### 617.20 Appendix A State Environmental Quality Review FULL ENVIRONMENTAL ASSESSMENT FORM

**Purpose:** The full EAF is designed to help applicants and agencies determine, in an orderly manner, whether a project or action may be significant. The question of whether an action may be significant is not always easy to answer. Frequently, there are aspects of a project that are subjective or unmeasurable. It is also understood that those who determine significance may have little or no formal knowledge of the environment or may not be technically expert in environmental analysis. In addition, many who have knowledge in one particular area may not be aware of the broader concerns affecting the question of significance.

The full EAF is intended to provide a method whereby applicants and agencies can be assured that the determination process has been orderly, comprehensive in nature, yet flexible enough to allow introduction of information to fit a project or action.

**Full EAF Components:** The full EAF is comprised of three parts:

- Part 1: Provides objective data and information about a given project and its site. By identifying basic project data, it assists a reviewer in the analysis that takes place in Parts 2 and 3.
- **Part 2:** Focuses on identifying the range of possible impacts that may occur from a project or action. It provides guidance as to whether an impact is likely to be considered small to moderate or whether it is a potentially-large impact. The form also identifies whether an impact can be mitigated or reduced.
- Part 3: If any impact in Part 2 is identified as potentially-large, then Part 3 is used to evaluate whether or not the impact is actually important.

## THIS AREA FOR <u>LEAD AGENCY</u> USE ONLY

## DETERMINATION OF SIGNIFICANCE -- Type 1 and Unlisted Actions

Identify the Portions of EAF completed for this project:Part 1Part 2Part 3Upon review of the information recorded on this EAF (Parts 1 and 2 and 3 if appropriate), and any other supporting information, and considering both the magnitude and importance of each impact, it is reasonably determined by the lead agency that:Part 3

- A. The project will not result in any large and important impact(s) and, therefore, is one which will not have a significant impact on the environment, therefore a negative declaration will be prepared.
- B. Although the project could have a significant effect on the environment, there will not be a significant effect for this Unlisted Action because the mitigation measures described in PART 3 have been required, therefore a CONDITIONED negative declaration will be prepared.\*
- C. The project may result in one or more large and important impacts that may have a significant impact on the environment, therefore a positive declaration will be prepared.

\*A Conditioned Negative Declaration is only valid for Unlisted Actions

Name of Action

Name of Lead Agency

Print or Type Name of Responsible Officer in Lead Agency

Title of Responsible Officer

Signature of Responsible Officer in Lead Agency

Signature of Preparer (If different from responsible officer)

## PART 1--PROJECT INFORMATION Prepared by Project Sponsor

NOTICE: This document is designed to assist in determining whether the action proposed may have a significant effect on the environment. Please complete the entire form, Parts A through E. Answers to these questions will be considered as part of the application for approval and may be subject to further verification and public review. Provide any additional information you believe will be needed to complete Parts 2 and 3.

It is expected that completion of the full EAF will be dependent on information currently available and will not involve new studies, research or investigation. If information requiring such additional work is unavailable, so indicate and specify each instance.

Name of Action

Location of Action (include Street Address, Municipality and County)

| Name of Applicant/Sponsor    |       |          |
|------------------------------|-------|----------|
| Address                      |       |          |
| City / PO                    | State | Zip Code |
| Business Telephone           |       |          |
| Name of Owner (if different) |       |          |
| Address                      |       |          |
| City / PO                    | State | Zip Code |
| Business Telephone           |       |          |
| Description of Action:       |       |          |

# Please Complete Each Question--Indicate N.A. if not applicable

# A. SITE DESCRIPTION

Physical setting of overall project, both developed and undeveloped areas.

| 1. | Present Land Use:   | Urban                | Industrial                     | Commercia                        | I Residential (suburb                             | an) Rural (non-farm)                     |
|----|---|----------------------|--------------------------------|----------------------------------|---|--|
|    |   | Forest               | Agriculture                    | Other                            |   |  |
|    |   |                      |                                |                                  |   |  |
|    |   |                      |                                |                                  |   |  |
| 2. | Total acreage of proje  | ect area:            | acres.                         |                                  |   |  |
|    | APPROXIMATE ACR   | EAGE                 |                                |                                  | PRESENTLY   | AFTER COMPLETION                         |
|    | Meadow or Brushland   | d (Non-agricu        | Itural)                        |                                  | acres   | acres                                    |
|    | Forested  |                      |                                |                                  | acres   | acres                                    |
|    | Agricultural (Includes  | orchards, cro        | opland, pasture, e             | etc.)                            | acres   | acres                                    |
|    | Wetland (Freshwater   | or tidal as pe       | r Articles 24,25               | of ECL)                          | acres   | acres                                    |
|    | Water Surface Area  |                      |                                |                                  | acres   | acres                                    |
|    | Unvegetated (Rock, e  | earth or fill)       |                                |                                  | acres   | acres                                    |
|    | Roads, buildings and  | other paved          | surfaces                       |                                  | acres   | acres                                    |
|    | Other (Indicate type)   |                      |                                |                                  | acres   | acres                                    |
| 3. | What is predominant   | soil type(s) o       | n project site?                | hatfield,                        | Charlton, Woodb                                   | ridge, Leicester                         |
|    | a. Soil drainage:   | Wel                  | I drained %                    | 6 of site                        | Moderately well drained                           | % of site.<br>Resource Conservation      |
|    |   | Poo                  | rly drained                    | % of site                        | Service (See EAF                                  |  |
|    | <ul> <li>b. If any agricultura<br/>Classification System</li> </ul> |                      | ved, how many a 0 acres (see 1 | acres of soil are<br>NYCRR 370). | classified within soil group 1                    | through 4 of the NYS Land                |
| 4. | Are there bedrock our   | tcroppings or        | project site?                  | Yes                              |   | d Investigations                         |
|    | a. What is depth to   | bedrock              | (in feet)                      |                                  |   | results contained<br>Pulte Homes Estates |
| 5. | Approximate percenta  | age of propos        | ed project site w              | ith slopes:                      | (2004); also                                      |  |
|    | 0-10% %   | 10-                  | 15% %                          | 15% or                           | greater %   |  |
| 6. | ls project substantiall<br>Historic Places?                         | ly contiguous<br>Yes | to, or contain a<br>No         | Stag                             |   | by City Scape; Pulte                     |
| 7. | ls project substantial  | y contiguous         | to a site listed or            | Home<br>n the Register of        | es Estates Projec<br>f National Natural Landmarks | ? Yes No                                 |
| 8. | What is the depth of  | the water tab        | le? (in                        | feet) Natu                       | ral Resource Cons                                 | (See EAF Narrative)<br>ervation Service  |
| 9. | Is site located over a  | primary, prin        | cipal, or sole sou             | rce aquifer?                     | Yes No  |  |
| 10 | . Do hunting, fishing o   | r shell fishing      | opportunities pr               | esently exist in                 | the project area? Ye                              | s No                                     |

Does project site contain any species of plant or animal life that is identified as threatened or endangered?
 Yes
 No
 According to:

Identify each species:

12. Are there any unique or unusual land forms on the project site? (i.e., cliffs, dunes, other geological formations?

Yes No Describe:

13. Is the project site presently used by the community or neighborhood as an open space or recreation area?

Yes No

If yes, explain:

14. Does the present site include scenic views known to be important to the community? Yes No

- 15. Streams within or contiguous to project area:
  - a. Name of Stream and name of River to which it is tributary
- 16. Lakes, ponds, wetland areas within or contiguous to project area:

b. Size (in acres):

| 17. | ls tl        | he site served by exis                     | sting public u         | tilities?                | Yes            | No             |               |                  |                                   |
|-----|--------------|--|------------------------|--------------------------|----------------|----------------|---------------|------------------|-----------------------------------|
|     | a.           | If YES, does sufficien                     | nt capacity e          | exist to allow co        | nnection?      | Yes            | s No          | )                |                                   |
|     | b.           | If YES, will improven                      | ments be nec           | essary to allow          | connection?    | ,              | Yes           | Ν                | 0                                 |
| 18. | ls tl<br>30₄ | he site located in an a                    | agricultural di<br>Yes | strict certified p<br>No | oursuant to A  | Agriculture ar | nd Markets    | Law, Article 25- | AA, Section 303 and               |
| 19. |              | he site located in or se<br>I 6 NYCRR 617? | ubstantially o<br>Yes  | contiguous to a<br>No    | Critical Envir | ronmental A    | rea designat  | ed pursuant to A | Article 8 of the ECL,             |
| 20. | Has          | s the site ever been us                    |                        |                          |                |                |               | Yes              | No                                |
| B.  | Proj         | ject Description                           |                        |                          |                | _              |               | _                | iew and field<br>e Services, Inc. |
| 1.  | Phy          | vsical dimensions and                      | scale of proj          | ect (fill in dimer       | nsions as app  | propriate).    |               |                  |                                   |
|     | a.           | Total contiguous acr                       | eage owned             | or controlled by         | y project spo  | onsor:         | acres         |                  |                                   |
|     | b.           | Project acreage to be                      | e developed:           | acre                     | es initially;  | ас             | res ultimate  | ly.              |                                   |
|     | C.           | Project acreage to re                      | emain undeve           | loped:                   | acres.         | aludina        | rogior        | al flood         | retention areas)                  |
|     | d.           | Length of project, in                      | miles:                 | (if appropr              | iate) NOT      | -              | -             |                  | recención areas)                  |
|     | e.           | If the project is an ex                    | xpansion, inc          | licate percent of        | f expansion    | proposed.      | %             | NOT APPLI        | ICABLE                            |
|     | f.           | Number of off-street                       | parking space          | ces existing             | ; proj         | posed          |               |                  |                                   |
|     | g.           | Maximum vehicular t                        | trips generate         | ed per hour:             | (upo           | on completic   | on of project | )?               | Traffic Study)                    |
|     | h.           | If residential: Numbe                      | er and type o          | f housing units:         | NOT AP         | PLICABL        |               | attacheu         | ITALLIC Study)                    |
|     |              |  | One Fa                 | amily                    | Two Fan        | nily           | Multiple      | Family           | Condominium                       |
|     |              | Initially                                  |                        |                          |                |                |               |                  |                                   |
|     |              | Ultimately                                 |                        |                          |                |                |               |                  |                                   |
|     | i. D         | imensions (in feet) of                     | largest prop           | osed structure:          |                | height;        |               | width;           | length.                           |
|     | j. L         | inear feet of frontage                     | along a publ           | ic thoroughfare          | project will o | occupy is?     |               | ft.              |                                   |
| 2.  | Hov          | w much natural materi                      | ial (i.e. rock,        | earth, etc.) will        | be removed     | from the site  | e?            | tons/cubic yar   | ds. (cubic yards)                 |
| 3.  | Will         | disturbed areas be re                      | eclaimed               | Yes                      | No             | N/A            | 4             |                  |                                   |
|     | a.           | If yes, for what inter                     | nded purpose           | e is the site bein       | g reclaimed?   | )              |               |                  |                                   |
|     | b.           | Will topsoil be stock                      | piled for recla        | amation?                 | Yes            | No             |               |                  |                                   |
|     | C.           | Will upper subsoil be                      | e stockpiled f         | or reclamation?          |                | Yes            | No            |                  |                                   |
| 4.  | Нον          | w many acres of vege                       | etation (trees         | , shrubs, ground         | l covers) will | l be removed   | d from site?  | acre             | S.                                |

| 5. Will any mature forest (over 100 years old) or other locally-important vegetation be removed by this project? |                  |  |  |  |  |  |  |  |  |
|--|------------------|--|--|--|--|--|--|--|--|
|  |                  | Yes No (See attached EAF Narrative)  |  |  |  |  |  |  |  |
| 6.   | lf sir           | gle phase project: Anticipated period of construction: months, (including demolition)                          |  |  |  |  |  |  |  |
| 7.   | lf mu            | ulti-phased:   |  |  |  |  |  |  |  |
|  | a.               | Total number of phases anticipated (number)  |  |  |  |  |  |  |  |
|  | b.               | Anticipated date of commencement phase 1: month year, (including demolition)                                   |  |  |  |  |  |  |  |
|  | с.               | Approximate completion date of final phase: month year.  |  |  |  |  |  |  |  |
|  | d.               | Is phase 1 functionally dependent on subsequent phases? Yes No   |  |  |  |  |  |  |  |
| 8.   | Will             | blasting occur during construction? Yes No Approximately 190,000 cubic yard for                                |  |  |  |  |  |  |  |
| 9.   | Num              | full use on-site (see EAF Narrative)<br>ber of jobs generated: during construction ; after project is complete |  |  |  |  |  |  |  |
| 10   | Num              | ber of jobs eliminated by this project   |  |  |  |  |  |  |  |
| 11.  | Will             | project require relocation of any projects or facilities? Yes No   |  |  |  |  |  |  |  |
|  | If yes, explain: |  |  |  |  |  |  |  |  |
|  |                  |  |  |  |  |  |  |  |  |
|  |                  |  |  |  |  |  |  |  |  |
|  |                  |  |  |  |  |  |  |  |  |
| 12   | ls su            | rface liquid waste disposal involved? Yes No   |  |  |  |  |  |  |  |
|  | а.               | If yes, indicate type of waste (sewage, industrial, etc) and amount  |  |  |  |  |  |  |  |
|  | b.               | Name of water body into which effluent will be discharged  |  |  |  |  |  |  |  |
| 13   | ls su            | bsurface liquid waste disposal involved? Yes No Type   |  |  |  |  |  |  |  |
| 14   | Will             | Will surface area of an existing water body increase or decrease by proposal? Yes No                           |  |  |  |  |  |  |  |
|  | lf ye            | s,explain: (See attached EAF Narrative)  |  |  |  |  |  |  |  |
|  |                  |  |  |  |  |  |  |  |  |
|  |                  |  |  |  |  |  |  |  |  |
|  |                  |  |  |  |  |  |  |  |  |
| 15   | ls pr            | oject or any portion of project located in a 100 year flood plain? Yes No                                      |  |  |  |  |  |  |  |
| 16   | Will             | the project generate solid waste? Yes No (See attached EAF Narrative)  |  |  |  |  |  |  |  |
|  | a.               | If yes, what is the amount per month? tons   |  |  |  |  |  |  |  |
|  | b.               | If yes, will an existing solid waste facility be used? Yes No  |  |  |  |  |  |  |  |
|  | C.               | If yes, give name ; location   |  |  |  |  |  |  |  |
|  | d.               | Will any wastes not go into a sewage disposal system or into a sanitary landfill? Yes No                       |  |  |  |  |  |  |  |

| 17. | Will  | I the project involve the disposal of solid waste?   | Yes       | No                   |         |                                 |
|-----|-------|--|-----------|----------------------|---------|---------------------------------|
|     | a.    | If yes, what is the anticipated rate of disposal?    | to        | ons/month.           |         |                                 |
|     | b.    | If yes, what is the anticipated site life? ye        | ears.     |                      |         |                                 |
| 18. | Will  | I project use herbicides or pesticides? Yes          | No        | (For Lawr            | ı & Tre | e Care)<br>Based on criteria in |
| 19. | Will  | I project routinely produce odors (more than one ho  | our per d | ay)? Yes             | No      | NYSDEC, "Assessing &            |
| 20. | Will  | I project produce operating noise exceeding the loca | al ambiei | nt noise levels?     | Yes     | Mitigating Noise", 2000)<br>No  |
| 21. | Will  | I project result in an increase in energy use? Y     | /es       | 110                  |         | ria in NYSDEC, "Assessing       |
|     | lf y€ | es, indicate type(s)                                 |           | Energy (<br>dated 20 |         | HG Emissions in EIS's"          |

| 22. If water supply is from wells, indicate pumping    | capacity      | gallons/minute. NOT APPLICABLE       |
|--|---------------|--------------------------------------|
| 23. Total anticipated water usage per day gallons/day. |               | (Based on 0.1 gallon per square foot |
| 23. Total anticipated water usage per day              | gallolis/day. | space AT 230,000 SQ. FT.)            |
| 24. Does project involve Local, State or Federal fun   | nding? Yes    | No                                   |
| If yes, explain:                                       |               |                                      |

\*

| City, Town, Village Board                                  | Yes              | No         |                             |              |
|--|------------------|------------|-----------------------------|--------------|
| Town of Yorktown,  | 105              |            |                             |              |
| Town Board,  |                  |            |                             |              |
|  |                  |            |                             |              |
| City, Town, Village Planning Board<br>Town of Yorktown,    | Yes              | No         |                             |              |
| Planning Board & NYCDE                                     | P *              |            |                             |              |
| City, Town Zoning Board<br>Town of Yorktown,               | Yes              | No         |                             |              |
| Zoning Board of Appeal                                     | s *              |            |                             |              |
| City, County Health Department<br>Westchester County Depa  | Yes<br>artment   | No         |                             |              |
| of Planning & Board of                                     | Legislato        | ors *      |                             |              |
|  |                  |            |                             |              |
| Other Local Agencies                                       | Yes              | No         |                             |              |
|  |                  |            |                             |              |
|  |                  |            |                             |              |
| Other Regional Agencies<br>New York City Departmer         | Yes<br>nt of     | No         |                             |              |
| Environmental Protectio                                    | on *             |            |                             |              |
|  |                  |            |                             |              |
| State Agencies<br>New York State Departmer                 | Yes<br>nt of     | No         |                             |              |
| Environmental Conservat:                                   | ion (NYSDI       | EC)and     |                             |              |
| NYS Department of Transp                                   | portation        | (NYSDOT)*  |                             |              |
| Federal Agencies<br>US Army Corps of<br>Engineers (USACE)* | Yes              | No         |                             |              |
| * These approvals will be (                                | obtained ;       | as part of | Site Plan and Subdiv        | ision Review |
| C. Zoning and Planning Information                         |                  | ab Pare or |                             |              |
| 1. Does proposed action involve a plannin                  | ng or zoning dec | ision? Yes | No                          |              |
| If Yes, indicate decision required:                        |                  |            |                             |              |
| Zoning amendment   | Zoning variance  |            | New/revision of master plan | Subdivision  |
| -  | Special use perr |            | Resource management plan    | Other        |
|  | •                |            |                             |              |

- 2. What is the zoning classification(s) of the site?
- 3. What is the maximum potential development of the site if developed as permitted by the present zoning?
- 4. What is the proposed zoning of the site?
- 5. What is the maximum potential development of the site if developed as permitted by the proposed zoning?
- 6. Is the proposed action consistent with the recommended uses in adopted local land use plans? Yes No
- 7. What are the predominant land use(s) and zoning classifications within a 1/4 mile radius of proposed action?

- 8. Is the proposed action compatible with adjoining/surrounding land uses with a ¼ mile? Yes No
- 9. If the proposed action is the subdivision of land, how many lots are proposed?
  - a. What is the minimum lot size proposed?

| 10. ' | Will proposed action require any authorization(s) for the formation of sewer or water districts?   |
|-------|--|
|       | Sewer district formation/inclusion must be authorized by the Westchester County Board of County Legislators at the time of Site Plan and Subdivision review.   |
| 11. 1 | Will the proposed action create a demand for any community provided services (recreation, education, police, fire protection?  |
|       | Yes [No (Police and Fire Protection)   |
| i     | a. If yes, is existing capacity sufficient to handle projected demand?   |
|       | Based on correspondence provided by the Lake Mohegan Fire District sufficient capacity exists; T/O Yorktown Police will result in manpower/equipment demands (see correspondence attached to EAF Narrative). |
| 12. ' | Will the proposed action result in the generation of traffic significantly above present levels?   |
|       | a. If yes, is the existing road network adequate to handle the additional traffic.   |
|       | No significant impacts over current volumes, based on project Traffic Study findings & evaluation of road geometry (attached).   |

#### D. Informational Details

Attach any additional information as may be needed to clarify your project. If there are or may be any adverse impacts associated with your proposal, please discuss such impacts and the measures which you propose to mitigate or avoid them.

### E. Verification

I certify that the information provided above is true to the best of my knowledge.

| Applicant/Sp | ponsor Name Anthony P. Russo | Date June 28, 2013             |
|--------------|------------------------------|--------------------------------|
| Signature    | Clack Ing                    | (Revised/Resubmitted 06/28/12) |
|              | <u>l</u>                     |                                |

Title President, Environmental Compliance Services, Inc.

If the action is in the Coastal Area, and you are a state agency, complete the Coastal Assessment Form before proceeding with this assessment.

# PART 2 - PROJECT IMPACTS AND THEIR MAGNITUDE

**Responsibility of Lead Agency** 

General Information (Read Carefully)

- In completing the form the reviewer should be guided by the question: Have my responses and determinations been **reasonable?** The reviewer is not expected to be an expert environmental analyst.
- I The Examples provided are to assist the reviewer by showing types of impacts and wherever possible the threshold of magnitude that would trigger a response in column 2. The examples are generally applicable throughout the State and for most situations. But, for any specific project or site other examples and/or lower thresholds may be appropriate for a Potential Large Impact response, thus requiring evaluation in Part 3.
- ! The impacts of each project, on each site, in each locality, will vary. Therefore, the examples are illustrative and have been offered as guidance. They do not constitute an exhaustive list of impacts and thresholds to answer each question.
- ! The number of examples per question does not indicate the importance of each question.
- ! In identifying impacts, consider long term, short term and cumulative effects.

### Instructions (Read carefully)

site?

- a. Answer each of the 20 questions in PART 2. Answer Yes if there will be any impact.
- b. **Maybe** answers should be considered as **Yes** answers.
- c. If answering **Yes** to a question then check the appropriate box(column 1 or 2)to indicate the potential size of the impact. If impact threshold equals or exceeds any example provided, check column 2. If impact will occur but threshold is lower than example, check column 1.
- d. Identifying that an Impact will be potentially large (column 2) does not mean that it is also necessarily **significant**. Any large impact must be evaluated in PART 3 to determine significance. Identifying an impact in column 2 simply asks that it be looked at further.
- e. If reviewer has doubt about size of the impact then consider the impact as potentially large and proceed to PART 3.
- f. If a potentially large impact checked in column 2 can be mitigated by change(s) in the project to a small to moderate impact, also check the **Yes** box in column 3. A **No** response indicates that such a reduction is not possible. This must be explained in Part 3.

| 1        | 2         | 3              |
|----------|-----------|----------------|
| Small to | Potential | Can Impact Be  |
| Moderate | Large     | Mitigated by   |
| Impact   | Impact    | Project Change |

### Impact on Land

1. Will the Proposed Action result in a physical change to the project

| NO | YES | (See | attached | EAF | Narrative) |
|----|-----|------|----------|-----|------------|
|----|-----|------|----------|-----|------------|

**Examples** that would apply to column 2

| Yes | No  |
|-----|-----|
| Yes | No  |
|     | Yes |

|    |                 |  |                      | 12Small toPotentialModerateLargeImpactImpact |        | 3<br>Can Impact Be<br>Mitigated by<br>Project Change |  |     |    |
|----|-----------------|--|----------------------|--|--------|--|--|-----|----|
|    | C               | Construction or expans   | ion of a santary l   | andfill.                                     |        |  |  | Yes | No |
|    | C               | Construction in a desig  | nated floodway.      |  |        |  |  | Yes | No |
|    | С               | Other impacts:   |                      |  |        |  |  | Yes | No |
| 2. |                 | l there be an effect to an<br>site? (i.e., cliffs, dunes,<br>NO YES          |                      |  | d on   |  |  |     |    |
|    | С               | Specific land forms:   |                      |  |        |  |  | Yes | No |
|    |                 | Imp  | act on Water         |  |        |  |  |     |    |
| 3. | (Ur             | l Proposed Action affect<br>ider Articles 15, 24, 25 of                      |                      |  |        |  |  |     |    |
|    | EC              | NO YES   | ( Se                 | ee attached                                  | EAF    | Narrative)   |  |     |    |
|    | Exa<br>C        | amples that would apply<br>Developable area of sit                           |                      | ected water body.                            |        |  |  | Yes | No |
|    | C               | Dredging more than 10<br>a protected stream.                                 | 0 cubic yards of     | material from chan                           | nel of |  |  | Yes | No |
|    | С               | Extension of utility distr body.   | ibution facilities t | hrough a protected                           | water  |  |  | Yes | No |
|    | C               | Construction in a desig  | nated freshwater     | r or tidal wetland.                          |        |  |  | Yes | No |
|    | C               | Other impacts:   |                      |  |        |  |  | Yes | No |
| 4. |                 | Proposed Action affect   | any non-protecte     | d existing or new bo                         | ody of |  |  |     |    |
|    | wai             | NO YES   | (Se                  | ee attached                                  | EAF    | Narrative)   |  |     |    |
|    | <b>Exa</b><br>C | Amples that would apply<br>A 10% increase or decr<br>water or more than a 10 | ease in the surfa    |  | y of   |  |  | Yes | No |
|    | С               | Construction of a body area.   | of water that exce   | eeds 10 acres of su                          | rface  |  |  | Yes | No |
|    | С               | Other impacts:   |                      |  |        |  |  | Yes | No |

|    |          |  | 1<br>Small to<br>Moderate<br>Impact | 2<br>Potential<br>Large<br>Impact | 3<br>Can Impact Be<br>Mitigated by<br>Project Change |
|----|----------|--|-------------------------------------|-----------------------------------|--|
| 5. |          | I Proposed Action affect surface or groundwater quality or<br>antity?<br>INO INCES (See attached EAF Narra   | tivo)                               |                                   |  |
|    |          |  | LIVE)                               |                                   |  |
|    | Exa<br>• | amples that would apply to column 2<br>Proposed Action will require a discharge permit.  |                                     |                                   | Yes No   |
|    | •        | Proposed Action requires use of a source of water that does not have approval to serve proposed (project) action.  |                                     |                                   | Yes No   |
|    | ٠        | Proposed Action requires water supply from wells with greater than 45 gallons per minute pumping capacity.   |                                     |                                   | Yes No   |
|    | •        | Construction or operation causing any contamination of a water<br>supply system.   |                                     |                                   | Yes No   |
|    | ٠        | Proposed Action will adversely affect groundwater.   |                                     |                                   | Yes No   |
|    | ٠        | Liquid effluent will be conveyed off the site to facilities which presently do not exist or have inadequate capacity.  |                                     |                                   | Yes No   |
|    | ٠        | Proposed Action would use water in excess of 20,000 gallons per day.   |                                     |                                   | Yes No   |
|    | •        | Proposed Action will likely cause siltation or other discharge into<br>an existing body of water to the extent that there will be an<br>obvious visual contrast to natural conditions. |                                     |                                   | Yes No   |
|    | ٠        | Proposed Action will require the storage of petroleum or chemical products greater than 1,100 gallons.   |                                     |                                   | Yes No   |
|    |          | Proposed Action will allow residential uses in areas without water and/or sewer services.  |                                     |                                   | Yes No   |
|    | •        | Proposed Action locates commercial and/or industrial uses<br>which may require new or expansion of existing waste treatment<br>and/or storage facilities.                              |                                     |                                   | Yes No   |
|    | •        | Other impacts:   |                                     |                                   | Yes No   |
|    |          |  |                                     |                                   |  |

.

|    |   |                          |                 |            |                 | 1<br>Small to<br>Moderate<br>Impact | 2<br>Potential<br>Large<br>Impact | 3<br>Can Impac<br>Mitigated<br>Project Cha | by |     |    |
|----|---|--------------------------|-----------------|------------|-----------------|-------------------------------------|-----------------------------------|--|----|-----|----|
| 6. |   | l Proposed Ac<br>off?    | tion alter dra  | inage flow | or patterns, or | surface                             | water                             |  |    |     |    |
|    |   | NO                       | YES             | (See       | attached        | d EAF                               | Narrat                            | ive)                                       |    |     |    |
|    | Examples that would apply to column 2<br>C Proposed Action would change flood water flows |                          |                 |            |                 |                                     |                                   | Yes  | No |     |    |
|    | C   | Proposed Ac              | tion may cau    | use substa | ntial erosion.  |                                     |                                   |  |    | Yes | No |
|    | C Proposed Action is incompatible with existing drainage patterns.                        |                          |                 |            |                 |                                     | Yes                               | No   |    |     |    |
|    | C   | Proposed Ac<br>floodway. | tion will allow | v developn | nent in a desig | nated                               |                                   |  |    | Yes | No |
|    | С   | Other impact             | S:              |            |                 |                                     |                                   |  |    | Yes | No |

