The Maryland-National Capital Park and Planning Commission Prince George's County Planning Department Development Review Division 301-952-3530



Note: Staff reports can be accessed at www.mncppc.org/pgco/planning/plan.htm.

Preliminary Plan

4-07004

| Application | General Data | |
|--|------------------------------|------------|
| Project Name: | Date Accepted: | 3/5/07 |
| BRANDYWINE WOODS CONSERVATION SUBDIVISION | Planning Board Action Limit: | 07/23/07 |
| | Plan Acreage: | 97.04 |
| Location: | Zone: | R-R |
| Northwest side of Tower Road, 200 feet north of its intersection with Redwood Avenue and extending | Lots: | 133 |
| west to the CSX Railroad line and Cherry Tree Crossing Road. | Parcels: | 4 |
| Applicant/Address: | Planning Area: | 85B |
| TOWER TERRA, LLC P.O. Box 10111 | Tier: | Developing |
| Silver Spring, MD 20914 | Council District: | 09 |
| Property Owner: | Election District: | 11 |
| | Municipality: | N/A |
| TOWER TERRA, LLC | 200-Scale Base Map: | 218SE08 |

| Purpose of Application | Notice Dates |
|---|--|
| CONSERVATION SUBDIVISION 133 RESIDENTIAL LOTS AND FOUR CONSERVATION PARCELS | Adjoining Property Owners Previous Parties of Record Registered Associations: (CB-58-2003) 02/02/07 |
| | Sign(s) Posted on Site and Notice of Hearing Mailed: 06/12/07 |
| | |

| Staff Recommendation | | Staff Reviewer: Tom | Staff Reviewer: Tom Lockard | |
|----------------------|--------------------------|---------------------|-----------------------------|--|
| APPROVAL | APPROVAL WITH CONDITIONS | DISAPPROVAL | DISCUSSION | |
| | | X | | |

THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

PRINCE GEORGE'S COUNTY PLANNING DEPARTMENT

STAFF REPORT

SUBJECT Preliminary Plan of Subdivision 4-07004

Brandywine Woods, Lots 1–133, Parcels A–D

OVERVIEW

The subject property is located on Tax Map 145, Grid E-2, shown as Parcels 52, 94, 100 and 198. The site comprises 97.04 acres of land in the R-R Zone. The applicant is proposing to develop the site with 133 single-family residences and 4 conservation parcels pursuant to the Conservation Subdivision regulations. The conservation subdivision development technique was created by the District Council in order to allow for orderly development of land in a manner that "protect(s) the character of land through the permanent preservation of farmland, woodland, sensitive natural features, scenic and historic landscapes, vistas, and unique features of the site in keeping with the General Plan and Countywide Green Infrastructure Plan." (CB-06-2006) This is accomplished by placing a minimum percentage of the site to be developed into permanent conservation. In return, the minimum net lot area of the proposed lots is reduced, while the overall maximum density for the property's zoning classification is maintained. The percentage of required conservation area varies on a sliding scale according to the zoning of the property:

- (1) In the O-S Zone, a minimum sixty percent (60%) of the gross tract area shall be designated as a conservation lot or parcel. Up to forty percent (40%) of the gross tract area may be utilized for residential development areas.
- (2) In the R-A Zone a minimum fifty percent (50%) of the gross tract area shall be designated as a conservation lot or parcel. Up to fifty percent (50%) of the gross tract area may be utilized for residential development areas.
- (3) In the R-E and R-R Zones a minimum forty percent (40%) of the gross tract area shall be designated as a conservation lot or parcel. Up to sixty percent (60%) of the gross tract area may be utilized for residential development areas.

SETTING

The property is located on the northwest side of Tower Road, 200 feet north of its intersection with Redwood Avenue and extending west to the CSX Railroad line and Cherry Tree Crossing Road. The site is developed with a single-family residence and trailer, which are to be removed. The remainder of the site is wooded. The site adjoins a PEPCO power line right-of-way to the north, single-family residences to the east and south, and the Chalk Point CSX railroad line to the west. To the southwest of the subject property is a parcel of land owned by the U.S. Department of Defense known as the Brandywine Defense Reutilization and Marketing Office (DRMO) site. It was used for many years as a depository of waste materials for various DOD installations in the surrounding area. The DRMO site has been identified by the Environmental Protection Agency as a "superfund site" due to the presence of PCB, heavy metal, and TCE contamination. The southwest corner of the subject property may lie within the underground plume of contaminated ground water. A remediation plan for the DRMO site and

affected surrounding properties is undergoing, and it is estimated that the remediation of the southwestern corner of the subject property will take place within the next four to seven years.

The sketch plan shows two proposed access points onto Tower Road. Within the subdivision, a combination of public and private roads are proposed to serve the individual lots. The six lots fronting on Tower Road are shown as being served by a private road (alley) to their rears in order to avoid driveway cuts onto Tower Road.

The sketch plan shows, but does not accommodate, a proposed master plan collector roadway (C-613, Brandywine Road Relocated). The applicant proposes to have this right-of-way and the affected lots shown within it placed in reservation.

FINDINGS AND REASONS FOR STAFF RECOMMENDATION

1. **Development Data Summary**—The following information relates to the subject preliminary plan application and the proposed development.

| | EXISTING | PROPOSED |
|------------------------------|----------------------|-----------------------------|
| Zone | R-R | R-R |
| Use(s) | Vacant buildings and | 133 single-family dwellings |
| | woodlands | |
| Acreage | 97.04 | 97.04 |
| Lots | 0 | 133 |
| Parcels | 4 | 4 |
| Dwelling Units: | | |
| Detached | 2 (to be razed) | 133 |
| Public Safety Mitigation Fee | | No |

2. **Environmental**—The Environmental Planning Section has reviewed the revised preliminary plan and Type I tree conservation plan for a Conservation Subdivision, stamped as received by the Countywide Planning Division on June 13, 2007. A later revised plan was stamped as received on June 26, 2007, but it was not reviewed for this memorandum because it was received after the deadline for new information.

Background

The Environmental Planning Section previously reviewed the subject property during the approval of TCPII/62/99 as a forest stewardship plan to allow logging on the site. A field visit was not undertaken to determine whether or not logging was performed in accordance with that plan. A portion of this site was previously reviewed as Preliminary Plan 4-02121 and TCPI/04/03, which were withdrawn prior to the Planning Board hearing.

The Environmental Planning Section (EPS) has reviewed the sketch plan for this Conservation Subdivision, stamped as received by the Countywide Planning Division on October 23, 2006. Those plans were found to require additional information and/or revisions to satisfy the stated requirements for a sketch plan. No revised sketch plan has been referred to EPS for review or comment to date.

The current proposal is for the development of 133 single-family lots and four conservation parcels in the R-R Zone using the Conservation Subdivision design criteria.

This 97.04-acre property is located in the R-R Zone on the east side of the Consolidated Rail Corporation Tracks, north of Brandywine Road (MD 381) and west of Tower Road. A review of the available information indicates that nontidal wetlands and a stream are found to occur on the property. Transportation-related noise and vibration impacts are associated with the abutting railroad tracks. The soils found to occur according to the Prince George's County Soil Survey include Beltsville, Fallsington, Iuka and Leonardtown silt loam. These soils have hydrologic limitations that could affect the development of this property, including perched water table, poor drainage, and slow permeability. According to available information, Marlboro clay does not occur on this property. According to information obtained from the Maryland Department of Natural Resources Natural Heritage Program, there are no rare, threatened or endangered species found to occur in the vicinity of this property. There are no designated scenic or historic roads adjacent to the subject property. This property is located in the Mataponi watershed of the Patuxent River basin, and in the Mattawoman watershed of the Potomac River basin. The site is located in the Developing Tier as reflected in the General Plan, and contains regulated areas, evaluations areas, and network gaps as identified in the Countywide Green Infrastructure Plan.

