancy. This will allow for the monitoring of design flow to assure that all users wastewater generation falls within the system design capacity. It should be noted that actual water and wastewater flow metering/monitoring will be required as part of the water and sewer permitting with the PCDOH, NYCDEP and NYSDEC. This metering/monitoring will provide an assurance that the actual project flows do not exceed the system design capacity.

Comment 4.4-5 (Letter A-7 Joseph S Paravati, Jr., Assistant Public Health Engineer, September 25, 2006): This Department requests that a long-term off site monitoring well program be implemented as described in 4.4.4 page 10 (mitigation).

Response 4.4-5: *Comment noted. DEIS Section 4.4.4, Groundwater Mitigation, describes a program of off-site private well monitoring. The purpose of the program would be to ascertain whether the use of the Patterson Crossing Retail Center wells has off-site impacts on neighbors wells. Procedures for an off-site monitoring program are provided in the DEIS. The specific details of such a monitoring program including which wells to monitor, should be determined by the Planning Board in consultation with a professional hydrogeologist retained by the Planning Board, and in consultation with the Putnam County Department of Health.*

Comment 4.4-6 (Letter A-7 Joseph S Paravati, Jr., Assistant Public Health Engineer, September 25, 2006): It appears that the Kroger well data is showing a drawdown during the test period. Please clarify.

Response 4.4-6: *The water level in the Kroger well did decline over the period of monitoring, but it does not appear that the water level decline was due to pumping the Patterson Crossing Retail Center production wells. The total period of well monitoring*

was approximately 14 days, and the Kroger well was monitored three days prior to and eight days after the period of pumping. The Kroger well shows a decline before the test, during the test and a steady decline in the eight days following the pumping test. The well showed no recovery or rebound after the pumps in the test wells were turned off. If the production wells had any influence on the Kroger well, a rebound would have been observed in the Kroger well following the end of the test. This recovery was not observed. The cause of the steady, long term decline (over 14 days) observed in the Kroger well is likely due to precipitation prior to the pumping test, which would have increased the volume of water in the well, and a slow return to "normal" levels in the aquifer after the rain subsided (see Figure 1 - Precipitation Data, Patterson Crossing Water Supply Report, DEIS Appendix H).

Comment 4.4-7 (Letter A-7 Joseph S Paravati, Jr., Assistant Public Health Engineer, September 25, 2006): The following chemicals and contaminants and/or compounds were not tested for either test well: silver, chloride, iron, manganese, sodium, zinc, lead, copper, carbofuran, dibromochloropropane, ethylene dibromide, diquat, endothall, glyphosate, and 2, 3, 7, 8 - TCDD (dioxin).

Response 4.4-7: *According the Orange County Laboratories, dibromochloropropane and ethylene dibromide have new nomenclatures and are represented in the analytical as 1,2-dibromo-3-chloropropane and 1,2-dibromoethane (EDB) respectively. They are present on the sampling that was conducted on both of the wells on the property in January 2005. According to a telephone conversation with Ms. Anne Bittner of the Putnam County Department of Health, on January 7, 2005, Putnam County typically waives the requirement for the sampling of the pesticides Diquat, Endothall, Glyphosate, and 2,3,7,8 - TCDD (Dioxin).*

Silver, iron, manganese, sodium, zinc, lead, and copper were analyzed by Severt Trent Laboratories, but the result were not reported. The analytical results for these metals are provided in Appendix D of the FEIS.

Chloride was not analyzed for in the samples from both wells, and carbofuran was not analyzed in the sample from the SE Well. These parameters are typically not considered a concern for wells in Putnam County. Under Subpart 5-1: "Public Water Systems", chloride is listed as an inorganic compound, that when found at elevated levels could be indicative of road salt.

The Patterson Crossing Retail Center wells are deep bedrock wells (705 and 805 feet respectively) that tap fractures which can extend for considerable distance. Steel casing was installed for both wells (51 feet and 81 feet, respectively), to protect the water supply from surface influences, such as road salt. In addition, the limited use of road salt at the Patterson Crossing Retail Center development will result in no impact to the bedrock aquifer and drinking water quality. This assumption is based upon 1) the large separation distance between the surface and the bedrock aquifer, 2) the large volume of precipitation that annually percolates through the glacial till material found above the bedrock (approximately 9,960,945 *gallons per year), and 3) the limited amount of road salt use proposed for the development.*

Comment 4.4-8 (Letter A-7 Joseph S Paravati, Jr., Assistant Public Health Engineer, September 25, 2006): The actual water flow data in Table 4.4-2 should be further clarified with documentation and/or calculations.

Response 4.4-8: *Refer to Response 4.4-1. The Water System Report has been revised to include actual water usage data from local retailers (see Appendix G).*

Comment 4.4-9 (Letter B-2 James Bacon, Attorney for CWCWC and PCCPOS, September 25, 2006): The Applicant plans to cut, blast and fill a total of 566,500 c.yds of soil and rock, enough to fill a football field with 318 feet of soil and rock. Where are the Applicant's details as to the site's hydrology? Why don't the soil boring maps show testing 8.7 acre septic field? What empirical evidence is cited to prove seasonal depth of the water table?

Response 4.4-9: *The hydrology of the site is documented by extensive engineering and scientific studies described in detail in DEIS Section 4.1 - Geology, 4.2 - Soils, 4.4 - Groundwater, and 4.5 - Surface Water.*

DEIS Figure 4.2-2: Soil Sampling Locations (TMA), shows the location of shallow soil testing done to confirm soil mapping across the site as mapped by the Soil Survey of Putnam and Westchester Counties (USDA, SCS). Soil borings and analysis done specifically for the septic field are provided in the Hydrogeology Investigation (Mounding Analysis) completed by GeoDesign Incorporated (see DEIS Appendix E). In addition, Insite completed geotechnical borings across the property to further assess soil types, depth to bedrock and depth to groundwater (see DEIS Appendix D). These studies show that that the stabilized shallow groundwater level (in the soil above the bedrock) is approximately 24 feet below the ground surface.

Comment 4.4-10 (Letter B-5 David B. Clouser, PE, LS, David Clouser and Associates, September 21, 2006): Similarly, what consideration has been given to the substantial alteration of the local groundwater table with such an extensive earth moving site alteration?

Response 4.4-10: *Shallow groundwater was one of several factors that was considered in the discussion of proposed grading in Section 4.1, Geology, and 4.2, Soils. Shallow groundwater is located in unconsolidated glacial till material above the bedrock. The GeoDesign test borings indicate that the stabilized shallow groundwater level varies from approximately 1.5 to 24 feet below the ground surface (in the area of the septic field). Extensive hydrogeologic testing has been done by GeoDesign and Insite in order to design the project to accommodate the groundwater conditions at the site.*

Water in the bedrock aquifer is found in fractures and fissures in the bedrock. The proposed Patterson Crossing Retail Center wells and local private wells in the vicinity of the project site tap this bedrock aquifer. Grading for the project will not affect the bedrock aquifer. The stabilized water level in the bedrock aquifer is approximately 55 feet below grade, based upon the two on-site water supply wells.

Comment 4.4-11 (Letter B-8 James M. Tierney, Watershed Inspector General, September 25, 2006): Table 4.4-1 (Recharge Calculations) on page 4.4-4 should be presented with a site map that shows the location of the recharge areas used in the "model". In addition, according to the proposed site development plan, approximately 36% of the site will become impervious. An explanation needs to be provided in the DEIS addressing how this amount of impervious surface will affect groundwater recharge.

Response 4.4-11: *The recharge area used for the recharge estimate is limited to the 90.5 acre project site. The recharge area and local topography and drainage features are shown in DEIS Figure 2-1 Regional and Local Setting. As indicated in the DEIS, "A recharge analysis was completed to estimate the amount of water available for recharge from the Patterson Crossing Retail Center property, only. This analysis provides a conservative estimate of available groundwater within the site boundaries. As indicated above, the actual area contributing groundwater to the on-site wells would be larger, due to bedrock fractures extending beyond the property boundaries".*

According to the project plans, approximately 34 percent of the site or 31.0 acres is proposed to be converted to impervious surface. Therefore, approximately 59.5 acres will remain as pervious or unpaved surface. Recharge estimates can be made for future conditions, eliminating the paved surface from the recharge, as shown in Table 4.4-1 below.

The recharge analysis provided in the DEIS assumed that approximately 33 percent of annual precipitation would be available for recharge. A more conservative estimate was provided in the Groundwater Appraisal of the Fishkill-Beacon Area, Dutchess County NY, (Snavely, 1980, USGS Water Resources Investigation Open File Report 80-437). The Snavely report estimates that 20 percent of annual rainfall is available for recharge in the Southern Dutchess and northern Putnam County area. The Putnam County Groundwater Utilization Plan, (The Chazen Companies, 2004) indicates that groundwater recharge in much of Putnam County is approximately 7 inches per year. The recharge estimate provided below is consistent with both Snavely and Putnam County Groundwater Utilization Plan estimates (7 inches per year).

Table 4.4-1
Recharge Calculations for Post-Development Conditions

Acres (Un-Paved surface, following development)	*59.5*
Square Feet	*2,591,820*
Average rainfall per year (inches)	*48.8*
Average rainfall per year (feet)	*3.67*
Cubic feet of precipitation per year	*9,511,979*
Gallons of precipitation per year	*71,149,605*
Amount lost to evapotranspiration and runoff (80% loss based upon conservative model, and 6 percent loss for drought conditions results in 14 percent of rainfall available for recharge).	*61,188,660*
Amount, in gallons, available for recharge per year (equal to approximately 7 inches per year)	*9,960,945*
Amount, in gallons, available for recharge per day	*27,290*
Amount, in gallons, available for recharge per minute	*18.95*

Source: Tim Miller Associates, Inc., Note: Rainfall figures are an average of annual rainfall amounts for Middletown, Harriman and Poughkeepsie for the period 1990 to 2000.

If the majority of rainfall which reaches pavement or rooftops is lost to evapotranspiration and this volume is eliminated from recharge calculations, the

remaining unpaved surface would result in recharge of approximately 9,960,945 gallons per year or 18.95 gallons per minute (gpm). It should be noted that groundwater recharge to a bedrock aquifer is a slow process that occurs over periods of weeks and months and that the rate will vary over time, depending upon precipitation and season. The 18.95 gallons per minute (gpm) is an estimate of annual recharge averaged over an entire year. This averaged estimate allows comparison to the volume of water being withdrawn from wells, which is typically measured in gallons per minute (gpm).

This recharge estimate is based upon the following assumptions: 1) only unpaved areas are available for recharge (no contribution from stormwater basins or septic system which will provide significant recharge), 2) a conservative estimate of rainwater lost to evapotranspiration and run-off (80 percent), and 3) a further reduction of 6 percent for drought conditions. This 18.95 gpm estimate exceeds the project water demand of 10.4 gpm. As described above, the 18.95 gpm estimate, does not account for the volume of water from parking lots and rooftops that is directed to stormwater basins, a portion of which will recharge the groundwater or the volume of wastewater recharge through the septic areas.

Comment 4.4-12 (Letter C-23 Daniel Kuchta, September 25, 2006): Page 4.4-12 states "The project will not result in the introduction of a gasoline service station or petroleum storage tanks to the site. Therefore ... a formal spill contingency plan is not necessary for this site." Page "1", section 3.0 of Appendix M states "The effluent pump station will be provided with an emergency generator therefore one day's design flow of emergency storage is not required." These two statements appear to contradict each other. What will be the source of fuel for this generator and where will it be stored? How large of a fuel tank will be needed to run an emergency generator of this size for one day? Why won't a spill contingency plan be needed for the fuel tank for the emergency generator?

Response 4.4-12: *Diesel fuel for an emergency generator is typically stored in a 200 gallon tank located near the generator. These tanks have secondary containment to prevent spills and leaks of fuel. A spill contingency plan is not required for emergency generator tanks. A formal oil spill contingency plan is required by the USEPA for petroleum storage facilities with large capacity or facilities that transport or transfer oil over water. The federal Oil Pollution Prevention regulation (40 CFR 112) provides specific criteria for the need for a contingency plan. The facility must have a total oil storage capacity greater than or equal to one million gallons, and meets other criteria related to the potential threat posed by the facility.*

Comment 4.4-13 (Letter C-23 Daniel Kuchta, September 25, 2006): Page 4.4-12 states "The project will not result in the introduction of a gasoline service station or petroleum storage tanks to the site. Therefore ... a formal spill contingency plan is not necessary for this site." But page 4.14-3, section on Energy Consumption, states "If alternative energy sources are used, such as heating oil..." and page 7-1, 3rd paragraph states "When completed, the operation of the proposed facilities would require electricity and the use of fossil fuels either directly as heating fuel..." These statements seem to contradict each other. The use of heating oil will require storage tanks for the oil. Will these be above or below ground tanks? Will the use of heating oil storage tanks require a formal spill contingency plan?

Response 4.4-13: *The Project is proposed to use electricity for power and heating needs. There are no plans to use heating oil for this Project.*

Comment 4.4-14 (Letter C-31, Kathleen McManus, September 25, 2006): In the written portion of the Water Supply report, it is incorrectly states that my neighbor's well was monitored (Martha Berglund at 88 Concord Road, Lot 22.76-2-7). This information is incorrect. According to the supporting documentation under Appendix B for this report, it is indeed the well on my property (84 Concord Road, Lot 22.76-2-8) that was tested.

Response 4.4-14: *It is correct that the pumping test monitoring locations listed on page 2 of the Patterson Crossing Pumping Test Report (Appendix H), listed the adjoining Berglund property (88 Concord Road, 22.76-2-7), while the McManus property (84 Concord Road, 22.76-2-8), was actually monitored. The pumping test results provided in Appendix D - Pumping Test Data/Charts, provide the results for the McManus property and they are identified as the McManus property.*

Comment 4.4-15 (Letter C-31, Kathleen McManus, September 25, 2006): I have serious concerns that the developer is understating the impact that the proposed project will have on our well for the following reason: The tests were conducted during a 72-hour test period (Monday, January 17, 2005 to Thursday January 20, 2005) which occurred in the middle of a week; it did not include a weekend when residents typically spend more time in the homes and therefore, use more water.

Response 4.4-15: *The pump test was done during a weekday period, but the off-site monitoring occurred over a total period of 14 days. The monitoring period included weekends and showed a representative period of private well usage. The monitoring showed the water levels changes in private off-site wells during typical usage, and water levels to a time period when the project wells were pumped (at approximately four times the daily project demand). The pumping test protocol was reviewed and approved by the Putnam County Department of Health and was completed to professional standards for pumping tests.*

Comment 4.4-16 (Letter C-23 Daniel Kuchta, September 25, 2006): No additional well tests were conducted during a peak-usage month, i.e. July or August, when my school-age children are home all day and warm weather dictates more water usage such as, but not limited to, additional human/animal consumption, additional showers, additional laundry, filling/adding water to the pool, watering landscaping, washing cars and pets, power-washing home and/or deck.

Response 4.4-16: *The Patterson Crossing Retail Center wells are deep bedrock wells (705 and 805 feet respectively) which tap fractures which can extend for considerable distance. Such deep wells are generally not subject to much seasonal variations in groundwater. More shallow wells, or wells with pumps that are set relatively close to the surface are subject to lower well yields during periods of drought. Seasonal variations in groundwater levels are not expected to affect the Patterson Crossing Retail Center well yields.*

As described above, the two Patterson Crossing wells were pumped at more than four times the average daily demand for a sustained 72 hour period. No impact to off-site residential wells was observed during this conservative test. Therefore, use of the Patterson Crossing wells will not impact off-site residential wells during periods of high water demand, such as the summer months.

Comment 4.4-17 (Letter C-31, Kathleen McManus, September 25, 2006): A while ago, I wrote a letter requesting a test for my well. I was "informed" that due to the distance of my house to the site, the test was not necessary, I was not in a distance to be affected. I read the report on groundwater (4.4 Groundwater, July 27,2006) and as a matter of fact I feel I am CLOSE ENOUGH TO BE AFFECTED! It seems the Patterson Crossing Project will affect an area larger than previously projected. Also, if the retail center uses more water than estimated in their draft, then most definitely it would affect the recharge of the entire area (the study mentions "miles"), not to mention the water quality if they are to expand their septic and drainage fields.

> ***Response 4.4-17:*** *Private residents in proximity to the project water production wells were selected for monitoring because such wells had the highest likelihood of showing drawdown impacts. The list of private monitoring wells for the pumping test was reviewed and approved by the Putnam County Department of Health, as indicated by the letter dated January 18, 2005 (see Appendix A).*
>
> *The commentors well (McManus, Lot 22.76-2-8) was monitored for 14 days, prior to, during and after the pumping test. The pumping test data (Patterson Crossing Pumping Test Report, (Appendix H)), shows no drawdown or influence on the McManus well during the pumping test. It should be noted that the project wells were pumped at 22 gallons per minute each, which is approximately 4.2 times the estimated water demand. The conservative pumping test showed no influence on off-site wells.*

Comment 4.4-18 (Letter C-36 Denize Paron, September 20, 2006): My well has always been in optimum working conditions. Who is going to be responsible if anything goes wrong with my well pressure and quality as well as my house structure in general, the Patterson Planning Board or the developer of the project?

> ***Response 4.4-18:*** *The project Applicant is responsible for damage to private property caused by the construction or operation of the Patterson Crossing Retail Center project. A blasting and well mitigation plan has been developed and is provided in the DEIS (see DEIS Section 4.4.4 Mitigation Measures and Responses 4.4-3 and 4.4-5). A discussion of blasting and measures to minimize potential impacts is provided in Response 1.3-1.*

Comment 4.4-19 (letter C-38 Melanie Pien, Stephen Pien, Alani Pien, Kai Pien September 25, 2006): The well that will supply Patterson Crossing with up to 10,000 gallons of water per day has allegedly been sited to" limit potential draw-down effects on neighboring wells," (page 2-18). The DEIS does not provide any evidence to show that neighboring wells will not be affected, particularly in times of drought nor any mitigation plan if wells are affected.

> ***Response 4.4-19:*** *See Response 4.4-17. The pumping test showed no impact to neighboring wells. The results of the testing are provided in Appendix H of the DEIS. A mitigation plan for private wells is described in Section 4.4.4 Mitigation Measures of the DEIS.*

Comment 4.4-20 (Letter B-8 Veronica Popovics, submitted following public hearing Sept. 13,2006 and Sept. 14, 2006): Regarding the boring, I presented at the public hearing, a container which holds the contents of the massive amount of sediment and ground

disturbance found in my indoor home well water filter cylinder at the end of the week of hole boring. I question what turbulence will take place and what monitor plan specifically is in place for my well, during the much more traumatic dynamite blasting of the bedrock on this very closely adjoining property proposed for the Patterson Crossing Development? Who pays costs to cover damage/replacement in the case of trauma to my relatively new well?

Response 4.4-20: *See Response 4.4-18. The Patterson Crossing Retail Center wells were drilled a minimum of 600 feet from any private residential well. Well drilling does not typically result in turbidity in nearby existing wells. The 72 hour pumping test did not show any drawdown in eight private wells monitored during the test, indicating that the Patterson Crossing Retail Center wells and off-site private wells are not hydrogeologically connected. With regard to future blasting and its potential affect to off-site residences, a Blasting Mitigation Plan is provided in the DEIS (see Appendix Q). Refer to Response 1.3-24 for additional information on the pre-blast survey.*

Comment 4.4-21 (Letter C-41 David G. Reeves, September 22, 2006): 4.4 Groundwater 1. Page 4.4-4: This document should acknowledge that it will be necessary to provide the Town with a a copy of the needed PCOH variance regarding control of land within 200 feet of a non-community, non-transient water source should be submitted prior to any "final" approval.

2. However, Drawing SP 2.3 places the septic fields within 185' east of the Town of Kent Property Line and private homes along Vernon Lane.

3. This does not comply with the consultant's request.

Where is the correction made to the DEIS report as recommended by your consultant?

Response 4.4-21: *The applicant will obtain the variance from the PCDOH for the control of land within 200 feet of a water supply well, prior to final Site Plan approval. The location of the proposed septic system compared to adjacent homes is not related to wellhead protection areas as suggested in the comment. A correction to the DEIS is not necessary on this subject.*

Comment 4.4-22 (Letter C-41 David G. Reeves, September 22, 2006): 4.4 Groundwater Page 4.4-6 and 4.4-7: We have previously raised the issue of the design flow of 10,740 gpd in Table 4.4-3 bring a substantially lower than the anticipated daily usage of 35,000 gpd based on NYSDEC standards and the potential maximum square footage. We continue to suggest that the documents be revised to discuss the following scenarios:

Because there is always the chance for a change in tenant(s), in our view the estimated design hydraulic loading rates should be based on NYSDEC standards and the potential maximum sq. ft of retail floor area and the number of seats in the food service facility. Where is the correction made to the DEIS report as recommended by your consultant?

Response 4.4-22: *See Responses 4.4-1 and 4.4-4 above regarding the determination of water design flows. The project engineer has revised the Water System Report to provide actual water usage data from retail stores similar to the uses proposed for the Patterson Crossing development (See updated Water System Report, Appendix G). This data was utilized to develop the project water design flows, which are 15,000 gallons per day (gpd).*

Project wastewater flows will be limited to the 11,400 gpd design flow, recognizing the design limitations of the subsurface sewage treatment system (SSTS). The wastewater design flow (11,400 gpd) differs from the water design flow (15,000 gpd) due to water loss related to irrigation at the Home Improvement Center garden center. The difference also reflects a small amount of water (100 gpd) taken off-site from the Coffee Shop through coffee and softdrink sales (see Wastewater Report, Appendix H). The Applicant would agree to appropriate controls to assure each user's (tenant's) wastewater flows fit the project's design flows. One such control would require each specific user present the Town Building Department with a copy of the corporate user flow data used to establish wastewater hydraulic loading rates and corporate documentation supporting the estimated employee count at the time they apply for their building permit, or with any change in occupancy. This will allow for the monitoring of design flow to assure that all users wastewater generation falls within the system design capacity. Actual water and wastewater flow metering/monitoring will be required as part of the water and sewer permitting with the PCDOH, NYCDEP and NYSDEC. This metering/monitoring will provide an assurance that the actual project flows do not exceed the system design capacity.

Comment 4.4-23 (Letter C-41 David G. Reeves, September 22, 2006): 4.4 Groundwater Page 4.4-8: Under mitigation, it is acknowledge that documented impacts to near by private wells caused by construction will be remedied, including those caused by blasting. However, even though not expected, the possible impacts of long-term use of the developments' well on off-site should be considered. A possible mitigation plan for such documented impacts should be discussed, as well as an outline of how long-term usage complaints will be addressed by the developer. This will enable the Town, and local residence, to evaluate such a procedure during the EIS review process.

Response 4.4-23: *See Responses 4.4-3 and 4.4-5, above. A well monitoring plan for off-site residential wells is described in the DEIS Section 4.4.4. Groundwater Mitigation, and the plan will be implemented by the applicant. Well usage complaints will be directed to the Town Engineer and will be reviewed by a professional hydrogeologist retained by the Town.*

Comment 4.4-24 (Letter C-42 Virginia M. Reeves, September 22, 2006): Based on the DEIS report this area has a layer of water within 18" of the ground surface. Based on the report this may not be a suitable area for the septic fields. Based on the DEIS reports the off set to the septic field will be 200' from the property line, however the plans have the septic fields 185' from the property lines. This plan should be changed to comply with DEIS report. Why was this not done before the Patterson Planning Board accepted the DEIS?

Response 4.4-24: *The shallow groundwater near the proposed subsurface sanitary treatment system (SSTS) varies from 18 inches (outside of the proposed treatment system) to 24 feet in depth. A detailed hydrogeologic study of the septic field was completed by GeoDesign and is provided in the DEIS (see Appendix E). The report concludes the proposed SSTS field can support the estimated project discharges. The DEIS does not indicate a proposed 200 foot off-set for the septic field.*

Comment 4.4-25 (Letter C-44 Peter Riebold, September 22, 2006): This paragraph states that "limited future development may occur along Fair Street, south of the site and along Route 52, north of the site". The Town of Patterson zoning map, however, shows a large "C-1" zone along Route 311 east of Fair Street, a smaller C-1 zone on Ludingtonville Road

north of Route 311, and a large "I" zone straddling Interstate 84 from the Kent town line east of Fair Street. These areas are substantial in size, and the town of Patterson is favorable to the commercial development of these areas. The DEIS does not mention these sites for future development even though they are located near the Patterson Crossing site and will presumably draw water from the same aquifer.

> ***Response 4.4-25:*** *Future development will occur on undeveloped land in the vicinity of the project site. Any proposed future project will require water in sufficient quantities to support that specific development. According to the Putnam County Groundwater Protection and Utilization Plan (Chazen Companies, 2000), the Route 311 and I-84 area straddles two bedrock types that are characterized as lower yielding bedrock aquifers and higher yielding aquifers. A major fault zone is shown in the study diagrams (Figure 5 Bedrock and Surficial Aquifers). Locally, sufficient groundwater supplies are available to support future development.*

Comment 4.4-26 (Letter C-44 Peter Riebold, September 22, 2006): The paragraph mentions the irrigation storage tank that will be supplied by rain water collected from roof runoff. The DEIS does not mention a backup irrigation plan if drought conditions limit the amount of rainfall available to fill the tank. Presumably, in times of drought, water will be drawn from wells to irrigate the landscaping. The DEIS must state how much water will be drawn from the wells for irrigation and the effect of such pumping on area wells.

> ***Response 4.4-26:*** *Please refer to Response 4.4-16. In times of drought, irrigation of the grounds will be limited or eliminated at the Patterson Crossing Retail Center development. Water from the on-site wells will not be utilized for irrigation except for to maintain plant materials at the garden center.*

Comment 4.4-27 (Letter C-44 Peter Riebold, September 22, 2006): Table 4.4-3 estimates employee and customer water usage in four of the retail stores. The paragraph explains that customer usage is estimated at 5 gallons per customer restroom visit. It can be assumed that an employee would use the same amount of water per restroom visit. The employee usage estimates appear low. For example, the clothing store will have 15 employees each using 15 gallons per day for a total 225 gallons per day, according to table 4.4-3. If each employee's restroom visit uses 5 gallons, this estimate indicates that each employee will use the restroom 3 times each day. These types of stores are typically open 12 or more hours a day. It is likely that more than 3 restroom visits will be made over the 12 hour period by each employee. It is understood that at least two work shifts will be utilized to staff the 12 hour day, which will make the water usage estimate more complicated to calculate. If a full time employee covering the remaining 4 hours might make 2 restroom visits, for a total of 5 restroom trips, not the 3 that is used in the simplistic estimate given in table 4-4-3.

> ***Response 4.4-27*****:** *New construction requires 1.6 gallons per flush toilets, 1.0 gallons per flush urinals, and 1.0 gallons per minute faucets. The flow numbers used in the DEIS are accepted unit values which take typical trends and usage into consideration.*

Comment 4.4-28 (Letter C-44 Peter Riebold, September 22, 2006): This paragraph discusses controls that would be needed to ensure that "future retail users" do not exceed the "10,740 gpd design flow" for the project. The paragraph states "One control would require each specific user present the Town Building Department with a wastewater design flow at the time they apply for their building permit, or with any change in occupancy". This implies

that there will be future construction or expansion of the Patterson Crossing Retail Center beyond the project description contained in the DEIS. The DEIS must state whether additional construction or expansion of the shopping center will be considered in the future, and how it will fit into the original layout as described in the DEIS. The developer cannot be allowed to undertake any expansion of the complex after the initial project is approved. Allowing the developer to do so would allow the developer to skirt this SEQR process. If no future construction is permitted, this must be clearly stated in the DEIS and appropriate legal measures must be taken to enforce it.

Response 4.4-28: *No future construction of the Patterson Crossing Retail Center site is contemplated by this Applicant.*

Comment 4.4-28A (Letter C-44 Peter Riebold, September 22, 2006): Other sections of the DEIS have claimed a water usage rate of 10,740 gallons per day. This paragraph, however, clearly states that during periods of dry weather, more than 10,740 gpd will be needed to be pumped from wells to meet irrigation needs. And conversely, in periods of wet weather, additional water will flow into the stormwater management system. The DEIS must detail how the area residential wells will respond to the extra water pumped during dry periods...

