

Wetlands

A detailed wetland delineation was conducted by CEA on the project site in accordance with both the US Army Corps of Engineers (ACOE) as well as the New York State Department of Environmental Conservation guidelines. The Corps of Engineers Wetland Delineation Manual (Environmental Laboratory, 1987) and supplemental guidelines were used to delineate federal wetlands pursuant to the ACOE. The NYSDEC Freshwater Wetland Delineation Manual (1995) was used to delineate state wetlands.

As recommended in the guidelines, available data on the site were obtained from US Geological Survey quadrangle maps, US Fish and Wildlife Service National Wetlands Inventory Maps (NWI), NYSDEC Freshwater Wetland Maps, US Department of Agriculture Soil Survey maps for Rockland County and other relevant sources.

The NWI maps show the general configuration, location and category of wetlands found within a given area of coverage. An NWI wetland map showing the project site can be seen in Figure 3.3-2.

Because the NWI maps are limited in precision by their scale and by the identification method used, the presence and boundaries of wetlands shown on the NWI maps need to be more precisely verified in the field. Commonly, small wetland areas, and, less frequently, large wetland areas are not precisely located on NWI maps and may not be wetlands that exhibit the three parameters set forth in ACOE guidance.

The NYSDEC is responsible for mapping larger freshwater wetlands that are 12.4 acres in size or greater, or some smaller wetlands that are of unusual local importance (Environmental Conservation Law, Article 24). A generalized NYSDEC Freshwater Wetlands Map for the project site is included in Figure 3.3-3. This map is also limited in precision due the scale and mapping techniques. The NYSDEC Freshwater Wetlands Map identifies two wetlands (TH-14 and TH-30) extending onto portions of the site. The portions of NYSDEC TH-14 and TH-30 that are located within the project boundaries were validated by Brian Drumm of the NYSDEC on November 21, 2006.

Wetlands were delineated on the site in June 2005, by CEA. The precise surveyed locations of these delineated wetlands are shown on Figure 3.3-4. During the delineation survey it was determined that areas of wetlands on this property were more frequent than the NWI mapping indicated.

The largest area delineated was designated Wetland 1, and is part of the NYS DEC designated wetland, TH-30. Wetland 2 is also regulated by NYS DEC as part of NYS DEC Wetland TH-14, and is located on the west side of Route 202. Four other wetlands exist on site, identified as Wetlands 3, 3A, 4 and 5, which are regulated by the United States Army Corps of Engineers (ACOE). Wetlands 3 and 3A are associated with a watercourse that flows north on the northern portion of the property. Wetlands 4 and 5 are associated with the farm pond in the center of the site. In total, there are approximately 26.9 acres of wetlands on the project site.

New York Environmental Conservation Law (NYS ECL) cites the natural resource benefits of wetlands to include various provisions of flood protection, wildlife habitat, open space uses

and water resource protection. Wetland 2 includes a portion of the Mahwah River and is the largest and only wetland with permanent surface water on this site. These characteristics allow Wetland 2 to be considered to provide greater wetlands benefits than the two smaller wetlands. Wetland area 2 is located on the north side of US Route 202 in the portion of the project site which is to be left undeveloped.

Wetland Area 1

Wetland Area 1 consists of 12.20 acres of NYSDEC Freshwater Wetland TH-30, a Class II forested wetland, and is nearly adjacent to Route 306 on the eastern edge of the property. Hydrology for the wetland is provided by a small pond and watershed located off the property. An intermittent stream flows northwesterly from the wetland, crossing under Route 202 and eventually into the Mahwah River. The NWI describes the wetland as PFO1C (Palustrine, Forested, Broad-leaved Deciduous, Seasonally Flooded) and the stream as R3UBH (Riverine, Upper Perennial, Unconsolidated Bottom, Permanently flooded).

Wetland Area 2

Wetland Area 2 is part of NYSDEC Freshwater Wetland TH-14, a Class I forested wetland. The 8.46 acre wetland is located on the west side of Route 202 where no development is proposed on this section of the property. This wetland is described by the NWI as PFO1E (Palustrine, Forested, Broad-Leaved Deciduous, Seasonally Flooded/Saturated).

Wetland Area 3

Wetland Area 3 is a 0.29 acre isolated ACOE wetland located within the power line right-of-way on the northern end of the property. This small wet meadow is primarily associated with the intermittent stream from Wetland Area 1 and is not mapped by the NWI.

Wetland Area 3A

Wetland Area 3A is another small isolated (0.08 acre) wet meadow located within the power line easement, east of Wetland Area 3. Wetland 3A also is not mapped by the NWI.

Wetland Area 4

Wetland Area 4 is a 5.75 acre forested wetland that is under ACOE jurisdiction. This wetland is located in the southern portion of the site and is fed hydrologically by two intermittent farm ditches. The ditch originating from the area near Scenic Drive located south of the site is listed on the NWI map as R4SBC (Riverine, Intermittent, Streambed, Seasonally Flooded). The second ditch, also originating from the area around Scenic Drive, is not identified on the NWI map.

Wetland Area 5

Wetland Area 5 is a ACOE jurisdictional wetland consisting of 0.13 acres of emergent wetland located on the southwest edge of the existing farm pond in the center of the site. The farm pond is a NYSDEC Class B pond associated with the Class B stream which discharges from it to the north. The intermittent stream outfall from the pond runs westward to and under Route 202 and through Wetland 2 to the Mahwah River. The NWI map lists the

pond as PubHh (Palustrine, Unconsolidated Bottom, Permanently Flooded, Diked/Impounded) and the outfall stream as R3UBH (Riverine, Upper Perennial, Unconsolidated Bottom, Permanently Flooded).

