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EXHIBIT "L"



**Application for Preliminary Subdivision**

**August 12, 2010**

**Patrick Farm SUBDIVISION  
Town of Ramapo  
Rockland County, New York**

RECEIVED

AUG 26 2010

BUILDING PLANNING

**NARRATIVE SUMMARY**

Following please find responses to review comments made in the following two memos prepared by the Town of Ramapo Planning Consultant and Department of Public Works:

1. Supplement to Patrick Farm Subdivision Review - Town of Ramapo prepared by John Lange, Senior Associate, Planning, F. P. Clark Associates, Inc., dated July 19, 2010
2. Patrick Farm prepared by Ed Moran, Town of Ramapo Department of Public Works, dated July 12, 2010

The following format has been utilized to provide a response to each comment, one -by-one:

- A comment from the reviewer appears first. The comments appear in the same sequence as the in the original Memo. (Occasionally the comment has been reformatted to break-up multiple nested comments so that a response can be provided to each part of a multiple comment.) The comment appears in regular font.
- The response to the comment then follows and is indicated by "Response:", followed by the text of the response in an italicized font.

After the one-by-one responses to each comment from each reviewer, located in the back of this document, please find an Appendix featuring miscellaneous correspondence:

*cc: Bldg  
all other agencies  
when land delivered  
By Dennis Koch*

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## SUBDIVISION Review Comment Letter #1:

### **1. Supplement to Patrick Farm Subdivision Review – Town of Ramapo prepared by John Lange, Senior Associate, Planning, F. P. Clark Associates, Inc., dated July 19, 2010**

**General Comments:** The CDRC session was very productive. This letter provides additional detail to the primary items identified below. All new information is in red to assist the applicant in responding to comments.

- a. As a general comment, relocating the detention ponds to the other side of Route 202 would significantly minimize disturbance to the main property, particularly to the Scenic Roads District which governs impacts to 1000 feet on either side of Route 202. Although clearing would be required west of Route 202, the visual impact would be significantly lessened by conveying the runoff under Route 202 by pipe to a central water quality and detention pond system.
- b. The applicant should assess the viability of further preserving the upland portion. This would provide significant mitigation of impacts. Furthermore, moving homes off the high elevation areas to lower levels via a small area of consolidation via cluster provisions would also provide extensive mitigation of impacts to steep slopes and to Scenic Roads Compliance.

**Response to General Comment "a":** *The stormwater management plan does not propose any facilities on the west side of Route 202. Property located on the west side of the road is not part of this application and will not be disturbed as part of this development. The stormwater management plan features 14 basins spread throughout the Subdivision, Condominiums, and Volunteer Housing sites. Siting of the basins throughout the property is preferable for several reasons:*

- i. *The stormwater management plan has been designed as a Low Impact Development (LID) practice. LID is a stormwater management approach and set of practices that aims to manage runoff as close to its sources as possible.*
- ii. *The Applicant was encouraged during the environmental review process to design the basins as a series of water amenities. The stormwater management basins have indeed been designed as a series of amenities and include ambitious landscape plans to beautify each basin as a visual resource.*
- iii. *The west side of Route 202 is located within the Scenic Roads District and the property is currently home to natural vegetation. There is no reason to construct additional infrastructure across the road in order to disturb and create visual impacts at this area.*

**Response to General Comment "b":** *During the environmental review process, extensive consideration and plan modification was performed to preserve the upland portion of property on the east side of Route 202 and to mitigate impacts to steep slopes and to the Scenic Road District. This involved careful design at lots 1, 2, 3, 79, 80, and 81. Design enhancements which were made at these areas were recognized by the Town Planning Consultant as well as the Town Board. In addition, the development plan on the "high elevation" incorporated specific design strategies identified within the Scenic Road District Law. The development plan also incorporates groundwater recharge at these locations which is the lowest portion of the site and hydraulically appropriate location for recharge. Groundwater recharge is an initiative of the Town Comprehensive Plan.*

*In summary, this plan is consistent with the plan which was evaluated by the Town Board during the environmental review process. This plan accomplishes the goal of balancing development objectives*

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with both scenic road and comprehensive plan objectives. The Town Board determined that the site design would conform to the standards in the Scenic Road Regulations.

**Environmental Comments:** The environmental review was completed during the preparation of the Environmental Impact Statement under the SEQRA process for the overall development. The environmental review permitted the tree survey to be completed at the time of subdivision and site plan. However, the tree survey provided is just a list and does not depict the actual location of the trees. Please provide a map of the trees on a subdivision/housing location/grading map so that comments on impacts can be fully determined.

**Response:** *The tree survey which was performed within the single-family portion of the subdivision but was not performed within roadway portions which are sure to be disturbed and was not performed at wetland locations or other locations which are sure to remain undisturbed is indicated on the Erosion Control Plan (Sheets 31-39). The tree survey is featured on the erosion control plan for several reasons:*

- i. *The Grading & Drainage Plans are very busy and would tend to obscure the tree locations.*
- ii. *The Erosion Control plans are not so busy yet show the proposed grading in a muted fashion and are ideal for portraying the tree survey data.*
- iii. *The soil conservation measures indicated on the erosion control plans complement the tree conservation measures associated with the tree survey mapping.*

**Site Plan Comments:** This office offers the following comments on the Subdivision Plan.

1. Although the subdivision plan includes a bulk table to demonstrate basic compliance with the bulk requirements, the plans showing housing locations sites do not have dimensions to verify compliance. Please provide. (all lots should have zoning setback information – the following appear to require variances from bulk requirements:
  - a. See item number 17 which lists lots not meeting frontage requirements (there are 12 lots which do not comply).
  - b. The provisions for meeting requirements of the current subdivision ordinance are listed in item 2 below:

**Response:** *All single family building envelopes have been dimensioned on the Layout Plans to demonstrate bulk compliance.*

2. The practical division of some of the lots provides houses that do not meet one or more of the bulk requirements, or offer a lot that is either non-desirable or barely developable. One lot shows a 20 foot setback from the street. Others have extensive areas that are not usable. (See item 24 of this list for further clarification of lot deficiencies) Note: the lot noted with a 20 foot setback was an error – The measurement was to the access drive; This lot does not have sufficient frontage.  
(lot 22)
  - a. The following lots are encumbered by water or floodable areas and would not meet the subdivision law requirements:
    - i. Lots 22, 23,24,25,27,28,29,30
    - ii. Lot 89

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iii. Lots 43,44,45,46,47,38,49, 66,67,68 61,62,63,64,74, 54, 55

## Responses to Comment "2":

- i. All lots meet all bulk requirements.
- ii. All lots are developable and will be desirable to the eventual purchaser of that lot.

