

# **NATURAL RESOURCES**

## **Chapter Eight**

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### Introduction:

The project plan has been modified through the DEIS review process and includes reduced retail square footage, refined stormwater management and infiltration systems to address stormwater, provide infiltration to maintain the hydrology to the on-site and off site wetlands; and to protect the wetlands located at the lower portion of the site and off-site. No wetland disturbance is proposed. No disturbance of the 100' NYSDEC wetland buffer is required. Only 0.61+/- acres of Town regulated buffer area disturbance is proposed to allow the stormwater facilities to discharge in a flatter area of the site. The project will disturb 32.5 acres of upland forested habitat on a piece of property that is located between roads and active railroad tracks which currently limit migration and use by a variety of species. The habitat will be lost due to the project and it is considered an unavoidable impact. Due to the shape and size limitations of the site, the loss of this habitat can not be mitigated on-site. However, the protection of the wetland buffers, edge and habitat planting and the use of infiltration of stormwater will protect the remaining flora and fauna.

### Comment NR-1

#### *Chapter 17 Mitigation*

- 1. The Proposed Project would likely involve disturbance to the wetland buffer for the construction of the stormwater management facilities; as such, the FEIS should include potential mitigation on measurers for this disturbance. (AKRF (11/12/2013))*

### Response:

The proposed project will not disturb any of the DEC-regulated 100-foot wetland adjacent area (buffer). Small impacts (0.61 acres) for grading for the stormwater management system and placement of level spreaders are proposed within the Town-regulated wetland buffer which varies from 133 to 166 feet. As mitigation for these disturbances, runoff from Route 312 a portion of the I-84 entrance and exit ramps, and pavement/roof runoff within a 20 acre drainage basin in Terravest Corporate Park will be collected in stormwater practices on the project site. This represents treatment of existing impervious surfaces for which no treatment is currently provided. The existing offsite runoff is discharged to the project site by pipe and conveyed to the wetland in open channels. High velocity runoff has eroded the channels. Placing the runoff in the stormwater practices will eliminate the erosion and sedimentation, remove pollutants from the runoff and return the wetland habitat to a more natural and less disturbed state. Site design efforts have focused on conservation measures aimed at protecting the

wetland and wooded wetland buffer habitats on the property. Seventy-three percent (37.74 acres) of the site will consist of undeveloped areas and areas of green space (pervious areas, not including pervious pavement). The acreage that will remain undeveloped includes a linear section of unbroken forest in the eastern portion of the site, along the western edge of DEC regulated Freshwater Wetland BR-18. Native plantings, trees, shrubs, and grasses, are proposed in and around the areas of development to improve habitat quality in these areas. Finally, the edge of the development closest to the wetland buffer (below the retaining walls) will be replanted with native vegetation: meadow, lawn, and bioretention basin seed mixes, to ensure stabilization. Additional, existing vegetation (trees, shrubs, and herbaceous vegetation) will remain between the development and the wetlands. Please see Drawing L-10, Composite Planting Plan.

## **Comment NR-2**

### Chapter 7: Natural Resources

- *The text and the tables for lists of plants are not consistent and some of the plant species discussed is not reflected in the table. A full revision of the Natural Resource Inventory Report should be included in the Appendix and a statement provided that indicates that the narrative is consistent with the full version. (Coleman (11/11/2013))*

### Response:

The text regarding plant species in both the DEIS and the Biological Assessment Report mention the more dominant species present on the property during most visits. The tables reflect all of the vegetation noted onsite during all visits, even if only a small number of a particular species was noted, or if it was noted on only a single visit.

## **Comment NR-3**

- *The natural resources chapter appears to consist of an edited version of the Natural Resource Inventory completed by Evans Associates. A full version of the Natural Resource Inventory Report should be included in the Appendix and a statement provided that indicates that the narrative is consistent with the full version. (Coleman (11/11/2013))*

### Resource:

The Biological Assessment Report prepared by Evans Associates is included in Appendix H of the DEIS. The narrative in the Natural Resources section of the DEIS is similar in content to the natural resources information presented in the Biological Assessment Report.