Master Plan Conformance

The approved master plan for this area is the *Subregion VI Study Area Approved Master Plan* (September 1993) and *Approved Sectional Map Amendment* (May 1994) which is now almost 14 years old. In the approved master plan and sectional map amendment, the Environmental Envelope section contains goals, objectives and guidelines. The following guidelines have been determined to be applicable to the current project. The text in **BOLD** is the text from the master plan and the plain text provides comments on plan conformance.

1. An open space and conservation area network, based on existing soil conditions, slopes, watercourses, vegetation, natural ecological features, and estimated future population needs, should be established and maintained.

Comment: Review for conformance with the Countywide Green Infrastructure Plan will address this guideline.

2. Developers shall be encouraged to utilize the Comprehensive Design Ordinance, the cluster provisions and site plan review provisions of the subdivision regulations and other innovative techniques that ensure responsible environmental consideration.

Comment: The conservation subdivision regulations are an innovative new technique for promoting "responsible environmental consideration" during the development process, in coordination with other development requirements.

3. Land dedicated in accordance with the subdivision regulations for the provision of needed recreation facilities should not consist solely of floodplains or other parts of the Natural Reserve Areas.

Comment: The preliminary plan proposes private recreational facilities on a 3.45-acre conservation parcel located in the southwest quadrant of the intersection of Tower Road

and Tower Terrace. The conservation parcel contains an area of wetlands along with designated wetland buffers, which are not shown to be impacted by the recreational development proposed. The conservation parcel is proposed to be owned by the homeowners association and is not proposed for public dedication.

4. The responsibility for environmentally sound development practices should apply equally to private and public interests; decisions concerning the selection and the use of properties should be based on environmental considerations.

Comment: The proposal for conservation subdivision on this property, which is located in the Developing Tier where conservation subdivision is optional, demonstrates the interest of the private sector in applying environmentally sound development practices on sites with specific environmental considerations to be addressed.

5. All public and private development proposals shall be encouraged to capitalize on natural assets through the retention and protection of trees streams, and other ecological features.

Comment: The preliminary plan proposes the protection of all environmentally sensitive areas of the site, which are affected by streams, nontidal wetlands, and wetland buffers. No variation requests are required for the revised preliminary plan design.

6. Woodland associated with floodplains, wetlands, stream corridors and steep slopes shall be given priority for preservation.

Comment: The TCPI submitted with this application will be evaluated later in this memorandum for protection of priority woodland areas.

7. To the extent practicable, large contiguous tracts of woodland should be conserved in both upland and bottomland situations in order to reduce forest fragmentation, maximize woodland interiors, and reduce the edge/area ratio.

Comment: The TCPI submitted with this application will be evaluated later in this memorandum for protection of contiguous blocks of woodlands in order to minimize forest fragmentation, maximize interior woodlands, if possible, and minimize the edge/area ratio.

8. The Natural Reserve Areas, containing floodplain and other areas unsuitable for development should be restricted from development except for agricultural, recreational and similar uses. Land filling should normally be discouraged. Where permitted for special reasons, all necessary conditions should be imposed.

4-07004

Comment: The preliminary plan contains an expanded buffer adjacent to the stream that crosses the northern portion of the site and nontidal wetlands and wetland buffers that are required to be protected under state regulations. The proposed impacts to these features have been minimized; however, the site is proposed to receive extensive fill in order to provide buildings that are above the water table. This does not meet the criteria regarding "land filling should normally be discouraged."

9. All development proposals should provide effective means for the preservation and protection of Natural Reserve Areas, and development plans for lands containing open space and conservation areas should specify how and by whom these areas will be maintained.

Comment: Ownership and protection of the conservation parcel(s) identified must be determined during the preliminary plan review process.

10. Development plans and permits for development within the Conditional Reserve Area should be carefully reviewed for adherence to regulations regarding physiographic constraints and natural processes of the land.

Comment: The conservation subdivision development option allows for the protection of the natural reserve and conditional reserve to a greater extent than possible under conventional subdivision design criteria.

11. In the Perceptual Liability Areas, land uses such as school, residences, nursing homes and libraries that are sensitive to noise intrusion, air pollution, and other characteristics of excessive vehicular traffic should be protected by suitable construction techniques and by the enforcement of legally mandated standards.

Comment: The noise and vibration impacts related to the railroad tracks running along the western boundary of the property will be addressed by requiring all adjacent lots to maintain the 300-foot lot depth requirement of the Subdivision Regulations.

12. Developers shall be encouraged to include careful site planning and construction techniques which are designed to reduce the adverse impact of point and nonpoint source noise that exceeds the State's current maximum allowable levels for receiving land uses.

Comment: Because collector roads are not generally regulated for noise impacts, the proposed site design will only be evaluated for noise impacts from the adjacent railroad tracks.

Conformance to the Green Infrastructure Plan

The following policies support the stated measurable objectives of the Countywide Green Infrastructure Plan, based on the policies of the Environmental Infrastructure Chapter of the General Plan.

Policy 1: Preserve, protect, enhance or restore the green infrastructure network and its ecological functions while supporting the desired development pattern of the 2002 General Plan.

The subject property contains regulated areas, evaluation areas, and network gaps areas as identified in the Countywide Green Infrastructure Plan, which cover approximately 90 percent of the property.

The conservation subdivision as currently designed appears to meet the intent of the Green Infrastructure Plan because the proposed conservation parcel includes all of the nontidal wetlands and wetlands buffers contained in the evaluation area and network gaps; however, the proposal as currently designed does not represent a better preservation design than would be achieved using a conventional subdivision design. The preservation of the sensitive resources will be discussed in detail later in this memorandum.

Policy 2: Restore and enhance water quality in areas that have been degraded and preserve water quality in areas not degraded.

Preservation of water quality in this area will be provided through the protection of nontidal wetlands and buffers, the creation of conservation parcels, and the application of best stormwater management practices. It is recommended that low-impact development methods be applied on this site, to the fullest extent possible, although one difficulty is the high water table on this site which will affect the use of bioretention. A stormwater management concept approval letter and associated plans have not been submitted.

There was a concern that the extension of a sewer line into this property might affect the configuration of a ground water contamination plume related to the DRMO site located to the southwest of this site. An alternative sewer alignment has been proposed, but there are still concerns about how grading and development in the area may impact the contamination plume. This issue is related to water quality and groundwater contamination. As such, the development proposed may not meet the intent of the Green Infrastructure Plan because it may impact groundwater quality. This will be further addressed later in this memorandum.

Policy 3: Protect and enhance tree cover within the master plan area.

A TCPI has been submitted for review with the current application and will be reviewed later in this memorandum. Because this site is developing using the conservation subdivision approach, provision of the woodland conservation requirement entirely on-site is recommended.

Policy 4: Reduce overall energy consumption and implement more environmentally sensitive building techniques.

The development is conceptual at the present time. In future applications, the use of these building techniques should be addressed.

Policy 5: Reduce light pollution and intrusion into residential, rural and environmentally sensitive areas.

All street lights in the new subdivision should use full cut-off optics to ensure that light intrusion is minimized.

Policy 6: Reduce adverse noise impacts to meet State of Maryland noise standards.