Response to Comment "2a": We understand that the Zoning Law takes precedence with respect to lot area deductions and that this section of the Subdivision Regulations does not apply. We understand that this matter is being resolved between the Applicants' Attorney and the First Deputy Town Attorney.

3. The drainage basins are shown on individual lots. They should be placed on homeowner association property. As shown they severely restrict use of the individual lots they are located on. Common facilities should be located on common property. In the case of lot 79, no homes are included on the lot, just drainage basins. In other cases, the drainage basins have been placed on individual lots with homes, decreasing the usable lot size and values. Lots with drainage basins encroaching usable lot area are:
  - a. Lot 28, 79, 75, 76, 72, 73, 22, 23, 51

Response: Stormwater management basins are either located within easements to the Condominium or Volunteers Homeowners Association or within easements to the Town. Their location is largely dictated by gravity; however their naturally sited location has not been permitted to dictate the overall site layout. Easements are a perfectly acceptable and commonplace means to deal with maintenance. As discussed in our Response to Comment "2a" above, we understand that the Zoning Law takes precedence with respect to lot area deductions and that the section of the Subdivision Regulations does not apply. With respect to Zoning Law deductions from floodplain area, this specific deduction has been coordinated with the Town DPW during the environmental review process and pertains to existing FEMA defined floodplains. Proposed stormwater management basins do not impact existing usable land areas.

4. There are excessive slopes on proposed roadways. In some cases the roads meet the maximum permitted slope of 10 % but require walls on both sides to complete the cuts required to service the lots. The walls on both sides of the street are six or more foot tall providing a road with a 10 % slope with elevation changes of 12 feet or more from the walls supporting the roadway. This is not low impact development as was expected from the EIS process. These lots included,
  - 2, 3, 81, 82, 79,

Response: Proposed road profiles are consistent with the very road profiles evaluated during the environmental review. The environmental review included a through demonstration of how road profiles were closely followed the natural topography. Nevertheless, we have taken this opportunity to make the following improvements to the plans

- i. The centerline profile of the portion of Road B in the vicinity of Lots 79 and 80 has been lowered. This revision allows for the grading on these two lots to more closely blend with the existing topography.
- ii. Grading on Lots 81 and 82 has been revised to reduce the grading impact and preclude the need for retaining walls in the rear of the dwellings.

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5. The amount of grading on specific lots is excessive and should be reduced in view of reducing the impacts to the natural environment and in lieu of low impact development requirements. It will not be possible to save any trees on some of the proposed single family homes with the amount of grading proposed.

Response: The extent of proposed grading and tree removal has been minimized to the maximum extent practicable. It is in the applicant's economic interest to minimize unnecessary grading and in the applicant's aesthetic interest to maximize tree preservation. Great efforts were made during the environmental review process to demonstrate how homes were sited to parallel the topography.

6. Lot 79 shows the water quality basin directly adjacent to the proposed home. The home should be a minimum of 100 feet from a basin. The basin is shown approximately 10 feet from the building outline. The amount of grading is excessive.

Response: As discussed in our Response to Comment "4" above, proposed grading at Lot 79 has been reduced. The stormwater management basin has been designed as an amenity with significant proposed landscaping. We find the 100 foot suggested separation to be arbitrary. The lot will be purchased by someone who finds the basin attractive. The basin planting will become more mature and beautiful over time.

7. Lot 23 has WQ basin number 6 covering most of the lot and approximately 50 feet from the rear building line.

Response: As discussed in our Response to Comment "6" above, the stormwater management basin has been designed as an amenity with significant proposed landscaping. The lot will be purchased by someone who finds the basin attractive. The basin planting will become more mature and beautiful over time.

8. Lot 81 has a 16 foot drop in elevation right off the building line and the grading depicted is excessive. No tree preservation can be accomplished on this area.

Response: Proposed Lot 81 grading has been revised. Although the dwelling on Lot 81 is elevated, there are significant areas where tree preservation can be achieved at the perimeter of lots 80, 81, 82, 85, and 86.

9. Sheet 83 shows a list of trees, but these tree **locations** should be shown on the subdivision plans so that design efforts to preserve the maximum number of trees can be conducted. A list of trees does not show their locations. Please provide. Note: Trees are shown on erosion control sheets instead of on drainage sheets where the impacts can be assessed

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Response: As discussed above in our response to the "Environmental Comments", the tree survey is featured on the Erosion Control Plan (Sheets 31-39). We request that consideration be given to leaving the tree mapping as is for the reasons indicated.

10. Lot 22 and 13 share a common driveway.

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Response: *The common driveway results in a single crossing over the watercourse is preferable to two crossings over the watercourse.*

11. Lot 33 has WQ Basin number 5 on the lot.

Response: *The stormwater management basin at Lot 33 allows the stormwater to be pretreated for water quality mitigation prior to being released into the existing pond.*

12. The driveway for lot 51 crosses the volunteer housing lot and also serves at the public access to the archaeological site. It is also too close to the Route 306 intersection, This is not a good combination.

Response: *The driveway serving Lot 51 has been revised and situated further back from the Route 306 intersection. We have no issue with the driveway crossing the volunteer housing site. The NYSDOT has objected to multiple driveways having direct access to Rt. 306.*

13. The house on lot 67 has the building foundation directly on the easement line for the high pressure gas main and 25 feet from the high pressure gas main marker. This is not a recommended location for a home.

Response: *The dwelling location on lot 67 has been relocated to provide additional separation to the gas main and easement.*

14. Lots 72 and 73 show WQ Basin number 10 spanning their property. Almost fifty percent of these properties are dedicated to the drainage system leaving this portion of their lots unusable.

