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SUPREME COURT OF THE STATE OF NEW YORK
COUNTY OF ROCKLAND
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In the Matter of
LENA BODIN, LYNDA GELLIS, NANCY KENT, SHERYL SANTI-LUKS, JOHN PORTA, ROBERT SOLOMON, SANDRA SOLOMON, EDITH THORNBURG, JOHN THORNBURG, ANNE WILLIAMS, WILLIAM ABRAMSKY, BARBARA ABRAMSKY, and HILLCREST FIRE COMPANY No. 1,
Index No. 149/12
(Walsh, J.)
Petitioners-Plaintiffs,
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For a Judgment pursuant to Article 78 of the CPLR, - against -

THE PLANNING BOARD OF THE TOWN OF RAMAPO, THE TOWN BOARD OF THE TOWN OF RAMAPO, THE TOWN OF RAMAPO, SCENIC DEVELOPMENT, LLC, FORTY- SIX- FIFTY TWO WADSWORTH TERRACE CORP., and NEWFIELDS ESTATES, INC.

AFFIDAVIT OF KIM COPENHAVER IN SUPPORT OF VERIFIED PETITION AND COMPLAINT

Respondents-Defendants. :
STATE OF NEW YORK
)
) $\mathrm{ss}:$
COUNTY OF ROCKLAND )
KIM COPENHAVER, being duly sworn, hereby deposes and, under penalties of perjury, states as follows:

1. I am Kim Copenhaver. I am an environmental assessment professional with over eighteen (18) years of experience in Local, State, and Federal environmental regulatory compliance and aquatic resource management. A copy of my resume is attached hereto as Exhibit "A."
2. I submit this Affidavit in support of Petitioners' effort, pursuant to Article 78 of the New York State Civil Practice Law and Rules to annul, vacate, and set aside three (3)

Decisions (the "Subject Decisions") issued by the Planning Board ("Planning Board") of the Town of Ramapo ("Town") on December 27, 2011 in connection with a development project, referred to as Patrick Farm (the "Project"), proposed for real property located on the east side of Route 202, 0 feet south of Route 306 (the "Site").
3. My firm, Copeland Environmental LLC ("Copeland"), was retained by the Village of Pomona, Milton and Sonya Shapiro, and Ramapo Organized for Sustainability and Safe Aquifer ("ROSA"), which represents the interests of many of the Petitioners, to assist in the technical review of certain materials underlying the Subject Decisions.
4. I set forth the results of my review of the Project materials in a detailed written submission, dated December 5, 2011, which was submitted during the Public Hearing for the Project (the "December $5^{\text {th }}$ Submission"). I am informed by Counsel that an incomplete copy of this Submission is included in the Certified Record produced by the Town at pages 779 to 786 . I am attaching a complete copy of this Submission, which was duly submitted to the Town, as Exhibit "B".
5. As I advised the Planning Board in my December $5^{\text {th }}$ Submission, the Project documentation's wetland delineation appears inadequate in its representation of the wetlands and waterways on the Site, including areas subject to the jurisdiction of the United States Army Corps of Engineers ("U.S. ACOE") and the New York State Department of Environmental Conservation ("DEC").
6. As a result of the Plamning Board's use of an inaccurate wetland delineation, the Planning Board would have failed to properly calculate, as required by the Town Zoning Code, the amount of developable land at the Site, resulting in illegal and excessive Project density.

## Professional Experience

7. I am the owner of Copeland Envirommental LLC which is an independently owned envirommental consulting firm established in 2002 with offices at 3 Buchman Drive, Albany, NY 12211.
8. I received my B.S. in Environmental Biology from the State University of New York, Empire State College in 1993.
9. Since graduating, I have worked for the U.S. ACOE Regulatory Branch in Troy, NY (Project Manager/Biologist), the Town of Clifton Park (Environmental Specialist), and the NYS Department of Environmental Conservation, Division of Regulatory Affairs, Central Office, Albany, NY (Assistant Environmental Analyst).
10. I have completed numerous professional training certifications by the U.S. ACOE and other professional institutions including Environmental Assessment and Regulatory Training, Wetlands Development and Wetlands Hydrology, Stream and Riparian Corridor Assessment, Erosion and Sediment Control, and Ecological Assessment, Hydrology of Constructed Wetlands, among others.
11. Copeland Environmental has extensive experience in Local, State, and Federal environmental regulatory compliance and aquatic resource management. I personally have over eighteen (18) years of environmental assessment experience.
12. Regarding the proposed Project, Copeland's review focused primarily on site plans, previous existing conditions plans, topography and soils maps, aerial photographs, and other drainage indicators which are the primary indicator of wetlands on a property.

