

appropriate phasing to allow for the construction of sediment and erosion control structures.

2. Conformance to the conditions as stated in the DPA letter dated July 18, 2003 approving the elements of the SPA water quality plan under its purview, attached.

---

## SITE PLAN

---

**STAFF RECOMMENDATION:** Approval of 471 SFD, 414 Townhouses (inclusive of 44 MPDU Townhomes) and 48 MPDU Multifamily homes inclusive of 92 MPDU's and 188 TDR's with the following conditions to be met prior to signature set:

1. Lighting and Landscaping Plan

Staff to review the final landscape plans for adequacy of buffer along A-305 and inclusion of native plant. Staff to review final lighting plans for private streets and driveways and garages for conformance to IESNA guidelines for reducing light pollution.

2. Environmental Planning

- a. All residential units that will be subject to projected future exterior noise levels equal or exceeding 65 dBA Ldn, must be constructed to meet the 45 dBA Ldn interior noise standard.

Certification from an acoustical engineer that the building shell of impacted buildings along A-305 has been designed to attenuate projected exterior noise levels to an interior level not to exceed 45 dBA Ldn. Certification shall be distributed to M-NCPPC technical staff for review prior to release of building permit.

The builder shall construct these units in accord with acoustical design specifications, with any changes that may negatively affect acoustical performance approved by an acoustical engineer and M-NCPPC staff in advance of installation.

Prior to occupancy, the builder must certify, via written notice to M-NCPPC staff, that the residential units are constructed in accordance with the acoustical design specifications as identified.

All residential units that are subject to projected future exterior noise levels equal or exceeding 65 dBA Ldn shall be protected with exterior noise attenuation fencing.

- b. SWM waiver of open section streets within Special Protection Areas
- c. Forest Conservation Plan shall satisfy all conditions of approval prior to recording of plat and DPS issuance of sediment and erosion control permit.

3. Division of Permitting Services

- a. SWM Memo - Conditions of DPS Stormwater Management Concept approval letter dated July 18, 2003.
- b. Streets and Paving Memo of June 24, 2003.

4. Affirmation of Waiver of Subdivision Standards

- a. The Planning Board approves the waivers shown previously and are specified here as:
  - 1. Section 50-26 (h)(3) Waiver of Sidewalk one side of street for Cool Valley Ct and Tulip Tree Terrace
  - 2. Section 50-26(e)(3) - 25 Ft Truncation to radius truncation
  - 3. Section 50-26-(a)(1) Max block length of 1,600 ft - One Block at Rainbow Arch Drive and Robin Song Drive is longer
  - 4. Section 50-29(a)(2) -SFD Unit frontage on Public Street - for courtyards
  - 5. Section 50-29(a)(3)lot lines perpendicular to ROW - at radius
  - 6. Section 59-C-(a)(4) allow more than one unit on lot - for attached TH's (piggybacks)

5. Block Design Standards

For all single family lots less than 60 feet width at the building restriction line with front load garages, the following restrictions apply:

- A. No house elevations or colors will be the same as any home on either side or across the street.
- B. A minimum of 20% and a maximum of 70% of the homes will have a brick or stone front.
- C. A minimum of 30% of the homes will have a front porch of at least 15 feet in width.
- D. No more than 50% of the homes shall have garages which project closer to the street than the front wall or porch of the home. Homes with this type of elevation may be built only two in a row.
- E. Homes with the same elevation and color shall not be built within sight of each other.

## 5. M-NCPPC Parks Greenway Trail

- a. Applicant to construct an 8-foot wide asphalt/boardwalk hiker/biker trail in the Clarksburg Greenway on the property applicant currently owns. The alignment will follow the route established by the Clarksburg Greenway Facility Plan and be constructed to park standards and specifications. The Applicant will provide necessary bridges and boardwalk per the Facility Plan.
- b. Applicant will construct the portions of the hiker/biker trail from Stringtown Road east to Newcut Road and north to the Greenway Village Property that are not on applicant's property, provided that M-NCPPC acquires the ownership or easement rights across the needed property along the trail alignment and funds the proportionate cost to Applicant for construction of these additional sections of trail.
- c. Applicant will construct Foreman Boulevard to allow for grade separated crossing for the hiker/biker Greenway Trail. The trail crossing should be constructed to accommodate the trail under the road without changing the natural location, configuration or composition of the stream channel, and should be located to minimize flooding of the trail and minimize surface water runoff from the paved trail directly into the stream. Trail crossing to meet the "staff guidelines" as set out in the attached Meeting Summary of March 18, 2002, attached, unless otherwise agreed to by M-NCPPC staff and Applicant. Due to the substantial length of the trail under Foreman Boulevard, Applicant to install adequate lighting along the trail under the road. Final trail/road crossing details to be submitted to M-NCPPC staff for approval.
- d. The property within the delineated Clarksburg Greenway along Little Seneca Creek and Little Seneca Tributary will be dedicated to M-NCPPC and the hiker/biker trail constructed or clearly delineated and marked prior to construction of the residences that abut the Greenway. Dedication to be made at time of record plat and boundaries to be clearly staked to delineate between parkland and private property. Dedicated property to be transferred free of trash and unnatural debris.
- e. The entire school/park site on Snowdens Mill Parkway, including the ball field area at the north end, to be conditionally conveyed to the Board of Education at time of record plat for use as an elementary school. The deed shall contain a reversionary clause that provides that if the deeded school site property is not used, or ceases to be used for school purposes, the land will convey to M-NCPPC for use as parkland. If a conditional conveyance is not acceptable to the Board of Education, then the Applicant shall convey the property directly to M-NCPPC at time of record plat and a written agreement shall be negotiated between M-NCPPC staff and Board of Education staff that provides for transfer of the

property to the Board of Education if needed for school purposes. The site will be graded by Applicant, surfaced with topsoil, fine graded to a maximum of +/- 6" over 100', and seeded as appropriate for ball field cover.

#### 6. Signature Set Documentation

Submit a Site Plan Enforcement Agreement, Development Review Program and Homeowner Association Documents for review and approval prior to release of the signature set as follows:

- a. Development Program to include a phasing schedule as follows:
  - 1) Streets tree planting must progress as street construction is completed, but no later than six months after completion of the units adjacent to those streets.
  - 2) Community-wide pedestrian pathways and recreation facilities must be completed prior to seventy percent occupancy of each phase of the development.
  - 3) Landscaping associated with each parking lot and building shall be completed as construction of each facility is completed.
  - 4) Pedestrian pathways and seating areas associated with each facility shall be completed as construction of each facility is completed.
  - 5) Clearing and grading to correspond to the construction and infrastructure phasing.
  - 6) Phasing of dedications, stormwater management, sediment/erosion control, recreation, forestation, community paths, or other features.
  - 7) Noise attenuation design completed and accepted by M-NCPPC technical staff prior to release of building permits.
  - 8) Site plan #8-03002 will withhold 231 market-rate building permits (30 MPDUs /13%) until building permits for the construction of the required MPDUs (offsite) in the next phase are released. MPDU construction within Phase I to be included in Phasing Plan.
  - 9) Greenway dedication with record plat and trail construction prior to unit construction
  - 10) Park School dedication
  
- b. Signature set of site, landscape/lighting, forest conservation and sediment and erosion Control plans to include for M-NCPPC technical staff review prior to approval by Montgomery County Department of Permitting Services (DPS):
  - 1) Limits of disturbance.
  - 2) Methods and locations of tree protection.
  - 3) Forest Conservation areas.
  - 4) Note stating the M-NCPPC staff must inspect tree-save areas and protection devices prior to clearing and grading.

- 5) The development program inspection schedule and Site Plan Opinion.
- 6) Conservation easement boundary.
- 7) Streets trees 40 or 50 feet on center along all public streets.
- 8) Centralized, screened trash areas for all multi-family and one-family attached units except townhouses.

4. No clearing or grading prior to M-NCPPC approval of signature set of plans unless authorized by Infrastructure Plan or other approvals.

# FINAL WATER QUALITY PLAN- SPECIAL PROTECTION AREA REVIEW

## DISCUSSION

The 333-acre property is located in the southwest quadrant of Piedmont and Stringtown Roads in Clarksburg. The site is currently a mix of hay, corn, and soybean fields and forests. The property is zoned R-200/TDR 4, R-200/TDR-3, R-200, and PD-4. The proposed development of the site includes single-family detached units, townhouses, multi-family units, and associated infrastructure. The entire site is within the Clarksburg Special Protection Area.

The site is located within the Little Seneca Creek watershed. Water flows to the Town Center tributary, a first order tributary, and directly to the Little Seneca Creek. Both watercourses flow through the subject property and are designated as Use IV-P. The natural resource inventories for the site delineate the onsite environmental buffers.

Water quality plans are required as part of the Special Protection Area regulations. Under the SPA law, Montgomery County Department of Permitting Services (MCDPS) and the Planning Board have different responsibilities in the review of the water quality plan. MCDPS has reviewed and conditionally approved the elements of the final water quality plan under their purview. The Planning Board responsibility is to determine if the site imperviousness, environmental guidelines for special protection areas, and forest conservation requirements have been satisfied.

## SITE PERFORMANCE GOALS

As part of the final water quality plan, several site performance goals were established for the project:

- Protect the streams and aquatic habitat.
- Maintain the nature on-site stream channels.
- Maintain stream base flows.
- Identify and protect stream banks prone to erosion and slumping.
- Minimize storm flow runoff increases.
- Minimize increases in ambient water temperatures.
- Minimize sediment loading.
- Minimize pollutant loadings (nutrient and toxic substances).
- Protect springs, seeps, and wetlands.

## STORMWATER MANAGEMENT

To help meet these performance goals, the stormwater management plan requires water quality control and quantity control to be provided through an extensive system of linked best management practices (BMPs). Water quality control will be provided via several dry ponds.

Quality control will be provided via a treatment train that consists of vegetated conveyance swales, dry swales (vegetated swales underlain with infiltration structures), bioretention structures, surface sand filters, structural sand filters, and infiltration/recharge structures. In areas where open section roadways are not feasible, additional water quality structures are incorporated into the water quality plan to compensate for the lost benefits that open section roadways provide.

## **SITE IMPERVIOUSNESS**

There are no impervious limitations within the Clarksburg SPA. The impervious amount proposed for the 333-acre site is approximately 23 percent. Environmental Planning does not have impervious data from similarly zoned sites in the County to compare the data, however the impervious level is similar to other sites developed using R-200 standard method.

Environmental Planning looks for opportunities to reduce impervious surfaces on all plans reviewed and ways to reduce the imperviousness where incorporated into the plan. These include shared driveways, reduced width roadways, narrower hard surface trail, and sidewalks on one side of the roadways when appropriate.

## **ENVIRONMENTAL GUIDELINES**

The environmental guidelines for SPAs require examination of many tools to maximize achievement of site performance goals. For instance, the goal of protecting seeps, springs, and wetlands is better achieved with naturalized buffers surrounding these areas. The natural resource inventory for the Clarksburg Village site identified the environmental buffers. Environmental buffers include wetlands and wetland buffers, floodplains, and streams and stream valley buffers. As part of the Environmental Guidelines, the stream valley buffer must be reforested. Where trees do not currently exist, the applicant will plant new forests or supplement existing forests. The applicant will place forest conservation easements on the environmental buffers.

As part of the approval of the preliminary plan, the applicant requested and received permission from the Planning Board to encroach into the environmental buffers for stormwater management facilities. The preliminary plan conditions identified the ponds that could be partially located in the environmental buffers provided the facilities were reconfigured to maintain at least of the environmental buffer widths as undisturbed areas. Other stormwater management facilities could not encroach into the stream valley buffer any further than was approved in the preliminary water quality plan. The applicant has complied with the preliminary plan conditions.

Other impacts to environmental buffers are created and by stream crossings for A-305 (Midcounty Highway), A-302 (Newcut Road), and Foreman Boulevard. All proposed stream crossings are to be constructed using bottomless arch culverts. During the construction of the stream crossings, there will be impacts to wetlands. The U.S. Army Corps of Engineers and the Maryland Department of the Environment have jurisdiction over wetlands and are responsible to issuing wetland permits. The alignments of the Greenway trail and stream crossings for A-305

and A-302 were previously field located with various permitting agencies. The purpose of the field walks was to identify routes that avoid impacts to wetlands by utilizing boardwalk or by shifting roadway alignments.

## SITE PLAN REVIEW ISSUES

### I. ISSUE

Citizens have written the Planning Board and staff regarding the desire to close Piedmont Road from the proposed subdivision, a desire to use more native plant materials and a concern about tree preservation and buffers in the northeastern corner of the site. Their letters are attached.

#### Applicant Position

The applicant doesn't agree with the request to keep Piedmont Road separate from the new community - Piedmont will serve units proposed in the Clarksburg Village subdivision. A letter from staff in response is attached. Native trees are on the plant list. The applicant has removed a unit formerly adjacent to the Hayman property and planted a buffer along the property line.

#### Staff Recommendation

The Applicant has kept the connection to Piedmont Road per M-NCPPC and MCDPW&T staff recommendation. The location of Piedmont Road needed to be adjusted to fit the minimum separations from adjacent intersections. Native trees are on the plant list - availability prevents their complete usage on the site. The edge condition has been addressed by the developer's direct contact with the adjacent citizen. A proposed unit was removed in that location.