Transportation-related noise impacts to this site from the adjacent railroad tracks will be mitigated by the provision of the required lot depth (300 feet).

Policy 7: Protect wellhead areas of public wells.

The site is not in a wellhead protection area and does not propose any public wells.

Conformance with the Conservation Subdivision Regulations

CB-4-2006 requires that an applicant file a sketch plan before a preliminary plan of subdivision for a conservation subdivision is accepted. It is further required that the Planning Director or her designee certify the completion of the sketch plan process prior to acceptance of the preliminary plan. The certification of the sketch plan is not the approval of a specific lot yield, but the completion of the sketch plan process for planning purposes.

The sketch plan submitted for this site generated the comments that were previously provided in a memorandum dated December 1, 2006. Many concerns were raised regarding the conformance of the sketch plan to the Conservation Subdivision Regulations.

The sketch plan was reviewed to determine if, first, this site is an appropriate site for the application of the Conservation Subdivision Ordinance because it is optional in the Developing Tier; and second, to determine if the sketch plan represents a design which provides for significant environmental benefit over what would be achieved through application of the standard subdivision process. Due to a significant amount of environmentally sensitive areas on this site and other site constraints, staff agrees that the property itself is a suitable candidate for the application of conservation subdivision principles.

The sketch plan was evaluated in comparison to the layout that could be achieved under a conventional subdivision and does not represent a greater level of conservation than could be achieved under that option.

The Environmental Planning Section recommends that the sketch plan be substantially revised to meet the spirit and intent of the conservation subdivision option.

The Environmental Planning Section previously reviewed the sketch plan to determine if the sketch plan submitted fulfills the intent listed in Section 24-152(e)(2), and comments were

provided in a memorandum dated December 1, 2006, and also provided below. The specific language of the ordinance is shown in **bold type** and EPS comments are provided in regular type.

- (2) The intent of the sketch plan is to clearly document the design process, and to prioritize the characteristics of the site to be preserved in a conservation parcel or lot. Priorities can be a combination of site characteristics and may include areas of the site not otherwise regulated by this Subtitle.
 - (a) The sketch plan shall document the existing features of the site. The characteristics of the site are generally categorized as follows:
 - (i) Scenic
 - (ii) Agricultural
 - (iii) Environmental, and
 - (iv) Historic

Comment: The specific scenic qualities of the site have not been identified. The Environmental Planning Section's character priorities for this site are the existing woodland, the stream and buffers, and the nontidal wetlands and buffers.

- (b) The sketch plan shall include:
 - (i) Existing grades at two-foot contours, and a non-disturbance line;
 - (ii) Information on surrounding properties to evaluate the opportunities for connectivity between characteristics of abutting properties,
 - (iii) Location and/or documentation of woodlands, farmland, farm structures, historic structures, streams, wetlands, scenic vistas, rock formations, hedgerows, pastures, cultural resources, unique views from streets and adjoining properties, and any other information pertaining to the character of a site. The sketch plan shall incorporate information from a signed natural resources inventory (NRI).

Comment: The sketch plan shows existing grades based on two-foot contours and a proposed limit of disturbance, but not conceptual grading. Although some information has been provided regarding surrounding properties, additional information regarding topography, existing tree lines, and the existing stream would be helpful in order to evaluate opportunities for connectivity. The sketch plan includes the location of woodlands, open fields, and environmental features, incorporating information from the signed NRI/005/06. The NRI includes documentation of woodlands, streams and wetlands.

(c) The sketch plan shall identify the areas proposed for conservation lots and parcels including conceptual house site and septic recovery area on conservation lots.

Comment: The sketch plan shows the areas proposed for conservation parcels. No conservation lots are proposed.

(d) The sketch plan shall establish a building and structures envelope on each conservation lot.

Comment: No conservation lots are proposed.

(e) The sketch plan shall propose locations for dwellings on that portion of the site determined to be least suitable for conservation.

Comment: The sketch plan shows the proposed location for dwellings on the eastern side of the site and outside of the delineated environmental features.

(f) The sketch plan shall locate areas of the site that have appropriate soils for septic recovery fields (community, shared and/or individual systems) if proposed and shall show areas for stormwater management facilities, if any, and the type of facility proposed

Comment: Individual septic recovery system areas are not proposed for this site.

(g) The sketch plan shall show conceptual locations for proposed roads, lot lines and setbacks.

Comment: The sketch plan shows all proposed roads, lot lines and setbacks.

(h) The sketch plan should designate existing environmental and landscape features such as groups of trees, specimen trees, hedgerows, and woodland areas.

Comment: The sketch plan combined with the NRI shows all existing environmental features and landscape features.

Natural Resources Inventory (NRI)

The preliminary plan is required to incorporate information from a signed NRI. A signed NRI (NRI/005/06) was submitted with the preliminary plan application, which shows the environmental features in conformance with the NRI. No additional information is required with regard to the approved NRI.

Woodland Conservation

This property is subject to the provisions of the Prince George's County Woodland Conservation Ordinance because the gross tract area is in excess of 40,000 square feet and there are more than 10,000 square feet of existing woodland on-site. A Type I tree conservation plan (TCPI/04/07) was submitted with the preliminary plan.

It should be noted that this site is part of a woodland mitigation bank approved under TCPII/05/96 Cherry Tree Crossing (Pyles Property) and contains three recorded individual woodland mitigation easements totaling 6.47 acres. These easements benefit TCPII/24/94 (3.69 acres; Glenshire Estates), TCPII/57/02-01 (0.87 acres, Capital Christian Fellowship) and TCPII/124/02 (1.91 acres, Penn-Belt Industrial Center). These easements are located in the northeastern portion of the site, and are delineated on the TCPI as part of the required

conservation area for the site. The General Notes and woodland conservation worksheet incorrectly indicate that this easement is "previously dedicated." The off-site woodland mitigation easements submitted fulfill the woodland conservation requirements for three benefiting properties.

The woodland conservation requirement for this site must be based on the net tract area of the entire site, including the off-site easement because "previously dedicated land" only refers to dedications for rights-of-way or other similar dedications.

Required Revisions: The TCPI worksheet should be revised to base the requirements on the full acreage of the property (97.07 acres). Include the area of woodland mitigation provided on this site for the benefit of other properties in the woodland calculation worksheet and provide a note containing all related TCPs for benefiting properties.

The Type I tree conservation plan, TCPI/04/07, has been reviewed and was found to require revisions. The plan proposes clearing 42.33 acres of the existing 88.30 acres of woodland. The woodland conservation threshold is 19.41 acres. Based upon the proposed clearing, the woodland conservation requirement for the site is 29.99 acres plus the 6.47 acres required for previously recorded off-site mitigation easements, for a total of 36.46 acres. The plan proposes to meet the requirement by providing 28.17 acres of on-site preservation and 1.21 acres of afforestation, which falls short of the requirements for the site. The TCPI plan and worksheet should be revised to indicate how the total woodland conservation requirement for the site will be met.

The NRI and sketch plan identified three specimen trees located on the property. The TCPI shows the critical root zone of the specimen trees and their intended disposition. None will be retained after development.

The legend of the plan sheets must be revised to correctly identify graphic elements. The graphic pattern labeled "tree conservation area" should be revised to read "woodland preservation area." The "existing woodland conservation easements" should be revised to read "Off-site woodland conservation mitigation easements" and the term should also be corrected in the general notes. Woodland preservation should not be shown in the ten-foot-wide public utility easement along Tower Road.