Response 4.4-28A: *As described above, the two Patterson Crossing wells were pumped at more than four times the average daily demand for a sustained 72 hour period. No impact to off-site residential wells was observed during this conservative test. Therefore, use of the Patterson Crossing wells during dry periods and for limited irrigation will not impact off-site residential wells. The applicant has proposed a well monitoring plan (see DEIS Section 4.4.4, Groundwater Mitigation) to ensure that any off-site impacts to private wells will be identified and remedied, if necessary.*

Comment 4.4-29 (Letter C-47 Charles M. and Grace E. Sisto, September 22, 2006): The developer has located two test wells on the subject property (figure 4.4-2 well monitoring locations). Are these going to be the permanent locations of the water supply for Patterson Crossing or will it be two of the four potential well locations sited in figure 4.4-1?

Response 4.4-29: *Two water production wells were installed in 2005 and the locations are shown in DEIS Figure 4.4-2 Well Monitoring Locations.*

Comment 4.4-30 (Letter C-47 Charles M. and Grace E. Sisto, September 22, 2006): At the meeting in Patterson on September 14, 2006, Annmarie Baisley quoted from a Putnam County Groundwater Protection and Utilization Plan, prepared in September 2004 (4.4-2). She said, according to the study, water from the aquifer under the subject property flows towards Lake Carmel. A resident who lives on Concord Road near the emergency exit (Echo Road), had indicated when test boring were being done near one of the fractures, her water was affected. The DEIS shows quite a bit of blasting in the same area and I feel that will have a potential of altering the fractures of bedrock.

Response 4.4-30: *Based upon topography and surface water drainage patterns, groundwater flows both towards the west and Lake Carmel and towards the northeast and wetlands near Interstate 84. A 72 hour pumping test completed on the project wells resulted in no observed impacts to eight off-site private wells. Blasting is not expected to result in any impact to off-site private wells and a blasting mitigation plan will provide a systematic process for evaluating claims of damage to wells and providing restitution, if required.*

Comment 4.4-31 (Letter C-47 Charles M. and Grace E. Sisto, September 22, 2006): In the DEIS (4.4-10), the developer would like the impact on wells limited to a reasonable distance of 1500 feet. Who determines that 1500 feet is a reasonable distance? In figure 4.4-2, test wells one and two with a radius of 1500 feet each are overlapping. Will the drawdown of both wells have more of an effect on the Lake Carmel wells located near the project.

Response 4.4-31: *Putnam County reviewed and approved the pump test protocol, including the distance for well monitoring. The pumping test involved the pumping to both wells simultaneously at a rate of 22 gallons each. This pumping rate is approximately 4.2 times the estimated project water demand of 10.4 gallons per minute. The pumping test showed no influence to off-site residential wells and the project will have no long-term measurable effect on Lake Carmel.*

Comment 4.4-32 (Letter C-51 Judith Terlizzi, September 14, 2006): What impact will the accumulated road salt have on our wells and more importantly our lake? Who will be responsible?

Response 4.4-32: *The Applicant proposes to use sand for winter road traction and maintenance at the Patterson Crossing Retail Center development. Salt will be not be used for winter road and parking lot maintenance with the exception of the access road should conditions require for patron safety. In addition, it is expected that some small amounts of salt will be used immediately around the buildings and pedestrian areas where it is most critical for safe pedestrian passage. It is expected that the winter maintenance of the larger expanses of access roads and parking lots will remain sand only, unless the town determines at some future date that some application of salt in limited areas is desirable for safety reasons. This salt, which will be applied by hand in limited areas, will be inconsequential to surface flows into Lake Carmel compared to the application of salt to NYS Routes 311 and 52.*

In addition, such limited use of road salt will not impact the bedrock aquifer and drinking water quality. This assumption is based upon the large volume of precipitation that annually percolates through the glacial till material found above the bedrock (approximately 9,960,945 gallons per year), and the limited amount of road salt proposed for the development.

Comment 4.4-33 (Public Hearing, September 13, 2006, Laura Bromfield): I'm afraid if I lose my water what happens to my family? If we remain in the home, our water goes, we will not be able to sell.

Response 4.4-33: *A rigorous pumping test completed to the Putnam County Health Department standards showed no influence on private off-site wells. The Applicant has agreed to a well monitoring program to ensure that no off-site wells are affected and will provide mitigation if they are (see Response 4.4-3).*

Comment 4.4-34 (Public Hearing, September 13, 2006, Joan Castiner): If there is damage to my possessions or if the integrity of the structure of my home or my well is compromised, who will be responsible for restitution?

Response 4.4-34: *See Response 4.4-3 regarding a well mitigation plan.*

Comment 4.4-35 (Public Hearing, September 13, 2006, Charles Sisto): I feel with the blasting it could affect wells even further than 1,500 feet. He is stating that that's a reasonable distance. Who is he and where do we come up with the reasonable distance from the operating wells, especially when the blasting is taking place.

Response 4.4-35: *The Applicant has selected a radius of 500 feet from the area of proposed blasting for pre-blast inspections. This radius is based upon technical studies and professional blasting standards, as described in Response 1.3-1. The proposed distance of 500 feet is believed to be adequate, based on similar construction projects and numerous technical studies. Refer to Repsonse 1.3-24 for additional information on the pre-blast survey.*

Comment 4.4-36 (Public Hearing, September 13, 2006, David Clouser): The hydrogeologist has commented with a very brief review of the information. One was his concern that the report shows that the groundwater depth is highly variable on the site. There's no information that really models what happens when you make a forty-foot deep road cut, what happens to the slopes and water tables?

Response 4.4-36: *Shallow groundwater found in the glacial till material varies across the property. Shallow groundwater levels will adjust, over time to the new surface elevations resulting from grading. In certain areas, shallow groundwater may flow to the surface on hillsides and will have to be redirected with properly engineered drainage features, such as swales, ditches, and pipes.*

Comment 4.4.-37 (Public Hearing, September 14, 2006,AnnMarie Baisley): Look at the aquifers that are not addressed sufficiently in the DEIS.

Response 4.4-37: *The DEIS describes the result of a detailed well pumping test and description of local aquifers (See Section 4.4 Groundwater).*

Comment 4.4-38 (Public Hearing, September 14, 2006, Kathleen McManus): So I question why the water results from monitoring my well were not included on the DEIS.

Response 4.4-38: *See Response 4.4-14. The pumping test results provided in Appendix D - Pumping Test Data/Charts, provide the results for the McManus property and they are identified as the McManus property.*

Comment 4.4-39 (Public Hearing, September 14, 2006, Kathleen McManus): The probe was in my well, I believe for at least ten days to two weeks. The DEIS reflects that test were done for four days. I questioned why water tests were not done for six months later at an optimum time, say July or August, when water usage at a home, particular mine that has five people in it was not done. As you know, in the summer kids are home so there's more water usage. Someone is home all day, more laundry, more showers, watering the lawn, pools, power washing, you name it.

Response 4.4-39: *See Response 4.4-16, regarding the timing of the pump test. While the actual well pumping occurred over three days (72 hours), wells were monitored both prior to and after the pumping for a total period of 14 days.*

4.5 SURFACE WATER COMMENTS AND RESPONSES

Comment 4.5-1 (Letter A-4 Neil A. Wilson, AICP, LRC Planning Services, September 21, 2006): Page 4.4-1 and 4.5-1, the discussion of ground water and surface waters does not consider the 2004 "Putnam County Groundwater Protection and Utilization Plan" prepared by The Chazen Companies. The DEIS discussion should be revised to consider the analysis, conclusion, and recommendations of the Chazen report.

Response 4.5-1: *Refer to Response 4.4-2. The Chazen Groundwater Plan does not provide information relative to the assessment of impacts on surface water resources, nor does it include information that would improve or clarify Section 4.5 of the DEIS.*

Comment 4.5-2 (Letter A-6 Marilyn Shanahan, Chief, SEQRA Coordination Section, September 25, 2006): The DEIS evaluates potential impacts on surface waters and discusses how they will be avoided or mitigated. However, New York City Department of Environmental Protection (DEP) believes that the potential impacts that the project may have on receiving waters, in terms of water quality degradation, increase in runoff volume, and downstream flooding have not been fully assessed. The DEIS must provide more specific information to assess the potential for sedimentation of the watercourses and wetlands associated with the proposed repair of the channel and pipe receiving runoff from Concord Road, storm water basins 3.4, 3.1, 3.2 the proposed rip rap swale, and the rip rap velocity dissipater. DEP cannot determine at this time whether the project sponsor has adequately avoided or mitigated the adverse environmental impacts during construction associated with the proposed repair and stabilization of the preexisting stream bank erosion starting from Concord Road down to the proposed velocity dissipater.

Response 4.5-2: *The analysis of potential adverse impacts on receiving waters (wetlands and watercourses) included in the DEIS concluded that those impacts were associated solely with changes in stormwater characteristics during and following construction. The DEIS further concluded that the potential impacts on water quality would be mitigated, in part, through implementation of the Erosion and Sediment Control Plan included in Patterson Crossing Retail Center Stormwater Pollution Prevention Plan (SWPPP) included as Appendix F of the DEIS and this FEIS. The Erosion and Sediment Control Plan identifies specific measures, including a detailed construction phasing plan (Drawing SP4.1), that will mitigate potential impacts on surface water resources by preventing erosion and subsequent sedimentation of wetlands and watercourses on and off the project site during construction. The DEIS, the February 4, 2008 revised SWPPP, including its Appendix F, Supplemental Phosphorous Loading Calculation (Simple Method) also demonstrate that potential impacts that could result from increases in runoff volume and downstream flooding will be minimized by the proposed on, and off, site stormwater management facilities. The Applicant notes that the supplemental phosphorous loading calculations included in Appendix F of the SWPPP were prepared in accordance with the recommendations of James Tierney, New York City Watershed Inspector General.*

Although the Applicant is willing to implement the additional measures that were initially proposed to improve the quality of stormwater from Concord Road (if requested by the Town of Kent and all regulatory approvals are issued), the project has been revised to eliminate construction of the rip rapped swales, stormwater

management ponds, and velocity dissipater previously sited in the channel and noted in the comment. The project now involves the treatment of stormwater from Concord Road by stormwater pond 3.4P, which will be located outside the limits of the channel. Following treatment in Pond 3.4P, the stormwater will discharged to the NYCDEP flagged watercourse located in post development drainage area 3.5 S.

Comment 4.5-3 (Letter A-6 Marilyn Shanahan, Chief, SEQRA Coordination Section, September 25, 2006): The land use and water quality data references for Middle Branch and East Branch reservoirs are from a 2001 annual report which was based on 1990's data. This information should be updated and it should be noted that both reservoirs are eutrophic, phosphorus-restricted under the Watershed Rules and Regulations, and exceed the NYSDEC TMDLs for phosphorus, requiring substantial reductions in total phosphorus.

Response 4.5-3: *NYCDEP 2006 Watershed Protection Program Summary and Assessment refers to the 2001 land use data cited in the DEIS, and the comment, as being the most recent data available. The water quality data references in the DEIS for the East Branch and Middle Branch Reservoirs have been revised to cite the most current New York City 2005 Drinking Water Supply and Quality Report.*

As discussed in the DEIS, both the Middle Branch and East Branch Reservoir basins are designated in New York City's Watershed Regulations (WR&R) as phosphorous restricted, and according to the New York State Department of Environmental Conservation (NYSDEC), are both exceeding the Total Maximum Daily Loads (TMDL) that NYSDEC assigned to them. As such, since the January 8, 2003 effective date of the New York State Pollutant Discharge Elimination System General Permit for Stormwater Discharges from Separate Municipal Stormwater Sewer Systems (GP-02-02), the Towns of Patterson and Kent, and other municipalities in the two watersheds, have been required by NYSDEC to achieve substantial reductions in current phosphorous loads to the reservoirs. The Applicant notes that NYSDEC issued SPDES General Permit for Stormwater Discharges from Municipal Separate Storm Sewer Systems (MS4s) GP-0-08-002 in April, 2008, and that the permit became effective on May 1, 2008. GP-0-08-002 replaced GP-02-02 and also imposes the requirement for MS4s to achieve significant reductions in current phosphorous loads to the reservoirs.

The NYSDEC Phase II Phosphorous Total Maximum Daily Loads for Reservoirs in the New York City Water Supply Watershed (Delaware, Dutchess, Greene, Putnam, Schoharie, Sullivan, Ulster, and Westchester Counties) June 2000 (Phase II Report) cited in the DEIS indicates that the existing 949 kg/yr phosphorus TMDL set for the Middle Branch Reservoir (the amount of daily phosphorous input that the reservoir can assimilate) is being exceeded and that water quality in the reservoir is impaired as a consequence of existing phosphorous inputs to the reservoir from its watershed. The current load (phosphorous input to the reservoir from point and nonpoint sources in the reservoir's watershed) to the reservoir of 1,020 kg/yr is greater than the load that can be assimilated (949 kg/yr). Even after reductions in the point source loading in the Middle Branch watershed due to the application of WR&R, the available load (additional input of phosphorous that can be assimilated) will be exceeded by 204 kg/yr. The most significant contributor of phosphorus to the Middle Branch Reservoir, at 528 kg/yr, is the upstream load from the Lake Carmel subbasin. Therefore,

reductions in this load coupled with reductions of the urban runoff load of 211 kg/yr would be necessary in order to meet the TMDL.

The Phase II Report further indicates that the East Branch Reservoir TMDL is being exceeded and that water quality in this reservoir is also impaired as a consequence of existing phosphorous inputs into the reservoir from its watershed. The current load of 3,462 kg/yr to the reservoir is also greater than the load that can be assimilated (2,822 kg/yr). Even after reductions in point source loading in the East Branch watershed due to the application of the WR&R, the available load will be exceeded by 993 kg/yr. Significant reductions in the urban runoff load of 1,141 kg/yr and the 189 kg/yr upstream loads from Peach and Putnam Lake subbasins would have to be achieved to meet the target load.

The revised project layout and stormwater management system have been specifically developed to reduce post-construction phosphorous loads from the site to below pre-development levels. The proposed project now includes on-site and off-site stormwater treatment practices that reduce existing phosphorus loading to each of the two reservoir basins. The on-site stormwater will be treated by a series of wet ponds, as shown on the plans that accompany this FEIS, that will mitigate potential impacts on surface waters associated with post construction increases in phosphorous loading from the project site. To further reduce phosphorus loading to both of the reservoir basins, off-site wet ponds are now proposed to treat runoff from off-site drainage areas shown on FEIS Figure 4.5-4. The off-site improvements, which exceed any statutory requirements, include practices to treat currently untreated stormwater from the residential development to the west of the project site on Concord Road, a portion of NYS Route 311 and the exit ramps from Interstate 84, as well as the Putnam County Highway Facility (PCHF). This approach to treating on and off-site stormwater will advance the goals of the TMDL program and assist the towns in meeting their TMDL obligations.

As noted in a June 21, 2007 letter from Insite Engineering to the Deputy Putnam County Executive, in a July 13, 2007 letter from Mr. Paul Camarda to County Executive Robert Bondi, and in the June 25, 2007, August 9, 2007, and August 14, 2007 letters from Mr. Bondi (included in FEIS Appendix A, Correspondence), the construction of the off-site stormwater treatment practices in the East Branch Reservoir Watershed is proposed as a cooperative effort between the County and the Applicant.

The stormwater runoff discharging to the Middle Branch Reservoir includes the runoff from the northern portion of the site including the access road, and the off site runoff from NYS Route 311 and Interstate 84, as well as the residential development north of Lake Carmel. As detailed in Appendix F of FEIS Appendix F, SWPPP, following treatment of runoff from these areas total annual phosphorus load discharging to the Middle Branch Reservoir would be reduced from 30.90 lbs to 23.24 lbs.

Stormwater runoff discharging to the East Branch Reservoir includes the majority of the stormwater runoff from the proposed development, as well as, the undeveloped hillside to the south of the proposed development. Existing runoff discharging to the East Branch Reservoir includes untreated stormwater from the PCHF. The treatment of stormwater at the PCHF now proposed will provide an overall reduction in

phosphorus loading following construction of the project. Also detailed in the SWPPP Appendix F, annual phosphorus loads to the East Branch Reservoir would be reduced from 10.08 lbs. to 9.46 lbs following construction of the project.

Comment 4.5-4 (Letter A-6 Marilyn Shanahan, Chief, SEQRA Coordination Section, September 25, 2006): The DEIS claims that the project implementation will result in a decrease in pollutant loading in comparison to the pre-construction loading. However, review of the information provided indicates that the project may result in a net increase in pollutant loading. Table 4.5-6 reveals that the project may cause an increase in loading of BOD, TP, and TN in two out of the three design points (DP-1and DP-3). For DP-2, the DEIS shows that there will be in increase in loading of TSS from 2,864 lbs/yr to 4,275.3 lbs/yr.

Response 4.5-4: *Refer to Response 4.5-3. The site development plan that was subject to the analysis of impacts in the DEIS, and the pollutant loading analysis in the SWPPP, has been revised in response to comments on the DEIS and now reflects a reduction in the area of previously proposed impervious surfaces. The plan now proposes 1.26 acres less impervious surfaces than the DEIS plan, which results in reduced post construction pollutant loading. Accordingly, DEIS Table 4.5-6, FEIS Table 4.5-1, below, has been amended to reflect the current projections of reduced post-construction pollutant loading from the site detailed in the SWPPP (FEIS Appendix F).*

As discussed in the DEIS, portions of the project site are located in the Middle Branch and East Branch reservoir basins. The proposed stormwater management system has been designed to maintain the existing drainage boundaries between the two reservoir basins. Pre and post-development drainage areas on the site contributing to Design Point 1 and Design Point 2 discharge to the East Branch Reservoir. Drainage areas contributing to Design Point 3 discharge to the Middle Branch Reservoir. In general, stormwater draining to the East Branch and Middle Branch reservoirs will continue to drain to these reservoirs following construction. The pre- and post-development drainage areas, and the Design Points, are shown on FEIS Figure 4.5-2 (Existing Drainage Areas) and Figure 4.5-3 (Proposed Drainage Areas).

Stormwater from the majority of the developed site will discharge to Design Point 1 in the East Branch Reservoir watershed. The stormwater will be collected in the proposed drainage system and conveyed to a series of constructed ponds for treatment. The treatment train that will treat stomwater from the bulk of the development (subcatchments 1.1, 1.2, 1.3) consists of three wet stormwater ponds in series (pond 1.1P to pond 1.2P to pond 1.4P). Stormwater from subcatchment 1.3 will discharge to Design Point 1 after being treated in two wet ponds in series (pond 1.3P to pond 1.4P). The first pond in both treatment trains, pond 1.1P and 1.3P have been designed as micropool extended detention ponds (P-1) as specified in the NYSDEC 2003 Stormwater Management Design Manual (Manual). Ponds 1.2P and 1.4P have also been designed as extended detention wet ponds. The proposed stormwater management practices will provide the necessary pollutant removal.

Stormwater now discharging to Design Point 2, also in the East Branch watershed, will continue as sheet flow from the hillside from west to east following development

of the site. A portion of subcatchment PRE 2 (shown on FEIS Figure 4.5-2, Existing Drainage Areas) will be diverted in the post-development condition to Design Point 1 for treatment. The reduction in drainage area to Design Point 2 resulting from the diversion will reduce overall pollutant loading to Design Point 2 despite the change in ground cover resulting from construction of the proposed septic system in subcatchment PRE 2.

There are three components of the post-development stormwater runoff discharging to the Middle Branch of the Croton River (Design Line 3) in the Middle Branch Reservoir watershed. The first component of the runoff (subcatchment 3.2) is generated from the northern portion of the site which includes the proposed access road, northern parking area, and side slopes. A proposed stormwater treatment train consisting of two stormwater ponds in series (ponds 3.1P and 3.2P) will treat runoff from a portion of the entrance road and from the lower parking areas for the main retail pad. Subcatchment 3.2 consists of the northern portion of the access road and adjacent side slopes in addition to an area along NYS Route 311 and portions of the Interstate 84 median and exit ramps. Stormwater from subcatchment 3.2 will be treated in pond 3.2P before discharging to Design Line 3. The proposed project includes the renovation of a portion of the existing stormwater collection system along NYS Route 311 to allow for proposed road safety improvements. After treatment in pond 3.2P, stormwater will discharge into the renovated collection system along the south side of NYS Route 311 which outlets into an existing roadside swale that flows directly into the Middle Branch of the Croton River. Both ponds 3.1P and 3.2P have been designed as a micropool extended detention ponds (P-1) in accordance with the Manual.

The second component of the stormwater runoff discharging to Design Line 3 is from the area discharging directly to the design line from subcatchment 3.3. The drainage area contributing to the watercourse in subcatchment 3.3 will be maintained allowing for continued flow and a direct discharge to Design Line 3.

The third component of stormwater runoff discharging to Design Line 3 is the runoff from the existing Lake Carmel residential development on Concord Road. This runoff discharges to a highly eroded ditch (a NYCDEP flagged watercourse) that flows down the slope towards New York State Route 311. Although treatment of this runoff is not required, a treatment pond is proposed to improve stormwater quality and rectify a chronic source of sediment entering Lake Carmel. Stormwater from the existing development will be treated in pond 3.4P and will outlet to the existing drainage ditch. The pond has been designed as a micropool extended detention pond (P-1), pursuant to the Manual. The pond will improve stormwater quality, while continuing flow in the drainage ditch that ultimately discharges to the Middle Branch of the Croton River. Treating the runoff from Concord Road will provide a additional TMDL benefit in the watershed.

FEIS Table 4.5-1, below, shows that following treatment of stormwater on the project site, post construction levels of phosphorus and total suspended solids, as calculated by the pollutant loading coefficient method, discharging to both the Middle Branch and East Branch Reservoir basins will be reduced from existing levels.

In addition to the on-site stormwater treatment practices, the proposed project now includes stormwater treatment measures to treat runoff from an additional area in the East Branch Reservoir Basin. This treatment, which exceeds State and City requirements, will remove additional, existing, pollutant loads and will provide an additional TMDL program benefit. FEIS Figure 4.5-4, Off-site Stormwater Treatment Sites, depicts the Putnam County Highways Facility (PCHF) site along Fair Street in the Town of Patterson where the practices are proposed. Stormwater from the PCHF subcatchments will be treated in micropool extended detention ponds to provide additional pollutant removal and improve water quality in the receiving reservoir basin.

The revised projections in pre-and post-construction loadings are a result of revisions to the proposed project that reduce the area of impervious surfaces and the water quality improvements resulting from the diversion and treatment of the flows entering the site from Concord Road, and the additional on- and off-site stormwater treatment practices now proposed. As demonstrated in the detailed calculations in the SWPPP (Appendix F), these constituents would be reduced even without treatment of the runoff from Concord Road. The SWPPP also includes calculations demonstrating compliance with the NYSDEC required 90th percentile water quality volume treatment for the 1, 2, 10, 25 and 100 year, 24 hour, storm events pursuant to the Final Scoping document.

As seen in Table 4.5-1, below, post-development pollutant loads of concern from the project site are within the range of the pre-development loads as required by NYCDEP regulations in all instances but two, BOD from Design Point 1, and TSS from Design Point 2. The Applicant notes that although small increases in BOD and TSS are anticipated from Design Points 1 and 2, respectively, the proposed off-site stormwater practices will provide mitigation of impacts associated with theses small increases.

BOD indicates the amount of organic matter in water and is the measure of the amount of oxygen that would be consumed if bacteria, and protozoa, oxidized all of the organic matter in a liter of water. According to Lake Access (an EPA funded cooperative project among the University of Minnesota, the Deluth Natural Resources Research Institute and Department of Education, and Minnesota Sea Grant) "BOD is introduced into surface water through inputs of organic matter such as sewage effluent, surface runoff, and decomposition. If BOD is high, low dissolved oxygen levels result. Low dissolved oxygen levels can lead to mortality of aquatic life. Wetlands remove BOD from surface water through decomposition of organic matter or oxidation of inorganics. BOD removal by wetlands may approach 100%." Accordingly, it is anticipated that the large wetland into which stormwater from Design Point 1 discharges will assimilate the modest increase in BOD discharging from the site.

TSS are solids in water that can be trapped by a filter and can include a wide variety of materials such as silt, decaying plant and animal matter, industrial wastes, and sewage. According to the Manual, suspended solids can have adverse effects on aquatic life in streams and lakes. The Manual notes that the reflected energy from light reflecting off of suspended sediment can increase water temperatures (Kundell and Rasmussen, 1995). Sediment can physically alter habitat by destroying the

riffle-pool structure in stream systems, and smothering benthic organisms such as clams and mussels. Finally, sediment transports many other pollutants to the water resource. To mitigate potential impacts associated with post construction increases in TSS, the proposed project includes the installation of a hydrodynamic separator in Fair Street that will reduce TSS in stormwater from Design Point 2.

Table 4.5-1
Annual Pollutant Load Summary, in lbs/yr
Pollutant Loading Coefficient Method

Design Point	BOD		TP		TN		TSS	
	Pre	Post*	Pre	Post*	Pre	Post*	Pre	Post*
DP-1	338	467.5/ 1309.4	5.56/	2.51/ 6.62	76.5	61.1/ 120.6	3,380.5	616.0/ 1121.1
DP-2	289.1	182.7	4.1	2.8	74.3	66.2	3,180.1	4,342.8
DP-3	1,389.2	854.0/ 1274.9	12.2	6.77/ 9.84	115.7	66.6/ 93.6	9,207	451.5/ 2444.7
Total	2,016.3	1504.2/ 2767.0	21.9	12.09/ 19.27	266.5	193.9/ 196.4	15,770.3	4815.4/ 7403.5

Source: Insite Engineering, Surveying and Landscape Architecture, P.C., 2007
** Range of expected loadings based on pollutant removal efficiencies in NYSDEC publications.*

With respect to phosphorous, the pollutant of greatest concern in New York City's TMDL watersheds, implementing the SWPPP for the project is expected to achieve better than the calculated mean removal efficiencies due to adjunct stormwater treatment practices that have been incorporated into the project design, but not considered in the calculation of post development pollutant loading. These adjuncts include catch basin/drain inlet sumps, turf filter strips, forested filter strips, and the addition of permanent pools in the stormwater basins.

Comment 4.5-5 (Letter A-6 Marilyn Shanahan, Chief, SEQRA Coordination Section, September 25, 2006): Given that the project is located in basins that already do not meet phosphorus TMDL, the burden for reducing any additional phosphorus loading would fall on the Towns of Kent and Patterson. This obligation would likely need to be met through the construction of additional nonpoint source pollution reduction facilities within the basins. The sponsor should propose adequate mitigation at the project site or elsewhere within the Towns so that the project is sure to have a positive or neutral impact on the Town's ability to achieve the TMDL.

Response 4.5-5: *Refer to Responses 4.5-3 and 4.5-4. The burden for reducing additional post construction increases in phosphorous from the Patterson Crossing Retail Center site, which lies in the TMDL Middle Branch and East Branch Reservoir watersheds, rests with the Applicant. Accordingly, the project SWPPP specifies on site stormwater treatment measures that will reduce post construction phosphorous loads from the site to below pre-construction levels. In addition, in response to the comment and as discussed below, the project has been revised and now includes additional stormwater treatment measures on and off the site to further reduce existing phosphorous loads unrelated to the proposed development. These measures are detailed in Appendix F of the SWPPP.*

As NYSDEC regulated Municipal Separate Storm Sewer Systems (MS4), the Towns of Patterson and Kent, and other MS4s in the East Branch and Middle Branch watersheds, have the NYSDEC imposed burden to reduce current phosphorous loading to achieve the reservoir TMDLs. A program for achieving phosphorous reductions has been established in the March 2002 NYSDEC document entitled Interim Report Non Point Source Implementation of the Phase II Phosphorous TMDLs in the New York City Watershed(TMDL Implementation Plan). The TMDL Implementation Plan states that the plan is largely structured to use existing programs to achieve phosphorous reductions. Applicable to the East Branch and Middle Branch Reservoirs, these programs include:

- *Putnam County Croton Plans;*
- *NYCDEP Croton Strategy; and,*
- *NYCDEP East of Hudson Water Quality Investment Funds, including the Putnam County Septic Repair Program.*
- *With the inclusion of the proposed on and off-site stormwater treatment measures that will reduce existing phosphorous loads, the Patterson Crossing Retail Center project is consistent with the TMDL Implementation Plan and applicable portions of the above-cited programs. Further, based on the effectiveness of the proposed treatment measures specified in the SWPPP in reducing post construction increases in phosphorous, the project will not impact the two Town's ability to achieve the established TMDL.*

The Applicant notes that the specific goal of the TMDL Implementation Plan, which was prepared in accordance with the January 1997 New York City Watershed Memorandum of Agreement, and Section 303(d) of the Clean Water Act, is to reduce the phosphorus concentration in the eight reservoirs, including the East Branch and Middle Branch, listed in the Phase II Phosphorus TMDL as needing further phosphorus reduction than will be achieved by the wastewater treatment plant upgrades required by the WR&R.