IMPACT ON AIR

7. Will Proposed Action affect air quality? NO YES
Analysis of emmisions using NYSDEC Policy; "Assessing Energy Use & GHG in EIS's", dated 7/15/2009. (see EAF Narrative)

**Examples** that would apply to column 2

| C | Proposed Action will induce 1,000 or more vehicle trips in any given hour.  | Yes | No |
|---|---|-----|----|
| C | Proposed Action will result in the incineration of more than 1 ton of refuse per hour.  | Yes | No |
| C | Emission rate of total contaminants will exceed 5 lbs. per hour<br>or a heat source producing more than 10 million BTU's per<br>hour. | Yes | No |
| C | Proposed Action will allow an increase in the amount of land committed to industrial use.   | Yes | No |
| C | Proposed Action will allow an increase in the density of industrial development within existing industrial areas.                     | Yes | No |
| С | Other impacts:  | Yes | No |

#### IMPACT ON PLANTS AND ANIMALS

8. Will Proposed Action affect any threatened or endangered species?

NO YES (See attached EAF Narrative)

Examples that would apply to column 2

C Reduction of one or more species listed on the New York or Federal list, using the site, over or near the site, or found on the site. Yes No

|     |          |  | 1<br>Small to<br>Moderate<br>Impact | 2<br>Potential<br>Large<br>Impact | 3<br>Can Impa<br>Mitigated<br>Project Ch | d by |
|-----|----------|--|-------------------------------------|-----------------------------------|--|------|
|     | C        | Removal of any portion of a critical or significant wildlife habita  | at.                                 |                                   | Yes                                      | No   |
|     | C        | Application of pesticide or herbicide more than twice a year, other than for agricultural purposes.  |                                     |                                   | Yes                                      | No   |
|     | C        | Other impacts:   |                                     |                                   | Yes                                      | No   |
| 9.  |          | I Proposed Action substantially affect non-threatened or non-<br>dangered species?   |                                     |                                   |  |      |
|     |          | NO YES (See attached EA  | F Narrative)                        |                                   |  |      |
|     | Exa<br>C | amples that would apply to column 2<br>Proposed Action would substantially interfere with any reside<br>or migratory fish, shellfish or wildlife species.                  | nt                                  |                                   | Yes                                      | No   |
|     | C        | Proposed Action requires the removal of more than 10 acres<br>mature forest (over 100 years of age) or other locally importar<br>vegetation.                               |                                     |                                   | Yes                                      | No   |
|     | C        | Other impacts:   |                                     |                                   | Yes                                      | No   |
| 10. | Wil      | IMPACT ON AGRICULTURAL LAND RESOURCES<br>I Proposed Action affect agricultural land resources?<br>NO YES   |                                     |                                   |  |      |
|     | Exa      | amples that would apply to column 2  |                                     |                                   |  |      |
|     | C        | The Proposed Action would sever, cross or limit access to agricultural land (includes cropland, hayfields, pasture, vineya orchard, etc.)                                  | ard,                                |                                   | Yes                                      | No   |
|     | C        | Construction activity would excavate or compact the soil profil agricultural land.   | e of                                |                                   | Yes                                      | No   |
|     | C        | The Proposed Action would irreversibly convert more than 10 acres of agricultural land or, if located in an Agricultural Distric more than 2.5 acres of agricultural land. | ct,                                 |                                   | Yes                                      | No   |

|     |          |   | 1<br>Small to<br>Moderate<br>Impact  | 2<br>Potential<br>Large<br>Impact | 3<br>Can Impao<br>Mitigatec<br>Project Ch | lby |    |
|-----|----------|---|--|-----------------------------------|---|-----|----|
|     | C        | agricultural land managemen   | isrupt or prevent installation of<br>t systems (e.g., subsurface drain<br>ping); or create a need for such<br>field to drain poorly due to |                                   |   | Yes | No |
|     | C        | Other impacts:  |  |                                   |   | Yes | No |
|     |          | IMPACT ON AESTHE  | TIC RESOURCES  |                                   |   |     |    |
| 11. |          | Proposed Action affect aesthe<br>Visual EAF Addendum in Secti<br>NO YES   | etic resources? (If necessary, use<br>on 617.20, Appendix B.)<br>( See attached EAF  | Narrative)                        |   |     |    |
|     | Exa<br>C | <b>Imples</b> that would apply to colu<br>Proposed land uses, or project<br>from or in sharp contrast to cu<br>patterns, whether man-made | ct components obviously different<br>urrent surrounding land use   |                                   |   | Yes | No |
|     | C        |   | ct components visible to users of<br>I eliminate or significantly reduce<br>ic qualities of that resource.                                 |                                   |   | Yes | No |
|     | C        | Project components that will r<br>significant screening of scenic<br>the area.  | esult in the elimination or<br>c views known to be important to  |                                   |   | Yes | No |
|     | C        | Other impacts:  |  |                                   |   | Yes | No |

### IMPACT ON HISTORIC AND ARCHAEOLOGICAL RESOURCES

| 12. |     | historic or paleon                                       | impact any site or stru<br>tological importance?      | None, as identified by the Stage 1A & 1B Su |           |
|-----|-----|--|---|---|-----------|
|     |     | NO YE  | YES   | completed by City/Scape for the Pulte Homes | 3 Estates |
|     | Exa | amples that would  | apply to column 2                                     | Project                                     |           |
|     | C   | Proposed Action<br>substantially con<br>or National Regi | rtially within or Yes<br>or site listed on the State  | No  |           |
|     | C   | Any impact to an the project site.                       | archaeological site or                                | fossil bed located within Yes               | No        |
|     | C   |  | a will occur in an area c<br>al sites on the NYS Site | lesignated as sensitive Yes<br>Inventory.   | No        |

|  | 1<br>Small to<br>Moderate<br>Impact | 2<br>Potential<br>Large<br>Impact | 3<br>Can Impao<br>Mitigatec<br>Project Ch | l by |
|--|-------------------------------------|-----------------------------------|---|------|
| C Other impacts:   |                                     |                                   | Yes                                       | No   |
| IMPACT ON OPEN SPACE AND RECREATION  |                                     |                                   |   |      |
| <ul> <li>13. Will proposed Action affect the quantity or quality of existing or future open spaces or recreational opportunities?</li> <li>NO YES (See attached EAF N</li> </ul> | Marrative)                          |                                   |   |      |
| <b>Examples</b> that would apply to column 2<br>C The permanent foreclosure of a future recreational opportunity.  |                                     |                                   | Yes                                       | No   |
| C A major reduction of an open space important to the community.   |                                     |                                   | Yes                                       | No   |

Yes

No

#### IMPACT ON CRITICAL ENVIRONMENTAL AREAS

14. Will Proposed Action impact the exceptional or unique characteristics of a critical environmental area (CEA) established pursuant to subdivision 6NYCRR 617.14(g)? NO YES

С

Other impacts:

List the environmental characteristics that caused the designation of the CEA.

| Ex | Examples that would apply to column 2                                       |     |    |  |  |  |  |  |
|----|---|-----|----|--|--|--|--|--|
| С  | Proposed Action to locate within the CEA?                                   | Yes | No |  |  |  |  |  |
| С  | Proposed Action will result in a reduction in the quantity of the resource? | Yes | No |  |  |  |  |  |
| C  | Proposed Action will result in a reduction in the quality of the resource?  | Yes | No |  |  |  |  |  |
| С  | Proposed Action will impact the use, function or enjoyment of the resource? | Yes | No |  |  |  |  |  |
| C  | Other impacts:  | Yes | No |  |  |  |  |  |

|     |                 |   |   |                | 1<br>Small to<br>Moderate<br>Impact | 2<br>Potential<br>Large<br>Impact | 3<br>Can Impac<br>Mitigated<br>Project Cha | by      |
|-----|-----------------|---|---|----------------|-------------------------------------|-----------------------------------|--|---------|
|     |                 | IMP                                     | ACT ON TRANSPORTATION   |                |                                     |                                   |  |         |
| 15. | Wil             | l there be an effec<br>NO               | t to existing transportation syste<br>YES (See attac  |                | Narrative)                          |                                   |  |         |
|     | <b>Exa</b><br>C |   | d apply to column 2<br>sent patterns of movement of peo   | ople and/or    |                                     |                                   | Yes  | No      |
|     | C               | Proposed Actior                         | n will result in major traffic proble   | ms.            |                                     |                                   | Yes  | No      |
|     | C               | Other impacts:                          |   |                |                                     |                                   | Yes  | No      |
|     |                 |   | IMPACT ON ENERGY  |                |                                     |                                   |  |         |
| 16. |                 | I Proposed Action<br>ergy supply?       | affect the community's sources  | Based          | on criteria                         |                                   |  |         |
|     |                 | NO                                      | YES   |                | ssing Energy<br>attached EAF        |                                   | in EIS's'                                  | ", 2009 |
|     | <b>Exa</b><br>C | Proposed Action                         | d apply to column 2<br>n will cause a greater than 5% inc<br>of energy in the municipality.                   | ·              | ALLACHED EAF                        | Narracive)                        | Yes  | No      |
|     | C               | energy transmis                         | n will require the creation or exter<br>sion or supply system to serve n<br>nily residences or to serve a maj | nore than 50   | al                                  |                                   | Yes  | No      |
|     | C               | Other impacts:                          |   |                |                                     |                                   | Yes  | No      |
|     |                 | N                                       | OISE AND ODOR IMPACT  |                |                                     |                                   |  |         |
| 17. |                 | I there be objection<br>Proposed Action | onable odors, noise, or vibration<br>?  | as a result of | (See attache                        | ed EAF Narra                      | ative)                                     |         |
|     |                 | NO                                      | YES   |                |                                     |                                   |  |         |
|     | <b>Exa</b><br>C | -                                       | apply to column 2<br>,500 feet of a hospital, school or   | other sensitiv | ve                                  |                                   | Yes  | No      |
|     | С               | Odors will occur                        | routinely (more than one hour pe  | er day).       |                                     |                                   | Yes  | No      |
|     | C               |   | n will produce operating noise exo<br>bise levels for noise outside of st                                     | -              |                                     |                                   | Yes  | No      |
|     | С               | Proposed Actior noise screen.           | n will remove natural barriers that   | would act as   | a                                   |                                   | Yes  | No      |
|     | C               | Other impacts:                          |   |                |                                     |                                   | Yes  | No      |

|     |                 |  | 1<br>Small to<br>Moderate<br>Impact | 2<br>Potential<br>Large<br>Impact | 3<br>Can Impac<br>Mitigated<br>Project Cha | by |
|-----|-----------------|--|-------------------------------------|-----------------------------------|--|----|
|     |                 | IMPACT ON PUBLIC HEALTH  |                                     |                                   |  |    |
| 18. | Wil             | l Proposed Action affect public health and safety?<br>NO YES   |                                     |                                   |  |    |
|     | C               | Proposed Action may cause a risk of explosion or release of hazardous substances (i.e. oil, pesticides, chemicals, radiation, etc.) in the event of accident or upset conditions, or there may be a chronic low level discharge or emission. |                                     |                                   | Yes  | No |
|     | C               | Proposed Action may result in the burial of "hazardous wastes"<br>in any form (i.e. toxic, poisonous, highly reactive, radioactive,<br>irritating, infectious, etc.)   |                                     |                                   | Yes  | No |
|     | C               | Storage facilities for one million or more gallons of liquefied natural gas or other flammable liquids.  |                                     |                                   | Yes  | No |
|     | C               | Proposed Action may result in the excavation or other disturbance within 2,000 feet of a site used for the disposal of solid or hazardous waste.   |                                     |                                   | Yes  | No |
|     | C               | Other impacts:   |                                     |                                   | Yes  | No |
|     |                 | IMPACT ON GROWTH AND CHARACTER<br>OF COMMUNITY OR NEIGHBORHOOD   |                                     |                                   |  |    |
| 19. | Wil             | I Proposed Action affect the character of the existing community?<br>NO YES (See attached EAF Na   | arrative)                           |                                   |  |    |
|     | <b>Exa</b><br>C | amples that would apply to column 2<br>The permanent population of the city, town or village in which the<br>project is located is likely to grow by more than 5%.   |                                     |                                   | Yes  | No |
|     | C               | The municipal budget for capital expenditures or operating services will increase by more than 5% per year as a result of this project.  |                                     |                                   | Yes  | No |
|     | С               | Proposed Action will conflict with officially adopted plans or goals.  |                                     |                                   | Yes  | No |
|     | C               | Proposed Action will cause a change in the density of land use.  |                                     |                                   | Yes  | No |
|     | С               | Proposed Action will replace or eliminate existing facilities, structures or areas of historic importance to the community.  |                                     |                                   | Yes  | No |
|     | C               | Development will create a demand for additional community services (e.g. schools, police and fire, etc.)   |                                     |                                   | Yes  | No |

|   |  | 1<br>Small to<br>Moderate<br>Impact | 2<br>Potential<br>Large<br>Impact | 3<br>Can Impao<br>Mitigatec<br>Project Ch | l by |
|---|--|-------------------------------------|-----------------------------------|---|------|
| C | Proposed Action will set an important precedent for future projects. |                                     |                                   | Yes                                       | No   |
| C | Proposed Action will create or eliminate employment.                 |                                     |                                   | Yes                                       | No   |
| C | Other impacts:   |                                     |                                   | Yes                                       | No   |
|   |  |                                     |                                   |   |      |

20. Is there, or is there likely to be, public controversy related to potential adverse environment impacts? NO YES

If Any Action in Part 2 Is Identified as a Potential Large Impact or If you Cannot Determine the Magnitude of Impact, Proceed to Part 3

# Part 3 - EVALUATION OF THE IMPORTANCE OF IMPACTS

## **Responsibility of Lead Agency**

Part 3 must be prepared if one or more impact(s) is considered to be potentially large, even if the impact(s) may be mitigated. (See attached EAF Narrative)

Instructions (If you need more space, attach additional sheets)

Discuss the following for each impact identified in Column 2 of Part 2:

- 1. Briefly describe the impact.
- 2. Describe (if applicable) how the impact could be mitigated or reduced to a small to moderate impact by project change(s).
- 3. Based on the information available, decide if it is reasonable to conclude that this impact is **important**.

To answer the question of importance, consider:

- ! The probability of the impact occurring
- ! The duration of the impact
- ! Its irreversibility, including permanently lost resources of value
- ! Whether the impact can or will be controlled
- ! The regional consequence of the impact
- ! Its potential divergence from local needs and goals
- ! Whether known objections to the project relate to this impact.

### EAF NARRATIVE PROPOSED STATE LAND CORP. ZONE AMENDMENT MARCH 2012; REVISED JUNE 2013

### **PART 1 - PROJECT INFORMATION**

The subject property is located along NYS Route 202/35 in the Town of Yorktown, Westchester County, New York (Figure 1, Site Location Map). The site is comprised of one tax parcel designated as Section 26.17, Block 1, Lot 1; it is approximately 100 acres in size. The Project Sponsor, State Land Corp., is seeking a rezone from R1-160 Single Family Residential to C-3 Business zone. The rezone will facilitate the development of Retail and Office space. The site is currently vacant, forested land, which is bound by a commercially zoned district to the south; the property is immediately bordered by the Sylvan Glen Preserve to the north and west (industrial further west), residential properties to the east and south, and commercial properties south along NYS Route 202/35. The final project will provide approximately 230,000 square feet of commercial space on approximate4ly 27.5 acres, and the remaining approximate 72.5 acres will be deeded to the Town of Yorktown as open space. The approximate 72.5 acre parcel area abuts the Sylvan Glen Preserve to the north.

The Project Sponsor has submitted a formal application to the Town of Yorktown for the proposed project, which includes application for a zone change, a Full Environmental Assessment Form (EAF, Parts 1, 2 and 3), a Traffic Study and site design plans. Application for the zone change requires a formal review and approval by the Town Board, the Lead Agency for the project. As part of addressing the requirements of the State Environmental Quality Review (SEQR) Act for the project (a Type I Action), the Applicant has prepared a Full EAF in lieu of a Draft Environmental Impact Statement, which will contain additional supplemental studies to evaluate and mitigate the potential impacts of the project.

The property contains local wetlands and watercourses; a portion of NYSDEC designated Wetland A-10 (a Class II wetland) lies at and beyond the southwest corner of the property. The topography slopes upward from south to north with most of the slopes being moderate to steep (Figure 1). Surface runoff is conveyed overland or through the watercourses. The western portions of the property are tributary to the NYSDEC wetland, the majority of runoff travels to the southeast and to a culvert within NYS Route 202/35 which conveys the runoff to the Hunter Brook a NYSDEC Class B steam. The stream eventually discharges to the New Croton Reservoir to the south.

Preliminary conceptual plan sheets prepared by Site Design Consultants (SDC) of Yorktown New York (submitted in support of Town Board applications) depict a two lot commercial development (Lots 1 and 2, thereby requiring Subdivision Approval by the Town) with two independent retail areas, along with building layout provisions to aid in attracting a variety of retail and office uses, while minimizing environmental impacts (referred to as the project). The site plans shows a single access point on NYS Route 202/35, which divides into individual access for the two construction sites.

The proposed right-of-way limits of the Bear Mountain Parkway Extension (BME), a future east-west thoroughfare of the New York State Bear Mountain Parkway, lies immediately north of the proposed State Land Corp. commercial development. This extension has been considered by the Applicant in light of the fact that it has been highlighted in the "Route 35/202/6 and Bear Mountain Parkway Sustainable Development Study" previously prepared for the Town of Yorktown, the City of Peekskill, the Town of Cortlandt, the New York Metropolitan Transportation Council and the County of Westchester. The extension is also part of the New York State Transportation Improvement Plan (TIP). Specific environmental impacts related to the construction of the BME have been evaluated in conjunction with the proposed 27.2 acre commercial development; Figures 2 and 3 present two preliminary site improvement plans, with and without right-of-way provisions for the Bear Mountain Parkway Extension, respectively. These figures also present existing on-site watercourses and wetlands which will be encroached, or altered under the proposed commercial development, as well as the limits of an on-site 100-year floodplain.

The State Land Corp. project presents provisions for providing an east-west right-of-way along the northern limits of the development, in order to facilitate possible future plans for extending the Bear Mountain Parkway Extension, east-west. The need for this has been implied in the "Sustainable Development Study" as a long-term improvement for the NYS Route 202/35 corridor. It is important to note that whether or not the BME is construct is outside the control of the Applicant and more so under the control of the Town of Yorktown and the NYSDOT. Given that the BME is considered a long-term alternate, the majority of this document focuses on the 27.5 acre development, whereby approximately 72.5 acres will be deeded to the Town for preservation. The BME is only initially considered in light of the fact that it was planned to be routed across the Applicant's property. Further, the actual amount of land area utilized for the proposed development may vary (27.5 to 30 acres developed and 72.5 to 70 acres preserved) depending on the outcome of the Site Plan Approval process, which will be decided by others at a later date.

The Applicant has petitioned the Town Board for a zoning amendment from R1-160 One-Family Residential District, to C-3 Commercial Limited District. Prior to pursuing Site Plan and Subdivision review and approval with the Town Board, this EAF and the documents submitted and referenced herein have been prepared and are submitted in support of seeking a zoning amendment. The project is being reviewed by the Town Board, the Lead Agency under SEQR, as a conceptual plan for commercial development in order to evaluate project related impacts in consideration of the zone amendment. Previously, the project site has been considered for two major developments, one a 395,000 square foot commercial regional retail center (Homart Development preferred plan) and the other a 27-lot single-family residential subdivision (Pulte Homes Estates). As part of the Town's review of these proposals, each applicant submitted Draft Environmental Impact Statements (DEIS's) which included completion of extensive environmental, economic and social impact studies related to the site and surrounding areas (see below). Given the completion of these studies, the Board has determined that a majority of information gathered under these projects can be utilized in evaluating impacts identified by the Board for the State Land Corp. project. The Board has also required the Applicant to complete additional studies to supplement prior information, thereby ensuring a comprehensive review process for deciding the zone change. If the zone change is approved, the project may be further evaluated at a later date under the Town's Site Plan Approval process, whereby the Town and many of the interested agencies identified for this

project will conduct addition reviews (i.e. required agency authorizations, approvals and permits) and may require additional studies. This will be addressed in line with the submission of a final site plan by an interested Applicant.

Land uses in the most immediate vicinity of the site include commercial/light businesses along NYS Route 202/35 (included as "highway transportation") and residential land uses south of Old Crompond Road. Zoning districts within <sup>1</sup>/<sub>4</sub> mile of the site include Commercial Shopping Center C-1, Commercial Hamlet Center C-2, Commercial Limited C-3, Commercial General C-4, Single Family Residential (R1-20, R1-40 and R1-160, including residential zoned portions of the Sylvan Glenn Preserve), I-1 Industrial (west) and Townhouse and Multifamily (R-3). The majority of these commercial land uses exists along the north and south sides of NYS Route 202/35; the nearest residential land uses primarily exist east of the site beyond the Bear Mountain Parkway Extension near Stoney Street and south of Old Crompond Road, (south of the commercial development along the south side of NYS Route 202/35). Figure 4, Zoning Compliance Site Plan, depicts the various features of the proposed project along with provisions for meeting applicable zoning code requirements for the C-3 zone district.

The preliminary project proposal will result in a maximum area of disturbance of 27.5 acres as Lot 1 (Figure 1). As noted, the remaining approximate 72.5 acres will be dedicated as preservation area (Lot 2). As such, less overall ground disturbance (including less floodplain alteration) and a larger area left undisturbed (approximately 72.5 acres) will be realized if the Bear Mountain Parkway Extension right-of-way is not constructed (Figure 2). It is important to point out that the actual area of disturbance may vary, depending on the final project design. While the ultimate, final project design may result in changes in the amount of the overall level of disturbance, the Applicant has evaluated worst case impact scenarios related to the 27.5 acre development, and there will not be a significant expansion of the total amount of disturbance during Site Plan Approval.

Currently, the land owner (State Land Corp.) pays the Town of Yorktown \$27,227 in taxes each year for various services, including Westchester County and school taxes. The proposed project will increase the assessed value of the property and thus, generate a much greater amount of tax revenue, beyond that which is currently assessed for the property. Representatives of Environmental Compliance Services, Inc. (ECSI) obtained a "what if calculation" of expected taxes from the Town Assessor's office for the proposed State Land Corp. development. The expected amount of taxes to be generated by the proposed development (without the Bear Mountain Parkway Extension) is \$1,290,253 (see Tax Assessor's breakdown of expected taxes, by tax jurisdiction, is as follows:

| Tax<br>Jurisdiction                               | Box Store<br>140,000 sq. ft. | Office Space<br>150,000 sq. ft. | Retail Space<br>58,750 sq. ft. | Total by Tax<br>Jurisdiction |
|---|------------------------------|---------------------------------|--------------------------------|------------------------------|
| Town Tax  | \$76,443.95                  | \$8,895.30                      | \$52,815.82                    | \$138,155.07                 |
| County Tax  | \$75,806.50                  | \$8,821.12                      | \$52,375.40                    | \$137,003.02                 |
| Lake Mohegan Fire<br>District                     | \$34,032.24                  | \$3,960.12                      | \$23,513.18                    | \$61,505.54                  |
| Westchester County<br>Refuse                      | \$7,357.96                   | \$856.20                        | \$5,083.68                     | \$13,297.84                  |
| Open Space &<br>Conservation                      | \$30.00                      | \$30.00                         | \$30.00                        | \$90.00                      |
| Advanced<br>Life Support                          | \$2,072.57                   | \$241.17                        | \$1,431.95                     | \$3,745.69                   |
| Yorktown  | ¢10.000.22                   | ¢1 071 79                       | ф <del>л.551.17</del>          | ¢10.752.29                   |
| Consolidated Water<br>Yorktown School<br>District | \$10,929.33<br>\$507,230.64  | \$1,271.78<br>\$59,023.20       | \$7,551.17<br>\$350,450.26     | \$19,752.28<br>\$916,704.10  |
| TOTAL   | \$713,903.19                 | \$83,098.89                     | \$493,251.46                   | \$1,290,253.50               |

The amount of taxes generated by the proposed project is expected to offset the additional demand for public services, including Fire and Police protection services and equipment (see correspondence received from the Fire and Police Chief, under "Correspondence"), as well as help reduce the tax burden for Town of Yorktown and Westchester County residents.

The proposed project will also provide roadway improvements along NYS Route 202/35 which in turn will compliment improvements recently planned and currently being constructed by the New York State Department of Transportation. In addition, a primary stream which bisects the site will receive improvements designed to reduce sedimentation, total nitrogen and phosphorous discharge potentials to offsite, higher quality and protected receiving waters. These waterways are tributary to the New Croton Reservoir. In addition, two regional flood retention areas will be developed north of the proposed development. These two flood retention areas, combined with the implementation of storm water management controls contained in the Storm Water Pollution Prevention Plan prepared for the project (under separate cover), will reduce offsite discharge potentials by 30 percent. This offset will serve to mitigate existing flood potentials for communities located immediately downgradient of the site. This in turn will result in reducing road and bridge restoration costs for the Town, as well as improve property values and overall quality of life for downgradient property owners.

A general construction sequence has been provided in the project SWPPP, which is submitted in support of this full EAF to address issues related to storm water runoff and temporary and permanent controls necessary for the project. This Plan has been prepared by SDC.

### 1) Prior Site Development Proposals

Over the past nearly 20-years, the project site has been considered for two major developments, one a commercial regional retail center and the second a 27-lot single-family residential subdivision. Both of these developments were never constructed due to the attraction of other sighting opportunities, and/or changes in economic/market conditions. The highlights of these two previous developments within the Town, in comparison to the current State Land Corp. proposal, are presented below.

### A) Homart Development Company

During the early 1990's, the Homart Development Company had proposed to develop the project site as a Homart Community Retail Center; the project involved an application for a zoning amendment from residential to commercial. The Applicant sought to amend an R1-40 Single Family Residential zone to "Planned Retail Business" (C-1), an amendment deemed to best fit existing retail and other related businesses existing along NYS Route 202/35. A DEIS was prepared by the Homart Development Company and submitted to the Town during 1994. Several alternative design iterations were generated under the project (33 alternatives) which included a development sized as a 395,000 square foot retail center; this alternative was considered the "preferred plan" by the Applicant and it included provisions to attract three commercial anchor stores including a grocery store, a discount department store and a home improvement store (Figure 4A). Project alternatives were reviewed under the SEQR process, which was administered by the Town of Yorktown.

The preferred alternative resulted in a total land disturbance of 55 acres of 45 acres being set aside for conservation. This alternative focused little on vicinity roadway improvements; estimated taxes generated by the preferred development plan were calculated to be \$886,272, \$521,312 of which would be directed to the Yorktown Central School District. The breakdown of expected taxes, by jurisdiction, was calculated to be as follows:

| Taxing Agency                        | Tax Rate<br>(per \$1,000) | Estimated Taxes |
|--------------------------------------|---------------------------|-----------------|
| Town of Yorktown                     | \$83.64                   | \$114,203.56    |
| County of Westchester                | \$109.25                  | \$149,170.65    |
| Shrub Oak-Mohegan Water District     | \$10.64                   | \$14,527.92     |
| Westchester County Water District #2 | \$14.70                   | \$20,071.47     |
| Lake Mohegan Fire District           | \$33.74                   | \$46,068.81     |
| Westchester County Refuse District   | \$12.91                   | \$17,627.40     |
| Paramedic                            | \$2.41                    | \$3,290.63      |
| Yorktown Central School District     | \$381.80                  | \$521,312.15    |
| TOTAL                                | \$886,272.59              |                 |

The amount of tax revenue generated was expected to cover the cost for additional demands for Police and Fire Protection (manpower and equipment). The overall expected tax benefit to the Town of Yorktown was determined to be \$473,420, including estimated sales taxes generated by retail establishments within the preferred development.