Afforestation is proposed to fulfill 1.21 acres of the woodland conservation requirement. The areas proposed are mostly small areas adjacent to stormwater management facilities. If the proposed afforestation lies within the stormwater management easement area, an approved technical plan showing landscaping at the required stocking rates of the Woodland Conservation Ordinance will be required prior to approval of the TCPII. All afforestation areas will be protected by permanent tree protection devices for a minimum of five years and be planted prior to the issuance of building permits for adjacent lots. All afforestation areas shall be labeled by proposed acreage. At time of TCPII review, some of these areas may be found unacceptable due to their size, lack of contiguousness, or placement in nonpriority areas. An afforestation area that is proposed within the ultimate right-of-way of the master-planned collector is not acceptable and should be removed from the plan.

Required Revisions: At least 30 days prior to any Planning Board hearing, the Type I tree conservation plan should be revised to:

a. Label all afforestation areas by size. Areas which are less than 10,000 square feet in area and not contiguous to a woodland conservation area are not acceptable.

- b. Show the ten-foot-wide public utility easement along Tower Road and remove woodland preservation areas from the public utility easement.
- c. Revise the legend to correctly identify graphic elements. The graphic pattern labeled "tree conservation area" should be revised to read "woodland preservation area." The "existing woodland conservation easements" should be revised to read "Off-site woodland conservation mitigation easements" and the term should also be corrected in the general notes.
- d. Revise the woodland conservation worksheet as needed to reflect the revisions required above and show how the woodland conservation requirement will be provided on-site.
- e. Have the revised plan signed and dated by the qualified professional who prepared the plan.

There has been a clearing impact to the off-site woodland conservation mitigation easements previously recorded for TCPII/24/94. This impact must be quantified and be mitigated as part of approval of the TCPI and TCPII for this site.

Required Revisions: Show the mitigation of clearing impacts to the off-site woodland conservation mitigation easement for TCPII/24/94, and provide appropriate notes.

Disposition of Existing Off-site Easements as Part of Conservation Parcel

The three off-site easements can be shown as part of the conservation parcel, but the area of the off-site mitigation easements must be in addition to the required conservation area, because the off-site mitigation easements already represent a density transfer from each benefiting property. The conservation parcel results from the transference of density from one area of the property to another by the use of reduced lot size requirements. Therefore, the off-site mitigation easements cannot be used twice for density transfer purposes.

Based on the zoning of this property, the conservation area requirement is 38.82 acres, before the inclusion of the off-site woodland conservation easement.

The conservation parcels should not be labeled "environmental conservation parcels," and should be individually identified (such as Parcel A, B, or C) and labeled by area.

The conservation parcels also appear to include the master planned right-of-way for the collector road crossing the site. This is not appropriate. The area of the master planned right-of-way within the conservation parcel should be labeled, and deducted from the area of the conservation parcel.

Required Revision: The preliminary plan and TCPI should be revised to provide the minimum conservation area requirement of 38.82 acres, based on the gross tract area of 97.04 acres, and not including the three off-site mitigation easements or the master planned right-of-way.

The Conservation Subdivision regulations indicate that the woodland conservation required for the site may be provided at an off-site location, only if it is necessary to preserve the rural and agricultural landscape. Because this site is currently mostly wooded, with no agricultural landscapes, all woodland conservation requirements should be met on-site.

Required Revision: The TCPI should be revised to show how all how the woodland conservation requirement will be met on-site.

Soils

This property is extremely flat and is underlain with soils that have limitations with respect to high water tables and impeded drainage. Extensive grading and filling may be necessary to provide adequate drainage to structures proposed to be placed on the site. Although these limitations may ultimately affect the construction phase of this development, there are no limitations that would affect the site design or layout once the nontidal wetlands and buffers are addressed as discussed later in this memorandum.

Comment: During the review of building permits the Department of Environmental Resources will likely require a soils study addressing the soil limitations with respect to the construction of homes. Basements may not be appropriate in this area.

Noise

The subject property abuts the Consolidated Rail Corporation tracks leading to the Chalk Point Power Generation Plant. The main use of these tracks is for the transport of coal for electrical generation. In the future, rail traffic on this rail line will increase to include the transport of gypsum, which will be used as a substrate for the new air-quality scrubbing system being added to the generating plant. The proximity of the railroad line has been identified as a concern on this site based on the proposed residential use. The preliminary plan respects the 300-foot lot-depth requirement adjacent to the rail right-of-way.

Section 24-121 (a) (4) of the Subdivision Ordinance requires that: "residential lots adjacent to an existing or planned transit right-of-way be platted with a minimum lot depth of three hundred (300) feet. Adequate protection and screening from traffic nuisances shall be provided by earthen berms, plant materials, fencing, and/or the establishment of a building restriction line, when appropriate." A 300-foot buffer lot depth has been maintained between all lots and the railroad tracks.

The location of the 65dBA Ldn contour related to the railroad tracks has been shown on the plan, but no Phase I noise study has been submitted. The location of the noise contour shown does not adversely impact the proposed residences. The railroad track label should be revised to read transit right-of-way centerline.

Required Information: A Phase I noise study should be submitted which supports the location of the 65 dBA Ldn noise contour related to the railroad tracks. The railroad track shall be correctly labeled transit right-of-way centerline.

Unsafe Land

The Health Department has provided extensive comments concerning the adjacent property that has been designated by the Environmental Protection Agency as a "superfund site" due to the presence of PCB contamination. The subject property may lie within the contamination plume of the superfund site and any proposed development may further affect the contamination plume.

Comment: The Environmental Planning Section defers to the Health Department as the lead agency regarding the hazard and ongoing mitigation actions related to the adjacent site.

Subdivision may not be appropriate at this time based on Section 24-131 of the Subdivision Ordinance, Unsafe Land, which states "The Planning Board shall restrict or prohibit the subdivision of land found to be unsafe for development."

Direct Access to Tower Road

None of the lots proposed should have direct access to the abutting road. The preliminary plan has been revised to retain lots fronting directly on Tower Road, but to eliminate direct access by points onto Tower Road, and a 50-foot-wide front yard building restriction line on the west side of Tower Road has been shown on the preliminary and TCPI plans.

Comment: The revised preliminary plan and TCPI show appropriately restricted access to Tower Road and maintain an appropriate 50-foot-wide front building restriction line, consistent with the setback maintained on the east side of Tower Road.

Trail Impacts

The plan shows an extensive network of trails located in afforestation areas and woodland preservation areas which scale at eight to ten feet in width. No information has been provided regarding their proposed construction material or method. Additional information is required to determine the compatibility of trails with afforestation areas and preservation areas proposed.

Required Information: Additional information should be provided about the proposed trail system with regard to width, material and construction methodology. Required cleared areas for construction and/or maintenance must be shown conceptually on the TCPI plan.

Water and Sewer Categories

The water and sewer service categories are W-4 and S-4 according to water and sewer maps obtained from the Department of Environmental Resources dated June 2003 and the site will, therefore, be served by public systems.

Environmental Staff Conclusions

The Environmental Planning Section concludes that Preliminary Plan 4-07004 and Type I Tree Conservation Plan TCPI/04/03 should not be approved for the following reasons:

- a. The plans submitted do not result in a better layout or preservation of the resources than a conventional design and do not meet the criteria for a Conservation Subdivision, as detailed below.
- b. The size of the conservation area has not been confirmed as fulfilling the minimum size of 40 percent of the gross tract area of the site and fulfilling the characteristics of a conservation area
- c. A stormwater management concept approval was not submitted. Because the site is extremely flat, it will be necessary to ensure that the stormwater concept proposed will work with the topography.
- d. The site is located directly adjacent to a known hazardous waste site that is undergoing remediation. Section 24-131 of the Subdivision Regulations state "The Planning Board

shall restrict or prohibit the subdivision of land found to be unsafe for development." [emphasis added] Until remediation has been completed and further testing results in no evidence of movement of the underground plume that has contaminated the water table, staff would not recommend subdivision of the subject property.