## Wetlands And Stream Delineations Need To Be Properly Delineated, Surveyed, And Reviewed

13. As I advised the Planning Board in our December $5^{\text {th }}$ Submission, it could not rationally determine the Project's impacts in relation to the wetlands or waterways because the Site's wetlands have not been accurately delineated.
14. There appear to be significant wetland areas that are not reflected on the Plans approved by the Planning Board.
15. The Plans, for example, do not show wetlands along the majority of the riparian areas on Site.
16. It is highly unlikely that there are no wetlands within these riparian zones and stream corridors.
17. The Plans also fail to show wetlands on many low lying areas where hydric soils are mapped. Hydric soils are a likely indicator of wetlands. This is set forth in guidance documents including, the U.S. ACOE Wetland Delineation Manual, and the Northeast Regional Supplement for the ACOE Wetland Delineation Manual.
18. The Project soil survey indicates that Alden silt loam is present in low lying areas. Alden silt loam is a hydric soil.
19. It is highly unlikely that there are no wetlands within these low lying areas with recognized hydric soils.
20. In addition, my review of the Project materials indicates, for example, that additional tributaries and wetlands are likely to exist on the following proposed lots based on topographic reliefs, landscape position and my years of experience searching for unmapped wetlands on vacant lands:
(a) swale or other drainage way at the back of lot 70 ;
(b) two open stream lines merging on lot 34 and 35;
(c) potential swales through lots 63, 73, 43 and 44, based on topography;
(d) the wetland line should be reviewed on $\operatorname{lot} 55$;
(e) lot 28 shows the confluence of two tributaries where wetlands are usually located.
21. Topography indicates that a tributary crosses lot 63 and 73 . This tributary is not shown on the Plans.
22. A tributary or swale may be located at the main access road to the Site from Old Haverstraw Road and would be impacted. Topographic relief demonstrates that a small tributary may be located in this area.
23. As such, there appears to be numerous areas of wetlands that the Planning Board did not recognize in approving the Plans at issue.

## The Wetlands Appear To Be Improperly Delineated

24. Perhaps even more fundamentally, the Planning Board does not appear to have had the benefit of a formal surveyed wetland delineation in the final approved plans.
25. As I advised the Planning Board in my December $5^{\text {th }}$ Submission, the wetland delineation does not appear to be a flagged and surveyed wetland boundary on the approved Project Plans. Direct and indirect impacts to protected aquatic resources, or to proximate existing residences or the Town as a whole, cannot be assessed accurately without flagged and surveyed aquatic resource boundaries, especially for the lots that are of concern and within impact areas.
26. This compounds my concern that the Planning Board did not consider all wetlands on the Site.
27. Stream channels, for example, as shown, are not detailed enough to assess the
temporary and permanent impacts to the stream beds or banks, or to the adjacent riparian areas because there are no surveyed wetland points or lines shown.
28. Furthermore, the topography used on the plans does not line up with the stream lines at road and utility crossings in several locations and New York State Stream classifications are not shown on all tributaries. Several streams are noted as Class B protected streams, but this classification is not carried up to the other tributaries that directly feed into these streams.
29. Additionally, streams in lots 17,19 , and 24 are too close to the homes or grading line. Impacts associated with a driveway crossing and utilities also will occur on lot 21 yet there is no formal surveyed delineation in this area as well.
30. A tributary exists on lot 88 , just below SMH \#33 that appears to continue upslope and could be impacted by the proposed utility line.
31. The delineation of lots $87 \& 88$ also requires review because it appears that utility lines may be placed in wetlands that are running parallel to a stream. The ACOE Section 404 Clean Water Act regulations do not allow this activity without an individual permit review and authorization.
32. The driveway and home on lot 55 appear to be too close to the mapped stream. This area should be flagged as waters of the United States and reviewed for potential impacts.
33. The stormwater basin and back yards of lots 27 and 28 are too close to assess if impacts to aquatic resources are occurring. There is no surveyed delineation in this area.
34. In many areas the access roads for maintenance of the stormwater basins are located right next to streams and wetlands. This can lead to long term problems, such as deposition of sediments from the basin into low-lying wetland areas. There is a concern, for example, that such a situation exists on the back of $\operatorname{lot} 35$.