#### **Comment NR-4**

- *The breeding bird survey identified several forest interior bird species to be present on the subject parcel. Several of these species are listed as NYS special concern status species. Species such as the hooded warbler, ovenbird, veery, are ground and lower canopy nesting species. The impact of clearing of the site on these species and recommended mitigation measures should be provided. (Coleman (11/11/2013))*

#### **Response:**

The total initial disturbance to forested areas on site is approximately 32.7 acres. Ground and lower-canopy nesting bird species will see a reduction in their habitat. Avoidance and mitigation for the loss of this upland habitat includes avoiding direct impacts to all of the wetlands and the majority of the forested wetland buffers, and site design efforts that focus on conservation measures aimed at protecting the wetland and wooded wetland buffer habitats on the property. Please refer to Response NR-1 for more information on the proposed mitigation measures.

According to the information provided by New York State Department of Environmental Conservation (NYS DEC), “Species of Special Concern” are “those species which are not yet recognized as endangered or threatened, but for which documented evidence exists relating to their continued welfare in NY State.” The Species of Special Concern designation does not provide any additional protection under the NYS DEC rules and regulations. The Biological Assessment Report prepared for this project and included in the Draft Environmental Impact Statement listed all wildlife species observed on or potentially inhabiting the site, including species of special concern. The construction of the proposed project will result in the loss of 32.7 acres of upland forested habitat (60%) on the site and temporary grading disturbance of 0.61 acres of locally-regulated wetland buffer. The disturbed wetland buffer areas will be replanted following construction of the stormwater facilities, and will continue to provide protection of the downslope wetland areas. The 32.7 acres of upland forested habitat will be permanently lost and replaced with the proposed site development, and all species utilizing that habitat will be displaced. All of the wetlands and most of the forested wetland buffers will be preserved and will provide a linear corridor of unbroken forest and wetland habitat for wildlife movement through the site.

#### **Comment NR-5**

- *The data provided indicates that spring peepers were observed on the site and apparently breeding while within wetland C. This species is considered a potential vernal pool species and its use of the property may indicate potential habitat features are present near the site. (Coleman (11/11/2013))*

**Response:**

Based on site visits, there is no vernal pool within the site or north of the railroad tracks. Following construction, these species are expected to be limited to the undisturbed portions of the site. The placement of the project fills and retaining walls may limit movement north somewhat but it should be noted that movement of species within the site is already limited due to existing slopes, and the location of the roads, railroad track and wood operation on-site. As noted in response NR-7, the proposed project layout protects the majority of the locally-regulated wetland buffers, which extend well beyond the NYS DEC buffer and includes areas of upland forest where amphibians and reptiles may spend all or part of their life cycle outside of the breeding season. All areas of the site were searched for mammals, birds, amphibians and reptiles during the site inventory for the Biological Assessment.

**Comment NR-6**

- *A more detailed analysis of the adjacent state wetland may be necessary to determine the extent of this species use of the property and what the potential impacts may be to this species from development o the site and the importance of the upland habitat adjacent to the wetlands on and immediately adjacent to the site. More information is necessary to determine project impacts and mitigation measures. (Coleman (11/11/2013))*

**Response:**

The off-site portion of the adjacent state wetland (DEC Freshwater Wetland BR-18) is located on the opposite side of the railroad tracks. While the off-site wetland likely contains some ideal breeding habitat for amphibian species such as those found in Wetland C, the use of the on-site uplands by off-site species is severely limited by the presence of the railroad tracks. However, if in fact the on-site uplands are being utilized by off-site species, the forested buffer surrounding the DEC wetland will remain outside the clearing limit for the proposed project. As discussed in Response NR-7, the on-site buffers around the state wetlands will remain undisturbed and it is expected that the species using those areas will remain but be limited to those areas in the future.

**Comment NR-7**

- *The potential impact on amphibian and reptile species that utilize the property from clearing of the forested upland habitat has not been addressed. The report should also document whether spring peepers were observed utilizing upland areas of the site. (Coleman (11/11/2013))*

Response:

Spring peepers were not observed in the uplands on the site. However, since they are present in Wetland C, presumably they would also utilize the nearby on-site forested wetland buffer area. The wetland buffer surrounding Wetland C (where spring peepers and other amphibians were observed breeding) will remain intact beyond the DEC-regulated 100-foot wetland adjacent areas. Therefore, the upland areas most-likely utilized by spring peepers (and other amphibians) will remain.

The previously-proposed retaining walls surrounding the project have been replaced by a tiered system of boulder retaining walls and soil or rock fill embankments. These retaining walls and embankments will create a north to south migration barrier, but will not impact amphibian movement to the east and west within the forested wetland buffer. This barrier will protect many species by preventing them from entering developed areas of the site or reaching roadways. Snakes and other reptiles may be provided some new habitat within the walls and embankments.