### II. ISSUE - SITE PLAN DEVELOPMENT

The Applicant has worked with staff since the initial design concepts were developed to achieve a community that works with environmental constraints, provides parkland, recreation areas and pedestrian amenities. The plans were developed to make a desirable orientation of units to the internal streets and well distributed open spaces adjacent units. The improvements include:

- **Location of A-305 (Snowden's Mill Parkway).** The master plan concept for the area showed the road location immediately adjacent to the tributary to the east. This proved to be infeasible due to environmental concerns for increased pollutant runoff in the stream valley and the grading required to keep the road there. The current layout has approximately 50% of the subdivision directly on the tributary open space.



- **Orientation of units to A-305 (Snowden's Mill Parkway).** The units do not "front" onto this north-south arterial but a buffer of preserved forest, berms, noise fences and landscaping and unit orientation (flag lots have been removed and no rear yards face the road).

- **Noise buffer along A-305 (Snowden's Mill Parkway).** The plans provide a noise buffer for outdoor attenuation using berms, noise fences and unit or garage orientation. A detailed noise study was used to analyze each unit within the noise-affected areas.

- **Effectiveness of preserved forest/ afforestation areas as a buffer of views of units from the road and of the road from the units.** Where this concern has been raised, additional evergreen plant material has been added, consistent with plant species in the forest conservation guidelines.

- **Access to Stringtown Road.** There are now two internal connections from the northern part of the subdivision to Stringtown Road, providing a variety of access options that are more efficient to different parts of the project. Also both access points are public roads, thus providing sidewalks on two sides of the street and a continuous row of street trees.

- **Open space systems.** Trees have been saved internally in patterns that coincide with the open space and pedestrian systems. Open spaces are spread evenly throughout the project. **Over 57% of the units either face or back onto a natural area or internal open space!**

- **'Windows on the Park.'** Approximately half of the frontage along A-305 or Snowden's Mill Parkway is adjacent parkland or open space. There are 5 access points or path connections from the subdivision to the adjacent Greenway Trail and 2 to the adjacent tributary. In one area (Sheet 8) the unit layout is crafted to allow direct views from A-305 to the Greenway Trail).

- **Stormwater management facilities.** The location and number of facilities vis a vis the environmental areas has been resolved to satisfy the needs of the Special Protection Area. The facilities have to be sited throughout the site for even infiltration.

- **Greenway Trail.** The location, the 600 foot dedicated area, the pedestrian connections and the details of the road crossings (utilizing bottomless arches, etc.) have been determined and shown. The applicant will build the trail (with M-NCPPC reimbursement).

- **Streetscape – Trees.** The plan includes street trees along A-305 or Snowden's Mill Road in a pattern that coincides with the draft Clarksburg streetscape guidelines – they are a double row staggered on the outside with a naturalistic

layout with a variety of species in the center island. Internally the streets have tighter street tree spacing than typically allowed because of the higher densities and more defined pedestrian environment.

-**Streetscape – Architecture.** In response to a concern about repetition of protruding garages within the front loaded garage sections (other Clarksburg projects have restricted the garage protrusion to be no further than the front-most part of the house), the applicant has provided staff with a block face composition plan that shows the variety within the streetscape front. This addresses the issue.

- **Lot design** – the lots have been modified to give each unit as much level area behind the units as possible.

### Applicant Position

The Applicant's proposal now encompasses these elements.

### Staff Recommendation

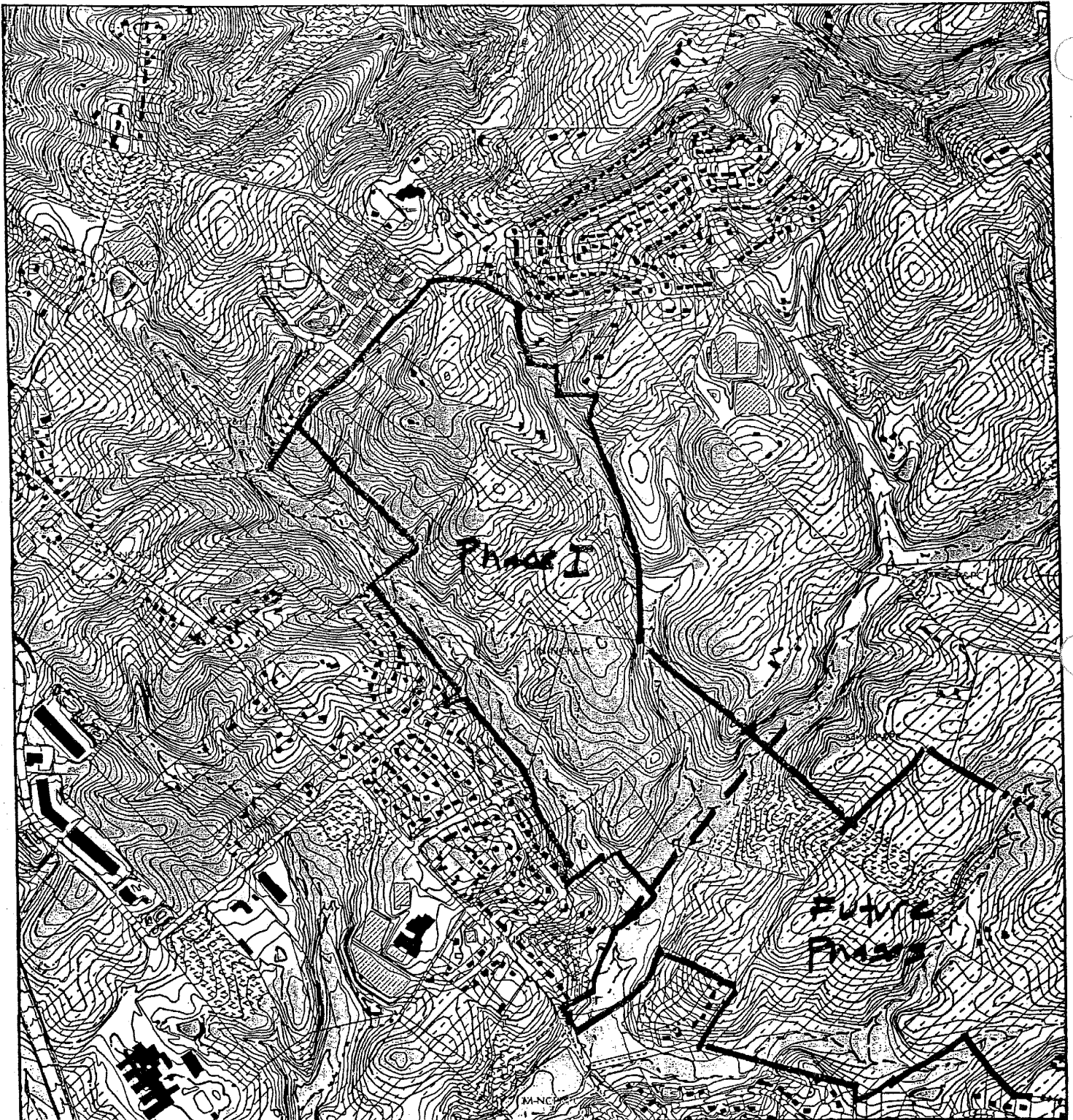
Staff concurs with the results of these developments.

**PROJECT DESCRIPTION:** Site Description

The site is located within the Special Protection Area (SPA) portion of the Little Seneca Creek Watershed (use IV waters). Seven streams traverse through the site as a whole: the main-stem of Little Seneca Creek, the Town Center Tributary, and five unnamed tributaries of Little Seneca Creek. About 286 acres of the site are in forest cover. The remaining land is in active agricultural use as fields and hedgerows. The topography over most of the site is rolling, with steep slopes occurring predominately within the stream valleys.

Stringtown Road forms the northern boundary, beyond which is the recently constructed Clarksburg Town Center (townhouse units face Stringtown Road). Little Bennett Park lies further to the north. East of the site is a stream tributary beyond which is the recently approved Greenway Village Subdivision (Phase I). Ovid Hazen Wells Park lies further to the north. South of the site is the Little Seneca Creek, beyond which are future phases of Clarksburg Village. West of the site is the Town Center Tributary, the site of the future Greenway Trail. Beyond the trail are wooded areas and the previously approved Highlands of Clarksburg site plan and the existing Clarkebrook Estates subdivision and Timber Creek Lane.

# CLARKSBURG VILLAGE-PHASE 1 (8-03002)



Map compiled on October 09, 2002 at 12:57 PM | Site located on base sheet no - 232NW12

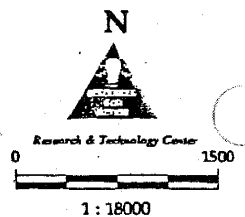
### NOTICE

The planimetric, property, and topographic information shown on this map is based on copyrighted Map Products from the Montgomery County Department of Park and Planning of the Maryland - National Capital Park and Planning Commission, and may not be copied or reproduced without written permission from M-NCPPC.

Property lines are compiled by adjusting the property lines to topography created from aerial photography and should not be interpreted as actual field surveys. Planimetric features were compiled from 1:14400 scale aerial photography using stereo photogrammetric methods.

This map is created from a variety of data sources, and may not reflect the most current conditions in any one location and may not be completely accurate or up to date. All map features are approximately within five feet of their true location. This map may not be the same as a map of the same area plotted at an earlier time as the data is continuously updated. Use of this map, other than for general planning purposes is not recommended. - Copyright 1998

Key Map



**PROJECT DESCRIPTION:** Proposal

The project is a combination of neotraditional and traditional unit layout with interconnecting streets and cul-de-sacs. Snowden's Mill Parkway forms the north-south spine for the project. It intersects with the Piedmont Road segment of the Mid-County Highway built with Clarksburg Town Center immediately to the north. Within this Site Plan, an elementary school is centrally located to the west of Snowden's Mill Parkway. A bike path from the eastern Greenway Village connects to the school through the tributary. A segment of the M-NCPPC Greenway Trail forms the western boundary of the site, with numerous path connections to the trail from the adjacent neighborhoods of this site plan.

'Traditional' subdivision lots – with front loaded garages and mid to large sized lots- are located to the north west corner of the site and the middle portion of the site. Tighter, neotraditional styled units are located in the northern third of the site and the southern portion of the site. The 'neotraditional' units are characterized by tighter unit spacing, free standing garages for detached and townhouse homes and centralized open spaces distributed within the blocks.

The street pattern forms interconnecting grids that allow for even dispersion of traffic and ease of access to each unit. Alleys are used to access the freestanding garages. There are numerous access points to the adjacent arterial streets. A primary road circles the elementary school for easier bus traffic circulation. A roundabout is located along the northern entrance to better control traffic speeds and form an entrance feature.

The pedestrian system is created from sidewalks within each street and paths through the open spaces and mews. Bike paths extend from Greenway Village subdivision to the east to the school site and from the neighborhood areas to the adjacent Greenway trail.

Landscaping includes street trees with spacing that relates to the location of the street and the adjacent land use (ie, tighter tree spacing next to neotraditional units, double row of trees along the Snowden's Mill Parkway). The roundabout is landscaped with appropriate material that allows visibility and creates an entry feature.

The buffer areas along Snowden's Mill Parkway are landscaped with a variety of evergreen buffers, aforestation materials with native evergreens within the FCP areas and noise fences where needed. The intent is to screen views of units from the streets and screen views of the streets from the units.

The open spaces and play areas are well developed with plant materials – layers of shrubs, shade trees and groundcovers- and benches and walks. Each mews is defined by landscaped corners and sitting areas which create public access and definition for the spaces. Each unit type has a typical unit foundation planting design that includes a flowering or shade tree that adds to the streetscape definition. The corner lots within the neotraditional areas include screen planting and fencing to buffer private back yards from public views and vice versa.

Tree preservation areas have been incorporated into the landscaping schemes for several areas. Where trees are preserved in rear yards, split rail fences are added to maintain the property line definition.

Recreation areas are dispersed throughout the subdivision, providing local structures play or sitting opportunities for each housing area. The recreation areas are designed to be attractive focal points within each community area.

Lighting is predominately provided in the public streets, under the review of MCDPW&T. The light fixtures provided will follow MCDPW&T's recommended light fixtures for Clarksburg Town Center area. The alleys will be lit with individual garage light fixtures that will not cause excessive glare or other light pollution.

# CLARKSBURG VILLAGE

**GENERAL NOTES**

1. This plan is prepared in accordance with the provisions of the Subdivision Control Act, Chapter 33, Article 24, of the Code of Maryland, and the Regulations of the State Board of Planning and Zoning, Chapter 17, Article 10, of the Code of Maryland.

2. The proposed subdivision is shown in accordance with the provisions of the Subdivision Control Act, Chapter 33, Article 24, of the Code of Maryland, and the Regulations of the State Board of Planning and Zoning, Chapter 17, Article 10, of the Code of Maryland.

