MCPB
Item #
May 27, 2010

[CORRECTED]

MEMORANDUM

DATE:	May ~~17~~ [21], 2010
TO:	Montgomery County Planning Board
VIA:	Mark Pfefferle, Acting Chief, Environmental Planning MP
FROM:	Doug Johnsen, Planner Coordinator dj Environmental Planning
PLAN NAME:	Equipment Maintenance and Operations Center Shady Grove ("EMOC")
PLAN NUMBER:	MR 2010709
PLAN TYPE:	Preliminary Forest Conservation Plan
REVIEW BASIS:	Forest Conservation Law, Chapter 22A of the County Code
ZONE:	I-3
LOCATION:	Crabbs Branch Way near Shady Grove Road and I-370 Gaithersburg, MD
APPLICANT:	Montgomery County Department of General Services
APPLICANT'S CIVIL ENGINEER:	ADTEK, Inc
HEARING DATE:	May 27, 2010

STAFF RECOMMENDATION: Approval of the Preliminary Forest Conservation Plan with the following conditions:

1. Compliance with the preliminary forest conservation plan received on May 11, 2010.
2. Submission of a final forest conservation plan consistent with 22A.00.01.09(B) of the Forest Conservation Regulations.
3. Before issuance of building permit for the EMOC project (MR2010709), a Memorandum of Understanding (MOU) shall be entered into between M-NCPPC and MONTGOMERY COUNTY that establishes the process for and the amount of credits for both stream buffer encroachments and forest conservation mitigation requirements to be granted using parkland, which shall be at a 1:1 ratio.
4. Applicant to plant areas on parkland identified by MNCPPC staff, preferably within the same watershed or in another location as approved by Environmental Planning staff, in an amount equal to the acreage of encroachment into the stream buffers for unacceptable uses (approximately 5.4 acres) as determined by the final forest conservation plan. Such planting shall be in accordance with Parks Department standards, and shall be in addition

to the forest conservation plan planting requirements as determined by the final forest conservation plan worksheet.

5. Applicant to maximize onsite forest planting and consider creating slopes of less than 3:1 so more forest can be successfully planted along the drive aisle to Roberts Oxygen.
6. Applicant to record a category I conservation easement over all retained and planted forests, wetlands, and stream buffers not permanently impacted by the facility prior to any land disturbing activities occurring onsite.
7. The offsite planting area must be planted prior to the completion and occupancy of the EMOC facility.
8. If the offsite planting is not on parkland owned by and titled in MNCPPC, the applicant must record a category I conservation easement to protect the planted forests.

DISCUSSION

There are two items for Planning Board review for the Shady Grove Equipment Maintenance and Operations Center (EMOC) facility. First is the Preliminary Forest Conservation Plan and the second is the mandatory referral application. This memorandum covers staff's review and recommendations on the Preliminary Forest Conservation Plan for the entire site, which, in accordance with Section 22A- 11(e)(2) of the Montgomery County Code, the Planning Board must consider when reviewing a mandatory referral application.

The Board's actions on the Preliminary Forest Conservation Plans are regulatory and binding. The Planning Board must act on the Forest Conservations Plan before it can proceed to make recommendations on the mandatory referral.

BACKGROUND

The 42.12-acre site is located at the intersection of Shady Grove Road and Crabbs Branch Way on the northwest corner. The project site is composed of three parcels; Casey 6 and Casey 7 which straddle the alignment of I-370, and a portion of Roberts Oxygen. Casey 6 is located on the north side of I-370 and Casey 7 is on the south side of I-370. The project site is bounded by Shady Grove Road on the south, CSX railroad track on the west, Roberts Oxygen and the town of Washington Grove on the north, and the alignment of the ICC on the east (Figure 1). The future alignment of Crabbs Branch Way extends through Casey 6. The site was subject to a previously approved preliminary plan of subdivision however, the applicant chose not follow through with a site plan and the land was acquired by the County. Therefore, the preliminary forest conservation plan approved by the Board as a part of this application supersedes any previously approved forest conservation plan for the subject site in its entirety.

The applicant is proposing to construct a new Equipment Maintenance and Operations Center to support the maintenance and operations of the County's Ride-On buses and some heavy equipment. Casey 6 will contain a warehouse, a maintenance shop, equipment storage, parking for 89 heavy equipment vehicles, and a fueling station. Casey 7 will be comprised of covered bus parking for 187 buses, a fleet/heavy equipment maintenance building, a fare collections building, a fueling and washing building, a compressed natural gas (CNG) fueling yard and associated parking for heavy equipment. A portion of Roberts Oxygen will include two sand/salt

barns.