Response: *As discussed in our Response to Comment "6" above, the stormwater management basins have been designed as an amenity with significant proposed landscaping. We find the 50% figure to be an overstatement and suggested that the lots will be purchased by someone who finds the basins attractive. The basin planting will become more mature and beautiful over time.*

15. Lots 67 and 69 share a common driveway.

Response: *The common driveway serving lots 67 and 69 make it possible to avoid an additional point of access to Route 306. This is a preferable design strategy for State highways*

16. In accordance with the subdivision regulations Section 21 F, the applicant should prepare temporary staking in preparation for a site visit by CDRC and/or the planning board. The centerlines of the roads should be staked so that CDRC and Planning Board members can walk the site and get a feel for how the roads will fit the topography. A site visit should be arranged as soon as possible.

Response: *The cited section of the regulations is a discretionary option specifically for the benefit of the Board to be discussed at the first Planning Board Meeting. We will alert the Board to this section of the regulations when we meet with them.*

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17. In accordance with Section 40 (C), all homes should have frontage on an improved road. This subdivision relies on common driveways to serve residences without proper frontage on an improved road. New subdivisions should be created without common driveways and inadequate road frontages. Lots without minimum frontage include:
- a. Lot 1 Minimum frontage is 160; can be reduced to no more than 50% or 80 feet. Frontage shown is 67.88
  - b. Lot 81 – same – frontage shown is 78.53
  - c. Lot 85 – same – frontage shown is 67.96
  - d. Lot 10 – same – frontage shown is 64.60
  - e. Lot 11 – same – frontage shown is 64.60
  - f. Lot 69 – same – frontage shown is 50.00
  - g. Lot 70 – same – frontage shown is 57.93
  - h. Lot 66 – no frontage internal to subdivision
  - i. Lot 67 – no frontage internal to subdivision
  - j. Lot 78 – no frontage – easement through multi-family zone
  - k. Lot 22 – frontage shown is 71 feet
  - l. Lot 13 – frontage shown is 68.11

Response: All proposed lots meet minimum frontage requirements. The 160 foot figure is a lot width requirement and not a frontage requirement. Common driveways are a wonderful tool that can be utilized to avoid locating driveways where they may not be ideally suited; and at locations where they are appropriate, they can help to minimize impervious cover. They have been endorsed by environmental planners; they are recommended by the Town Scenic Road Law and should be encouraged where appropriate.

18. Section 41 Roads, subsection A requires that roads shall be related appropriately to the topography. Local roads shall be curved wherever possible to avoid conformity of lot appearance. **Streets shall be arranged so as to obtain as many as possible of the building sites at or above the grade of the streets. Grades of streets shall conform as closely as possible to the original topography. A combination of steep grades and curves shall be avoided.** (see response to item 4.) Specific standards are in article IV, Section 41 (I) of the subdivision regulations.

Response: Great efforts were made during the environmental review process to demonstrate how proposed roads profiles followed the existing conditions topography as closely as possible. Combinations of steep grades and curves have been avoided. The road design meets the specific standards of the subdivision regulations.

19. Many lots have irregular boundaries and side yards that will not be perpendicular to the street. These should be eliminated. **Section (D) Side lot lines requires, "In general, side lot lines shall be at right angles to street lines (or radial to curving street lines) unless in the opinion of the Planning Board a variation from this rule will result in a better street or lot plan. The Planning Board will discourage the use of small angular sections of lots that have no useful purpose by discounting those areas in calculating minimum lot size."**



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This subdivision has many instances of irregular areas. Lot 51; Lot 79; Lot 41; Lot 21; Lot 71

Response: Several lots have boundaries which include angular lot lines; however the usability of all lots has been demonstrated by the siting of a conceptual dwelling on each single family lot. The lots do not include small angular sections with no useful purpose. All lots are in compliance with the Subdivision Regulations and Zoning Code

20. Section (I), regarding trees states that "**No existing trees shall be removed from any portion of any required side yard of a subdivision created pursuant to these regulations.**" The grading plans violate this provision on many of the lots. This should not be waived and the applicant will have to demonstrate how this regulation can be implemented on a lot by lot basis. Looking at the grading sheets and the tree locations, it is difficult to judge the precise impacts since there are no clearing limit lines for anything other than roads. However, it appears that tree preservation efforts for side yards will be very difficult. The lots that have the greatest impact also happen to be in the Scenic Roads District.

Response: We understand that the referenced Section is not applicable.

21. The table of recreation requirements requires that 3% of the total land be preserved for recreation. It is noted that this is active recreation, not open space. Please designate compliance with the required 3% for the single family portion of the development.

Response: The recreation area is not provided. The Applicant will follow the alternative procedure of money in lieu of land as outlined in § 44E.

22. The minimum size of a recreation area "**shall have an area of at least four acres...and have a total frontage on one or more streets of at least 200 feet.**" Please demonstrate compliance with this regulation.

Response: Please refer to our response to comment 21 above.

23. For the record, the above recreation standards are the minimum requirements

Response: A response to comment 23 is not required.

24. Section 45 subsection B (4) requires that low lying lands subject to flooding or overflowing during storm events, whether or not included in areas for deductions, shall be preserved and retained in their natural state as drainage ways. **Such lands or lands subject to periodic flooding shall not be computed in determining the number of lots to be utilized... nor for computing the area requirements of any lot.** It appears that many lots in the proposed subdivision rely heavily on the use of these prohibited areas. Please adjust as appropriate.

Response: As noted in our Response to Comment "2a" above, we understand that the Zoning Law takes precedence with respect to lot area deductions and that this section of the Subdivision

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*Regulations does not apply. This matter is being resolved between the Applicants' Attorney and the First Deputy Town Attorney.*

25. Section 46 subsection (A) states, "No trees shall be removed from any subdivision nor any change of grade of the land effected until the final plat has been filed. All trees on the plat required to be retained shall be preserved, and where required, all trees shall be welled and otherwise protected against change of grade. The sketch plat shall show the number and location of existing trees, and shall further indicate all those marked for retention, which shall be keyed to a table listing species, height, caliper and condition as certified by a licensed landscape architect or botanist. The public improvement security shall include the amount as set forth in the standard schedule of fees.