According to NYSDEC, a substantial part of the TMDL Implementation Plan relies on the Stormwater Management Plans (SWMPs) that MS4s were required to develop pursuant to GP-02-02. The permit applied to each municipality within the East of Hudson portion of the New York City watershed, which have been designated as MS4s, including the Towns of Patterson and Kent. NYSDEC has developed heightened requirements for the MS4s in the East of Hudson Watershed that, if the MS4s implemented as part of their Stormwater Management Programs (SWMP), they would have been presumed to be in compliance with the TMDL strategy requirements in Part III.B.2 of GP-02-02. Part III.B.2 required MS4s with discharges to an approved TMDL waterbody, such as the East Branch and Middle Branch Reservoirs, that are not meeting the TMDL stormwater (load) allocations to modify their SWMPs to ensure that the reduction of the phosphorous is achieved. The MS4 permit required that modifications to the SWMP be considered for each of the six minimum measures established in GP-02-02. Similarly, GP-0-08-002 requires permittees "to develop, record, periodically assess and modify as needed," the measurable goals for each of the six minimum measures included in their SWMPs.

The Applicant notes that according to the Implementation Plan, "NYSDEC remains committed to the development of a final implementation plan. The Phase II Phosphorus TMDLs identified eight NYC reservoirs as water quality limited and needing nonpoint (NPS) reductions. These reservoirs are in the Croton portion of the City' watershed and are located east of the Hudson River. Thus, the timing of the final implementation plan will depend on the findings and completion of Croton Planning in Putnam and Westchester Counties, as well as the implementation of Phase II Stormwater Regulations and continued monitoring in the Croton Watershed."
The Implementation Plan also relies on non-point source projects selected by Putnam County and NYCDEP, and supported by NYCDEP East-of-Hudson Water Quality Investment Funds. To further help meet the TMDL, the plan also includes tasks to reduce phosphorus from agriculture, sanitary collection systems, fertilizer use and other phosphorus source controls.

Discussions with NYSDEC during January, 2007, revealed that neither the Implementation Plan, nor the heightened MS4 requirements, which NYSDEC indicated will compliment each other in achieving the TMDL, have been formally adopted.

As detailed in Appendix F of the SWPPP, following the proposed treatment of runoff on and off the project site, the total annual phosphorus load discharging to the Middle Branch Reservoir would be reduced from 30.90 lbs to 23.24 lbs and the annual phosphorus loads to the East Branch Reservoir would be reduced from 10.08 lbs. to 9.46 lbs.

The Applicant notes that SPDES General Permit for Stormwater Discharges from Construction Activity Permit GP-0-08-001 (GP-0-08-001), which replaced GP-02-01 on May1, 2008, requires preparation of a SWPPP for the Patterson Crossing Retail Center project since it would disturb more than five thousand square feet of soil.

According to the April 2008 NYSDEC FACT SHEET for New York State Department of Environmental Conservation SPDES General Permit for Stormwater Discharges from Construction Activity (Fact Sheet), in the New York City Watershed East of the Hudson (EoH Watershed), in which the proposed Patterson Crossing Retail Center project is located, the stormwater controls required in GP-0-08-001 are based, in large part, on recommendations from the Center for Watershed Protection (CWP) report entitled "Recommendations for Developing an NPDES Phase II Stormwater General Permit for Municipal Separate Storm Sewer Systems in the East of Hudson Watershed." The Fact Sheet notes that the CWP report recognizes the EoH Watershed "is among the most sensitive watersheds in New York State that supplies drinking water to millions of people, but at the same time experiences substantial development pressure." The Fact Sheet further notes that conditions in the EoH Watershed warrant practices that prevent, and reduce, phosphorus contributions to the entire watershed and that "because the needed reductions will be so difficult to attain and because protection of drinking water is at the top of the environmental protection hierarchy, the conditions that apply in the EoH Watershed are the most rigorous to be included in GP-0-08-001."

There is one major change in GP-0-08-001 that affects the proposed project. Since the proposed project is located in the EoH Watershed, beginning September 30, 2008, the SWPPP must, according to the Fact Sheet, "include post-construction stormwater management practices designed in conformance with the Enhanced Phosphorus Removal Design Criteria included in the current Manual dated, or the most current version or its successor." According to the Manual, enhanced phosphorus treatment specifically refers to a measurable, significant improvement in phosphorus treatment performance over the design methodology and associated design criteria included in the August 2003 Manual. The Applicant notes that the Patterson Crossing Retail Center SWPPP can satisfy the Enhanced Phosphorous Removal Criteria to further minimize any potential impacts associated with increased phosphorous loading.

In order to comply with GP-0-08-001, and the Watershed Regulations, the Patterson Crossing Retail Center SWPPP includes erosion and sediment controls to be used during construction and measures to control changes in stormwater quantity and quality after construction. Together, the measures included in the SWPPP accomplish the following:

- *Reduce or eliminate erosion and the resulting sedimentation of surface waters during construction;*
- *Mitigate or eliminate the impact(s) that post development changes in stormwater, including any increases in pollutants in it, can have on the quality of receiving surface waters;*
- *Reduce post construction increases in the volume and peak rate of stormwater discharge during and after construction to prevent downstream erosion and flooding;*
- *Maintain stormwater controls during and after construction.*

To be authorized under GP-0-08-001 to proceed with a project, and discharge stormwater from a site, the "Operator" must submit a "Notice of Intent" (NOI) to NYSDEC confirming that the SWPPP has been prepared in accordance with the terms of the general permit. Because the proposed project is subject to the requirements of a regulated, traditional land use control Municipal Separate Storm Sewer System (MS4), in this case the Towns of Patterson and Kent, GP-0-08-001 requires that the SWPPP be reviewed and accepted by the Towns prior to submission of the NOI to NYSDEC. Following review and approval of the SWPPP by the Towns, the Applicant will also, in accordance with GP-0-08-001, have the "MS4 SWPPP Acceptance" form signed by the principal executive officers or ranking elected officials from the Towns, or by duly authorized representatives of those individuals, and submit those forms with the NOI to NYSDEC. To secure authorization to proceed with a project under the stormwater provisions of the WR&R, which incorporate NYSDEC General Permit for Stormwater Discharges GP-93-06 by reference, NYCDEP review and approval of the SWPPP is also required.

Comment 4.5-6 (Letter A-6 Marilyn Shanahan, Chief, SEQRA Coordination Section, September 25, 2006): The DEIS indicates the applicant is to implement measures to reduce the impact from winter de-icing (page 4.5-16). The DEIS should indicate what legal mechanism will be used to ensure that roadways will be maintained using improved

procedures in perpetuity. In particular, assurances should be identified that will run with the property in event of property transfer.

Response 4.5-6: *Compliance with the measures proposed to mitigate potential impacts associated with deicing materials as described in the DEIS will be included as a term, such as a deed restriction or restrictive covenants, of any sale between the Applicant and any future owners/leasers of the project, and with any contractor engaged to conduct the deicing practices.*

Comment 4.5-7 (Letter A-6 Marilyn Shanahan, Chief, SEQRA Coordination Section, September 25, 2006): While there are no direct wetland impacts cited, the DEIS should assess indirect impacts to Wetland A and the New York State DEC Wetland (L-14) due to the proposed discharge of stormwater to these systems.

Response 4.5-7: *See Response 4.5-4 for discussion of post construction pollutant loading in wetlands. No encroachment into either Wetland A or NYSDEC Wetland L-14 is proposed. Potential indirect impacts on Wetland A and NYSDEC Wetland L-14 could result from post construction increases in the rate, volume, and pollutant loading in stormwater discharged to the wetland. However, as disclosed in the revised project specific SWPPP, post construction loads of phosphorous and total suspended solids in stormwater will decrease, and post construction peak discharge rates of stormwater will be lower than pre-development rates, following treatment by the proposed stormwater management facilities. Because of the level of treatment that stormwater will receive prior to its being discharged to Wetland A, and off site Wetland L-14, no direct, or indirect, impacts on either wetland are anticipated.*

Comment 4.5-8 (Letter A-6 Marilyn Shanahan, Chief, SEQRA Coordination Section, September 25, 2006): Figure 4.5-4 does not show a wet extended detention pond for the subcatchment series labeled 2.0, 3.5 or 3.6. Please add the locations of these basins to the Figure.

Response 4.5-8: *DEIS Figure 4.5-4 (Proposed Drainage Areas) has been revised to show all seven proposed stormwater management ponds and is included in this FEIS as Figure 4.5-3.*

Comment 4.5-9 (Letter A-6 Marilyn Shanahan, Chief, SEQRA Coordination Section, September 25, 2006): Also, the DEIS does not indicate if these extended detention ponds or any other proposed Low Impact Development techniques will be planted or seeded. All plantings and seed mixtures should be included in the DEIS and should include only non-invasive, native species appropriate for the intended moisture regime.

Response 4.5-9: *The proposed stormwater treatment ponds will be planted in accordance with Appendix H of the Manual. The type of hydrologic zones that will be created within the basins will be determined in concert with the Manual. The hydrologic zones designate the degree of tolerance that certain plants exhibit to different degrees of inundation and is the basis for plant species selection. The hydrologic zones identified in the Manual applicable to the stormwater management facilities at Patterson Crossing are expected to include Zone 2: Shallow Water Bench (6 inches to 1 foot deep), Zone 3: Shoreline Fringe (regularly inundated). Zone 4:*

Riparian Fringe (periodically inundated), Zone 5: Floodplain Terrace (infrequently Inundated) and Zone 6: Upland Slopes (seldom or never inundated).

Table H.5 (Native Plant Guide for Stormwater Management Areas), at the end of Appendix H, designates appropriate plants for each zone based upon the hydrology of the zone, the stormwater functions required of the plant, and the desired landscape effect. The planting plans now being developed for each of the zones in the proposed stormwater treatment ponds will specify species set forth in the Manual such as those identified in Table 4.5-2, Typical Stormwater Pond Zone Plantings, below.

Table 4.5-2
Typical Stormwater Pond Zone Plantings

Pond Zone	***Proposed Plants***
1	*Coontail (Ceratophyllum demersum, Duckweed (Lemma sp.), Wild Celery (Valisneria americana), Wild Rice (Zizania aquatica)*
2	*Marsh Hibiscus(Hibiscus moscheutos), Cattail (Typha sp.), Giant Burreed Sparganium (eurycarpum), Common Three-Square (Scirpus pungens), Duckweed (Lemma sp.), , Switchgrass (Panicum virgatum), Smartweed (Polygonum spp.), Soft Rush (Juncus effusus)*
3	*(Marsh Hibiscus(Hibiscus moscheutos), Cattail (Typha sp.), Giant Burreed Sparganium (eurycarpum), Common Three-Square (Scirpus pungens), Switchgrass (Panicum virgatum), Smartweed (Polygonum spp.), Soft Rush (Juncus effusus)*
4	*Switchgrass (Panicum virgatum)Fowl mannagrass (Glyceria striata)Fowl mannagrass (Glyceria striata)Smartweed (Polygonum spp.), Soft Rush (Juncus effusus)*
5	*Switchgrass (Panicum virgatum)Fowl mannagrass (Glyceria striata), Fowl mannagrass (Glyceria striata)Smartweed (Polygonum spp.), Soft Rush (Juncus effusus), Hackberry (Celtis occidentalis)*
6	*Switchgrass (Panicum virgatum)Smartweed (Polygonum spp.), Soft Rush (Juncus effusus), Hackenberry(Celtis occidentalis)*

Source: New York State Stormwater Management Design Manual, 2003.

Any Low Impact Development practices constructed on the site will be stabilized in accordance with the New York State Standards and Specifications for Erosion and Sediment Control, April 2005.

Comment 4.5-10 (Letter A-6 Marilyn Shanahan, Chief, SEQRA Coordination Section, September 25, 2006): The project sponsor proposes to undertake the Lake Carmel stormwater improvement project by piping the discharge from Concord Road to a proposed "pocket pond" (P-5) for treatment. From this pocket pond, flows will be diverted back to a surface watercourse. Work within watercourse B or any other surface watercourse may require USACE authorization.

Response 4.5-10: *Refer to Response 4.5-2. No activities are proposed that constitute the dredging of, or the discharge of fill in, waters of the United States as defined in Section 404 of the Clean Water Act. Accordingly, authorization from USACE will not be required to construct any component of the project.*

Comment 4.5-11 (Letter A-6 Marilyn Shanahan, Chief, SEQRA Coordination Section, September 25, 2006): A figure illustrating the proposed design specifications of this "pocket

pond" and surface watercourse should be included in the DEIS. Please indicate if this "pocket pond" will discharge at design line 3.

Response 4.5-11: *Design specifications for the stormwater management ponds are included in construction drawings at the back of this FEIS. Micropool extended detention pond 3.4P is proposed to treat untreated stormwater from Concord Road. The runoff will be conveyed from the road to Pond 3.4P in a swale then discharged from the pond to the NYCDEP flagged watercourse. The discharge from the pond to the watercourse is depicted on the construction plans included with this FEIS.*

Comment 4.5-12 (Letter A-6 Marilyn Shanahan, Chief, SEQRA Coordination Section, September 25, 2006): The DEIS does not address the increase in the volume of stormwater if the project were to be implemented. Increases in stormwater volume require assessments of impacts throughout the downstream receiving water bodies. Increased stormwater volume can destabilize stream banks and trigger flooding. This impact is due solely to increased impervious surface.

Response 4.5-12: *Potential adverse impacts on surface water resources associated with increases in stormwater volume are limited to those resulting from downstream flooding and have been addressed by the proposed multiple stormwater detention ponds identified in the project's SWPPP. These stormwater management facilities were selected, designed, and would be constructed, in accordance with NYSDEC and NYCDEP design guidelines and regulations, including NYSDEC General Permits for Stormwater Discharges from Construction Activity GP-0-08-001 and GP-93-06. It is not possible to develop a site with increased impervious surfaces without increasing the volume of stormwater generated on the site. Accepted stormwater management techniques, however, address the discharge rate of runoff rather than the volume, as it is well established that the rate is the determining factor in flooding and erosion, not the volume.*

While there would be an minor increase in the volume of water discharged off-site, as disclosed in the pre- and post-development computer data included in SWPPP Appendices A and B, the stormwater discharge rates, which could result in the erosion suggested in the comment, would be below the pre-developed rates, as shown in Table 4.5-3, below. By reducing the post-development discharge rates to below pre-developed levels, potential impacts on down-gradient water resources from the effects of stream bed and bank erosion have been addressed.

Table 4.5-3
Peak Flow Summary
24-Hour Design Storm (C.F.S.)

	2-Year		***10-Year***		***25-Year***		***100-Year***	
	Pre	***Post***	***Pre***	***Post***	***Pre***	***Post***	***Pre***	***Post***
Design Point 1 (Interstate 84)	*22.41*	*6.54*	*47.02*	*29.57*	*65.04*	*53.75*	*93.52*	*93.46*
Design Point 2 (Fair Street)	*26.08*	*19.71*	*56.12*	*40.59*	*78.41*	*55.86*	*113.68*	*79.81*
Design Line 3 (Middle Branch of Croton River)	*44.67*	*28.44*	*86.6*	*66.45*	*116.53*	*89.92*	*162.82*	*130.44*

Source: Insite Engineering, Surveying and Landscape Architecture, P.C., 2007

Comment 4.5-13 (Letter A-8 Michael W. Soyka, P.E., September 8, 2006): The erosion control standards as required by the NYS Standards and Specifications for Erosion and Sediment Control, August 2005 edition (Blue Book), have not been met. While silt fencing is shown on the plans, there is no indication on either the plans or within the text of the DEIS that any consideration was given to the area that is contributory to a particular section of silt fence. There should be no more than one-quarter acre of drainage to each 100 feet of silt fence.

Response 4.5-13: *According to the New York State 2005 Standards and Specification for Erosion and Sediment Control (Standards and Specifications), "diversion of surface water away from exposed soils provides the most economic and effective erosion control possible since it is more advantageous to control erosion at the source than to design controls to trap suspended sediment." Accordingly, the proposed project includes the construction of a series of temporary surface water diversions and temporary sediment basins to control runoff during construction. Following the construction of these runoff control practices, no 100 foot segments of silt fence will have a contributing drainage area of greater than one quarter acre as noted in the comment. A note is included on the Erosion and Sediment Control Plan specifying such criteria. In further concert with the Standards and Specifications, since the fences will remain in place for longer than one month, they are 'designed for expected runoff."*

Comment 4.5-14 (Letter A-8 Michael W. Soyka, P.E., September 8, 2006): The Blue Book is also quite specific as to the information that is required to be shown on the plans as it concerns Sediment Traps. As stated on page 5A.36 of the Blue Book, the following information shall be shown for each trap in a summary table format on the plans:

(1) Trap number
(2) Type of trap
(3) Drainage area
(4) Storage required
(5) Storage provided
(6) Outlet length or pipe sizes
(7) Storage depth below outlet or cleanout elevation
(8) Embankment height and elevation (if applicable)

None of the above referenced information appears on the plans. The plans appear to address only post construction stormwater management practices.

Response 4.5-14: *The Patterson Crossing Retail Center SWPPP satisfies the requirements of GP-0-08-001, and the WR&R, and provides sufficient information to assess the potential for significant adverse impacts on surface water resources resulting from erosion and sedimentation during construction of the project.*

The Blue Book specifies that each proposed sediment trap shall be delineated on the plans in such a manner that it will "not be confused with any other features," and that each trap shown on the plan shall indicate all the information necessary to properly construct and maintain the structure. The Blue Book also allows for, in instances where the required information is not delineated on the plans, the development of a table, that are shown on the Erosion and Sediment Control Plan, that includes the

information noted in the comment. Such a table is now included on the Patterson Crossing Erosion and Sediment Control Plan. In addition, as required by the Blue Book, each sediment trap on a plan has been assigned a number that corresponds to information in the table.

Comment 4.5-15 (Letter A-8 Michael W. Soyka, P.E., September 8, 2006): Numerous drainage swales are shown on the plans. Only two types are shown on the Detail sheet, with only minimum dimensions given. The types of swales should be shown on the plans. Calculations should have been prepared to determine the flow for each swale. The proper swale could be selected once the flow and velocity for each swale was determined.

Response 4.5-15: *Proposed swales are included in the Patterson Crossing Retail Center Erosion and Sediment Control Plan component of the SWPPP (Appendix F) and are effective measures to prevent erosion, and subsequent sedimentation of surface water resources during construction by diverting clean runoff away from disturbed soils. The SWPPP, which fully complies with the requirements of NYSDEC and NYCDEP, as set forth in GP-0-08-001 and GP-93-06, includes plans on which each proposed swale type is identified and construction details for the swales are depicted. The swales are sufficiently detailed on the plans that accompany this FEIS to allow for an assessment of their effectiveness and a determination that potential adverse impacts associated with erosion and sedimentation have been mitigated.*

Comment 4.5-16 (Letter A-8 Michael W. Soyka, P.E., September 8, 2006): The swales on the drawings contain numerous check dams. The DEIS has not demonstrated that the maximum drainage area above a check dam does not exceed 2 acres.

Response 4.5-16: *Refer to Response 4.5-15. Design calculations for the proposed swales, as well as the check dams, will be provided in the final SWPPP. The calculations will demonstrate that the maximum drainage area above each check dam will not exceed two acres. All components of these on-site conveyances are designed, and will be constructed, to convey stormwater flows generated by a 100-year, 24-hour storm. These measures further reduce the potential for impacts on surface water resulting from erosion and sedimentation by reducing runoff velocities to non-erosive levels.*

Comment 4.5-17 (Letter A-8 Michael W. Soyka, P.E., September 8, 2006): Practices to control runoff are not explained. The plans should demonstrate that positive drainage is maintained, with the drainage area contributory to each practice clearly shown.

Response 4.5-17: *The revised Patterson Crossing Retail Center SWPPP, FEIS Appendix F, includes a discussion of the measures proposed to control erosion and prevent sedimentation of water resources on the project site during construction. As shown on the construction plans, positive drainage will be established and maintained by the proposed grading of the site. Existing and proposed contributing drainage areas are shown on FEIS Figure 4.5-2 (Existing Drainage Areas), and FEIS Figure 4.5-3 (Proposed Drainage Areas) respectively. The SWPPP has been designed in accordance with the requirements of GP-0-08-001 and GP-93-06, and meets the criteria for coverage under GP-0-08-001, and GP-93-06 which is incorporated into the WR&R by reference.*

Comment 4.5-18 (Letter A-8 Michael W. Soyka, P.E., September 8, 2006): The attached Erosion and Sediment Control Plan Review Checklist is Appendix G in the Blue Book. One would expect that for a project this large, that said Checklist would have been referenced and included as a appendix in the DEIS. This would be one method that could be used to demonstrate that the erosion and sediment control measures that were selected for this project were well thought out and in compliance with the standards of the New York State Standards and Specifications for Erosion and Sediment Control.

Response 4.5-18: *Existing erosion in Lake Carmel's 3,126 acre watershed has accounted for many tons of sediment that has entered the lake and contributed to its poor water quality. Eliminating these existing sources of erosion and sedimentation on and near the project site, and controlling erosion and sedimentation throughout construction, are integral components of the Patterson Crossing Retail Center project and will improve and protect the lake's water quality.*

As discussed in detail in the DEIS, and the revised SWPPP (Appendix F herein), untreated stormwater, the majority of which originates in the Town of Kent, is discharged from Concord Road and has created a severely eroded channel (See FEIS Figure 4.5-5, Eroding Drainage Channel From Concord Road). This channel continues to be a significant source of sediment, and the pollutants that adsorb to the sediment, including phosphorous, to Lake Carmel and the reservoir. This chronic erosion is evidenced by FEIS Figure 4.5-5, and can be seen in aerial photographs dating as far back as 1964. The Applicant notes that while the discharge of stormwater from the town road has generated many tons of sediment that have entered Lake Carmel, no steps have been taken to repair the eroded channel or to prevent the resulting sedimentation. Although not required to do so, the Applicant is willing to stabilize this channel to eliminate the continual source of pollution to Lake Carmel and the reservoir.

Like the ongoing erosion of the channel created by stormwater discharged from Concord Road, accelerated erosion of the bed and banks of the channel that conveys stormwater along NYS Route 311 to the Middle Branch Croton River (See FEIS Figure 4.5-6, Eroding Drainage Channel Along NYS Route 311) continually adds to the sediment, and other pollutant loads, entering the lake and the Middle Branch Reservoir. The Applicant notes that no measures have been taken to eliminate this chronic source of sediment to Lake Carmel.

To eliminate this source of pollutants, including phosphorous, the Applicant proposes to reshape, and rip rap, the eroding channel from the outfall of the proposed stormwater drainage system to a point approximately one hundred feet west of the outfall. The rip rap channel will convey stormwater discharged from both the new outfall, and that which originates on Concord Road, flows across the project site, and enters the channel. In so doing, the improvements will reduce sediment, and other pollutants, including but not limited to phosphorous, that currently enter Lake Carmel and the Middle Branch Reservoir, thereby benefiting the lake's ecology, surrounding residents, Lake Carmel users, the New York State Department of Transportation, the Town of Kent, and the New York City public drinking water supply. The Applicant notes that no credits were taken in the Stormwater Pollution Prevention for the phosphorus removed by these improvements, even though they will significantly reduce the phosphorus load presently entering Lake Carmel and Middle Branch

Reservoir. The Applicant also notes that the channel does not constitute waters of the United States as defined in Section 404 of the Clean Water Act. As such, no authorization from the United States Army Corps of Engineers is required to complete the repair project.

The revised Patterson Crossing Retail Center development plan, and Erosion and Sediment Control Plan included in the SWPPP (DEIS and FEIS Appendix F) includes specific measures to eliminate existing erosion, and to prevent erosion during construction, that far exceed the requirements set forth in the New York State Standards and Specifications for Erosion and Sediment Control Standards and Specifications). These measures also far exceed those required by NYSDEC GP-0-08-001, and by GP-93-06 which is incorporated into the WR&R by reference. A completed Erosion and Sediment Control Plan Review Checklist from the specifications, which is included as Appendix G of the SWPPP, can be found in Appendix F of this FEIS. The checklist, which simply solicits yes and no responses to a series of questions, demonstrates the Erosion and Sediment Control Plan's completeness.

Although not required by the Standards and Specifications, GP-0-08-001, or GP-93-06, the Patterson Crossing project includes measures, as proposed on the project plans, to permanently stabilize the drainage system along NYS Route 311, thereby eliminating this continual source of sediment. In addition, if supported by the Towns of Kent and Patterson, and other regulatory agencies, the Applicant is willing to implement the initially proposed drainage channel repair project to eliminate the ongoing source of sediment entering Lake Carmel in the Town of Kent. In addition to these enhanced measures, the Patterson Crossing Retail Center Erosion and Sediment Control Plan includes the following measures, beyond those set forth in the Standards and Specifications, to further ensure the plan's effectiveness in protecting water quality in Lake Carmel during construction in the Middle Branch Reservoir/Lake Carmel Watershed in the Town of Kent:

- *A representative from INSITE Engineering, or a licensed geo-technical engineer, will inspect the stabilization of slopes in excess of 15 percent. In addition, no more that 2.5 acres of slopes in excess of 15 percent will be disturbed at any time;*

- *Disturbed slopes greater than 15 percent in the Middle Branch/Lake Carmel Watershed in the Town of Kent will be protected with erosion control matting or hydroseeded;*

- *GP-0-08-001 requires that erosion and sediment controls be inspected at least once every seven days, as long as there is less than five (5) acres of disturbance and twice every seven days for as long as greater than five (5) acres of soil remain disturbed. Although the permit specifies one or two inspections per seven days based on area of disturbance, a representative from Insite Engineering and/or a geo-technical engineer will inspect the erosion and sediment controls two or three times a week, one more than required by the permit depending on the amount of site disturbance.A representative of the Applicant responsible for overseeing implementation of the Erosion and Sediment Control Plan shall be available twenty-four hours a day, seven days a week;*

- *The representative of the Applicant responsible for overseeing implementation of the Erosion and Sediment Control Plan shall submit weekly reports to the Towns of Kent and Patterson during those weeks when work is done;*

- *The site contractor will maintain a stock of contingency erosion control materials, including crushed stone, rip rap, silt fence, dewatering pumps and piping, hay bales, and seed, on the site. These materials will be stored for immediate use to address unanticipated conditions.*

Comment 4.5-19 (Letter A-8 Michael W. Soyka, P.E., September 8, 2006): On page 4.5-2, at the end of the 5th line, should "NYC-A" read "NYC-B"?

Response 4.5-19: *Watercourse "NYC-A" is correctly identified on DEIS page 4.5-2.*

Comment 4.5-20 (Letter A-8 Michael W. Soyka, P.E., September 8, 2006): Refer to the last paragraph on page 4.5-5. The monitoring site on the Middle Branch of the Croton River is shown as "MIDBR8" on this page and "MIDBR4" on Figure 4.5-1.

Response 4.5-20: *MIDBR8 is the correct designation for the NYCDEP monitoring site that is discussed on Page 4.5-5 of the DEIS. DEIS Figure 4.5-1 has been revised to indicate MDBR8 and is included in this FEIS as Figure 4.5-1.*

Comment 4.5-21 (Letter A-8 Michael W. Soyka, P.E., September 8, 2006): In the second paragraph on page 4.5-12 it states that in order to better focus the repair project, the Applicant will voluntarily sample and test water conveyed by the eroded channel. Water quality test results will be provided to the Town of Patterson. Since this channel lies wholly within the Town of Kent and drains into Lake Carmel which lies wholly within the Town of Kent, it would seem reasonable to provide the water quality test results to the Town of Kent, as well.