Figure 1: Site Overview

Environmental Inventory

A Natural Resource Inventory/Forest Stand Delineation (NRI/FSD) was submitted for the subject site. Environmental Planning staff approved three NRI/FSDs for this site. The first was approved on February 19, 2002, the second was approved on October 17, 2005 and the third was approved on February 4, 2010. There are 6.94 acres of forest, 14.85 acres of stream valley buffer of which 5.73 acres are forested and 1.99 acres of wetlands on the subject property of which 1.60 acres are forested.

The site contains three streams and one wetland. The streams are headwaters to the Mill Creek within the Upper Rock Creek watershed, a Use Class IV stream. Mill Creek has a poor to fair resource condition, reflecting the dense development in its headwaters that was built with little or no stormwater controls. This area has primarily a combination of townhouses, single-family homes, apartments, and light industrial. In addition, the InterCounty Connector has further bisected the stream on the Casey 6 property from the lower portions of the stream.

The topography of the site is generally flat with some steep slopes associated with the incised stream channels. The site includes approximately 6 acres of forest in seven different forest stands. Each stand is delineated on the basis of dominant tree species mix, soils, topography, and location relevant to environmentally sensitive features. The majority of the forest, 4.80 acres, is located within environmental buffers and rated as the highest priority for retention. Approximately 2.2 acres of forest is outside of any stream buffers in an upland location and has a low priority for retention. Within the total on-site forest there are 24 trees that are 24" diameter breast height (DBH) or larger and of these 24 trees 5 trees are 30" DBH and greater.

FOREST CONSERVATION

This project is subject to the Montgomery County Forest Conservation law (Chapter 22A of the County Code) under section 22A-4(d) *"a government entity subject to mandatory referral on a tract of land 40,000 square feet or larger..."* The net tract is 42.44 acres in size which incorporates additions to the 41.04 acre original site for 1.40 acres of improvements outside the property lines. The majority of the forest, 4.80 acres, is located within environmental buffers and rated as the highest priority for retention. Approximately 2.2 acres of forest is outside of any stream buffers in an upland location and has a low priority for retention.

The submitted preliminary forest conservation plan (PFCP) shows the removal of 3.30 acres of forest and the retention of 3.21 acres of forest. The forest conservation worksheet indicates 5.74 acres of planting requirement associated with the forest removal. The forest to be retained is entirely within environmental buffers. The applicant's plan shows the planting of 0.15 acres of forest onsite leaving an offsite planting requirement of 5.59 acres.

The Shady Grove Sector Plan was approved and adopted in March 2006. The sector plan contains specific objectives for the Upper Mill Creek area. More specifically, the sector plan states:

> *"Create opportunities for a variety of land uses including public facilities, while respecting environmental resources, buffers and noise concerns on the site."*

The forest conservation law identifies priority areas for protection and indicates that the primary objective of a forest conservation plan is to avoid reforestation and to retain certain vegetation in undisturbed state. More specifically, section 22A-12(b)(1) states:

"(b) Retention

(1) The primary objective of the forest conservation plan should be to retain existing forest and trees and avoid reforestation in accordance with this Chapter. The forest conservation plan must retain certain vegetation and specific areas in an undisturbed condition unless the Planning Director finds that:

a. The development would make maximum use of any available planning and zoning options that would result in the greatest possible forest retention;

b. Reasonable efforts have been made to protect the specific areas and vegetation listed in the plan; and

c. The development proposal cannot be reasonably altered.

Section 22A-12(b)(2) identifies the areas to be remain undisturbed. This section specifically

states the " *....areas protected under this subsection include:.....(a) floodplains, stream buffers, steep slopes, and critical habitats...* "

The applicants plan shows a permanent encroachment of approximately 7.5 acres into stream buffers. Of this total approximately 2.1 acres is for necessary and allowable encroachments such as the master planned extension of Crabbs Branch Way, stormwater management outfalls, and a sanitary sewer line. These types of encroachments are typically approved by the Planning Board. The remaining 5.4 acres for encroachment is for non-typical uses such as; buildings, vehicle drive aisles, stormwater management facilities, refueling areas, and employee parking areas.
The EMOC facility is classified under the Federal National Pollutant Discharge Elimination System (NDPES) program as a stormwater management hotspot. This is because the nature of the operation has the potential to leak hydrocarbons and other contaminants into ground and surface waters. As a result, all vehicle and equipment maintenance facilities are required to obtain NDPES stormwater management permits and provide additional protections to prevent contamination of the water resources. The types of stormwater pollutants generated by maintenance and refueling stations provide few opportunities for the use of porous pavement as a stormwater management treatment technique. These types of facilities are required to separate the oil and grit from the runoff as a pretreatment prior to releasing the collected runoff to a stormwater management facility.