- e. A portion of the property is encumbered by a previous woodland mitigation bank and the disposition of this woodland and its treatment in this application are unclear.
- 3. **Community Planning**—The property is located in Planning Area 85B within the Cedarville community and is located in the Developing Tier. The vision for the Developing Tier is to maintain a pattern of low- to moderate-density suburban residential communities, distinct commercial centers, and employment areas that are increasingly transit serviceable. The proposed development is consistent with the 2002 General Plan development pattern policies for the Developing Tier.

The subject property is within the limits of the 1993 Subregion V Study Area master plan. This application, as described in this report, conforms to the low-suburban residential land use at up to 2.6 dwelling units per acre recommended in the 1993 Subregion V Study Area master plan.

4. **Parks**—In accordance with Section 24-134(a) of the Subdivision Regulations, the Park Planning and Development Division recommends that adequate private recreational facilities be provided in accordance with the standards outlined in the *Parks and Recreation Facilities Guidelines*.

A private recreational facility is demonstrated on the preliminary plan, adjacent to the northern access point onto Tower Road and Conservation Parcel D.

5. **Trails**—There are no master plan trails issues identified in the adopted and approved Subregion V master plan that impact the subject property. Roads in the vicinity of the subject property are open section with no sidewalks. There is no M-NCPPC parkland immediately adjoining the site.

Staff supports the internal trail network as shown on the cover sheet for the preliminary plan. However, the locations of the trails are not marked and labeled on some of the more detailed sheets. Trails should be marked and labeled on all sheets of the preliminary plan and should be a minimum of six feet wide and asphalt.

Due to the density of the proposed subdivision and in keeping with the county's goals of livable communities, staff recommends the provision of standard sidewalks along both sides of all internal roads and along the site's frontage of Tower Road, unless modified by DPW&T.

6. **Transportation**—The transportation staff determined that a traffic study detailing weekday analyses was needed. In response, the applicant submitted a traffic study dated March 2007. The findings and recommendations outlined below are based upon a review of these materials and analyses conducted by the staff of the Transportation Planning Section, consistent with the *Guidelines for the Analysis of the Traffic Impact of Development Proposals*.

Growth Policy—Service Level Standards

The subject property is in the Developing Tier, as defined in the General Plan for Prince George's County. As such, the subject property is evaluated according to the following standards:

Links and signalized intersections: Level-of-service (LOS) D, with signalized intersections

operating at a critical lane volume (CLV) of 1,450 or better is required in the Developing Tier.

Unsignalized intersections: The Highway Capacity Manual procedure for unsignalized intersections is not a true test of adequacy but rather an indicator that further operational studies need to be conducted. Vehicle delay in any movement exceeding 50.0 seconds is deemed to be an unacceptable operating condition at unsignalized intersections. In response to such a finding, the Planning Board has generally recommended that the applicant provide a traffic signal warrant study and install the signal (or other less costly warranted traffic controls) if deemed warranted by the appropriate operating agency.

Staff Analysis of Traffic Impacts

The following intersections were identified as critical:

US 301 and MD 381 (signalized)

MD 381 and Cherry Tree Crossing Road (unsignalized)

MD 381 and Tower Road (unsignalized)

Cherry Tree Crossing Road and Old Indian Head Road (unsignalized)

Dyson Road and Cherry Tree Crossing Road (unsignalized)

The existing conditions at the study intersections are summarized below:

| EXISTING TRAFFIC CONDITIONS | | | | |
|---|---|-------|----|--|
| Intersection | Critical Lane Volume (AM & PM & Saturday) Level of Service (LOS, AM & PM & Sat.) | | | |
| US 301 and MD 381 | 1,279 | 1,206 | СС | |
| MD 381 and Cherry Tree Crossing Road | 16.1* | 13.6* | | |
| MD 381 and Tower Road | 13.4* | 11.3* | | |
| Cherry Tree Crossing Rd and Old Indian Head Rd | 9.2* | 8.8* | | |
| Dyson Road and Cherry Tree Crossing Road | 9.2* | 9.4* | | |

^{*}In analyzing unsignalized intersections, average vehicle delay for various movements through the intersection is measured in seconds of vehicle delay. The numbers shown indicate the greatest average delay for any movement within the intersection. According to the guidelines, delay exceeding 50.0 seconds indicates inadequate traffic operations. Values shown as "+999" suggest that the parameters are beyond the normal range of the procedure and should be interpreted as a severe inadequacy.

It is noted that the traffic study utilizes the critical lane volume procedure for analyzing each of the unsignalized intersections. The guidelines clearly indicate that the unsignalized intersection procedure identified in the Highway Capacity Manual is to be used to analyze unsignalized intersections. While the study could have been rejected outright on these grounds, it was not because the use of the incorrect procedure in this circumstance did not lead to an incorrect finding. Nonetheless, it is noted that the results are reported using the unsignalized procedure consistent with past practices.

There are no funded projects within the study area in either the County Capital Improvement Program (CIP) or the State Consolidated Transportation Program (CTP). The traffic study identified two approved but unbuilt developments that would directly affect the critical

intersection. Two other sites, Brandywine Industrial Park and Brandywine Commerce Center, were not identified even though these sites both have record plats and are adjacent to one of the critical intersections. Both sites are apparent on the on-line public web site PGATLAS, and both are identified on the public development activity tool that is available for online development activity research. The sites include 5.552 million square feet of approved development. Annual through traffic growth of 3.0 percent per year was added to account for development and traffic growth in the general area. With background growth added, including the two developments that should have been factored into the analysis, the following results are obtained:

| BACKGROUND TRAFFIC CONDITIONS | | | | |
|---|--|-------|--|---|
| Intersection | Critical Lane Volume (AM & PM & Saturday) | | Level of Service (LOS, AM & PM & Sat.) | |
| US 301 and MD 381 | 1,667 | 1,631 | F | F |
| MD 381 and Cherry Tree Crossing Road | 17.6* | 14.3* | | |
| MD 381 and Tower Road | 14.2* | 11.4* | | |
| Cherry Tree Crossing Rd and Old Indian Head Rd | 9.4* | 9.1* | | |
| Dyson Road and Cherry Tree Crossing Road | 9.3* | 9.6* | | |

*In analyzing unsignalized intersections, average vehicle delay for various movements through the intersection is measured in seconds of vehicle delay. The numbers shown indicate the greatest average delay for any movement within the intersection. According to the guidelines, delay exceeding 50.0 seconds indicates inadequate traffic operations. Values shown as "+999" suggest that the parameters are beyond the normal range of the procedure and should be interpreted as a severe inadequacy.