Response: *During the environmental review process, the extents of the tree mapping limits were agreed upon with the Town Planning Consultant. Trees were not mapped within the proposed public improvements (roads, etc.) because they were certain to be removed. Drawing 39 is one of the Erosion Control Plans and features a detail entitled "Typical Dwelling Silt Fence and Tree Preservation Notes"; and notes 2 and 3 indicate how trees to be removed in conjunction with home construction will be evaluated at the time of plot plan review.*

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## SUBDIVISION Review Comment Letter #2:

### 2. Patrick Farm

prepared by Ed Moran, Town of Ramapo Department of Public Works,  
dated July 12, 2010

#### General Comments:

- 1) Now that the project is past the EIS stage, official review comments should be received from the various utility agencies such as Columbia Gas and Orange and Rockland in regards to their easements, etc. Columbia Gas also requested full details in order for them to complete their review.

Response: Subdivision plans and site plans have been provided to Columbia Gas and Orange and Rockland for their review and comment. A preliminary acknowledgement letter from Columbia Gas, dated August 16, 2010 is located in the Appendix of this document.

- 2) It appears a shade tree easement is shown, but it does not seem to be labeled.

Response: The shade tree easement has been labeled accordingly.

- 3) Street lights must be installed along the public roadways. The location and spacing must be approved by Orange and Rockland.

Response: Note 14 on Drawing 30 outlines the typical street light procedure for any subdivision.

- 4) Money in lieu of land is required prior to final approval.

Response: Note 27 on Drawing 1 outlines the typical fee payment procedure for any subdivision.

- 5) An emergency action plan must be developed for any dam onsite.

Response: All dam work subject to NYSDEC jurisdiction will be reviewed as appropriate. Leonard Jackson Associates has already performed extensive coordination with the NYSDEC Dam Safety Unit and will follow their direction for preparation and submission of the requisite application materials.

- 6) The distance from centerline to designated street line should be shown at Route 202 and Route 306.

Response: The requested distances will be shown as requested. We request clarification on which drawing(s) this information should be provided.

- 7) Who will be responsible for stream maintenance?

Response: Property owners will be responsible for stream maintenance.

- 8) Comments must be received from NYSDOT prior to preliminary approval.

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Response: Attached in the Appendix of this document is copy of August 19, 2010 Meeting Minutes with the NYSDOT which includes their comments and reflects the coordination which has been performed for gaining a Highway Work Permit for the Route 202 and 306 improvements.

- 9) A more complete description of the easements should be included within the plan set. The easements are listed, but to whom they are granted is missing.

Response: All easements have been labeled, including the entity the easement benefits.

## **NYSDEC & USACOE Related Comments:**

- 10) When were the various wetlands (both Federal and State) flagged and certified? The dates should be shown on the plans. According to the DEIS, the wetlands were certified back in June 2005. Therefore, a new certified delineation is necessary.

Response: The wetland delineation was validated by the NYSDEC on 11-13-2009 and is valid for 10 years. Dr. Mallery's February 1, 2007 letter serves as an ACOE Jurisdictional Determination and is valid for 5 years. A copy of a July 27, 2010 letter from Mark Chertok is located in the Appendix of this document and sets forth how the Mallery letter serves as the ACOE J.D. We understand that the July 27, 2010 Chertok letter is being reviewed by the First Deputy Town Attorney.

- 11) During a site visit, the presence of wetlands was apparent which are not shown on the plan. A wetlands specialist should be sent out for a current delineation. A wetlands delineation map should be created showing flagged points. This will then have to be certified by the appropriate agencies. More specifically, one of the larger areas that appears to have been missed is partially shown on the NWI map provided within the DEIS and on the town's NWI Thiells, NY map which shows it to be a PFOIE wetland.

Response: As noted above in our response to Comment 10, the Applicant has gained currently valid wetland delineations.

- 12) The contention of the applicant and engineer for the applicant is that approval from the USACOE was granted in the form of a letter from Dr. Christopher Mallery. According to LJA, the work was authorized under nationwide general permits (NWP). After consulting with the USACOE in regards to both the letter from Dr. Mallery and NWP's, a JD is required for the project. Not only has the scope of work changed from 139 single family homes to 497 units, NWP's are only valid for 2 years. With every NWP, the USACOE requires a jurisdictional determination.

Response: As noted above in our response to Comment 10, the Applicant has gained currently valid wetland delineations. We understand that this matter is being reviewed by the First Deputy Town Attorney.

- 13) According to a letter submitted by Adam Peterson of the NYSDEC dated July 3, 2009, the DEC will require the placement of survey markers along the boundary of the 100 foot adjacent area (wetland buffer boundary) in conjunction with the placement of a permanent barrier (split rail fence, stone wall, or other equivalent structure). The survey markers and permanent structure appear to be appropriate for lots 43-49 and

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53-55. These must be shown on the final site plan. Comments from the NYSDEC are required for this stage of the review.

Response: Wetland markers and permanent barriers will be indicated on final plans if they are required by the NYSDEC. An application to the NYSDEC is required for several permits and they will have ample opportunity for review and comment on the subdivision and site plans. Attached in the Appendix of this document is a copy of a March 17, 2010 letter from the NYSDEC with their preliminary review comments.

14) Only 5 acres may be developed at one time unless a waiver is granted by the NYSDEC.

Response: The Applicant is aware of this requirement and will not be seeking a waiver.

15) Permission will be needed for the location of the sanitary sewer line within the NYSDEC wetland buffer area. (Sheet 19)

Response: The Applicant is aware of this requirement.

## Floodplain Analysis Comments:

16) A floodplain disturbance permit must be approved by the floodplain administrator at the Town of Ramapo.

Response: Subsequent coordination with the Town DPW revealed that if a floodplain disturbance permit is required, it should be submitted on a lot by lot basis later at the time of building permit application.

17) A LOMR is needed for the new flood plain elevations.