The applicant's submission shows a considerable amount of stream buffer encroachment on Casey 6 west of proposed Crabbs Branch Way and adjacent to the employee's parking lot. The applicant plan shows a buffer at eight (8) feet from the stream when the generally acceptable stream buffer is 125 feet. In other places, further west, a full stream/environmental buffer is provided. On another stream on Casey 6 that leads to Roberts Oxygen the applicant is providing a stream buffer approximately 40 feet from the stream or 1/3 of the normal stream buffer. On Casey 7, the applicant is proposing to encroach into state regulated wetlands and wetland buffers. Some of the encroachment is for part of a new building and others is for driveways and vehicle access ramps into bus maintenance structure. The state establishes a 25 foot buffer around all wetlands but Montgomery County has 40 foot wetland buffer for this stream. The applicant will be required to submit an application for a wetland permit from either the Maryland Department of the Environment or the U.S. Army Corps of Engineers, as only those agencies have the authority to require wetland permits. Those permit agencies will look at the impacts to wetlands the same way that Environmental Planning looks at impacts to stream buffers. That is: 1) can the encroachment be avoided, 2) if not, can the encroachment be minimized, and 3) finally, if the encroachment cannot be avoided or minimized, it must be compensated.

(1)(A) *The development would make maximum use of any available planning and zoning options that would result in the greatest possible forest retention.*

The applicant has subjected both Casey 6 and 7 to eleven design iterations to arrive at the current site layout. Each design iteration attempted to solve the problems of siting the required structures, addressing specific site requirements, addressing vehicle movement and retaining as much stream valley buffer as possible. The end result is the current site layout which attempts to minimize encroachments into the stream buffers without unreasonably compromising the service level at the proposed facility location.

(1)(B) *Reasonable efforts have been made to protect the specific areas and vegetation listed in the plan.*

Staff feels that reasonable efforts have been expended to protect the specific areas called out in the forest conservation law. Through the many design iterations, the more environmentally damaging operations such as the fueling station and the salt storage area were moved as far as possible away from the stream valley buffers. In addition to this aspect of the design, a number of other elements of the building and site design incorporate an environmentally sensitive approach:

- Project is planned to achieve LEED gold certification.
- New facilities take less land than the existing facility.
- New program and needs are larger than the existing program, but the new facilities design on less foot print than existing facilities by providing the first multi story depot for the county.
- Peak runoff has been reduced to pre-development conditions for both the one and two year events.
- Once completed, the buildings will have approximately 187,000 square feet (4.3 acres) of vegetative/green roofs. This equates to approximately 75 percent of all roof surfaces.
- One hundred percent of the average annual rainfall is treated by storm filters. These filters have data supporting the removal of more than 80 percent of the total suspended solids (TSS).
- Rainwater will be collected from the roof and will be used to wash buses, chassis, toilets, urinals, and hose bibbs. DGS expects a water savings anywhere from 30 to 40 percent from the collection and use of rainwater.
- In addition to installing an efficient automated bus washer, a water reclamation system capable of treating contaminated water runoff will be installed. The new EMOC bus wash water recycling system will save approximately 80% of the water used in the wash process and reduces sewer discharge by a similar amount.

(1)(C) *The development proposal cannot be reasonable altered.*

The proposed EMOC facility is using almost every space of land outside of the stream/environmental buffers so there is little or no opportunity to reconfigure the development application to avoid the impacts to the stream buffers. This is mainly because of the level of activities proposed for the land area. The Shady Grove Sector Plan indicates that "*public facilities, such as relocated County Service Park facilities, could be located in this area... Relocation of some of the service park facilities to Casey 6 and 7 could allow housing to be located closer to the Metro station.* One possibility would be to separate some of the functions but the Department of General Services has stated that this is not efficient to separate the uses. The level of service proposed on Casey 6 and 7 is the same as what is approved at the current location near the Shady Grove Metro.