## The Applicant's Efforts To

## Refute My Concerns Are Misguided

35. I am aware that the Applicant's consultant sought to refute my concerns, in a submission made to the Planning Board dated December 20, 2011. I am informed by Counsel that this response is included in the Certified Record at pages 148 and 149. The consultant's response, however, fails to address my concerns.
36. The Applicant's consultant claimed that "DEC and ACOE staff [] established the limits of the wetlands and watercourses at the site."
37. In the first instance, the fact that some wetlands may not fall within DEC or ACOE jurisdiction does not mean that they do not exist. DEC and ACOE both have fairly narrow definitions of the wetlands and other waterways that fall within their respective jurisdictions. Clear examples of this include the lower classification streams that are not regulated by the DEC , and isolated wetlands that are not regulated by the ACOE .
38. Wetland areas do exist that are not subject to DEC or ACOE jurisdiction, but which still warrant consideration.
39. Moreover, it is specifically notable that the Applicant's consultant fails to reference a wetland delineation confirmation letter from ACOE .
40. Based on my experience, including my employment at ACOE, reference to a wetland delineation confirmation letter is standard practice for developments of this size and complexity.
41. In addition, it is standard practice in letters from ACOE concerning developments of this size and complexity for it to reference the extent of land that they reviewed at a development site, whether or not regulated waters of the U.S were found, and the total acreage of those waters subject to ACOE jurisdiction, including the linear footage of streams.
42. While the Applicant's consultant does reference a DEC validation of its wetland mapping, again, DEC's wetland jurisdiction is fairly narrowly circumscribed. In general, a wetland must be at least 12.4 acres before DEC will assume jurisdiction, (see 6 N.Y.C.R.R. § $664(2)(\mathrm{f})$ ), unless there are wetlands that are found to be of some unique local importance as determined by the DEC Commissioner, pursuant to State Environmental Law Section 24-301.
43. As such, again, the fact that a wetland is not reflected on the map verified by DEC does not mean it does not exist. To the contrary, wetlands frequently exist beyond DEC jurisdiction.

## The Applicant's Claim That ACOE "Confirmed" That Wetlands Under Its Jurisdiction "Have Been Avoided" Is Dubious

44. Similarly, the Applicant's consultant claimed that it received a letter from ACOE, dated January 5, 2011 "which confirms that no Corps of Engineers permits are required for the project as Wetlands and Waters of the United States have been avoided."
45. Again, based on my experience, including my work for ACOE, this is not the typical letter the ACOE would issue in connection with a Project of this scope or magnitude.
46. The referenced ACOE letter only concerns certain "arch culverts." I am informed by Counsel that this letter is included in the Certified Record at pages 165 and 166.
47. The letter simply does not reference the Project at issue or the development as a whole. There is no indication in this letter from ACOE that they reviewed the Site, confirmed the wetland delineation on it, or reviewed, confirmed, or approved the Subdivision and Site Development Plans.
48. The letter contains no citation of the drawings, plans or acreages within ACOE's review area. Furthermore, the letter does not state that the ACOE received a request to review the development plans for a residential development on what is collectively known as Patrick Farm.
49. Again, based on my experience, an ACOE letter concerning a Project of this magnitude would, as a matter of course, contain this information.
50. Instead, however, the letter referenced by the Applicant's consultant only indicates that ACOE reviewed certain "arch culvert" plans. Indeed, the letter states on its face that it is only responding to a request concerning "a number of arch culverts to serve as pedestrian and linear transportation crossings."
51. Again, at the risk of being redundant, if ACOE were truly signing off on a development project of this magnitude, in its ordinary course it would provide a permit approval or a letter of no jurisdiction concerning the entire subdivision activities. It would state that ACOE reviewed all wetlands at the site, specifically stating how many acres of land were reviewed in connection with the project site, and a brief description of the development activities proposed. It would state, for example, that ACOE "reviewed plans for the development of a 100 -lot residential and its attendant features that is proposed on 200 acres of land." ACOE would indicate that it had reviewed development plans, which it would specifically identify, and indicate how many acres the project would impact, including all attendant features.
52. These letters also will generally indicate the date that the wetland delineation on the development site was reviewed and confirmed by the ACOE , to prove that the ACOE did a complete review including field investigations of the entire development site.
53. Moreover, ACOE documents issued subsequent to the January 5, 2011 letter referenced by the Applicant raise further doubts that ACOE signed off on this Project.
54. In an internal email among ACOE staff, dated April 15, 2011, for example, Dr. Christopher Mallery, ACOE Chief, Western Section, clearly states that it is his "impression that
[the Applicant] will have to come in for a whole new [ACOE] authorization (including a new [Jurisdictional Determination], with a substantial 106 [i.e., ACOE] review." (A copy of this email is attached hereto as Exhibit " C ".)
55. In a subsequent letter to the Applicant from ACOE, dated April 18, 2011, Stacey M. Jensen, Chief, Eastern Permits Section, clearly suggested that the Applicant contact ACOE for a review of its Project plans, stating "[i]f your proposal would involve [] regulated work, you should contact this office immediately so that a project-specific jurisdiction determination can be made as to whether a Department of Army permit will be required." (Emphasis added.) (A copy of this letter is annexed hereto as Exhibit "D".).
56. This April 18, 2011 letter appears to clearly refute the Applicant's claim that the ACOE wetlands on the Site and the proposed impacts of the development have been reviewed and accepted.
57. It also contradicts the Applicant's consultant's representation that the January 5, 2011 ACOE letter it references "confirms that no Corps of Engineers permits are required for the project."


Sworn to before me this
20 day of April 2012

MARY ELLEN LEO


Notary Public, State of New York
Qualified in Saratoga County
Reg. No. 01LE6218884
My Commlssion Expires March 15, 2014

## Kim Copenhaver

## Environmental Biologist and Regulatory Specialist

Kim Copenhaver is an environmental assessment professional that has over eighteen years of extensive experience in Local, State and Federal environmental regulatory compliance and aquatic resource management. Ms. Copenhaver is the owner of Copeland Environmental LLC, an independently owned envirommental consulting firm, which was established in 2002.