Response: A Letter of Map Revision (LOMR) is not required in accordance with the FEMA National Flood Insurance Program. Based on FEMA regulations, a LOMR is required only for those projects that will result in an increase in 100-year water surface elevations of greater than 1.0 foot for streams with base flood elevations specified, and no floodway designation; or any increase in 100-year water surface elevation if there is proposed construction within a regulatory floodway. Brian Brook is the only on-site watercourse which has been studied as part of the Flood Insurance Study for the Town of Ramapo. There is no work proposed within the regulatory floodway of Brian Brook and the hydraulic analyses have demonstrated that any potential increase in 100-year peak water surface elevations will be less than 1.0 feet.

18) How were the cross section elevations determined for the flood plain analysis? If completed using Rockland County topo, actual survey points should be taken in the field to verify the channels (top of bank, bottom of bank elevations) are correct.

Response: Cross section geometry for the hydraulic analyses was determined utilizing field survey of the channels at various locations supplemented with topographic mapping prepared for this property by photogrammetric methods for overbank geometry.

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- 19) Based on the flood plain limits, several of the road/stream crossings do not appear to be large enough to prevent the roadway from being inundated during the 100 year storm.

Response: Hydraulic analyses were performed for each on-site watercourse. Proposed stream crossings were sized appropriately to safely convey the 100-year peak discharge with at least 2 feet of freeboard inside the proposed culvert.

## General Grading & Drainage Plan Comments:

- 20) Drywells and other infiltration practices cannot be located on areas with natural slopes greater than 15%.

Response: No drywells or other infiltration practices are proposed at areas with natural slopes greater than 15%.

- 21) Stationing should be shown on both the grading sheets and the utility sheets.

Response: Road stationing has been included on the Grading and Drainage Plans and the Utility Plans.

- 22) As per the Superintendent of Highways Anthony Sharon's letter dated April 20, 2009, fences are to be installed around all of the ponds and are to be keyed the same to prevent dumping and wind-blown objects from entering the ponds. In addition, as part of the agreement to maintain the ponds, the Highway Department has requested funding for equipment necessary.

Response: Fencing, in conjunction with landscaping, is proposed at the perimeter of the proposed stormwater management basins. We are actively seeking further information from Mr. Sharon on requested funding.

- 23) A permanent access point and access road must be constructed for all the ponds.

Response: Permanent access points and access driveways are proposed for all ponds.

- 24) The design of the private driveway / cul-de-sac adjacent to lots 1, 2, and 3 creates potential snow removal problems. The walls along the high side of the street should be set back farther from the edge of pavement. (Sheet 13; part 1 of 9)

Response: Walls along the private driveway, on the high side of the roadway, serving Lots 1, 2 and 3 have been relocated a minimum of 6 feet away from the proposed edge of pavement.

- 25) The design of the private driveway must meet NYS Fire Code specifications with regard to fire truck turnarounds. The ability of a truck to maneuver the turning radii must be demonstrated. (Sheet 13; part 1 of 9)

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Response: The fire truck turn analysis has been performed and demonstrated that the 7-Tower Ladder Fire Truck is able to maneuver along the subject private driveway. A copy of the Fire Truck Turn Analysis (FFTP) plan is attached in the Appendix.

- 26) The 100 year flood plains should be shown on the grading and drainage plans. The culverts should be large enough to convey a storm of that size. Some of the culverts do not appear large (wide) enough. (Sheet 13-21)

Response: 100 year flood plains should be shown on the grading and drainage plans. Hydraulic analyses were performed for each on-site watercourse. Proposed stream crossings were sized appropriately to safely convey the 100-year peak discharge with at least 2 feet of freeboard inside the proposed culvert.

- 27) Drainage structures should not be located within the 100 year floodplain. HW #10 within lot 79, and HW 10A within Tax Lot 32.07-1-11 should be relocated slightly. (Sheet 14-15)

Response: We agree that in certain instances, it may be desirable to locate drainage structures outside of high velocity areas of floodplains where they would not be likely to last; however we request that this comment be reconsidered as a rule. In many instances drainage structures are appropriately sited within slowly moving or fringe areas of the floodplain. The construction of drainage structure within floodplain areas can be accomplished with no effect on floodplain elevations or the hydraulic functioning of the drainage systems.

- 28) Will WQ Basin #2 be maintained by the Patrick Farm Condominiums? The easements are shown, but to whom they are granted is not listed. (Sheet 14; part 2 of 9)

Response: Yes, it will be maintained by the Condo HOA. All easements have been labeled to indicate the entity that benefits from the easement. In addition, the Appendix of this document includes a table that summarizes basin maintenance responsibilities.

- 29) The right-of-way needs to be adjusted along Road C from Route 202 to the bus stop. 10 feet of right-of-way is needed on either side of the roadway. (Sheet 15; part 3 of 9)

Response: The additional widening strip beyond the 50 foot typical right-of-way is proposed to be provided as easements to the Town in lieu of an expanded ROW. We understand that this matter is being resolved between the Applicants' Attorney and the Town Attorney.

- 30) The bus stop should be farther from the intersection with the parking lot entrance to the multi-family housing. (Sheet 15; part 3 of 9)

Response: The bus stop has been relocated as requested.

- 31) Are the utility towers on lots 77 and 87 remaining? Who owns the towers? If they are to stay, easements will be needed. It appears there may be an existing transmission easement over lots 77 and 78, but it isn't shown. (Sheet 15; part 3 of 9)

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Response: The existing utility towers are owned by Orange & Rockland and are to remain. The existing easement has been clarified and labeled.

32) I am under the assumption Old Haverstraw Road is to be removed. With the existing access to the lot being removed and a new access being constructed from Road D over lot 89 (the multi-family development portion), an easement must be shown. The driveway depiction over the top of the parking lot driveway is somewhat confusing. (Sheet 15; part 3 of 9)

Response: An access easement is indicated to be provided to Lot 78. Following construction of the condominium project, access to Lot 78 will be over proposed Driveway C-1, which also serves several condominium units.

33) The driveway should be relocated outside of the path of the sanitary sewer manhole. If repair work is ever needed, access to the lot would be completely blocked. (Sheet 15; part 3 of 9)

Response: Driveway has been relocated as requested. In addition, the driveway has access from either direction on thru driveway C-1.

34) Fences must be installed around all of the WQ basins. A proper access driveway at least 12 feet in width must also be provided which allows entry to all points of the basins. (Sheet 13-21)

Response: Fencing and a access gate is proposed at the perimeter of the proposed stormwater management basins.