Staff recommends that the Planning Board approve the preliminary forest conservation plan for a variety of reasons. These include:

1. The applicant will compensate for the encroachment into the stream buffer by planting trees and creating new forests in addition to the other forest conservation requirements.
2. The applicant is proffering to install a bicycle connection through their site to Brown Street.
3. The applicant is removing the impervious surface from the old site located on Crabbs Branch Way south of Shady Grove Road. This site will be developed in the future to assist in fulfilling the master plan objectives.
4. There is already some, but limited amount of impervious surface on the Robert's Oxygen parcel. Staff estimates this to be a parking lot of approximately 11,000 square feet. The applicant will place new impervious surfaces in the same location as this parking lot but the new surface will have stormwater management controls greater than what is currently used.

Forest Conservation Variance

Section 1607(c) of the Natural Resources Article, MD Ann. Code, identifies certain individual trees as high priority for retention and protection. Any impact to these trees, including removal or any disturbance within a tree's critical root zone (CRZ), requires a variance. An Applicant for a variance must provide certain written information in support of the required findings in accordance with Section 22A-21 of the Montgomery County Code. The law requires no impact the retention and protection to the greatest extent possible of all trees that measure 30" diameter at breast height (DBH) or greater; any tree designated as the county champion tree; trees with a DBH 75% or greater than the diameter of the current State champion for that species; and rare, threatened and endangered species,. Since this project did not obtain approval of a Preliminary Forest Conservation Plan prior to October 1, 2009 and the applicant is proposing to affect/impact three trees then a forest conservation variance is required. The applicant has requested a variance to impact the following three trees:

1. Black Cherry (*Prunus serotina*), 30" DBH, Tree #8
2. Yellow Poplar (*Liriodendron tulipifera*), 30" DBH, Tree #9
3. Red Maple (*Acer rubrum*), 32" DBH, Tree #15

In accordance with Montgomery County Code, Section 22A-21(c) the Planning Board referred a copy of the variance request to the County Arborist in the Montgomery County Department of Environmental Protection for a written recommendation prior to acting on the request. The County Arborist has 30 days to comment. In this case, the variance request was referred to the Montgomery County Arborist on March 18, 2010. The County Arborist responded on to the variance request on April 19, 2010 by stating that their office had no recommendations.

In accordance with Section 22A-21(e), Environmental Planning staff recommends a finding by the Planning Board that the Applicant has met all criteria required to grant the variance.

1). *Will confer on the applicant a special privilege that would be denied to other applicants.*

The requested variance [to remove trees #8 and #9 and impact, but save, tree #15] will

not confer on the applicant any special privileges that would be denied to other applicants. Other applicants will require variances and some are already in the process of obtaining a recommendation from the County Arborist before their subdivision plan comes to the Planning Board. Variances will be necessary in some cases to realize master planned densities and in other cases to remove a potentially hazardous tree and still others to obtain other planning goals. Therefore, staff believes that granting this variance is not a special privilege that would be denied to other applicants.

2). *Is based on conditions or circumstances which are the result of the actions by the applicant.*

The requested variance is based on site layout and design for the Equipment Maintenance and Operations Center. The current site layout and design necessitates the removal of two trees and impacting a third thereby requiring a variance for the maintenance buildings, drive lanes and associated parking for the center. The applicant has not explored options to reduced the amount of impacts to the stream valley buffers and the subsequent impacts to the three trees.

3). *Arises from a condition relating to land or building use, either permitted or nonconforming, on a neighboring property.*

The requested variance is a result of the proposed site design and layout on the subject property and not as a result of land or building use on a neighboring property.

4). *Will violate State water quality standards or cause measurable degradation in water quality.*

Staff believes that the requested variance will [not] violate State water quality standards or cause measurable degradation in water quality. ~~Under section 22A-16(d) of the County code "*The Board or Director may treat any forest clearing in a stream buffer, wetland or special protection area as creating a rebuttable presumption that the clearing had an adverse impact on water quality.*" Two of the three trees are located within stream valley buffers and are being removed or impacted due to the high amount of impacts to the stream valley buffers caused by the design of the project. The subject property is located within the upper reaches of the Mill Creek watershed which has a use IV designation.~~ [This variance request is for the necessary removal of trees #8 and #9 for vehicle drive lanes, and use of stress reduction measures to minimize impacts to tree #15 for a SWM outfall. The loss of these two trees will not cause undue impacts to water quality in the Mill Creek watershed.]

Staff Recommendation

Staff recommends the Planning Board grant the waiver and approve of the preliminary forest conservation plan with conditions.