The site is proposed for development as a residential subdivision. The site is proposed to be developed with 133 single-family detached residences. The site trip generation would be 107 AM peak-hour trips (28 in, 79 out) and 145 PM peak-hour trips (93 in, 52 out). With the trip distribution and assignment as assumed in the traffic study, the following results are obtained under total traffic:

| TOTAL TRAFFIC CONDITIONS | | | | |
|---|--|-------|--|---|
| Intersection | Critical Lane Volume (AM & PM & Saturday) | | Level of Service (LOS, AM & PM & Sat.) | |
| US 301 and MD 381 | 1,744 | 1,720 | F | F |
| MD 381 and Cherry Tree Crossing Road | 18.5* | 15.3* | | |
| MD 381 and Tower Road | 14.5* | 11.5* | | |
| Cherry Tree Crossing Rd and Old Indian Head Rd | 9.7* | 9.5* | | |
| Dyson Road and Cherry Tree Crossing Road | 9.6* | 9.9* | | |

*In analyzing unsignalized intersections, average vehicle delay for various movements through the intersection is measured in seconds of vehicle delay. The numbers shown indicate the greatest average delay for any movement within the intersection. According to the guidelines, delay exceeding 50.0 seconds indicates inadequate traffic operations. Values shown as "+999" suggest that the parameters are beyond the normal range of the procedure and should be interpreted as a severe inadequacy.

Given that all unsignalized study area intersections operate acceptably, no off-site transportation conditions will be recommended for the unsignalized intersections.

However, the traffic study incorrectly finds that the US 301 and MD 381 intersection operates adequately under total traffic. With the necessary components of background development in place, this intersection fails under background and total traffic conditions. The traffic study has not recommended needed improvements to obtain adequacy at that location. At this time, the Transportation Planning Section does not have sufficient information to recommend approval of this application.

Plan Comments

C-613, a planned collector facility shown on the Subregion V master plan, is shown on this plan. The plan suggests that 22 lots actually be placed into reservation. This strategy is problematic for two reasons:

- 1. The Transportation Planning Section has not received responses from the agencies regarding reservation that provide a period of time needed to complete the purchase of the needed right-of-way. Therefore, the statutory requirement needed to place property into reservation is not met.
- 2. If the lots could, indeed, be placed into reservation, there are concerns that the remainder of the subdivision could be constructed. Lots are not well situated adjacent to the right-of-way, and the overall adjacent portion of the subdivision is not designed as if the right-of-way were planned.

The proffer of reservation instead of dedication raises another issue. C-613 was put onto the Subregion V master plan as a means of providing a grade-separated intersection for MD 381 over the railroad tracks. While trains are not frequent, when the slow-moving coal trains use the tracks they can block traffic for 10 to 15 minutes at a time, and the overpass is deemed essential to providing emergency services located on the west side of the tracks to areas east of the tracks. This issue needs to be better addressed by the agencies that plan public services; nonetheless, it appears that the dedication of C-613 is needed for the development of any dense development on the east side of the Popes Creek Railroad tracks, and dedication, not reservation, should be shown on any plans.

Transportation Staff Conclusions

Based on the preceding findings, the Transportation Planning Section cannot conclude that adequate transportation facilities would exist to serve the proposed subdivision as required under Section 24-124 of the Prince George's County Code if the application is approved. This determination is based upon a staff determination that, with the appropriate list of approved development, the US 301/MD 381 intersection will not operate adequately under background and future traffic. No recommendations are included in the traffic study to alleviate the inadequacy.

7. **Schools**—The Historic Preservation and Public Facilities Planning Section reviewed this preliminary plan for school facilities in accordance with Section 24-122.02 of the Subdivision Regulations and CB-30-2003 and CR-23-2003 and concluded the following.

Finding

Impact on Affected Public School Clusters

| Affected School Clusters # | Elementary School Cluster 5 | Middle School Cluster 3 | High School Cluster 3 |
|-------------------------------|--------------------------------|----------------------------|--------------------------|
| Dwelling Units | 133 | 133 | 133 |
| Pupil Yield Factor | 0.24 | 0.06 | 0.12 |
| Subdivision Enrollment | 31.92 | 7.98 | 15.96 |
| Actual Enrollment | 3,898 | 5,968 | 78.35 |
| Completion Enrollment | 148.8 | 90 | 181 |
| Cumulative Enrollment | 5.28 | .9 | 1.8 |
| Total Enrollment | 4,084 | 6,066.88 | 8,033.76 |
| State Rated Capacity | 3,771 | 6,114 | 7,792 |
| Percent Capacity | 108.30 | 99.23 | 103.10 |

Source: Prince George's County Planning Department, M-NCPPC, January 2007

These figures are correct on the day the referral memo was written. They are subject to change under the provisions of CB-30-2003 and CR-23-2003. Other projects that are approved prior to the public hearing on this project will cause changes to these figures. The numbers shown in the resolution of approval will be the ones that apply to this project.

County Council bill CB-31-2003 establishes a school facilities surcharge in the amount of \$7,000 per dwelling if a building is located between I-495 and the District of Columbia; \$7,000 per dwelling if the building is included within a basic plan or conceptual site plan that abuts an existing or planned mass transit rail station site operated by the Washington Metropolitan Area Transit Authority; or \$12,000 per dwelling for all other buildings. Council bill CB-31-2003 allows for these surcharges to be adjusted for inflation and the current amounts are \$7,671 and \$13,151, to be a paid at the time of issuance of each building permit.

The school surcharge may be used for the construction of additional or expanded school facilities and renovations to existing school buildings or other systemic changes.

The Historic Preservation and Public Facilities Planning Section staff finds that this project meets the public policies for school facilities contained in Section 24-122.02, CB-30-2003 and CB-31-2003 and CR-23-2003.

8. **Fire and Rescue**—The Historic Preservation and Public Facilities Planning Section has reviewed this subdivision plan for adequacy of fire and rescue services in accordance with Section 24-122.01(d) and Section 24-122.01(e)(1)(B)-(E) of the Subdivision Ordinance.

The Prince George's County Planning Department has determined that this preliminary plan is within the required seven-minute response time for the first due fire station Brandywine

Company 40, using the 7-Minute Travel Times and Fire Station Locations Map provided by the Prince George's County Fire/EMS Department.

Pursuant to CR-69-2006, Prince George's County Council and the County Executive suspended the provisions of Section 24-122.01(e)(1)(A, B), regarding sworn police and fire and rescue personnel staffing levels.

The Fire Chief has reported that the department has adequate equipment to meet the standards stated in CB-56-2005.

9. **Police Facilities**—The Prince George's County Planning Department has determined that this preliminary plan is located in Police District V. The standard for emergency calls response is 10 minutes and 25 minutes for nonemergency calls. The times are based on a rolling average for the proceeding 12 months. The preliminary plan was accepted for processing by the Planning Department on March 5, 2007.

| Reporting Cycle | Date | Emergency Calls | Non-emergency |
|-----------------|-------------|------------------------|---------------|
| Acceptance Date | 2/06 - 2/07 | 10 minutes | 15 minutes |
| | | | |
| Cycle 1 | | | |
| Cycle 2 | | | |
| Cycle 3 | | | |

The response time standards of 10 minutes for emergency calls and 25 minutes for non-emergency calls were met on 03/16/07.

The Police Chief has reported that the department has adequate equipment to meet the standards stated in CB-56-2005.

Pursuant to CR-69-2006, Prince George's County Council and the County Executive suspended the provisions of Section 24-122.01(e)(1)(A, B) regarding sworn police and fire and rescue personnel staffing levels.

10. **Health Department**—The abandoned shallow well adjacent to the existing vacant house must be backfilled and sealed in accordance with COMAR 26.04.04 by a licensed well driller or witnessed by a representative from the Health Department as part of the raze permit. The location of the well should be located on the preliminary plan. Any abandoned septic tank must be pumped out and either removed or backfilled.