Response 4.5-21: *As noted, if requested by the Towns of Kent and Patterson or another regulatory agency, the Applicant is willing to implement the initially proposed drainage channel repair project to improve the quality of stormwater from Concord Road. However, implementing the repair project is not required to meet State or City stormwater regulations and has been eliminated from the Proposed Action. As such, water quality monitoring is no longer proposed. See also Section 1.3 of the SWPPP.*

The Applicant is committed to addressing existing drainage, and water quality, issues on and near the project site, and accordingly, will treat stormwater that now discharges on to the project site from Concord Road. The Proposed Action includes a system to collect runoff from the currently eroding channel, pipe it to stormwater pond 3.4P for treatment, and slowly release it though a pipe back into watercourse NYC-A. Detaining the stormwater in the pond will remove pollutants in the runoff and will lower peak rates of discharge to below existing rates, thereby reducing the potential for additional erosion of the bed and banks of the watercourse.

Comment 4.5-22 (Letter A-8 Michael W. Soyka, P.E., September 8, 2006): It would appear that the DEIS and the SWPPP lack some coordination. Each post development peak flow shown in Table 4.5-5 (page 4.5-12) differs from the values listed in the SWPPP.

Response 4.5-22: *FEIS Table 4.5-3, reflects the post-construction discharge rates included in the revised December 21, 2007, SWPPP. With the exception of the discharges from Design Point 3, the discrepancies in peak discharge rates between the post development discharge rates presented in DEIS Table 4.5-5 and the SWPPP amounted to thousands of a percent of a cubic foot per second. For Design Point 3, the greatest discrepancy amounted to only 5.84 cubic feet per second of the 78.24 cfs generated by a one hundred year storm. In all cases post development discharge rates are less than pre-development rates. As such, none of the discrepancies influence the analysis of impacts in the DEIS.*

Comment 4.5-23 (Letter A-8 Michael W. Soyka, P.E., September 8, 2006): It appears that stormwater from STA 0+00 to STA 2+00± (near proposed road elevation 671) receives no treatment. Please explain.

Response 4.5-23: *Impacts on surface water associated with runoff from the slight increase in impervious surface between sta. 1+00 and sta. 2+00 will be mitigated with the proposed stormwater management facilities that will treat runoff from Interstate 84, NYS Route 311, and Concord Road. As demonstrated in the SWPPP, these measures will achieve a reduction in existing pollutant loads. The Applicant notes that runoff from this section of the road would discharge in the Lake Carmel watershed where post construction pollutant loads in stormwater will be reduced to below existing levels after treatment by proposed stormwater ponds 3.1P, 3.2P, and 3.4P located on the project site.*

Comment 4.5-24 (Letter A-8 Michael W. Soyka, P.E., September 8, 2006): Proposed Stormwater Basin 3.3 will be a pocket pond. It is stated throughout the DEIS that the stormwater management practices will be designed in accordance with DEC requirements. A pocket pond requires a water table that is high enough to support a permanent pool. Nowhere in the document is there even the slightest indication that the depth to the water table has been investigated and that it is likely that the water table will be at an elevation that will sustain a permanent pool in the pocket pond.

Response 4.5-24: *The proposed stormwater management system for the project has been modified and the previously proposed pond 3.3P noted in the comment is no longer proposed. Deep hole tests, as shown on FEIS Figure 4.5-7 (Stormwater Testing Plan) were also performed in, or adjacent to, the proposed stormwater basins to assess the soils conditions in these areas. These tests were witnessed by NYCDEP. In addition, soil conditions in the vicinity of basin 3.4 were confirmed through investigation of the exposed soil strata in the approximately eight foot deep Concord Road drainage ditch.*

Comment 4.5-25 (Letter A-8 Michael W. Soyka, P.E., September 8, 2006): The discharge from the Concord Road drainage system empties from stormwater basin 3.4 into NYCDEP Watercourse NYC-B and then into NYCDEP Watercourse NYC-A. The slope on Watercourse NYC-A is approximately 25% between delineation flags NYC6A and NYC5A. The possibility of erosion in this natural, undisturbed, unreinforced channel is ignored and not addressed.

Response 4.5-25: *Refer to Response 4.5-11. The currently eroding channel originates at the end of a pipe which conveys untreated stormwater from Concord Road and other connected roads onto the project site. The channel does not appear to be natural and because of the unmanaged discharge, would not be considered undisturbed. Following construction of the project, stormwater will be detained in micropool extended detention pond 3.4P prior to being discharged to the NYCDEP flagged watercourse. Refer to Response 4.5-21.*

Comment 4.5-26 (Letter B-2 James Bacon, Attorney for CWCWC and PCCPOS, September 25, 2006): DEP studies conducted on the Croton watershed in Putnam County showing baseline phosphorus export levels of .0446 pounds per acre for forested areas.[3] However, rather than using .0446, the Applicant used .10 lbs. per acre per year relying upon a 1992 DEC publication. The DEC 1992 pre-development phosphorus export levels are not specific to the Croton Watershed and that publication is no longer applicable. Indeed, according to Watershed Inspector General James Tierney, it is "outdated and defunct".

Consequently the Applicant's calculations are incorrect by a factor of 2.24. Therefore, for the pre-development existing conditions, less than half as much phosphorus is exported from the site as compared with the Applicant's estimates.

Tim Miller Associates has previously argued that because DEP has not formally adopted the figures in its stormwater review procedures, the .0446 figure is not relevant for the Croton Watershed's reservoirs. This reasoning is wrong.

The .0446 figure was formally adopted by DEP in 2002 as accurate and was relied upon by DEP, EPA and DEC in developing baseline data for the TMDL calculations for the Croton Watershed reservoirs.

If the entire TMDL program developed by DEP, EPA and DEC is founded on the .0446 figure, then it is inappropriate for the lead agency to use any other figure.

Furthermore, the EPA recommended that the most conservative approach available be used in modeling phosphorus impacts. Was EPA wrong? Is the .0446 figure more conservative than the .10 figure from 1992, which James Tierney stated was outdated and defunct?

Response 4.5-26: *Refer to Response 4.5-4 and 4.5-5. A pollutant loading analysis in the revised SWPPP, FEIS Appendix F, was completed using the pollutant loading coefficient method to meet the requirements of New York City's stormwater regulations. In addition, at the request of the New York State Watershed Inspector General, the revised SWPPP includes supplemental phosphorous loading calculations performed using the "Simple Method" in conjunction with the 1996 Terrene Institutes publication "A Watershed Approach to Urban Runoff, which is a site-specific method for determining pollutant loading.*

The NYCDEP has not formally adopted the cited pollutant export of 0.0446 lbs/yr, and has confirmed through telephone discussions with the Applicant's representatives that the 0.10 lbs/yr phosphorus loading rate (from forested land) is the loading rate applied in the agency's regulatory stormwater permitting program.

The procedure used to develop the Phase II TMDLs is contained in the NYCDEP report entitled Methodology for Calculating Phase II Total Maximum Daily Loads (TMDLs) of Phosphorus for the New York City Drinking Water Reservoirs, March 1999 (http://www.ci.nyc.ny.us/html/dep/html/tmdl.html). The procedures contained in the methodology are consistent with NYSDEC, Division of Water, Technical Operations and Guidance Series 1.3.1, Total Maximum Daily Loads and Water Quality-Based Effluent Limits and do not cite the 0.0446 lbs/yr loading rate noted in the comment.

According to the Phase II Report, "Phase II Phosphorus TMDLs incorporate a site-specific interpretation of New York State narrative standard for nutrients (phosphorus), an improved data base, an enhanced modeling framework, a reservoir-specific approach to calculate the margin of safety, and continued ambient and point source monitoring by NYCDEP and NYSDEC are necessary to develop multi-tiered reservoir models and assess the impacts of point and nonpoint control measures on reservoir water quality as well as future phosphorus reduction strategies for each reservoir."

The phosphorus TMDLs for the Croton reservoirs were determined based on reservoir monitoring data and the Vollenweider model that were used to estimate the total watershed loading. Modeling of the watershed sources, utilizing export coefficients, was not used in the TMDL calculation but was provided to guide implementation of phosphorus reductions. Additionally, no site-specific data was used for the nonpoint source load estimates. The phosphorus export coefficients were based on an average of literature values from the New York and Connecticut areas.

Site-specific loading requires years of intensive monitoring. That level of monitoring is rarely available for individual development projects and routine monitoring data from the reservoirs and streams are not at the proper scale, or frequency, to calculate export coefficients for a single land use.

Comment 4.5-27 (Letter B-2 James Bacon, Attorney for CWCWC and PCCPOS, September 25, 2006): As SEQRA further requires that "to the maximum extent practicable" the lead agency "minimize or avoid adverse environmental effects" of a project, the lead agency must demonstrate that a project will not only maintain phosphorus pollutant loading at pre-development levels, but actually reduce those levels pursuant to the TMDL program.

Response 4.5-27: *Refer to Response 4.5-5. The Patterson Crossing SWPPP demonstrates that the proposed on- and off-site stormwater treatment facilities will achieve an annual reduction in phosphorous loading of 7.26 lbs in New York City's drinking water supply watershed. As such, the SEQRA requirement that "to the maximum extent practicable" the lead agency "minimize or avoid adverse environmental effects" of the project has been met.*

Contrary to the comment's assertion, no provisions of SEQRA require that the lead agency demonstrate that phosphorous loading from the Patterson Crossing Retail Center project will be below pre-development levels. Notwithstanding, on and off site stormwater management facilities that far exceed any regulatory requirements are proposed as part of the project. These facilities will treat stormwater from the

residential development on Concord Road, from a portion of NYS Route 311 and entry and exit ramps to and from Interstate 84, and at the Putnam County Highways Facility, and will achieve part of the reduction in existing phosphorous levels required of MS4s in the City's East of Hudson watershed pursuant to the TMDL program.

Comment 4.5-28 (Letter B-4 Marian H. Rose, Ph.D., President, CWCWC, September 25, 2006): These pollutants from parking lots include motor oil, grease, petroleum and poly cyclic aromatic hydrocarbons (PAHs) that are classified as bioaccumulative carcinogens. There is nothing in the applicant's DEIS that mentions mitigation of these contaminants.

Response 4.5-28: *Pollutants from parking lots are, in large part, derived from parked cars. Many of these cars will be parked somewhere in the watershed everyday. The stormwater runoff from the proposed parking lots will be treated in accordance with New York State and City standards. Cars parked at older residences, and retail facilities, will generate pollutants that may not be treated prior to entering the environment.*

Pollutants other than those specifically mentioned in the DEIS accumulate on impervious surfaces. The WR&R require an assessment of those specific pollutants of concern identified in NYSDEC GP-93-06, BOD, TN, TP, and TSS. Additional pollutant type loading are presumed to be reduced by the NYSDEC approved stormwater practices and those required by the WR&R. Table 7.4 of the Manual notes that stormwater ponds will remove more than 30 percent of the total nitrogen load, greater than 60 percent of metal loads, and greater than 70 percent of the bacteria loading. The stormwater management practices proposed as part of the Patterson Crossing Retail Center project have been designed in a "treatment train" providing pretreatment, primary treatment, secondary treatment, and in certain locations, tertiary treatment. These treatment trains will provide enhanced pollutant removal prior to stormwater being discharge from the site. In addition to these measures, oil and water separators have been incorporated into the stormwater management system. The separators will remove motor oil, grease, petroleum *products that are conveyed from impervious parking areas, and internal roadways, to the stormwater management system.*

Environmental impacts associated with polycyclic aromatic hydrocarbons (PAHs) are primarily associated with airborne contamination. According to the United States Department of Health Services, Agency for Toxic Substances and Disease Registry, PAHs are "formed during the incomplete burning of coal, oil and gas, garbage, or other organic substances like tobacco or charbroiled meat and enter the air mostly as releases from volcanoes, forest fires, burning coal, and automobile exhaust."

The Manual, identifies PAHs as a common pollutant found in stormwater and notes that urban land uses and activities can degrade groundwater quality if stormwater runoff is infiltrated without adequate treatment. The Manual further indicates that certain land uses and activities are known to produce higher loads of toxic chemicals, and are designated as stormwater "hotspots", from which soluble pollutants, such as some polycyclic aromatic hydrocarbons (PAH's) can migrate into groundwater and potentially contaminate wells.

A stormwater hotspot is defined in the Manual as "a land use or activity that generates higher concentrations of hydrocarbons, trace metals or toxicants than are found in typical stormwater runoff, based on monitoring studies." Further, according to the Manual, "if a site is designated as a hotspot, it has important implications for how stormwater is managed. First and foremost, stormwater runoff from hotspots cannot be allowed to infiltrate into groundwater, where it may contaminate water supplies. Second, a greater level of stormwater treatment is needed at hotspot sites to prevent pollutant washoff after construction. This treatment plan typically involves preparing and implementing a stormwater pollution prevention plan that involves a series of operational practices at the site that reduce the generation of pollutants from a site or prevent contact of rainfall with the pollutants." Table 4.3 in the Manual provides a list of designated hotspots for the State of New York.

Of the land uses and activities which are deemed stormwater hot spots in the Manual, only the proposed outdoor loading/unloading facilities at the Patterson Crossing Retail Center has been identified as a stormwater hotspot. The proposed Garden Center does not constitute a "commercial container nursery" that is also identified as a hotspot in the Manual. Although the Garden Center is not considered a "hot spot", the stormwater runoff is proposed to be pretreated in a "Stormfilter" treatment unit prior to discharging into the stormwater ponds. The "Stormfilter" treatment unit has been proposed to provide an additional stormwater benefit above the required treatment being provided in the stormwater ponds.

The Manual cautions that stormwater runoff from designated hotspots should never be infiltrated, unless the runoff receives full pretreatment with another practice. The stormwater treatment plan proposed in the SWPPP involves a series of operational practices at the site that reduce the generation of pollutants from the site and prevents the contact of rainfall with the pollutants as recommended in the Manual. In addition, no stormwater from the site will be infiltrated, even after treatment, as further recommended in the Manual.

Comment 4.5-29 (Letter B-4 Marian H. Rose, PhD, President, CWCWC, September 25, 2006): Clouser Associates also clearly points out serious deficiencies in the applicant's stormwater analysis in terms of using input data that do not conform with most recent data recommended by the agencies that regulate the NYC watersheds, namely, DEP and DEC. This leads to the applicant over-estimating the pollution reduction capability of the proposed stormwater management system. Rather than a decrease in phosphorus-loading as claimed by the applicant, there will, in effect be an increase in phosphorus loading to the aforementioned phosphorus-restricted reservoirs.

Response 4.5-29: *Refer to Response 4.5-4, 4.5-5, and 4.5-26. The Patterson Crossing Retail Center SWPPP includes pre-and post-construction stormwater calculations that satisfy the requirements of the NYCDEP and the NYSDEC. Appendix F of the SWPPP includes supplemental pre-and post-construction pollutant loading estimates calculated with the Simple Method as requested by the New York State Watershed Inspector General. These calculations demonstrate that the proposed on and off-site stormwater treatment facilities, which exceed the treatment requirements imposed by GP-0-08-001 and the WR&R, will reduce post construction phosphorous loading in the Middle Branch and East Branch Reservoir watershed to below existing loads.*

Comment 4.5-30 (Letter B-5 David B. Clouser, PE, LS, David Clouser and Associates, September 21, 2006): According to the latest NYCDEP TMDL report, non-point sources such as urban stormwater runoff are the other major contributors to the phosphorus loads within the reservoir. Very importantly, programs and measures must be implemented within the watersheds to reduce the pollutant loading from both wastewater treatment and urban stormwater runoff sources.

With that said, the proposed project involving the construction of vast areas of impervious surfaces and massive land disturbance in the Middle Branch Reservoir and East Branch Reservoir watershed is a major concern, requiring substantial and complex mitigation methods to minimize this recognized significant adverse impact. A review of the DEIS information for this project does not reveal that these concerns that affect one of the world's largest water supplies have been appropriately addressed.

> ***Response 4.5-30:*** *Refer to Responses 4.5-4 and 4.5-5, 4.5-26, and 4.5-29. Potential significant adverse impacts on New York City's drinking water supply that could result from the proposed land disturbance, and construction of impervious surfaces, are associated with stormwater and are addressed through implementation of the on and off site treatment practices set forth in the SWPPP, which also includes an Erosion and Sediment Control. Combined, these measures will prevent erosion and sedimentation and will achieve a significant reduction in current phosphorous loads entering the reservoir(s). Further, relative to the impacts on the water supply, untreated runoff from Interstate 84, local impervious roads and developments, and other land uses in the watershed, have had on the reservoirs, the proposed project does not represent the potential for significant adverse impact on surface water.*

Comment 4.5-31 (Letter B-5 David B. Clouser, PE, LS, David Clouser and Associates, September 21, 2006): After our office's review of the project's DEIS information (and as supported in our comments in Section IV. (1), it is most probable that the project will result in an actual significant increase in the phosphorus loading to the water supply reservoirs instead of reducing this pollutant load. Therefore this proposal does not meet the minimum TMDL requirements established by the NYCDEP and NYSDEC. The project must therefore be redesigned to meet these TMDL Phosphorus reduction requirements.

> ***Response 4.5-31:*** *Refer to Responses 4.5-4, 4.5-5, 4.5-26, 4.5-29, and 4.5-30. The proposed project has been redesigned as suggested in the comment. Appendix F of the revised SWPPP demonstrate that the project will result in a significant decrease in current phosphorous loads entering the City's water supply. The on-and off-site stormwater treatment facilities have been specifically designed to reduce post development increase in phosphorous to below existing levels and to advance the goals of the State imposed TMDL program. An overall phosphorous reduction from 40.98 lbs/yr to 32.70 lbs/yr is expected in New York City's watershed after construction of the Patterson Crossings Retail Center project, and the on-and off-site stormwater practices proposed.*

Comment 4.5-32 (Letter B-7 Cathleen Breen, Watershed Protection Coordinator, September 25, 2006): The Supplemental DEIS is needed to provide further analysis of the impacts to water quality from the disturbance of over 68.4 acres of land with 32.4 acres being converted into impervious surfaces, such as roadways and parking lots. Given the phosphorus impaired status of the Middle Branch and East Branch Reservoirs, as well as Lake Carmel, the DEIS did not adequately address how the necessary phosphorus reductions or the total maximum daily loads (TMDL) would be achieved. Another critical problem is the disturbance of greater than 5 acres at a time during construction, which would serve to further exacerbate the problem.

Response 4.5-32: *Refer to Responses 4.5-4, 4.5-5, 4.5-20, 4.5-26, 4.5-30, and 4.5-31. Potential impacts on water quality that could result from disturbance of the site, construction of impervious surfaces, and increases in post construction phosphorous loads, were fully analyzed in the Section 4.5 of the DEIS (Surface Water). These potential impacts have been addressed by the proposed reductions in project scope and impervious surfaces, and by the enhanced stormwater treatment now proposed on and off the project site. Implementing the proposed sequence of the construction and phasing plan included in the Erosion and Sediment Control Plan will further reduce the potential for erosion (see Drawing SP4.1, Overall Sequencing Plan). The proposed sequencing plan divides construction into twenty-four separate phases and will limit the area of disturbed soil at any time, thereby reducing potential impacts associated with erosion, and subsequent sedimentation of on and off site water resources. The proposed sequencing also mitigates potential impacts on water resources by shortening the construction period and the length of time that any disturbed soils are subject to erosion. In addition, to further avoid impacts associated with erosion and sedimentation, construction phasing operations will follow site development protocols that provide for rock generated on the site to be placed, and redistributed, in areas where structural fill, subbase, riprap and crushed stone is required in any phase of construction for the development of the site. These preventative measures will serve as the primary means of avoiding sedimentation of water resources during construction of the project and will effectively control erosion and significantly reduce the potential for sedimentation that results from it. As such, potential impacts on down-gradient receiving surface water resources, including the Middle Branch and East Branch Reservoirs, will be minimized to the greatest extent practical.*

SEQRA section 617.9.7 specifies that a Lead Agency may require a supplemental environmental impact statement that is limited to the specific significant adverse environmental impacts not addressed, or inadequately addressed, in the DEIS that arise from: changes proposed for the project; or newly discovered information; or a change in circumstances related to the project. No such changes to the Patterson Crossing Retail Center project are proposed, nor has any new information been discovered or have circumstances applicable to the project changed since the DEIS was accepted by the Lead Agency. As such, preparation of a supplemental environmental impact statement is not warranted, required, or appropriate.

Comment 4.5-33 (Letter B-7 Cathleen Breen, Watershed Protection Coordinator, September 25, 2006): Construction on steep slopes should be avoided in the watershed. The DEIS proposes to use more than 12 acres of steep slope that are greater than 15% including for the siting of stormwater basins: therefore, the Supplemental DEIS is needed for further analysis on the specific engineering controls proposed for use on these steep slopes.

Response 4.5-33: *Refer to Response 4.5-32 concerning the comment relating to a Supplemental DEIS. The proposed project has been revised since the DEIS was accepted, and now only 10.2 acres of slopes equal to, or exceeding, 15 percent would be disturbed by the project rather than 12.3 acres of disturbance initially proposed. The potential impact on surface water resources, including New York City's public drinking water supply, that could result from disturbance of steep slopes is generally limited to sedimentation of the resources resulting from erosion of the disturbed soil on the slopes during construction. According to the Standards and Specifications, "diversion of surface water away from exposed soils provides the most economic and effective erosion control possible since it is more advantageous to control erosion at the source than to design controls to trap suspended sediment." Accordingly, the focus of the Patterson Crossing Retail Center Erosion and Sediment Control Plan is to prevent erosion through the diversion of runoff, rather than to contain sediments that become mobile. Providing temporary runoff diversions, as proposed, will direct runoff away from exposed slopes and will reduce runoff velocities on the site to non-erosive limits. Temporary diversions will also be constructed in the internal road system to reduce runoff velocities and prevent erosion of the roadways under construction.*

Comment 4.5-34 (Letter B-8 James M. Tierney, Watershed Inspector General, September 25, 2006): Post Treatment Pollutant Loadings are Underestimated. The DEIS employs dated and substandard methods to calculate water pollutant loadings, resulting in an underestimate of the additional pollutants that will be caused by the proposed Project after construction, including nutrient phosphorus. The Middle Branch and East Branch Reservoirs, as well as nearby Lake Carmel, are already significantly impaired by excessive phosphorus. Pollutant loadings need to be properly calculated and the proposed Project modified so that (accurately calculated) post-development pollutant loadings more closely resemble pre-development levels.

Response 4.5-34: *Refer to Responses 4.5-4, 4.5-5, 4.5-26, 4.5-29, 4.5-30, and 4.5-31. The pollutant loading analysis for the proposed development included in the revised Patterson Crossing Retail Center SWPPP, FEIS Appendix F, was completed using the pollutant loading coefficient method to meet the requirements of New York State and City stormwater regulations. The calculations indicate an overall reduction in phosphorus loads discharging from all design points on the site following construction.*

In response to the comment, the Applicant has performed additional phosphorous loading calculations employing the site specific Simple Method. These calculations are included in FEIS Appendix F of the revised SWPPP (Supplemental Phosphorous Calculations). The calculations, were performed in conjunction with the 1996 Terrene Institutes publication A Watershed Approach to Urban Runoff to determine pollutant loading. The project has also been modified in response to the comment and enhancements are now proposed as part of the plan that include on- and off-site

stormwater treatment facilities beyond those required to satisfy NYCDEP and NYSDEC regulatory requirements. Based upon the revised site development plan, revised SWPPP, and the additional on and off-site stormwater treatment practices detailed in the SWPPP, post construction phosphorous loads in both the East Branch and Middle Branch Reservoirs are expected to be significantly reduced following construction of the project.

As noted, the revised project layout and stormwater management system have been developed to reduce post-construction phosphorous loads in the New York City watershed to below pre-development levels. The proposed stormwater treatment practices included in the revised project reduce phosphorus loading to each of the two reservoirs. Stormwater on the project site will be treated by series of wet ponds shown on the plans that accompany this FEIS. To further reduce phosphorus loading to both of the reservoir basins, off-site wet ponds are now proposed that will treat existing runoff from off-site drainage areas shown on FEIS Figure 4.5-4. The off-site improvements include measures to treat currently untreated stormwater from the residential development to the west of the project, a portion of NYS Route 311 and the exit ramps from Interstate 84, as well as the PCHF. This approach to treating on- and off-site stormwater will advance the goals of the TMDL program and assist the towns in meeting their TMDL obligations.

The stormwater runoff discharging to Lake Carmel, and ultimately the Middle Branch Reservoir, includes that from the northern portion of the site including the access road, from NYS Route 311 and Interstate 84, as well as from the residential development on Concord Road north Lake Carmel. As detailed in Appendix F of the SWPPP (Supplemental Phosphorous Calculations), annual phosphorus loads discharging to Lake Carmel and the Middle Branch Reservoir would be reduced from 30.90 lbs to 23.24 lbs after treatment by proposed stormwater management ponds 3.1, 3.2, and 3.4 that are located on and off the project site.

Stormwater runoff discharging to the East Branch Reservoir includes the majority of the stormwater runoff from the proposed development, as well as, the undeveloped hillside to the south of the proposed development. The analysis of the East Branch Reservoir includes offsite improvements at the PCHF. The PCHF commercial site within the East Branch Reservoir Basin that discharges untreated stormwater in close proximity to the subject project. The proposed treatment of stormwater at the PCHF will provide an overall reduction in phosphorus loading in post development conditions. As further detailed in Appendix F of the SWPPP, annual phosphorus loads to the East Branch Reservoir would be reduced from 10.08 lbs. to 9.46 lbs following construction of the project. Based upon the calculations performed with the Simple Method, total annual reductions in phosphorous loading in New York City's watershed would be 8.28 lbs.

The Applicant notes that the proposed stormwater management facilities that will treat runoff from the PCHF, Concord Road, NYS Route 311, and the Interstate 84 ramps, exceed State and City regulatory requirements, and that even without these measures, adverse impacts on surface water will be avoided with the required on-site treatment practices specified in the SWPPP. The FEIS Appendix A includes a June 21, 2007 letter from INSITE Engineering to the Deputy Putnam County Executive, a July 14 letter from Mr. Paul Camarda to County Executive Robert Bondi, and June

25, 2007, August 9, 2007, and August 14, 2007 letters from Mr. Robert Bondi, concerning the construction of these facilities. As indicated in the County Executive's August 14 correspondence, the County is willing to utilize grant money it received to fund fifty percent of the cost of constructing off-site Pond PC-2 at the Putnam County Highways Facility located in the East Branch Reservoir watershed. The Applicant notes his willingness to fund the remaining fifty percent of constructing Pond PC-2 and to fund one hundred percent of the cost of constructing Pond PC-1, which is also located off the project site. The August 14 communiqué also expresses the County's willingness to permit the construction of all stormwater management facilities proposed on County owned lands.

Comment 4.5-35 (Letter B-8 James M. Tierney, Watershed Inspector General, September 25, 2006): Project Construction on Sensitive Slopes and Soils**.** A significant number of the proposed retail structures, parking lots, and large water treatment basins are proposed to be constructed, all or in part, on steep slopes (over 15 %) and/or soils rated as ""severely restricted" (under the United States Natural Resources Conservation Service criteria) for the type of construction activity that is proposed. To limit excessive erosion and sedimentation (with associated pollutants), these sensitive areas should be avoided to a greater extent by adjusting and reducing the proposed Project's footprint. Heightened erosion and sediment controls should be engineered and specified in detail to address those sensitive areas that cannot be avoided. Additionally, the large septic leach field for the project is to be located in soils often characterized by high groundwater (1.5 to 2.5 feet below the surface). The DEIS must address in more detail how contact between raw sewage and groundwater will be avoided.