Table 3.3-3 Assessment of On-site Freshwater Wetland Benefits						
Freshwater Wetland Benefit	Wetland 1	Wetland 2	Wetland 3	Wetland 3A	Wetland 4	Wetland 5
1) Flood and storm control by the hydrologic absorption and storage capacity of freshwater wetlands.	Medium	High	Low	Low	Medium	Low
2) Wildlife habitat by providing breeding, nesting and feeding grounds and cover for many forms of wildlife, wildfowl and shorebirds, including migratory wildfowl and rare species such as the bald eagle and osprey.	Low	High	Low	Low	Low	Low
3) Protection of subsurface water resources and provision for valuable watersheds and recharging groundwater supplies.	Low	High	Low	Low	Low	Low
4) Recreation by providing areas for hunting, fishing, boating, hiking, bird watching, photography, camping and other uses:	N/A	Medium	N/A	N/A	N/A	N/A
5) Pollution treatment by serving as biological and chemical oxidation basins.	Low	High	Low	Low	Low	Low
6) Erosion control by serving as sedimentation areas and filtering basins, absorbing silt and organic matter and protecting channels and harbors.	Low	Medium	Low	Low	Medium	Low
7) Education and scientific research by providing readily accessible outdoor bio-physical laboratories, living classrooms and vast training and education resources.	N/A	Medium	N/A	N/A	N/A	N/A
8) Open space and aesthetic appreciation by providing often the only remaining open areas along crowded riverfronts and coastal regions.	N/A	Medium	N/A	N/A	N/A	N/A
9) Sources of nutrients in the freshwater food cycles and nursery grounds and sanctuaries for freshwater fish.	N/A	Medium	N/A	N/A	N/A	N/A
Sources: Environmental Conservation Law, Article 24, Title 1, Section 24-0105-7 & Tim Miller Associates, Inc., 2008.						

Previous Wetland Disturbances

The applicant purchased the project site in 2002. In an effort to provide drainage from the site to the man made farm pond in the center of the site, the applicant engaged in the dredging of man made drainage channels in the vicinity of the pond. The only intent on the part of the applicant was to improve drainage flow to the farm pond and clean up the brush and heavily silted areas on site. On May 17, 2004 the New York District of the ACOE issued

a Cease and Desist Order with respect to this dredging of drainage channels to Scenic Development, LLC, based on a May 12, 2004 site inspection in which an ACOE representative observed fill being inadvertently placed in ACOE regulated wetlands located on the project site without authorization. It was not the applicant's intent to conduct any activities that would affect waters of the United States. The applicant immediately complied with the Cease and Desist order. CEA responded to the Cease and Desist Order in letters dated November 27, 2006 and January 12, 2007 detailing measures taken to remediate the impacted areas. The identified remediation measures were implemented and approved by the ACOE and by the Town of Ramapo. These areas are shown on the site plan and are located in areas which remain completely undisturbed. A February 1, 2007 letter by Chief Christopher Mallery, Ph.D., on behalf of the ACOE, (Appendix B, Correspondence) rescinded the May 17, 2004 Cease and Desist Order based the implementation of the identified remediation measures, and furthermore conducted a review of the proposal for the further development of the site.

The letter from Chief Mallery states that the potential impacts from the proposed development of Patrick Farm, as detailed in the reviewed submittal, were sufficiently minor in scope as to be considered authorized under nationwide general permits, provided that the project is carried out in accordance with the general conditions of the nationwide general permit program. If, at any time during the course of construction, the project was to be modified to include additional impacts to regulated areas additional written authorization from the ACOE would be necessary. The proposed project does not include any impacts to ACOE regulated wetlands and waters. The most recent site plan, the subject of this DEIS, has been resubmitted to the ACOE for confirmation the development is eligible under a nationwide permit. The most recent submission is included in Appendix B, Correspondence.

Alterations to the On Site Dam

The farm pond dam will be improved as part of the project and will require a Dam Permit from the NYSDEC. Plans outlining the proposed improvements will be submitted to the Town in conjunction with the Site and Subdivision Plans.

3.3.2 Potential Impacts

Vegetation

Based upon the current proposed site plan the project proposes to permanently disturb approximately 113.5 acres (54.5 percent) of the project area. Ecological communities that would be directly impacted include successional old field, oak-tulip tree forest, successional southern hardwood forest, unpaved road/path, and interior of barns/agricultural buildings. No disturbance is proposed for the wetland communities on site.

Of the 113.7 acres of total disturbance, 69.1 acres of the proposed project will result in the loss of and/or change in forested habitat that connects similar habitat to the west and east of the project site. Figure 3.3-6 shows the proposed site plan and defines the limits of disturbance superimposed on the aerial photo of the site's existing conditions. As shown in Figure 3.3-5, 68.1 acres of trees will be able to be preserved on site. Construction in the center of the site, will result in the loss of approximately 45.2 acres of trees. Figure 3.3-7 shows a Sample Tree Survey Acre within the zone change area. As Figure 3.3-7 shows approximately 100 trees will be harvested from this area. However, the Landscape Plan for