Multi-tasked project management skills include:

- Site Assessment
- Jurisdictional Determinations
- Permit Management and Compliance
- Interagency Coordination
- Envirommental Impact Assessment
- Site Plan Review

Natural resource skills include:

- Habitat Assessment
- Natural Resource Planning
- Wetland Delineations
- Wetland Mitigation Design
- Morphological Stream Assessment
- Bio-technical Bank Stabilization Design
- Riparian Corridor Management
- Bio-Engineering
- Construction Site Monitoring

Ms. Copenhaver was the Project Manager / Biologist for the U.S. Army Corps of Engineers, Regulatory Branch in Troy, NY. Responsibilities included - Jurisdictional determinations, Permit decisions, NEPA compliance, Interagency Coordination, Clean Water Act, navigation laws, Endangered Species Act, Historic Preservation Act, Wild and Scenic Rivers Act, among other Federal, State and Local regulations. Additional responsibilities involved aquatic habitat assessment and restoration. Project experience included: utility and transportation projects, residential and commercial developments, dredging, dams, landfills, docks, bridges and structures, stream canalization and aquatic habitat restoration, as well as others.

She was the Environmental Specialist for the Town of Clifton Park, where her duties encompassed assurance of environmental assessment and regulatory compliance for planning, zoning and building departments, and construction inspections.

Kim Copenhaver served as an Assistant Environmental Analyst, for the NYS Department of Environmental Conservation, Division of Regulatory Affairs, Central Office, in Albany, NY. Her responsibilities included assisting in statewide regulatory program initiatives such as public/private partnerships, amendments to SEQRA Regulations and SEQRA Training initiatives, FERC license review and State legislative initiatives on land use law and government privatization initiatives.

Ms. Copenhaver received her BS in Environmental Biology from the State University of New York. Professional certifications include the Environmental Assessment and Regulatory Training for USACOE, the NYSDEC Regulatory Training, Wetlands Development and Wetlands Hydrology, Stream and Riparian Corridor Assessment, Erosion and Sediment Control, Ecological Assessment, and Corps of Engineers Wetland Delineation.

## Exhibit B

# Aquatic Resource Review <br> of the <br> Patrick Farm Proposed Residential Development Town of Ramapo, Rockland County, New York 

## Prepared by

Copeland Environmental LLC<br>Regulatory Consulting Wetlands and Waterways<br>3 Buchman Drive, Albany, NY, 12211<br>(518) 874-1888 www.copelandenviromental.com

December 5, 2011

## Introduction:

This report outlines the findings of an aquatic resource review completed of the proposed development on the Patrick Farm property located along Haverstraw Road, in the Town of Ramapo, NY. Online resources, site plans, previous existing conditions plans and other documents provided to the consultant were used in our research for this report. The findings of this review are based on the best professional judgment of the wetland consultant. The sketches and recommendations within this report are to be used as a guide.

The review was completed by Kim Copenhaver, owner and senior wetland consultant for Copeland Environmental LLC. Ms. Copenhaver is an envirommental assessment professional who has over 18 years of extensive experience in local, state and federal environmental regulatory compliance and aquatic resource management with a focus on aquatic environments, and the regulations surrounding them. A copy of Ms. Copenhaver's qualifications is provided as an attachment to this report.

We did not complete site work or detailed scientific investigations. Topography, soils, aerial photographs and other drainage indicators are the primary indicator of wetlands on a property. When seeking out the location of wetlands to be delineated, these are some of the primary factors that are used by wetland specialists.

## Wetland Delineation Review

Copeland Environmental reviewed the proposed plans for the site, as well as additional materials provided by ROSA and available online natural resources maps. Our comments are related to the site plan entitled "Final Subdivision Plans Prepared for the Patrick Farm Subdivision, Town of Ramapo, Rockland County, New York", Sheets 2 and 3, Sheets 13-29, Sheets 87-89 and Sheets 80 and 81; all prepared by Leonard Jackson Associates dated 5/24/10 or 9/9/11 and last revised on1 1/1/11 and/or 9/9/11. Development plans for lots 87 and 88 of the subdivision were not reviewed in detail.