35) The sight distance must be shown at the intersection of Road C and Route 202 and the intersection of Road F and Route 306. (Sheet 15 & 20)

Response: Sight distances were formerly indicated on a former Drawing 80 - Off-Site Road Improvements. The plans have now been revised to feature John Collins' drawings for the off-site road improvements and sight distances will be coordinated in the future with those drawings.

36) Work cannot occur within the 100 year flood plain. The wall along lot 74 cannot extend that deeply into the lot. The wall should be offset from the edge of the flood plain. (Sheet 16; part 4 of 9)

Response: Plans have been revised to more accurately portray 2 walls which will be constructed at the vicinity of lot 74. One wall is a wing wall associated with the proposed culvert. A second wall is a private wall associated with the lot 74 dwelling. Work within the 100-year floodplain is permitted by FEMA regulations. If a floodplain disturbance permit is required, for the lot 74 private wall it will be submitted later at the time of building permit application.

37) The town does not wish to maintain a staircase partially within the town right-of-way. Regardless of its location, the staircase should be removed from the plans. (Sheet 18; part 6 of 9)



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Response: The staircase has been removed and replaced with an ADA compliant ramp situated on private property.

38) What is the purpose of the proposed roadways/trails which are shown throughout the property? For example, the trail which runs from the previously mentioned staircase, around WQ Basin #4, and out to Road B. If walkways/paths are to remain, easements would be needed as well as some form of maintenance agreement.

Response: The "promenade" is a recreational walking path. Easements are indicated. Required maintenance agreements can be coordinated between the attorneys.

39) Where the gas line crosses Road A, approximately 3 feet of fill is being added to the existing gas line elevation. This will most likely push the amount of cover over the 48" maximum set forth in the Columbia Gas Transmission guidelines. (Sheet 18; part 6 of 9)

Response: Plans are under review by Columbia Gas. We endeavored to comply with their guidelines and look forward to receiving their review.

40) Catch basin 3-13A should be relocated outside of the path of the gas main. (Sheet 18; part 6 of 9)

Response: Catch basin 3-13A has been relocated as suggested.

41) The dwelling footprints on Lots 45 and 46 must be located outside of the gas transmission easement. No portion of the footings should be located within the easement. (Sheet 19; part 7 of 9)

Response: Additional separation between the proposed dwelling and the existing gas easement has been provided.

42) The right-of-way needs to be adjusted along Road F from Route 306 to approximately the northern boundary of lot 56. Ten feet of right-of-way is needed on either side of the roadway. (Sheet 20; part 8 of 9)

Response: The right-of-way has been adjusted as requested.

## General Utility Plan Comments:

43) Cleanouts are needed for the sanitary sewer house connections just before entering the road right-of-way.

Response: Cleanouts have been added to lateral connections just prior to entering the road right-of-way.

44) Stationing should be shown on both the grading sheets and the utility sheets.

Response: Road stationing has been indicated on the Grading & Drainage Plans and the Utility Plans.

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45) All sanitary sewer stream crossings should be ductile iron pipe or encased in concrete.

Response: All sanitary sewer stream crossings are proposed to be ductile iron pipe.

46) Wherever possible, 90 degree angles along sanitary sewer pipe should be avoided.

Response: 90 degree angles along sanitary sewer pipe have been avoided wherever possible.

47) The culverts should be shown on the drainage and sewer profiles.

Response: Proposed culverts have been indicated on the utility profiles.

48) The house connections should be shown on the sewer profile sheets.

Response: House connections have been indicated on the sanitary sewer profiles.

49) Wherever the force main crosses a stream, it should not change grade.

Response: The force main has been is proposed to be horizontal at all stream crossings.

50) The force main is proposed to connect to a new gravity line to be installed along Prosperity Drive. Who will be the ultimate owner of the new 15" gravity line on Prosperity Drive? Having two entities maintain separate sanitary sewer facilities on a public street is not practical. The existing county line should be redesigned and increased in size in order to handle the increased flow from the Patrick Farm force main.

Response: We have coordinated this matter with Rockland County Sewer District Number 1, who currently maintains the existing sanitary sewer main within Prosperity Drive. RCSD1 has indicated their willingness to own 2 independent mains within Prosperity Drive. We will investigate the potential for connection of the existing sanitary laterals to the proposed sewer main and then abandoning the existing main.

51) The town now requires a minimum of 0.45% slope on sanitary sewer mains. This allows for a slight amount of human error during the installation of the pipe. Please adjust the grade of any pipe shown with a lesser slope. (Sheet 22-30)

Response: The minimum slope of 0.45% has been utilized as suggested.

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52) SMH #7 is missing from the plan. (Sheet 22; part 1 of 9)

Response: SMH 7 is located at approximate station 10+65 on Road E.

53) Dead end pipe runs along sanitary sewer mains (e.g. between SMH #65 & 66) must have a minimum slope of 1%. (Sheet 22-30)

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Response: A minimum slope of 1% has been provided along proposed dead end sanitary sewer mains.

54) The manhole information for SMH #41 is cut off by the Key Map. (Sheet 23; part 2 of 9)

Response: The label for SMH 41 has been relocated so that it is visible.

55) Please provide a 25 foot wide sanitary sewer easement for the lines which run from Road B through the condominium portion of the project. (Sheet 23; part 2 of 9)

Response: Easements have been provided as requested.

56) Every attempt should be made to avoid 90 degree angles on sanitary sewer pipes such as at SMH #15. Shift SMH #15 farther northeast to create a better flow hydraulically. (Sheet 23; part 2 of 9)

Response: SMH #16 has been shifted farther northeast to create a better flow hydraulically.

57) Sewer manhole #14 is incorrectly labeled as a DMH.

Response: The label has been revised.

58) Please provide a 25 foot wide sanitary sewer easement for the lines which run from Road C to Road D through the condominium portion of the project. (Sheet 24; part 3 of 9)

Response: Easements have been provided as requested.

59) The sanitary sewer manhole located on lot 35 must be relocated outside of the 100 year floodplain. (Sheet 27; part 6 of 9)

Response: The sanitary sewer manhole located on lot 35 has been relocated outside of the 100 year floodplain.