The demand for water use under the preferred alternative was calculated to be 24,500 gallons per day, the supply of which would be obtained from the Yorktown Consolidated Water District by way of a connection with an existing 12 inch water main at the intersection of Stoney Street and NYS Route 202/35. Sanitary sewer effluent generated by the proposed Homart development was calculated to be 25,000 gallons per day. Sanitary sewer main facilities were verified to be located in close proximity to the project site and a sewer main extension was planned to be constructed to connect the development with the nearby (Peekskill Sewer District).

On-site natural resources were predicted to be impacted under the preferred plan, with 45 acres to be set aside as open space. Overall, the preferred alternative impacted 3.7 acres of wetlands/watercourses; a total of 13.3 acres of buffer area was to be affected by grading under this alternative. In addition, planned earthwork activities (grading) would generate 655,676 cubic yards of soil, all of which would be used on-site as fill; it was planned that site work would balance cut and fill and therefore, eliminate the need to export soil material off-site.

A Traffic Impact Study was prepared for the Homart Development (dated March 1995), by John Collins Engineers, P.C. This study included an analysis of the preferred 395,000 square foot retail center. The trip generation estimates conducted for this alternative indicate that the site was expected to generate approximately 363 total trips during the AM Peak Hour, 1,572 total trips during the PM Peak Hour and 2,134 total trips during the Saturday Peak Hour.

Sheffield Archaeological Associates completed a cultural resource survey of the entire project site and determined that several historic period structures and features, and one prehistoric site, existed within the study area. These included the Gardineer-Olsen Farmstead (1901/1908), a dam possibly linked to the farmstead, a root cellar located south of the dam (within the eastern portion of the site), an unidentifiable structure and cabin ruins and a cistern or well. The study further noted that these findings "lacked research potential and historical significance". Further, nearby and on-site resources (historical/prehistoric) identified through their investigations, would not be affected by the preferred development design. This finding was further substantiated in correspondence issued by the NYS Office of Park, Recreation and Historic Preservation.

As noted, the preferred development was to include three large buildings designed to house a grocery chain, a discount department store and home improvement store chain. These buildings were to be located in close proximity to the property frontage to accommodate site access and utility conveyances/connections. The buildings and parking areas surrounding each were to be constructed at an on-site elevation greater than the elevation of NYS Route 202/35. The project relied heavily upon vegetation plantings that were proposed to aid in screening (softening) visual impacts to retail shops and businesses along NYS Route 202/35, as well as drivers of vehicles utilizing this transportation corridor. Despite the elevated nature of the constructed buildings and parking areas and planned vegetation plantings to help screen the development, an expectation existed that the three large planned anchor stores would visually impact drivers traveling along NYS Route 202/35 and the existing retail shops and businesses along the roadway.

During the SEQR process, Homart decided to abandon the concept of establishing a retail center in the Town of Yorktown and pursued an opportunity in the adjoining Town of Cortlandt.

B) Pulte Homes Estates

During 2004, Pulte Homes of New York, LLP proposed to subdivide and construct a 27lot residential subdivision development on the subject 100 acre project site (Figure 4B). A DEIS was prepared by Pulte Homes and submitted to the Town during 2004. The DEIS analyzed several alternative designs that coincided with the up-zoning being proposed by the Town's Comprehensive Plan; the size of the lots were greater than 4 acres in size. While this project did not involve a zone change, several issues were considered in the DEIS, similar to those in the current State Land Corp. action.

The 27-lot development was expected to generate a considerable amount of taxes, especially in light of concerns for an identified demand for community services typical of residential developments. Further, the development would add some school-aged children to the Yorktown Central School District. Taxes generated by the Pulte Homes development was estimated to be \$450,687 and after the development \$421,987 (\$450,687 less \$28,700 current taxes); this remaining amount would be distributed to the County, the Yorktown Central School District and the Town of Yorktown. The 27-lot development would result in a greater demand for Town services, including seasonal roadway maintenance and repairs, infrastructure costs, and police and fire protection, as compared to the type and level of services demanded by the State Land Corp. commercial development.

The demand for water supply was estimated at 9,400 gallons per day, which was proposed to be obtained from the Yorktown Consolidated Water District by way of a water main pipeline connection. A total of 15,900 gallons per day of sanitary sewage was estimated to be generated by the project, which would be routed to the Peekskill Sewer District by way of a sewer main extension.

Approximately 77 acres would be set aside for "preservation"; approximately 23 acres would be disturbed to accommodate 26 home sites. The amount of open space planned to be deeded to the Town consisted of 10.8 acres; the remaining undeveloped portions of home site lots made up 66.2 acres of "open space" (totaling the approximate 77 acres). These acres remained in the ownership of individual homeowners. Only the 10.8 acre area was contiguous to the Sylvan Glen Preserve at the northwestern portion of the site. A fair amount of natural resources would be impacted under this proposal, with on-site wetlands and watercourses affected to a much lesser degree compared to the Homart project. The proposed configuration of the project design and the amount of land under ownership by individual homeowners would destroy and fragment the natural attributes and varied biodiversity of the upper woodland forested portions of the property, and thus, the project would affect habitat communities in proximity to the Sylvan Glen Preserve.

Wetland/watercourse impacts were expected to be minimal under the proposed development, however, a considerable amount of wetland and watercourse buffer area (6.19 acres) would be affected. Of the 23 acres of land disturbance, the development would be

constructed upon 11.8 acres with slopes greater than 15 percent, which represented 24 percent of the overall area of steep slopes found on the project site. In addition, planned earthwork activities (grading) would generate 187,000 cubic yards of soil and rock of which 67,000 would be used on-site as fill, and 120,000 cubic yards were required to be exported from the site. Further, given the proposed configuration of the development, 11.8 acres of disturbance were proposed to take place on slopes exceeding 15 percent.

As with the Homart Development, this project did not include any substantial opportunities for area roadway improvements along NYS Route 202/35. Total trip generation calculated for the project resulted in 28 total trips at AM Peak Hour and 32 at PM Peak Hour. The Applicant did extend a willingness to contribute to some future traffic improvements planned for the Route 202/35 corridor; improvements such as the installation of a traffic light to accommodate the development was not found to be warranted for the expected low traffic volume estimated to be generated by the project during peak hours.

City/Scape Cultural Resource Consultants completed a cultural resource survey (State 1A and 1B) of the entire project site and determined that nearby and on-site resources (historical/prehistoric) identified through their investigations would not be affected by the Pulte Home development. These findings were further substantiated in correspondence issued by the NYS Office of Park, Recreation and Historic Preservation.

Visual impacts associated with this development were identified as resulting primarily from select clear cut of forested areas, which was necessary to accommodate house lots, roadways and storm water management facilities; these impacts were identified as occurring from lower to the higher elevation areas of the site. A "boulevard style" entrance way was proposed to connect with NYS Route 202/35 including landscaped medians, street trees and lighting. It was explained that the narrow, winding road configuration of the development proposed throughout the project site served to off-set visual impacts identified under the project.

In time, Pulte Homes decided to abandon their proposal due to changes in economic and house market characteristic.

### C) Comparison of Prior Projects with the State Land Corp. Proposal

The proposed commercial portion of the site, without the Bear Mountain Extension rightof-way, will result in less overall land disturbance (approximately 27.5 acres) and thus, a greater amount of reservation area (approximately 72.5 acres without the Bear Mountain Parkway Extension) would be deeded to the Town as a large natural area contiguous to the Sylvan Glen Preserve. Compared to the amount and designation of "open space" identified under the Pulte Home and the Homart developments, the amount of open space offered by the State Land Corp. development represents a very significant contribution to the Town as it is a large tract of land, which is contiguous with the Sylvan Glen Preserve. This land will be conveyed to the Town by the Applicant as preserved, undisturbed land for the Town to decide its use into the future.

As with other commercial properties in the Town of Yorktown, the property will be reassessed with a higher valuation and thus, a greater amount of revenue will be generated well above current tax receipts. Similarly to that of the Homart development, the State Land Corp. proposal will generate a large amount of taxes (estimated by the Town Tax Assessor's Office as \$1,209,253 annually), a large portion of which is expected to be collected by the Town annually. Similarly to that of the State Land Corp. development, the Homart and Pulte Homes developments identified demands for fire and police protection services and equipment. The amount of taxes generated by the prior two development projects was concluded to be sufficient to cover the cost of these community services, with a large portion of the taxes being distributed to the County, the School District(s) and the Town of Yorktown annually. The same is expected with the State Land Corp. development.

While the Homart and Pulte Homes projects required public sewer extension and water supply main connections similar to that of the State Land Corp. proposal, the off-site connection locations are ideally located for the State Land Corp. proposal and would therefore result in less excavation/grading and overall costs. State Land Corp. proposes to pay for the cost of each connection. The DEIS prepared for the Pulte Homes project indicates that the cost for a water main connection would be paid by the Applicant, no details exist to substantiate whether or not Pulte Homes project would pay the cost for wastewater/sewer connections. As with the other two development projects considered for the subject property, adequate water supply and sewage treatment capacity exists for the State Land Corp. project proposal.

Given the significantly large amount of retail space proposed under the Homart Development, the project resulted in the greatest amount of traffic volume generation compared to the Pulte Homes project and the State Land Corp. proposal. Approximately 37% less vehicle trips will be generated by the State Land Corp. project during each of the peak hours compared to those estimated for the Homart Development. The Pulte Home development resulted in significantly less expected vehicle trips, based on the residential makeup of the development. It is important to point out that the Homart and Pulte Home developments did identify existing traffic volume and level of service concerns along NYS Route 202/35. The Homart project included provisions for adding through lane and turning lane movements, widening Route 202/35 at the site entrance and implementing signal improvements; the Pulte Homes project did not include traffic related improvements. The State Land Corp. proposal includes roadway improvements which are designed to complement regional roadway improvements currently planned by the NYSDOT. These improvements will aid in addressing existing and future traffic demands identified for the NYS Route 202/35 corridor.

In addition to roadway improvements, the State Land Corp. project will mitigate natural conditions within sections of an on-site stream which bisects the property. Portions of this stream have been determined to cause high sediment, total nitrogen and phosphorus discharge potentials to downstream, high quality streams; these high quality streams are tributary to the New Croton Reservoir. Proposed in-stream improvements have been determined to reduce off-site total nitrogen and phosphorus levels, as well as significantly reduce sedimentation potentials. In conjunction with the in-stream improvements, two proposed regional flood retention areas are proposed to be located along the northern limits of the project site, each designed to offset flood potentials to communities located immediately downgradient of the project site. The details of these improvements and the benefits derived are discussed under Items 1, Impacts on Water and Item 3, Physical Changes to the Project Site, below. Wetland mitigation plantings will also be

implemented along the expanded limits of the two regional flood retention area to provide greater habitat diversity and ensure flood holding capacity. The Homart project would result in altering and mitigating 3.6 acres of on-site wetlands, and portions of stream corridors, as well as wetland and stream corridor buffer area. An estimated 5.22 acres of wetlands would also be altered as a result of joint (NYSDOT and Homart) roadway improvements along Route 202/35. Less stream and wetland related impacts (0.58 acres wetland mitigation) would be realized under the Pulte Homes project.

The amount of land disturbance on slopes greater than 15 percent was larger for the Homart and Pulte Homes development as each project design encroached into the steep, northern portions of the property. The State Land Corp. proposal will concentrate disturbance on less areas exhibiting 15 percent slope; essentially, the majority of the development will take place on land areas below 15 percent slope. In addition, Homart's preferred development resulted in disturbing a greater amount of land (55 acres) compared to the State Land Corp. development (approximately 27.5 acres) with less contiguous land for preservation (45 acres, of which 3.6 acres required for wetland mitigation); the Pulte Homes development would disturb approximately 23 acres with a contiguous land contribution of 10.8 acres to be deeded to the Town of Yorktown for open space. The State Land Corp. development will result in the largest, contiguous natural land contribution to the Town, approximately 72.5 acres.

Sheffield Archaeological Associates (Homart Development) and City/Scape Cultural Resource Consultants (Pulte Homes) completed cultural resource surveys/investigations of the project site and determined that nearby and on-site resources (historical/prehistoric) identified through their work efforts would not be affected by the Homart or Pulte Home developments. These findings for these developments were substantiated in correspondence issued by the NYS Office of Park, Recreation and Historic Preservation. During April 2012, these findings were again substantiated by the NYS Office of Park, Recreation and Historic Preservation and Historic Preservation (contained in "Correspondence"). While the State noted that none of the findings associated with the Miller home site (circa 1840) were "eligible", the area will remain undisturbed by the proposed State Land Corp. development as the area lies within the approximate 72.5 acre open space northwest portion of the project.

In addition, the State Land Corp. development will include provisions for extending a planned free flow lane leading from the Bear Mountain Parkway Extension and onto NYS Route 202/35; the developer will extend this free flow lane to the proposed driveway which will connect the development with NYS Route 202/35. The two westbound through lanes at the site access will be extended approximately 100 feet in conjunction with the provision of a westbound left turn lane for left turns into the development. The development will include construction of a traffic signal light at the driveway intersection with NYS Route 202/35, opposite the Parkside Corners Shopping Center. A signalized pedestrian crosswalk will also be provided at the site access intersection to connect with the sidewalk on the south side of NYS Route 202/35, which will be constructed as part of the NYSDOT Pine Grove Court Improvements.

The State Land Corp. development will generate 920 parking spaces, per current Town Code requirements; the 395,000 square foot preferred Homart project provided for 1,400 parking spaces, which met Town Code requirements at the time of the proposed development. Visual

impacts identified under the Homart development would be the most significant, in light of Homart's plan to locate three large buildings on-site in order to attract large anchor stores. The Homart project opens the greatest amount of the land by removal of significant acreage of natural vegetation. This includes the opening of the entire road frontage which will increase the visibility of the project from more viewpoints within the immediate area and long distance regional viewpoints. Additionally, the size of the project comprised of more buildings creates the need for more parking areas, site lighting, and signage. The Homart development visibility would be much greater than that resulting with the State Land Corp. project, both during daylight and evening hours. Further, landscaped screening was proposed to off-set visual impacts along NYS Route 202/35; regardless, a large portion of the project would be visible along NYS Route 202/35.

The Pulte Homes development resulted in the least amount of visual impact. This project would result in approximately 23 acres of disturbance of natural vegetation, which is approximately 5 acres less than the State Land Corp. proposal. However, the Pulte project would extend into the upper reaches of the site which would thereby increase project visibility from more distant viewpoints in the regional viewshed. The Pulte site would require less lighting and would not require large expansive parking areas; however, since the development would extend farther up into the site, the line of site from route 202 would be increased. While homes would be seen from surrounding areas within the lower and upper reaches of the site, the development's configuration, consisting of narrow winding street designs, would be significantly less than the impacts identified under the Homart development.

The State Land Corp. proposal would require less disturbance (less than 30 acres) than that preferred Homart development, and 5 acres more than what would result with the Pulte Homes project. Efforts will be made to allow existing dense stands of trees and shrub vegetation to remain in place, as well as implement a tree and shrub planting program within each area of concern to screen off-set visual impacts. In addition, the development will be set-back from the property's frontage and the majority of parking areas (including portions of proposed buildings) will not be seen from NYS Route 202/35 or distance regional viewpoints due to the slightly higher elevation of the development being nestled within surrounding dense stands of tree and shrub vegetation. While the buildings will be visible at certain viewpoints, the project's base elevation and proximity to Route 202 will virtually eliminate the potential views of parking areas by passing motorists. It should be noted that proposed parking areas will include incorporating landscaping to visually break the pavement mass and create screening for the buildings. It is not proposed to totally screen the buildings from motorists traveling along NYS Route 202/35; rather the screen will soften the visual impacts.

The design of the State Land Corp. development will site lighting components designed to minimize the amount of light generated, while providing adequate lighting for safe pedestrian and traffic movement throughout the site. Downward facing LED lights (Light Emitting Diode) lights are anticipated to be installed as part of the photometric design of each fixture. During off hours, store front and sign lighting will be reduced as on-site businesses will be closed and store lighting turned off, or significantly reduced to conserve energy. Entrance signage will be visible from route 202; however, signs will be illuminated during evening (dusk/night-time) business hours. The signage on the building fronts will be somewhat visible from route 202 and will also increase in visibility in the non-daylight business hours. However, there will be vegetative screening and landscaping which will provide a balance of visibility for pedestrians to identify the site during their approach and decide to enter the access driveway, while not having an offensive visual to passing traffic on route 202.

Essentially, the State Land Corp. development would be visible from two viewpoints along NYS Route 202/35, the site access point and to a lesser degree a portion of the southeastern limits of the development. These areas would be briefly visible to drivers of vehicles traveling along NYS Route 202/35, and from some businesses existing along this route. Efforts will be incorporated into the site design to save as many existing trees as possible, and replant replacement trees and shrubs where most effective and practicable.

In effort to summarize a comparison of a majority of the above discussed differences between the State Land Corp. proposal and that of the Homart and Pulte Homes development, the following tables were generated for the reader to make quick comparisons:

|                  | I                              | (Whithout the DML)                      |                                    |        |
|------------------|--------------------------------|---|------------------------------------|--------|
| Project          | Area of Disturbance<br>(Acres) | Soil Removal<br>Volume<br>(Cubic Yards) | Open Space<br>Remaining<br>(Acres) | Total  |
| Homart           | 55.00-70.00                    | 0.00                                    | 40.00 to 55.00                     | 110.00 |
| Pulte Homes      | 23.00                          | 120,000                                 | 77.00                              | 103.00 |
| State Land Corp. | 28.30                          | 389,686                                 | 72.50                              | 98.3   |

#### LAND DISTURBANCE AND REMAINING OPEN SPACE (Without the BME)

#### EXISTING WETLANDS AND WATER RESOURCES, DISTURBANCE AND MITIGATION (Without BME)

| Project          | Wetland and Water<br>Resources<br>(Acres) | Wetland/Wetland Buffer<br>Disturbance<br>(Acres) | Mitigation<br>(Acres) | Land Preservation<br>(Acres) |
|------------------|---|--|-----------------------|------------------------------|
| Homart           | 13.38                                     | 17.00  | 0.00                  | 40.00-55.00                  |
| Pulte Homes      | 13.71                                     | 6.19   | 0.00                  | 77.00                        |
| State Land Corp. | 13.32                                     | 10.90  | 0.40                  | 72.50                        |

## COMPARISON OF COMMUNITY BASED IMPACTS

| Project          | Traffic Generation<br>(Trips) | Traffic Mitigation and<br>Improvements   | Tax Revenue Generation for<br>Town of Yorktown<br>(Million Dollars) |
|------------------|-------------------------------|--|---|
| Homart           | 2,134                         | None proposed  | 0.47  |
| Pulte Homes      | 32                            | None proposed  | 0.45  |
| State Land Corp. | 494                           | Widening along frontage for<br>designated left and right turn lanes<br>into site | 1.29  |

# POLLUTANT LOADING/SEDIMENT TRANSPORT AND DOWNSTREAM BENEFITS

| Project                | Storm<br>Water<br>Control<br>Measures   | Pollutant Loading   | Sediment<br>Transport  | Flood Mitigation  | Downstream Benefits  |
|------------------------|---|---|--|---|--|
| Homart                 | Two (2)<br>wetland<br>replication<br>areas, one (1)<br>detention<br>basin   | A pollutant loading<br>analysis was not<br>performed as part of<br>the application.<br>However, the<br>constructed wetlands<br>areas would provide<br>some pollutant removal<br>characteristics           | Stabilization of<br>exposed slopes<br>with seed and<br>loam was<br>proposed to<br>reduce sediment<br>transport.  | A study was not<br>performed. However,<br>the wetland<br>replication area to the<br>north would have<br>provided some flood<br>mitigation.  | Possible flood<br>mitigation and minor<br>pollutant removal from<br>on-site improvements<br>with proposed wetland<br>replication practice  |
| Pulte<br>Homes         | Four (4)<br>retention<br>ponds  | A pollutant loading<br>analysis was not<br>performed as part of<br>this application.<br>However, the retention<br>basins would have<br>captured some<br>pollutants and retain<br>such pollutants on site. | Inlet protection,<br>swale check<br>dams, silt fence,<br>and sediment<br>basins (4) were<br>proposed to<br>reduce sediment<br>transport during<br>construction   | A study was not<br>performed.<br>Furthermore, no<br>upstream practices<br>were proposed to<br>attenuate existing<br>flows.  | Possible for some<br>pollutant capture in the<br>four (4) retention ponds.   |
| State<br>Land<br>Corp. | Two (2)<br>proposed<br>subsurface<br>infiltration<br>basins,<br>coupled with<br>multiple<br>bioretention<br>areas, native<br>species<br>plantings, and<br>stream<br>restoration<br>practices. | An analysis was<br>performed that<br>identifies a reduction of<br>122 lbs TN, 29 lbs TP,<br>and 4,884 lbs TSS per<br>year.  | Diversion<br>swales, water<br>bars, stabilized<br>const. entrances,<br>silt fence, erosion<br>control blankets,<br>sediment basins<br>(2) will reduce<br>sediment<br>transport during<br>const.<br>Furthermore, the<br>stream<br>restoration<br>practices being<br>implemented will<br>reduce the<br>sediment<br>transport within<br>the existing<br>stream bed. | Upstream regional<br>stormwater detention<br>areas (2) in addition to<br>the on-site infiltration<br>and attenuation<br>systems provide for a<br>post development<br>peak flow that is 27%-<br>30% lower than the<br>corresponding storm<br>event's pre-<br>development peak<br>flow. | The on-site infiltration<br>and attenuation<br>facilities will provide<br>pollutant capture and<br>removal from the<br>downstream<br>watercourse.<br>Furthermore, the stream<br>restoration practices<br>will provide additional<br>TSS removal from the<br>downstream<br>watercourse. |

### A) Site Description

### Item 3- Predominant Soils and Characteristics

Soils in the project area have been mapped and described by the US Department of Agriculture, Natural Resource Conservation Service (Soil Conservation Service (SCS) Soil Survey of Putnam and Westchester Counties, New York). The County survey provides a wealth of information about the general kinds of soils found on-site; however, the bounds of the soil series depicted in the soil survey bulletin are approximate at best due to the scale of the mapping and limited field checking. Information included in the DEIS for the Pulte Homes Estates project was gathered by a Certified Soil Scientist who was retained to conduct a site specific soil survey. This entailed identifying a number of site-specific attributes associated with the landform including slope shape, length, steepness and aspect, parent material and bedrock types, on-site drainage patterns, and existing vegetative cover. Representative sample locations were chosen based on the aforementioned criteria. Soils were sampled using a spade and Dutch auger, and analyzed to document the specific soil types found in the area.

On-site field work was conducted during February 2002 and confirmed the presence of most of the soil types depicted in the County soil survey bulletin. Warm weather and the lack of snow cover during 2002 facilitated acquisition of representative auger samples which served to better document soil types and conditions. Most of the soils found on the project site have developed in loamy glacial till materials derived mainly from gneiss, schist, and related metamorphic rock. Organic soils found in the wetland situated at the southwestern corner of the site, is the exception to this characterization. While the perimeter of this wetland system possesses poorly drained mineral soils, the majority of this Palustrine (Latin for "wetland") system contains a thick sapric and hemic organic layer that overlies outwash or till deposits. Glacial till characterized as an unsorted mixture of silt, sand, clay, gravel, and stones were deposited in-situ during the retreat of the glaciers. Till deposits encompass much of the landform in the region, with glacial outwash deposits (sands, silts, clays, and gravels sorted by glacial melt processes) generally restricted to valleys and other low lying terrain.

Soils found on the eastern portions of the property contain loamy to sandy loam in texture and generally possess a friable substratum that promotes infiltration. Depth to bedrock here is variable, with some upper and mid-sloped areas exhibiting scattered bedrock and ledge outcrops. The soils situated in the central and western parts of the site are loamy and underlain by a somewhat tight substratum condition, which retards infiltration and promotes surface runoff. Evidence of this condition can be seen in the field by ditch-like upland drainage channels and intermittent watercourses that bisect the property, north south. Till depth on the lower reaches of the site is considered moderately thick. A man-made excavation (pit) which has become a small surface water feature near NYS Route 35/202 exhibits a land cut that approaches, or exceeds, approximately twenty feet in depth.

Surface stones and boulders are common on parts of the site, although this varies to a large degree depending upon specific location. Shallow stony soil is also very common on the middle and lower slope areas on the central and western parts of the site. Detail information of on-site soils is further summarized as follows:

<u>Carlise Muck 0 to 2 percent slopes, (Ce)</u>: This soil is reported to occupy broad depressions and other low lying terrain between hills and till, or outwash plains. This soil is formed in well decomposed organic material that exceeds a depth of 51 inches. The Carlise soil is prone to shallow flooding and frost action. The shallow depth to the water table and its inherently low strength make this soil problematic for most development options.

<u>Charlton loam, 3 to 8 percent slopes, (ChB)</u>: This soil is gently sloping, very deep, and well drained. This soil is commonly found on hilltops and hillsides. No major limitations are typically encountered with this soil type.

<u>Charlton loam, 8 to 15 percent slopes, (ChC)</u>: This soil is gently sloping, very deep, and well drained. This soil is commonly found on hilltops and hillsides. No major limitations are typically encountered with this soil type.

<u>Charlton loam, 15 to 25 percent slopes, (ChD):</u> This soil is moderately steep, very deep, and well drained. It is often found on the sides of ridges and hills. Steep slope is a major problem limitation associated with this soil type. During construction, minimizing the removal of vegetation, mulching, and quickly establishing a plant cover can help to prevent and/or control erosion and sedimentation potentials.

<u>Charlton-Chatfield complex, rolling, very rocky, 2 to 15 percent slopes, (CrC):</u> This unit consists of the very deep and moderately deep, well drained and somewhat excessively drained Chatfield soil and the well-drained Charlton soil. It is typically found on hilltops and hillsides that are underlain by highly folded bedrock. Slopes range from 2 to 15 percent. Rock outcrops covers 2 to 10 percent of the surface. The main engineering limitations for these soils are the moderate depth to bedrock (40 to 60 inches), rock outcrops, and the irregular topography.

<u>Chatfield-Charlton complex, hilly, very rocky, 15 to 35 percent slopes, (CsD):</u> This unit consists of the very deep and moderately deep, well drained and somewhat excessively drained Chatfield soil and the well-drained Charlton soil. It is often found on the tops and sides of hills that are underlain by highly folded bedrock. Slopes range from 15 to 35 percent. Rock outcrops covers 2 to 10 percent of the surface. The main engineering limitations for these soils are the moderate depth to bedrock (20 to 40 inches), rock outcrops, and steep slope.

Leicester loam, stony, 0 to 3 percent slopes, (LeA): This soil is nearly level, very deep, and somewhat poorly, to poorly drained. It is found on upland till landforms and along small drainage ways on bedrock controlled terrain. The main limitations associated with this soil type pertain to wetness and a high potential for frost action.

Leicester loam, 3 to 8 percent slopes, stony (LcB): This soil is gently sloping, very deep, and somewhat poorly drained, and poorly drained. It is on the lower

parts of hillsides and along small drainage ways in bedrock-controlled areas. The main engineering limitations associated with these soils types are wetness and a high potential for frost action.

<u>Paxton fine sandy loam, 2 to 8 percent slopes (PnB)</u>: This soil is gently sloping, very deep, and well drained. It is typically found on broad ridges, small hills, and drumlins. The main limitations are wetness, frost action, and slow permeability in the substratum.