We have found that the wetland delineation does not appear to be an adequate or accurate representation of the potential waters of the United States or the potential New York State jurisdictional waters. The following deficiencies should be brought to the attention of the appropriate agencies:

## Wetland Delineation Review (continued)

1. The wetland delineation does not appear to be a flagged and surveyed wetland boundary. The lines are not representing meets and bounds in the field. Surveyed delineations are always required for a sites that are proposed for development, particularly in the areas of potential impact to wetlands and waterways. Direct impact and indirect impacts to protected aquatic resources cannot be assessed accurately without clearly flagged and surveyed aquatic resource boundaries. The following recommendations are made:
a. Ask the U.S. Army Corps of Engineers Regulatory Branch if they have confirmed the wetland delineation on the property. If so, get a copy of the wetland delineation map that was confirmed and get the details of when and by whom it was confirmed. Changes in the wetland delineation procedures and ACOE Jurisdictional Determination procedures have occurred over the past 5 years. These should be addressed fully.
b. Ask the NYS Department of Environmental Conservation if they have confirmed the wetland delineation on the property. If so, get a copy of the wetland delineation map that was confirmed and get the details of when and by whom it was confirmed. The DEC wetland verifications are usually good for only 3 to 5 years. This wetland boundary should be revisited with a flagged and surveyed wetland line; at least on the lots that are of concern and within impact areas.
2. There is no reference note on the site plans regarding who or when the wetland delineations were completed and what agencies may have reviewed or confirmed the wetland delineation. Without this, there is no trail for the review or reference to how old the delineation work is.
3. Streams - There are no wetlands shown along the majority of the riparian areas associated with the streams on site. It is highly unlikely that there are no wetlands within these riparian zones and stream corridors. Our review clearly indicates that there are some riparian areas that should be reviewed by a professional wetland delineator. See the attached sketch.
a. The stream channels are shown as a line or two placed at the bottom of a ravine. This is not detailed enough to assess the impacts to the stream beds or banks. Both temporary and permanent impacts are of concern.
b. Topography on the plans does not line up with the stream lines at road and utility crossings in several locations.
c. NYS Stream classifications are not shown on all tributaries. Several streams are noted as Class B protected streams, but the classification is not carried to the others tributaries which directly feed into these streams.
4. The soil survey indicates that Alden silt loam is listed as a hydric soil. These soils are listed to be found in depressions and the soil has an 80 component of hydric soil conditions. The wetland delineation leaves out many low lying areas where this hydric soil is mapped. The wetland boundary within these areas should be more closely reviewed.
5. Our review of the materials provided raises some concerns that additional tributaries or wetlands exist on the following proposed lots:
a. Swale or other drainageway at the back of lot 70
b. Two open stream lines merging on lot 34 and 35
c. Potential swales through lots $63,73,43$ and 44 based on topography.

## Wetland Delineation Review (continued)

d. The wetland line should be reviewed on lot 55
e. Lot 28 shows the confluence of two tributaries. This area should be closely looked at.
6. Because of the importance of the resources on the site, you should consider if the pond and its adjacent wetland areas should be considered eligible for re-mapping as a DEC wetland. In certain cases, when a wetland holds unique and/or important functions or benefits to the community, the watershed or the natural environment, the DEC can considered taking jurisdiction over the wetland; whether or not they meet the 12.4 acre NYS DEC threshold, or not. The engineering firm for the project mentioned that the pond averages 1.5 feet in depth which is well within the range of wetland and special aquatic site parameters. Therefore, other preferences and protections that are afforded to wetlands and riparian areas, such as disturbance set backs, regulated adjacent areas, and preservation initiatives, should be considered.

Summary: Overall the wetland delineation has numerous deficiencies and inconsistencies. The level of detail provided does not allow for an accurate assessment of the limits of waters of the U.S. on the site, or a reasonable measurement of potential direct and indirect impacts to the aquatic environment that could occur. This level of detail is well below the standards required by the ACOE and DEC for other, much smaller projects. You should insist that the same level of detail be provided here; and that all of the current procedures for assessing wetlands and the potential impacts to wetlands are complied with.

You should have the DEC revisit the wetland delineation that was confirmed by their staff. It appears that not only could the limits of the "FWW TH 30 " be expanded to include smaller adjacent wetland areas, but the pond and associated wetland complexes on the remaining portion of the site appear to potentially warrant the state's jurisdiction as under Article 24 due to their importance to the community and the watershed at large. You should petition the state to review an expansion of their Article 24 jurisdiction on the site.

## Aquatic Resource Impact Assessment

We reviewed the above referenced plans and additional materials provided to us. Of particular importance within these materials includes letters from the ACOE and DEC that were obtained by FOIL and FOIA requests, and the 2009 "Request for a Jurisdiction Determination by the NYSDEC" prepared by Leonard Jackson Associates. Please note that we did not review detailed grading plans of the development proposed for lots 87 and 88. It appears that permits will be needed from the DEC and from the ACOE for the project as follows:

1. Direct impacts to the wetlands would require authorization under sections 404 and 401 of the Clean Water Act (U.S. Army Corps of Engineers Permit and DEC Water Quality Certificate). Although it appears that the ACOE authorized the project 2007 under the Nationwide General Permits, and later a portion of the project referenced as "Patrick Farm Condominiums" was given a no-permit-needed letter, these appear to be invalid or inconsistent for the following reasons:
a. The project scope has significantly changed since the time the 2007 approval was issued,
b. The Nationwide General Permits referenced in the letter expired in March of 2007 and are due to expire once again in March of 2012. The conditions of the nationwide permits have changed.
c. There is a new regional wetland delineation manual for this area that should be followed.