A raze permit is required prior to the removal of any of the structures (house, garage, three sheds) on-site. A raze permit can be obtained through the Department of Environmental Resources, Office of Licenses and Permits. Any hazardous material located in any structure on-site must be removed and properly stored or discarded prior to the structures being razed.

The former Brandywine Defense Reutilization and Marketing Office (DRMO) site located southwest of the subject property is listed as a "Superfund site." The Department of Defense (DOD), Environmental Protection Agency (EPA), Maryland Department of the Environment (MDE), and the Prince George's County Health Department are working through the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) process toward remediation. While surface contamination within the boundaries of the site has been

cleaned up, according to MDE, the groundwater contamination continues to be a problem both inside and outside the property boundaries, and certain areas of soil contamination outside of the boundaries still exist. The majority of this contamination moved west and northwest of the DRMO property. However, some of the contamination has been trapped along the east side of the railroad tracks and may impact the southwestern portion of the property within the conservation parcel. Remediation of surface and subsoil contamination (PCBs and heavy metals) along with isolated areas of groundwater contamination (TCE) within the southwestern edge of the subject property will likely occur over the next four to seven years. While groundwater contamination is not a primary concern within the confines of the subject property, there is an issue that could be problematic in remediating the groundwater contamination to the west of Cherry Tree Crossing Road. The dewatering of those lots closest to Cherry Tree Crossing Road could potentially alter the current configuration of the contaminated groundwater plume. Caution should be taken in dewatering near the contamination plume.

A second concern raised by the Health Department involved a sewer line extension that was being proposed through the contaminated area. That extension has been relocated and is no longer a concern.

- 11. **Stormwater Management**—The Department of Public Works and Transportation (DPW&T), Office of Engineering, has determined that on-site stormwater management is required. A stormwater management concept plan has been submitted to DPW&T but has not yet been approved. This is a critical element in this review because the site is extremely flat with a high water table. The Environmental Planning Section is requiring a copy of the approval letter and associated plans with sufficient time to analyze the impacts prior to any Planning Board hearing. Development must be in accordance with an approved plan.
- 12. **Historic**—Mataponi Branch is located about 270 feet north of the subject property and the landform is relatively flat. Prehistoric archeological sites have been found in similar settings and the subject property lies in close proximity to known prehistoric archeological sites.

A search of current and historic photographs, topographic and historic maps, and locations of currently known archeological sites was conducted. There are four currently known archeological sites identified within a one-mile radius of the property, three historic (18PR454, 18PR539, 18PR606) and one prehistoric (18PR544). The town of Brandywine lies just to the south of the subject property, which is also near the historic Southern Maryland Railroad. Two National Register properties, the William W. Early House (1907) and the Chapel of the Incarnation (1917), several historic sites, and historic resources are located within a two-mile radius of the subject property.

There are no residences shown in this area on the 1861 Martenet or 1878 Hopkins maps. A house and several outbuildings do appear on the 1938 aerial photograph on the eastern side of the property and this may be the same house still visible in the 2005 aerial photographs. Another outbuilding or house is visible in the southwestern portion of the property in the 1965 aerial photograph. Except for the above-described buildings, the property appears to have remained relatively undeveloped throughout the 20th century.

Recommendations

Prior to approval of this preliminary plan, Phase I (Identification) archeological investigations, according to the Planning Board's *Guidelines for Archeological Review* (May 2005), are recommended on the above-referenced property to determine if any cultural resources are present.

The entire 97.04 acres should be surveyed for archeological sites. A title search should be performed on the property to identify past owners and to determine whether those owners held slaves. The applicant should submit a Phase I Research Plan for approval by the staff archeologist prior to commencing Phase I work. Evidence of M-NCPPC concurrence with the final Phase I report and recommendations is required prior to signature approval.

Upon receipt of the report by the Planning Department, if it is determined that potentially significant archeological resources exist in the project area, prior to Planning Board approval of any detailed site plan or final plat, the applicant shall provide a plan for:

- a. Evaluating the resource at the Phase II level
- b. Avoiding and preserving the resource in place

If a Phase II and/or Phase III archeological evaluation or mitigation is necessary, the applicant shall provide a final report detailing the Phase II and/or Phase III investigations and ensure that all artifacts are curated in a proper manner, prior to approval of any grading permits.

13. **Conservation Subdivisions**: Sections 24-152(f)-(k) of the Subdivision Regulations contain the design criteria and required findings for conservation subdivisions. Staff comments, where applicable, have been added.

(f) Conservation Areas

- (1) The conservation area shall be located on a parcel or lot and characterized as primarily scenic, agricultural, historic or environmental, or any combination.
 - (a) A conservation easement for the purpose established on the preliminary plan shall be placed on the conservation area at the time of final plat. The conservation area shall be designated as either a parcel or a lot on the sketch plan, preliminary plat and final plat.
 - (i) A conservation parcel that includes stormwater management facilities and septic recovery areas associated with the residential development area shall be conveyed to the homeowners' association.

Comment: The conservation parcels shown on the plan include numerous small pocket wetlands (BMPs) proposed for stormwater management. There are no septic recovery areas because the site will be served by public sewer.

(ii) A conservation lot may support one dwelling unit.

Stormwater management or septic recovery areas not associated with the singe-family dwelling unit on the conservation lot shall not be permitted.

Comment: The applicant is not proposing any conservation lots.

(2) Design criteria for conservation areas.

(a) The area of the site required for a conservation parcel or lot shall be determined based on the priorities established in the review of the sketch plan, may include areas of the site not otherwise more specifically regulated by this Subtitle, and should be one parcel or lot to the extent possible.

Comment: The applicant identified woodlands, wetlands and contiguous habitat as the priorities to be conserved. Most of these areas are already regulated for conservation. The applicant has done a good job of creating a contiguous conservation area.

(b) Conservation areas shall connect with existing and potential conservation areas on abutting sites to encourage corridors of compatible site characteristics, unless it is found to be impractical due to topography, spacing or existing natural barriers.

Comment: Connections between the site and abutting properties are limited due to the existence of barriers (roads, railroad tracks, powerline right-of-way).

- (c) Naturally contiguous conservation areas shall not be divided for the sole purposes of obtaining allowable density.
- (d) Fragmentation of the conservation area into small, irregularly shaped conservation parcels and lots shall be avoided.
- (e) Farm structures shall be retained whenever possible.
- (f) The subdivision layout shall be designed to minimize potential adverse impacts on existing farm operations.
- (g) Woodland conservation required for the area of conservation parcels or lots may be provided at an off-site location, only if it is necessary to preserve the rural and agricultural landscape.

Comment: The applicant has not shown all of the required woodland conservation on-site and has not addressed how it will be met. Off-site mitigation would not be appropriate in this instance since there is no rural and agricultural landscape to conserve.

(h) Septic recovery areas and stormwater management facilities may be located on a conservation parcel to be maintained by the homeowners association if there is no adverse impact to the character of that area of land, and it is demonstrated that the residential development area cannot support these facilities. Stormwater management facilities in conservation parcels should not include typical dry ponds with associated steep slopes, dams, mowed areas, fencing or unsightly overflow structures. Farm ponds, bioretention ponds, naturally contoured ponds and wet ponds with wetland edges and no visible structures are permitted on the conservation parcel which is to be maintained by the homeowners association. Septic recovery areas within conservation parcels to be maintained by the homeowners association should be designed to appear to be part of the existing landscape.

Comment: The applicant is proposing pocket wetlands (BMPs) rather than conventional stormwater management facilities. There will be no septic recovery areas.