<u>Ridgebury Loam, 3 to 8 percent slopes, (RdB):</u> This soil is gently sloping, very deep, and poorly to somewhat poorly drained. It is typically found along drainage ways in upland areas and the toe and lower slopes of hillsides. The main limitations associated with this soil type include wetness, frost action, and slow permeability in the substratum.

<u>Sun loam, extremely stony, (Sh):</u> This soil is very deep, nearly level, and poorly drained, or very poorly drained. Larger stones cover 3 to 15 percent of the surface. The main limitations associated with this soil include wetness a slow rate of water movement in the substratum, factors that affect its suitability for septic systems.

Sutton loam, 3 to 8 percent slopes (SuB): This soil occurs on gently sloping terrain in depressions, adjacent to drainage ways, and on concave slope positions. It is moderately well drained with a seasonally high water table that approaches from 1.5 feet to 2.5 feet of the surface from late fall through early spring. Seasonal wetness is the main limitation associated with this soil type, although subsurface and surface drains can be installed to reduce this condition.

<u>Woodbridge loam, 3 to 8 percent slopes (WdB):</u> This soil is gently sloping, very deep, and moderately well drained. It is typically found on the sides of hills, drumlins, and broad ridges. This soil possesses a seasonally high water table that approaches from 1.5 feet to 2.5 feet of the surface from late Fall through Spring. Frost action and a seasonally high water table are the primary limitations associated with this soil type. Subsurface drains can often be installed to reduce wetness and provide conditions more suitable for septic system installations.

<u>Woodbridge loam, 8 to 15 percent slopes (WdC):</u> This soil occupies moderately to steeply sloping terrain on the sides of hills, drumlins, and ridges. It is moderately well drained with a seasonally high water table that approaches from 1.5 feet to 2.5 feet of the surface from late fall through spring. Frost action and a seasonally high water table are the primary limitations associated with this soil type. Subsurface drains can often be installed to reduce wetness and provide conditions more suitable for septic system installations.

Figure 5 presents the location of the above described soils and is contained at the back of this document under the divider entitled FIGURES. Given the above information, some on-site

soils present certain constraints for development that will need to be addressed during the design and construction of the proposed project. These constraints relate largely to wetness in areas where hydric (wetland) conditions have been created. Upland soils on the site are defined as Charlton-Chatfield complex (Cr), Chatfield-Charlton complex (Cs), Woodbridge (Wd) soils, the Pompton silt loam (Pw) and the moderately well drained Sutton soils (Su). Woodbridge loamy (Wd) soils are found in the center portion of the site.

Sun loam (Sh) soils are found in the southwest corner of the site in proximity to NYSDEC designated Wetland A-10; Carlisle muck (Ce) and Leicester loam soils are also present. Leicester loam soils are also present in other wetland areas of the site. Noted limitations will require special planning considerations for this project. These factors, described as limitations in soil surveys published by the Soil Conservation Service, reflect the difficulty and relative costs of the corrective measures that may be necessary (i.e. erosion control, footing drains or other drainage improvements) rather than construction potential. The limiting characteristics of these soils can be overcome by careful project planning, design and management.

The following tabulations presents the percentage and area (in acres) of each on-site soil type and soil limitations published by the Natural Resources Conservation Service (NRCS), respectively:

| Soil Symbol | Soil Name                     | HSG<br>Group | Area (sf)    | Area<br>(acres) | Total (acres) | Overall Site Area<br>(%) |  |
|-------------|-------------------------------|--------------|--------------|-----------------|---------------|--------------------------|--|
| ChB         | Charlton Loam                 |              | 272,373.00   | 6.25            |               |                          |  |
| ChC         | Charlton Loam                 |              | 34,987.00    | 0.80            |               |                          |  |
| ChD         | Charlton Loam                 | А            | 411,732.00   | 9.45            | 33.972        | 34.11                    |  |
| CrC         | Charlton-Chatfield<br>Complex |              | 553,115.00   | 12.70           | 55.772        | 57.11                    |  |
| LcB         | Leicester Loam                |              | 207,610.00   | 4.77            |               |                          |  |
| CsD         | Charlton-Chatfield<br>Complex | В            | 1,195,796.00 | 27.45           | 29.270        | 29.39                    |  |
| SuB         | Sutton Loam                   |              | 79,196.00    | 1.82            |               |                          |  |
| PnB         | Paxton Fine Sandy<br>Loam     | _            | 152,920.00   | 3.51            | 26.626        | 26.73                    |  |
| WdB         | Woodbridge Loam               | С            | 18,696.00    | 0.43            |               |                          |  |
| WdC         | Woodbridge Loam               |              | 988,216.00   | 22.69           |               |                          |  |
| Sh          | Sun Loam                      |              | 22,480.00    | 0.52            |               |                          |  |
| Ce          | Carlisle Muck                 | D            | 241,965.00   | 5.55            | 9.242         | 0.28                     |  |
| HrF         | Hollis-Rock Outcrop           | ע            | 9,023.00     | 0.21            | 9.242         | 9.28                     |  |
| LcA         | Lecester Loam                 |              | 129,111.00   | 2.96            |               |                          |  |
| W           | Water                         | -            | 21,295.00    | 0.49            | 0.489         | 0.49                     |  |
|             | Total                         |              | 4,338,515.00 | 99.60           | 99.599        | 100.00                   |  |

#### **ON-SITE SOILS BY ACRES AND PERCENT**

## ON-SITE SOIL LIMITATIONS PUBLISHED BY THE NRCS

| Soil Symbol | Soil Name                     | Shallow<br>Excavations | Dwellings without<br>Basements | Local Roads and<br>Streets | Lawns and<br>Landscaping |
|-------------|-------------------------------|------------------------|--------------------------------|----------------------------|--------------------------|
| ChB         | Charlton Loam                 | Somewhat limited       | Not limited                    | Not limited                | Not limited              |
| ChC         | Charlton Loam                 | Somewhat limited       | Somewhat limited               | Somewhat limited           | Very limited             |
| ChD         | Charlton Loam                 | Somewhat limited       | Very limited                   | Very limited               | Very limited             |
| CrC         | Charlton-Chatfield<br>Complex | Somewhat limited       | Somewhat limited               | Somewhat limited           | Somewhat limited         |
| LcB         | Leicester Loam                | Very limited           | Very limited                   | Very limited               | Very limited             |
| CsD         | Charlton-Chatfield<br>Complex | Very limited           | Very limited                   | Very limited               | Very limited             |
| SuB         | Sutton Loam                   | Very limited           | Somewhat limited               | Very limited               | Somewhat limited         |
| PnB         | Paxton Fine Sandy<br>Loam     | Very limited           | Somewhat limited               | Somewhat limited           | Somewhat limited         |
| WdB         | Woodbridge Loam               | Very limited           | Somewhat limited               | Very limited               | Somewhat limited         |
| WdC         | Woodbridge Loam               | Very limited           | Somewhat limited               | Very limited               | Somewhat limited         |
| Sh          | Sun Loam                      | Very limited           | Very limited                   | Very limited               | Very limited             |
| Ce          | Carlisle Muck                 | Very limited           | Very limited                   | Very limited               | Not rated                |
| HrF         | Hollis-Rock<br>Outcrop        | Very limited           | Very limited                   | Very limited               | Very limited             |
| LcA         | Lecester Loam                 | Very limited           | Very limited                   | Very limited               | Very limited             |
| W           | Water                         | Not rated              | Not rated                      | Not rated                  | Not rated                |

"Not limited" indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. "Somewhat limited" indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. "Very limited" indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected. Information within table provided by the United States Department of Agriculture Natural Resources Conservation Service Web Soil Survey, National Cooperative Soil Survey

Soils that are described as having "severe" limitations are so noted due to steep slopes, shallow depth to bedrock, and/or soil wetness. Tese limitations have been considered in the project design whereby, a number of appropriate drainage and engineering features are included to help overcome these potential obstacles. These measures have been applied upon similar site conditions throughout the Town of Yorktown and have effectively addressed the general limitations that are sometimes associated with these types of soil conditions.

Erosion and sediment control measures, footing and curtain drains, runoff diversion swales, and the use of retaining walls in areas with relatively steep slope are proposed throughout the site. Soils with severe limitations due to slope will be avoided whenever possible.

Bedrock geology across the site is reported to be associated with the Manhattan Prong, a geologic sub-province which is made up of the Late Precambrian to early Paleozoic metamorphic rock. On-site rock structure is highly folded and faulted, as a result of past occurrences of compressional deformation. Subsurface material originates from bedrock of Fordham gneiss, with quartz veins of various thickness/cross-cutting. The depth to bedrock on

site varies greatly, occurring at or near the surface in certain locations in the eastern portion of the site and found elsewhere at depths that greatly exceed 60 inches. Evidence of exposed bedrock outcrops exist in portions of the site, primarily comprised of gneiss, especially in the northeastern portion of the site, at elevations between 400 and 410 feet.

The amount of rock blasting required under the project is estimated to be 190,000 cubic yards. Figure 6 presents areas of the site where bedrock outcrops exist within, and immediately outside, the limits of project disturbance. In addition, areas where rock is expected to be encountered and blasted during construction are depicted.

## Item 6 - Cultural Significance

During May 2004, representatives of City/Scape: Cultural Resource Consultants completed a Stage 1A-Literature Review and Sensitivity Analysis, and a Stage 1B-Archaeological Field Survey, for the subject site. These surveys were performed for the Pulte Homes development site and were contained within the Draft Environmental Impact Statement for the Pulte Homes Estates, Volume II. The surveys concluded that no prehistoric significance exists for the 100 acre property site and that evidence of a historic farmstead structure (former Miller home site, circa 1840) exists at the northwestern limits of the property, as well as remnants of an outbuilding just south of a dam situated along a stream in the eastern portion of the site. The Miller homestead is located well outside the project limits (northwest) and the dam and remnants of the outbuilding east are not significant State or National Registers of Historic places exist for the site. The ruins of the farmstead foundation were evaluated and it was determined that the materials encountered by way of shovel testing originated during the 19<sup>th</sup> and 20<sup>th</sup> century; no concentration of materials dating back to the period when the house was constructed were observed. The ruins are located outside the limits of the currently proposed commercial development and are outside the Area of Potential Effect (APE).

In an effort to confirm the importance of on-site/nearby off-site cultural resources with the State of New York, representatives of Environmental Compliance Services, Inc. contacted and provided past report information to the New York State Office of Parks, Recreation and Historic Preservation (NYS-OPRHP), along with a request to review the documentation for confirmation. During April 2012, the NYS-OPR&HP issued correspondence indicating that they have reviewed the information provided and find that the proposed project will not have impact upon cultural resources in, or be eligible for inclusion in the State and National Register of Historic Places. A copy of the State's correspondence is contained under "Correspondence", attached to this EAF Narrative.

## Item 11 - Threatened/Endangered Animal and Plant Life

During February 2012, Environmental Compliance Services, Inc. (ECSI) submitted correspondence to the New York Natural Heritage Program to request their assistance to review their records to determine if any threatened, endangered, or species of special concern exist on the project site, or immediate area. Correspondence received from the Natural Heritage Program (see attached correspondence, dated March 3, 2012) indicates that they have no records of rare or State listed animals or plants, significant natural communities or other significant habitats, on or in the immediate vicinity of the site. Further, based on available mapping for the Westchester

County area, no Critical Environmental areas exist on the site or upon immediately surrounding properties. The Town of Yorktown owned and operated Sylvan Glen Preserve abuts the property to the north.

DEIS documents prepared for the Homart and Pulte Homes developments provided ecological and physical information for the entire site by way of assessing on-site natural resources. Each project provided detailed information on geologic and physical soils and water resources (wetlands and streams). The Homart project completed a terrestrial and aquatic ecological studies and a wildlife survey was completed under the Pulte Homes project. Pulte Homes also completed a tree survey and functional and hydrologic studies. The information derived from the various studies and assessments previously completed and discussed for the State Land Corp. development provides a significant amount of information on the natural resources of the entire site. Further, the detailed information provided by these developments addresses the concepts and issues outlined in the Metropolitan Conservation Alliance (MCA) Croton-on-Highlands Biodiversity Plan (MCA Technical Paper Series No. 7).

During June through August 2012, ECSI completed a Biodiversity Assessment of the storm water retention areas located north of the site, mostly on Sylvan Glen Preserve property. In addition, ECSI conducted an assessment of the entire site during 2012. Based on the assessments completed by ECSI, the natural resources (functional characteristics and values) have not changed and in fact, on-site resources complement those of the adjoining Sylvan Glen Preserve, north of the site. If portions, or a majority, of land area north are altered, the proximity of disturbance will affect habitat communities within the nearby Sylvan Glen Preserve, the most significant impacts being destruction of valuable habitat and severe fragmentation. Both the Homart and Pulte Homes projects involved a greater amount of land disturbance and alteration to the north, compared to that of the proposed State land Corp. proposal. The State Land Corp. development will provide the greatest amount of land between the development and the Sylvan Glen Preserve, and thus, ensure that the natural habitat communities within the Sylvan Glen Preserve will remain in tact into the future. In addition, the quality and quantity of storm water originating from the upper portions of the site will be enhanced and existing sedimentation potentials will be significantly reduced for the downstream tributaries, including the Hunters Brook, southeast.

## Item 14 - Important Scenic Community Views

Six line of sight viewpoints have been defined for the project. Figure 7 presents the location of six line-of-sight profiles in relation to the proposed development on the project site. These include a sight from NYS Route 35/202 (View #1), a second sight from NYS 202/35 (View #2), a sight from Stoney Street and NYS Route 35/202 (View #3), a sight from the western overpass of the Taconic Parkway (View #4), a sight from Sylvan Glen Park (View #5) and a sight from Catherine Street at the Fieldhome property (View #6). Each of the line-of-sight profiles is labeled according to view; photographs have been developed to present a visual representation of the view from the origin of each line-of-sight viewpoint (see attached photographs prepared to match each light-of-sight view). In addition, project renderings have been prepared for viewpoints 1 and 2 to better explain expected impacts and mitigating measures to be considered.

Based on information presented on the line-of-sight profiles, the elevated portions of the subject property site above 400 feet (mean-sea-level) consist of undeveloped forest vegetation. This area will remain natural, a large majority of which (approximately 70 acres without construction of the Bear Mountain Parkway Extension) will be deeded to the Town for preservation/open space. Portions of proposed on-site buildings will be visible from NYS Route 202/35 and from some establishments located along NYS Route 202/35. Views of the proposed project structures from the Taconic Parkway's western bridge overpass and the Fieldhome on Catherine Street will be least visible due to the large distances existing between each of these viewpoints and varied topographic features. The possibility also exists whereby a portion of the development's western limits will be viewed from the Sylvan Glen Park; these views are expected to present minimal visual impact because of distance and the west facing topographic features. These conditions have been confirmed in photographs obtained depicting visual conditions from the viewpoint and to the project structures. The State Land Corp. project will include mitigation measures designed to soften and offset visual impacts; these measures are discussed under Part 2, Item 11- Impact on Aesthetic Resources of this EAF.

#### Item 15- Streams Within/Contiguous to the Project Area

The project site is drained by a number of linear drainage ways/watercourses, which flow generally from north to south in relation to the topography of the site. The largest watercourse (watercourse B), approximately bisects the site. These drainage ways/watercourses connect with on-site wetlands, all of which eventually drain to Hunter Brook, either directly via a pipe network in NYS Route 202/35, or through a tributary of Hunter Brook at the western portion of the site. Figure 8 depicts the water resources identified under the Pulte Homes Estate project during 2004 (DEIS Figure 3.2-4 prepared by John Meyer Consulting, February 2004). Based on field observations made by ECSI during a site visit of February 2012, wetland/watercourses D and wetland S have slightly expanded. These areas lie north, outside the limits of the site where construction is proposed. Figures referenced and contained in this document include this updated information of wetland expansion.

A segment of the western tributary leading to Hunter Brook flows through the southwest corner of the site and is a major hydrologic component of a NYSDEC designated wetland (Wetland A-10) situated at and beyond the southwestern limits of the property. This wetland receives surface and groundwater flow from areas north and west of the site and a tributary which flows through the central limits of the wetland. This tributary flows under NYS Route 202/35 via a box culvert, which then flows easterly along the south side of existing land use developments, to the confluence at Mill Pond. From this confluence, flow enters the Hunter Brook main channel and continues south to the New Croton Reservoir, which is approximately three miles downstream of the site. Construction activities performed on-site will change drainage patterns with incorporation of impervious surfaces, clearing and grading activities, all of which are subject to review by the New York City Department of Environmental Protection (NYCDEP), under the Rules and Regulations for the Protection of the New York City Watershed. This property is located within a "Main Street Designated Area", as defined by Section 18-39 (a) (11) of the regulations.

The drainage ways/watercourse corridors which flow from north to south through portions of the site include the majority of smaller wetlands on site, as well as the hydrologic connections, (including wetlands/watercourses labeled H, E, F, B, C, D, J, K, L, M, N and P, Figure 8). These wetlands are fed by runoff and shallow lateral flow from the large undeveloped watershed to the north. In some cases, Town owned property situated north includes wetlands and watercourses that serve as "headwater flows" of these watercourses.

Based on the design of the proposed project and the storm water management retention areas proposed north of the site, will pose no effect on the base flow to offsite wetlands, or the tributary areas which are fed by source wetlands. The proposed earthen berm of the down gradient edge of these retention wetlands will not create a full dam effect. The berm will be provided with a weir outlet which will be designed to allow unrestricted base flow, while and detaining storm water during storm events; therefore, no effect on the supply of water to downstream waters is expected. During storm events, the additional runoff volume will be detained and released at a controlled rate which will create a reduction of peak discharge during storm events. These wetland areas will also provide water quality benefits, especially with the implementation of a wetland mitigation plan designed to add indigenous plantings which will which will provide additional water quality benefit by increasing the amount of uptake of nutrients and pollutants. Furthermore, additional detention time will allow a greater amount of suspended particles to settle out; extended detention time will also increase the potential for groundwater recharge as a result of the extended time of detention and increased head across the expanded wetland areas.

# 1) <u>Function of On-site Water Resources</u>

The on-site water resources serve several functions. The primary function is the conveyance of storm water runoff and base-flow from the upper reaches of the site (north of the proposed development), and to the culverts under NYS Route 202/35, which ultimately direct flows to the Hunter Brook. Some of the channels are deeply cut and in some places have channel gradients that exceed 10 percent. Additionally, perennial watercourses provide a year-round source of water as a wildlife habitat component, as well as saturated stream bed conditions for habitation of amphibian and macro invertebrate species. From a water quality standpoint, adjoining slopes and rocky stream bed substrate serve to aerate stream flow, thereby maintaining oxygen levels.

## 2) Description of Wetland Setback (Buffer) Function

Because the site is currently undeveloped, existing mature hardwood forest stands dominate the landscape and provide stable wetland buffer in many locations. The canopy is high and well-developed; observed shrub layers display evidence of being significantly grazed by resident deer population. There is a healthy leaf litter throughout these buffer areas and sporadic areas where the herbaceous layer is dense.

As described above, the primary functions served by on-site wetlands relate to water quality, conveyance and storage. Other than stream corridors, the on-site wetlands receive relatively high scores for water quality, due to the existence of dense vegetation cover within these areas and the ability to temporarily store and filter surface flows. With the exception of NYSDEC Wetland A-10, on-site wetlands appear to be too small, and too linear to sustain wetland dependent habitat, or open space functions, outside of the context of the overall hardwood forest landscape. Therefore, setback areas are important in maintaining buffer as it relates to filtering surface water flows, a closed canopy for water temperature maintenance, and erosion control and surface stabilization. As noted, surface water flows across the site occur north-south due to the site topography. The most critical on-site buffer areas are those situated just upgradient of each individual wetland. These areas serve to filter surface flows and provide the type of substrate necessary to promote shallow groundwater discharge flow which has been predominantly observed within the wetlands. As noted, the project will involve enhancement in the form of stream bank stabilization to match the above mentioned functions. This is further discussed below as part of planned mitigation activities, which will be prepared and submitted by the Applicant, to the Town Board as part of the SEQR review process administered for this project.

Both the previously proposed Homart and Pulte Homes projects would result in a greater amount of wetland and buffer disturbance compared to the that of the State Land Corp. proposal, and without provision to enhance the existing storm water quality to thereby improve water quality of downstream tributaries, including the Hunter Brook. This will be accomplished by way of the stream bank stabilization proposed under the State Land Corp. development, which are in addition to the wetland mitigation plan proposed for each upgradient storm water (wetland) retention area.

## B) Project Description

## Item 5 - Mature Forests over 100 Years Old

During April/May 2004, a tree survey was completed within the limits of the 100 acre property site. Trees equal to and greater than 8 inches in diameter (diameter at breast height-DBH) were identified, tagged and located in the field by a survey crew. A total of 2,331 trees were recorded and tagged in the field. Predominant tree species identified included Tulip poplar, Apple, Ash, Birch, Cedar, Elm, Conifers, Hickory, Locust, Maple, Oaks, Sumacs, Spruce and Walnut. Based on tree survey information completed for the Pulte Homes project, trees aged 100 years and older which are located within the area of disturbance proposed under the State Land Corp. proposal will be impacted. Removal of these trees will include removal understory and ground cover vegetation.

The proposed development area for the State Land Corp. project will result in the removal of approximately 27 % of "a total combination of vegetation" for the 100 acre site (i.e. canopy, understory and ground cover vegetation). Given that this percentage is less than the 30% area threshold noted under Town Code, the project therefore complies with applicable provisions of Chapter 270, "Trees"; appropriate Tree Removal Permits will be obtained, as necessary. Regardless, at least 50 acres of undeveloped natural area will be deeded to the Town of Yorktown, which is contiguous with the Sylvan Glen Preserve.

Tree preservation measures designed to reduce such impacts will be implemented under the project. These measures will include avoidance when possible, along with minimizing encroachment during and after construction, whenever practicable. Further, emphasis will be directed at incorporating landscape plantings within the frontage of the property. In light of such expected impacts, a landscape plan is proposed to aid in off-setting the taking of trees necessary for development. This plan includes measures for planting and maintaining indigenous species in areas surrounding the proposed development along three (3) sides of the limits of development, in order to enhance existing tree stands.

#### Item 13 - Subsurface Liquid Waste Disposal

Public sewer system districts are located adjacent to the project site. An existing 12 inch public sewer gravity main runs parallel to the west side of the Bear Mountain Parkway Extension, where it then crosses under Route 202/35 just beyond the southeast corner of the project property. At the intersection of the Bear Mountain Parkway Extension and NYS Route 202/35, an existing sewer manhole containing physical features to extend a public sewer main, is located southeast of the property site. This information was confirmed in a meeting with Sharon Robinson, P.E., Town Engineer in a meeting on September 14, 2012.

The project site is currently not in a sewer district; however, the site is adjacent to the Town of Yorktown Hunter Brook Sewer District and the Westchester County Peekskill Sanitary Sewer District. Both of these sewer districts would need to be extended to include the subject property. An extension/connection with the Hunter Brook Sewer District will require Town Board action; connection with the Peekskill Sanitary Sewer District will require action by the Westchester County Board of Legislators. Approvals for a public sewer main extension are required from the Town Engineer, the Westchester County Department of Health (for Approval for Extension of Public Mains) and the NYC Department of Environmental Protection for a Sewer Connection Permit.

It is proposed that public sewers will be extended to the project site from a nearby existing sanitary manhole. The Manhole is located off the southeast corner of the project. No wetlands, or wetland buffer, will be disturbed by the proposed construction of sewer mains.

Extending the sewer to the project site will require creating a new or expanding an existing Town sewer district as well as petitioning inclusion into the Westchester County Peekskill Sanitary Sewer District. Providing sewers to the project site will result in the maximum development potential under the project. The alternative, as described further elsewhere, would be to construct an On-site Wastewater Treatment System (OWTS) which can only be constructed on the western portion of the project eliminating more than half of what is proposed. However, with sewers the potential for maximizing the proposal can be achieved. Further, if the remaining portion of the property were to stay as zoned (residential), the possibility exists to open the area to more residential homes, or multi-family housing, given limitations associated with an OWTS; however, the State Land Corp. proposal will allow a great deal of land to remain as preserved open space, dedicated to the Town of Yorktown. The OWTS would be limited by slope requirements and other environmental considerations which would no longer apply if sewers are constructed.

The area available for a OWTS would allow for maximum daily flows of 10,125 gal/day and can accommodate 60,250 SF of retail space and a 3,500 SF 117 seat restaurant.

As part of the SEQR review process administered by the Town of Yorktown, the need to provide an on-site sewer system designed to handle wastewaters generated by the proposed development must be considered. In an effort to address this concept, SDC evaluated slopes, watercourses, soil types and groundwater conditions across the site and determined that one area in particular would be most favorable as an on-site, subsurface sanitary sewer system. Figure 9 presents a conceptual design of an on-site sewer system within the west central portion of the site. This conceptual sewer system design will encompass a large area of the site and thus, it would not facilitate the full development potential of the site as proposed. Essentially, the proposed development would have to be significantly reduced in size and magnitude in order to allow construction and operation of an on-site sewer system, within the most favorable area of the site. The design of the conceptual sewer system will handle a much smaller development, thereby reducing the full potential of the property as proposed. This design is considered by the State Land Corp. to be infeasible and thus, it is not a proposal which can be pursued by the Given that adequate sewer works exist in close proximity to the proposed Applicant. development site, State Land Corp. sees no logical reason to consider an on-site sewer system. A connection with one of the two nearby sewer systems will in turn provide the means to make full use of the property, as proposed.

## Item 15 - Encroachment of 100-Year Floodplain

As shown on Town of Yorktown Flood Insurance Rate Maps (FIRM) dated August 16, 1993, a portion of the site is situated within a Zone A 100-year flood insurance area. FEMA Flood Boundary mapping depicts the approximate limits of a 100-year floodplain which is associated with a centrally located watercourse (Figures 2 and 3). The FIRM describes areas within Zone A as Special Flood Hazard Areas inundated by the 100-year flood with no base flood elevation determined.

In an effort to offset the taking of portions of the on-site 100-year floodplain, two regional flood retention areas are proposed to be developed north and upgradient of the proposed development. Figure 10 presents the location of the two proposed regional storm water management areas. Essentially, two vegetated earthen berms with stone weir outlets will be constructed across the path of existing drainage conveyances to control storm water flows during storm events. These areas have been located strategically to gain the greatest benefits for temporarily detaining storm water flows, to the extent that 30 percent additional flood holding capacity will be provided within the immediate watershed area. As such, this quantity of temporary detention will offset the taking of the 100-year floodplain within the limits of the project, as well as provide greater flood protection for downgradient properties. In addition, these areas will facilitate groundwater base-flow by allowing detained water to spread to adjoining well drained soil areas, as well as increase wetland habitat area.

In addition to the above, a portion of the stream which bisects the site and includes a portion of the 100-year flood plain, will receive in-stream improvements. The improvements are designed to stabilize portions of the bank and bed of the stream, to the extent that high velocity

flows and sedimentation potentials would be mitigated, in conjunction with reducing total nitrogen and phosphorus discharge potentials to downgradient, higher quality protected streams.

A preliminary hydrologic analysis was completed for the proposed project by Site Design Consultants, the project engineer. The analysis, entitled Preliminary Stormwater Management Plan, was prepared for State Land Corp. during February 2012. This analysis provides details of the off-site storm water mitigation areas and their hydrologic function for controlling and lowering the peak rate of runoff from the watershed. This will be accomplished by detaining the flow through the site and releasing runoff over a longer period of time. The storm water retention (wetland) areas will be modified with the proposed installation of an earthen berm. This berm will be constructed in a natural way, allowing the passing of the existing base flow and the retention of increased flows during larger storm or runoff events. This will reduce peak rates associated with the watershed area which discharges to the Hunter Brook. In turn, retaining water in the wetlands for a longer period of time will increase the potential for ground water recharge and enhancement of the wetland functions. Overall, there will be no loss of water to downgradient wetlands and recharge and/or base flow to the stream system will be maintained. Overall, the volume of runoff will be the same, or slightly increased, and will be disbursed over a longer period of time. The result of these wetland modifications will be positive, thereby attenuating and/or reducing flood potentials downstream, while still providing a benefit to upgradient wetlands and the groundwater recharge system.