## Aquatic Resource Impact Assessment (continued)

d. Over the past 5 years there has been additional guidance providing clarification of the limits of Waters of the United Sates, and associated coordination processes for jurisdictional determinations. These should be complied with.
e. Although it appears that a no permit needed letter was issued, the letter does not reference which drawings were reviewed. There is no drawing cited. There is also a reference to a submittal on September 29, 2020, which is 10 years in the future. In addition, this is only one lot of the subdivision (Condominium Lot). This should never have been reviewed as a single and complete project. This has made it very confusing for the municipalities and for the community at large.

Overall, it appears that their has been a great deal of confusion around this project due to the submitting of partial information about the scope of the project, by using old outdated jurisdictional determination or by using enforcement actions as a means to circumvent the full environmental review process. It is time that the entire project be put on the table with an accurate and current Jurisdictional Determination so it can be reviewed in accordance with the currently applicable federal regulations and guidance documents.
2. Direct impacts will occur from grading within NYS "FWW TH-30" regulated adjacent area. Therefore an Article 24 wetland permit would be required.
3. Direct disturbances to the bed and bank of NYS protected streams would occur from road crossings. This will require a DEC permit under Article 15 for stream disturbances.
4. A water quality certificate will likely be required from the DEC in accordance with the section 401 of the Clean Water Act for the discharge of fill material into a water of the U.S.
5. You should check with DEC to see if water and sewer supply permits will be required.
6. The DEC should also provide a review of the proposed stormwater management plan to insure that project meets current standards, particularly given the project's proximity to the Mahwah River and aquifers that support existing residences. Pollutants and flooding could be significant from a project of this size and scope.

We have summarized some particular impact areas of potential concern, as well as some general comments to consider and to present to the agencies during their review.

1. Without a surveyed wetland delineation boundary of the limits of waters of the U.S. and the NYS jurisdictional waterways and wetlands, the impacts cannot be accurately measured or analyzed. The Federal Regulations require that the 404 B1 guidelines demonstrate that a project sponsor has avoided, minimized and mitigated for both direct and indirect impacts to the project. Without confirmation of the limits of the aquatic resources I don't see how the agencies could make a determination of compliance with these important guidelines. The wetland delineation should be confirmed by the $A C O E$ on the entire site and in off site work areas. If a previous confirmation was completed, we believe that it should be revisited given the inconsistencies in delineation maps and the additional information provided to the agencies in this report and others (affidavits from engineer and biologist).

## Aquatic Resource Impact Assessment (continued)

2. There is no limit of clearing and grading placed on the map. Without this, and an accurate surveyed delineation, it is unclear if the numerous road crossing and outfall structures near or over the streams would result in a discharge of fill materials.
3. Dewatering activities are likely to be needed to construct some of these stream crossing. These often involve a discharge of temporary fill material and disruption to the stream flows.
4. Potential waters of the U. S. that do not appear to have been delineated may be filled as a result of the project. Other waters of the U.S. are situated too close for comfort, so that that one could reasonably expect impacts to the wetland or tributary would occur by the contractor building the project or by future property owners. These are listed below and are shown on our sketch:
a. Lots 17, 24 and 19, the streams are too close to the homes or grading line. These areas need to be professionally delineated and surveyed.
b. A tributary or swale may be located at the main access road to the site from old Haverstraw Road and would be impacted. Topographic relief demonstrates that a small tributary may be located in this area.
c. The catch basin proposed near Lot 34 is close to a wetland, impacts can be expected.
d. At Lot 35 there appears to be an impact associated with a proposed sewer line towards the rear. In addition, the storm basin behind that has access roads and outfalls in the stream. There is some concem about accurate wetland mapping and impacts in this area.
e. The stormwater basin and back yards of lots 27 and 28 are too close to assess if impacts are occurring. There is no surveyed delineation in this area.
f. Impacts associated with a driveway crossing and utilities will occur on lot 21 and there is no formal delineation in this area.
g. There appears to be a swale or tributary located on Lot 70 that is not marked or mapped at all. A culvert extends across Ladentown Road on to Lot 70, where topography shows a swale is potentially located. Grading is proposed within the swale, right behind a proposed house.
h. Topography indicates that a tributary crosses lot 63 and 73. This tributary is not mapped at all. The agencies should review this area.
i. The tributary on lot 88 , just below SMH \#33, appears to continue upslope and could be impacted by the utility line.
j. The delineation on the two out-parcels (Lots $88 \& 87$ ) should be reviewed. In some cases it appears that utility line may be placed in wetlands that are rumning parallel to a stream. This is not allowed by the regulations. The agencies should review wetland delineation near SMH 35C to insure that all impacts are assessed.
$k$. There appears to be a small tributary that crosses the proposed house location and back yard of Lots 43 and 44. This potential tributary feeds into the DEC wetland and should be protected.
5. The driveway and home on lot 55 appears to be too close to the stream. This area should be flagged for waters of the Untied States and revisited for potential impacts.