Response 4.5-35: *Refer to Responses 4.4-32 and 4.5-33. The potential impact on surface water resources, including New York City's public drinking water supply, that could result from disturbance of steep slopes relates primarily to sedimentation of the resources resulting from erosion of the disturbed soil on the slopes during construction. According to the New York State Standards and Specification for Erosion and Sediment Control, "diversion of surface water away from exposed soils provides the most economic and effective erosion control possible since it is more advantageous to control erosion at the source than to design controls to trap suspended sediment." Accordingly, the focus of the Patterson Crossing Retail Center Erosion and Sediment Control Plan is to prevent erosion through the diversion of runoff, rather than contain sediments that become mobile.*

Erosion will be prevented, in part, by providing temporary runoff diversions that will direct runoff away from exposed slopes and will reduce runoff velocities to non erosive limits elsewhere on the site. During construction, implementing the sequence of construction and phasing plan (See Overall Phasing Plan, Drawing SP4.1) and the Erosion and Sediment Control Plan will further reduce the potential for erosion. As specified in the Erosion and Sediment Control Plan (See Drawing SP4.2, SP4.3, and SP4.4, Sediment and Erosion Control Plan), these measures will serve as the primary means of avoiding sedimentation of water resources during construction of the project, will minimize the potential for soil erosion by limiting, and rapidly stabilizing, all areas disturbed during construction.

Implementing the proposed sequence of the construction and phasing plan included in the Erosion and Sediment Control Plan will further reduce the potential for erosion

(see Drawing SP4.1, Overall Sequencing Plan). The proposed sequencing plan, which divides construction into twenty-four separate phases, will limit the area of disturbed soil at any time, thereby reducing potential impacts associated with erosion, and subsequent sedimentation of on- and off- site water resources. The proposed sequencing also mitigates potential impacts on water resources by shortening the construction period and the length of time that any disturbed soils are subject to erosion.

During construction of the Patterson Crossing Retail Center project runoff from areas outside of disturbances would be diverted away from disturbed soils to further prevent impacts resulting from erosion and sedimentation. Temporary diversions will also be constructed in the internal road system to reduce runoff velocities and prevent erosion of the roadways under construction. This preventative approach will effectively control erosion and significantly reduce the potential for sedimentation that results from it, thereby ensuring that potential impacts on down-gradient receiving surface water resources, including the Middle Branch and East Branch Reservoirs, are fully mitigated.

To ensure effective implementation of the Erosion and Sediment Control Plan, it will be overseen by a Certified Professional Erosion and Sediment Control Specialist (CPESC)/Certified Professional in Stormwater Quality (CPSWQ), or other equally qualified professional, throughout the entire construction period.

As discussed in the DEIS, to assess and mitigate potential impacts on surface water associated with the proposed subsurface sewage treatment system (SSTS), a hydrogeological investigation/mounding analysis (DEIS Appendix E) was performed by GeoDesign on the project site. The analysis was based upon field investigations, review of existing data and preparation of a three-dimensional computer model using an 11,000 gallon per day sewage flow rate applied to the area of the proposed southern SSTS. The northern SSTS capacity was established at approximately 3,000 gpd The simulation for the site concluded that there will be no leachate breakout at the ground surface, there would be no leaching trench flooding, and that there would be a minimum three year travel time for the leachate to reach the nearest property line. Accordingly, operation of the SSTS is not expected to have an adverse impacts on surface water.

To further mitigate impacts associated with the SSTS, GeoDesign's hydrogeological investigation/mounding analysis report recommended that a minimum of two feet of sand-gravel fill be placed over the proposed treatment area to increase separation between the bottom of the leach fields and groundwater. That recommendation is incorporated into the SSTS design.

Recognizing that the project will be serviced by a SSTS with an engineered available capacity, project wastewater flows will be limited to the 11,400 gpd (11,000 gpd to the southern SSTS and 400 gpd to the northern SSTS) design flow. Future retail users will be required to generate only wastewater flows that are consistent with the flow projections for the project. In order to assure the project's wastewater design flow is not exceeded, the Applicant would agree to appropriate controls to assure each user's wastewater flows fit the project's design flows. One such control would require each specific user to present the Town Building Department with a

wastewater design flow at the time they apply for building permits, or with any change in occupancy. This will allow for the monitoring of design flow to assure that no user generates wastewater volume greater than the system design capacity. The Applicant notes that actual water and wastewater flow metering/monitoring will be required as part of the water and sewer permitting with the PCDOH, NYCDEP and NYSDEC. This metering/monitoring will provide an assurance that the actual project flows do not exceed the system design capacity, thereby further mitigating potential adverse impacts on surface water associated with excessive wastewater flows.

The Applicant notes that a series of soil tests were conducted for the proposed project. This series includes not only the initial borings in early 2004 which were conducted in order to determine general soil types and depth of rock throughout the cut portions of site, but a second series of borings that were conducted in late 2004 and 2005 relative to the analysis of the northern and southern SSTS area, and specifically in support of the mounding analysis performed for the SSTS. In addition, percolation tests and deep hole tests were performed in both the north and south SSTS areas. These test were witnessed by PCDOH and NYCDEP. The results of the testing is included in the appendix to the Wastewater Report which is included in this FEIS as Appendix H.

In addition, Deep hole tests were also performed in, or adjacent to, the proposed stormwater basin areas to assess the soils conditions in these areas. These too were witnessed by NYCDEP. Refer to FEIS Figure 4.5-7, Stormwater Testing Plan for test pit locations, and to the SWPPP for a summary of the testing conducted. In addition, soil conditions in the vicinity of basin 3.4 were confirmed through investigation of the exposed soil strata in the Concord Road drainage ditch.

Comment 4.5-36 (Letter B-8 James M. Tierney, Watershed Inspector General, September 25, 2006): Adverse Water Quality Impacts from the Expansion of Adjacent Roadways, Proposed by the Project Sponsor are Not Assessed. Many roadways in the vicinity of the proposed project are already congested under the State Department of Transportation rating system. The Project's sponsor identifies at least ten significant roadway expansion projects (new traffic storage lanes, turning lanes, exit ramp lanes) that will involve construction activity and new impervious surfaces, on Route 311, 52 and Interstate 84 exit ramps. One of these expansion projects would be on a causeway over the already highly polluted Lake Carmel. Route 311, in particular, would be expanded from two lanes to four and six lanes in a number of areas. The DEIS fails to conduct any analysis of the adverse impacts to water quality (construction cuts, new impervious surfaces, etc.) of expanding these roadways. Such an analysis must be included as part of the necessary "secondary impacts" analysis and include an assessment of associated phosphorus loadings to the Watershed.

Response 4.5-36: *As discussed in DEIS Section 4.8-8, and further discussed in FEIS Section 4.8, no new roads, or modifications to the causeway over Lake Carmel, are proposed as part of the Proposed Action. Of thirteen intersections studied (twelve existing and the proposed project access road from NYS Route 311), eight have been considered for improvement, four in the Town of Patterson and four in the Town of Kent. The intersections identified for potential improvement, as set forth in an April 27, 2007 memorandum to the Putnam County Department of Highways and Facilities*

(included in FEIS Appendix A, Correspondence) are discussed below and summarized in Table 4.5-4.

NYS Route 311 and NYS Route 164

NYSDOT advises that under the Transportation Improvement Plan (TIP) certain lane improvements have been identified as necessary at this intersection. These improvements will be funded by the State. It is expected that construction of the improvements by the State will be moved forward to coincide with the opening of Patterson Crossing Retail Center. These improvements are entirely under the NYSDOT's jurisdiction as Route 311 and 164 are both State roads.

NYS Route 311 and Fair Street (County Road 60)

The primary improvement at this intersection would be a right turn lane on Fair Street. This intersection is under the purview of NYSDOT.

NYS Route 311 and Westbound Ramp (Interstate 84, Exit 18) and NYS Route 311 and Eastbound Ramp (Interstate 84, Exit 18)

These two locations will be directly impacted by traffic traveling to and from the proposed retail center. The westbound ramp requires improvements under the Existing Condition. The Applicant will help fund either a new integrated signal system at both ramps with associated geometric improvements or a roundabout. The NYSDOT believes roundabouts are an excellent alternative due to decreased long-term maintenance costs. It should be noted that physical constraints limiting the amount of useable land in the area of these ramps could negate the use of this option. The NYSDOT has agreed that they will issue a work permit for a viable mitigation program at these two Intersections.

NYS Route 311 and Terry Hill Road (County Road 46)

Improvements would include a right hand turn lane and island

NYS Route 311 and NYS Route 52

Mitigation primarily involves retiming of the existing traffic signal and possible minor curb cut adjustments of NYS Route 311 to increase right turn lane storage. These improvements are under the purview of NYSDOT and do not involve additional impervious surface.

NYS Route 52 and Barrett Hill Road

Funding to improve this intersection with a left turn lane on NYS Route 52 is included in the NYSDOT TIP.

NYS Route 311 and Patterson Crossing Retail Center Access Road

This new three-way intersection will become the main access into the Patterson Crossing Retail Center site. The conceptual improvement plan includes a new traffic

signal and right and left hand turn lanes from NYS Route 311. The access road would have separate left and right turn lanes exiting the site.

Table 4.5-4 Intersection Improvement Summary	
Intersection	***Proposed Improvement Program***
NYS Route 311 and NYS Route 164	*NYSDOT adds geometrics (TIP) Applicant bonds signal ($100K)*
NYS Route 311 and Fair Street	*County adds right turn lane Applicant bonds signal ($100K)*
NYS Route 311 and Ludingtonville Road	*None*
NYS Route 311 and Westbound Ramp	*Applicant to participate in improving signal and turn lanes or traffic circle*
NYS Route 311 and Eastbound Ramp	*Applicant to participate in improving with signal and turn lanes or traffic circle*
NYS Route 311 and Ludington Court	*None*
NYS Route 311 and Longfellow Drive	*None*
NYS Route 311 and Terry Hill Road	*County adds signal, Terry Hill Rd. right turn lane/island & Harvard Dr. island*
NYS Route 311 and NYS Route 52	*NYSDOT to maintain and retime as necessary*
NYS Route 52 and Barrett Hill Road	*NYSDOT adds geometrics (TIP) Applicant bonds signal ($100K)*
NYS Route 52 and Horse Pound Road	*Kent Manor developer bonds center lane improvement*
Fair Street and Terry Hill Road	*None*
NYS Route 311 and Access Road	*Applicant participates in installation of signal and turn lanes*
Source: Tim Miller Associates, Inc., 2007.	

The proposed modification of State roads made by NYSDOT would be subject to the provisions of two existing Memoranda of Understanding, one between NYSDOT and NYSDEC and one between NYSDOT and NYCDEP. Under the terms of these agreements, NYSDOT would be required to comply with the erosion and sediment control and stormwater management provisions of GP-0-08-001, and of GP-93-06, which is incorporated by reference in the WR&R. By complying with State and City stormwater regulations, impacts associated with erosion resulting from construction activities and increases in post construction pollutant loading in stormwater from new impervious surfaces will be addressed.

Potential significant adverse impacts on surface water that could result from the noted safety improvements are expected to be further mitigated by the proposed on- and off-site stormwater management facilities that exceed any statutory requirements and that will reduce existing phosphorous loads in New York City's watershed.

Other secondary impacts associated with post construction increases in phosphorous, and other pollutants, are those that could result from additional pollutant loads in runoff from road improvements necessary to serve additional residential development generated by the proposed project. DEIS Chapter 8.0 addressed the potential for induced residential growth for the proposed project. The Patterson Crossing Retail Center is expected to generate approximately 488

permanent jobs, which are expected to be filled by individuals within a reasonable commuting distance to the project site. No significant secondary population increases that would generate increased development, and impervious roads to accommodate them, are expected to result from the Proposed Action. The Applicant notes that any development projects that did result from population increases would be subject to rigorous NYCDEP and NYSDEC regulations that require the development and implementation of SWPPPs that would reduce post construction increases in pollutant loading. As such, no adverse impacts on surface water resulting from increased pollutants in stormwater discharged from new, or expanded, roads are anticipated.

The Proposed Action has been enhanced and now includes proposed stormwater management facilities, beyond those required by NYCDEP and NYSDEC, that will treat runoff from portions of the Interstate 84 ramps, Route 311, the Putnam County Highways Facility, and Concord Road These practices, detailed in Appendix F of the SWPPP, will achieve an overall reduction in existing phosphorous loads of 7.66 lbs/yr in the New York City Watershed following construction of the project. Since any future residential development projects will be subject to New York State and City stormwater treatment requirements, the reduction in phosphorous loading that will result from treatment of runoff from the Interstate 84 ramps, Route 311, Concord Road, and the Putnam County Highways Facility, is expected to offset any potential increases in phosphorous resulting from unforeseen secondary growth that may occur. Based upon the revised site development plan, and the effectiveness of the on- and off-site measures now proposed, post construction phosphorous loads in the East Branch and Middle Branch Reservoirs are expected to be reduced from 10.08 lbs/yr to 9.46 lbs/yr and from 30.90 lbs/yr to 23.24 lbs/yr, respectively, following construction of the project.

The Applicant notes that stormwater basin 3.2 is currently proposed in the State owned NYS Route 311 Right of Way (ROW). Based upon communications with NYSDOT staff, the Applicant proposes to acquire from NYSDOT the land in the ROW on which the basin is located, and to construct and maintain the basin. However, the Applicant could also redesign the basin as necessary to gain NYSDOT approval, and upon approval of the revised design, construct the basin and dedicate the land on which it is located to the State, which would then own and maintain the basin. To gain NYSDOT approval of a revised basin design the Applicant would eliminate the pipe that discharges stormwater from Pond 3.1 to Pond 3.2 in accordance with NYSDOT's policy of not permitting discharges of stormwater from private developments into State owned stormwater management facilities. As a consequence of the redesign, stormwater from Pond 3.1 would not receive secondary treatment in Pond 3.2. However, the proposed project, including the proposed off-site treatment practices, would still result in an overall reduction in phosphorous loading in the Middle Branch Reservoir/Lake Carmel Watershed.

The Applicant has provided the NYSDOT copies of the project SWPPP and Site Plans to assist in the States review of the Proposed Action (see the letter from John Collins Engineers, P.C. Dated November 27, 2007 in Appendix A, Correspondence).

Comment 4.5-37 (Letter B-8 James M. Tierney, Watershed Inspector General, September 25, 2006): Assessment of Impact on "Total Maximum Daily Load" Pollution Budgets; Shifted Burden to Towns. Under federal and state regulations, the Towns of Kent and Patterson are responsible for reducing the existing phosphorus loadings to impaired area waterways. The DEIS fails to present the added phosphorus-reduction burden shifted to the Towns that would be associated with the Project itself and with associated secondary growth. The DEIS should identify how the Towns, or the Project's sponsor, will meet the TMDL obligation in the face of increased phosphorus loadings caused by proposed project.

Response 4.5-37: *Refer to Responses 4.4-4, 4.5-5, 4.5-26, 4.5-29, 4.5-30, and 4.5-36. Both the Middle Branch and East Branch Reservoir basins are designated in the WR&R as phosphorous restricted, and according to NYSDEC, are both exceeding the TMDL that NYSDEC assigned to them. As such, since the January 8, 2003 effective date of the New York State General Permit for Stormwater Discharges from Separate Municipal Stormwater Sewer Systems (GP-02-02), the Towns of Patterson, and Kent, and other municipalities in the two watersheds, have been required by NYSDEC to achieve substantial reductions in current phosphorous loads to the reservoirs. This obligation remains in effect under the provisions of GP-0-08-002 which replaced GP-02-02 on May 1, 2008.*

As noted, the burden for reducing additional post construction increases in phosphorous from the Patterson Crossing Retail Center site, which lies in the Middle Branch and East Branch Reservoir watersheds, rests with the Applicant. Accordingly, the project SWPPP specifies on site stormwater treatment measures that will reduce post construction phosphorous loads from the site to below pre-construction levels. In addition, as the comment suggests and as discussed below, the project has been revised and now includes additional stormwater treatment measures on and off the site to further reduce existing phosphorous loads unrelated to the proposed development. These measures are detailed in Appendix F of the revised Patterson Crossing Retail Center SWPPP (FEIS Appendix F).

As a NYSDEC regulated Municipal Separate Storm Sewer System (MS4), the Towns of Patterson and Kent, and other MS4s in the East Branch and Middle Branch watersheds, have the NYSDEC imposed burden to reduce current phosphorous loading to achieve the reservoir TMDLs. A program for achieving phosphorous reductions has been established in the March 2002 NYSDEC document entitled Interim Report Non Point Source Implementation of the Phase II Phosphorous TMDLs in the New York City Watershed Croton Reservoir System Phase II Phosphorous TMDL Nonpoint Source Implementation Plan (TMDL Implementation Plan). The TMDL Implementation Plan states that the plan is largely structured to use existing programs to achieve phosphorous reductions. Applicable to the East Branch and Middle Branch Reservoirs, these programs include:

- *Putnam County Croton Plans;*
- *NYCDEP Croton Strategy; and,*
- *NYCDEP East of Hudson Water Quality Investment Funds, including the Putnam County Septic Repair Program.*

The Applicant notes that the specific goal of the TMDL Implementation Plan, which was prepared in accordance with the January 1997 New York City Watershed Memorandum of Agreement and Section 303(d) of the Clean Water Act, is to reduce the phosphorus concentration in the eight reservoirs, including the East Branch and Middle Branch, listed in the Phase II Phosphorus TMDL as needing further phosphorus reduction than will be achieved by the wastewater treatment plant upgrades required by the WR&R.

*According to NYSDEC, a substantial part of the TMDL Implementation Plan relies on the Stormwater Management Plans (SWMPs) that MS4s were required to develop pursuant to GP-02-02. The permit applied to each municipality within the East of Hudson portion of the New York City watershed, which have been designated as MS4s, including the Towns of Patterson and Kent. NYSDEC has developed heightened requirements for the MS4s in the East of Hudson Watershed that, if the MS4s implemented as part of their Stormwater Management Programs (SWMP), they would have been presumed to be in compliance with the TMDL strategy requirements in Part III.B.2 of GP-02-02. Part III.B.2 required MS4s with discharges to an approved TMDL waterbody, such as the East Branch and Middle Branch Reservoirs, that were not meeting the TMDL stormwater (load) allocations to modify their SWMPs to ensure that the reduction of the phosphorous was achieved. The MS4 permit required that modifications to the SWMP be considered for each of the six minimum measures established in GP-02-02. Similarly, GP-0-08-002 requires permittees "*to *develop*, record, periodically assess and modify, as needed," *measurable goals* for each of the six minimum measures included in their SWMPs.*

The Implementation Plan also relies on non-point source projects selected by Putnam County and NYCDEP, and supported by NYCDEP East-of-Hudson Water Quality Investment Funds. To further help meet the TMDL, the plan also includes tasks to reduce phosphorus from agriculture, sanitary collection systems, fertilizer use and other phosphorus source controls.

As noted, according to the Implementation Plan, "NYSDEC remains committed to the development of a final implementation plan. The Phase II Phosphorus TMDLs identified eight NYC reservoirs as water quality limited and needing nonpoint (NPS) reductions. These reservoirs are in the Croton portion of the City watershed and are located east of the Hudson River. Thus, the timing of the final implementation plan will depend on the findings and completion of Croton Planning in Putnam and Westchester Counties, as well as the implementation of Phase II Stormwater Regulations and continued monitoring in the Croton Watershed."

In addition to the Implementation Plan, NYSDEC developed heightened requirements for the MS4s in the East of Hudson Watershed that, if the MS4s implemented as part of their SWMPs, they werepresumed to be in compliance with the TMDL Strategy requirements in GP-0-08-002. Part III.B.2 required an MS4 with discharges to an approved TMDL waterbody, such as the East Branch, that is not meeting the TMDL stormwater (load) allocations to modify its SWMP to ensure that the reduction of the phosphorous is achieved. The MS4 permit requires that modifications to the SWMP be considered for each of the six minimum measures established in GP-02-02. As noted, GP-0-08-002, which replaced GP-02-02 on May 1, 2008, requires permittees

"to develop, record, periodically assess and modify, as needed," measurable goals for each of the six minimum measures included in their SWMPs.

With the inclusion of the proposed on and off-site treatment measures that will reduce existing phosphorous loads, the Patterson Crossing Retail Center project is consistent with the TMDL Implementation Plan and applicable portions of the above-cited programs. Further, based on the effectiveness of the proposed on and off site treatment measures specified in the SWPPP in reducing post construction increases in phosphorous, the project will not impact the two Town's ability to achieve the established TMDL.

The revised project layout and stormwater management system have been specifically developed to reduce post-construction phosphorous loads from the site to below pre-development levels. Further, the proposed project now includes on-site and off-site stormwater treatment practices that reduce phosphorus loading to each of the two reservoir basins. The on-site stormwater will be treated by a series wet ponds shown on the plans that accompany this FEIS. To further reduce phosphorus loading to both of the reservoir basins, off-site wet ponds are now proposed to treat runoff from off-site drainage areas shown on FEIS Figure 4.5-4. The off-site improvements, which far exceed the requirements of federal, State, City, and municipal regulations, will treat currently untreated stormwater discharging from the residential development to the west of the project, a portion of NYS Route 311 and the exit ramps from Interstate 84, as well as the Putnam County Highways Facility. This approach to treating on and off site stormwater will advance the goals of the TMDL program and assist the towns in meeting their TMDL obligations. As noted, implementing the proposed project will achieve an overall reduction in phosphorous loading in New York City's drinking water supply watershed. The total post construction annual phosphorous load in the watershed is estimated to be 40.98 lbs/yr compared to the 32.70 lbs that discharge from the site, and the off site areas that will be treated following development of the site.

Stormwater runoff discharging to the Middle Branch Reservoir includes the runoff from the northern portion of the site including the access road, and the off site runoff from NYS Route 311 and Interstate 84, as well as the residential development north of Lake Carmel. As detailed in Appendix F of the SWPPP, Supplemental Phosphorous Loading Calculations, following treatment of runoff from these areas total annual phosphorus load discharging to the Middle Branch Reservoir would be reduced from 30.90 lbs to 23.24 lbs.

Stormwater runoff discharging to the East Branch Reservoir includes the majority of the stormwater runoff from the proposed development, as well as, the undeveloped hillside to the south of the proposed development. Existing runoff discharging to the East Branch Reservoir includes untreated stormwater from the PCHF. The treatment of stormwater at the PCHF now proposed will provide an overall reduction in phosphorus loading following construction of the project of 7.66 lbs./yr. Also detailed in FEIS Appendix F, annual phosphorus loads to the East Branch Reservoir would be reduced from 10.08 lbs. to 9.46 lbs following construction of the project.

Comment 4.5-38 (Letter B-8 James M. Tierney, Watershed Inspector General, September 26, 2006): Post Treatment Pollutant Loadings are Underestimated. A central element of any water quality analysis in the Watershed is a comparison of pre-development pollutant loadings to post-development pollutant loadings. (This assessment does not include the often significant pollutant loadings associated with sediment runoff from active construction sites; those loadings should be separately analyzed.) The DEIS incorrectly concludes that "post-development loads are approximately equal to or less than pre-development loads." DEIS at 1.7. This error is caused by the use of outdated methods to calculate pollutant loadings. Our calculations demonstrate a sizable increase in pollutant loadings, particularly in the pollutant of central concern: phosphorus.

Response 4.5-38: *Refer to Responses 4.5-4, 4.5-5, 4.5-26, 4.5-29, 4.5-30, 4.5-36, and 4.5-37.*

NYCDEP allows the use of either the pollutant loading coefficient method, or the simple method, in its SWPPP permitting program. NYCDEC does not require an analysis of pre-and post-construction pollutant loading to gain coverage under GP-0-08-001. The pre- and post- construction pollutant loading estimates for TP, TN, TSS, and BOD estimates in the Patterson Crossing Retail Center SWPPP (DEIS Appendix F) were made by a professional engineer licensed in the State of New York, using the NYSDEC pollutant loading coefficient method, as set forth in NYSDEC Reducing Impacts from New Development, as cited in GP-93-06, which is adopted by reference in WR&R. These estimates were recalculated based upon the revised site development plan, and reduction in impervious surfaces, and are provided in the revised SWPPP included in this FEIS as Appendix F.

In response to the comment, additional phosphorous loading calculations employing the site specific Simple Method are included in the Supplemental Phosphorous Loading Calculations included in FEIS Appendix F, SWPPP. Those calculations, were performed in conjunction with the 1996 Terrene Institutes publication A Watershed Approach to Urban Runoff to determine pollutant loading.

As discussed above, and detailed in Appendix F of the SWPPP, the proposed action has been enhanced to include on- and off-site stormwater treatment facilities beyond those required to satisfy NYCDEP and NYSDEC regulatory requirements. Based upon the reduced site development plan, revised SWPPP, and the additional on-and off-site stormwater treatment practices now proposed, post-construction phosphorous loads in both the East Branch and Middle Branch Reservoirs are expected to be significantly reduced following construction of the project.

The Applicant notes that to comply with, and gain coverage under, GP-0-08-001 an analysis of pre-and post-construction loading is not required. Instead, GP-0-08-001 requires treatment of the Water Quality Volume (WQv). By treating the WQv, as demonstrated in the Patterson Crossing Retail Center SWPPP (included as Appendix F in the DEIS and Appendix F in this FEIS), the stormwater treatment goals of NYSDEC are met.

Comment 4.5-39 (Letter B-8 James M. Tierney, Watershed Inspector General, September 25, 2006): Employ the "simple method" to calculate pollutant loading rather than outdated "coefficient method". Appendix C of DEIS used the "coefficient method" described in Reducing the Impacts of Stormwater Runoff from New Development (DEC 1992) to calculate pollutant loading for biochemical oxygen demand (BOD), total phosphorus (TP), and total nitrogen (TN). This method for calculating loading rates uses outdated data from 1983 (National Urban Runoff Program or "NURP" data) and inappropriate generic assumptions. In contrast, the "simple method" should be used to calculate pollutant loading in conjunction with the 1996 Terrene Institute's event mean concentrations for site specific impact analysis (A Watershed Approach to Urban Runoff). The simple method is site specific in that it employs local annual rainfall and actual runoff values for the subject area. We note that the Project sponsor's engineer, Insite Engineering, is familiar with these concerns and recently employed this up-to-date pollutant loading methodology with respect to the proposed "Camarda Park" recreational complex in the Town of Carmel.

Response 4.5-39: *Refer to Responses 4.5-4, 4.5-5, 4.5-26, 4.5-29, 4.5-30, 4.5-36, 4.5-37, and 4.5-38. Both the Simple Method (coefficients in Table 8 of Reducing the Impacts of Stormwater from New Development, 1992) (Reducing Impacts) and the Pollutant Loading Coefficient Method (Table 9 of the same document) are planning tools typically used to estimate pollutant loading for various surface coverage. As described in Reducing Impacts, the Simple Method (Schueler, 1987), which utilizes pollutant runoff coefficients obtained in the Washington, D.C. Area Nationwide Urban Runoff Program, may be used to predict pollutant loading for major land use categories. The method is primarily intended for use on development sites less than one square mile (640 acres) and "provides a quick and easy means of estimating pollutant loads within subwatershed." The method is meant for planning purposes only, and while according to Reducing Impacts, it sacrifices some precision for the sake of simplicity, it is considered precise enough to make reasonable and reliable nonpoint pollution management decisions at the site planning scale. The technique requires a modest amount of information, including the subwatershed drainage area and impervious cover, stormwater runoff pollutant concentrations, and annual precipitation. With the Simple Method, "the investigator can either break up land use into specific areas, such as residential, commercial, industrial, and roadway and calculate annual pollutant loads for each type of land, or utilize more generalized pollutant values for urban runoff."*

The pollutant loading coefficient method, as described in Reducing Impacts, also allows for an estimate of changes in pollutant loading using pollutant loading coefficients such as those included in the document. The use of the pollutant loading coefficients requires that the hydrologic soil groups of soils on the site be determined so that pollutant loading can be matched with the soils.

A revised pollutant loading analysis for the reduced development plan included in this FEIS was completed using the pollutant loading coefficient method to meet the requirements of New York City stormwater regulations. The analysis is included in the SWPPP (Appendix F) and indicates an overall reduction in phosphorus loads discharging from the site in the proposed condition for all of the design points. In addition to that analysis, the "Simple Method" was used to calculate pre-and post-construction phosphorus loading as requested in the comment. The Simple Method was used in conjunction with the 1996 Terrene Institutes publication A

Watershed Approach to Urban Runoff for a site-specific method for determining pollutant loading.