In addition, use of green infrastructure and standard storm water practices will provide further recharge of treated storm water runoff to the groundwater table. These practices may include bio-retention, swales, infiltration practices and porous pavement. Based on a review of the latest floodway map published by FEMA (dated 9/2007), no change in the floodway boundary exists. As such, a HEC analysis is not necessary.

There will be no effect on the base flow to the offsite wetlands, or the tributary areas which the wetlands are a source of. The proposed earthen berm of the down gradient edge of these wetlands will not create a full dam effect. The berm will be provided with a weir outlet which will be designed to allow for unrestricted passing of base flow and detaining of storm events. Therefore there will be no effect on the supply of water to downstream waters. However, during storm events the additional runoff volume will be detained and released at a controlled rate which will create a reduction of peak discharge during storm events. The wetland areas will also provide some water quality benefits. Once constructed, the wetland areas will be enhanced by installing plantings, which will provide additional water quality benefit by increasing the amount of uptake of nutrients and pollutants. Furthermore, additional detention time will increase the ability of suspended particles to settle out. Also this extended detention time will increase the potential for groundwater recharge as a result of the extended time of detention and increased head.

## Item 23 - Water Usage

Based on the amount of square foot retail space, it is estimated that 23,000 gallons of potable water will be demanded for the proposed 230,000 square feet of building space. This estimate is based on a factor of 0.1 gallons per square foot space of development. During the

early planning stages of the project, representatives of SDC contacted representatives of the Yorktown Consolidated Water District and confirmed that water supply will be provided through the extension of public water mains to the project site.

Subsequently, a meeting was held with the Superintendent of the Yorktown Consolidated Water District about servicing the project with public water (Personal Communications, David Rambo, Water Superintendent and Assistant Superintendent Ken Rundle, September 13, 2012). During the meeting, the Superintendent explained that adequate water pressure and supply exists for a project. Further, due to the fact that no public supply water mains exist along the frontage of the property, a water main extension must be constructed. The closest point to the Town's public water supply main is located at the intersection of Stony Street and the Bear Mountain Extension, approximately 750 feet east of the site. Essentially, the existing water supply main will be extended to the property in conjunction with constructing the main parallel to an existing gravity sanitary sewer and sewer force main. Once the main is within the project site it will be brought to reasonable proximity to the proposed buildings from which service connections will be provided for each individual building. Each building will be metered separately. Fire hydrants will be appropriately spaced throughout the project site for easy access for the Fire Department.

The Water Department Superintendent also requested that all attempts be made to loop the water main so that there are no dead ends to the system. Therefore, it is proposed that the water main will continue through the site entranceway, across NYS Route 202/35, then through the opposite property known as Parkside Corner where a connection with an existing water main in Old Crompond Road will be made. This will require obtaining an easement from the property owner of the adjacent site; an easement will be obtained as part of the Site Plan Approval process required for the development of the site.

The State Land Corp. property is currently within the Yorktown Consolidated Water District. Approvals required for the extension of the water main must be from, the Town Engineer and Water District Superintendent, the Westchester County Department of Health (for Approval for Extension of Public Mains), and from the New York State Department of Transportation for a Utility Permit and road Opening Permit. These approvals would be sought at the time of site plan approval. It is important to note that a private water supply is required by the Westchester County Department of Health "if a public water supply is available". This could be waived if the supply was not within reasonable proximity, and/or if the supply is not physically possible to extend it, or the pressure or supply is inadequate. These constraints do not apply to the State Land Corp. project.

No wetlands, or wetland buffer, will be disturbed by the proposed construction of water mains.

## C. Zoning and Planning Information

The proposed State Land Corp. development will be constructed on approximately 27.5 acres of the total 100 acre parcel area to provide additional retail commercial and office space in the Town of Yorktown. The proposed development includes a 140,000 square foot space to

attract a home goods/do-it-yourself anchor store, with a nursery/garden center and provisions for outdoor storage of home building materials (wood and masonry supplies). In addition, 73,750 square feet of office and retail space is proposed to total 230,000 square feet. Outdoor storage will be utilized for retail goods; it is anticipated that the types of materials to be stored outside will include landscape items, plants, masonry supplies, lumber and associated display items. The Applicant is currently in the process of obtaining an indication from the Town Building Inspector as to whether or not outdoor storage of retail goods is allowed under the C-3 zone.

The State Land Corp. parcel is currently zoned as R1-160, Single Family Residential District. As noted, the Applicant is seeking a zone change from R1-160 to C-3, Commercial Limited District as the C-3 zone will provide the best fit and maximum opportunities for commercial uses proposed under the project. While an amendment to a C1 zone will facilitate most of the Applicant's needs, it does not include provisions to allow outdoor material storage, a permitted use allowed under the C-3 zone. Essentially, the C-3 zone change will provide the Applicant with the opportunity to offer prospective buyers a project with economically reasonable development potential thereby ensuring the viability of the project.

It is important to note that traffic improvements recommended in the Town's Comprehensive Plan of 2010, namely the Bear Mountain Parkway Extension and the widening of the NYS Route 202/35 corridor, may render portions of the State Land Corp. property as unsuitable for development under the R1-160 zone. Given the slopes of the land north of the proposed development, the construction of the Extension would cause extreme/severe slope constraints (north) which in turn would minimize the amount of land available for residential development, as well as bi-sect the site in such a way that access to NYS Route 202/35 would likely not be able to be achieved.

In addition, both the Comprehensive Plan and the Sustainable Development Study indicate that the Bear Mountain Parkway Extension should be routed north of the NYS Route 202/35 corridor which would further hamper the suitability of portions of the project site for residential development. Based on these unique circumstances, the Town has expressed the need to later revisit the idea of allowing mixed uses for the State Land Corp. property in order to best complement and enhance the character and uses existing within the surrounding areas. As such, the proposed future use of the property would need to be consistent with the Sustainable Development Study, as well as be subject to Site Plan, Town planning and SEQR reviews, in order for the Town Board to approve mixed uses for the property.

## **PART 2 - PROJECT IMPACTS AND THEIR MAGNITUDE**

## Item 1- Physical Changes to the Project Site

The proposed development will change the runoff characteristics of the site, thereby altering the quantity and quality of the surface storm water. Such impacts can be mitigated by managing the storm water prior to discharge by way of capture and treatment of surface runoff prior to discharge. The development of the site will also alter hydrologic conditions, therefore changing the characteristics of existing surface and groundwater runoff discharge. This in turn will alter the site's natural ability to store, treat, or infiltrate runoff, as well as will result in the discharge of potentially damaging pollutants and sediments to adjoining water bodies. Such impacts can occur during the construction phase, and long-term after development. As an example, graded and destabilized areas generated during construction are subject to erosion which can cause the displacement of sediment. After development, changes in surface conditions, such as impervious surfaces, roofs, pavement, or lawn surfaces can generate pollutants. Some of the pollutants of concern are: Total Suspended Solids (TSS); Biological Oxygen Demand (BOD); Total Phosphorus (TP); and Total Nitrogen (TN), as well as oil or grease, and chloride.

In addition, the project will require alteration of regulated on-site watercourses, wetlands and wetland buffer, as well as alteration of portions of an on-site 100-year floodplain area. As noted above, a Storm Water Pollution Prevention Plan (SWPPP) has been completed for the proposed project, in accordance with applicable NYSDEC and NYCDEP regulatory requirements. The Plan identifies temporary and permanent storm water controls necessary for eliminating such potentials, as well as includes an Erosion and Sediment Control Plan (E&SCP) to be implemented prior to and after construction.

The Watershed Treatment Model was utilized for the project to aid in developing the types of proposed storm water retrofit and stream restoration techniques that will be constructed as part of the proposed development. The model identifies primary sources including existing surface covers within the subject watershed including residential, commercial, roadway, industrial, forest, and rural conditions, as well as considers existing soil types and characteristics (hydrologic soil group, depth to groundwater, as well as identifies secondary sources including potential sanitary sewer, erosion, agricultural, roadway maintenance, and non-point source loading to the watershed. In addition, the model identifies existing management practices including existing municipal/county programs that are in place that educate the public of fertilizing lawns, pet waste management practices, existing riparian buffers, street sweeping, and catch basin maintenance schedules.

Once the existing pollutant loads are identified, the model allows the user to input proposed improvements to thereby evaluate future conditions based upon the following parameters:

- 1) Primary Sources identifies the proposed modified surface covers within the subject watershed including residential, commercial, roadway, industrial, forest, and rural conditions.
- 2) Secondary Sources identifies sanitary sewer improvements, and non-point source loading reduction.
- 3) Future Management Practices identifies the existing and/or proposed municipal/county programs that are in place that educate the public of fertilizing lawns, pet waste management, and erosion control. This section also includes identification of existing to remain and/or proposed street sweeping programs, impervious disconnection programs,

riparian buffers, catch basin maintenance schedules, "urban downsizing", redevelopment projects, storm water retrofits, and stream restoration.

Once all of the proposed information is provided, a spreadsheet is generated which identifies the existing pollutant loads, and the loads to surface waters coupled with the proposed improvements that will reduce the pollutant loading to the stream. Below is the summary analysis of the model for the proposed project.

|           | TN (lb/yr) | TP (lb/yr) | TSS (lb/yr) |
|-----------|------------|------------|-------------|
| Existing  | 513        | 97         | 33,291      |
| Proposed  | 391        | 68         | 28,407      |
| Reduction | 122        | 29         | 4,884       |

# MITIGATION

In an effort to mitigate storm water related impacts, the E&SCP will be implemented during all phases of construction until the completion of the project. This Plan will minimize or eliminate the potential short-term adverse impacts during construction; after completion, the erosion and sediment control will become a maintenance plan to insure that permanent erosion and sediment controls continue to function and prevent the transport of sediments.

The E&SCP prepared for the proposed project includes a Sequence of Construction and several design measures which will be installed, operated and maintained during all aspects of construction. Some of the practices and methods that will be used for this project are:

- Minimization of open disturbance by use of stabilizers such as seed, mulch, and erosion blankets, stone, etc. Areas not subject to construction traffic for extended periods will be temporarily stabilized.
- Work areas will be contained and down grade perimeters will be lined with barriers such as silt fence, diversions, berms, etc.
- Where possible, clean storm water will be diverted away, or around work sites to reduce the amount of runoff requiring treatment.
- Sediment traps will be constructed where heavy concentrations of runoff may accumulate.
- Dust control measures will be maintained on-site such as water trucks.
- Runoff will be prevented from gaining erosive velocities on long slopes. This can be achieved with seed and mulch, erosion control blankets, curb dams and multiple rows of silt fence.
- Existing drainage structures will be protected from sediment-laden runoff.

The above practices consist of NYSDEC accepted and recommended practices and have been selected and designed into the project to meet the temporary and permanent erosion and sediment control practices of the NYSDEC Storm Water Design Manual. Standard details and specifications, as well as the overall E&SCP are included in the prepared SWPPP. In general, the types of practices planned for use for the proposed project are described below.

#### Stabilized Construction Entrance

This practice will be located at the entrance of the site driveway and be installed at the beginning of the project; it will be maintained so as to prevent the tracking of sediment off-site.

## Silt/Sediment Fence and Hay-bales

Silt fence and hay-bales are specified to control and contain sediment from leaving areas under disturbance to undisturbed areas.

## Soil Stockpiles

Designated areas for temporary stockpiling of imported soil material for construction will be developed. These areas will be contained with sediment fence to prevent the movement of sediment. The stockpiles, if not active for more than seven (7) days, will be seeded, mulched and maintained. Stockpile areas will be placed to best suit proposed construction activities and minimize off-site impact potentials.

## Temporary and Permanent Vegetative Cover

Both temporary and permanent stabilization measures will be implemented, as necessary. Constructions Plans will include the locations and specifications as to which vegetative cover requirements are to be followed. In addition, specific notations (i.e. seed and fertilizer mixes) and time constraints related to stabilization of disturbed areas will be provided. Disturbed areas expected to remain exposed for more than seven (7) days will receive temporary vegetative cover.

## Storm Drain Inlet Protection

Inlet protection will be provided; a permeable barrier around drainage inlets in order to reduce sediment content in runoff before entering newly constructed storm drain systems.

## Erosion Blankets

Erosion blankets combined with seed applications will be used for stabilizing slopes 3:1, or greater, or as otherwise specified; blankets will be installed per manufacturer's specifications.

#### Soil Restoration

Disturbed areas with Hydrologic Soil Group soils designated as "HSG C" will be restored to achieve permanent vegetation. Soil restoration may be completed by tilling or aerating the soil to a depth of 12-inches.

## Temporary Sediment Traps

Sediment Traps will be placed in strategic locations to collect sediment; specific requirements for installation, sizing and maintenance during construction will be based on 3,600 cubic feet per acre of drainage area.

#### Rock Outlet Protection

Rock outlet protection will be placed at the discharge end of pipes and channels to reduce depth, velocity, and dissipate the energy of water to avoid downstream erosion.

#### Water Bars

Water bars will be used for diversion of surface runoff to limit the accumulation of erosive velocities of water and will be utilized as necessary during construction.

As noted, the SWPPP will be prepared in accordance with the NYSDEC Storm Water Design Manual, as well as applicable regulatory requirements mandated by the New York City Department of Environmental Protection and the Town of Yorktown and Town Code Chapter 248, Storm Water Management and Erosion and Sediment Control. Further, the SWPPP will be reviewed by these agencies for completeness and regulatory compliance.

Alteration of on-site watercourses, wetlands, wetland buffer and floodplain areas will amount to approximately 20.3 acres under the development, including provisions for the Bear Mountain Parkway Extension right-of-way. Approximately 10.9 acres will be altered under the project without the Bear Mountain Parkway Extension right-of-way. Given the amount of land required for construction of the preferred plan under the Homart commercial project, 55 acres would be disturbed, and 45 acres would be set aside as open space. This development would result in a greater taking of vegetation, as well as wetlands, wetland buffer and stream corridors. As such, a greater demand for storm water management and best management controls would be required, with a corresponding greater potential for storm water related impacts. The State land Corp. proposal would result in taking less land (roughly half)and therefore, the types of storm water practices implemented are expected to be highly effective in reducing potential impacts.

Figures 11 and 12 present a tabulated, color coded representation of the amount of overall disturbances with and without the Bear Mountain Parkway Extension, respectively. The Applicant proposes to mitigate the taking of these resources by performing necessary stream bank and bed improvements along portions of the centrally located watercourse (B) which bisects the site. Four sections of the stream will receive improvements designed to reduce excessive sedimentation potentials and total nitrogen and phosphorus discharge potentials to

higher quality/protected streams located immediately downstream of the site. The downgradient streams are tributary to the New Croton Reservoir.

It is important to note that the two proposed regional storm water management areas will provide additional flood storage capacity for the macro-watershed area the site is situated within; approximately 30 percent greater capacity will be provided by these areas, in conjunction with proposed storm water controls noted under the SWPPP and thus, both on-site and off-site, downstream properties will benefit. Further, these areas will serve to expand the limits of existing watercourses and wetlands north of the site on the Sylvan Glen Preserve property. A total of 4.6 acres of flood protection/wetlands will be provided by these regional storm approximately water management areas (Figure 10 depicts the proposed retention areas).

As noted, a Preliminary SWPPP has been submitted in accordance with Town of Yorktown requirements; a pre- and post-construction pollutant loading and hydrological analysis has been completed, portions of which are summarized below to further explain that approximately 30 percent storage capacity will be provided under the project.:

| Storm Event (year) | Pre-Developed Peak Flow (cfs) | Post-Developed<br>Peak Flow (cfs) | Net Change of<br>Peak Flow (cfs) | Percent<br>Change |
|--------------------|-------------------------------|-----------------------------------|----------------------------------|-------------------|
| 1                  | 43.13                         | 31.55                             | -11.58                           | -27%              |
| 10                 | 166.71                        | 114.89                            | -51.82                           | -31%              |
| 25                 | 245.84                        | 169.39                            | -76.45                           | -31%              |
| 100                | 374.32                        | 259.39                            | -114.93                          | -31%              |

In addition to these impacts, soil and rock is required to be removed from the project site; approximately 609,686 cubic yards will be removed, without the inclusion of the Bear Mountain Parkway Extension through the northern portion of the development. Of this amount, 190,000 cubic yards will consist of blasted rock for use on-site and 30,000 cubic yards as topsoil, also to be utilized on-site. The remaining 389,686 cubic yards will be exported from the site for off-site uses. A total of approximately 1,357,596 cubic yards will be removed with the inclusion of the Bear Mountain Parkway Extension, which is greater than the amount of material required to be removed under the State Land Corp. project. This quantity of material will be "cut" from the southern portions of the site where the terrain is most suitable for locating the development. Some blasting will have to be performed, which will involve the preparation and implementation of a "Blast Plan" by a qualified blasting firm. Regardless of the rezoning of the property, the construction of the Bear Mountain Parkway Extension and Parkway Extension will generate approximately 747,910 cubic yards of cut material.

Figure 13 presents existing slopes across the entire 100 acre property site, as well as the square foot area for each slope category noted. As depicted in Figure 11, steep slopes (0 to 10, 10 to 15, 15 to 25 and 25 percent and greater) exist throughout portions of the northern reaches of the site. The project has been designed to minimize encroachment into areas which exhibit 15 percent slope conditions.

#### Item 3 – Impact on Water

The proposed development will result in disturbing approximately 27.5 acres of land area, of which 1.9 acres of wetland and waterways will be disturbed along with 8.9 acres of wetland/watercourse buffer area. Essentially, 10.9 acres of Town of Yorktown jurisdictional wetlands and buffer area will be impacted under the project; of this amount 1.9 acres consist of US Army Corps of Engineers jurisdictional wetlands. A tabulation of acres impacted under the project is provided in Figure 11, Wetland Disturbance Project Site. In addition, two wetland areas situated north of the project limits will be slightly altered to provide regional flood retention. Limited grading activities and construction of an earth and stone dam (berm) immediately downgradient of each wetland area will be performed to expand the water holding capacity of each area. Based on seasonal precipitation events, these areas will expand by up to 50 percent and thereby, will in turn function to off-set flood potentials for downgradient communities. It is estimated that nearly 30 percent flood mitigation potential will be realized with the two retention areas, in conjunction with the implementation of controls provided for the proposed project. Additional mitigation may be required by outside agencies other than the Town of Yorktown. As noted above, the following breakdown of expected additional flood storage potential with the establishment of upgradient retention areas is as follows:

| Storm Event (year) | Pre-Developed Peak Flow (cfs) | Post-Developed<br>Peak Flow (cfs) | Net Change of<br>Peak Flow (cfs) | Percent<br>Change |
|--------------------|-------------------------------|-----------------------------------|----------------------------------|-------------------|
| 1                  | 43.13                         | 31.55                             | -11.58                           | -27%              |
| 10                 | 166.71                        | 114.89                            | -51.82                           | -31%              |
| 25                 | 245.84                        | 169.39                            | -76.45                           | -31%              |
| 100                | 374.32                        | 259.39                            | -114.93                          | -31%              |

An existing watercourse which bisects the site will be reconditioned to reduce existing sediment, total nitrogen and phosphorous discharge potentials to downstream higher quality receiving waters situated immediately south of the site; these waters are tributary with the New Croton Reservoir. Portions of this stream lie within a 100 year flood plain. The Homart and Pulte Homes developments did not propose measures designed to reduce sediment, total nitrogen or phosphorous discharge from the site.

During August 2012, representatives of SDC and ECSI inspected the stream to determine existing conditions and decide where and what types of necessary improvements should be considered. In addition, the Hollis-Magee method for evaluating wetland/watercourse functions was utilized in the field to determine the stream's functionality relative to wildlife habitat, vegetation and water quality. Overall, the stream in question appeared to display the types of conditions identified under the Pulte Homes project (2004), whereby, much of the stream consisted of un-vegetated banks with evidence of decaying/detritus throughout the areas inspected, soil and rock and boulder dislodgement and excessive sedimentation. The primary function of the stream section in question is to convey storm water runoff and base flows from the upper reaches of the property, and to a culvert located under NYS Route 202/35. Observed in-stream conditions displayed poor habitat conditions which are expected to attract few amphibian and reptile species and macro-invertebrates, especially given observed evidence of high velocity flows and excessive sediment deposition. More natural, better functional areas of

the stream lie further north, beyond the limits of stream sections determined to be in need of improvement.

After the field inspection, a set of improvements were considered to help stabilize portions of the bank and bed of the stream, to the extent that high velocity flow and sedimentation potentials would be mitigated, in conjunction with reducing total nitrogen and phosphorus discharge potentials to downgradient, higher quality protected streams. Overall, the improvements considered would serve to increase the functionality of the stream section of concern, and thereby provide improved conditions which in time will enhance existing habitat and attract a greater diversity of wildlife. The improvements considered were later incorporated into the Watershed Treatment Model, created by the Center for Watershed Protection, to determine the extent of sediment, nitrogen and phosphorous reduction expected by the improvements. The model was utilized to assess various watershed management practices including, 1) estimation of pollutant loading (total suspended solids, total nitrates, total phosphorous) within the existing watershed; 2) identification of the current management practices and their effects to the overall watershed; 3) estimation of pollutant load reductions as part of the proposed watershed management practices (non-structural and structural improvements) and 4) identification and evaluation of effects the proposed improvements have on the watershed and compare the results to existing conditions. The model is further described in the Storm Water Pollution Prevention Plan prepared for the project by SDC, along with a comparison of existing quantities of sediment, total nitrogen and phosphorus discharge potentials, and calculated reductions with the implementation of planned in-stream improvements.

With respect to the upgradient, off-site wetlands proposed to be utilized as storm water retention areas, these wetland areas display a good functions, with respect to biodiversity (specifically vegetation and overall habitat); however, each functions to a lesser degree for flood control. Proposed improvements include implementing a mitigation plan designed to expand each area by establishing indigenous plant species along the outer the edge of each area, in line with expected storm water storage. At no time will the wetland be impacted as the existing dowgradient point where water exits each area will be slightly altered to establish a low profile earthen berm with a weir designed to control existing flow. These measures will serve to enhance the flood control properties of each area and thus, upgrade the overal "functionality" of each area, in a very positive manner.

## MITIGATION

Figure 14 entitled "Southern Future Management Practices Map", presents the limits of four (4) stream sections of concern and the types of improvements planned to be incorporated under the project in order to reduce off-site sediment, nitrogen and phosphorous discharge potentials. The observed conditions of each stream section, and the types of improvements planned, are as follows:

• <u>Station 1+50 to Station 3+50</u>: Area displayed evidence of significant embankment erosion and sediment deposition. The stream will be re-aligned to

remove a 180 degree turn around Station 3+50. Existing sediment will be removed and the base of the stream will be reshaped to redirect and slow flow; as embankment stabilization in the form of bank shaping and vegetation plantings. Also, relocation of existing stone by random placement in locations to curb velocity and protect stream banks will be performed. In addition, a velocity control measure, inclusive of a sediment trap in the form of a small pooling area, will be incorporated.

- <u>Station 4+10 to Station 7+00:</u> Area displayed evidence of significant erosion and sediment deposition. Existing sediment will be removed and the base of the stream will be reshaped to redirect and slow flow; strategically relocate in-stream boulders and provide embankment stabilization with the placement of vegetation matting.
- <u>Station 10+00 to Station 10+50</u>: Felled tree debris observed within various portions of this stream section; stream bed and bank erosion is prevalent. Remove tree debris and strategically relocate in-stream boulders; embankment stabilization will be provided in the form of rock stabilization; the stream bed will be reshaped to slow and redirect flow. A velocity control measure in the form of a small pooling area will be added to trap sediment and further slow flow.
- <u>Station 12+10 to Station 13+50</u>: Felled tree debris within various portions of this stream section; stream bed and bank erosion is prevalent. Remove tree debris and strategically relocate in-stream boulders; embankment stabilization will be provided in the form of bank shaping, vegetation plantings and relocation of stones by random placement in locations to curb velocity and protect the stream bank; the stream bed will also be reshaped to slow and redirect flow.

The above improvements will also be performed with the goal of improving in-stream and stream-side conditions to the extent that increased biodiversity will be achieved, and thus, positively increase the functional attributes of the stream. The location of small pooling areas will aid in this regard, as well as provide some level of increased flood storage capacity, in line with reducing high flow velocity.

As noted, the above stream improvements will be performed in conjunction with providing increased flood holding capacities within two wetland areas situated upgradient of the proposed project limits. As part of designing these two areas, a Biodiversity Assessment was performed to evaluate existing conditions within and immediately surrounding these two wetland areas, and to determine impacts associated with increasing flood holding capacities of these two areas. The MCA study was reviewed and applicable criteria were utilized in the Assessment.

## 1) <u>Regional Flood Retention Areas</u>

During July and August 2012, ECSI performed a biodiversity assessment of the two freshwater wetland areas planned for use as regional flood retention areas. The western most area lies within the limits of the Sylvan Glen Preserve; the eastern area lies mostly within the

northern limits of the State Land Corp. parcel. A document under separate cover entitled "Biodiversity Assessment of Two Regional Flood Retention Areas Within and Adjoining the Sylvan Glen Preserve" contains documentation of the methods performed and the findings concluded under the assessment. The findings are summarized below to describe potential habitat impacts with the construction and operation of the two regional flood retention areas. A figure entitled "Biodiversity Survey Target Sites/Habitat Areas A, B & C", presents the areas evaluated under the assessment, including the locations of the bird observation, reptile/amphibian walk-throughs and vegetation transects.

During the assessment, small amounts of water were observed to temporarily pond within the western flood retention area after seasonal rainfall events; no water was observed to accumulate within the eastern area after seasonal precipitation events. This is likely related to the dynamics of upgradient contributory areas in the vicinity of each proposed retention area. The eastern and western areas display depressional wetland characteristics, with observed Obligate and Facultative-Wet species, surrounded by transitional tree and shrub vegetation comprised of Facultative-Wet and Facultative species; observed transitional species are bordered by species comprised of upland vegetation (Facultative and Facultative-Upland species). Sections of the Sylvan Glen Trail traverse these wetland areas, east and west. The trail crosses the western wetland area at its southern reaches, and trail crosses the eastern wetland through its midpoint. Once the flood holding capacities of the wetland areas are increased, existing trail crossings will require conversion to wooden elevated walkways (2 to 4 feet above the existing surface), to include with at least one railing designed to provide stability for hikers. It is anticipated that the Town of Yorktown with maintain the converted elevated wooden walkways and railings as part of Preserve maintenance operations.

A) Vegetation

The Biodiversity Assessment included evaluation of three vegetation transects within the limits of the proposed regional flood retention areas. The types of woody vegetation observed within these areas included American Elm, Slippery Elm, Red Maple, Shagbark Hickory, Bitternut Hickory, White Oak, Black Birch, American Hop-hornbeam, Spicebush, Gray Dogwood, Flowering Dogwood, Sugar Maple, Northern Red Oak and Black Willow. Observed herbaceous species included Tussock's Sedge, Soft Rush, Common Blue Violet, Christmas Fern, Common Greenbrier, Cinnamon Fern, Spicebush (seedlings), Skunk Cabbage, Spotted Jewelweed, Sphagnum Moss, Sensitive Fern, Stilt Grass and Touch-Me-Not. In conjunction with identifying tree and shrub species, random soil samples were obtained to substantiate that these areas comprised of wetland (hydric) soils; soil conditions within immediately surrounding areas displayed moist conditions comprised of both and clay textures. It is within these soils conditions that transitional tree and shrub species were observed.