### Comment NR-8

- *The criteria used to classify the wetland as a non-vernal pool habitat should be expanded within the DEIS. (Coleman (11/11/2013))*

Response:

According to the NYNHP conservation guide:

“Vernal pools are intermittently to ephemerally ponded, small, shallow depressions usually located within an upland forest. They are typically flooded in spring or after a heavy rainfall, but are usually dry during summer. Many vernal pools are filled again in autumn. The substrate is dense leaf litter over hydric soils. Vernal pools typically occupy a confined basin (i.e., a standing waterbody without a flowing outlet), but may have an intermittent stream flowing out of it during high water. Since vernal pools cannot support fish populations, there is no threat of fish predation on amphibian eggs or invertebrate larvae. Characteristic animals of vernal pools include species of amphibians, reptiles, crustaceans, mollusks, annelids, and insects. Vernal pool amphibians include spotted salamander (*Ambystoma maculatum*), blue-spotted salamander (*A. laterale*), Jefferson's salamander (*A. jeffersonianum*), marbled salamander (*A. opacum*), and wood frog (*Rana sylvatica*). Fairy shrimp (*Anostraca*) are obligate vernal pool crustaceans, with *Eubrachipus spp.* being the most common.”

Wetland C (the on-site portion of DEC-regulated Freshwater Wetland BR-18) was ponded during every site visit, including those conducted during the summer months, and rooted aquatic vegetation is present in the wetland. Therefore, this wetland is permanently ponded and does not exhibit the ephemeral characteristics of a vernal pool. Also, no evidence of the species of amphibians or crustaceans listed above were found in the wetlands.

According to the NYSDEC, “*Woodland pools* are a type of small, temporary wetland (or vernal pool) found in forested landscapes... they're usually not connected to permanent surface water flows. Instead, they fill from rain, snowmelt, or groundwater.” While Wetland C is mainly supported by groundwater, it also receives significant input from surface water runoff from upland areas on and near the site.

Therefore, Wetland C does not meet the criteria for a vernal pool because it is permanently ponded, does not support vernal pool amphibians (as listed by the NYNHP), and receives a significant hydrologic contribution from surface water.

#### **Comment NR-9**

- *The report indicates that 31 of the 52 acres of the site will be disturbed. The DEIS does not address the impacts to existing vegetation communities or the impacts on species. Information on the methods of tree removal and corresponding loss of habitat are not provided. No specific information is provided on tree protection measures. The impact on wildlife species as a result of the loss of tree cover should be evaluated and a discussion of how this impact will be mitigated should also be provided. (Coleman (11/11/2013))*

#### **Response:**

The loss of tree cover and forest understory will result in a loss of wildlife habitat and vegetative diversity on the site, which in turn will result in the reduction of wildlife utilizing the site. A Biological Assessment Report has been prepared for the site and can be found in Appendix H in the DEIS; the report discusses the vegetation, habitats, and wildlife likely to be found on the property. The site is not likely to contain any suitable habitat for any rare, threatened, or endangered species of plants or animals, and portions of the site are currently being used as a firewood harvesting and processing operation. The most significant potential impact to resident or migratory species using the site is the loss of a majority of the upland forest cover outside of the wetland buffers. However, the forest cover that will be lost following development is part of a highly fragmented landscape which includes major commercial development and transportation corridors, including the MetroNorth railroad corridor and Interstate 84.

The project design has been revised to reduce the development footprint and pull disturbance further from the wetlands and wooded wetland buffers. In addition, a Planting Plan (Drawing L-10, Composite Planting Plan) has been developed to protect the remaining forested areas following development and to enhance areas that are to be developed. Please refer to Response NR-1 for more information on the proposed mitigation measures.

Vegetated areas shown on the plans to remain, will be field identified by survey prior to start of work in any area. Construction fencing and/or erosion barriers will be established to protect vegetation to remain.

### **Comment NR-10**

- *The extensive clearing of 60% (31 acres of the 52 acres) of the upland forested cover should be quantified. This should include the number of trees to be removed and the potential impact from the loss of tree cover. (Coleman (11/11/2013))*

### **Response:**

Approximately 3,000 trees are located within the limit of disturbance for the site and are likely to be removed. Please see Responses NR-9, NR-11, and NR-12 for discussions of the potential impacts from the loss of tree cover.