The revised project layout and stormwater management system have been specifically developed to reduce post-construction phosphorous loads from the site to below pre-development levels. The proposed stormwater treatment practices now included in the project reduce phosphorus loading to each of the two reservoir basins. The on-site stormwater will be treated by a series wet ponds shown on the plans that accompany this FEIS. To further reduce phosphorus loading to both of the reservoir basins, off-site wet ponds are now proposed to treat existing runoff from off-site drainage areas shown on FEIS Figure 4.5-4. The off-site improvements include measures to treat currently untreated stormwater from the residential development to the west of the project, a portion of NYS Route 311 and the exit ramps from Interstate 84, as well as the nearby Putnam County Highways facility. This approach to treating on-and off-site stormwater will advance the goals of the TMDL program and assist the towns in meeting their TMDL obligations.

The project enhancements include off-site stormwater treatment facilities as detailed in the December 21, 2007 SWPPP. Based upon the revised site development plan, Simple Method calculations included in the revised SWPPP, and the additional on and off-site stormwater treatment measures now proposed, post-construction phosphorous loads in both the East Branch and Middle Branch Reservoirs are expected to be significantly reduced following construction of the project.

The stormwater runoff discharging to the Middle Branch Reservoir includes the runoff from the northern portion of the site including the access road, and the off site runoff from NYS Route 311 and Interstate 84, as well as the residential development on Concord Road north of Lake Carmel. As detailed in Appendix F of the SWPPP, annual phosphorus loads discharging to the Middle Branch Reservoir, as calculated with the Simple Method, would be reduced from 30.90 lbs to 23.24 lbs.

Stormwater runoff would discharge to the East Branch Reservoir from the majority of the proposed development, as well as, the undeveloped hillside to the south of the proposed development. Stormwater flows to the East Branch Reservoir would also include treated stormwater from the proposed offsite improvements at the PCHF. The PCHF is a commercial site within the East Branch Reservoir Basin that is in close proximity to the subject project. The proposed treatment of stormwater at the PCHF will provide an overall reduction in phosphorus loading following development of the project. As further detailed in Appendix F, SWPPP, annual phosphorus loads to the East Branch Reservoir, as calculated with the Simple Method, would be reduced from 10.08 lbs. to 9.46 lbs following construction of the project.

Comment 4.5-40 (Letter B-8 James M. Tierney, Watershed Inspector General, September 25, 2006): The pollutant loading reduction calculations presented in the DEIS for annual loads are underestimated. The reduction in pollutant loads for runoff traveling through a series of stormwater treatment practices or technologies was incorrectly calculated in the DEIS, as it assigned to each practice in the series an equal pollutant removal efficiency. However, each practice in the series or in a treatment train does not provide equal pollution reduction. This is because the first practice removes the heavier particulate pollutants, whereas the second practice is left to treat the smaller or more colloidal or dissolved

pollutants that settle out more slowly, if at all. In other words, if two identical stormwater treatment practices (e.g., water detention basins) are situated one tributary to the other, the second basin will not remove the same amount of pollutants as the first. As a result, there is a decreasing efficiency with each succeeding practice in a series. Using the more appropriate formula found in Appendix A in the NYS Stormwater Design Manual (August 2003), we re-calculated the pollutant loadings associated with one of the sub-basin areas covering only a portion (38%) of the Project site: "Sub-Area 1.1S." Table 1 provides the pollutant loads for Sub-Area 1.1S using the outdated "coefficient method" that appears in the DEIS.

Table 1: Pollutant Loading Calculated Using the Coefficient Method: Sub-Area 1.1S

	TSS	BOD	TP	TN
Pre-Development Load (pounds)	3,265	328	6.9	87.3
Post-Development Load (pounds)	19,679	4,322	43.5	367.4
Remaining Post Treatment (pounds)	157	951	9.6	188
Percent Increase	--	190%	41%	115%

Table 2 provides the pollutant loads for the same sub-area using the more appropriate "simple method".

Table 2: Pollutant Loading Using the Simple Method: Sub-Area 1.1S

	TSS	BOD	TP	TN
Pre-Development Load (pounds)	1,908	526	8.6	99
Post-Development Load (pounds)	14,267	3,912	61.5	560
Remaining Post Treatment (pounds)	114	861	13.5	287
Percent Increase	--	64%	57%	190%

For Sub Area 1.1S, the total removal efficiency that can be expected from the proposed series of treatment practices from Basin 1.1 to Basin 1.2 to Basin 1.4 is 78% for both total phosphorus (TP) and biochemical oxygen demand (BOD), and 48.8% for total nitrogen (TN) under the simple method. Therefore, approximately 22% of the phosphorus traveling through the treatment basins will not be "captured", will leave the Project site and enter the Watershed. In the 1.1S basin alone, this amounts to an annual increase of 4.4 pounds of phosphorus or a 57 % increase above natural conditions from just a portion of the Project site. Given that the phosphorus loads are already too high, this increase is very significant. Regardless of the method employed, the post-development analysis shows a significant increase in total phosphorus and nitrogen. A re-calculation of pollutant loadings should be undertaken for the entire site employing the simple method. The Project sponsor's assertion that pollutant loadings pre- and post-development are "approximately equal" is incorrect and needs to be revised in the supplemental DEIS we recommend.

> ***Response 4.5-40:*** *Refer to Responses 4.5-4, 4.5-5, 4.5-26, 4.5-29, 4.5-30, 4.5-36, 4.5-37, and 4.5-38. A pollutant loading analysis for the proposed development was completed using the pollutant loading coefficient method to meet the requirements of New York City's stormwater regulations. This pollutant loading analysis is included in the SWPPP (Appendix F). The calculations show an overall reduction in phosphorus loads discharging from the site in the proposed condition for all of the design points. In response to the comment, additional calculations of pre- and post-construction phosphorous loads were performed with the Simple Method. The Simple Method used in conjunction with the 1996 Terrene Institutes publication "A Watershed*

Approach to Urban Runoff" is a site-specific method for determining pollutant loading. These calculations, included in Appendix F of the Patterson Crossing Retail Center SWPPP, Supplemental Phosphorous Calculations (Simple Method), demonstrate an overall reduction in annual post-construction phosphorous loading in the New York City Watershed of 7.26 lbs.

With respect the pollutant removal efficiency of stormwater practices in series, the equation contained in Appendix A of the Manual allows for the calculation of the composite pollutant removal by a treatment train. The equation serves to reduce the pollutant load as it proceeds through the train, not the efficiency of the stormwater management practice.

To clarify: *Assume a pollutant load of 10 lb (L)*

Assume the first SMP in train has a removal efficiency of 50 percent (E_1)

Assume the second SMP in train has a removal efficiency of 40 percent (E_2)

Using the NYSDEC equation: $R = L[(E_1) + (1-E_1) E_2]$

$R = 10[(0.5) + (1-0.5) 0.4] = 7$ lb of pollutant removed by train

The same calculation without combining the math produces the following:

For the 1st SMP: *$R_1 = (L_1) (E_1)$*

$R_1 = (10) (0.5) = 5$ lb of pollutant removed by 1st SMP

The load passed to 2nd SMP, call it L_2, is $L - R_1$ or $10 - 5 = 5$ lbs

For the 2nd SMP: *$R_2 = (L_2) (E_2)$*

$R_2 = (5) (0.4) = 2$ lb of pollutant removed by 2nd SMP

Total Removal: *$R = R_1 + R_2$*

$R = 5 + 2 = 7$ lb of pollutant removed by train

Comment 4.5-41 (Letter B-8 James M. Tierney, Watershed Inspector General, September 25, 2006): Similarly, the DEIS identifies ten, often significant, roadway expansion projects that the Project's sponsor assumes will be undertaken by State DOT (e.g. , additional turning lanes, traffic storage lanes, exit ramps lanes, etc.) These include work at Route 52 and Route 311, Terry Hill Road and Route 311, Fair Street and Route 311, I-84 westbound and Route 311, I-84 eastbound and Route 311, Route 164 and Route 311, Route 52 and Barrett Hill Road, Route 52 and Horse Pound Road, Route 52 and Terry Hill Road, and Route 52 and Longfellow Drive. DEIS at 4.8-45 and 4.8-46. The DEIS must also fully assess the extent of construction disturbances, new impervious surfaces and pollutant loadings associated with this proposed secondary growth or any other secondary growth identified by a qualified professional planner.

Response 4.5-41: *Refer to Response 4.5-36. As noted, no new roads, or modifications to the causeway over Lake Carmel, are proposed as part of the proposed project. Eight of the thirteen intersections studied during preparation of the DEIS were determined to potentially warrant safety improvements. These potential improvements, described in the April 27, 2007 memorandum to the Putnam County Department of Highways and Facilities included in FEIS Appendix A, Correspondence, include:*

- *A right turn lane at NYS Route 311 and Fair Street;*
- *Lane improvements at NYS Route 311 and Route 164;*
- *Turn lanes or traffic circle at NYS Route 311 and the east and west bound lanes of Route 84;*
- *A turn lane/island at NYS Route 311 and Terry Hill Road; and*
- *Turn lanes at NYS Route 311 and the access to the project site.*

The proposed modification of State Route 311 by NYSDOT would be subject to Memoranda of Understanding between NYSDOT and NYSDEC and between NYSDOT and NYCDEP. Under the terms of these agreements, NYSDOT would be required to comply with the erosion and sediment control and stormwater management provisions of GP-0-08-001 and the WR&R. By complying with these regulations, impacts associated with erosion and sedimentation and increases in post-construction pollutant loading in stormwater from construction activities, and new impervious surfaces, will be addressed.

Comment 4.5-42 (Letter B-8 James M. Tierney, Watershed Inspector General, September 25, 2006): The DEIS does not account for compliance with TMDL pollution budget requirements, potentially shifting a significant burden to the Towns of Kent and Patterson. As discussed, additional phosphorus pollutant loadings will result directly from the construction of the proposed Project, as well as secondary growth associated with new employees and the likely pressure for roadway expansion. Moreover, the East Branch and Middle Branch Reservoirs are already significantly impaired by excess phosphorus. Under the Clean Water Act's TMDL program and the municipal storm sewer system (MS4) stormwater pollution program, the Towns of Kent and Patterson are responsible for undertaking extensive efforts to reduce phosphorus loadings into these reservoirs. The proposed Project, however, had a high likelihood to add phosphorus to the Watershed above existing levels, and therefore, shift significant additional pollutant reduction burdens to the Towns. To address this situation, the DEIS should develop a detailed and quantified program by the Project sponsor to reduce all additional phosphorus loadings associated with the Project, including, as necessary, project re-design and off-site phosphorus reduction projects.

Response 4.5-42: *Refer to Responses 4.5-4, 4.5-5, 4.5-26, 4.5-29, 4.5-30, and 4.5-36, 4.5-37, and 4.5-41. As noted, NYSDEC General Permit for Municipal Separate Stormwater Sewer Systems (GP-0-8-002) places the burden for reducing current phosphorous loading, to achieve the New York State established TMDLs in the East Branch and Middle Branch Reservoirs, with the Towns of Patterson and Kent and other Municipal Separate Stormwater Sewer Systems (MS4s) in the two watersheds.*

Some 62 acres of the Patterson Crossing Retail Center site occupies 0.13 percent of, New York City's 75 square mile, 48,000 acre, East Branch Reservoir Watershed. Some 28 acres of the site occupies 0.20 percent of the City's 21 square mile, 13,440 acre, Middle Branch Reservoir Watershed.

As noted previously, the burden of reducing additional post-construction increases in phosphorous from the Patterson Crossing Retail Center site, which lies in the TMDL Middle Branch and East Branch Reservoir watersheds, rests with the Applicant. Accordingly, the project specific SWPPP (Appendix F) specifies stormwater treatment measures that will reduce post-construction phosphorous loads from the site to below pre-construction levels. In addition, as the comment suggests and as discussed below, the project has been revised and now includes additional proposed measures detailed in the Appendix F of the SWPPP, to further reduce existing phosphorous loads, in both TMDL watersheds, that are not generated by the proposed development.

The redesigned Patterson Crossing Retail Center project includes a detailed and quantified program to reduce all additional phosphorus loadings associated with the Project, as well as existing phosphorous loading at off site locations. Project revisions resulting from its redesign are consistent with, and comply with, the TMDL program. Based on the effectiveness of the on- and off-site stormwater treatment measures detailed in the SWPPP, the project will result in a total annual reduction of some 7.26 pounds of phosphorous currently discharging in the City's two reservoir watersheds. As such, the project will relieve some of the burden imposed on the two towns to meet the TMDL established by NYSDEC.

Comment 4.5-43 (Letter B-8 James M. Tierney, Watershed Inspector General, September 25, 2006): Remove storm water basins from steep slopes. The construction of a number of large stormwater management basins are proposed for the steep sections of the Project site in excess of a 15% slope. These must be relocated to flatter land. As specified in Table 7-2 of the NYS Stormwater Management Design Manual (August 2003), stormwater management basins are not to be constructed on slopes that exceeds 15%.

Response 4.5-43: *Refer to Response 4.6-35. Table 7-2 in the Manual evaluates the effect of slope on certain stormwater management practices, including stormwater basins like those proposed at the Patterson Crossing Retail Center. Specifically, the slope guidance refers to how flat an area where a practice is installed must be. To achieve compliance with the guidance, the areas on the Patterson Crossing Retail Center site in which the proposed basins are located will be regraded to slopes considerably less than 15 percent prior to the construction of the basins.*

Comment 4.5-44 (Letter B-8 James M. Tierney, Watershed Inspector General, September 25, 2006): Limit all development on steep slopes. A comparison of drawing no. SP-1 (overall site plan) with figure 4.2-1 (soils map) and Figure 4.3-3 (slope disturbance map) shows extensive construction on slopes over 15%, including: (i) stormwater management basins 3.1 and 3.2; (ii) significant portions of buildings H and I, with associated parking; large portions of building A, its access road and parking lot. Significant amounts of slopes over 25% are also slated to be disturbed in these areas.

In sensitive watersheds, it is best to avoid construction on slopes that exceed 15 percent. Slopes exceeding 15 percent are designed as "steep slopes" by the New York State Erosion Control Manual. Slope influences the retention and movement of water, the potential for soil slippage, accelerated erosion, the ease with which machinery can be used and the engineering uses of soils. Given the sensitivity of the site, we recommend that extra stabilization measures be undertaken on slopes of 10 percent and that very limited construction be allowed on slopes 15 percent. It has been our experience that the construction on steep slopes often results in large stormwater erosion events during construction activity, even where a full stormwater pollution plan is being implemented.

Response 4.5-44: *Refer to Responses 4.4-13, 4.5-15, 4.5-32, 4.5-33, 4.5-35, 4.5-37, and 4.5-43. A review of the slope maps provided in the DEIS reveals that the area where the proposed retail development is sited consists largely of lands that are less than 15 percent slopes. There are minor areas (16.4 acres) on the site that are occupied by slopes of 15 percent or greater, but the majority of the land to be developed, 53.86 acres of the 63.15 acres, (outside of the proposed access road) are gently sloping. DEIS Table 4.5-1, which has been revised and is included below as Table 4.5-5, identifies the acreage occupied by each slope category and the extent of proposed disturbance of each category. The Applicant notes that only 10.3 acres of slopes equal to or exceeding 15 percent would be disturbed. The Erosion and Sediment Control Plan included in the Patterson Crossing Retail Center SWPPP specifies measures from the New York State Standards and Specifications for Erosion and Sediment Control to prevent erosion and sedimentation resulting from disturbance of these slopes, and for stabilization of these slopes. These measures include diversion of runoff from these slopes and immediate stabilization of the slopes.*

Table 4.5-5
Existing Slopes and Slope Disturbances

Slope Category	Areas of Existing Slopes (Acres)	Proposed Slope Disturbance (Acres)
0% to 8%	39.2	31.66
8% to 15%	28.8	21.19
15% to 25%	16.4	8.51
>25%	6.1	1.8
Total Site Disturbance		63.15

Source: Insite Engineering, Surveying & Landscape Architecture, P.C., 2007

As previously noted, the potential impact on surface water resources that could result from disturbance of steep slopes relates primarily to sedimentation of the resources resulting from erosion of the disturbed soil on the slopes during construction. To mitigate those potential impacts, the Patterson Crossing Retail Center Erosion and Sediment Control Plan focuses on preventing erosion through the diversion of runoff, rather than containment of sediments that become mobile. The New York State Standards and Specification for Erosion and Sediment Control specifies that "diversion of surface water away from exposed soils provides the most economic and effective erosion control possible since it is more advantageous to control erosion at the source than to design controls to trap suspended sediment."

Providing the temporary runoff diversions specified in the Patterson Crossing Erosion and Sediment Control Plan will direct runoff away from exposed steep slopes and will reduce runoff velocities to non erosive limits elsewhere on the site. Implementing the proposed sequence of construction and phasing plan included in the Erosion and Sediment Control Plan will further reduce the potential for erosion and sedimentation during construction on any steep slopes. As specified in the Erosion and Sediment Control Plan. (See Drawings SP4.1, SP4.2, SP4.3, and SP4.4, Overall Phasing Plan and Sediment and Erosion Control Plans, respectively), these measures will serve as the primary means of avoiding sedimentation of water resources during construction of the project.

Implementing the proposed sequence of the construction and phasing plan included in the Erosion and Sediment Control Plan will further reduce the potential for erosion (see Drawing SP4.1, Overall Sequencing Plan). The proposed sequencing plan, which divides construction into twenty-four separate phases, will limit the area of disturbed soil at any time, thereby reducing potential impacts associated with erosion and sedimentation of on, and off, site water resources. The proposed sequencing also mitigates potential impacts on water resources by shortening the construction period and the length of time that any disturbed soils are subject to erosion. By reducing the areas of disturbance, and the time that disturbed soils are subject to erosion, through implementation of the phasing plan, potential impacts on surface water resources associated with erosion, and subsequent sedimentation that must be contained, will be adequately mitigated.

To ensure effective implementation of the Erosion Control Plan included in the SWPPP (FEIS Appendix F), it will be overseen by a Certified Professional Erosion and Sediment Control Specialist (CPESC)/Certified Professional in Stormwater Quality (CPSWQ), or other equally qualified professional throughout the entire construction period.

Comment 4.5-45 (Letter B-8 James M. Tierney, Watershed Inspector General, September 25, 2006): Provide a detailed plan for clearing grubbing waste disposal. The current, undeveloped project site is predominately wooded land. The clearing and grubbing of this site would generate large quantities of waste materials (e.g., brush, sod, and stumps). There is no mention in the DEIS of how this material will be handled or managed. If the waste material is to be buried onsite, an erosion and sediment control plan needs to be developed to account for additional deforestation and to address newly created stormwater concerns.

Response 4.5-45: *Debris generated during clearing and grubbing will removed from the site. An Erosion and Sediment Control Plan has been developed for the project and is included in the Patterson Crossing Retail Center SWPPP (FEIS Appendix F). Pursuant to that plan, the total area of clearing and grubbing, and the storage of debris from those activities on the site, will be limited during construction to those areas shown on the Overall Phasing Plan (Drawing SP-4.1).*

Comment 4.5-46 (Letter B-8 James M. Tierney, Watershed Inspector General, September 25, 2006): A revised schedule to stabilize soil with vegetative cover is needed. There are a number of statements in the DEIS that prescribe seeding on disturbed soils at different times. They vary from immediately to seven days to fifteen days. We recommend that the word "immediately" be replaced with "within 24 hours". In addition, we recommend that all other graded slopes be seeded within seven days, due to the sensitivity of the NYC drinking water supply and the presence of wetlands downslope. Seeding after fifteen days exceeds the fourteen days allowed in the State DEC State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activity (Permit No. GP-02-01).

> ***Response 4.5-46:*** *The term "immediately" has been replaced with "within 24 hours" Pursuant to the Town of Patterson Code, and the comment The Applicant has revised the SWPPP (Appendix F) to indicate, that stabilization will take place within 7 days after the construction activity in any portion of the site has temporarily or permanently ceased in accordance with a Town of Patterson requirement. That requirement will not apply when the installation of stabilization measures after construction activity temporarily or permanently ceased is precluded by snow cover or frozen ground conditions, stabilization measures shall be initiated as soon as practicable, or where construction activity on a portion of the site is temporarily ceased, and earth-disturbing activities will be resumed within twenty-one (21) days, temporary stabilization measures will not be initiated on that portion of the site."*

Comment 4.5-47 (Letter B-8 James M. Tierney, Watershed Inspector General, September 25, 2006): Provide design details for stormwater management practices. A table should be placed on the construction drawings indicating the important design attributes of each stormwater management practice showing design elements, elevation, and volumes required. This includes volumes for water quality treatment, pre-treatment, detention, and a listing of important elevations, such as inlet inverts, outlet inverts and over flow crest elevations.

> ***Response 4.5-47:*** *The project plans submitted with the DEIS were, in conjunction with the DEIS and its appendices, sufficiently detailed to complete the analysis of impacts on surface water resources, including potential impacts on the New York City drinking water supply. A table summarizing the proposed stormwater pond attributes has been added to drawings. Specific information that is included in the SWPPP (FEIS Appendix F), and relied upon to complete the stormwater facility designs, will be provided in tabular form on a plan sheet.*

Comment 4.5-48 (Letter B-8 James M. Tierney, Watershed Inspector General, September 25, 2006): Employ proper standards when designing sediment traps. All temporary sediment traps are required to meet the volume and drainage area limits for their use pursuant to NYS Erosion and Sediment Standards and Specifications (August 2005). Stormwater management facilities used during construction operations should be designed using construction runoff factors, which consist of: (i) the construction condition runoff curve number; and (ii) the construction runoff time of concentration. Typically, the results for erosion and sediment control practices from this analysis will be greater than those calculated for the post-developed condition runoff and will require additional site controls. These additional calculations and associated site controls need to be presented in the DEIS.

Response 4.5-48: *Refer to Response 4.4-14. As stated in the SWPPP the stormwater ponds will act as temporary sediment basins during construction of the project.The calculations in the SWPPP demonstrate that the seven proposed stormwater basins have been sized in accordance with the New York State Standards and Specifications for Urban Erosion and Sediment Control.*

Comment 4.5-49 (Letter B-8 James M. Tierney, Watershed Inspector General, September 26, 2006): The times of concentration that were used in the computer program (HydroCAD7.10) are not documented in the DEIS. An accurate time concentration is needed to assure that excessive or erosive flows do not impact downstream reaches. The calculations for the times of concentration and their flow paths need to be shown and validated in the DEIS.

Response 4.5-49: *The time of concentration calculations are included in the HydroCAD analysis included in Appendix A and B of the SWPPP.*

Comment 4.5-50 (Letter B-8 James M. Tierney, Watershed Inspector General, September 25, 2006): The computer output for the Sub-catchment PRE 3 lists 6.5 acres of impervious area. However, this impervious area does not appear to be included in the drainage area delineated on Map 2 in Appendix A. This discrepancy needs to be addressed in the DEIS.

Response 4.5-50: *Figures 2 and 3 of the SWPPP have been revised to clearly show the limits of the off-site impervious area, including New York State Route 311 and Interstate 84.*

Comment 4.5-51 (Letter B-8 James M. Tierney, Watershed Inspector General, September 25, 2006): According to the computer output, Pond 1.4 will discharge stormwater at a rate of approximately 10 cubic feet per second for the 10 year storm event down a slope of 26%. The DEIS does not present any information to assure that the pond outlet is stable. This issue needs to be addressed in the DEIS.

Response 4.5-51: *Potential adverse impacts anticipated from uncontrolled discharge of stormwater discharge on a slope are limited to erosion and subsequent sedimentation of water resources. To mitigate this potential impact a stabilized outlet, as detailed on sheet D-2 of the construction plans that accompany this FEIS, is proposed at the discharge point from Pond 1.4. The rip-rapped outlet has been designed in accordance with the Manual and will prevent erosion at the point stormwater discharges from the pond in a 100 year rainfall event.*

Comment 4.5-52 (Letter B-8 James M. Tierney, Watershed Inspector General, September 25, 2006): Drawing D-4 shows a surface sand filter (F-1) but it does not identify where it is to be placed on the project; nor are there any design computations supporting this practice. The SWPPP must include its location and all of the design calculations, both hydrologically and sizing, to support its selection and use.

Response 4.5-52: *The sand filter depicted on Drawing D-4 is not proposed and has been removed from the drawing.*

Comment 4.5-53 (Letter B-8 James M. Tierney, Watershed Inspector General, September 25, 2006): Following the NYS Stormwater Design Manual (August 2003), a P-5 pocket pond was designed for Basin 3.4. The pond is located on the northwest part of the project and its purpose is to control stormwater runoff from off site. This pocket pond is designed to have its permanent pool supplied by groundwater, as it intercepts the water table. A test pit should be excavated at the center of the proposed pond to assure that this practice will achieve its purpose.

Response 4.5-53: *Refer to Response 4.5-24.*

Comment 4.5-54 (Letter B-9 Christopher M. Wilde, Staff Attorney & Watershed Program Director, William Wegner Watershed Analyst, September 25, 2006): DEIS Table 4.5-6 predicts potential increases in BOD, TP, and TN at Design Points 1 and 3, and a 1,411-lb/year increase in TSS at Design Point 2. The post development pollutant loadings are expressed as a range of expected loadings. Although the lower limits for Design Points 1 and 2 are below pre-development loadings for TP, TN, and TSS, the upper limits exceed pre-development loadings. Without an expressed post-development median loading, there is no way to predict where within the range the loadings most often occur. Therefore, the applicant's claim that post-construction levels of TP, TN and TSS are significantly reduced at these design points is not supported by the information provided in the DEIS.

Response 4.5-54: *Refer to Responses 4.5-4, 4.5-5, 4.5-26, 4.5-29, 4.5-30, and 4.5-36, 4.5-37, and 4.5-41.*

Comment 4.5-55 (Letter B-9 Christopher M. Wilde, Staff Attorney & Watershed Program Director, William Wegner Watershed Analyst, September 25, 2006): In addition to the Middle Branch Croton River, The DEIS identifies five NYCDEP-regulated watercourses on the project site. Although the applicant claims that "no changes are proposed to existing streams on the site," Drawing SP-1 identifies a NYCDEP-regulated stream in which the applicant proposes to site three stormwater detention basins. The DEIS notes conditions of channel erosion and biological inactivity in what appears to be the stream in question;[32] However, it is highly counterintuitive to attempt to restore stream function by siting detention basins within a stream channel and its adjacent buffer area.

Response 4.5-55: *Refer to Responses 4.5-11 and 4.5-25. The eroding drainage channel that conveys stormwater from Concord Road has been flagged by NYCDEP as a watercourse. However, it does not function as a stream as it is intermittent, and is somewhat barren compared to a traditional stream that is more gently sloping and continuously wet. Its primary function is to convey stormwater down a steep slope.*

Though treatment of stormwater from Concord Road is not required to comply with NYSDEC and NYCDEP regulations, the stormwater flow in the channel will be piped to proposed micropool extended detention pond 3.4P for treatment. Following treatment in the pond the stormwater will be discharged back into the NYCDEP flagged watercourse. The proposed project has been revised to relocate the initially proposed ponds and eliminate all proposed disturbance of the channel.

Comment 4.5-56 (Letter B-9 Christopher M. Wilde, Staff Attorney & Watershed Program Director, William Wegner Watershed Analyst, September 25, 2006): Drawing SP-1 labels one detention basin "Lake Carmel Stormwater Improvement Area" and notes that this basin is intended to improve the quality of stormwater runoff from Concord Road. This would be better accomplished with conventional stream restoration practices than by fragmenting the stream with three stormwater management basins. The basins will displace not only reaches of the natural stream channel but adjacent buffer areas as well. Buffers provide transitional areas that intercept stormwater before it reaches streams or other aquatic habitat. Buffers maintain or improve water quality by trapping sediment and other pollutants; they also reduce thermal impacts (shade), process nutrients uptake, provide infiltration, reduce erosion, and restore and maintaining the chemical, physical and biological integrity of water resources." The DEIS alludes to proposed stream channel improvements, which may provide some water quality benefits. But restoration of the regulated stream and buffer functions will not be accomplished by fragmenting the stream and buffer with three stormwater detention basins. Accordingly, the applicant should be required to site the stormwater management practices elsewhere on the project site and perform any restoration work necessary to ensure that no eroded sediments are exported from the site.