Overall there appear to be a considerable amount of potential impacts from the project that need to be quantified and addressed during the State and Federal permit processes.
5. There are several areas throughout the site where utilities will be installed within wetlands or across streams. This will generally require permits if the work results in a discharge of fill material into these waterways. Temporary dewatering activities for this work should be reviewed.

## Aquatic Resource Impact Assessment (continued)

6. There are numerous areas where the outfall pipes and their rock armoring are located in waters of the United States. These should be closely reviewed with a formal surveyed delineation.
7. In many areas the access road for maintenance of the stormwater basins are located right along streams and wetlands. This can lead to long term problems. Experience has shown that when accumulated sediment is removed from stormwater basins, it is often side case nearby, within low lying areas that are commonly wetlands. There is a concern about this on the back Lot 35 .
8. The agencies should take a close look at areas where off site impact could occur for utility connections and upgrades to the existing municipal roads. Our review indicates that culverts are proposed to be replaced, lengthened or just enhanced with riprap armoring, as well as road shoulder improvements that are proposed. This work could result in a discharge of fill material into waters of the U.S. or state regulated waters. "But for" the subdivision, these potential impacts would not occur. Therefore, they should be reviewed in cumulatively, along with any other impacts proposed and they should be included in the total project area, the jurisdictional determination area and the area of potential effect for archeological review.
9. Indirect impact to the aquatic resources (such as thermal pollution to stream, habitat fragmentation, water quality and flood an storm flow impacts, and the spread of invasive species, and aquifer recharge protection) should closely considered on this site.
10. Has there been an archeological review completed for the site in accordance with the requirement of the National Historic Preservation Act and companion NYS Historic Preservation rules? Have the coordination requirements been completed for state and federal permit processes. You must make sure that there are no short cuts being taken at this site. Make sure that the state and federal agencies are aware of the historic and prehistoric potential importance of this site. The archeological report completed for the site should be reviewed in detail to ensure that they have been undertaken with all of the current standards and that all of the resources are clearly identified and presented to the agencies.
11. Who has completed the Endangered Species evaluation of the site? Will the agencies be overseeing this? The following federal species may be a concern for this site, Indian Bat (Myotis sodalis) and Bog turtle, (Clemmys muhlenbergii). NYS protected plants and wildlife should also be considered in the DEC permit review. New state endangered species policies should be considered in their permit review to insure that any habitat of concern is identified and impacts to the species or their potential habitat are clearly analyzed.
12. Single and Complete project - Lots 87 and 88 appear to be separated out of this subdivision as an independent project with separate utility. This definitely appears to be an attempt to avoid following state and federal regulations. There are three separate projects represented on this site that at one time were considered as one. These projects appear to be dependent on one another for the roads, sewer, water, power and stormwater infrastructure. It is unreasonable to conclude that these projects are not related and dependent upon one another. Impacts proposed on Lots 87 and 88 would not occur without the approval of Patrick Farm Subdivision. This makes them dependent and a single and complete project under the "but for clause". The project sponsor should show the proposed impacts on the two out parcels so that a completed and throughout review can be completed. These three projects sliould not be reviewed separately.
13. I have noticed several stub streets proposed in the site plan. The need and purpose of these stub streets should be clarified. Stub streets often indicate that additional phases of the project can reasonably be expected to occur? You should ask the agencies to consider if there are any wetlands at the edge of these stub streets, and if so; they should be clearly marked for future development.

Summary: There appear to be numerous areas where proposed impacts to the aquatic environment are not clearly identified or evaluated. The direct and indirect impacts of such an expansive development located near important aquifer areas and adjacent to or within close proximity to protected waterways should be closely reviewed. These areas have a long standing natural and cultural history that should not be easily set aside during the environmental review process. The functions and benefits of these streams, wetlands, and riparian areas are very important to protecting the community from pollutants, flooding, erosion and sediment control issues and for maintaining a healthy aquifer. In addition, the functions and benefits that these resources provide to the natural environment for wildlife labitat, transportation corridors, nutrient production and biodiversity should also be closely reviewed and considered in the approval process.

This assessment was prepared by Kim Copenhaver of Copeland Environmental LLC. Please contact Kim with any questions or concerns at kim@copelandenvironmental.com.




## Kim Copenhaver

## Environmental Biologist and Regulatory Specialist

Kim Copenhaver is an envirommental assessment professional that has over eighteen years of extensive experience in Local, State and Federal environmental regulatory compliance and aquatic resource management. Ms. Copenhaver is the owner of Copeland Environmental LLC, an independently owned environmental consulting firm, which was established in 2002.