As noted in the response to NR-9, the loss of tree cover and forest understory will result in a loss of wildlife habitat and vegetative diversity on the site, which will directly impact resident and migratory species, including forest interior species, utilizing the site. However, it is also noted that the forest habitat which will be lost is part of a highly fragmented landscape, with major barriers to wildlife movement. These barriers include the Metro-North railroad corridor to the east, the I-84 transportation corridor to the west, and NYS Route 312 to the north.

The construction of the proposed project will result in the loss of 32.7 acres of upland forested habitat (60%) on the site and temporary grading disturbance of 0.61 acres of locally-regulated wetland buffer. The disturbed wetland buffer areas will be replanted following construction of the stormwater facilities, and will continue to provide protection of the downslope wetland areas. The 32.7 acres of upland forested habitat will be permanently lost and replaced with the proposed site development, and all species utilizing that habitat will be displaced. All of the wetlands and most of the forested wetland buffers will be preserved and will provide a linear corridor of unbroken forest and wetland habitat for wildlife movement through the site.

In addition to the loss of upland forest habitat, the proposed removal of vegetation and replacement with impervious surfaces will increase the volume of runoff generated on the site. As discussed in response NR-11, the proposed stormwater management system for the project will capture and treat this runoff prior to it reaching the wetlands. The stormwater management features which are proposed to encroach within the wetland buffer areas (0.61 acres of temporary grading impact) will be replanted with native species, and will serve to protect the down gradient wetlands.

### **Comment NR-11**

- *The stabilization of existing slopes as a result of tree removal, increased runoff from loss of evaporation from tree cover, and corresponding loss of vegetation cover should be quantified and the impact on the function of remaining wetland buffer evaluated. (Coleman 11/11/2013)*

#### **Response:**

The proposed development will be separated from the stormwater facilities and the unaltered portions of the site with a 3-tier retaining wall system. This system will allow for stable slopes above the wall for site development, and will retain the existing, vegetated slopes below. Areas below the wall to be used for the stormwater management system will be graded and re-vegetated. Slope stabilization procedures during construction can be found in the Erosion Control Plan (see Site Plans ).

Untreated, and sometimes high-velocity and erosive stormwater runoff from Route 312 currently flows completely through the site and into DEC-regulated Freshwater Wetland BR-18 (Wetland C). In addition, stormwater runoff from other areas of the site, when not infiltrated into the soil, also flows without treatment or velocity control. The proposed removal of vegetation and replacement with impervious surfaces from portions of the site will increase the volume runoff from these areas; however, a stormwater management system has been designed to capture and treat this runoff as well as existing runoff. The stormwater management system for the proposed project includes controlling runoff from Route 312 within a drainage system containing several drop manholes. These manholes are designed to reduce the velocity of the flow as it travels through the site, where it is then released along a level spreader in the uplands near the wetland buffers, to mimic more natural conditions. The currently-existing, eroded channels that carry high-velocity stormwater runoff and sediment through the forest floor and into the wetland and wetland buffer will be no longer receive stormwater runoff from the highway, thereby returning this wetland buffer habitat to a more natural and less disturbed state. Please see Response WRW-1 for a detailed discussion of the stormwater system in relation to the treatment of runoff from the site.

Approximately 32.7 acres of wooded vegetation on the site will be altered by the proposed project, and minor grading (0.61 acres) will occur within the Town-regulated

133 to 166-foot wetland buffer. Areas to be re-planted with native trees, shrubs, and grasses are shown on the Planting Plan included in the Site Plans. The functions of the remaining wetland buffer will be minimally impacted. The main functions of the remaining wetland buffer include: providing a protective, vegetated area surrounding the wetlands, and providing a north-south corridor for wildlife travel along the wetlands. The wetland buffer may be better suited for these functions after development, as the high-velocity stormwater runoff that currently flows through the site will be slowed and damage from erosion and sedimentation will be minimized within the remaining wetland buffer.

In addition to the loss of upland forest habitat, the proposed removal of vegetation and replacement with impervious surfaces will increase the volume of runoff generated on the site. As discussed in response NR-11, the proposed stormwater management system for the project will capture and treat this runoff prior to it reaching the wetlands. The stormwater management features which are proposed to encroach within the wetland buffer areas (0.61 acres of temporary grading impact) will be replanted with native species, and will serve to protect the down gradient wetlands. Moving the discharge points outside of the locally-regulated wetland buffer would mean that the stormwater would be discharged in more steeply sloping portions of the site, which would increase the potential for erosion and transport of sediment into the wetlands.