60) SMH #57B is incorrectly labeled as a drop manhole. (Sheet 27; part 6 of 9)

Response: The SMH 57B label has been revised.

61) What is the reasoning behind the trajectory of the sewer pipe between SMH #34 and SMH #35B? (Sheet 27; part 6 of 9)

Response: The alignment of the proposed sanitary main between SMH #34 and SMH #35B has been designed to preclude a potential conflict with the existing gas main and provide adequate vertical separation between the two mains.

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## Sanitary Sewer Profiles (1 of 11)

62) Sanitary sewer house connections must be shown on the profiles. (Sheet 57-67)

Response: *House connections have been indicated on the sanitary sewer profiles.*

63) Drop manholes seem to be used throughout the development without warrant. In cases of extreme depth, at a minimum attempt slightly better than minimum slope along the pipe runs. In the majority of the cases however, the depth is reasonable and the drop manholes can be eliminated. Using minimum slope along a sewer main is a last resort. For example, there's no reason a constant slope cannot be maintained from SMH #29 to SMH #30A which would eliminate the need for a drop at SMH #30. This would allow for an improved hydraulic flow. (Sheet 57-67)

Response: *Design of sanitary sewer mains has been revisited and use of minimum slopes and drop manholes have been avoided to the maximum extent practicable. The need for drop SMH # 30 is for the house connection from lot 32. Attached is a list explaining the need for proposed drop SMH's.*

64) The continuation sheet numbers within the profiles appear to be incorrect. For example, sheet 57 states "Continuation see sheet #55" however the sheet number listed is incorrect. This is true for the entire profile section of the plans. (Sheet 57-67)

Response: *Profile annotations have been corrected accordingly.*

65) We understand the need for a drop manhole at SMH #103, however, please increase the slope of the incoming pipe slightly so it's above minimum pitch. (Sheet 63)

Response: *The incoming sanitary sewer main has been revised as requested.*

### Detail Sheet Comments

66) The curb caps should be type N to reduce the possibility of large debris from entering the drainage system.

Response: *Type N curb pieces have been proposed for curb inlet castings.*

67) Concrete sidewalk must be 4,500 psi; the detail should be corrected.

Response: *The sidewalk detail has been revised to indicate 4500 psi concrete.*

68) Please remove the words "Rockland County Sewer District No. 1" from the details.

Response: *Reference to RCSD1 has been removed as requested.*

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## Drainage Report and SWPPP Comments:

69) A SWPPP and NOI must be filed with and accepted by the Town of Ramapo and NYSDEC.

Response: The SWPPP has been provided for Town review. The NOI will be filed after the Town accepts the SWPPP.

70) The applicant must retain the services of an engineer for scheduled inspections of all erosion control measures. Inspection reports must be submitted to the town. The applicant is responsible for following rules/regulations set forth in the SWPPP. As per the NYSDEC, "in light of the sensitive nature of the watercourses on the site, it would be in the best interests of the project sponsor to be especially diligent in the design and implementation of adequate erosion and sediment controls during construction on the project site."

Response: Comment Noted.

71) Has the ESA Boundary Delineation and Report been submitted to the Rockland County Sewer District No. 1? The Town would like a copy of the report and the EPA's approval.

Response: The ESA Boundary Delineation and Report will first be submitted to the Town DPW for review and signature of the Application form. Next, the Application will be submitted to Rockland County Sewer District No. 1. The Town will receive a copy of the eventual EPA approval.

72) According to the Rockland County Drainage Agency letter of July 30, 2009, the New York State Stormwater Management Design Manual states the "Stormwater wetlands shall not be located within jurisdictional waters, including wetlands." If the existing pond onsite is considered jurisdictional water by the NYSDEC, which requires it to be regulated as a class B stream, that would violate the NYSSMDM. Prior to preliminary approval, the NYSDEC should approve the proposal.

Response: The NYSDEC will review all aspects of their jurisdiction. We propose that this occur after Preliminary Approval.

73) Stormwater Pond buffers of 25 feet which extend from the maximum water surface elevation within the ponds are required as per section 6.1 of the NYSSMDM.

Response: Buffers are required where untreated water is directly entering a pond via an overland flow path.

74) Groundwater elevations and percolation rates are needed. When test holes are dug and percolation rates determined, the Town of Ramapo DPW must be notified and a representative will be sent out to witness the tests.

Response: Following is a summary of proposed subsurface testing:

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<u>Stormwater Facility</u>	<u>Subsurface Testing</u>
1. Recharge Basins	Performed as part of EIS.
2. Water Quality Basins	Presence of groundwater to be established at time of construction and requirement for a liner shall be determined.
3. Single family recharge drywells	Presence of groundwater to be established at time of plot plan and location and configuration of drywell to be finalized.

75) 3 feet of separation is required between the bottom of infiltration trenches and groundwater as per section 6.3 of the NYSSMDM.

Response: Proposed recharge basins and recharge drywells are not water quality treatment measures. They are Green Infrastructure for Stormwater Management and subject to section 3.2 of the NYSSMDM. In this case, we wish for the rooftop runoff to contribute to and join the groundwater and so a separation is not applicable for this application.

76) The infiltration systems must be shown to completely de-water the water quality volume within 48 hours after the storm event according to section 6.3 of the NYSSMDM.

Response: The SWPPP demonstrates how this requirement is met.

77) The perimeter of any pond four feet or greater in depth must be surrounded by two benches; safety bench & aquatic bench, as per Section 6.1 of the NYSSMDM.

Response: Aquatic benches have been provided, however, a safety bench is not required when side slopes of the basin are 4:1 (4 horizontal to 1 vertical) or flatter.

78) As per Section 6.1.1 of the NYSSMDM, evaluate the site to determine the Hazard Class and to determine what design elements are required to ensure dam safety.

Response: The NYSDEC is currently evaluating the hazard class of the existing dam.

79) According to the HEC-1 output report, the maximum water surface elevation for the farm pond during the 100 year storm is 449.00 which would flow over the banks on the northeastern end. In addition, it would flood the pond and potentially Road B2.