Multi-tasked project management skills include:

- Site Assessment
- Jurisdictional Determinations
- Permit Management and Compliance
- Interagency Coordination
- Envirommental Impact Assessment
- Site Plan Review

Natural resource skills include:

- Habitat Assessment
- Natural Resource Planning
- Wetland Delineations
- Wetland Mitigation Design
- Morphological Stream Assessment
- Bio-technical Bank Stabilization Design
- Riparian Corridor Management
- Bio-Engineering
- Construction Site Monitoring

Ms. Copenhaver was the Project Manager / Biologist for the U.S. Army Corps of Engineers, Regulatory Branch in Troy, NY. Responsibilities included - Jurisdictional determinations, Permit decisions, NEPA compliance, Interagency Coordination, Clean Water Act, navigation laws, Endangered Species Act, Historic Preservation Act, Wild and Scenic Rivers Act, among other Federal, State and Local regulations. Additional responsibilities involved aquatic habitat assessment and restoration. Project experience included: utility and transportation projects, residential and commercial developments, dredging, dams, landfills, docks, bridges and structures, stream canalization and aquatic habitat restoration, as well as others.

She was the Environmental Specialist for the Town of Clifton Park, where her duties encompassed assurance of environmental assessment and regulatory compliance for planning, zoning and building departments, and construction inspections.

Kim Copenhaver served as an Assistant Environmental Analyst, for the NYS Department of Envirommental Conservation, Division of Regulatory Affairs, Central Office, in Albany, NY. Her responsibilities included assisting in statewide regulatory program initiatives such as public/private paitnerships, amendments to SEQRA Regulations and SEQRA Training initiatives, FERC license review and State legislative initiatives on land use law and government privatization initiatives.

Ms. Copenhaver received her BS in Environmental Biology from the State University of New York. Professional certifications include the Environmental Assessment and Regulatory Training for USACOE, the NYSDEC Regulatory Training, Wetlands Development and Wetlands Hydrology, Stream and Riparian Corridor Assessment, Erosion and Sediment Control, Ecological Assessment, and Corps of Engineers Wetland Delineation.

## Mallery, Christopher 5 NANO2

| From: | Mallery, Christopher S NAN02 |
| :--- | :--- |
| Sent: | Friday, April 15, 2011 8:31 AM |
| To: | Jensen, Stacey M NANO2 |
| Subject: | Project in Rockland County (UNCLASSIFIED) |

Classification: UNCLASSIFIED
Caveat5: NONE
Stacey:
I got a call this morining from an engineer who was hired by a local community organization to black a large project in Rockland County known as Patrick Farm (I think it's in the Town of Ramapo). Craig had worked on this in the distant past, and I had been involved with an enforcement case with it, based on some stream work they had done that really messed up the flow of water on the site. They put things back together as well as they could, and I wrote them off for a nationwide for their then-proposed project, with the warning that, if their project changed, they would need considerably more review from us. Their attorney (Mark Chertok, from SP\&R) asked for approval for an expanded project for the site a few years later, and I told him that, since the new project would affect the historic property on the site (the farmhouse), it would be very difficult for him to get a new approval, and that he would be better off following the old proposal that he had an authorization for. That was sufficient for him at the time, but apparently not everyone was listening, as the developer (Scenic Development) has come up with a new proposal that involves twice as many houses as the previous one.

It would be my impression that they will have to come in for a whole new authorization (including a new JD), with a substantial 106 review, but I will leave that decision to you. He said he would call you.

I think I may still have Chertok's submittal on my desk somewhere.
Thanks.

- Chris M.

Classification: UNCLASSIFIED
Caveats: NONE

Exhibit D

DEPARTMENT OF THE RRPMY

APR 1 自 2041

REPLYTO
ATTENIION OF:
Regulatory Branch-Eastern Permits Section
SUBJECT: Patrick Farm Residential Development in Ramapo, Rockiand County, New York
by Scenic Development, LLC
Scenic Development, ILC
c/o Yechiel Lebovits
3 Ashel Lane
Monsey. NY 10952

Dear Mr. Lebovits:
Your proposed residential development for the patrick Earm site In Ramapo, Rockland County, New York has been brought to our attention for possible regulated streams and wetland filling under Section 404 of the Clean Water Act. Under Title 33. CFR Part $325.1(b)$, if the district becomes aware of planning for work which may require a Department of the Army permit, we contact the principals involved to advise them of the possible requirement for a permit.

Please note that the Department of the Army regulates construction activities in navigable waterways and discharges or dredged or fill material into water of the United states, including. inland and coastal wetlands. If your proposal would involve such regulated work, you should contact this office immediately so that a project-specific jurisdiction determination can be made as to whether a Department of the Army permit will be required. Background material on the Corps of Engineers Regulatory Program is enclosed for your use.

If any questions should arise concerning this matter, please contact the undersigned at (917) 790-8420.


Enclosures

Copy Aumished without enclosures:
Leonard Jackson Associates
26 Firemens Memorial Drive
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p/o Mark A. Chertok
460 Park Averue

- New York, NY 10022

Richard L. Tomer, CENAN-OP-R
Thomas Creamer, CENAN-OP
Christopher Mallery, PhD, CENAN-OP-RW
Kenneth Wells, CENAN-PA
Christapher P. Gardner, CENAN-PA