3. The proposed subdivision is shown in accordance with the provisions of the Subdivision Control Act, Chapter 33, Article 24, of the Code of Maryland, and the Regulations of the State Board of Planning and Zoning, Chapter 17, Article 10, of the Code of Maryland.

4. The proposed subdivision is shown in accordance with the provisions of the Subdivision Control Act, Chapter 33, Article 24, of the Code of Maryland, and the Regulations of the State Board of Planning and Zoning, Chapter 17, Article 10, of the Code of Maryland.

5. The proposed subdivision is shown in accordance with the provisions of the Subdivision Control Act, Chapter 33, Article 24, of the Code of Maryland, and the Regulations of the State Board of Planning and Zoning, Chapter 17, Article 10, of the Code of Maryland.

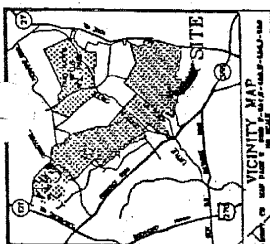
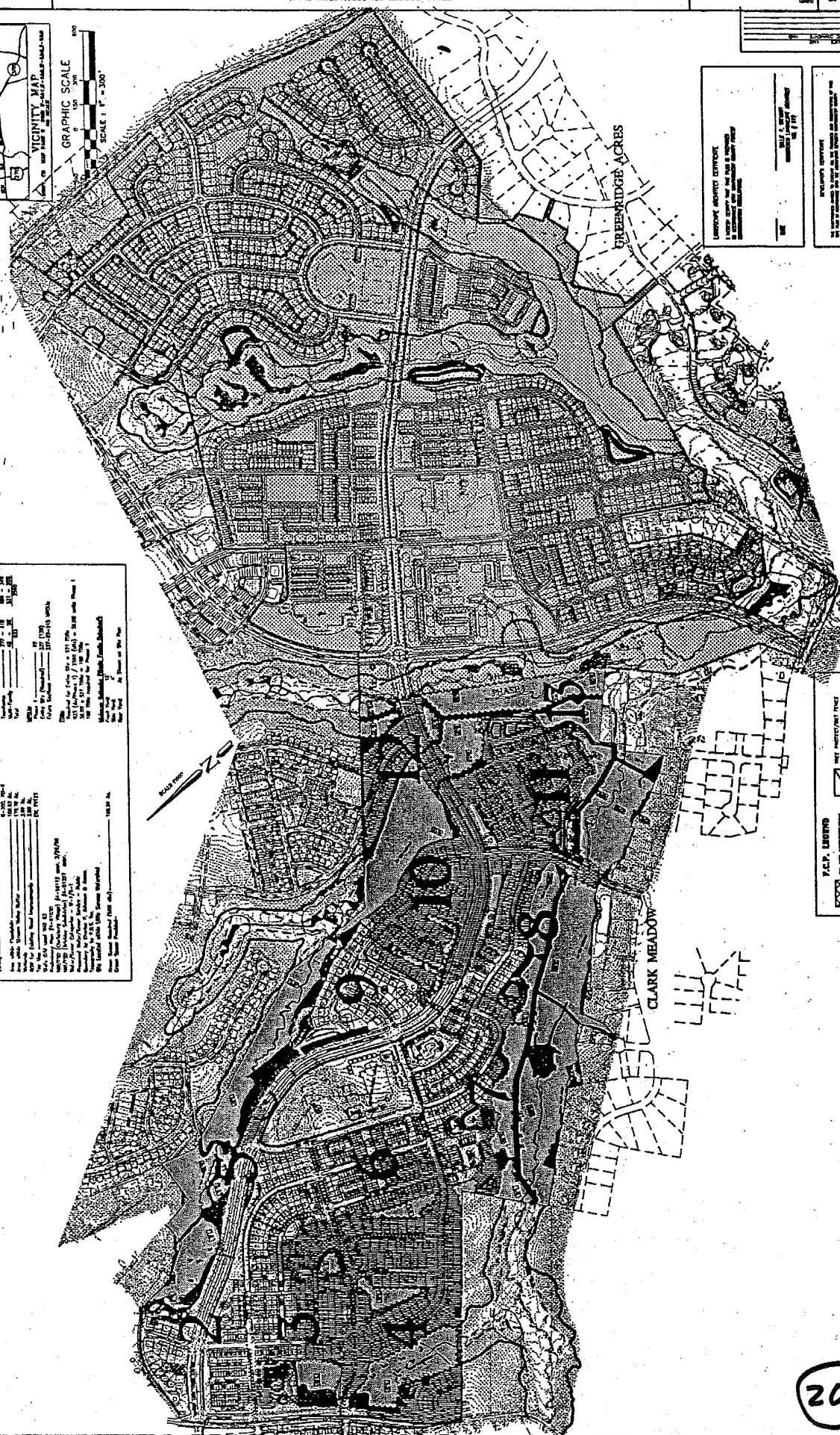
6. The proposed subdivision is shown in accordance with the provisions of the Subdivision Control Act, Chapter 33, Article 24, of the Code of Maryland, and the Regulations of the State Board of Planning and Zoning, Chapter 17, Article 10, of the Code of Maryland.

7. The proposed subdivision is shown in accordance with the provisions of the Subdivision Control Act, Chapter 33, Article 24, of the Code of Maryland, and the Regulations of the State Board of Planning and Zoning, Chapter 17, Article 10, of the Code of Maryland.

8. The proposed subdivision is shown in accordance with the provisions of the Subdivision Control Act, Chapter 33, Article 24, of the Code of Maryland, and the Regulations of the State Board of Planning and Zoning, Chapter 17, Article 10, of the Code of Maryland.

9. The proposed subdivision is shown in accordance with the provisions of the Subdivision Control Act, Chapter 33, Article 24, of the Code of Maryland, and the Regulations of the State Board of Planning and Zoning, Chapter 17, Article 10, of the Code of Maryland.

10. The proposed subdivision is shown in accordance with the provisions of the Subdivision Control Act, Chapter 33, Article 24, of the Code of Maryland, and the Regulations of the State Board of Planning and Zoning, Chapter 17, Article 10, of the Code of Maryland.



**CPJ Associates**

Charles P. Johnson & Associates, Inc.  
 1400 North Rockville Road, Suite 100  
 Rockville, Maryland 20850  
 Phone: (301) 771-1100

**FINAL FOREST CONSERVATION PLAN**  
**CLARKSBURG VILLAGE**  
 CLARKSBURG (2nd) SECTION DISTRICT  
 MONTGOMERY COUNTY, MARYLAND

DATE	1/14
BY	
CHECKED BY	
APPROVED BY	
SCALE	1" = 1/4 MI.

**LEGEND**

EXISTING ADJACENT FOREST  
 EXISTING ADJACENT FOREST  
 EXISTING ADJACENT FOREST

**CLARK MEADOW**

**GREENRIDGE ACRES**

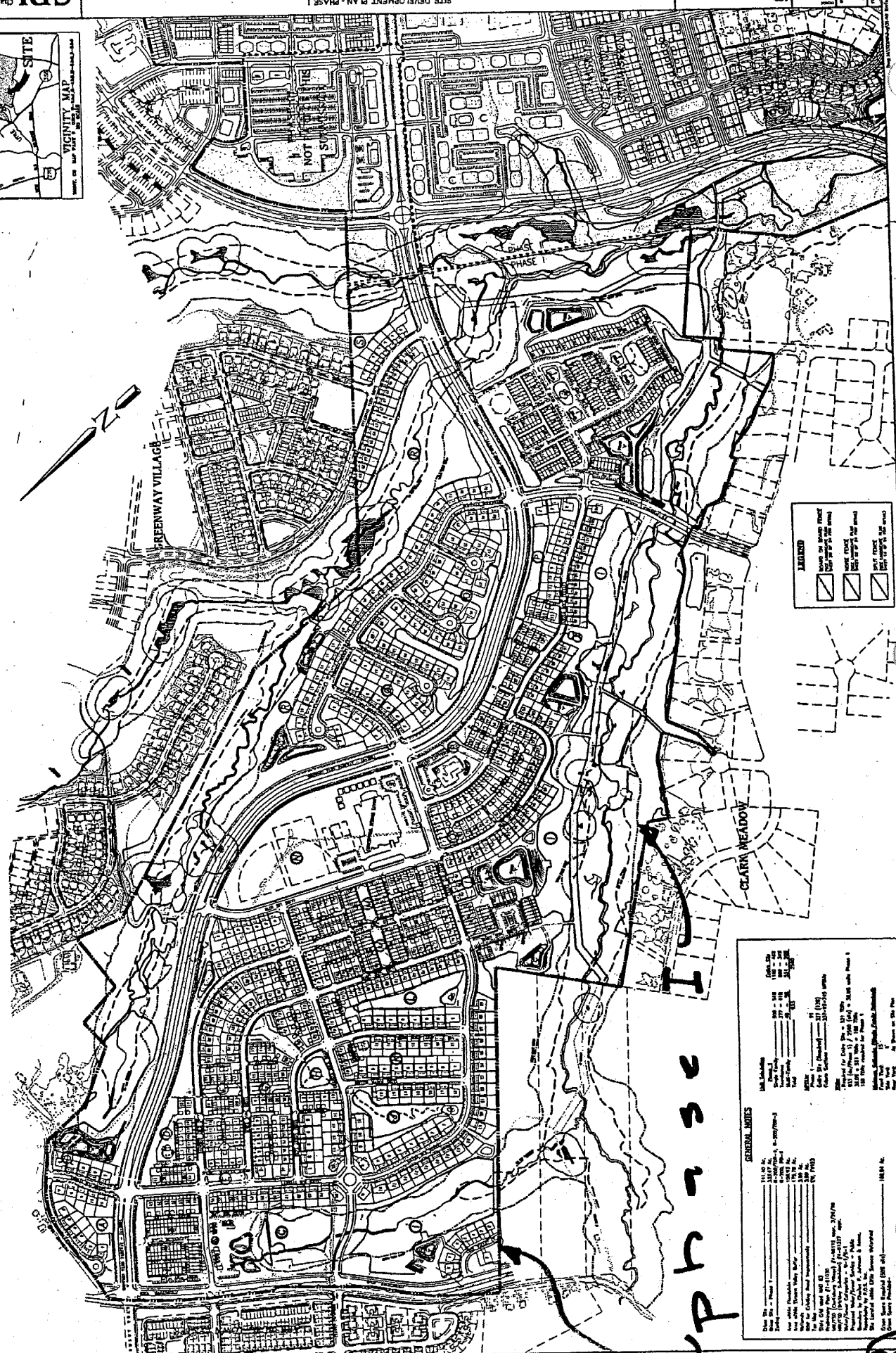
**F.A.P. LEGEND**

EXISTING ADJACENT FOREST  
 EXISTING ADJACENT FOREST  
 EXISTING ADJACENT FOREST

ADJACENT FORESTING WILL BE PROVIDED WITH THE L.D. IN ADJACENT FORESTED AREA OR A PROPOSED TREE SAVING POLICY HAVE BEEN

205 overall

# CLARKSBURG VILLAGE



UPHASE I

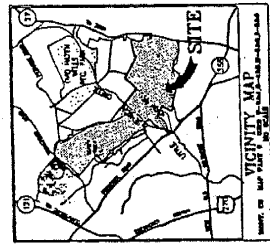
**GENERAL NOTES**

1. All work shall be in accordance with the specifications and drawings.
2. The contractor shall be responsible for obtaining all necessary permits.
3. The contractor shall maintain access to all existing utilities.
4. The contractor shall be responsible for the protection of all existing structures and utilities.
5. The contractor shall be responsible for the removal and disposal of all debris.
6. The contractor shall be responsible for the maintenance of all existing roads and sidewalks.
7. The contractor shall be responsible for the maintenance of all existing drainage systems.
8. The contractor shall be responsible for the maintenance of all existing landscaping.
9. The contractor shall be responsible for the maintenance of all existing parking areas.
10. The contractor shall be responsible for the maintenance of all existing utility lines.