> ***Response 4.5-56:*** *Refer to Responses 4.5-2 and 4.5-55. Field inspections of the severely eroded channel that is the subject of the comment have confirmed that the channel formed as a consequence of stormwater discharges from Concord Road. Nonetheless, the project has been amended to eliminate all proposed disturbance of the channel.*

Comment 4.5-57 (Letter B-9 Christopher M. Wilde, Staff Attorney & Watershed Program Director, William Wegner Watershed Analyst, September 25, 2006): Reduction of paved areas to accommodate the stormwater basins may be accomplished by constructing a multistory parking garage even a two-story parking facility would reduce the footprint of the parking lot area by half.

> ***Response 4.5-57:*** *As noted, the proposed Patterson Crossing Retail Center development plan has been revised to reduce impervious surfaces on the project site. The area of proposed impervious surfaces has been reduced from the 32.26 acres previously proposed at the time the DEIS was accepted to 31.00 acres under the plan presented in this FEIS. The Applicant seriously considered a multistory parking facility. As documented in the DEIS, a multistory parking garage would add significant cost ($15 to $30 million) to the development of the retail center. An economic analysis is not required to show that the economics of the project would not bear out the additional cost of such a parking facility without an approach to offset those added costs. To that end, one option considered by the Applicant included an increase in the lease rate for the future tenants. The increase in rents would result in a significantly less viable project. It is for this reason that structured parking is rarely built outside of urban centers.*
>
> *The best approach to offset these cost would be to increase the gross leasable floor area. Under this alternative, the area from which parking is removed would be used to site the additional retail space. With little or no net benefit in area of disturbance (similar impacts to existing vegetation and habitat and decrease in impervious surface) between this alternative and the Proposed Action increased construction and maintenance costs, and increase in the use of materials and natural resources to*

construct the garage and increased visual impacts, the Applicant believes that incorporation of a multistory parking garage is not feasible.

Comment 4.5-58 (Letter C-1 Carol F Arnold , September 21, 2006): There will be new pollutants introduced - especially worrisome to nearby homeowners - due to the construction activities and there will thereafter be harmful fumes from many delivery trucks and cars on the site. When construction begins, with all the vast disturbances to the site, the danger to Lake Carmel and to our wells from the run-off is a real threat.

Response 4.5-58: *Refer to Responses 4.5-4, 4.5-5, 4.5-26, 4.5-29, 4.5-30, and 4.5-36, 4.5-37, and 4.5-41.*

Based on the analysis conducted per the requirements of the project Scope, the DEIS concludes that there would be no impact to air quality resulting from the construction or operation of the Proposed Action.

Comment 4.5-59 (Letter C-9 Joan Castiner, September 25, 2006): Why are the proposed sewer pumps and storm water basins on Kent property? Who maintains the storm basins? There is talk of storm runoff being corrected, however, it seems like it is a Patterson problem, not a Town of Kent problem.

Response 4.5-59: *The seven stormwater basins, four of which are located entirely in the Town of Patterson, are proposed on the lower elevations of the project site to allow for the collection and treatment of stormwater. Operation and of the basins will be the responsibility of a property management maintenance company engaged by the property owner and will not be the responsibility of either Town. The proposed wastewater pumps are sited in a location that will allow for distribution of the septic effluent in the proposed subsurface sewage disposal system.*

Currently, untreated stormwater from Concord Road flows northerly across the project site in an eroding channel before entering the Middle Branch Croton River in the northwest corner of the project site in the Town of Kent. The river conveys untreated stormwater from Concord Road, along with untreated runoff from NYS Route 311 and Interstate 84, to Lake Carmel and then to the Middle Branch Reservoir. The proposed project includes the construction of three stormwater treatment ponds that will treat stormwater from Concord Road, NYS Route 311 and Interstate 84, prior to its being discharged to the river and Lake Carmel. The calculations included in the SWPPP demonstrate that the proposed treatment will reduce existing pollutants, including phosphorous, in the stormwater and help the Town of Kent meet it's obligation to achieve the TMDL. Detaining the stormwater in the basin will also reduce peak rates of stormwater discharge resulting channel erosion, and subsequent sedimentation of Lake Carmel, at no expense to the town.

The Applicant notes that the proposed sewer pumps are located in the Town of Patterson, not in the Town of Kent.

Comment 4.5-60 (Letter C-15 Suzannah C. Glidden, Chair Hands across the Border, September 12, 2006): The proposed Big Box development is to sit right on top of Lake Carmel, it's residents and their drinking water supply. The forest of the proposed site now holds rainwater from run off and allows it to seep into the ground and water supply sources, clean and filtered by this natural forest process. To slash the forest and pave it over with impervious surface of roads, parking lots and building roofs to create dramatic runoff of water that will not be filtered and recharged naturally by forest over a large area but which, by gravity, will be carried downhill polluted with the toxic soup of chemicals from vehicular road traffic. Is that the kind of water that's desirable to supply Lake Carmel residents in their well water?

Response 4.5-60: *Refer to Responses 4.5-4, 4.5-5, 4.5-26, 4.5-29, 4.5-30, and 4.5-36, 4.5-37, and 4.5-41. According to NYSDEC's official web site, the Federal Clean Water Act requires states to periodically assess and report on the quality of waters in their state. Section 303(d) of the Act also requires states to identify impaired waters, where specific designated uses are not fully supported. For these impaired waters, states must consider the development of a TMDL, or other strategy to reduce the input of the specific pollutant(s) that restrict waterbody uses, in order to restore and protect such uses. Lake Carmel is included on the Final New York State 2006 Section 303(d) List of Impaired Waters (approved July 5, 2007), which identifies septic systems as the source of elevated phosphorous in the lake. The list also indicates that development of a TMDL for Lake Carmel may be deferred pending verification of the suspected impairment.*

Existing elevated phosphorous levels in Lake Carmel were identified in the Phase II Report which indicated that the most significant contributor of phosphorus to the Middle Branch Reservoir is the upstream load from the Lake Carmel sub-basin at 528 kg/yr. The TMDL Implementation Plan further recognized existing elevated phosphorous levels in the lake. The Implementation Plan, which identifies sources of nonpoint phosphorous loads in certain New York City owned water supply reservoir watersheds, and strategies to reduce those loads, indicates, in addition to other things, that the Amawalk, East Branch and Middle Branch Reservoirs each have upstream lakes contributing to their phosphorus load. These lakes are: "Lake Mahopac to the Amawalk, Peach and Putnam Lakes to East Branch Reservoir, and Lake Carmel to the Middle Branch. These upstream lakes are areas where opportunities exist for phosphorus reductions particularly in the urban and septic categories. The most significant of these loads is the upstream load from Lake Carmel to the Middle Branch Reservoir, estimated at 528 kg/yr."

Approximately 22 acres of the 90 some acre Patterson Crossing Retail Center site will be maintained in its existing condition and an additional 31 acres will be revegetated and landscaped. Combined, these vegetated areas will occupy more than 59 percent of the site. Precipitation that falls on the wooded, landscaped, and revegetated areas after construction will continue to infiltrate into the ground, recharging the groundwater supply. Refer to Chapter 4.4 of the DEIS for details regarding the groundwater recharge analysis performed for the Proposed Action. Recharge of groundwater with treated stormwater is not expected to degrade local wells.

Rainfall collected on impervious, and other modified surfaces, will be captured and treated in accordance with NYSDEC and NYCDEP regulations to maintain pre-development water quality, volume, and discharge rates, before being slowly released into the watershed. In addition, the project includes the construction of on- and off-site stormwater treatment facilities that exceed all regulatory requirements. These facilities will reduce loads of phosphorous in stormwater to levels below those that currently exist.

As detailed in FEIS Appendix F (SWPPP), reductions in total suspended solids, total nitrogen, and biological oxygen demand, as well as the elevated phosphorous load in Lake Carmel which has been documented by NYSDEC, are expected to be significantly reduced by the stormwater treatment practices that are proposed on and off site the project site.

Comment 4.5-61 (Letter C-15 Suzannah C. Glidden, Chair Hands across the Border, September 12, 2006): With the destruction of forest and digging of earth in construction come erosion of sediment and silt that will wash down into some man-made storm water controls while other runoff will inevitably go straight into Lake Carmel. If those controls, like catch basins, are not carefully and frequently maintained, the clogged overflows will carry sediment and debris to Lake Carmel and escalate the filling-in of a once beautiful lake besides polluting its water. Who is to pay for the necessary, frequent and expensive maintenance of storm water controls? The developer? He should but it's tax payers who pay. We have enough new high costs associated with Phase II of storm water regulations coming in 2008 without additional storm water maintenance cost of this proposed unsustainable development.

Response 4.5-61: *Refer to Responses 4.5-4, 4.5-5, 4.5-26, 4.5-29, 4.5-30, and 4.5-36, 4.5-37, 4.5-41 and 4.5-59. New York State and City stormwater regulations require that the owner be financially responsible for the operation and maintenance of the stormwater facilities implemented as part of a project. As required by the NYSDEC SPDES General Permit GP-0-08-001, inspections will be conducted by an independent qualified Professional retained by the Applicant to ensure that all erosion and sediment control practices are properly maintained and in good working order. These measures also would be monitored during construction by the NYCDEP, and by representatives of the Town(s) paid for by inspection fees funded by the Applicant pursuant to the Town Code. Also as require by the Town Code, the Applicants will provide to the Towns of Patterson and Kent the required construction security and/or erosion control bond used to insure the proper installation and maintenance of erosion and sediment control measures and completion of site restoration. Should a property owner default on the maintenance, the Town may perform the work and directly assess the owner's for the costs.*

The on-and off-site stormwater management practices now proposed are designed and sited in accordance with the latest NYSDEC and NYCDEP regulations and will be installed and maintained by the Applicant in accordance with the SWPPP (Appendix F). MS4 stands for Municipal Separate Storm Sewer System and is a State program that requires municipalities that are designated as MS4s, including the Towns of Kent and Patterson, to develop and implement Stormwater Management Programs that will improve water quality by achieving reductions in existing phosphorous loads being discharged to TMDL watersheds such as the Middle

Branch and East Branch. The proposed on-and off-site stormwater treatment facilities will reduce existing phosphorous loads in the City's watershed to below existing levels, thereby advancing the goals of the MS4 program at no cost to the taxpayers.

Comment 4.5-62 (Letter C-22 Lisette Depew-Kubie, September 21, 2006): Perhaps the most troubling issue to be addressed is that of water quality and quality of life for our community. If water runoff from Patterson Crossing pollutes NYC watershed streams or tributaries, and NYC DEC sues the Town of Patterson-tell me- who Pays??

Response 4.5-62: *Refer to Responses 4.5-4, 4.5-5, 4.5-26, 4.5-29, 4.5-30, and 4.5-36, 4.5-37, and 4.5-41 The Applicant must construct the proposed project pursuant to the SWPPP that is approved by the NYSDEC and the NYCDEP.*

The Applicant is obligated to comply with the terms of GP-0-08-001 and failure to do so may subject the Applicant, not the Town of Patterson or Kent, to enforcement action(s), and possible fines, for any violation of the approved SWPPP and permit.

Comment 4.5-63: Daniel Kuchta, September 25, 2006): Page 4.5-17 Section on Mosquito Control:" The scoping document section E.3.k calls for a discussion of any designs or control measures to inhibit mosquito breeding. The DEIS has one sentence which says "Natural mosquito control can be built into the final design..." 'Can' does not mean 'will'. The DEIS should clearly state what 'will' be done in regards to mosquito control not what 'can' be done.

Response 4.5-63: *According to NYSDEC FAQs About Technical Requirements of the SPDES General Permit (GP-02-01) for Stormwater Discharges from Construction Activities, October 2004: "The concern about the structural stormwater control practices and mosquitoes as the carrier of mosquito borne disease including West Nile Virus has been investigated and addressed by a few other states. The studies showed that although some of the management practices can support mosquito production, their significance as a risk of West Nile Virus is debatable. The studies indicate that to prevent production of mosquitoes, water should not be left stagnant for more than 48 hours. Proper design and maintenance of structural practices is a key issue. The design of an extended retention pond should ensure a flushing in less than 48 hours to prevent stagnant water. In the case of wet detention basins or wetlands, stocking the structures with fish is an option. The population of fish feed on the mosquito larvae before they reach the hatching stage." The Applicant notes that no such FAQs publication has been issued by NYSDEC concerning the recently issued GP-0-08-001. However, the principles concerning the control of misquotes set forth in the October 2004 FAQs are applicable to the stormwater controls proposed at the Patterson Crossing Retail Center.*

As noted in the DEIS, page 4.5-14, the wet detention basins and adjacent areas are designed to inhibit mosquito breeding by allowing a balanced predator/prey community resulting in a natural control of nuisance insects. For example, frogs and other amphibians that would likely inhabit extended detention ponds prey on mosquito larvae.

Following construction, stormwater will be treated in stormwater micropool detention ponds, and dry swales that do not retain surface water. The NYCDEP regulations

require that stormwater be "captured and treated" following construction to maintain water quality, and the accepted method to meet this requirement is to provide 24-hour plug flow detention time for the 2-year 24-hour design storm. The proposed ponds have been design to detain stormwater as required and to discharge the 2-year, 24-hour storm volume over 24 hours, less than the 48 hours that generally necessary for mosquito reproduction. As such, potential impacts associated with mosquito reproduction are not anticipated.

Further, according to Proceedings of the Workshop on Stormwater Management and Mosquito Control, United States Environmental Protection Agency and Frederick W. Kutz, Ph.D. Consultant in Environmental Sciences (February 9, 2005) "a lack of maintenance [of stormwater management ponds] typically results in diminished pond performance, poor drainage, and promotes mosquito population growth." The proceedings also indicate that portions of all new ponds have to be a minimum of 4 feet deep, and that other areas of ponds that have varying shallower depths are to be planted with aquatic vegetation. This "results in habitat for natural predators of mosquitoes such as dragonflies, birds, fish, and frogs." Combined with the maintenance program set forth in the Patterson Crossing Retail Center SWPPP, the design and planting of the proposed stormwater ponds are expected to further reduce the potential for adverse impacts associated with mosquito reproduction.

Comment 4.5-64 (Letter C-23 Daniel Kuchta, September 25, 2006): Page 4.5-17 Section on Mosquito Control: "Patterson Crossing Retail center basins will be landscaped to encourage use by a variety of wildlife... including both predator and prey organisms...:" This is an empty statement. The DEIS should specify how the landscaping will be done to encourage this, the types and quantities of predator and prey organisms needed and how they will get to these basins and who is expected to pay to maintain this landscaping.

Response 4.5-64: *Refer to Response 4.5-63. Appendix H, specifically Table H.5, of the Manual lists recommended native plants for stormwater areas. That Manual is currently being utilized in the development of the Patterson Crossing Retail Center landscape plan to properly establish a beneficial natural habitat. Wildlife will migrate from the surrounding undisturbed areas to inhabit these areas. Maintenance of the site landscaping, as well as, all other site maintenance performed, will be paid for by the property owner(s) through the rental revenues collected by the property management company.*

Comment 4.5-65 (Letter C-23 Daniel Kuchta, September 25, 2006): Page 4.5-17 Section on Mosquito Control: "The DEIS states that mosquito control will occur naturally. It should be clear to everyone living in this area that whatever natural control may exist, it does not reduce the mosquito population sufficiently. West Nile virus, a mosquito borne virus. is a serious concern in this area particularly for seniors. The DEIS should state clearly how the mosquito control will not adversely impact all the seniors that are expected to be employed at Patterson Crossing.

Response 4.5-65: *Refer to Response 4.5-63.*

Comment 4.5-66 (Letter C-33 Audrey Napierkowski, September 25, 2006): How much runoff makes up 19%? Is it one gallon or thousands of gallons per day draining into Lake Carmel? What cumulative affect will this additional amount of runoff have on the quality of Lake Carmel's water over the passing years/decades? Traditional parking lot runoff contains motor oil & antifreeze from leaking cars as well as high concentrations of salt in the winter months; can Lake Carmel handle this additional storm water runoff along with wastewater runoff over the following decades? What are the proven, scientific facts that support your conclusions, impacts on Lake Carmel will not occur. (pg. 1-9). **[Similar comments were found in the following letters and from the following members of the public during DEIS public hearings: Letter C-51 Judith Terlizzi, (9.14.06), Public Hearing, Ms. Terlizzi (9.14.06), Public Hearing, Audrey Napierkowski (9.13.06), Public Hearing, Lisette Kubie, (9.14.06)]**

Response 4.5-66: *Refer to Responses 4.4-2, 4.4-32, 4.5-4, 4.5-5, 4.5-26, 4.5-28, and 4.5-62. DEIS The Applicant notes that only some 28 acres of the 90.5 acre site currently drains to Lake Carmel. Section 4.6 (Wetlands, Streams and Waterbodies) indicated that stormwater runoff from 19 percent of the proposed impervious surface shown on the site development plans included in the DEIS would have drained to Lake Carmel after treatment by the proposed stormwater management facilities. Subsequent to the acceptance of the DEIS, the site development plan was revised to reduce the area of impervious surface. As now proposed, stormwater from only 4.4 acres, or 14.2 percent of the total thirty-one acres of proposed impervious surface on the site, would discharge into the Lake Carmel/Middle Branch Reservoir watershed.*

Table 4.5-6 below, Peak Flow to Lake Carmel Summary, indicates the post-construction rates of stormwater discharge from the site to Lake Carmel are significantly reduced following development of the project and treatment of the stormwater by the proposed stormwater detention basins. The values in the table reflect calculated peak rates of discharge off site during certain rainstorm events. No calculation for daily discharges draining to the lake are possible since the discharges result from storm events.

Table 4.5-6
Peak Flow to Lake Carmel Summary
(in CFS for 24-Hour Design Storms)

Design Point	2-Year		10-Year		25-Year		100-Year	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
DP-3 To Lake Carmel	44.67	28.44	86.60	66.45	116.53	89.92	162.82	130.44

The project does not include the surface discharge of wastewater into Lake Carmel or any other surface water. As such, no impacts associate with wastewater are anticipated. The intent of the impervious surface breakdown is to illustrate that not all of the newly created impervious surfaces are tributary to Lake Carmel. In accordance with NYCDEP and NYSDEC regulations, no increase in run-off rates are proposed to be discharged from the site.

Over 50 percent of the project site will remain pervious and allow for direct recharge of groundwater. While the stormwater falling on impervious surfaces will not

immediately recharge groundwater, the stormwater is ultimately routed through the stormwater management facilities where additional recharge can take place.

Details of the groundwater recharge analysis performed for the proposed Action is included in Chapter 4.4 of the DEIS.

Comment 4.5-67 (Letter C-33 Audrey Napierkowski, September 25, 2006): As the effectiveness of storm water catch basins decreases with age, the likelihood of contamination to Lake Carmel will increase. The DEIS does not address any cumulative, long term affects to Lake Carmel or the adjacent properties from any of the site's runoff (waste water or storm water). The developer needs to supply the Board with answers to the above mentioned questions as well as remediation scenarios, including who would cover the cost of remediation, should contamination to Lake Carmel occur in the years to come.

Response 4.5-67: *Refer to Responses 4.5-4, 4.5-5, 4.5-61 and 4.5-62. The primary pollutant reduction function of the proposed catch basins is to retain road deicing sands. The operation and maintenance plan for the stormwater management facilities (including the catch basins) presented in the project SWPPP (Appendix F) includes a schedule for the owner/operator to periodically inspect and clean the facilities, including any deicing sand retained in the catch basins. A qualified contractor will be engaged to inspect and properly maintain these facilities. As a result, the effectiveness of these basins will be maintained over the long term.*

Cumulative potential adverse impacts on Lake Carmel, as well as other surface water and adjacent properties that will receive runoff from the proposed project, were discussed in detail in Section 4.5 of the DEIS, Surface Water. The DEIS concluded, based upon the calculations of existing and proposed stormwater quality, and upon the effectiveness of the proposed stormwater treatment facilities, that the potential impacts on Lake Carmel will be mitigated through the implementation of the Sediment and Erosion Control Plan and the SWPPP. Wastewater from the site will not discharge into the Lake, but rather into a proposed SSTS where it will be treated below grade.

Were Lake Carmel to be contaminated, the cause and source of the contamination would likely be the subject of an investigation by federal, State, and New York City agencies. The outcome of any such investigation could result in remediation order(s) that would be the responsibility of the property owner, Applicant, and/or other parties to implement at their expense.

The Applicant notes that elevated phosphorous levels in Lake Carmel and other lakes in similar settings (suburban areas densely developed with homes on small lots and individual septic systems in close proximity to the lakes) are often generated internally from anoxic sediments and the septic systems. A study conducted of Lake Carmel in 1987 (Diagnostic Feasibility Study for Lake Carmel, April 23, 1987) concluded that the greatest pollutant sources in that lake are internal and septic sources. A more recent study of Peach Lake (Peach Lake Wastewater Study, July 2004, prepared by Sterns & Wheler, LLC for Putnam and Westchester Counties, NY) concluded with similar results. Given the conclusions in the Lake Carmel and Peach Lake studies, it is evident that the most significant existing, and future, sources of phosphorous in Lake Carmel that are impacting the quality of it's water, and its

ecology, are not associated with the Patterson Crossing Retail Center project. The Applicant notes that the approximately 28 acres of the project site located in Lake Carmel 3,126 watershed occupies only 0.89 percent of the area draining to the lake and that the proposed treatment of runoff from that area will improve the quality of stormwater entering the lake. The Applicant further notes, the additional treatment measures that will treat runoff from Concord Road, Route 311 and Interstate 84, far exceeds any statutory requirements and will further improve the quality of stormwater entering the lake. Refer to Response 4.5-60.

Comment 4.5-68 (Letter C-23 Daniel Kuchta, September 25, 2006): Page 4.5-17 Section on Mosquito Control : The scoping document section E. 3. K calls for a discussion of the potential for storm water drains being used by mosquitoes. The DEIS does not specifically address this issue as far as this project is concerned and provides only 3 sentences on the general properties of detention basins and wetponds. This is not adequate. The DEIS should contain a discussion of the specific swales, drains, basins and ponds on the project site.

Response 4.5-68: *Refer to Response 4.5-63.*

Comment 4.5-69 (Letter C-41 David G. Reeves, September 22, 2006): 4.5.1 "Middle Branch Reservoir Watershed" The abbreviation used for the United States Army Corps of Engineers in this section should merely be the same as that used elsewhere in the DEIS document (i.e. USACE).

Where is the correction made to the DEIS report as recommended by your consultant?

Response 4.5-69: *The need for continuous use of USACE as an abbreviation for the United States Army Corps of Engineers is noted.*

Comments made on the preliminary DEIS as part of the Lead Agency's completeness review were incorporated into the version of the document accepted as complete and presented to the public for review and comment.

Comment 4.5-70 (Letter C-41 David G. Reeves, September 22, 2006): 4.5.3 "Future Conditions with Project"- Under this section it is stated that "the Applicant has determined that a geomorphic assessment is not required" for this project. A more detailed explanation should be provided as to why a geomorphic assessment is not required for this project, as opposed to merely making the unsupported statement. Was a more detailed explanation provided as to why a geomorphic assessment is not required for this project, as opposed to merely the unsupported statement?

Where is the correction made to the DEIS report as recommended by your consultant?

Response 4.5-70: *Section 4.3, Stream Channel Protection Volume Requirements, of the Manual recommends that geomorphic assessment be performed for sites exceeding 50 acres and a post-developed impervious coverage of more than 25 percent .*

The assessment recommended in section 4.3 is required in circumstances, unlike the Patterson Crossing Retail Center, where the contributing area exceeds 50 acres and

could result in erosion of the channel of a stream, more specifically a catchment, exceeding the aforementioned threshold. Patterson Crossing Retail Center has three catchments with unique discharge points, none of which meet the 50 acre threshold stated in the recommendation for geomorphic assessment. The peak stormwater discharge rates are expected to be less than the existing rates. Therefore, the receiving stream channels will be less subject to erosion than they currently are.

Comments made on the preliminary DEIS as part of the Lead Agency's completeness review were incorporated into the version of the document accepted as complete and presented to the public for review and comment.

Comment 4.5-71 (Letter C-42 Virginia M. Reeves, September 22, 2006): Why are all the storm water basins within the Kent property? Who will pay for the installation of these elaborate, but necessary chains of storm water basins? After all the majority of the storm runoff is from Concord Road 40,000 square foot of road surface which is in the Town of Patterson, however is diverted at the north end of Concord Road on to the town of Kent property. Why?

Response 4.5-71: *Refer to Response 4.5-59. Four stormwater treatment basins are located in the Town of Patterson and three are located in the Town of Kent The basins are sited so that they will collect stormwater by gravity for treatment.*

The costs for all construction on the subject property, as well as the off-site stormwater treatment practices, will be borne by the property developer. Stormwater from Concord Road currently flows in a NYCDEP flagged watercourse which discharges off of the project site. Following construction, and after treatment by proposed stormwater pond 3.4, the stormwater will continue to enter the watercourse and discharge off the site as it does under existing conditions.

Comment 4.5-72 (Letter C-44 Peter Riebold, September 22, 2006): The paragraph states that the swales and detention ponds ":will not retain water for intervals much more than 24 hours..." However, during periods of wet weather, this may not be true. Mosquito-borne diseases such as West Nile disease require that care be taken in planning the stormwater management system. To simply state that "This condition is typical of many stormwater management structures throughout southeastern New York" makes light of a public health concern that some municipalities remediate by dangerous aerial spraying of insecticides. A mosquito control plan must be incorporated into the Environmental Impact Statement.

Response 4.5-72: *Refer to Response 4.5-63.*

Comment 4.5-73 (Letter C-44 Peter Riebold, September 22, 2006): Other sections of the DEIS have claimed a water usage rate of 10,740 gallons per day. This paragraph, however, clearly states that during periods of dry weather, more than 10,740 gpd will be needed to be pumped from wells to meet irrigation needs. And conversely, in periods of wet weather, additional water will flow into the stormwater management system. The DEIS must detail how the area residential wells will respond to the extra water pumped during dry periods, and how the stormwater system will handle additional water coming from the roofs if the storage tank is full. During the winter months the garden center will be closed and there will be little need for irrigation of the landscaping. Roof runoff from rain and from melting snow will more likely flow into the stormwater system rather than the storage tank, and may put a strain on

the stormwater system. The DEIS also does not give statistics on the water needs of the garden center or landscaping so that the draw on the storage tank can be estimated.

Response 4.5-73: *Refer to Response 4.4-27 for a response to the groundwater portion of this comment.*

As discussed in DEIS Section 4.5, the stormwater management facilities are designed to detain and treat stormwater from all impervious surfaces, including the proposed roofs, and will effectively prevent downstream flooding.

Comment 4.5-74 (Letter C-47 Charles M. and Grace E. Sisto, September 22, 2006): The DEIS states that basin failure is not likely to occur for properly constructed and maintained structures. That being said, who will be responsible for inspecting, maintaining and properly cleaning these detention ponds after the project is completed? Also will these detention ponds act as a way of recharging groundwater?

Response 4.5-74: *Refer to Responses 4.5-59 and 4.5-67. A qualified, experience, property management firm engaged by the property owner(s) will be responsible for inspecting and maintaining all the stormwater management structures in accordance with the schedule in the approved SWPPP (FEIS Appendix F). The primary purpose of the stormwater management basins is to control post development changes in water quality and the peak rate of stormwater discharge. The wet detention ponds are designed not to have any appreciable groundwater recharge, as they will contain a permanent pool of water that will enhance the treatment of stormwater.*

Comment 4.5-75 (Letter C-47 Charles M. and Grace E. Sisto, September 22, 2006): Another concern, mentioned in the DEIS, when figuring for the 100 year storm, has it been taken into account the volume of water that will flow down the Croton River into Lake Carmel which is restricted by the causeway on Terry Hill Road? This has to be considered to prevent flooding of this area. Will the developer be responsible for improving this flow into Lake Carmel?