B) Avian Species

Avian species observed at three, predetermined observation locations during the assessment were typical inhabitants of second growth, forested upland and wetland settings; the most diverse of which were observed in close proximity to each wetland. Species encountered

included both habitat sensitive and habitat generalist types (i.e. Red Eyed Vireo and Blue Jay, respectively). Species observed included the Eastern Wood Pee Wee, American Robin, Northern Cardinal, Wood Thrush, Black-capped Chickadee, Tufted Titmouse, White-breasted Nuthatch, Mourning Dove, Veery, and the American Crow. The Red Tailed Hawk (Buteo jamaicensis) was the only raptor observed during the assessment; assorted woodpeckers (Picidae Family) including the Hairy, Downey, Yellow-shafted Flicker, Red-bellied and Pileated Woodpecker were also observed. Species not observed, but expected to inhabit these areas would include Little Brown Creeper, Northern Oriole, American Redstart, Ovenbird, Carolina Wren, Wild Turkey, Gray Catbird, Great Crested Flycatcher, Least Flycatcher, Black and White Warbler, Yellow Warbler, White Throated Sparrow, Eastern Screech Owl, Wilson's Warbler, Blue-gray Gnatcatcher, Scarlet Tanager, and the Yellow-billed Cuckoo. All of these species are common to eastern North America.

# C) Amphibian and Reptile Species

The predominant reptile observed in the vicinity of each regional flood retention area was the Garter Snake; observed amphibians included the Wood Frog, Spring Peeper, Green Frog and the Eastern Gray Frog. Species not observed, but likely to inhabit these areas would include Spotted and Slimy Salamanders, Red-spotted Newt, Fowler's Frog, Eastern Box Turtle, Marbled Salamander, American Toad, Northern Copperhead and the Northern Black Racer.

D) Mammalian Species

Observed mammalian species included White Tailed Deer, the Eastern Chipmunk, Eastern Gray Squirrel and the Red Fox (scat). Other species which were not observed, but are likely to inhabit these areas include the Striped Skunk, Opossum, Eastern Raccoon, Least Shrew, Star-nosed Mole, Deer Mouse, White-footed Mouse, Little Brown Bat, Northern Myotis and Coyote.

E) Insect Species

In addition to the above, observations of insect species were recorded during the Assessment. Species observed included the Bald-faced Hornet, Brown Dog Tick, Deer Tick, and Cabbage White Moth, Deer Fly, Triangulate Cobweb Spider, Field Cricket, Honey Bee, and the Monarch Butterfly.

Based on the above observed species and species anticipated to be present within and immediately surrounding the western and eastern wetland areas planned for use as regional flood retention areas, these areas are regarded as yielding diverse habitat capable of supporting a large variety of avian, amphibian/reptile, mammalian and insect species. Overall, observations indicate the existence of a balanced ecosystem within each area.

The proposed regional retention areas will involve damming up (low profile rock berm) the lower discharge point of each wetland to thereby allow water to periodically accumulate (backup) within the existing limits of each wetlands and immediately surrounding areas. The amount of water-holding area is expected to increase by 50 percent, an expansion which in turn will provide downgradient flood relief by 30 percent.

Existing moisture tolerant forms of observed species within these areas are expected to handle periodic flooding; these species display evidence of flooding (i.e. American Elm, Red Maple, Slippery Elm, Shagbark Hickory, American Hop-hornbeam, Spicebush, Flowering Dogwood, and Black Willow). Some of the transition species immediately surrounding existing wetland vegetation are expected to survive, while upland species may succumb to periodic flooding (i.e. Black Birch, Sugar Maple and Northern Red Oak). The extent at which upland tree and shrub will succumb to flooding is expected to be minimal as the majority of species observed are comprised of moisture and shade tolerant species (i.e. wetland and transitional species) characterized as being Obligate, Facultative-Wetland and Facultative species.

Observed and anticipated avian, amphibian/reptile and mammalian species identified in these areas are mobile and will likely relocate temporarily as a function of periodic flooding. Further, the timing of flooding and breeding periods for the amphibian species observed (and those species anticipated to exist) is not expected to be negatively affected. In fact, the range of amphibian and reptile habitat is expected to expand. As an example, Wood Frog and Spring Peepers seek out both terrestrial and aquatic habitats, while the Green Frog relies more heavily upon aquatic conditions. Regardless, all three species prefer temporary, ephemeral water sources to breed (May through August).

Trees which succumb to flooding will revert to "snags" (standing, dead trees) which provide additional diverse habitat conditions for a variety of insect. In fact, snags are noted for attracting several varieties of insects which are preferred by several bird species, primarily woodpeckers. Woodpeckers are also the primary excavators of nesting cavities in snags. These tree cavities are later used by other species such as Bluebirds, Wood Ducks, Titmice, Greatcrested Flycatchers, Black-capped Chickadees, White Breasted Nuthatches and Screech Owls, all of which depend on cavities for successful nesting. These species have been observed, or are anticipated to inhabit these areas.

#### MITIGATION

Access to each regional flood retention area will be arranged along the west/northwestern and eastern areas of the site, as the topography of these portions of the property are more gradual and can easily managed and maintained, compared to other areas of the property. Given that minimal work is proposed to construct each retention area dam (earth and rock berm), compact excavators and All-Terrain Vehicles (ATV's) will be used to transport materials, laborers, and tools to each area, as well as to perform limited grading required to build each dam. Use of compact excavators and ATV's is expected to significantly minimize soil erosion/sedimentation potentials, as well as result in the smallest access route practicable for accessing each area.

In an effort to minimize soil and water impacts at the western (flood retention) wetland, construction activities will consist of limited grading and only in the southern portion of the wetland, primarily in close proximity to a stone boundary wall (where the northern reaches of the site adjoin Sylvan Glen Preserve) is located. This wall marks the location of the proposed earthen/rock berm which will be constructed to retain storm water within the adjoining,

upgradient wetland. Similarly, limited grading activities will be performed near the rock berm at the eastern wetland (flood retention) area; earth/rock dam (berm) construction activities will take place solely upon State Land Corp. property. After construction, each regional flood retention area will be maintained by the Town of Yorktown. The improvements will consist of constructing a 5 foot high earthen dam, which will be reinforced with rock and vegetation. The dam will be constructed across a lower end of the natural draw in the topography, thereby limiting the disturbance only to the area of the dam. There is no earthwork expected outside of this limit.

Trees and shrubs which may succumb to periodic flooding will be replaced with moisture tolerant plantings. A Preliminary Wetland Mitigation Plan will be prepared once the proposed concept of the regional flood retention areas are designed and addressed under SEQR process. After each retention area is dammed (bermed) and at least one season of accumulated water is observed over four (4) seasons, a final plan will be prepared to best match observed conditions. The preliminary Plan will include the planting of indigenous species comprised mostly of moisture and shade tolerant herbaceous, shrub and tree species, along portions of the western and eastern edge of each retention area. The plantings will be located as a function of water level observations and soil amelioration resulting from seasonal flooding. Indigenous herbaceous species will likely include Tussocks Sedge, Cinnamon Fern, Soft Rush, Royal Fern, and Roughleaf Goldenrod; shrub species will include Red Osier, High-bush Blueberry, Arrow-wood, Green Ash, Spicebush and Silky Dogwood; trees will include American Elm, Black Willow, Sycamore and Red Maple. As noted, these species were observed under the Biodiversity Assessment completed for each retention area, as well as existing within immediately surrounding areas. Increasing the flood holding capacity of the two existing wetlands areas will serve to expand wetland habitat/vegetation and thereby increase the diversity of immediately surrounding transitional and upland vegetation areas. Further, the functional attributes of each area relative to flood holding capacity will be enhanced. Figure 15 and 15.1 presents the preliminary wetland mitigation plan for each of the two proposed storm water retention areas.

The mitigation plan will be performed over a 5-year monitoring and reporting period to ensure that successful establishment of each planting within the regional retention areas. The Monitoring Program will include monitoring wetland mitigation areas, as well as in-stream improvements (stream bed and bank conditions) within the four stream sections proposed to be improved to mitigate off-site sediment, nitrogen and phosphorus discharge potentials. A target goal of achieving an 85 percent survival rate will apply for vegetation plantings implemented under the wetland mitigation plan, and for vegetation applications implemented for in-stream improvements. Access to each area will be established as a narrow, wood chipped lane designed to accommodate small work vehicles (mini-excavator and/or ATV unit) originating from an access point along NYS Route 202/35.

## Item 5 – Affects to Surface or Groundwater Quality or Quantity

Shallow groundwater depths can greatly affect the project during and after construction, unless properly controlled. During construction, contact with groundwater can create unsuitable conditions for soil manipulation through earthwork. This would result in *soft or muddy soil* conditions which will cause difficulty for heavy equipment operation and site grading. Further,

saturated soils cannot be effectively compacted, stockpiled, or transported. This can be somewhat difficult to manage as earthwork is an evolving process with respect to preparing the grades. Measures can be implemented to improve conditions if groundwater is encountered during construction. Groundwater can be intercepted and diverted to sediment traps (via trenching), as well as isolating work areas. In extreme cases where high hydrostatic pressures exist, contact can be controlled using well points arranged in the field to draw down groundwater elevation, thereby allowing construction to take place in an inhibited manor. Excavated wet soils can be stockpiled separately allowing drying, as necessary, before placement or transport. Wet soils will not be used to fill areas designed to provide structural support.

After construction is complete, high groundwater conditions must be controlled to help ensure the longevity of the project infrastructure. High groundwater can act to de-stabilize structural and non-structural components. Paved areas and curbing are very susceptible to this. Uncontrolled groundwater conditions are likely to cause destabilization of base materials causing asphalt cracking, heaving and sinking. Buildings are also subject to the effects of high groundwater conditions including destabilization of supporting soils and possible flooding. Such incidents can be intercepted by permanent infrastructure. The most typical means of accomplishing this is by way of incorporating sub-surface interceptor drains, consisting of gravel and perforated pipe, designed to collect and convey groundwater around and away from the construction site. In areas where structural support must to be maintained, additional drainable structural stone can be placed to further support.

Information contained in the Pulte Homes DEIS indicates that bedrock was encountered during the geotechnical engineer's exploration of the underlying soils within the proposed development site. It is anticipated that competent rock will be encountered during the grading of the site. Weathered rock typically can be removed with a conventional excavator equipped with ripping tools, extreme service buckets with rock teeth, and/or pneumatic hammers without considerable difficulty during mass excavation operations. The speed and ease of excavation within areas of bedrock will depend on the type of grading equipment utilized, equipment operator skills, and the geologic structural makeup of the material, such as planes of weakness and spacing between discontinuities. Blasting may be considered to expedite removal of weathered and competent rock in areas where bedrock is encountered. In the event blasting is required for earthmoving activities, it will be performed in accordance with the Town of Yorktown, New York State, and Federal guidelines. Blasting will be completed by a certified and insured blasting contractor.

With respect to potential groundwater/surface water impacts related to the use of the two proposed storm water retention areas, potential impacts are expected to be minimal as groundwater discharges within the immediately surrounding watershed will continue to occur inhibited. The same is expected with surface water discharge as storm water will be temporarily retained and expanded within each area during certain storm events, whereby base flow discharge will continue to occur inhibited. In light of these unchanged and somewhat enhanced discharge characteristics, discharges to downstream receiving waters, including the Hunters Brook, will not change.

## Item 6 - Alteration of Drainage Flow, Patterns, or Surface Water Runoff

Expected alteration of drainage flow, surface water runoff and drainage patterns, and related mitigation measures, are noted above under Item 1, Physical Changes to the Project Site.

Item 7 - Impacts On Air

In an effort to assess likely emissions generated with the proposed State Land Corp. development, an analysis of indirect (stationary sources) and direct (stationary and mobile sources) was completed utilizing the NYSDEC Policy document entitled, "Assessing Energy Use and Green House Gases in Environmental Impact Statements", issued July 15, 2009. Presented below is a breakdown of expected emissions for both direct and indirect sources.

| Indirect Emissions from Stationary Sources |         |                                    |  |  |  |  |
|--|---------|------------------------------------|--|--|--|--|
| Facility Characteristic                    | SF      | Total Annual Site Energy<br>(kBtu) | CO <sub>2</sub> Emissions (metric tons/year) |  |  |  |
| Retail                                     | 230,000 | 32,456,170                         | 2,386  |  |  |  |

 $*CO_2$  Emission quantities taken from Energy Star Target Finder (www.energystar.gov)

| Indirect Emissions from Mobile Sources |                |  |   |                                      |  |  |
|--|----------------|--|---|--------------------------------------|--|--|
| Net New Annual<br>Vehicle Trips        | Vehicle Type   | Vehicle Miles Traveled<br>(VMT) Per Trip | Annual Vehicle<br>Miles Traveled<br>(VMT) | CO <sub>2</sub> Emission<br>(kg/mi)* | Annual CO <sub>2</sub><br>Emissions<br>(metric<br>tons/year) |  |
| 2,530,440                              | Passenger      | 8  | 20,243,520                                | 0.364                                | 7,369  |  |
| 25,560                                 | Truck (Diesel) | 30                                       | 766,800                                   | 1.726                                | 1,323  |  |

\*Emission factors taken from the U.S. Environmental Protection Agency Optional Emissions from Commuting, Business Travel and Product Transport

| Direct Emissions from Non-Stationary Sources |            |                           |                              |             |                        |         |  |
|--|------------|---------------------------|------------------------------|-------------|------------------------|---------|--|
|  |            |                           |                              |             |                        | $CO_2$  |  |
|  |            | Anticipated Fuel          | <b>Emmission Factor</b>      |             |                        | Volume  |  |
|  | Quantity   | Consumption while on-site | (kg CO <sub>2</sub> per unit |             | CO <sub>2</sub> Volume | (metric |  |
| Fleet Vehicles                               | (per year) | (gallons/year)            | volume)*                     | Unit Volume | (kg)                   | tons)   |  |
| Semi-Trailers                                | 12,780     | 25,560                    | 10.15                        | gallon      | 259,434.00             | 259     |  |

\*Emission factors taken from the U.S. Energy Information Administration (www.eia.gov/oiaf/1605/coefficients.html)

The types of mitigation practices designed to reduce expected emissions may include the following, depending on the actual development proposed in the future: Building Design and Operation

- 1. Energy efficient building materials to reduce cooling and heating
- 2. Energy star (high efficiency) HVAC systems may be installed
- 3. Use of reflective roofing materials
- 4. Use of Motion sensor light fixtures

- 5. Use of LED lighting both interior and exterior
- 6. Use of low flow fixtures within bathrooms
- 7. Use of recycled building materials where appropriate

## On-site Greenhouse Gas Sources

1. Use of Energy efficient heating systems and backup generators

## Site Layout and Design

- 1. Provide open space for protection of remaining natural features
- 2. Conservation of natural areas throughout the site
- 3. Incorporate alternative transportation methods (sidewalks, bicycle racks, etc.)
- 4. Incorporate native species plantings to reduce water demand for landscape

## Transportation

- 1. Propose idling reduction signs for loading/unloading operations
- 2. Provide internal signage to short route modes of public transportation
- 3. Develop alternative transportation methods throughout site (sidewalks, bicycle racks)
- 4. Provide ordinance with minimum amount of parking spaces for development
- 5. Implementation of proposed roadway improvements noted under the project to enhance traffic maneuvers throughout the site
- 6. Implementation of proposed of traffic signalization and signage noted under the project to enhance traffic flow entering and exiting the development

# Items 8 and 9 - Affect to Threatened/Endangered & Non-Threatened/Non-Endangered Animal and Plant Life

As noted under Item 6 in section A - Site Description, ECSI submitted correspondence to the New York Natural Heritage Program in February 2012 to request their assistance to review their records to determine if any threatened, endangered or species of special concern exist for the project site, or immediately area. Correspondence received from the Natural Heritage Program (see correspondence dated March 3, 2012) indicates that they have no records of rare or State listed animals or plants, significant natural communities or other significant habitats, on or in the immediate vicinity of the site.

Further, based on ECSI's review of available mapping for the Westchester County area no Critical Environmental areas exist on the site or upon immediately surrounding properties. The Town of Yorktown owned and operated Sylvan Glen Preserve abuts the property to the north.

Based on available aerial photography, the site has remained undisturbed since 1967. The property is contiguous and undisturbed woodland that extends north and west to Town and County owned properties. The Town owned Sylvan Glen Preserve exists to the north and west of the site (a former farm), with additional undeveloped lands further to the north. The proposed

development will provide at least an additional 50 acres of undeveloped lands north, to be annexed to the Sylvan Glen Preserve; as much as 70 approximate acres can be realized without the construction of the Bear Mountain Parkway Extension. The undeveloped portion of the subject property and the Sylvan Glen Preserve are forested display a variety of similar wildlife habitat characteristics consisting of forested freshwater wetlands and waterways, hardwood forest and rock outcrops. These characteristics provide a variety of habitat conditions which are favored by various avian, mammalian, reptile and amphibian species.

The proposed construction and expansion of two existing wetlands as regional flood retention areas is not expected to significantly affect any threatened/endangered species, or species of special concern, as well as species defined as "development sensitive" or "specie generalist's". As noted above, planned construction activities are planned to be minimal and those species observed and expected to occupy these areas are highly mobile (avian, amphibian/reptile and mammalian species) and will likely relocate temporarily as a function of periodic flooding.

# 1) General Vegetation Types

There are two general vegetation communities present at the site: Second Growth Hardwood Forest and Forested Wetlands. The second growth hardwood forest is divided somewhat into areas with deep soil versus shallow soil areas where rock is closer to the surface. These conditions result in altering the types of tree cover species.

# 2) Second Growth Hardwood Forest

Second growth, forest stands cover most of the property (84.9 acres, or 85 percent). This association is dominated by Sugar Maple (Acer saccharum) and Red Oak (Quercus rubra), and includes a significant number of American Beech (Fagus grandifolia), Tulip Poplar (Liriodendron tulipifera), Black Cherry (Prunus serotina), Yellow Birch (Betula lutea), and Shagbark Hickory (Carva ovata). Shrub and herbaceous strata within this association includes Spicebush (Lindera benzoin), Bittersweet (Celastrus scandens), Poison Ivy (Toxicodendron radicans), Garlic Mustard (Alliaria petiolata) and Honeysuckle (Lonicera spp.). Understory and herbaceous layers are not well-developed below the dense canopy of large diameter hardwood stands. Based on observations, there is a significant deer presence on this site, and the lack of well developed herb and shrub layers is likely the result of significant deer browse.

In areas of the site where shallow depth to bedrock is encountered, the dominant tree species are Red Oak, Yellow Birch and American Beech. In the southwest corner of the site, north and east of NYSDEC Wetland A-10, lies an area that appears to have once been a farmstead home site. Dense growth of pachysandra and a grove of large White Pine trees identify this area, which is a contrasting habitat characteristic than those of the more natural forested areas of the site. As noted, a dam and remains of a nearby out building exist within the eastern portion of the site.

## 3) Known and Expected Wildlife Species

Species common to the area which could reasonably be expected to utilize the site or the surrounding environment is provided below. These species were derived in part from available documents published for Westchester County. The list identifies common species that are likely to utilize the types of habitats observed at the subject site. Listed habitat types identified include hardwood forested uplands, forested wetlands, open water, stream corridors and stone walls. Species noted include a number of species that were observed during a field visit by Environmental Compliance Service, Inc. during February 2012, and information previously gathered for the Pulte Homes project.

A variety of small terrestrial animals were sighted on the project site during prior site visits performed by prior professionals in all seasons, including three days dedicated specifically to wildlife observation during the Spring of 2001. These surveys were conducted during clear weather conditions on May 29 and 30, 2001, and again in cold weather with a light snow covering on January 24, 2002. As noted, information gathered by observations made by Environmental Compliance Services, Inc. during February 2012 was generated to supplement prior information gathered for the project site. This survey was performed during clear weather and no snow cover existed on the surface.

Observed potentials for small animals include rabbit, raccoon, squirrel, chipmunk, and various amphibians. Deer were also observed to likely utilize the site during all seasons. The project site is used by numerous species of birds, particularly those species which favor closed canopy conditions.

The Croton-to-Highlands Biodiversity Plan was published in early 2004. The project site is contained within an area identified as the Sylvan Glen "biotic planning unit" (BPU). According to the report, a BPU is a large tract of habitat (at least 1,000 acres), containing significant species, that are isolated from other habitat hubs and corridors by development and roads. According to the study, the Sylvan Glen BPU contains a diverse assemblage of development-sensitive species, including spotted and slimy salamanders, red-spotted newts, gray tree frogs, wood frogs, pileated woodpeckers, black-and-white warblers, ovenbirds, northern and Lousiana Waterthrush, and Woodthrush. The report indicates that poorly planned development of privately owned lands in between the existing public lands would fragment the BPU into smaller habitats that would not support focal species currently found there. The Plan recommends protecting privately owned portions through preservation, or implementation of land use planning tools. Comparing the recommendations of the Croton-to-Highlands Biodiversity Plan to proposed State Land Corp. development, the proposed development compliments the need to ensure that private lands are protected to thereby maintain areas within the Town of Yorktown identified as biotic planning units. The amount of area planned to be deeded to the Town under the proposal will eliminate the possibility of developing the upper reaches of the project site, and therefore, dedication removes the potential through development of affecting the natural resources located in close proximity to the Sylvan Glen Preserve. Preservation of the 72.5 acre land area north of the proposed development will ensure a contiguous land tract adjoining the Sylvan Glen Preserve. If the this land area is not preserved, this land area will continue to present a development potential to the extent that fragmented and

isolated habitats may result at some time in the future. Such fragmentation and isolation of land areas will affect the habitat quality of the nearby Sylvan Glen Preserve, identified by the Croton-to-Highlands Biodiversity Plan as being an important BPU. Further, the two proposed storm water retention areas will maintain and enhance groundwater and surface water discharges in immediately surrounding areas, as well as to downstream habitats, both on- and off-site (i.e. the Hunter's Brook).

Several of species previously observed or found to likely inhabit the site included Ovenbird, Wood Frog, and the Red-spotted Newt (identified as "newt", *Notophthalmus viridescens*). Except for previously observed Louisiana Waterthrush and Black-and-white Warbler, all other species identified in the Biodiversity Plan are expected to possibly inhabit the site.

The above noted field survey dates experienced by others during the early 2000's were consistent with times of high wildlife activity. The late spring dates were chosen for observation of breeding birds, breeding salamanders and other amphibians, movement of turtles from winter hibernacula and increased activity by mammals during spring mating and rearing of young. Winter dates were chosen to evaluate the resident bird population and to observe winter signs of resident mammals. The absence of certain species during field observations does not mean that those listed species do not utilize the site. If the relevant literature indicates that certain species will likely utilize on-site habitats, or those species were observed in similar habitat nearby, then these species are considered likely to utilize the site.

4) Potential for Use by Rare or Endangered Species

According to the NYSDEC, there are no rare or endangered wildlife species known to inhabit the site, or immediately nearby areas. Prior field surveys performed by others at the site employed a series of random/zigzag transects with observation, listening, and/or ground searches being conducted as site specific features changed along the transect route (i.e. open, upland hardwood forest slopes to bottom land forested wetland, to stream corridor to open water wetland, etc.). The random aspect of these transects allowed investigators to observe and actively investigate features of interest along the way. This practice also facilitated data collection for a greater variety of micro-habitats.

The site was examined for potential use by a number of rare, endangered or protected species, as listed by the NYSDEC (2001). Based on observed on-site habitat conditions, habitat potentials for the following species listed by the State as being endangered or threatened were previously considered during the early 2000's:

- Bog Turtle Endangered
- Mud Turtle Endangered
- Tiger Salamander Endangered
- Northern Cricket Frog Endangered
- Fence Lizard Threatened
- Timber Rattlesnake Threatened

Habitat potential for the following species of special concern was also evaluated:

- Spotted Turtle
- Wood Turtle
- Eastern Box Turtle
- Eastern Hognose Snake
- Worm Snake
- Marbled Salamander
- Jefferson Salamander
- Blue spotted salamander

It is important to note that several of these species were eliminated from consideration due to the lack of known populations in Yorktown specifically or Westchester County generally. The Mud turtle is considered to be north of its known range and the lack of open field areas and suitable open water is likely to be considered to be extirpated in Westchester County. Tiger salamander is also north of its known range and is confined to eastern Long Island. The Northern cricket frog requires a sunny pond and is known only in the Hudson Highlands and Shawangunk area (Catskills). Timber rattlesnake is known to be in higher altitudes with rugged terrain and open areas of rocky ledges necessary for basking.

Observed on-site habitat conditions (forested upland and wetland, stream corridors, stone walls, a small man-made pond) were considered, and several species were eliminated from consideration as follows:

• Spotted turtle - lack of suitable open water and basking areas

• Wood turtle - lack of suitable stream corridors with sandy banks and overhangs, open meadows for nesting and foraging

• Fence lizard - similar to Timber rattlesnake for terrain and basking, does not prefer closed canopy woodlands

With respect to the potential presence of Bog Turtle, this well-studied and surveyed species was not identified by the New York Natural Heritage Program as being known to occur in the project area. It appears that the closed canopy of the wooded wetland to the west (Wetland A-10) would not provide the necessary basking and nesting opportunities for bog turtles. Evaluations of site specific requirements by others were conducted for the remaining State listed species (Eastern Box Turtle, Eastern Hognose Snake, Worm Snake, Marbled Salamander, Jefferson Salamander, and Blue Spotted Salamander).

There is the possibility that on-site habitat conditions could support the Eastern Hognose Snake (*Heterodon platyrhinos*). This species is listed by New York State as being a species of special concern (NYSDEC, 2001), although it is identified as being locally common in Westchester County. It is a highly secretive species that may utilize the stone walls and wooded areas of the site for cover and feeding.

A similar situation exists for the Eastern Worm Snake (*Carphophis amoenus*). This species inhabits moist wooded areas with sandy or rocky substrate, often burrowing underground

for long periods to avoid dry surface conditions. Its main food sources are earthworms and salamanders, which are plentiful on-site, primarily along stream corridors and within existing stone walls. If this species exists on-site, they are likely to avoid newly developed areas, but should otherwise be unaffected by site development in the long term. In the short term, site excavation and blasting may cause some individuals close to areas of proposed disturbance to relocate temporarily. Large open space areas will remain around the perimeter of the site, adjacent to the stream corridors and on parcels to the north, which provide open space for temporary habitation if required. No worm snakes were observed during prior on-site field investigations.

With respect to ambystomid salamanders, the lack of suitable on-site breeding pools makes the possibility of finding these salamanders breeding on this site unlikely. One pool that has potential for breeding, the man-made pond adjacent to NYS Route 202/35, is also used by Wood and Green Frogs; a Green Heron was also observed feeding in the pond (tadpoles) in the spring of 2001. The resident adult frogs are also likely to feed on larval salamanders, quickly depleting breeding populations. A third consideration is that the location of the pond, situated in close proximity to NYS Route 202/35, may be unsuitable for these species as they tend to be sensitive to human activity and proximity.

It is possible that salamanders may be breeding within vernal pools associated with the wetlands situated to the north of the site upon property owned by the Town of Yorktown (Sylvan Glen Preserve). Individuals may then migrate to the south onto the project site for foraging during the summer months. Typical home ranges for these species range from 100 to 200 yards. The proposed development is a minimum of 500 feet and more typically over 1,000 feet from these off site wetlands. The Eastern Box Turtle is another species that may occupy this site. Recently listed as a State species of special concern, the Eastern Box Turtle may wander the woods of this site, although none were observed during numerous site visits. This species is primarily a terrestrial turtle, although it may frequent stream beds, or shallow ponds, during the hot summer months. The major threat to this species is pesticide poisoning and collection.