Site Plan  
 Date: 10/15/88  
 Drawn by: [Name]  
 Checked by: [Name]  
 Approved by: [Name]

**LEGEND**

	EXISTING STRUCTURE
	PROPOSED STRUCTURE
	EXISTING DRIVEWAY
	PROPOSED DRIVEWAY
	EXISTING SIDEWALK
	PROPOSED SIDEWALK



**CPI ASSOCIATES**  
 Charles P. Johnson & Associates, Inc.  
 10000 Old Dominion Road, Suite 100  
 Fairfax, VA 22031  
 Phone: (703) 261-1100

SITE DEVELOPMENT PLAN - PHASE I  
 CLARKSBURG VILLAGE  
 CLARKSBURG (2ND) ELECTION DISTRICT  
 MONTGOMERY COUNTY, MARYLAND

DATE	10/15/88
SCALE	AS SHOWN
DRAWN BY	[Name]
CHECKED BY	[Name]
APPROVED BY	[Name]



**ANALYSIS: Conformance to Development Standards**

**PROJECT DATA TABLE**

Development Standard	Permitted/ Required	Proposed
Lot Area (ac.):	-	Total site : 741.40 acres Phase I: 333.87 acres
Density (dwelling/acre):		2.79 du/ac
<b>Dwelling Units:</b>		
One-family detached		471 (51%)
Townhouse		414 (44%)
Townhouse (MPDU)		44
Multiple-family (MPDU)		48
TOTAL	2590	933
Moderately-priced DU's	122	92 (9.8% of 13% required – see below)
Transferable Development Rights	521 (total site)	188 Phase I (933/2590=36% total units, 521x 36%=188 Phse I TDRs)
<b>R-200/MPDU Development Standards – NW Corner of site</b>		
Density	2.44	
Detached d.u. front yd	25 ft	25 ft.
Rear yd nest to non MPDU zone	20 ft.	20 ft.
Min Lot SFD	6,000 sf.	6,012 sf
Min Lot Townhouse	1,500 or less	4,000
Min Lot size -Attached	Planning Board waiver to allow more than one unit on lot per Section 59-C-(a)(4)	
Max Bldg. Height	3 stories/40 ft.	3 stories/ 40 ft
Green Area - 2,000 sf per Th/Atch.	1.7 ac	18.5 ac
<b>TDR/Development Standards TDR-3 – Remainder of the site</b>		
30% SFD Min	30%	51%
35% Green Area Min.	116.87 ac	166.94 ac (50%)
<b>Setbacks (ft.):</b>		
Front yard		15 ft
Side yard		4 ft.
Rear yard		as shown

**Parking:**

Total 933 x 2 = 1866

1866

Note: On Sheet 11 – where there it is developed with garage and non-garage townhouses and multifamily units 414 parking spaces are required and 730 spaces are required. Staff will review this area to see if the overage negatively impacts the impervious areas.

**MPDU CALCULATIONS:**

MPDUs required (13% of 933 units) = 122 MPDUs  
MPDUs provided (9.8) of total Phase I)= 92 MPDUs

The applicant is required to provide the full number of MPDUs prior to release of the last building permit for this site. The remainder of MPDUs for this site will be provided in Phase II where the units will be closer to the town center retail/commercial area and other facilities. In order to comply with the phasing requirements of the MPDU law, this site plan will withhold 231 market-rate building permits (30 MPDUs /13%) until building permits for the construction of the required MPDUs (offsite) in the next phase are released.

**TDR CALCULATIONS**

The attached Memo dated November 7, 2002 from Elm Street Development by David Flanagan has been reviewed by staff and accepted as the basis for the TDR calculations for this site. This site plan for Phase I will provide 188 or 36% of the total TDRs required –equivalent to the percentage of units within this phase.

**TDR Calculations**

Permitted density – 2,708 Dwelling Units

R-200/TDR-4	86.0 ac x 4.88 =	419.68 dus
R-200/TDR-3	573.7 ac x 3.66 =	2099.74 dus
R-200	77.6 x 2.44 =	189.34 dus
PD-4	4.3 ac	0 dus

Proposed Density – 2,590 Dwelling Units

1. Percent Density Bonus  
2590 – 1482 (Base Density)- 500 (250 multifamily TDR's)-  
495 (1 for 1 TDR's) – 113 units = min density bonus  
113/(1482+995)= 4.6% density bonus
2. Number of MPDUs  
4.6 density bonus = 13% MPDU (from table)  
2590 x .13 = 337 MPDUs

3. Number of TDR's

MPDUs (337) greater than density bonus (113) – no bonus market rater units

2590 (units provided) – 1482 (base density) – 337 MPDU = 771 units from TDRs

250 Multifamily (2 dus for 1 TDR) = 500 units

271 th's and sfd (1 du ofr 1 TDR) = 271 units

771 units from TDRs

4. Unit Summary:

a. Base Density	1482
b. TDRs	271
c. 250 TDRs (2 for 1)	500
d. MPDUs	<u>337</u>
	2590

Total TDR 521

Total MPDU 337

## 5. RECREATION CALCULATIONS:

### Clarksburg Village - Phase 1 Recreation Worksheet

#### DEMAND POINTS PER POPULATION CATEGORY

TYPE	#DU	TOT (D1)	CHILD (D2)	TEEN (D3)	ADULT (D4)	ELDERLY (D5)
SFD II ( 7,000-9,000 sq. ft.)	189	24.6	45.4	47.3	200.3	20.8
SFD III (<7,000 sq. ft.)	319	44.7	60.6	73.4	405.1	41.5
TOWNHOUSES	377	64.1	82.9	67.9	486.3	373.2
GARDEN	48	5.3	6.7	5.8	56.6	7.7
<b>TOTAL REQUIRED</b>	<b>933</b>	<b>138.6</b>	<b>195.6</b>	<b>194.2</b>	<b>1148.4</b>	<b>443.2</b>

#### SUPPLY POINTS OF ON-SITE RECREATION FACILITIES

FACILITY	QUAN.	TOT (D1)	CHILD (D2)	TEEN (D3)	ADULT (D4)	ELDERLY (D5)
Bike System	N/A	6.9	19.6	29.1	172.3	44.3
Pedestrian System	N/A	13.9	39.1	38.8	516.8	199.4
Nature Trail	N/A	6.9	19.6	29.1	172.3	66.5
Natural Area	N/A	0.0	9.8	19.4	114.8	22.2
Pool	N/A	7.6	40.1	39.8	287.1	66.5
Wading Pool	N/A	20.8	9.8	0.0	57.4	22.2
<b>SUBTOTAL</b>		<b>56.1</b>	<b>137.9</b>	<b>156.4</b>	<b>1320.7</b>	<b>421.0</b>
Tot Lots (Age 0-6)	2	18.0	4.0	0.0	8.0	2.0
Multi-Age Playground	4	36.0	44.0	12.0	28.0	4.0
Picnic/Sitting Areas	1	1.0	1.0	1.5	5.0	2.0
Open Play Area I	1	6.0	9.0	12.0	30.0	2.0
Open Play Area II	3	9.0	12.0	12.0	30.0	3.0
<b>SUBTOTAL</b>		<b>70.0</b>	<b>70.0</b>	<b>37.5</b>	<b>101.0</b>	<b>13.0</b>
<b>TOTAL PROVIDED ON-SITE</b>		<b>126.1</b>	<b>207.9</b>	<b>193.9</b>	<b>1421.7</b>	<b>434.0</b>



**ANALYSIS: Conformance to Master Plan**

**RELATION TO THE 1994 CLARKSBURG MASTER PLAN**

Clarksburg Village is located in the Newcut Road Neighborhood District of the 1994 Clarksburg Master Plan Area and will be traversed by the proposed A-302 (Newcut Road Extended) and proposed A-305 (Midcounty Arterial). It is also located south of Stringtown Road, northeast of Ridge Road, and northeast of MD 355.

This neighborhood includes approximately 1,060 acres, most of which is vacant. It is separated from the Clarksburg Town Center and Transit Corridor Districts by Stringtown Road and Little Seneca Greenway and will be traversed by the proposed Midcounty Arterial (A-305).

As shown in Figure 1, the land use recommendations for the Newcut Road Neighborhood propose a mixed-use center on Newcut Road, approximately midway between A-305 and Skylark Road. This will provide a concentration of activity and density in the middle of the neighborhood while promoting lower densities at the edges. This concept also clusters development near the greenway system and enhances public access to Ovid Hazen Wells Park.

The Clarksburg Master Plan recommends a mixed-use neighborhood with transit-oriented land use patterns for this District. The proposed site plan recommends a significant number of new residential units. In combination with Greenway Village located directly to the east, these two large projects will provide approximately 3,900 residential units and 109,000 square feet of commercial space.

The proposed site plan complies with the Master Plan land use objectives as follows:

1. Range of Units

The Master Plan emphasizes 45-55 percent single-family detached, 35-45 percent single-family attached, and 10-20 percent multi-family dwelling units. The proposal provides for a mix of units that satisfies the range of residential unit types proposed in the Master Plan.

2. Street Oriented Buildings

Street oriented buildings are one of the major principles of the Master Plan. The Planning Board at time of Preliminary Plan approval recommended that dwelling unit orientation along all road right-of-ways be addressed at the time of site plan review.

Conformance to the Master Plan's Policy 7, on street orientation and specific language in the Newcut Road Neighborhood, page 62, is very important if Clarksburg is to be a different, neo-traditional type of community that will make Clarksburg unique and appealing.

To assure that rear yards shall not be seen from adjacent roadways, especially at street intersections, unit orientation should be to major streets. The proposed site plan generally conforms to this Master Plan objective.

3. Windows into the Park

The "park bordered by a street" relationship opens up views of the Greenway and is a significant design principle of the Master Plan. This important relationship allows the community to visually experience the beauty of Clarksburg's stream valley parks and not have the open space hidden behind a row of residential lots. In general, along the Master Plan roadways (A-305 and A-302), there will be significant vistas of the Little Seneca Creek Greenway.

The proposed site plan satisfies this Master Plan objective.

4. Bikeway Connection

The Master Plan emphasizes bikeway access from neighborhoods to shopping and employment areas as well as to key community facilities. The applicant should provide a bikeway connection through the greenway trail to the adjacent Greenway Village community, Ovid Hazen Wells Regional Park, and the proposed elementary school. This will improve access to the neighborhoods, school, and the park.

The Greenway bikeway trail needs to run under A-305 within a structure and continue up to the Greenway Village community. Connections to the Greenway bikeway trail need to be shown from the traffic roundabout.

**FINDINGS: For Site Plan Review**

1. *The Site Plan is consistent with an approved development plan or a project plan for the optional method of development if required.*
2. *The Site Plan meets all of the requirements of the zone in which it is located. See project Data Table above.*
3. *The location of the building and structures, the open spaces, the landscaping, recreation facilities, and the pedestrian and vehicular circulation systems are adequate, safe and efficient.*

a. Buildings

The housing units are located to create individual neighborhoods with common unifying elements ie. open space greens, tree preservation areas, orientation to a roundabout, etc. Over half of the units either back or front onto a green space or mews, thus giving a sense of connection to open spaces despite the density of the developed areas. The unit alignment opens to provide views of adjacent open space as viewed from the streets and the sidewalks. One of the densest areas that consist of only townhouses and multifamily buildings has a completely open western edge to the Greenway Trail. These areas also provide pedestrian connections into adjacent open spaces. In several cases you can view the Greenway Trail area from Snowden's Mill Parkway. Units along Snowdens Mill Parkway have been carefully sited to prevent direct views to the rear yards of units. The views are diverted through layout, plant material and noise wall location.

The recreation facilities have been sited to become part of each neighborhood by their central location and sitting areas. Their attractive designs will make the play areas a desirable part of the community and open space systems.

The orientation of units directly to the entry streets within the subdivision help to shape the entry and the corresponding streetscape defines the pedestrian environment as well.

b. Open Spaces

The site provides opens paces that are integral with the developed areas as mentioned above. The Greenway Trail will provide a major feature for the subdivision and anchor for outdoor activities.

The Stormwater Management discussion has been addressed above in the Final Water Quality Plan report.

c. Landscaping and Lighting



The landscaping concept adequately provides for an attractive, environmentally sound and functional project by providing shade, screens and buffers. The Plan also provides for the preservation of existing trees and incorporates them in to developed areas, creating environmental benefits of shade and less erosion. The street trees define the streets, provide a buffer between the units and the street and they provide for a pleasant walking environment. The foundation plants and open space accent plants will create an attractive separation between the units and the paved surfaces. The buffers will screen views to the street and views of the units providing separation and privacy as needed.

The proposed lighting plan will include street lights that are regulated by MCDPW&T. The styles of the light fixtures proposed are consistent with the light fixtures allowed by DPW&T within the Clarksburg Town Center Planning Area. Alleys will be lit by garage-mounted lights with cut-off features to prevent light pollution.

d. Recreation

Recreation demand is satisfied as shown in the recreation calculations table above. The recreation will provide for a variety of outdoor exercise and play opportunities by providing numerous play areas within close proximity to housing. The Greenway Trail will provide for local and regional recreations opportunities.

e. Vehicular and Pedestrian Circulation

The street connections to the site are in accordance with the approved Preliminary Plan, and the layout provides an interconnected grid. There are several through streets that link the individual neighborhoods, a roundabout helps regulate traffic flow at their intersection.

There are several waivers proposed by the applicant that will create more flexibility to a neotraditional designed project, thus allowing tighter development envelope and allowing for more preservation of natural areas and treatment of storm water management. These waivers have been shown on earlier approvals at Preliminary Plan and are specified and detailed with this approval. The waivers are listed in the conditions of approval.

The pedestrian paths and bike paths provide a superior pedestrian environment with access to all parts of the site and connections to off site development or open spaces. The pedestrian paths follow the streets identically utilizing the access benefits of a grid.

4. *Each structure and use is compatible with other uses and other Site Plans and with existing and proposed adjacent development.*

The building locations are compatible with adjacent development with the difference in densities buffered by open space and plantings. The residential land uses as proposed within the project will be compatible with internal land uses.

The potential noise levels generated by traffic are planned to be mitigated through the use of buffers utilizing berms, landscaping and noise walls/fences.

The activity associated with the proposed residential will not cause any negative effect on adjacent residential uses.