Response: We would be happy to meet and review grading at the pond and at Road B2 and how peak water surface elevations are safely contained.

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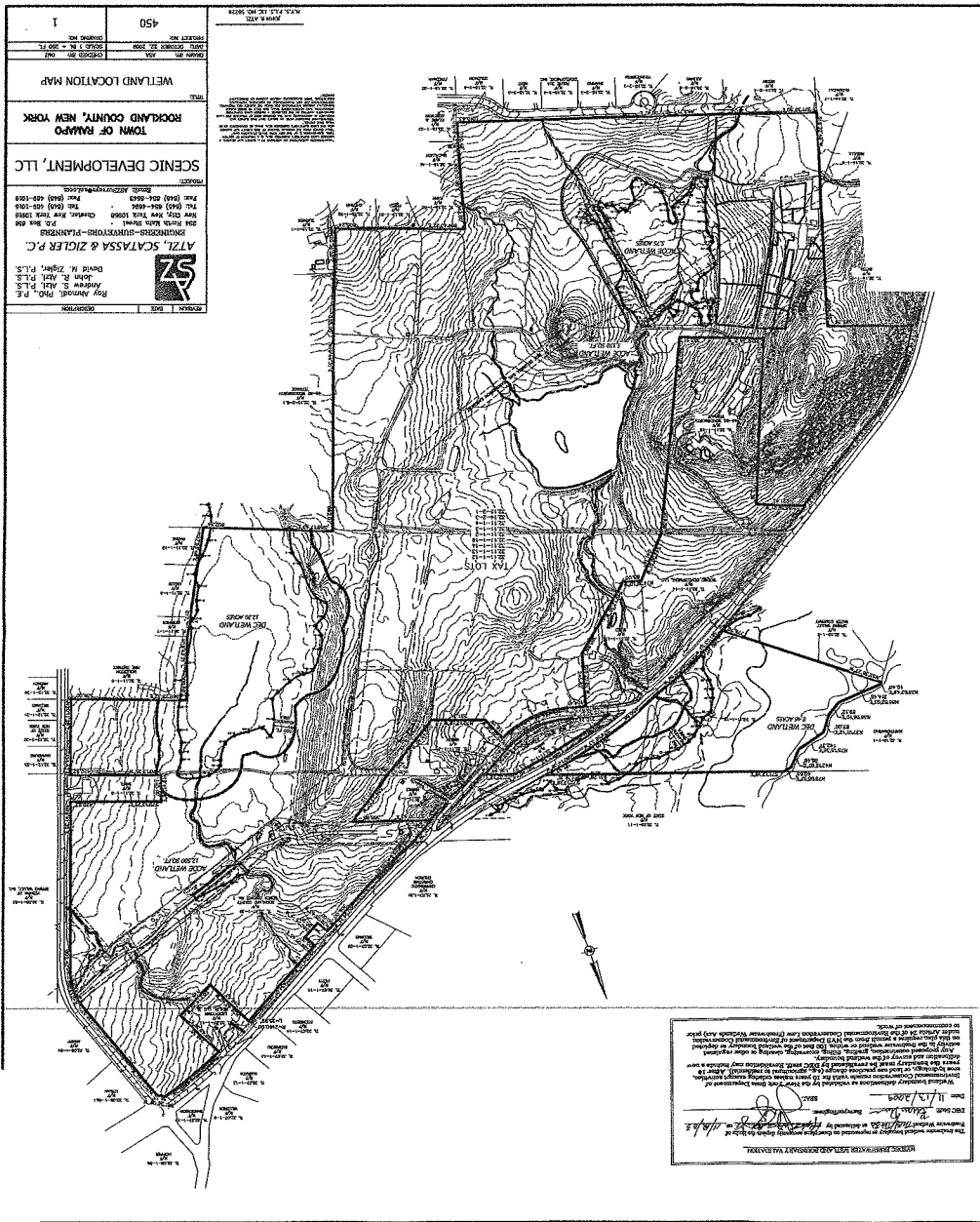
## APPENDIX

1. 6/16/10 NYSDOT Meeting Minutes
2. 8-12-10 Drop Manhole Summary
3. 3-17-10 NYSDEC letter.
4. 8-12-10 Drainage Basin Summary
5. 8-16-10 Columbia Gas letter.





450  
 1  
 PROJECT NO. 450  
 SHEET 1 OF 1  
 DATE 11/13/2007  
 TOWN OF RAMAPO  
 ROCKLAND COUNTY, NEW YORK  
 SCENIC DEVELOPMENT, LLC  
 ATZEL SCATASSA & ZIGLER P.C.  
 ENGINEERS-SURVEYORS-PLANNERS  
 100 WEST 10TH STREET  
 NEW YORK, NEW YORK 10011  
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 www.atzels.com  
 ROY ARONOFF, P.E.  
 ANDREW S. ATZEL, P.L.S.  
 DAVID M. ZIGLER, P.L.S.



I hereby certify that the information furnished on this map is true and correct to the best of my knowledge and belief, and that I am a duly licensed Professional Engineer in the State of New York.  
 Date: 11/13/2007  
 Roy Aronoff, P.E.  
 Andrew S. Atzel, P.L.S.  
 David M. Zigler, P.L.S.

NYSDEC FRESHWATER WETLAND BOUNDARY VALIDATION

The freshwater wetland boundary as represented on these plans accurately depicts the limits of Freshwater Wetland TH4/TH3A as delineated by [Signature] on 11/13/09

DEC Staff: [Signature] Surveyor/Engineer: [Signature]

Date: 11/13/2009 SEAL

Wetland boundary delineations as validated by the New York State Department of Environmental Conservation remain valid for 10 years unless existing exempt activities, area hydrology, or land use practices change (e.g., agricultural to residential). After 10 years the boundary must be revalidated by DEC staff. Revalidation may include a new delineation and survey of the wetland boundary.

Any proposed construction, grading, filling, excavating, clearing or other regulated activity in the freshwater wetland or within 100 feet of the wetland boundary as depicted on this plan requires a permit from the NYS Department of Environmental Conservation under Article 24 of the Environmental Conservation Law (Freshwater Wetlands Act) prior to commencement of work.