Second growth forested areas contain mature tree species (beech, oaks, hickory) that provide mast for deer and other mammals, and cover in the upper canopy and in standing dead trees. The proximity of the mature forest areas to the perennial stream corridors provides additional benefit to wildlife by offering a regular water source and additional forage opportunities. There is generally a lack of significant understory and thickets within these woods, but some of these areas do exist in isolated pockets, particularly closer to NYS Route 202/35. These areas are valuable for use as cover for some smaller ground-based species.

A few of the species observed on the site require closed canopy forest for nesting. The Ovenbird, Veery and Hermit Thrush were previously identified at the site as bird species that typically utilize woodland habitat. The Ovenbird, which builds nests on the ground in dense wooded areas, was previously observed (voice) in the northwestern corner of the site.

This habitat type is also valuable as being part of continuous woodland with Townowned property and undeveloped land to the north. The high volume of traffic along NYS Route 202/35 at the site's southern boundary limits the first 200 to 300 feet of the site for animals that are more secretive and less adaptable to noise and human activity.

## 5) Wooded Swamp

Of the larger species likely to use the site, White-tailed Deer and Eastern Raccoon are known to utilize the western wetland area (Wetland A-10), as well as on-site stream corridors. Signs of both species were previously observed throughout these areas of the site during field surveys performed by others.

The wooded swamp is also likely to provide habitat for a number of other animal species. Wetland A-10 also provides cover, food and nesting sites for numerous species, typical of other large wetland tracts in Westchester County. This habitat type is not regionally unique to this site; it is associated with other large wetlands located west, northwest and northeast of the project site.

# 6) On-site Stream Corridors

Two primary stream corridors drain this property. The corridor identified as Wetland B which bisects the site provides intermittent and perennial flow when not frozen, and varies in width from two to twelve feet. The eastern tributary is more intermittent in nature, and varies from two to six feet in width. Both streams have a stony substrate, and in many areas are flanked by stone walls that provide additional habitat. Small reptiles and amphibians living within the stream corridors (Red-backed and Two-line Salamanders, previously observed by others) offer additional food source to some of the larger omnivorous mammals that may be present (i.e. Eastern Raccoon, Red Fox, Skunk); and the undeveloped drainage within the centrally located wetland/watercourses may serve to provide good water quality both for the semi-aquatic species and larger mammals that may feed on them. Tree coverage provides shade for both watercourses and moderates seasonal temperature fluctuations. Although no fish species have been observed on site, moderation of stream temperatures by the adjacent vegetation is important to fish survival in downstream areas.

7) On-site Stone Walls

Stone walls are distributed throughout the property. These stone walls offer nesting and cover for a variety of species, including snakes, small mammals (Eastern Chipmunks, mice, rabbit, voles, etc.) and various amphibian species. Newts and salamanders are particularly likely to find suitable habitat within the stone walls, especially those situated near wetlands and watercourses. Insect and worm populations that are likely to live within the walls provide a food base for many of these species. Based on prior field surveys and prior aerial photo interpretations, there are at least 16,500 linear feet of stone wall distributed throughout the subject site.

## MITIGATION

As implied above, relatively diverse habitat exists throughout portions of the site, and in particular, the most valuable areas of the site adjoin the Sylvan Glen Preserve, north, west and east. While the above observations were made during the early 2000's, much of the habitat

conditions identified have not changed. This statement is based on extensive review and comparison completed by ECSI of the voluminous natural resource studies presented in the DEIS documents prepared for the Homart and Pulte Homes developments to that of current day conditions. This statement also applies to the cultural resource characteristics of the site which were previously documented in great detail as part of these two projects. Essentially, ECSI's observations serve to confirm that based on prior published site information that site conditions have not changed across the landscape. Further, the in-stream sedimentation and nutrient load potentials described previously by others continues to pose a water quality threat to higher quality downstream tributaries, namely the Hunter's Brook.

The State Land Corp. proposal will result in approximately 27.5 acres of disturbance, primarily within areas of the site situated in close proximity to the NYS Route 202/35 transportation corridor. Given the biodiversity of the project site, it is inevitable that a potential exists whereby threatened/endangered or species of special concern may be affected under the project. In an effort to minimize impacts, the development has been designed to the smallest area of disturbance practicable. Further, provisions for providing proper storm water management and planned in-stream improvements will serve to properly maintain remaining portions of the site, natural area contiguous with the Sylvan Glen Preserve to the north. This large tract of land will be preserved in perpetuity and will expand the natural habitats (including connecting wetlands and watercourses) of the Preserve further south. This in turn will provide visitors of the Preserve with greater opportunities for passive recreation.

In addition to land preservation, downstream flood potentials will be offset by nearly 30 percent with the establishment of two storm water retention areas north of the site. Associated wetland mitigation within these areas will expand wetland area and ensure/enhance groundwater and control surface water discharges where none exists now. The proposed in stream improvements (stream base and bank) will significantly offset existing sedimentation and nutrient load potentials currently being discharged to downstream receiving waters. These mitigation measures, combined with the preservation of 72.5 acres of undeveloped land north of the proposed development, will provide the Town with exceptional attributes for natural resource preservations between members of the Town Board and Planning Board members, the Town ha expressed a willingness to accept the dedication of the 72.5 acres land tract north of the development.

Overall, the proposed State Land Corp. development has been designed to minimize impacts, the greatest extent practicable, while providing several benefits to the Town and their residents.

## Item 11 – Affects to Aesthetic Resources

As noted, six line of sight viewpoints have been defined for the project (Figure 6). These include a sight from NYS Route 35/202 and toward the eastern limits of the proposed development (View #1), a second sight from NYS 35/202 and towards the proposed access road leading to the development which will connect with NYS Route 202/35, a sight from Stoney Street and NYS Route 202/35 (View #3), a sight from the western overpass of the Taconic

Parkway (View #4), a sight from Sylvan Glen Park (View #5) and a sight from Catherine Street at the Fieldhome property (View #6). Renditions of the proposed development for views 1 and 2 have been prepared to illustrate how the development will be viewed aesthetically from NYS Route 202/35. These renderings illustrate how two existing, undeveloped areas of the project site will appear when developed; these two viewpoints (views 1 and 2) are regarded as two important angle views of concern. The illustrations depict how a visual break in the natural landscape will appear for drivers of vehicles travelling along Route 202/35. The photographed views and renderings are provided during leaf fall conditions to provide a "worst case" illustration of the site with and without the project.

## MITIGATION

Based on information presented on the line-of-sight profiles, the upper elevated portions of the subject property site above elevation 400 feet (mean-sea-level) consists of undeveloped forest vegetation. This area will remain natural, a large majority of which will be deeded to the Town for preservation/open space. Views of the proposed project structures from the Taconic Parkway western bridge overpass and the Fieldhome on Catherine Street will be least visible due to the large distances between each of these viewpoints and varied topographic features between.

The possibility also exists where the western limits of the development will be viewed from the Sylvan Glen Park; these views are expected to present minimal visual impact because of distance and west facing topographic land features (more than 200 feet of vertical relief). These conditions have been confirmed in photographs obtained to depict visual conditions from the viewpoint and to proposed on-site project structures. In an effort to off-set these aesthetics, vegetative plantings (trees and shrubs) will be placed along the entrance road connecting with NYS Route 202/35 and along the visible slope constructed at the eastern limits of the development (Views 1 and 2 ). In addition, on-site buildings will receive soft tone colors and architecture designed to compliment surrounding areas.

The two viewpoints of concern will be visible to drivers of vehicles traveling along NYS Route 202/35, and from some businesses existing along this route. Efforts will be made to allow existing dense stands of tree and shrub vegetation to remain in place. In addition, proposed tree and shrub plantings within each of the two areas of concern will help screen (mitigate) visual impacts. In addition, the development will be set-back from the property's frontage and thus, the majority of parking areas and portions of on-site buildings will not be seen due to the slightly higher elevation of the development (building pads and parking areas) being nestled within surrounding dense stands of tree and shrub vegetation.

## Item 13 - Quantity/Quality of Existing/Future Open Space/Recreational Opportunities

The proposed project will be constructed on approximately 27.5 acres (without the Bear Mountain Parkway Extension right-of-way); an approximate 72.5 acres will remain as a natural area. This area is comprised of second growth hardwood forest and includes watercourses and connecting forested wetlands, which abut the northwestern and northern reaches of the Sylvan Glen Preserve. It is planned that remaining undeveloped areas will be deeded over to the Town

of Yorktown for preservation, as the Town deems necessary. This land area will add additional acreage to the Sylvan Glen Preserve and thus, provide Town residents and visitors with additional open space and passive recreational opportunities into the future. This proposed addition of preservation land for the Preserve will allow existing forest habitat to remain and its use controlled by the Town of Yorktown well into the future.

#### Item 15 – Impact on Transportation

In consideration of constructing 230,000 square feet of retail/office space with the rezone of the State Land Corp. property from R1-160 to C-3, a traffic study was completed by John Collins Engineers, P.C. to assess current and future traffic generation under existing, no-build and build scenarios. The study has been prepared in support of this EAF and has been submitted to the Town of Yorktown Town Board under separate cover. A design year of 2015 was utilized for the study in order to evaluate future traffic generation with and without the proposed project. In addition, a Level of Service (LOS) analysis was conducted.

The NYS Route 202/35 study area extends from the Taconic Parkway, east of the project site, and to Lexington Avenue, west (see Figure 1 - Site Location Map prepared by John Collins, P.C.; March 2011). Existing intersections from the BJ's/Staples Shopping Center and west to Snap Fitness were evaluated, in conjunction with a proposed driveway leading to and from the site. This driveway will be located opposite the Parkside Corner Shopping Center along the north side of NYS Route 202/35. Existing intersections within the study area which intersect with NYS Route 202/35 include Stoney Street (and the Bear Mountain Parkway Extension), Pine Grove Court, the Bear Mountain Parkway Extension and Lexington Avenue.

Available traffic counts presented in reports prepared by Jacobs-Edwards and Kelcey for the "Route 202/35/6 and Bear Mountain Parkway Sustainable Development Study", as well as counts obtained by John Collins, P.C. during September 2009, October and November 2010 and February 2012, were utilized for the study. These data were supplemented with traffic data obtained from the Costco study, all of which were compared to count data obtained by the New York State Department of Transportation (NYSDOT), as well as other data gathered in previous traffic studies conducted in the study area. Combined, these data served to establish the Year 2011 Existing Traffic Volumes for the study area; the Existing Traffic Volumes are Year 2011 Traffic Volumes shown in the Traffic Impact Study.

Data gathered for the study were used to generate estimated 2011 existing traffic volumes, which were projected to the 2015 design year to take into consideration background traffic growth (using a 2% rate of growth increase). As part of this, traffic volume generation for other recent and/or proposed projects in the study area were also considered for determining overall traffic growth for the 2015 design year. These estimates were then used to determine traffic volume under the no-build and build scenarios for design year 2015. The existing, no-build and build traffic volumes were then compared to roadway capacities using the procedures outlined in the "Highway Capacity Manual" and Synchro analysis software to determine existing and future levels of service.

Level of Service results and existing/future traffic generation within the study area were considered with pending improvements planned by the NYSDOT for the intersections of BJ's/Staples Shopping Center and NYS Route 202/35, as well as improvements planned for NYS Route 202/35 and Pine Court and the Bear Mountain Parkway Extension. In addition, improvements planned under the proposed Costco development in the vicinity of the intersection of Mohansic Avenue and NYS Route 202/35 in the "Route 202/35/6 and Bear Mountain Parkway Sustainable Development Study" was considered. Overall NYSDOT improvements will extend from the BJ's/Staples Shopping Center and to Snap Fitness, west, and will provide improved traffic safety and traffic flow. The final design for these improvements is planned to be completed during 2012; construction is planned to commence during 2013 and last 12 to 18 months.

Based on the data evaluated, Weekday AM, PM and Saturday Peak Hours were determined for the following intersections; NYS Route 202/35 with Lexington Avenue, the Bear Mountain Extension, Pine Grove Court, Stoney Street and the Stoney Street/BJ's/Staples Plaza driveway. Weekday Peak AM Hour are 7:15 to 8:15 AM, Weekday Peak PM Hour are 5:00 to 6:00 PM and Saturday Peak Hour are 12:00 to 1:00 PM.

#### 1) <u>Roadway Improvements</u>

The "Route 202/35/6 and Bear Mountain Parkway Sustainable Development Study" included a series of recommendations for roadway improvements within and slightly beyond the study area, as well a signal timing changes to accommodate existing and future traffic volumes. Recommendations for the Taconic State Parkway Interchange focused on the need to provide ramp and additional east-west turn lanes below the NYS Route 202/35 (overpass) bridge, as well as additional east-west through lanes in the vicinity of Mohansic Avenue intersection. These improvements are not currently scheduled.

The "Route 202/35/6 and Bear Mountain Parkway Sustainable Development Study" also noted the need to construct a center turn lane or wide median to accommodate left turn bays on NYS Route 202/35 between the Bear Mountain Parkway in Cortlandt and the Taconic State Parkway ramps in Yorktown. This improvement, which will improve access to businesses along the route and through-flow capacity, is one that the NYSDOT will construct between Pine Grove Court and Parkside Corners Shopping Center, as part of the overall NYSDOT Pine Grove Court Improvements which are scheduled to begin construction during the Fall of 2012. These improvements also include providing two through lanes in each direction along NYS Route 202/35 between Old Crompond Road and Snap Fitness west of the proposed State Land Corp. project. A new traffic signal will also be installed at the Pine Grove Court intersection, as well as at the intersection of the Bear Mountain Parkway Extension and Stony Street. The Bear Mountain Parkway Extension will also be reduced to one lane in each direction beginning north of Stony Street to the NYS Route 202/35 intersection. The NYSDOT project also includes a sidewalk which will be constructed along the north side NYS Route 202/35 beginning at Old Crompond Road, traveling west to Stony Street and the Chase Bank where pedestrians will cross to the south side of NYS Route 202/35. From this point, the sidewalk will continue along the south side of the roadway up to the Parkside Corners driveway. It is important to note that the NYSDOT improvement project has been expanded and the project now begins at Old Crompond Road where an additional westbound through lane is being constructed. In addition, the project construction began during April (2013) and is scheduled to be completed by the summer of 2014.

It is important to point out that the proposed State Land Corp. project includes provisions for providing an east-west right-of-way along the northern limits of the development, in order to facilitate possible future plans for extending the Bear Mountain Parkway Extension, east-west. This should be modified to indicate that the Sustainable Development study identified the need to connect the eastern and western sections of the Bear Mountain Parkway with a limited access two lane roadway (i.e. the Bear Mountain Parkway Extension). See also Section III.F.A.iii of the Traffic Impact Study. This project (PIN 800404) is currently listed as a future development by the NYSDOT.

In addition to the above, improvements will be provided by way of the proposed Costco development located along NYS Route 202/35, opposite Mohansic Avenue; improvements are centered on addressing capacity and safety concerns in the vicinity of the Taconic State Parkway Interchange.

Further, the proposed State Land Corp. development will include provisions for extending a planned free flow lane leading from the Bear Mountain Parkway Extension and onto NYS Route 202/35; the developer will extend this free flow lane to the proposed driveway which will connect the development with NYS Route 202/35. The two westbound through lanes at the site access will also be extended approximately 100 feet in conjunction with the provision of a westbound left turn lane for left turns into the development. The development will include construction of a traffic signal light at the driveway intersection with NYS Route 202/35, opposite the Parkside Corners Shopping Center. A signalized pedestrian crosswalk will also be provided at the site access intersection to connect with the sidewalk on the south side of NYS Route 202/35, which will be constructed as part of the NYSDOT Pine Grove Court Improvements.

According to information obtained from the Sustainable Development Study, the Town of Yorktown Comprehensive Plan and the Mid-Hudson South Region Bicycle and Pedestrian Master Plan, a plan exists to provide a walking/bicycle path which is designed to connect Yorktown Heights with the Bear Mountain Parkway Annsville Circle. The western portion of the trail will be built on the Bear Mountain Parkway and the Bear Mountain Parkway Extension right-of-way land, a portion of which will be dedicated by the proposed development. Near the Taconic State Parkway, it will utilize an existing pedestrian overpass to connect to Strang Boulevard. The path will continue along Strang Boulevard to the south to connect with FDR State Park. From here the path will join a planned Town spur that will connect with the North County Trailway via Downing Drive. Consistent with the recommendations of the Town of Yorktown Comprehensive Plan, the Sustainable Development Study and the NYSDOT's policy for the treatment of bicycle and pedestrian paths, (and in association with the Costco related road widening in the vicinity of the TSP interchange), the provision of a sidewalk/bikeway on NYS Route 202/35 to connect from Old Crompond Road to Strang Boulevard (with a pedestrian signal controlled crosswalk to the FDR State Park) is proposed to be provided by the Costco Development, subject to review and approval by NYSDOT.

#### 2) <u>Level of Service Analysis</u>

The Level of Service (LOS) analysis conducted was completed to determine existing and future LOS, and traffic operating conditions for study area intersections. The capacity analysis was performed in accordance with the "2010 Highway Capacity Manual" for signalized and unsignalized intersections, as published by the Transportation Research Board. For signalized intersections, LOS "A" represents best conditions and a LOS "F" represents worst conditions. LOS "C" is generally used as a design standard while LOS "D" is acceptable during peak periods. LOS "E" represents operation near capacity. For un-signalized intersections, the average amount of vehicle delay is computed for each critical movement for an intersection. Also taken into considerations were truck percentages, pedestrian activity, signal timing and roadway grades. The Level of Service summary can be found in Table 2 (Appendix B) of the Traffic Impact Study. Discussion of the center turn lane recommended by the Sustainable Development Study is noted under Section III.F.a.ii of the Traffic Impact Study.

#### A) NYS Route 202/35 and Lexington Avenue

Utilizing 2011 existing traffic volumes, this intersection is currently operating at a LOS "D" during Weekday AM and PM Peak Hours; an overall level of service of LOS "C" is experienced during Saturday Peak Hours. To improve these levels of service, an additional westbound through lane would be required to reduce westbound delays and allow for additional "green time" for the other intersection approaches. Applying the 2015 no-build and build scenarios for analyzing the intersection with this improvement, this intersection will operate at LOS "E" during Weekday AM Peak Hour and LOS"D" for Weekday PM Peak Hour and Saturday Peak Hour. Long-term plans indicated in the "Route 202/35/6 and Bear Mountain Parkway Sustainable Development Study" recommend connection of the Bear Mountain Parkway to accommodate through traffic on the NYS Route 202/35 corridor.

#### B) NYS Route 202/35 and Bear Mountain Parkway Extension

Utilizing existing 2011 traffic volume data, the results of the analysis indicate that this intersection is currently operating at LOS "F" for the southbound right turn movement during Peak Hours; a LOS "B" is experienced for at the eastbound left turn movement. NYSDOT improvements planned for this intersection call for upgrading this intersection in order to improve overall operating conditions. The capacity analysis, performed with NYSDOT improvements considered, indicates that the 2015 no-build and build traffic volumes will result in a LOS "B", or better, for the eastbound left turn lane movement during each Peak Hour, and the southbound right-turn movement will consist of a free flow movement onto NYS Route 202/35.

#### C) NYS Route 202/35 and Pine Grove Court

This intersection is currently a stop sign controlled "T" intersection, consisting of two, single lane approaches (north and south) with shoulders. The NYSDOT has initiated plans for improving this intersection. Plans call for providing an additional through lane in each direction and a separate left lane (westbound) and right lane (eastbound), and signalization. The capacity

analysis performed with these NYSDOT improvements, indicates that the 2015 no-build and build traffic volumes will result in an overall LOS "B", or better, during Peak Hours.

As indicated by the capacity analysis results summarized in Table No. 2 (Appendix B) of the Traffic Impact Study, the intersection of NYS Route 35/U.S. Route 202 at Pine Grove Court currently operates at a Level of Service "F" during each of the peak hours for vehicles turning left from the Pine Grove Court approach. In addition, vehicles turning left into Pine Grove Court block westbound through traffic resulting in westbound queues that extend back through the Stony Street/Staples Plaza intersection.

#### D) Bear Mountain Parkway Extension and Stoney Street

The Bear Mountain Parkway Extension and Stoney Street intersect as an un-signalized, full movement intersection. Capacity analysis completed for this intersection, utilizing 2010 existing traffic volumes, indicates that this intersection is currently operating at LOS "C" during Weekday AM Peak Hour, at a LOS "F" during Weekday PM Peak Hour and at LOS "C", or better, during Saturday Peak Hour. Planned upgrade improvements for this intersection by the NYSDOT will serve to positively affect level of service during peak hours of operation. Utilizing the 2015 no-build and build traffic volumes with planned improvements, this intersection is expected to operate at a LOS "B", or better, during AM, PM and Saturday peak hours.

#### E) NYS Route 202/35 and Stoney Street/BJ's-Staples Plaza

Stoney Street intersections with NYS Route 202/35, opposite the driveway leading to BJ's/Staples Plaza, which results in a full movement, signalized intersection. Capacity analysis completed for this intersection, utilizing 2011 existing traffic volumes, indicates that this intersection is currently operating at LOS "C", or better, during Weekday AM and PM, and Saturday Peak Hours of operation. NYSDOT improvements for this intersection include geometric upgrades designed to eliminate capacity constraints for this intersection, as well as for the Pine Grove Court intersection. Capacity analysis completed for this intersection, utilizing 2015 no-build and build traffic volumes with planned improvements, indicates that this intersection is expected to operate at a LOS "C" during the Weekday AM Peak Hour, with a LOS "D" for Weekday PM and Saturday Peak Hours.

#### F) NYS Route 202/35 and Site Access/Parkside Corners Shopping Center

As noted, the proposed site development will be accessed from NYS Route 202/35 by a driveway connection with this roadway, which will be situated opposite the Parkside Corners Shopping Center. The proposed driveway will consist of two left turn lanes and a shared through/right turn lane. No change is proposed for the Parkside Corners driveway. It is expected that the planned improvements for the Pine Grove Court intersection with NYS Route 202/35 will positively affect operating conditions for these driveways. Utilizing 2015 no-build and build traffic volumes with noted planned improvements for Pine Grove Court, indicates that

this intersection is expected to operate at LOS "A" during the Weekday AM Peak Hour, and at a LOS "C" during Weekday PM and Saturday Peak Hours.

The traffic volumes shown entering and exiting the Parkside Corners shopping center were based on counts and then adjusted for full occupancy using Institute of Transportation Engineers data. Capacity analysis conducted for this intersection under existing conditions and summarized in Table No. 2-R (attached) indicate that exiting vehicles turning left at the intersection currently operate at a Level of Service "F" during each of the peak hours. As part of the NYSDOT improvements, two through lanes will be provided in each direction with a westbound left turn lane for vehicles entering Parkside Corners. The 2015 No-Build Analysis was conducted with these improvements. While the results indicate that the delays on the Parkside Corners approach will improve slightly as a result of these improvements, the exiting left turn movement is still expected to operate at a Level of Service "F" during each of the peak hours. The traffic signal that would be installed as part of the State Land Corp. project will improve the operating conditions for this intersection for traffic both entering and exiting the Parkside Corners shopping center.

As indicated in the response to Comment 97, the NYSDOT improvements will slightly improve delays at this intersection; however it is still expected to operate at a Level of Service "F" under No-Build Conditions. The traffic signal that would be installed as part of the State Land Corp. project will improve the operating conditions for this intersection for traffic both entering and exiting the Parkside Corners shopping center.

G) Garden Lane

A complete analysis of the NYS Route 35/U.S. Route 202 at Garden Lane Intersection was completed. Garden Lane intersects with Crompond Road at a "T" shaped, unsignalized intersection (see additional sheet provided in attached Traffic Impact Study, which follows page 28 of report). Each of the approaches to the intersection consists of a single lane. Capacity analysis conducted utilizing the 2011 Existing Traffic Volumes and summarized in Table No. 2-R (attached within Traffic Study report) indicates that the intersection currently operates at a Level of Service "D" during each of the peak hours. Due to the lack of a left turn lane on Route 202/35 and the presence of on-street parking on Garden Lane, this intersection experiences delays and vehicle conflicts during peak periods (see also Section J).

The intersection was reanalyzed utilizing the Build Traffic Volumes. (Note that while the Build Traffic Volumes in the analysis refer to 2015, the volume projections and anticipated timeframe is more representative of a 2017 Design Year.) The results indicate that the intersection will operate at a "E" Level of Service during the Weekday Peak AM and PM Hours and at a Level of Service "F" during the Saturday Peak Hour.

Although the additional traffic generated by the State Land Corp. project is not expected to significantly change the Levels of Service at the intersection of Garden Lane and Route

35/202, potential future improvements at this intersection had previously been identified. Implementation of potential improvements would require specific improvements including those listed below that were identified regardless of the proposed State Land Corp. project.

- 1) Widen Route 35/202 to provide a separate westbound left turn lane
- 2) Install an actuated traffic signal
- 3) Implement other improvements on Garden Lane, including:
  - The Town would have to acquire land or land be dedicated by adjacent land owners to establish a minimum of a 50 ft. R.O.W. along Garden Lane
  - Widen, resurface and improve Garden Lane between Route 35/202 and Cedar Pond Lane to meet minimum requirements for a town roadway
  - Widen Garden Lane at Route 35/202 to provide a 7 ft. wide parking lane on the west side, a 12 ft. wide southbound lane and two 12 ft. wide lanes northbound.

In conclusion, based on the traffic study completed by John Collins Engineers, P.C., the Levels of Service for the intersections evaluated under the study are expected to improve with the types of roadway improvements planned by the NYSDOT. While some minimal delays may still occur under future no-build and build conditions, it is expected that the implementation of NYSDOT improvements, along with those planned by the project sponsor for the proposed development, will serve to mitigate potential level of service impacts and thus, the project will not result in any significant traffic related impacts. Long-term recommended improvements under the "Route 202/35/6 and Bear Mountain Parkway Sustainable Development Study" will also serve to improve future traffic safety and volume flow. Overall, these improvements will serve to provide safe and efficient access for the proposed project without any significant negative impacts imposed on traffic patterns in the vicinity of the project site.

As noted above, it is estimated that the 389,686 cubic yards of material will have to be removed from the site as part of the project without the inclusion of the Bear Mountain Parkway Extension on-site. It is assumed that during a normal 8 hour work day, there will be between 6 to 8 truckloads per hour leaving the site which would result in approximately 50 to 60 truckloads per day. Using a dump truck with a 20 cubic yard payload it would take approximately **1 to 1.5** years to remove all of the material from the site. This would require some temporary traffic control at the construction access such as flag men or a temporary traffic signal. No significant traffic related impacts are expected with the removal of this quantity of fill material. A greater time period would be required to remove the approximate 1,357,596 cubic yards of material required with the inclusion of the Bear Mountain Parkway Extension. This would take approximately 4.5 years. If larger vehicles are used to export the material, the expected timeframe could be condensed."

In addition, the NYSDOT Pine Grove Project will generate 86,000 cubic yards of excavated material.

#### Item 16 – Impact On Energy

An analysis of expected energy use with the proposed State Land Corp. development was completed utilizing "Target Finder" software published by Energy Star, to generate Target Energy Performance results, with and without the presumption of Energy-star equipment usage. The tabulation below presents the results of the analysis.

| Energy Category               | Calculated Energy Consumption<br>Without Energy Star Equipment<br>(kBtu) | Calculated Energy Consumption<br>With Energy Star Equipment<br>(kBtu) |
|-------------------------------|--|---|
| Total Annual Source Energy    | 71,118,188   | 49,782,731  |
| Total Annual Site Energy      | 32,456,170   | 22,719,319  |
| Total Annual Energy Cost (\$) | \$933,331  | \$653,332   |

Based on the above analytical findings for energy consumption, the project as proposed will generate an annual demand for on-site energy in amount of 32,456,170 kBtu at an expected annual cost of \$933,331. If Energy Star equipment is used within the development, to the fullest extent possible, it is estimated that estimated energy consumption would drop to 22,719,319 kBtu, representing a total annual energy cost of \$653,332. The use of Energy Star equipment would thus result in an estimated annual energy cost savings of \$279,999.