5. *The Site Plan meets all applicable requirements of Chapter 22A regarding forest conservation.*

The applicant is proposing an optional method of development for this site. The preliminary forest conservation plan was approved prior to the effective date of the forest conservation law as amended by Bill 35-00. Therefore, the development is not required to meet the requirements of Section 22A-12(f) of the Montgomery County code, which requires developments utilizing an optional method to meet the appropriate forest conservation threshold on-site.

The undeveloped site 333-acre Clarksburg Village Phase I site plan includes 208-acres of forest. The applicant is proposing to remove 123 acres of forest and retain 85 acres. The total planting requirement for this forest conservation plan is 10 acres. The forest conservation requirements will be met through onsite forest planting of the unforested portions of the stream valley buffer and other upland planting areas. A five-year maintenance period is required for all forest plantings per the environmental guidelines.

## APPENDIX

Memos as listed throughout the report.



THE MARYLAND-NATIONAL CAPITAL PARK & PLANNING COMMISSION

## MEMORANDUM

**TO:** Wynn Witthans, Development Review

**FROM:** Mark Pfefferle, Planning Coordinator, Countywide Planning *MP*

**DATE:** July 23, 2003

**SUBJECT:** Final Water Quality Plan for Clarksburg Village – Site Plan # 8-03002

---

## RECOMMENDATION

Staff recommends approval of the final water quality plan for Site Plan # 8-03002 subject to the following conditions:

- Reforestation is to begin as soon as possible after the issuance by the Montgomery County Department of Permitting Services (DPS) issuance of grading permits, with appropriate phasing to allow for the construction of sediment and erosion control structures.
- Conformance to the conditions as stated in the DPA letter dated July 18, 2003 approving the elements of the SPA water quality plan under its purview (Attachment A).

## DISCUSSION

The 333-acre property is located in the southwest quadrant of Piedmont and Stringtown Roads in Clarksburg. The site is currently a mix of hay, corn, and soybean fields and forests. The property is zoned R-200/TDR 4, R-200/TDR-3, R-200, and PD-4. The proposed development of the site includes single-family detached units, townhouses, multi-family units, and associated infrastructure. The entire site is within the Clarksburg Special Protection Area.

The site is located within the Little Seneca Creek watershed. Water flows to the Town Center tributary, a first order tributary, and directly to the Little Seneca Creek. Both watercourses flow through the subject property and are designated as Use IV-P. The natural resource inventories for the site delineate the onsite environmental buffers.

Water quality plans are required as part of the Special Protection Area regulations. Under the SPA law, Montgomery County Department of Permitting Services (MCDPS) and the Planning Board have different responsibilities in the review of the water quality plan. MCDPS has reviewed and conditionally approved the elements of the final water quality plan under their

purview. The Planning Board responsibility is to determine if the site imperviousness, environmental guidelines for special protection areas, and forest conservation requirements have been satisfied.

## **SITE PERFORMANCE GOALS**

As part of the final water quality plan, several site performance goals were established for the project:

- Protect the streams and aquatic habitat.
- Maintain the nature on-site stream channels.
- Maintain stream base flows.
- Identify and protect stream banks prone to erosion and slumping.
- Minimize storm flow runoff increases.
- Minimize increases in ambient water temperatures.
- Minimize sediment loading.
- Minimize pollutant loadings (nutrient and toxic substances).
- Protect springs, seeps, and wetlands.

## **STORMWATER MANAGEMENT**

To help meet these performance goals, the stormwater management plan requires water quality control and quantity control to be provided through an extensive system of linked best management practices (BMPs). Water quality control will be provided via several dry ponds. Quality control will be provided via a treatment train that consists of vegetated conveyance swales, dry swales (vegetated swales underlain with infiltration structures), bioretention structures, surface sand filters, structural sand filters, and infiltration/recharge structures. In areas where open section roadways are not feasible, additional water quality structures are incorporated into the water quality plan to compensate for the lost benefits that open section roadways provide.

## **SITE IMPERVIOUSNESS**

There are no impervious limitations within the Clarksburg SPA. The impervious amount proposed for the 333-acre site is approximately 23 percent. Environmental Planning does not have impervious data from similarly zoned sites in the County to compare the data, however the impervious level is similar to other sites developed using R-200 standard method. Environmental Planning looks for opportunities to reduce impervious surfaces on all plans reviewed and ways to reduce the imperviousness where incorporated into the plan. These include shared driveways, reduced width roadways, narrower hard surface trail, and sidewalks on one side of the roadways when appropriate.

## **ENVIRONMENTAL GUIDELINES**

The environmental guidelines for SPAs require examination of many tools to maximize achievement of site performance goals. For instance, the goal of protecting seeps, springs, and wetlands is better achieved with naturalized buffers surrounding these areas. The natural resource inventory for the Clarksburg Village site identified the environmental buffers. Environmental buffers include wetlands and wetland buffers, floodplains, and streams and

stream valley buffers. As part of the Environmental Guidelines, the stream valley buffer must be reforested. Where trees do not currently exist, the applicant will plant new forests or supplement existing forests. The applicant will place forest conservation easements on the environmental buffers.

As part of the approval of the preliminary plan, the applicant requested and received permission from the Planning Board to encroach into the environmental buffers for stormwater management facilities. The preliminary plan conditions identified the ponds that could be partially located in the environmental buffers provided the facilities were reconfigured to maintain at least of the environmental buffer widths as undisturbed areas. Other stormwater management facilities could not encroach into the stream valley buffer any further than was approved in the preliminary water quality plan. The applicant has complied with the preliminary plan conditions.

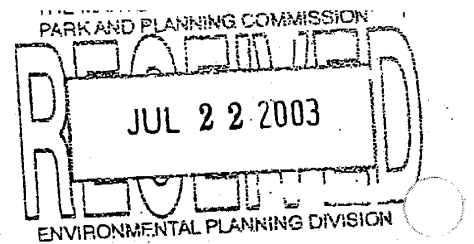
Other impacts to environmental buffers are created and by stream crossings for A-305 (Midcounty Highway), A-302 (Newcut Road), and Foreman Boulevard. All proposed stream crossings are to be constructed using bottomless arch culverts. During the construction of the stream crossings, there will be impacts to wetlands. The U.S. Army Corps of Engineers and the Maryland Department of the Environment have jurisdiction over wetlands and are responsible to issuing wetland permits. The alignments of the Greenway trail and stream crossings for A-305 and A-302 were previously field located with various permitting agencies. The purpose of the field walks was to identify routes that avoid impacts to wetlands by utilizing boardwalk or by shifting roadway alignments.

## **FOREST CONSERVATION**

The applicant is proposing an optional method of development for this site. The preliminary forest conservation plan was approved prior to the effective date of the forest conservation law as amended by Bill 35-00. Therefore, the development is not required to meet the requirements of Section 22A-12(f) of the Montgomery County code, which requires developments utilizing an optional method to meet the appropriate forest conservation threshold on-site.

The undeveloped site 333-acre Clarksburg Village Phase I site plan includes 208-acres of forest. The applicant is proposing to remove 123 acres of forest and retain 85 acres. The total planting requirement for this forest conservation plan is 10 acres. The forest conservation requirements will be met through onsite forest planting of the unforested portions of the stream valley buffer and other upland planting areas. A five-year maintenance period is required for all forest plantings per the environmental guidelines.

Attachment A



DEPARTMENT OF PERMITTING SERVICES

Douglas M. Duncan  
County Executive

Robert C. Hubbard  
Director

July 18, 2003

Mr. Alan Barney  
Charles P. Johnson Associates, Inc.  
1751 Elton Road  
Silver Spring, Maryland 20903

Re: Final Water Quality Plan for Clarksburg Village-  
Phase I  
SM File #: 200006  
Preliminary Plan No.: 1-01030  
Tract Size, Zone: 333 Ac., R-200/TDR-4,  
R-200/TDR-3, R-200 and PD-4  
Tax Plate: EW, EV, FV 123 and FV 122  
Watershed: Little Seneca Creek

**SPECIAL PROTECTION AREA**

Dear Mr. Barney:

Based on a review by the Department of Permitting Services Review Staff, the Final Water Quality Plan (FWQP) for the above mentioned site is conditionally approved. This approval is for the elements of the Final Water Quality Plan of which DPS has lead agency responsibility, and does not include limits on imperviousness or stream buffer encroachments.

**Site Description:** Phase I of the site consists of 333 acres located on the east side of Stringtown Road across from the intersection with Clarks Crossing Drive. The proposed zoning of the site is R-200/TDR-3 & 4, R-200 and PD-4. The development will consist of mixed residential (single-family detached, townhouses, and multi-family units) along with the associated infrastructure. This site is located in the Clarksburg Special Protection Area (SPA) of the Little Seneca Creek Watershed.

**Stormwater Management:** Water quantity control for this site will be provided via several dry ponds. These structures will provide channel protection volume for the one-year storm with a maximum detention time of 12 hours per state standards. Quality control will be provided via a treatment train that consists of vegetated conveyance swales, dry swales (vegetated swales underlain with infiltration structures), bioretention structures, surface sand filters, structural sand filters and infiltration/recharge structures. Non-structural measures for the backs of some lots that are draining to the stream valley buffer have also been used. In areas where open section roads are not feasible, additional water quality measures are required to offset the lost benefits that open section roadways provide. These offsetting measures include maximizing the sand surface area in the surface sand filters (sand on the entire footprint), providing structural pretreatment prior to all filtering structures and providing additional recharge volume. Areas that are intended for vehicular use are to be pretreated prior to entering filtration and infiltration structures. The water quality structures must be sized to treat a minimum of one-inch over the proposed impervious area without subtracting the recharge volume.



220

**Sediment Control:** Redundant sediment control structures are to be used throughout the site. These are to include upland sediment traps which drain to secondary traps down grade, or when this is not feasible sediment traps with forebays will be acceptable.

All sediment trapping structures are to be equipped with dewatering devices. Also, due to the sensitive nature of the watershed coupled with the large amount of proposed development, the use of flocculants or other measures to increase the effectiveness of sediment control removal will be required in the detailed sediment control plan. The following features are to be incorporated into the detailed sediment control plan:

1. The earth dikes that feed the sediment traps are to be constructed using trapezoidal channels to reduce flow rates.
2. The site grading shall be phased whenever possible to limit disturbance and immediate stabilization is to be emphasized.
3. Silt fence alone will not be allowed as a perimeter control. The use of super silt fence will be acceptable for small areas of disturbance.

**Performance Goals:** The performance goals that were established at the pre-application meeting are to be met as specified in the Preliminary Water Quality Plan and further refined in the Final Water Quality Plan. They are as follows:

1. Protect the streams and aquatic habitat.
2. Maintain the natural on-site stream channels.
3. Minimize storm flow run off increases.
4. Identify and protect stream banks prone to erosion and slumping.
5. Minimize increases to ambient water temperatures.
6. Minimize sediment loading.
7. Maintain stream base flows.
8. Protect springs, seeps, and wetlands.
9. Minimize pollutant loading (nutrient and toxic substances).

**Monitoring:** The monitoring must be in accordance with the BMP monitoring protocols which have been established by the Department of Permitting Services (DPS) and Department of Environmental Protection (DEP). Prior to the start of any monitoring activity, a meeting is to be held on site with DEP, DPS and those responsible for conducting the monitoring to establish the monitoring parameters. **The pre-construction monitoring must be completed prior to the issuance of a sediment control permit.** See the attachment to this approval letter for Phase I titled "Description of Monitoring Requirements" for during construction and post construction detailed monitoring requirements.

The "during construction" monitoring requirements are to last through the construction phase of the development, and the "post construction" monitoring will last for five years after construction is complete.

**Conditions of Approval:** The following conditions must be addressed in the initial submission of the detailed sediment control/stormwater management plan. This list may not be all inclusive and may change based on available information at the time of the review:

1. The stream channels on-site are to be walked to determine if channel restoration is necessary.
2. The proposed roadway dry swales are to have under drains that tie into the proposed storm drain structures. This will require approval from the Department of Public Works and Transportation.
3. Percolation tests must be performed to determine the feasibility of providing infiltration structures for water quality and ground water recharge.
4. Provide clear access to all stormwater management structures from a public right-of-way.
5. Water quality structures that are to be used for sediment control must have a minimum undisturbed buffer of two feet from the bottom of the sediment trap to the bottom of the stormwater structure.
6. The channel protection volume compensation for surface sand filter "S" must be provided in Pond "C".
7. Move the dry wells on lots 105-114, block T off of the lots and down slope of the PUE. Also, move the dry well for lots 47-50, block R off of lot 47 and down slope of the sanitary sewer line.
8. Structural pretreatment devices are to be sized for their entire contributing drainage area.
9. Additional pretreatment (other than road side swales), such as water quality inlets, will be required for surface sand filters that are treating large drainage areas (greater than 5 acres).
10. Prior to permanent vegetative stabilization, all disturbed areas must be topsoiled per the latest Montgomery County Standards and Specifications for Topsoiling.
11. Provide level spreaders and/or plunge pools at all of the quantity pond outfalls and at the storm drain outfall at surface sand filter "S".
12. Channel protection volume is to be provided separately from water quality volume.
13. Provide four inches of pea gravel on top of all of the proposed surface sand filters.
14. All of the proposed stream crossings are to be constructed using environmentally sensitive design criteria. Bottomless arch culverts as proposed in the preliminary Water Quality Plan will be acceptable.