Response 4.5-75: *Refer to Response 4.5-74. As their will be no post-construction increase in the peak rate of stormwater discharge for the 100 yr. storm event, no adverse off-site impacts associated with flooding are anticipated. Based upon the analysis of pre-and post-development stormwater conditions included in the DEIS, no improvements to the Terry Hill Road Causeway have been deemed necessary to prevent or offset flooding.*

Comment 4.5-76 (Comment number not used):

Comment 4.5-77 (Letter C-51 Judith Terlizzi, September 14, 2006): Another question raised is - Will the applicant install the most recent storm water improvements suggested? I believe called MS 4's that are being mandated by the state or will that be an expensive cost passed on to the taxpayer at a future time.

Response 4.5-77: *Refer to Responses 4.5-4, 4.5-5, 4.5-26, 4.5-29, 4.5-30, and 4.5-36, 4.5-37, 4.5-41, and 4.5-61. The Applicant will not only install all the proposed stormwater management facilities for the Patterson Crossing project, but will install*

additional facilities to address Concord Road runoff and runoff from Route 311, Interstate 84, and the Putnam County Highways Facility.

Comment 4.5-78 (Public Hearing, September 13, 2006, Marian Rose): Using the accurate input data, phospherous levels will increase under the new Phase II Stormwater Regulations, The Towns of Patterson and Kent will then be obliged in storm water devices to reduce the phospherous.

Response 4.5-78: *This is not so. Under the Applicant's plan, phosphorous will decrease. Refer to Responses 4.5-4, 4.5-5, 4.5-26, 4.5-29, 4.5-30, and 4.5-376 4.5-37, 4.5-41, and 4.5-61.*

Comment 4.5-79 (Public Hearing, September 13, 2006, David Clouser): The second item that we looked at was the pollutant removal from the stormwater facilities that are being proposed we found that there were wrong moderating factors used in the report. This is the site that is a phospherous restricted site that the board was aware of. It was identified as one of the primary problems in the watershed by the EPA, DEC and DEP and therefore instead of just maintaining the levels, especially the phospherous because that's the primary concern for the lake and watershed, that has to be reduced. The Draft Environmental Impact Statement maintains that there is some increase which is being proposed here. Getting back to the pollutant removal factor, we find that the pollutant loading calculation that was used is about one-half of what it should be.

Response 4.5-79: *Refer to Responses 4.5-4, 4.5-5, 4.5-26, 4.5-29, 4.5-30, and 4.5-36, 4.5-37, 4.5-41, and 4.5-61. The pollutant loading analysis in the DEIS was derived from accepted NYCDEP methodologies.*

Comments 4.5-80 through 4.5-84 (Comment numbers not used):

Comment 4.5-85 (Letter C-63 Marian H. Rose, Ph.D, Croton Watershed Clean Water Coalition, September 13, 2006): The developer is submitting a manifestly inadequate stormwater pollution prevention plan that uses inaccurate input data and fudges the final results so that no conclusions can be drawn regarding an increase or decrease in phosphorus pollution to Lake Carmel, or the Middle Branch and the East Branch Reservoirs. Using the accurate input data, phosphorus levels will increase. Under the new Phase 2 stormwater regulations, the Towns of Patterson and Kent will then be obliged to install stormwater devices to reduce the phosphorus. Simply because he owns the property, the developer has no right to cause this extra cost to the towns which translates into an extra tax burden on the residents.

Response 4.5-85: *Refer to Responses 4.5-4, 4.5-5, 4.5-26, 4.5-29, 4.5-30, and 4.5-36, 4.5-37, and 4.5-41. The Patterson Crossing Retail Center SWPPP has been prepared in accordance with, and satisfies the requirements of, New York State and City regulations, including those set forth in GP-0-08-001, and GP-93-06 which is incorporated by reference into the WR&R. In addition, to address concerns raised by the New York State Watershed Inspector General, off-site stormwater treatment facilities that far exceed the requirements of New York State and City regulations are proposed. These facilities will treated currently untreated stormwater from NYS Route 311, Interstate 84, and the Putnam County Highways Facility, and will achieve*

a 7.66 lbs/yr reduction in existing phosphorous loads in New York City's public drinking water supply watershed.

On the January 8, 2003 effective date of GP-02-02 the Towns of Patterson and Kent, as NYSDEC regulated Municipal Separate Storm Sewer Systems (MS4s), were obligated by the State under the provisons of GP-02-02 to reduce current phosphorous loading to achieve the East Branch and Middle Branch Reservoir TMDLs. That obligation remains in effect under the terms of GP-0-08-002 which replaced GP-02-02 and became effective on May 1, 2008. Though not required to do so, the Patterson Crossing Retail Center project will reduce phosphorous loads and advance the Town's obligation to achieve the TMDL by constructing on- and off-site stormwater treatment facilities at no cost to the taxpayers in either town. The on-site stormwater management practices now proposed are designed, and will be constructed by the Applicant, in accordance with the SWPPP (FEIS Appendix F). The off-site treatment facilities in the East Branch Reservoir Watershed are designed to reduce existing phosphorous loads and will be constructed in coordination with Putnam County (see June 21, 2007 correspondence to the Deputy County Executive from INSITE Engineering and June 25, 2007 and August 14, 2007 correspondence from the County Executive in FEIS Appendix A, Correspondence).

Figure 4.5-1: Middle Branch Watershed
Patterson Crossing Retail Center
Town of Patterson and Town of Kent,
Putnam County, New York
Base: USGS 7.5-minute Topographic Map
Approx. Scale: 1 inch = 9,300 feet

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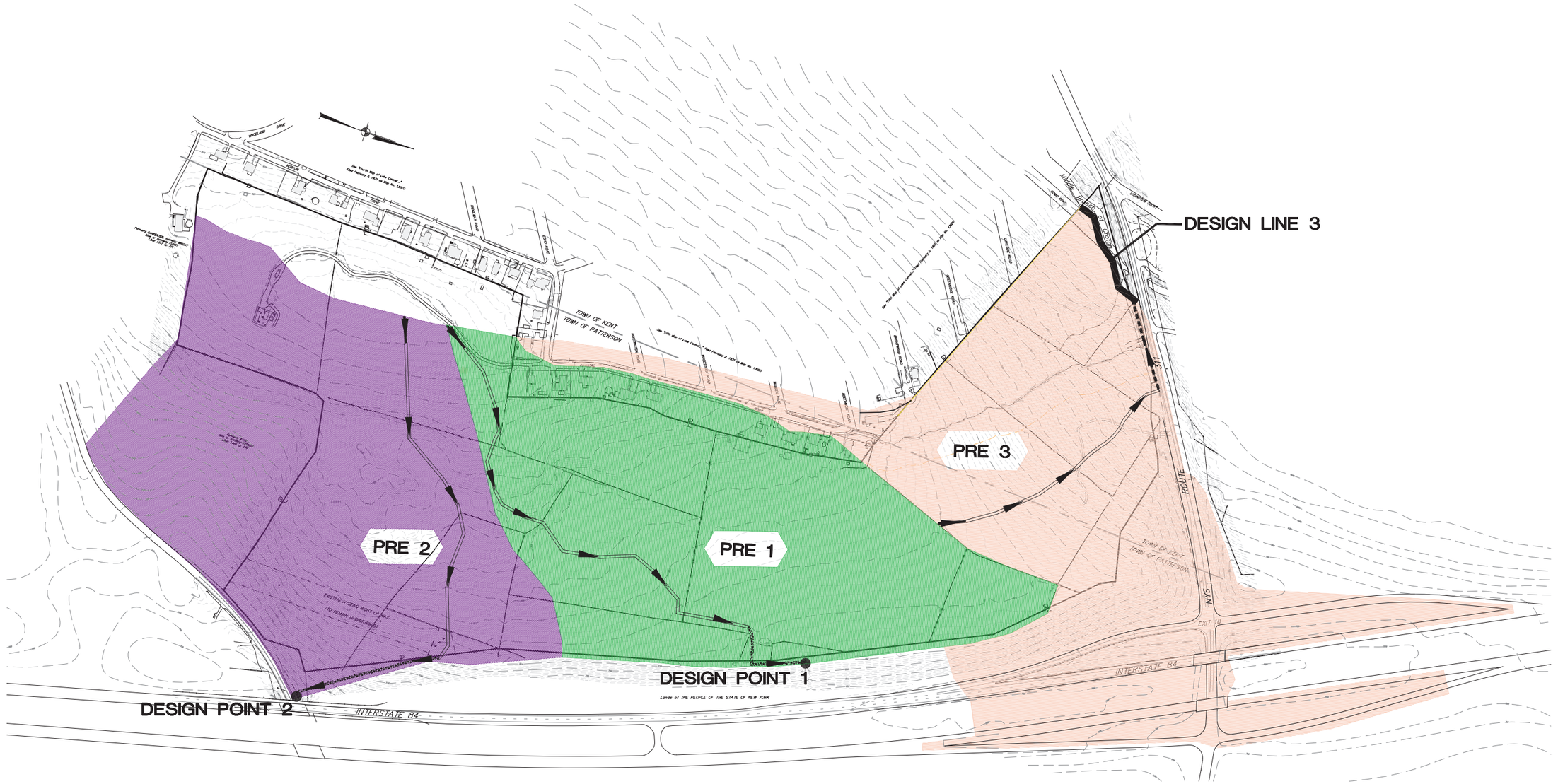

LEGEND

PRE 1 — Subcatchment

Sheet Flow

Shallow Concentrated Flow

Channel Flow

Pipe Flow

GRAPHIC SCALE

150 0 75 150 300 600

(IN FEET)

Note:

Drainage boundaries shown hereon are based on field observations / site assessments.

Figure 4.5-2: Existing Drainage Areas

Patterson Crossing Retail Center
Town of Patterson and Town of Kent,
Putnam County, New York
Source: Insite Engineering, Surveying & Landscape Architecture, P.C, 10/30/07
Scale: 1" = 400'

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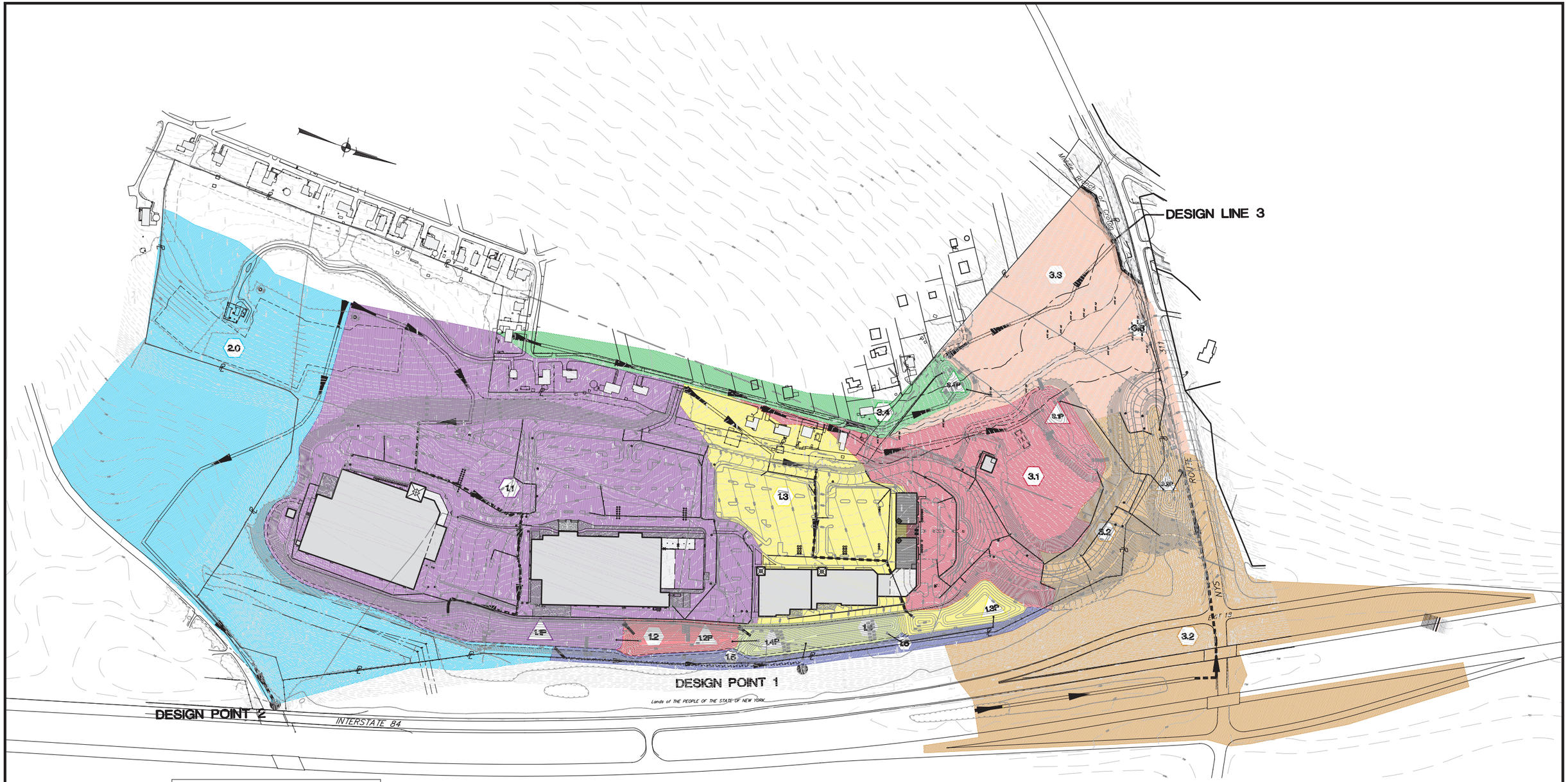

Note:

Drainage boundaries shown hereon are based on field observations / site assessments.

Figure 4.5-3: Proposed Drainage Areas

Patterson Crossing Retail Center
Town of Patterson and Town of Kent,
Putnam County, New York
Source: Insite Engineering, Surveying & Landscape Architecture, P.C, 2/04/08
Scale: As shown

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GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)

Note:

Drainage boundaries shown hereon are based on field observations / site assessments.

Figure 4.5-4: Off-Site Stormwater Treatment Areas at the Putnam County Highways Facility on Fair Street

Patterson Crossing Retail Center
Town of Patterson and Town of Kent,
Putnam County, New York

Source: Insite Engineering, Surveying & Landscape Architecture, P.C, 2/04/08
Scale: 1" = 150'

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Figure 4.5-5: Eroding Drainage Channel From Concord Road
Patterson Crossing
Town of Patterson, Putnam County, New York
Source: TMA Photograph, 01/09/08

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N
W E
S

Figure 4.5-6: Eroding Drainage Channel - Along NYS Route 311
Patterson Crossing
Town of Patterson, Putnam County, New York
Source: TMA Photograph, 01/09/08

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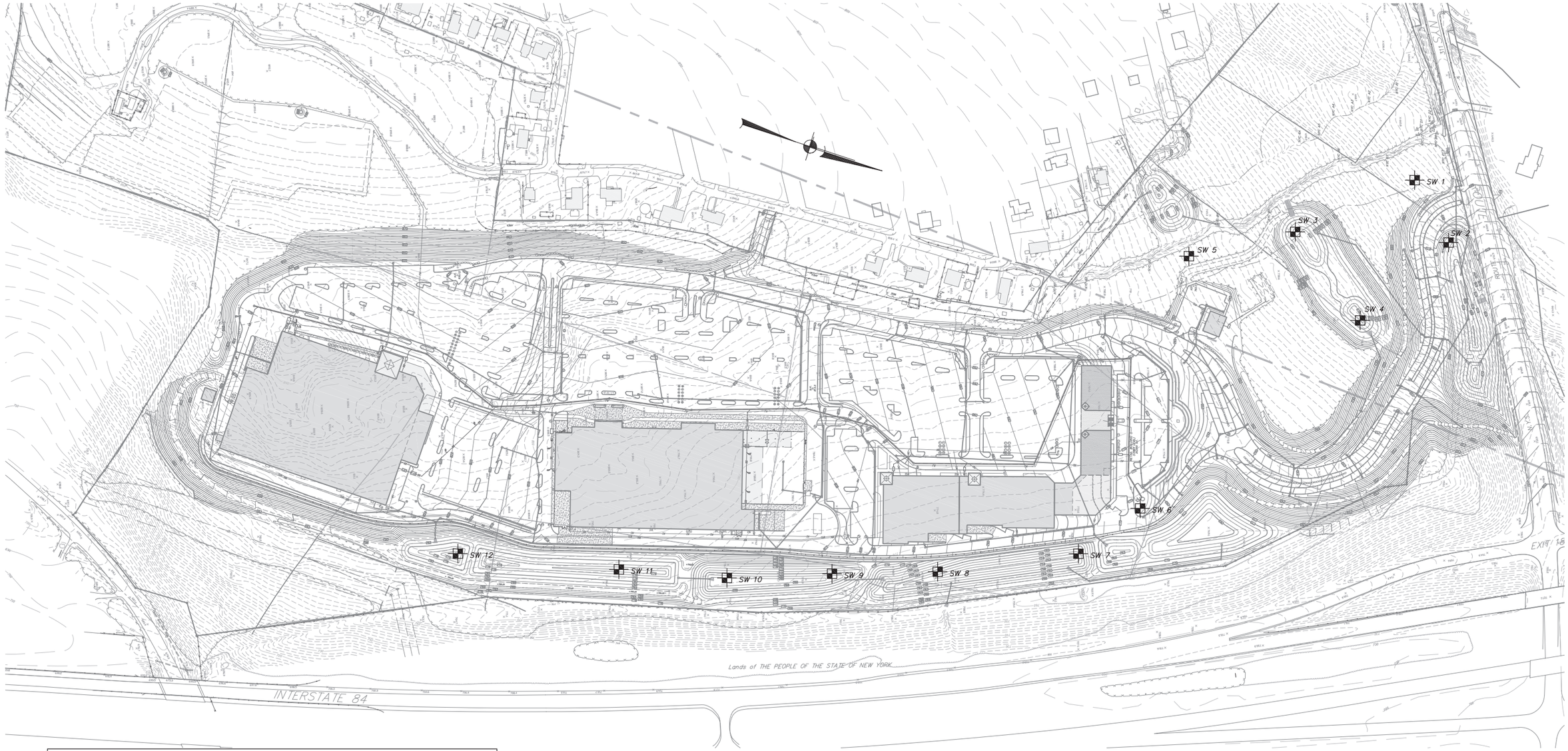

WITNESSED STORMWATER DEEP TEST DATA

TESTING DATE (6-20-05)

SW 1: 0"-12" TOPSOIL
12"-36" MODERATELY COMPACT BROWN SANDY LOAM
36"-150" COMPACT FINE BROWN SANDY LOAM
NO ROCK, GROUNDWATER SEEP @ 96"

SW 2: 0"-12" TOPSOIL
12"-36" MODERATELY COMPACT BROWN SANDY LOAM
36"-174"+ COMPACT FINE BROWN SANDY LOAM
NO ROCK, NO WATER

SW 3: 0"-10" TOPSOIL
10"-30" MODERATELY COMPACT ORANGE BROWN SANDY LOAM
30"-120"+ COMPACT FINE BROWN SANDY LOAM
NO ROCK, GROUNDWATER SEEP @ 84"

SW 4: 0"-10" TOPSOIL
10"-30" MODERATELY COMPACT ORANGE BROWN SANDY LOAM
30"-126"+ COMPACT FINE BROWN SANDY LOAM
NO ROCK, NO GROUNDWATER

SW 5: 0"-10" TOPSOIL
10"-30" MODERATELY COMPACT ORANGE BROWN SANDY LOAM
30"-108"+ COMPACT FINE SANDY LOAM
NO ROCK, NO GROUNDWATER

SW 6: 0"-12" TOPSOIL
12"-44" MODERATELY COMPACT BROWN SANDY LOAM
44"-132"+ COMPACT FINE BROWN SANDY LOAM
NO ROCK, NO GROUNDWATER

SW 7: 0"-12" TOPSOIL
12"-44" MODERATELY COMPACT BROWN SANDY LOAM
44"-132"+ COMPACT FINE BROWN SANDY LOAM
NO ROCK, GROUNDWATER SEEP @ 129"

SW 8: 0"-12" TOPSOIL
12"-38" MODERATELY COMPACT LIGHT BROWN SANDY LOAM
38"-132"+ COMPACT BROWN SANDY LOAM
NO ROCK, NO GROUNDWATER

SW 9: 0"-12" TOPSOIL
12"-40" COMPACT BROWN SANDY LOAM
40"-132"+ COMPACT FINE BROWN SANDY LOAM
NO ROCK, NO GROUNDWATER

SW 10: 0"-12" TOPSOIL
12"-66" GRAVELY BROWN SANDY LOAM
66"-132"+ MODERATELY COMPACT GRAVELY BROWN SANDY LOAM WITH COBBLES
NO ROCK, GROUNDWATER SEEP @ 65"

SW 11: 0"-12" TOPSOIL
12"-66" MODERATELY COMPACT BROWN SANDY LOAM
66"-144"+ COMPACT FINE BROWN SANDY LOAM
NO ROCK, NO GROUNDWATER

SW 12: 0"-12" TOPSOIL
12"-48" BROWN SANDY LOAM
48"-156"+ FINE BROWN SANDY LOAM, LOOSE
NO ROCK, NO GROUNDWATER

GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)

Figure 4.5-7: Stormwater Testing Plan

Patterson Crossing Retail Center
Town of Patterson and Town of Kent,
Putnam County, New York

Source: Insite Engineering, Surveying & Landscape Architecture, P.C, 2/04/08
Scale: As shown

File 04031 3/26/08
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4.6 WETLANDS, STREAMS, AND WATER BODIES COMMENTS AND RESPONSES

Comment 4.6-1 (Letter A-4 Neil A. Wilson, AICP, LRC Planning Services, September 21, 2006): Page 4.6-4, the reference to a Class "D" designation for a tributary of the Muddy Brook should be checked. As a result of regulatory amendments several years ago there are no streams assigned to a Class "D" designation in the region.

> ***Response 4.6-1:*** *The stream classification for Mud Pond Brook is Class 'C'. The best usage of Class C waters is fishing. The State's goal is that the waters are suitable for fish propagation and survival and that the water quality is suitable for primary and secondary contact recreation, although other factors, including existing point and non point source pollution, intermittent and/or seasonal flows, and access issues, may limit the use for these purposes.*

Comment 4.6-2 (Letter A-6 Marilyn Shanahan, Chief, SEQRA Coordination Section, September 25, 2006): The full reference was not supplied for the NYSDEC 1999 report cited on page 4.6-7. If this is the 305b or 303d report, there is a more recent source for this information that should be reviewed and referenced.

> ***Response 4.6-2:*** *The updated citation for the previously mentioned NYSDEC 1999 report is the New York State 2004 Section 303(d) List of Impaired Waters Requiring a TMDL, NYSDEC 2004. This source was reviewed and confirms that Lake Carmel (DEC Index no. H-31-P44-23-P59-6-P62a) continues to be listed as impaired due to phosphorus loading*

Comment 4.6-3 (Letter B-5 David B. Clouser, PE, LS, David Clouser and Associates, September 21, 2006): Stream Alteration - Sheet SP-3.1 of the Engineering Drawing indicates a DEP regulated water course extending from Concord Road to NYS Route 311, and further discharging into the Middle Branch of the Croton River. As shown on the plan, approximately 1,000 horizontal feet of this watercourse will be destroyed by the proposed development. Much of the watercourse will be filled in and piped underground, and large detention basins are proposed to be placed directly on top of the watercourse.

The Board should consider the feasibility of construction and realignment of this watercourse. We would suggest that the Board require design details (that would be prerequisite to obtaining the proper NYCDEP permits for this proposal) as a means to consider the stream reconstruction's reasonableness, in addition and coincident with considering the environmental impact associated with the destruction of such a large portion of the existing watercourse. It may also be noted that the watercourse may be additionally regulated by the Town of Kent and/or The Army Corps of Engineers.

> ***Response 4.6-3:*** *Field inspections of this severely eroded drainage channel (See FEIS Figure 4.5-5, Eroding Channel From Concord Road) confirm that it was formed entirely as a consequence of stormwater discharges from Concord Road; the channel conveys no base flow. The drainage channel is not natural, nor does it, or any areas adjacent to it, perform any biological function typically associated with a naturally occurring watercourse and its contiguous buffers. The function of this channel is to convey flows from Concord Road to the Middle Branch of the Croton River.*

The drainage channel restoration goal, therefore, is limited to eliminating the ongoing and future erosion of the channel, a continual source of sediment to downstream receiving waters.

Specifically, the proposal will pick up the stormwater discharge at its source on Concord Road, and convey it via a riprapped swale to a new water quality/detention basin (Basin 3.4) outside of the main channel of this feature. The outlet of this basin will then be discharged back to the existing watercourse channel (NYC B) in the vicinity of DEP flag B4. While most of the flow to the original channel will be diverted through this new arrangement, the existing channel will remain in place. Treated flows out of the new basin will be discharged at a non-erosive velocity back into the main channel and continue to flow to its confluence with the Middle Branch Croton River.

The slope, brief but intense runoff characteristics, and unstabile nature of the existing drainage feature creates erosive velocities and causes sedimentation of down-gradient water resources, including Lake Carmel. Diverting the flows from Concord Road into a properly designed and maintained stormwater detention basin would reduce the velocity to a rate that would reduce erosion of the channel and subsequent impacts on the receiving waters. Additionally, a reduction in existing pollutant levels, including phosphorus and sediments, from Concord Road would assist the Town in meeting its Total Maximum Daily Load requirements.

The Applicant acknowledged in the DEIS that a watercourse diversion permit would be required from the NYCDEP to complete this portion of the proposal. Lacking any base flow or observed seasonal groundwater discharge, the drainage channel does not meet the definition of waters of the United States (as ephemeral or other watercourse), as defined in Section 404 of the Clean Water Act, so no permission from the Army Corps of Engineers is required for the proposed project.

The proposed construction does not include impacts to wetlands or watercourses as defined by the Town of Kent code. The Town Code (Chapter 39A-4) defines a watercourse as "(a)ny body of water flowing in an identifiable channel or course at least nine (9) months of the year." The existing drainage channel from Concord Road does not meet this definition. FEIS Figure 4.5-5 reveals the absence of flow in the channel during January 2008. The lack of base flow in this channel has been observed by several of the Applicant's consultants throughout the year.

Wetlands are defined in 39A-4 as areas that "have a contiguous area of at least forty thousand (40,000) square feet..." The wetland on the Kent portion of the site is less than 40,000 s.f. (approximately 22,000 s.f.), and is therefore not a wetland regulated by the Town. This wetland also falls below the minimum size limit (12.4 acres) for wetland resources regulated by the NYSDEC. As such, there is no State regulated buffer associated with this resource.

The Army Corps of Engineers (ACOE), which regulates all non-isolated wetlands of any size, has jurisdiction over the on-site wetland. However, a jurisdictional determination was not requested from the ACOE because the proposed project does not involve dredging or filling in any wetland, or in other waters of the United States, as defined in Section 404 of the Clean Water Act.

In correspondence from the ACOE, (Refer to Appendix A Correspondence) it is stated that "If the Applicant can design the project to completely avoid waters of the United States, including wetlands, then written authorization from this office would not be necessary. In addition, if no written authorization would be necessary, no written confirmation of the limits of Corps jurisdiction would be necessary either."

As no impacts to the on-site wetland would result from the development of the retail center and there is no buffer associated with the federally regulated wetland, no federally mandated mitigation is required.

The Applicant, however, remains sensitive to the environmental features of the site. The proposed stormwater basins originally sited within the drainage area have been relocated to points outside of any regulated area. See the plan set included with this FEIS for a depiction of the proposed location of the stormwater basins.

Comment 4.6-4 (Public Hearing, September 13, 2006, Chris Wilde): As the stream bed is currently eroding, of course it doesn't appear thought was given to mitigate the site's impact by doing channel restoration and (inaudible).

Response 4.6-4: *Refer to response 4.6-3.*