With respect to Route 312, the majority of Route 312 pavement along the project frontage drains into the property by both overland flow and pipe. It was previously intended to divert an offsite subbasin #11 (as shown on the Post-Development Drainage Map) containing a portion of Route 312 and the entrance/exit ramp to I84 through the project by a separate pipe and outlet. Upon re-evaluation it has been determined that offsite subbasin #11, including all proposed lane widening within it (6,544 s.f.), can be captured in the site drainage system for treatment by infiltration and extended detention. Over the next 900 feet of Route 312 toward the north, lane widening will occur over an area of 7,200 s.f. Runoff from this existing pavement and widening will also be captured for treatment in the project's stormwater practices.

#### **Comment NR-12**

- *The DEIS does not provide sufficient details on how the impact of clearing will be mitigated. More specific details should be provided on the type of mitigation measures that will be used and more importantly where these measures will be located on the subject property. (Coleman 11/11/2013)*

#### **Response:**

Please see the Composite Planting Plan (Figure L-10) for details on the proposed mitigation

plantings. Please also refer to Response NR-1, NR-10, and NR-11 for more information on the potential impacts and proposed mitigation measures.

It should be noted that the existing site has been regularly logged and a portion of the site has been constantly in use as a logging operation for at least 20 years. Not all the large trees have been removed but the forest can not be considered to be undisturbed forest land.

As noted in the response to NR-9, the loss of tree cover and forest understory will result in a loss of wildlife habitat and vegetative diversity on the site, which will directly impact resident and migratory species, including forest interior species, utilizing the site. However, it is also noted that the forest habitat which will be lost is part of a highly fragmented landscape, with major barriers to wildlife movement. These barriers include the Metro-North railroad corridor to the east, the I-84 transportation corridor to the west, and NYS Route 312 to the north.

The construction of the proposed project will result in the loss of 32.7 acres of upland forested habitat (60%) on the site and temporary grading disturbance of 0.61 acres of locally-regulated wetland buffer. The disturbed wetland buffer areas will be replanted following construction of the stormwater facilities, and will continue to provide protection of the downslope wetland areas. The 32.7 acres of upland forested habitat will be permanently lost and replaced with the proposed site development, and all species utilizing that habitat will be displaced. All of the wetlands and most of the forested wetland buffers will be preserved and will provide a linear corridor of unbroken forest and wetland habitat for wildlife movement through the site.

In addition to the loss of upland forest habitat, the proposed removal of vegetation and replacement with impervious surfaces will increase the volume of runoff generated on the site. As discussed in response NR-11, the proposed stormwater management system for the project will capture and treat this runoff prior to it reaching the wetlands. The stormwater management features which are proposed to encroach within the wetland buffer areas (0.61 acres of temporary grading impact) will be replanted with native species, and will serve to protect the down gradient wetlands.

The tiered system of boulder walls that is proposed will allow some species of mammals and reptiles to use crevices within the lower wall for hibernation and den sites, while preventing the movement of other species into or across the development site. Use of a more conventional concrete retaining wall would act as a hard barrier and not allow any use by wildlife. In addition, the soil pockets within the tiered wall system will be vegetated, providing potential food (seed, nectar) for songbirds and insects.

### **Comment NR-13**

- *A tree preservation and tree replacement plan should be prepared that addresses the impacts to existing habitats. (Coleman 11/11/2013)*

Response:

Trees outside of the limit of development will be preserved. These areas will be protected during construction with an Erosion Control Plan as included in the Site Plan set. After development, the preserved areas will be protected by a 3-tier retaining wall. Replacement tree plantings are shown on the Composite Planting Plan (Figure L-10).

It has been acknowledged that the proposed project will result in the loss of upland wooded habitat that can not be mitigated. The composite planting plan is not intended to mitigate the loss of upland vegetation due to development, but rather to prevent or avoid the indirect impacts associated with development, such as the spread of invasive species and damage from wind and increased sunlight. The site will be cleared and graded in phases, in accordance with the NYS DEC Stormwater regulations, and the clearing will occur at the appropriate time of year (November to mid-March) to avoid disturbance of nesting/roosting species that may be utilizing the site.

**Comment NR-14**

*How many trees will be removed? What will the remaining slope facing south look like? How will the removal of trees be mitigated? (M&S Terlizzi (10/31/2013), (Public Hearing (11/07/2013)*

Response:

See response to NR-10.

The south facing slope will include a tiered retaining boulder wall system, and the existing trees between the infiltrator system and the railroad tracks as shown on the Site Plans will remain.