15. At a minimum one foot of stone (dead storage) is to be provided below the outlet pipe of the surface sand filters to allow for groundwater recharge.
16. Minimize the use of insecticides and fertilizers via a residential Integrated Pest Management Plan as part of the Homeowners Association (HOA) documents. A draft of this plan/document is to be submitted at the detailed sediment control plan stage, and the final document is to be submitted prior to bond release.
17. MCDPS reserves the right to require the developer to provide full time, third-party, on-site, sediment control inspection if the Department decides the goals of the Water Quality Plan are not being met.

Any divergence from the information provided to this office; or additional information received during the development process; or a change in an applicable Executive Regulation may constitute grounds to rescind or amend any approval actions taken, and to reevaluate the site for additional or amended Water Quality Plan requirements.

If you have any questions regarding these actions, please feel free to contact Leo Galanko at (240) 777-6242.

Sincerely,



Richard R. Brush, Manager  
Water Resources Section  
Division of Land Development Services

RRB:CN200006

cc: W. Witthans  
S. Federline  
M. Pfefferle  
L. Galanko  
D. Marshall  
SM File # 200006

Qn on-site 333 ac.  
Ql on-site 333 ac.



DEPARTMENT OF ENVIRONMENTAL PROTECTION

Douglas M. Duncan  
County Executive

James A. Caldwell  
Director

**Attachment to the Final Water Quality Plan for Clarksburg Village Phase I  
Description of BMP Monitoring Requirements**

SM # 200006 (Phase I)

Date: July 16, 2003

The purpose of this attachment is to add specificity to the standard monitoring requirements and procedures contained in the BMP monitoring protocols. Some supplemental QA/QC, data analysis, reporting and record keeping tasks will be explained in this attachment.

This BMP monitoring is being done to address whether the site performance goals are met. The purpose of the data analysis and reporting is to describe quantitatively how performance goals are met. Monitoring efforts and reports must employ scientific methods in an attempt to determine effectiveness of BMPs. Monitoring is to be done according to BMP Monitoring Protocols. However, these monitoring protocols are intended to provide a framework only. Some supplemental requirements are provided in this attachment. Prior to initiation of monitoring, consultants must contact DEP to review procedures and requirements. Thorough and careful analysis of data is required. Method(s) of data analysis and required statistical procedures may vary depending on the results obtained. Methods and assumptions should be detailed. BMP Monitoring Protocols are available at <http://www.co.mo.md.us/services/dep/Publications/pdf%20files/bmpprotocols.pdf>

**Monitoring Requirements**

1. BMP monitoring reports must include a table with dates of all major construction activities which take place on the site. (Groundbreaking, clearing, grading, BMP construction, BMP conversion, pond maintenance, etc.) Information should refer to specific structures and portions of the site.
2. Provide a record of continuous stream flow at two locations (Little Seneca Creek mainstem and downstream of the confluence of tributaries 109 and 110). The purpose of this monitoring is to document how development changes stream hydrology. Installation, maintenance, rating curve and data analysis must meet USGS standards. Pre-development conditions are to be compared with post-development conditions examining



Watershed Management Division

224

any relevant parameters including average flows, peak flows, hydrograph shape, lag time, etc. Conclusions regarding hydrologic impacts must be provided with graphs of supporting data.

3. A rain gage will be installed and maintained. Data will be collected on 15 minute intervals. Data collected will be used in the analysis of flow and groundwater data. Instruments are to be calibrated according to manufacturer's recommendations.
4. Stream water temperature will be monitored at seven (7) locations. This monitoring will occur from June 1 through September 30 each year. Accuracy of the temperature logger is to be checked prior to use in spring. An accuracy check after retrieval in fall may be necessary depending on results obtained. Consult with equipment manufacturer or DEP for appropriate procedures. All accuracy checks are to be submitted with data analysis and reports. Temperature loggers should be set to take readings at 24 minute intervals. Consult with DEP if readings will be taken at different intervals. Water temperature data is to be compared to air temperatures and precipitation during the period of June 1 through September 30 to evaluate development impacts. An on-site temperature logger will be required to obtain temperature data. Pre-construction results should be compared with data from subsequent periods. Results should also be compared among stations to evaluate temperature patterns over stream distance.
5. Ten (10) cross sections specified in the Greenway Village Trail PWQP will be monitored annually to evaluate the impact of the Clarksburg Village on stream geomorphology. Results should be plotted and compared to pre-construction conditions. DEP will be consulted before locating the cross sections. Cross sections surveys may need to be extended to the nearest reliable benchmark to allow accurate mapping of locations.
6. Stream channel embeddedness is to be monitored at the six (6) discrete flow stations. Photos of the stream bottom are to be taken concurrently with embeddedness readings. Frequency of embeddedness readings is one (1) per quarter year. Pre-construction results are to be compared with during and post-construction results to determine effectiveness of sediment control on the site. Graphs should be presented along with conclusions.
7. Photographs of the stream bed and channels are to be taken annually at temperature, discrete flow and continuous flow stations. The photographs are to be compared over time to evaluate development impacts.
8. Eighteen (18) groundwater monitoring wells are to be maintained. Well installation logs should be provided. Each groundwater well is to be surveyed to determine exact elevation. Groundwater levels are to be reported as actual elevations (surface elevation - depth to water). Frequency of readings is to be one per month at each well. Data should be analyzed to determine the effectiveness of site design and stormwater management in maintaining groundwater levels. Data from the pre-construction period should be compared to results obtained in subsequent periods. Graphs should be provided to

support conclusions. Groundwater level data will be compared to stream flow data and rainfall data.

9. Water chemistry sampling is required at nine of the groundwater wells. The wells to be monitored will be numbers 2, 4, 5, 6, 7, 9, 14, 15 and 16. Parameters include: nitrate, nitrite, TKN, total nitrogen, ortho-phosphorus, total phosphorus, lead, zinc, copper, cadmium. See Table 1 for relevant methods and detection limits. Sampling is to be done quarterly along with groundwater elevation readings. This monitoring is intended to evaluate the effect of construction impacts, BMPs that promote infiltration and residential land use impacts. Results will be compared among wells and also over time to evaluate how groundwater nutrient levels are impacted by development. Results will also be compared to stream nutrient data to evaluate the impact of groundwater nutrients on streams.
10. Discrete stream flow readings will be taken at six locations. The purpose of this monitoring is to compare baseflow stream discharge with groundwater elevation. Therefore, flow readings are to be done concurrently with the monthly groundwater well readings. Instruments are to be calibrated annually for low flow conditions.
11. Stream nutrients are to be monitored in the vicinity of temperature monitoring site number 1. One base flow grab and one automated flow-weighted composite storm flow sample is to be collected each quarter and analyzed for the parameters in Table 1. Storm sampling is to be done during rain events of at least 0.6 inches over a 24 hour period. Required laboratory methods and detection limits are also listed in table 1.

Table 1. Pollutant parameters, lab methods and detection limits

Parameter	Method	Detection Limit
Nitrate	EPA 353.2	0.05 mg/L as N
Nitrite	EPA 354.1	0.02 mg/L as N
TKN	EPA 351.3	0.2 mg/L as N
Orthophosphorus	EPA 365.3	0.01 mg/L
Total Phosphorus	EPA 365.3	0.05 mg/L
Total Suspended Solids	EPA 160.2	1.0 mg/L
Total Cadmium	EPA 213.2	0.6 µg/L
Total Copper	EPA 220.2	1.2 µg/L
Total Lead	EPA 239.2	0.4 µg/L
Total Zinc	EPA 289.2	3.4 µg/L

Concentrations and storm event loadings will be calculated. The storms during which the samples are collected should be characterized for duration and total rainfall.

Reports are to include analysis comparing pre-construction with post-construction results and draw conclusions on whether or not pollutant concentrations or loadings have changed in any significant way.

12. TSS grab sample locations will be established at the two (2) largest sediment ponds on the site during construction. Exact sampling locations will be determined by DEP in the field to allow evaluation of the effectiveness of redundant sediment traps. Sampling is to be done quarterly during storm events throughout the construction phase. Storms should have at least one half inch of rainfall in a 24 hour period to be counted towards this requirement. Samples should be collected within 24 hours after the storm. The storms during which the data was collected should also be characterized for duration and total rainfall. Storm frequency (return interval) should be reported as described in Technical Paper #40 of USDOC Weather Bureau. Results should be examined to determine the efficiency of the structure and percent removal of pollutants. Data should be compared to past periods and published results for similar structures. Graphs should be provided to support conclusions.
13. Pollutant removal efficiency will be determined for three (3) individual BMP structures. The water quality structures above ponds F, S and T will be monitored to evaluate BMP effectiveness under different site designs. Pollutants to be analyzed are listed in table 1. This monitoring will require the collection of automated flow-weighted storm composite samples at the inflow and outflow points of each structure. Qualifying storm events will be between one half (0.5) inch and one and one half (1.5) inches of rain in a twenty-four hour period. All three structures are to be monitored quarterly. Analysis will evaluate effects of differing site designs, whether pollutant removal efficiency changes over time, and compare removal efficiencies with published results. Drainage area, percent imperviousness, percent and total area of road surface, amount of open section or closed section roadways, and water quality pre-treatment approaches are to be reported and considered in the analysis.

One year of baseline data on items 2 (continuous flow), 4 (water temperatures), 6 (embeddedness), 7 (photos), 8 (groundwater levels) and 10 (discrete discharge measurements) must be collected as specified above before construction begins. Collection of data on items 3 (rainfall), 5 (cross sections), 9 (groundwater chemistry) and 11 (stream nutrients) should commence as soon as possible and continue for up to one year prior to construction. These items (3, 5, 9 and 11) do not need to be included in the pre-construction monitoring report. All items above with the exception of numbers 12 (sediment pond TSS) and 13 (water quality structure efficiency) should continue throughout the construction period and for five years post-construction. Item 12 (sediment pond TSS) is required only during construction. Item 13 (water quality structure efficiency) is only required during the post-construction period. A report on pre-construction conditions must be deemed acceptable by DEP prior to the issuance of a sediment control permit. For subsequent periods a draft annual report on BMP monitoring is due

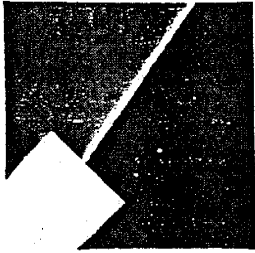
to DEP by **October 31** each year. A final report is due annually by December 1. County code requires that reports be submitted quarterly. These quarterly reports may be incorporated in the annual report. This should be reflected in the title of the document. BMP monitoring reports are to be delivered with data in an electronic format to Mark Sommerfield at Montgomery County DEP and also to Leo Galanko at Montgomery County DPS. All information submitted to DEP will be public information that DEP may freely copy and distribute. Questions on the monitoring requirements and procedures may be directed to the following personnel.

Mark Sommerfield  
(240) 777-7737  
mark.sommerfield@co.mo.md.us

Doug Marshall  
(240) 777-7740  
douglas.marshall@co.mo.md.us

Leo Galanko  
(240) 777-6242  
leo.galanko@co.mo.md.us

M-NCPPC



MONTGOMERY COUNTY DEPARTMENT OF PARK AND PLANNING

THE MARYLAND-NATIONAL CAPITAL  
PARK AND PLANNING COMMISSION

8787 Georgia Avenue  
Silver Spring, Maryland 20910-3760

December 27, 2001

Ms. Gladys Wood  
12521 Piedmont Road  
Clarksburg, MD 20871

RE: Piedmont Road

Dear Ms. Wood:

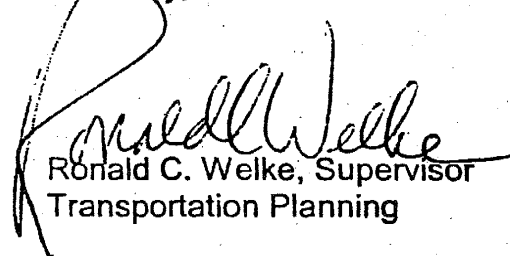
We are writing in reply to your letter/petition received on September 18, 2001 suggesting that the section of Piedmont Road, a rustic road, approaching Stringtown Road and proposed A-305 end in a cul-de-sac, and not connect to either road.

Planning staff involved in Community-Based Planning, Subdivision Development Review, Site Plan Review, as well as Transportation Planning have reviewed your request. It is staff's consensus that the connection of Piedmont Road to A-305 as approved in the preliminary plan for Clarksburg Village is essential to provide connectivity of local neighborhoods and to provide opportunities for local circulation of vehicular and pedestrian traffic within the community. Therefore, staff does not support your idea to terminate Piedmont Road in a cul-de-sac approaching Stringtown Road or A-305.

You are welcome to make your views known during the Planning Board's review of the site plans for Clarksburg Village prior to their approval. Please contact Ms. Wynn Witthans at (301)495-4584 regarding the schedule for submission, review and approval of the site plans.

We regret that staff is unable to support your request.