In addition to use of Energy Star equipment to reduce energy consumption and the annual cost for energy consumption, the following building design and operational measures can be incorporated into the project to further reduce energy use and annual consumption costs. Suggested building design and operational measures are as follows:

- 1. Install high efficiency HVAC systems
- 2. Use high albedo roofing materials
- 3. Maximize interior day-lighting
- 4. Reduce energy demand using peak shaving or load shifting strategies
- 5. Incorporation of super insulation to minimize heat loss
- 6. Use efficient, directed exterior lighting
- 7. Utilize interior motion sensors and lighting

These and other measures can be considered by the developer during the Site Plan Approval process.

#### Item 17 - Noise and Odor Impact

The project site fronts along NYS Route 202/35 for an approximate distance of 3,346 feet. Properties situated along this portion of NYS Route 202/35 are comprised of commercial and light industrial land uses. Residential land uses located nearest the proposed development areas of the site are located south of Old Crompond Road, at the intersection of Bound Brook

Lane and Old Crompond Road. It is estimated that the nearest residence to that of the proposed limits of the development is between 800 and 900 feet, depending on which residence is considered and the angle of direction. Noise generated by existing traffic conditions has been observed to occur primarily during the day, early morning and early evening. During weekly, daytime periods, traffic noise is expected to be greater in magnitude than that of noise generated by proposed on-site construction activities.

Distances between the proposed project site and existing properties south of NYS Route 202/35 are expected to attenuate daily noise generated by heavy equipment in use during completion of the initial construction phase at the site. In addition, heavy equipment will be equipped with mufflers to aid in reducing noise levels. Further, plans to implement arrangements for maintaining a significant vegetation buffer along the frontage of the property will further serve to attenuate project related noise levels and noise generated by heavy equipment will be of short duration. As such, potentials for noise impacts of greatest magnitude are expected to be of small to moderate impact and of short duration. While noise will be generated by the proposed development during construction, noise levels resulting from the proposed commercial development of the site are expected to be less than that of existing traffic related noise along NYS Route 202/35.

The Homart or Pulte Homes development projects do not evaluate noise and odor impacts.

#### **MITIGATION**

During project construction, noise levels are expected to be of short duration and generated during day-time periods. Further, the proposed development is separated from the Sylvan Glen Preserve by more than 1,300 feet of woodland and lies at a topographic more than 200 feet and thus, noise generated during and after construction of the proposed development is expected to be off-set by distance and existing topographic conditions.

Existing traffic noise conditions will be improved with the implementation of the above noted improvements planned by the NYSDOT and the project Applicant. These improvements are expected to better manage the volume and speed of traffic, which in turn will serve to reduce traffic noise. Essentially, the improvements will serve to "smooth out" and slow traffic, which in turn will reduce traffic noise. In addition, the proposed development will include planting vegetation for visual screening, which will also serve to reduce noise levels generated by the development. It is important to note that the proposed development will be set back from NYS Route 202/35 which in turn will reduce visual impacts and attenuate noise.

No odor nuisance impacts are expected to occur during the site development phases of construction.

#### Item 19 – Impact on Growth and Character of Community or Neighborhood

Both commercial and light industrial establishments exist along the Route 202/35 corridor, and in the immediate proximity of the State Land Corp. property. The largest of these establishments consists of the Staples Plaza (zoned as C-1, Commercial Shopping Center), which lies approximately 800 feet southeast of the State Land Corp. property site. This Plaza includes such anchor stores as BJ's, Staples and AC Moore, all of which comprise the bulk of available square foot space provided by this development (greater than 110,000 square feet). Other commercial land uses exist immediately south and southwest of the State Land Corp. property (primarily zoned as C-4, Commercial General), all of which are accessed by "driveway/road cuts" connecting with Route 202/35. These establishments rely heavily upon access with Route 202/35 and are arranged in close proximity to Route 202/35. The southwest and western boundary of the State Land Corp. property abuts lands which are zoned I-1, Light Industrial Park. The Sylvan Glen Preserve lies north and abuts the northern limits of the State Land Corp. property.

The proposed commercial development is expected to complement, rather than duplicate, existing businesses located nearby along NYS Route 202/35. The development will attract additional traffic (motorists and pedestrians) to the immediate area which in turn will increase business shopping traffic for existing businesses other than the types anticipated under the proposed project. As an example, the types of businesses expected to benefit are nearby restaurants, fast food outlets, beauty salons, auto repair shops and bakeries. Other businesses such as gyms, hobby shops and music stores will also benefit as they represent a more unique demand for business services. The proposed development will likely trigger business development by attracting the "in-fill" of new businesses in vacant storefronts, the types of businesses which are certain to benefit from the type of shopper traffic generated (know as "generators") by the proposed development. Further, the proposed development will likely enhance and maintain existing business by way of continued attraction.

In addition, the NYSDOT roadway improvements and those planned under the State Land Corp. development, will enhance access to existing business along the south side of Route 202/35 with the means for safe and efficient traffic movements.

Prior natural resource/biodiversity assessments completed for the project site have identified habitat conditions which compliment those of the Preserve to the immediate north. The proposed project will utilize approximately 27.5 acres of land along the Route 202/35 transportation corridor, and allow 72.5 acres to be deeded to the Town owned and operated Preserve as contiguous, natural open space.

The Cultural Resource Survey completed for the Pulte Homes project during May 2004 (Stage 1A and 1B survey activities) revealed that the nearest culturally sensitive resource, to that of the proposed project, lies within the north-western and eastern limits of the site. Stone foundation sections and walls found in the western portion of the property were identified as being that of the Elisa Miller home site (circa 1840).

The project will require police protection and fire prevention services for the 230,000 square foot build-out with demands for additional manpower and equipment.

#### MITIGATION

The proposed zone change from R1-160 to C-3 is expected to compliment immediately surrounding commercially and light industrially zoned lands along the Route 202/35 transportation corridor. The proposed commercial development will complementexisting businesses located nearby along NYS Route 202/35. Additional traffic (motorists and pedestrians) will be attracted to the immediate area which in turn will increase business shopping traffic for existing businesses other than the types anticipated under the proposed development. The existing variety of unique businesses located along the Route 202/35 corridor will benefit by the development, as well as cause the "in-fill" of new businesses in vacant storefronts and enhance/ maintain existing business. Given the NYSDOT roadway improvements planned for Route 202/35, as well as those planned under the State Land Corp. development, access to existing business along the south side of Route 202/35 will be enhanced and safe and efficient traffic movement is expected.

The proposed zone change has the potential to provide a greater amount of open space (approximately 72.5 acres) for the Town of Yorktown, which will contiguously extend the southern limits of the Sylvan Glen Preserve. This will expand the Preserve by 21 percent, which represents a significant natural resource benefit for Preserve visitors, into perpetuity. Essentially, the boundaries of the Preserve will be expanded to provide Town residents with additional land area for passive recreation. Neither the Homart nor the Pulte Homes development projects provided as much potential for open space for the Town's use.

Given that this open space area contains wetlands and waterways which flow to downstream trout protected streams across steep sloping areas, the preservation of this area will ensure protection of natural and water resources for the Town, both on-site and downstream (offsite) of the property. The two proposed flood retention areas planned under the project will serve to significantly reduce flood potentials to immediately downgradient neighborhoods; planned instream improvements (stream bank/bed) will also significantly reduce existing off-site sedimentation and total nitrogen/phosphorus discharge potentials and thereby provide a necessary mechanism to protect and preserve downstream trout protected waterways, which in turn are tributary to the New Croton Reservoir.

The proposed project design will be setback from NYS Route 202/35 with planting screens to aid in minimizing visual impact potentials along this adjoining transportation corridor. Traffic improvements planned under the project will compliment and further transportation improvements planned by the NYSDOT to enhance traffic conditions, reduce traffic noise and minimize congestion. Prior projects considered for the project site resulted in less available open space (i.e. the formerly proposed Pulte Homes residential development) and thus, the current project design will maximize open space and focus development along the Route 202/35 transportation corridor.

While the New York State Office of Parks and Recreation and Historic Preservation found that the Miller home site is not "eligible" for cultural significance (including stone features and 19<sup>th</sup> and 20<sup>th</sup> century ceramic remains, and the dam and outbuilding ruins in the eastern portion of the site), these resources lie within the preservation area planned to be deeded to the Town, and thus, these resources will be protected and made accessible to Town residents who visit the Preserve. The remaining cultural resources identified will be managed and maintained by the Town within the limits of the open space area. The cultural resources identified on-site will continue to remain intact to provide a cultural and educational resource for Preserve visitors into the future.

It is important to note that the above noted aspects of the project are expected to meet with the intent of the Sustainability Development Study of 2004, a study which emphasized specific land use planning and transportation improvements along the NYS Route 202/35 transportation corridor, elements of which are included under the project. The project will include provisions for improved transportation flow and safety, as well as provide natural resource and flood protection, expansion of natural open space land for the Town of Yorktown and protection of off-site waterways and fishery resources, all of which also meet the intent of the Study.

The proposed commercial development is estimated to provide employment opportunities during construction (225 jobs); after construction completion, it is anticipated that a total of 350 jobs will be generated and thus, made available in the surrounding community. An assortment of service related jobs are expected to be generated with the proposed development including sales, clerical, managerial, and a variety of related skilled and unskilled labor jobs.

Based on correspondence received from the Town of Yorktown Police Department and the Town of Yorktown Fire District (see "Correspondence" contain herein), demands for police and fire protection services are anticipated; however, the project will provide a tax base of \$1,290,253 annually which is expected to offset the cost for additional Police and Fire service personnel and equipment required by the project. This expected ratable amount has been determined by the Town Assessor's Office, by way of a "what if calculation" which was requested by ECSI for the project (see "Correspondence" herein contained). This amount represents significant increase over current taxes (\$27,000 to \$1.2 million), and thus, the project will provide a significant additional amount of ratable dollars to the Town (and County), a positive benefit for the community.

# CORRESPONDENCE

New York State Department of Environmental Conservation Division of Fish, Wildlife & Marine Resources 625 Broadway, 5<sup>th</sup> Floor, Albany, New York 12233-4757 Phone: (518) 402-8935 • Fax: (518) 402-8925 Website: www.dec.ny.gov



Joe Martens Commissioner

March 3, 2012

Anthony Russo Environmental Compliance Services 26 South Street Middletown, NY 10940

Dear Mr. Russo:

In response to your recent request, we have reviewed the New York Natural Heritage Program database, with respect to an Environmental Assessment for the proposed Project – 100 Acre Parcel, along north side of Rte 202, Project # 4330, area as indicated on the map you provided, located in the Town of Yorktown, Westchester County.

We have no records of rare or state listed animals or plants, significant natural communities or other significant habitats, on or in the immediate vicinity of your site.

The absence of data does not necessarily mean that rare or state-listed species, natural communities or other significant habitats do not exist on or adjacent to the proposed site. Rather, our files currently do not contain information which indicates their presence. For most sites, comprehensive field surveys have not been conducted. We cannot provide a definitive statement on the presence or absence of all rare or state-listed species or significant natural communities. This information should not be substituted for on-site surveys that may be required for environmental assessment.

Our databases are continually growing as records are added and updated. If this proposed project is still under development one year from now, we recommend that you contact us again so that we may update this response with the most current information.

This response applies only to known occurrences of rare or state-listed animals and plants, significant natural communities and other significant habitats maintained in the Natural Heritage Data bases. Your project may require additional review or permits; for information regarding other permits that may be required under state law for regulated areas or activities (e.g., regulated wetlands), please contact the appropriate NYS DEC Regional Office, Division of Environmental Permits, as listed at <u>www.dec.ny.gov/about/39381.html</u>.

Sincerely,

Vean Pietrusiak, Information Services NYS Department Environmental Conservation

Enc. cc: Region 3

# 156



## LAKE MOHEGAN FIRE DISTRICT

March 21, 2012

LOU BARBIERI CAPTAIN

Environmental Compliance Services, Inc. 26 South Street Middletown, NY 10940

Mr. Anthony Russo President

This is to address your request for information as to impact on the Lake Mohegan Fire District of the State Land Corp development site on Crompond Rd, in the town of Yorktown.

The Lake Mohegan Fire District does protect this area for Emergency Services, both Fire and EMS. Fire response to that area would come from our Fire HQ on Rt. 6, our Furnace Woods Fire Station on Croton Ave ( Town of Cortlandt ), and from our Jefferson Valley Fire Station on Lee Blvd ( Jefferson Valley section - Town of Yorktown ). Normal response times would be in the five minute range( + or -) from each station. Our Fire District owns and maintains 2 Ladder Trucks and 6 Class A Fire Engines, which

are housed in a total of 4 Fire Stations located within our Fire District borders. We are a Combination Fire Department, meaning we have Career Firefighters (5-6) on

duty 24 Hours a day who would respond immediately . Volunteer FF's would respond via radio page. The Chief Officers are Volunteer. We have two Career Officers on duty, during daytime hours on weekdays.

Our Career FF's are also Emergency Medical Technicians who would be dispatched as First responders, along with the Lake Mohegan Volunteer Ambulance Corps ( Separate Organization ) who would transport patients and also along with Paramedic Service provided by the Town of Yorktown ( Separate ).

Fire Prevention and Fire Codes issues are the responsibility of the Town of Yorktown Fire Marshall's office ( Not affiliated with the Fire District ).

In 2011, our alarms total for Fire and EMS was 2811 calls.

The closest Mutual Aid Fire Departments to this site would be The Town of Yorktown Volunteer Fire Dept. and the City of Peekskill Fire Department.

Resources for Emergency Services, both financial and manpower wise, are always impacted by development, as will be the case if your project is approved. Our Department is always striving to provide the best service it possibly can and will do so for this development. Discussions with developers are welcomed as to how our Service

can be enhanced with any assistance from clients such as yours.

I hope this satisfies your inquiry, and I look forward to future discussion.

Very truly yours,

aptain Tou Barbieri

Captain Lou Barbieri LMFD

P.O. BOX 249 LAKE MOHEGAN, NY 10547-0249 (914) 528-1808 FAX (914) 528-1806



-YORKTOWN POLICE DEPARTMENT-

## 2281 CROMPOND ROAD YORKTOWN HEIGHTS NY, 10598-3735 Daniel M. McMahon, *Chief of Police*

April 26, 2012

Mr. Anthony P. Russo, President Environmental Compliance Services, Inc 26 South Street Middletown, NY 10940

Dear Mr. Russo:

RE: State Land Corp @ Crompond Road Yorktown NY 10598

I have reviewed your attached letter.

#### 1. **POLICE JURISDICTION:**

The Yorktown Police Department is the responsible police agency for the State Land Corporation proposed site location.

#### **POLICE DEPARTMENT DESCRIPTION:**

The Yorktown Police Department was established in 1927. It is a 24/7/365 police agency. In 1991 the Yorktown Police Department was one of the first Police Departments to be accredited in New York State. The Department is staffed by 55 sworn officers and a staff of 7 civilian personnel. The Department is the 9-1-1 answering point for the 38,000 residents and all the businesses in the 40 square miles of the Town of Yorktown. There are no villages or cities in the Town of Yorktown.

While the population of the Town of Yorktown has increased significantly since 1981, the staffing of the Yorktown Police Department has been stagnant. An independent audit of the Yorktown Police Department in 1996 conducted by the New York State Division of Criminal Justice Services (DCJS) stated that the Department was understaffed but the staffing situation has not changed since 1981.

The Department, led by the Chief of Police, is divided into the Patrol Division, the Detective Division and the Staff Division. Each Division is supervised by a Lieutenant. There are eight Sergeants, four Detectives, one Youth Officer, one *D.A.R.E.* officer, four School Resource Officers and thirty-three Police Patrol Officers, including two Canines and two Canine handlers. There are also 7 civilian employees including three Dispatchers, three Office Assistants and one Community Service/Animal Control Worker assigned to the Police Department.

#### **POLICE DEPARTMENT FLEET:**

The Department patrol fleet is comprised mostly of Ford Crown Victoria marked patrol vehicles. The Department's unmarked vehicles are also Ford Crown Victorias. The Department has four marked four wheel drive vehicles that are used for both patrol and School Resource Officers. The Department has some special use vehicles and trailers that are used for: a Command Post vehicle, traffic barricades, firearms trailer, speed trailer and message sign trailer.

#### 2. POLICE DEPARTMENT CAPABILITY:

The Department handles many calls for service from our shopping retail centers including: the Village Green Shopping Plaza; the Shrub Oak Shopping Center; the Jefferson Valley Mall; the Jefferson Valley Shopping Center; the Parkside Corners Shopping Center; the Staples Plaza; the Yorktown Green Shopping Center; the Triangle Shopping Center; the Downing Plaza and the Underhill Plaza.

#### 3. **POLICE STATION LOCATION:**

The Yorktown Police Department Station is located at 2281 Crompond Road in the hamlet of Yorktown Heights. The Police Station is located approximately 3 miles east of State Land Corp's proposed site. The Department does not have any substations.

#### 4. **POLICE RESPONSE TIME:**

Response Time depends on many variables; staffing, classification of call for service, time of day, weather and location of call for service.

The response time for an emergency call such an aided case or a crime in progress is five to seven minutes.

#### 5. **DEPARTMENT STAFFING RATIOS:**

As you can see from the below chart the Yorktown Police Department is substantially understaffed when compared to the F.B.I. averages and when compared to other Westchester Police Departments.

| MUNICIPALITY                               | POPULATION | SWORN<br>POLICE<br>OFFICERS | OFFICERS PER<br>THOUSAND<br>POPULATION |
|--|------------|-----------------------------|--|
| TOWN OF YORKTOWN                           | 38,000     | 55                          | 1.45                                   |
| F.B.I. AVERAGE<br>FOR NY, NJ, PA           | 38,000     | 76                          | 2.00                                   |
| TOWN OF GREENBURGH,<br>WESTCHESTER COUNTY  | 42,000     | 110                         | 2.61                                   |
| TOWN OF EASTCHESTER,<br>WESTCHESTER COUNTY | 18,000     | 51                          | 2.83                                   |

#### 6. DEPARTMENT PLANS TO EXPAND SERVICES OR AREA OF JURISDICTION:

At the current time the Department has no plans to expand any aspect of their service facilities or area of jurisdiction.

#### 7. ANTICIPATED INCREASE FOR POLICE SERVICE:

Based on the type and size of the business we anticipate about 110 calls for service annually from the proposed State Land Corp Site. This includes the retail business and the parking lot. About 75% of these calls for service will require an investigation. The proposed State Land Corp site will also generate additional quality of life calls for service from the surrounding neighborhoods as well as vehicular traffic issues.

Mutual Aid IS NOT intended to supplement a lack of manpower in a municipality. The increase in calls for police service in the Town of Yorktown is the sole responsibility of the Town of Yorktown.

The Westchester County Police DOES NOT provide police patrol service to the Town of Yorktown. They provide support services such as; Bomb Squad, SWAT Team, Forensic Team. The New York State Police DOES NOT provide police patrol service to the Town of Yorktown. They provide support services such as; Aviation Unit, Diver Unit, Fingerprint Identification.

The impact on police services from this proposed project, will be the sole responsibility of the Yorktown Police Department. The proposed State Land Corp project will have a negative impact on the policing of the entire Town of Yorktown.

#### POLICE DEPARTMENT BUDGETARY IMPLICATIONS:

- A. The proposed State Land Corp project will cause increased traffic on Crompond Road and surrounding roads There are six traffic lights between Strang Boulevard and Lexington Avenue. This will create a need for traffic control equipment and dedicated manpower in this area during weekends and shopping seasons.
- B. The proposed State Land Corp. project will cause an increase of 110 calls for service annually and about 80 police investigations. This will increase the need for manpower and/or overtime for investigations, reporting paperwork, arrest processing and court appearances.

#### **CONCLUSION**

This project will have a negative impact on the level of police services and the cost of police service that the Yorktown Police Department provides to the residents of the Town of Yorktown.

Setta Ma

Daniel M. McMahon *Chief of Police* 

cc: Town Clerk State Land Corp. On Crompond Road

#### Susan

| From:        | Kim Penner [kim@yorktownny.org]  |
|--------------|----------------------------------|
| Sent:        | Thursday, July 12, 2012 10:13 AM |
| To:          | ecsi@frontiernet.net             |
| Subject:     | Emailing: 20120712101425581.pdf  |
| Attachments: | 20120712101425581.pdf            |

<<20120712101425581.pdf>> Hi Tony,

Attached are the estimated tax figures for development of the State Land Corp. property. Should you have any questions, please fell to call.

Kim Adams Penner Assessor

Your message is ready to be sent with the following file or link attachments:

20120712101425581.pdf

Note: To protect against computer viruses, e-mail programs may prevent sending or receiving certain types of file attachments. Check your e-mail security settings to determine how attachments are handled.

#### Tax ID# 26.17-1-1

## what if calculation:YORKTOWN

Account # 0727600 Bank #

241.17

1,271.78

59,023.20

| Pay by mail to:<br>RECEIVER OF TAXES<br>TOWN OF YORKTOWN<br>ELFRIEDE H. SCHMID                  | In Person Payment:<br>RECEIVER OF TAXES<br>363 Underhill Ave. | 9am - 5p<br>Closed I       |  | Property Description and Location<br>Town: 555400 School: 555402<br>Location: CROMPOND RD. |  |
|---|---|----------------------------|--|--|--|
| P.O. Box 703<br>Yorktown Heights, NY 10598<br>STATE LAND CO<br>3967 PROVOST A<br>BRONX, NY 1046 | RP.<br>AVE.   | 0727600                    | The Assessor es<br>THIS PROPERT<br>The assessed va<br>7/1/2010 was 64,<br>The UNIFORM P<br>establish assess<br>If you feel your as<br>right to seek a re-<br>information, pleas<br>"How to File a Co<br>Please note that | ERCENTAGE OF V   | ARKET VALUE OF<br>s \$2,471,042.<br>as of<br>ALUE used to<br>h, you have the<br>For further<br>r for the booklet<br>sessment". |
| Levy Description  | Taxal   | ole Value                  | Tax Rat  | e  | Tax Amount   |
| TO TOWN TAX<br>CO COUNTY TAX<br>F0061 LAKE MOHEGAN FIRE   |   | 64,000<br>64,000<br>64,000 | 138.989000 pe<br>137.830000 pe<br>61.876800 pe   | er thousand  | 8,895.30<br>8,821.12<br>3,960.12   |

64,000

64,000

64,000

150,0007 OFFICE

P0065 ADVANCED LIFE SUPPOR

SC YORKTOWN SCHOOL

W0100 YORKTOWN CONSOLIDATE

Combined Tax Rate: 1,297.95 per thousand

3.768300 per thousand 19.871500 per thousand

3.768300 per thousand

Date 7/10/2012

Estimated Tax: 83,098.89

"What If" scenario for proposed assessment change

#### Tax ID# 26.17-1-1

## what if calculation:YORKTOWN

Account # 0727600 Bank #

30.00

| Pay by mail to:<br>RECEIVER OF TAXES<br>TOWN OF YORKTOWN<br>ELFRIEDE H. SCHMID<br>P.O. Box 703<br>Yorktown Heights, NY 10598<br>STATE LAND COR<br>3967 PROVOST AV<br>BRONX, NY 10466 | P.<br>/E. | 9am - 5                                  | Holidays<br>Property Tay<br>The Assessor esti<br>THIS PROPERTY<br>The assessed valu<br>7/1/2010 was 550<br>The UNIFORM PE<br>establish assessm<br>If you feel your as<br>right to seek a red<br>information, pleas<br>"How to File a Cor | Y as of 7/1/2010 was<br>ue of this property<br>,000.<br>ERCENTAGE OF Monents was 2.59.<br>Esessment is too hig<br>luction in the future<br>e ask your assess<br>mplaint on Your As<br>he period for filing | School: 555402<br>IPOND RD.<br>Roll Sect: 1<br>hts<br>IARKET VALUE OF<br>as \$21,235,521.<br>as of<br>VALUE used to<br>gh, you have the<br>e. For further<br>or for the booklet<br>asessment". |
|--|-----------|--|--|--|--|
| Levy Description   | Taxab     | le Value                                 | Tax Rate   | 9  | Tax Amount   |
| TO TOWN TAX<br>CO COUNTY TAX<br>F0061 LAKE MOHEGAN FIRE D<br>G0084 WESTCHESTER COUNT   | YR        | 550,000<br>550,000<br>550,000<br>550,000 | 138.989000 pe<br>137.830000 pe<br>61.876800 pe<br>13.378100 pe   | r thousand<br>r thousand   | 76,443.95<br>75,806.50<br>34,032.24<br>7,357.96  |

**OP099 OPEN SPACE & CONSERV** 30.000000 per unit 1 P0065 ADVANCED LIFE SUPPOR 550,000 3.768300 per thousand 2,072.57 19.871500 per thousand W0100 YORKTOWN CONSOLIDATE 550,000 10,929.33 SC YORKTOWN SCHOOL 550,000 922.237529 per thousand 507,230.64

## 14-0,000 \$ Box STORE

Combined Tax Rate: 1,297.95 per thousand

Date 7/10/2012

Estimated Tax: 713,903.19

"What If" scenario for proposed assessment change

#### Tax ID# 26.17-1-1

## what if calculation:YORKTOWN

Account # 0727600 Bank #

| Pay by mail to:<br>RECEIVER OF TAXES<br>TOWN OF YORKTOWN<br>ELFRIEDE H. SCHMID<br>P.O. Box 703 | In Person Payment:<br>RECEIVER OF TAXES<br>363 Underhill Ave.<br>Yorktown Heights<br>NY 10598 | Monday through Friday<br>9am - 5pm<br>Closed Holidays |              | Property Descript<br>Town: 555400<br>Location: CRON<br>Class: 311 | School: 555402                               |
|--|---|---|--------------|---|--|
| Yorktown Heights, NY 10598   | 072   | 27600   | Property Te  | axpayer's Bill of Rig   | phts   |
| STATE LAND COF<br>3967 PROVOST A<br>BRONX, NY 10466  | VE.   |   | THIS PROPERT | timates the FULL M<br>Y as of 7/1/2010 w<br>lue of this property  | MARKET VALUE OF<br>as \$14,671,814.<br>as of |

7/1/2010 was 380,000. The UNIFORM PERCENTAGE OF VALUE used to establish assessments was 2.59.

If you feel your assessment is too high, you have the right to seek a reduction in the future. For further information, please ask your assessor for the booklet "How to File a Complaint on Your Assessment". Please note that the period for filing complaints on the above assesment has passed.

| Levy Description   | Taxable Value   | Tax Rate   | Tax Amount   |
|--|---|--|--|
| TO TOWN TAX<br>CO COUNTY TAX<br>F0061 LAKE MOHEGAN FIRE DI<br>G0084 WESTCHESTER COUNTY R<br>OP099 OPEN SPACE & CONSERV<br>P0065 ADVANCED LIFE SUPPOR<br>W0100 YORKTOWN CONSOLIDATE<br>SC YORKTOWN SCHOOL | 380,000<br>380,000<br>380,000<br>380,000<br>1<br>380,000<br>380,000<br>380,000<br>380,000 | 138.989000per thousand137.830000per thousand61.876800per thousand13.378100per thousand30.000000per unit3.768300per thousand19.871500per thousand922.237529per thousand | 52,815.82<br>52,375.40<br>23,513.18<br>5,083.68<br>30.00<br>1,431.95<br>7,551.17<br>350,450.26 |

## 58,7507 RETAIL

Combined Tax Rate:

1,297.95 per thousand

Date 7/10/2012

Estimated Tax: 493,251.46

## "What If" scenario for proposed assessment change