(g) Residential Development Areas

(1) The residential development area shall include individual lots, recreational facilities, community or individual septic recovery areas, stormwater management facilities, and all easements and streets serving these lots.

(2) Layout Design Criteria

(a) Internal streets shall be sited to maintain the existing grade as much as possible.

Comment: This site is almost uniformly flat. Grading for the street network will not change this.

- (b) Lots and the siting of dwellings shall be arranged and sufficiently set back to preserve views of the site characteristics from streets and abutting properties.
- (c) Dwellings should not be located in the center of open fields or on a ridgeline.
- (d) Existing farm roads and driveways should be incorporated into the internal street or trail design where possible.
- (e) Access to all lots should be from interior streets and easements.

Comment: All access is proposed from interior streets.

- (f) Dwellings and streets should be located at the edges of woodlands or situated in a manner that will maximize the amount of contiguous wooded area left intact.
- (g) Proposed street and driveway crossings through wetlands, floodplains, steep slopes, and streams are prohibited, unless the crossing will provide more efficient lot and street layout that provides less net disturbance of these features than an alternative layout.

Comment: The applicant has removed a street connection through a wetland at the request of the Environmental Planning Staff.

- (h) Trees on ridgelines should be preserved.
- (i) Dwellings should be located a minimum of 40 feet from any environmentally regulated area, including woodland conservation areas.

- (3) Lot Specific Design Criteria
 - (a) Buildings and driveways shall be sited to maintain the existing grade as much as possible.
 - (b) A variety of lot sizes and lot widths should be provided within clusters of dwellings in order to prevent visual monotony.

Comment: Several areas of proposed lots are very linear in nature which adds to visual monotony of the development. These areas include the central section of the site and the string of lots fronting on Tower Road.

- (c) Dwellings should be sited to avoid the rears being oriented toward the fronts of other dwellings and external streets. A landscape plan may be required to provide for the buffer of views of the rear and sides of dwellings from all streets and easements and the fronts of other dwellings.
- (d) Direct driveway access for individual lots onto perimeter streets shall be avoided unless necessary for safety reasons or for some other benefit such as environmental preservation.

Comment: The applicant is showing access to the houses fronting on Tower Road via a private road (alley). No direct access to Tower Road is proposed.

- (e) Large expanses of driveways and parking areas shall not be visible from the external streets and abutting properties.
- (4) Stormwater management. The applicant shall utilize low impact development techniques (LID), unless otherwise authorized by the Department of Environmental Resources. For purposes of this section, "low impact development techniques" (LID) refer to stormwater management designs that accommodate stormwater through the use of existing hydrological site features and by reducing impervious surfaces (roadways), curbs, and gutters; decreasing the use of storm drain piping, inlet structures; and eliminating or decreasing the size of stormwater ponds.

Comment: The applicant is proposing pocket wetlands (BMPs) rather than conventional stormwater management facilities.

(5) Gateway Signs permitted pursuant to Section 27-624 shall be reviewed by the Urban Design Section prior to the approval of the sign permit for compatibility with the character of the surrounding and proposed community.

Comment: The preliminary plan does not show areas for gateway signs.

(6) Lighting techniques should be utilized that decrease adverse impacts on the adjoining and abutting properties.

Comment: The preliminary plan contains a note stating that all community lighting shall use full cut-off optics and be directed downward to reduce glare and light spill-over.

(h) Scenic and Historic Roads

Development along a designated scenic or historic road shall conform to the following standards:

- (1) There should be no views of the rears of dwellings from the road.
- (2) Engineered berms for screening purposes are not permitted unless they are constructed to mimic natural contours.
- (3) Fencing along the road shall be rural in character.
- (4) Views from scenic and historic roads shall be preserved or may be created through the installation of landscaping that mimics natural conditions.
- (5) Trees and vegetation shall not be removed within the required setback unless in accordance with an approved tree conservation plan.
- (6) Existing slopes and tree tunnels along the street frontage should be retained, unless required to be removed by DPW&T or the State Highway Administration (SHA) for frontage improvements.
- (7) Buildings that are located within 200 feet from the street should be sited such that the principal entrance is oriented toward the street.
- (8) A scenic easement shall be provided along the frontage of a designated scenic or historic road abutting the 10-foot public utility easement. The scenic easement shall be a minimum of 40 feet and increased where appropriate to retain unique characteristics of the scenic and historic character of the road.
- (9) In general, access (public and private) to a scenic or historic road should be limited to the extent possible unless for safety reasons or for some other benefit such as environmental preservation, or to implement the stated purposes of this Division.
- (10) Septic recovery areas shall not be permitted within the scenic easement, unless determined appropriate.

Comment: The subject property does not adjoin any scenic or historic roads.

(i) Streets

(1) A conservation subdivision may be served by public and private streets, and access easements.

(2) Access authorized pursuant to Section 24-128(b)(1), (3) and (11) of the Subdivision Regulations may be deemed adequate to serve lots of any net lot area. Access easements designed in accordance with Section 24-128(b)(1) may be deemed adequate to serve a maximum of eight (8) lots. The access easement shall provide a passing area when determined appropriate.

Comment: Within the subdivision, a combination of public and private roads are proposed to serve the individual lots. The six lots fronting on Tower Road are shown as being served by a private road (alley) to their rears in order to avoid driveway cuts onto Tower Road.

(j) Criteria for Approval

The Planning Board shall find that the conservation subdivision:

- (1) Fulfills the purpose and conforms to the regulations and standards for a conservation subdivision.
- (2) Achieves the best possible relationship between the development and the conservation of site characteristics as prioritized in the sketch plan and preliminary plan.

Comment: In this instance, the applicant has identified existing woodland, sensitive natural features (wetlands), and contiguous woodland habitats (both on site and links to adjoining properties) as the site characteristics being preserved through the use of the conservation subdivision technique. There are no areas of productive farmland, farmland structures, historic structures, or scenic amenities identified on the site. It should be noted that preservation of environmentally sensitive areas and woodland are required of all subdivisions pursuant to Sections 24-130 and 24-132 of the Subdivision Regulations, respectively. The applicant does show a well planned, contiguous conservation area on the site; however, the site's ability to provide connectivity to environmental characteristics on adjoining property is limited by the presence of barriers (a railroad and road to the west, a road to the east and a high-tension PEPCO right-of-way to the north) along the periphery. In addition, the preliminary plan fails to show 40 percent of the gross tract area as conservation area, fails to accommodate master plan roadway C-613 (other than to propose reservation), and is potentially underlain by hazardous groundwater contamination. Nor has the applicant provided a draft conservation plan document. All of these factors lead the staff to conclude that this application does not present a proposal suitable for development pursuant to the conservation subdivision technique. The conservation subdivision plan submitted does not result in a better layout or preservation of the site resources than would a conventional subdivision design.

(k) Preliminary Plan

In addition to the information required for a major subdivision provided in Section 24-119, the preliminary plan for a conservation subdivision shall:

- (1) Include all information required in the sketch plan process, including the proposed purpose (scenic, historic, agricultural, or environmental) of the conservation area(s), and
- (2) Include a draft conservation easement document.

Comment: The applicant has not submitted this document.

STAFF RECOMMENDS DISAPPROVAL OF PRELIMINARY PLAN 4-07004 AND TYPE I TREE CONSERVATION PLAN (TCPI/04/07), BASED ON THE NEED FOR ADDITIONAL ENVIRONMENTAL INFORMATION, INADEQUATE TRANSPORTATION FACILITIES, AND FAILURE TO MEET THE REQUIREMENTS FOR A CONSERVATION SUBDIVISION.