Sincerely,

  
Ronald C. Welke, Supervisor  
Transportation Planning

RCW:cmd

cc: Wynn Witthans  
Malcolm Shaneman  
Karen Kumm-Morris

RECEIVED  
SEP 18 2001  
SILVER SPRING

Mr. Welke  
Dept of Transportation Coordinator  
8787 Georgia Ave  
Silver Spring, MD 20910-3760

Dear Mr. Welke,

We the undersigned Piedmont Road property homeowners, would like to see the section of Piedmont Road referenced in the attached drawing end in a court and not connect to A-305. As Piedmont Road has been designated a rural, rustic road, we feel having the road end in a court rather than attached to a major arterial road would better preserve its existing character, thereby allowing it to remain in keeping with the intent of the rural designation.

We have attached a copy of Mr. Flanagan's preliminary site plan for our section of Piedmont Road with the end of Piedmont changed to a court. This concept represents our vision for Piedmont Road.

Please keep us informed of future meetings regarding plans for this area, and/or other actions we should take to secure this vision of Piedmont Road.

Sincerely,

Gladys Wood  
12521 Piedmont Rd  
Clarksburg MD 20871  
301-540-7758

John & Shari Chelberg  
12601 Piedmont Rd.  
Clarksburg, MD 20871  
301-540-9719

Nicholas C. & Linda L. Nichols  
12512 Piedmont Rd  
Clarksburg MD 20871  
301-540-1785

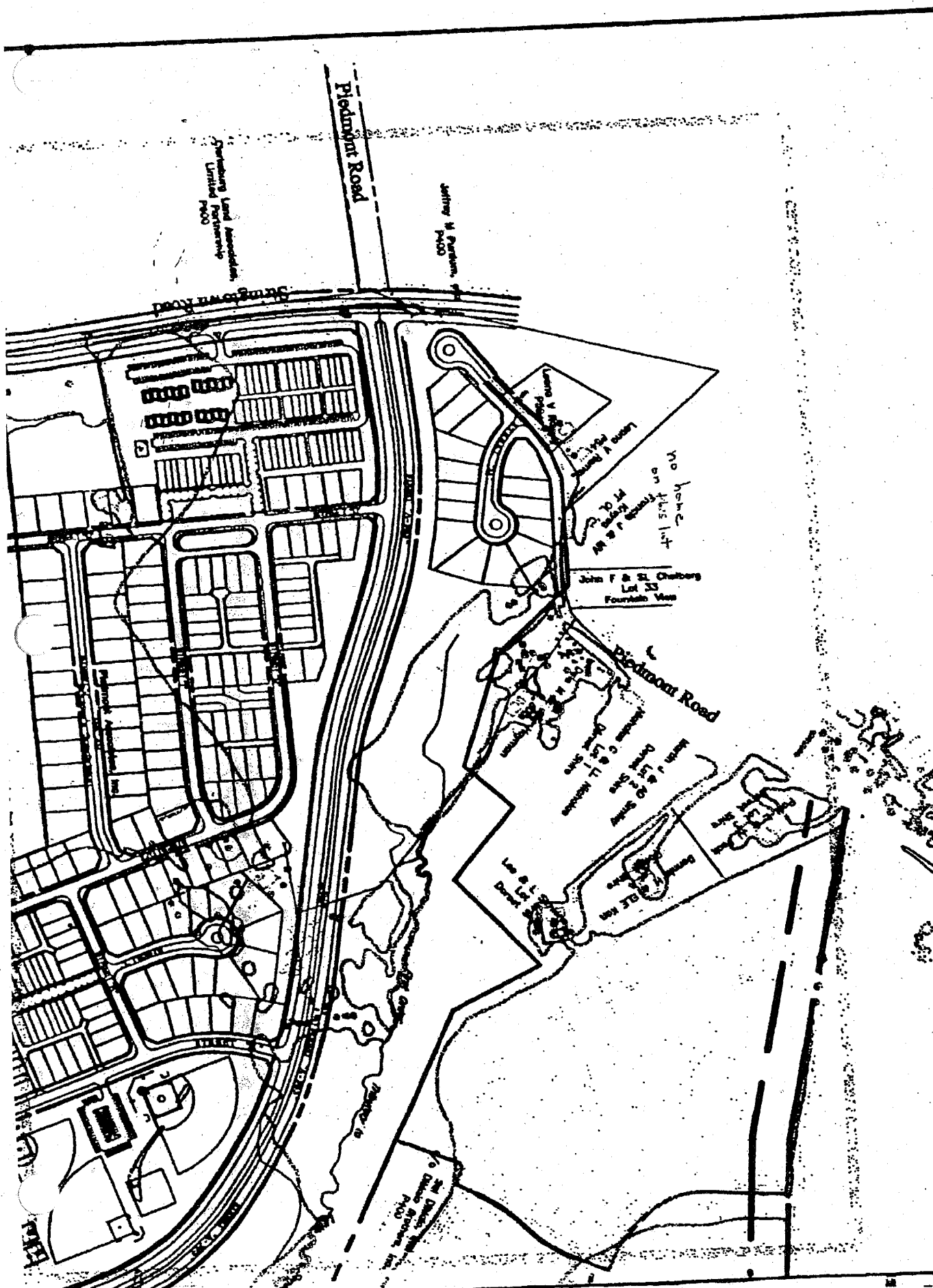
Kent P. Cheung  
12517 Piedmont Road  
Clarksburg, MD 20871  
301 972-0188

J. Martin Smiley  
12508 Piedmont Rd.  
Clarksburg, MD 20871  
301-972-1619

cc Mr. Flanagan  
Mr. Steve Howie  
Jean and Dale Hayman  
12600 Piedmont Rd  
Clarksburg MD 20871  
301 977-2571

George Claggett  
12509 Piedmont Rd  
Clarksburg MD





General Land Associates  
United P&O

Piedmont Road

Jeffrey M. Parkers  
P&O

Stoughton Road

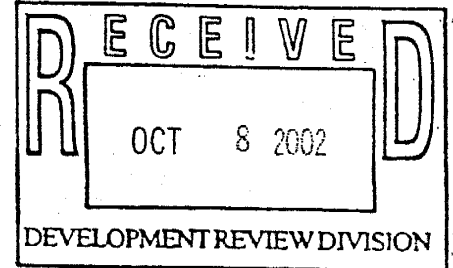
no home  
on this lot

John F. & St. Chelberg  
Lot 33  
Fourth Mass

Piedmont Road

Jean & Dale Hayman  
12600 Piedmont Road  
Clarksburg, MD 20871  
Home: 301-972-3571  
FAX: 301-972-6488  
October 6, 2002

8/11  
2:40 PM  
work(301)353-8080



M-NCPPC  
Development Review Division  
Montgomery Planning Board  
8787 Georgia Avenue  
Silver Spring, MD 20910-3760

Dear Planning Review Board Members,

We would like to submit written comments on the Clarksburg Village-Phase 1 Plan. Our property is adjacent to the new homes planned for Piedmont Road. The second set of lots numbered 6 & 7 touch our property line.

Along this side of our property is a stand of mature, native trees composed of white oak, cedar, locust, sassafras, etc. We are interested in preserving these trees along the border between our property and Clarksburg Village.

We are also interested in maintaining a buffer between our property and the newer development which is not compatible with our home and neighboring properties.

We would like to see properties #6 and #7 removed or moved so that the mature trees and our buffer can remain intact.

Please allow us to have input on the planning of this area. Please notify us of meetings regarding this area and please keep us informed when plans are submitted.

Thank you,

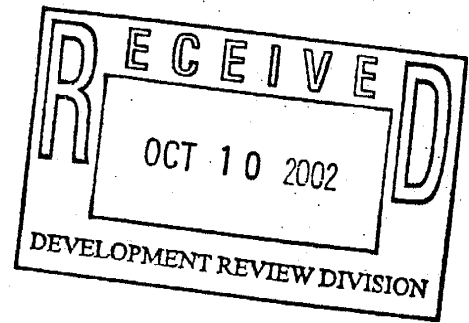
*Jean Hayman*  
Jean and Dale Hayman

*Dale Hayman*

232

October 8, 2002

Development Review  
Montgomery County Planning Board  
8787 Georgia Avenue  
Silver Spring, Maryland 20907



Re: Notice of Site Plan Application to Adjacent Property Owners  
Clarksburg Village – Phase 1  
Current zoning: R-200, R-200 TDR-3, R-200/TDR-4  
Plan #: 8-03002

Dear Sirs:

As a new resident to the area, I'm shocked at the sheer number of homes that are planned for this entire site. Traffic already is awful for the morning and evening commutes on both 355 and Route 27. I cannot imagine how bad it will be when this development is complete.

The solution is not building more roads. It's building fewer homes!

Given our current state of affairs, did anyone stop and think for a moment where all the water is going to come from for these homes? Frederick, Maryland has had to stop all development for lack of water. When will our community see the light and stem development?

Near our lot specifically, you plan to construct a new, major road through our perfectly peaceful neighborhood. Split an existing neighborhood in two, just to add a new road? I can see why; **to pack in more houses in the land to be developed.** But how can you consider putting all that extra noise and traffic into a neighborhood that is quiet and well established? Please reconsider placing this major outlet through the new development rather than intersecting our neighborhood.

I also see nothing that will guarantee the survival of our beautiful line of trees that exists at the back of my property. Please tell me you wouldn't cut them down for the sake of "development."

I appreciate the opportunity to comment. I only hope you will take them seriously.

Yours truly,

A handwritten signature in cursive script that reads "Keith F. Mordoff".

Keith F. Mordoff  
11705 Morning Star Dr.  
Germantown, MD 20876

233

Witthans, Wynn

---

**From:** Dolan, Mary  
**Sent:** Wednesday, May 14, 2003 8:23 AM  
**To:** 'Krisna\_Becker@hgsi.com'; Maskal, Nellie; Edwards, Sue; Pfefferle, Mark; Kumm, Karen; Witthans, Wynn  
**Subject:** RE: Natural Landscaping

Krisna-

Steve Cary has transferred to another part of our agency and is not available to follow up on this. Robert, unfortunately, is currently doing the work of three inspectors and is very difficult to reach. We will be following up with him to see what we can do under the current approvals. It just may take some time.

Thanks for your persistence in this matter. We will follow up as soon as possible.

Mary

-----Original Message-----

**From:** Krisna\_Becker@hgsi.com [mailto:Krisna\_Becker@hgsi.com]  
**Sent:** Tuesday, April 22, 2003 3:50 PM  
**To:** Maskal, Nellie; Edwards, Sue; Dolan, Mary; Pfefferle, Mark; Kumm, Karen; Witthans, Wynn  
**Subject:** Natural Landscaping

Dear Clarksburg Planners:

Thank you again for meeting with me in February. I thought I would just send a note in time for Spring landscaping. You have probably seen the minutes from the December 12 Clarksburg Planning Meeting by now, but here they are again. I would really like to know if the Clarksburg Streetscape Plan has been amended to include our input on landscaping issues. I've also included a few other resources that you could use. (More resources can be found at [www.mdflora.org](http://www.mdflora.org).)

I would just like to emphasize again that Clarksburg needs a more natural type of landscaping, in keeping with it's Special Protection Area status. This will save the taxpayers a lot of money in maintenance (mowing alone costs \$2240 a year, per acre, according to management at a local condominium) , preserve our air quality (reduces lawnmower emissions), protect our streams by filtering runoff, and ensure that we have sufficient drinking water during peak months by using native plants that don't need as much water. Please use these resources to preserve as much of the existing, functioning habitats of Clarksburg as possible.

By the way, I have also tried to contact Steve Cary and Robert Kronenberg about Ecological Covenant site plan enforcement, but have received no response. Is there anyone else who might be responsible for ensuring that the developers in Clarksburg comply with these covenants?

Thank you,  
Krisna Becker

Roadside Use Of Native Plants; Bonnie L. Harper-Lore and Maggie Wilson; 2000; Island Press: Washington, DC; 665 pgs. ISBN: 1-55963-837-0

234

This book was first created by the Federal Highway Administration and is aimed at the highway administrator but it contains material useful to all native plant landscapers. It covers both basic topics like "Defining a Native Plant", and more complex issues such as "Using Plant Communities as Models", "Working with Succession", and "Choosing Non-Invasive Plant Materials".



Natural Landscaping for Public Officials - a Source Book

## Minutes from the December 12, 2002 Clarksburg Civic Association Planning Meeting

### Draft Clarksburg Streetscape Plan Landscaping and Lighting issues

**Attendees:** Chuck Faller  
 Paul Majewski  
 Dave Post  
 Krisna Davis  
 John Davis  
 John Carman  
 Gary Gunterberg

The meeting began promptly at 7:30. The focus of the discussion was to determine what types of tree were appropriate for the streetscapes of Clarksburg. Comment was made that Red Maples, identified as a Streetscape tree on the Draft Streetscape plan ("the Plan"), were not a good streetscape tree because of their root system being along the top of the ground. This would cause damage to any sidewalks or paving nearby. It was also noted that the Red Maples on the Plan were on the perimeter roads of the plan like West Old Baltimore Road, Rt. 121 on the West side of I270 and Rt. 27. Another tree identified on the Plan, the Pagoda Tree, is also not a desirable tree because the seed pods that fall from the trees tend to clog up drainage systems. The Tilia Cordata 'Greenspire' tree identified on the Plan has a hard problem with Japanese Beetles, and would find it hard to survive in this area.

With regards to the guidelines on the Plan, the planting of a single tree species along each street may go well in the Town center or retail areas of the Master plan but a variety of trees may look better in the residential areas of the Master Plan. A question was asked, "Have you ever seen a residential street with all of the same trees on it?" The committee felt that by using 2 or 3 species along the residential streets it would look more natural than all one species. The second point in the Guidelines of the Plan should allow mixing of species within a block in the residential areas. Third, providing (2) 4" vertical perforated, PVC pipes on either side of the root ball for tree watering within mixed use center, please add "or acceptable alternative". As written, this limits the way plants are watered. There may be another way that would be better in some circumstances. There was a split in the committee on seasonal lighting. We understand the problems that may occur with the lights but some thought it would be nice in the commercial areas.

Following that review the committee decided to go down the list of trees and vote on which trees we would like to see along our streets. We created three lists. The first were trees that we

235

wanted to see on our streets. The second was a list of trees that we definitely did not want on our streets. The third were trees that we did not have a strong opinion either way. Some of the committee members had certain criteria that they use in determining their vote. These included but not in any specific order of importance:

1. Was the tree native to the area.
2. Tree shape
3. Aesthetics
4. Tree viability in the area
5. Seed pods or flowers that would drop on the ground
6. Root system
7. Overused in the area

The following lists were not written in order of preference. The trees were selected by reviewing the list of trees in the Plan then a list of approved major trees from the Montgomery County Department of Transportation and then other trees that were not included in either list.

### TREES THAT WE WANT TO SEE ON OUR STREETS

1. Sugar Maple
2. Yellowwood
3. Marshall Seedless Ash
4. Thornless Honey Locust (seedless variety)
5. White Oak
6. Red Oak
7. Willow Oak
8. Silver Linden
9. American Linden
10. American Elm
11. October Glory Red Maple
12. Red Sunset Maple
13. Black Gum
14. Pin Oak
15. Shingle Oak

### TREES THAT WE DO NOT WANT ON OUR STREETS

1. European Beech
2. Village Green Zelkora
3. Silver Maple
4. Autumn Flame Red Maple
5. Pagoda Tree
6. Sawtooth Oak
7. Norway Maple

### TREES THAT WE MAY WANT ON OUR STREETS

1. European Hornbeam
2. Male Grafted Ginkgo

3. Little Leaf Linden
4. London Plane Tree
5. Shumard Oak
6. Lacebark Elm

By the time we reviewed the trees and came up with the above list it was 9:00. We decided to postpone the lighting until the next meeting in January. Meeting was adjourned.

---

Also, here are some comments from Louisa Thompson, a native plant specialist, and gardener. I asked for her opinion on the list of trees that the Planning Committee had settled on:

[louisathompson@erols.com](mailto:louisathompson@erols.com)

Regarding your list of trees below:

- Pinoak is a terrible street tree because its lower branches grow downwards and outwards. They must be limbed up every year until they reach maturity, and then they look butchered. Also, they drop leaves all through the winter, making leaf pickup an ongoing job.
- Maples in general have shallow roots that interfere with lawns and sidewalks. While silver and Norway maple are the worst, I would make sure that sugar maple and the red maple cultivars on the list truly do not have this characteristic, before approving their use as street trees. I've seen them in large tree boxes and mulched islands, and the fall foliage is gorgeous, but I don't know whether they damage the pavement as they get larger.

I'm not familiar with most of the non-natives.

There is a European linden that grows in Patapsco Valley State Park, where it spread from a historic planting. Every summer, the linden leaf miner (closely related to the locust leaf miner) so completely tunnels through the leaves that the foliage is almost white. It looks awful. So I hope someone will check whether the lindens on the list are resistant to this insect. American linden needs a colder climate than we have here - but yours may be just cold enough (of course, the climate is warming everywhere).

Depending on the kind of soil they are planted in and how much water they will get, scarlet oak may be a better choice than red oak, and chestnut oak might do better than white. Both tolerate thinner soil and drier conditions better. Scarlet oak naturally grows on ridgetops and does well in full sun. Chestnut oak grows on ridgetops and steep slopes, and probably can tolerate either sun or shade.

The trees you've listed are all quite tall, which is good for street trees because they grow well above traffic. However, I hope there will be a list of smaller, flowering trees for use in the landscape. I'd recommend fringetree (the native *Chionanthus virginicus*, not the Chinese one), black haw (*Viburnum prunifolium*), and redbud as the 3 most beautiful. Fringetree tolerates minimal soil but probably needs it to be well-drained. Redbud tolerates high alkalinity and does well in lawns. Black haw tolerates a wide range of conditions. All have attractive fall foliage as well, and none produces particularly messy fruit. Redbud is planted around here as a street tree, and I see black haw flourishing in highway interchanges. Fringetree is more expensive.

There is a serviceberry cultivar bred for its fall foliage. Personally

I don't love serviceberry as much as the others, but it is the earliest to bloom, just after Bradford pear.

Some shrubs you might want to consider are spicebush and Carolina allspice. Spicebush is tall and vase-shaped, so it can be planted next to walkways. Carolina allspice, an old-fashioned favorite because of its fragrant leaves, is probably also pretty resistant to deer. It's a dense, round shrub good for foundation plantings. The native shrub viburnums are not deer-resistant, but they are lovely. Maple-leaf viburnum is said to be difficult to transplant, but downy arrowwood and smooth arrowwood, which have been lumped as *Viburnum dentatum*, are widely available in the nursery trade. You should try to get the one that used to be called *Viburnum recognitum*, smooth arrowwood, which is the piedmont species/variety and doesn't need as much soil moisture. Both flowers and foliage are ornamental.



*a former Spring*

# Charles P. Johnson & Associates, Inc.

Planners Engineers Landscape Architects Surveyors

# CPJ Associates

Silver Spring, MD

Frederick, MD

Fairfax, VA

July 11, 2003

Ms. Wynn Withams  
Development Review Division  
MNCPPC  
8787 Georgia Avenue  
Silver Spring, MD 20901

Re: Clarksburg Village

Dear Wynn:

On behalf of our client, Elm Street Development, we are requesting waivers for the following sections of the Montgomery County Code, Chapter 50 from the Maryland National Capital Park and Planning Commission:

Section 50-26 (h) (3) which requires a sidewalk on both sides of a tertiary street. Because streets "Cool Valley Court" and "Tulip Tree Terrace" are so short in distance and serving so few units, and we are in a Special Protection Area, we are requesting that the sidewalk requirement for one side of the roadway be waived.

Section 50-26 (e) (3) requires a 25' truncation at intersections. In this subdivision due to its neo-traditional traights we are utilizing a radius truncation which allows the homes to move closer to the right of way.

Section 50-28 (a) (1), which states that the maximum block length is 1600 feet. We have one block between "Rainbow Arch Drive" and "Robin Song Drive" which exceeds the 1600 foot requirement. This block has been designed with a "Green street" breaking up the houses. This will serve as pedestrian access, play and sitting areas. As mentioned earlier, since we are in a Special Protection Area, and are utilizing some neo-traditional neighborhood design, we feel this provides the residences with a better living environment.

Section 50-29 (a) (2) which requires for single family detached lots to have frontage on a public street. There are several areas throughout the development in which we have single family detached homes fronting on to Homeowner Association open spaces. The homes have pedestrian access from the HOA and have vehicular access via the alleys at the rear of the homes. Again, we are trying to employ some of the neo-traditional neighborhood design principals.

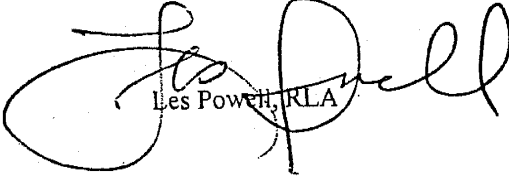
Section 50-29 (a) (3) which states lot lines will be perpendicular to the road right of way. There are several areas throughout the development where the lot lines are not perpendicular or radial to the street in an effort to create open space or enhance some of the views with house sitings.

We are also requesting that any previous variance request for waivers that may have been granted at the time of preliminary plan be maintained. These include, but are not limited to, section 50-32 (a-c) which is special controls for environmentally sensitive areas. I am also enclosing a copy of the waivers that we are requesting from Montgomery County Department of Permitting Services and Department of Public Works and Transportation.

239

If you have any questions or comments, please feel free to contact me.

Sincerely

  
Les Powell, RLA

240

**Charles P. Johnson & Associates, Inc.**  
Planners Engineers Landscape Architects Surveyors

**CPJ**  
Associates

Silver Spring, MD

Frederick, MD

Fairfax, VA

July 15, 2003

Montgomery County  
Department Permitting Services  
255 Rockville Pike  
Rockville, MD 20850

Attn: Mr. Joseph Y. Cheung

Re: Clarksburg Village  
Preliminary Plan #1-01030

Dear Mr. Cheung:

On behalf of our client, Clarksburg Village L.C., we hereby submit for a waiver of the open section road standard, as typically required in a Special Protection area. As part of the proposed neo-traditional layout, there will be a combination of open and closed section roads.

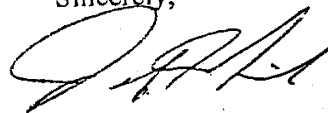
As part of processing the Preliminary Plan of subdivision (Approved 7/30/01) and Preliminary Water Quality Plan (approved 7/27/01), a variety of street cross sections were agreed to by MCDPS, MCDPW&T and the MNCPPC. The approved sections appear on sheet C-10 of the Preliminary Plan (by Rodgers Consulting).

The subdivision is currently going through the Site Plan and Final Water Quality Plan process, and is scheduled for planning board on July 31, 2003. As required by MCDPS-Water Resources Division, in areas where open section roads are not feasible, additional water quality measures are to be provided to offset the lost benefits that open section roadways provide.

241

Please find attached the previous correspondence and approvals related to the street sections and if in agreement, please sign below. Thanks again for all your assistance throughout the whole process.

Sincerely,



Jeff Seidleck

Approved: \_\_\_\_\_

Joseph Y. Cheung  
Manager - Right of Way Permitting And  
Plan Review Section

cc: MNCPPC - Steve Federline  
MCDPWT - Greg Leck

W:\WPFILES\Letters\clarksburg VII-Clearing\07.15.03.wpd

242

# Charles P. Johnson & Associates, Inc.

Planners Engineers Landscape Architects Surveyors

# CPJ

Associates

Silver Spring, MD

Frederick, MD

Fairfax, VA

July 15, 2003

Montgomery County  
Department Permitting Services  
255 Rockville Pike  
Rockville, Md 20850

Attn: Mr. Joseph Y. Cheung

Re: Clarksburg Village  
Preliminary Plan #1-01030


Dear Mr. Cheung:

On behalf of our client, Clarksburg Village L.C. we hereby submit for a waiver of the standard 30' fillet radius for street intersections within the subdivision. The above-referenced site is going through the site plan approval process and is scheduled for Planning Board on July 31, 2003. As was implemented on other neo-traditional style subdivisions within the Clarksburg area, we are proposing the following standard for intersection fillets:

- 30' Radius for an intersection with a Primary Road
- 25' R - Secondary
- 20' R - Tertiary
- 15' R - Alley

The Proposed Site Development Plan reflects these guidelines and if you are in agreement, please sign below. Thanks again for your assistance.

Sincerely,



Jeff Seidleck

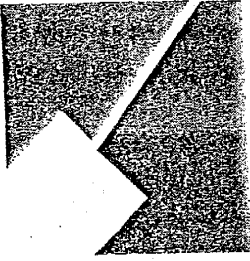
Approved: \_\_\_\_\_

Joseph Y. Cheung  
Manager - Right of way Permitting and  
Plan Review Section

cc: MCDPS - Sarah Navid  
MNCPPC - Wynn Witthans

W:\WPFILES\Letters\Montg County Mr Cheung ClarksVill Pre Plan101030.wpd

243



## MEMORANDUM

July 23, 2003

TO: Wynn Witthans, Site Plan Review, Development Review Division  
Michael Ma, Site Plan Supervisor, Development Review Division

FROM: Doug Powell, Plan Review Coordinator, Park Planning and Resource  
Analysis Unit, Countywide Planning Division *D. Powell*

RE: Clarksburg Village Subdivision, Site Plan #8-03002

Park Planning and Resource Analysis staff has reviewed the above-referenced Plan and requests the following **CONDITIONS OF APPROVAL**:

**8-03002**  
**Clarksburg Village**

1. Applicant to construct an 8-foot wide asphalt/boardwalk hiker/biker trail in the Clarksburg Greenway on the property applicant currently owns. The alignment will follow the route established by the Clarksburg Greenway Facility Plan and be constructed to park standards and specifications. The Applicant will provide necessary bridges and boardwalk per the Facility Plan.
2. Applicant will construct the portions of the hiker/biker trail from Stringtown Road east to Newcut Road and north to the Greenway Village Property that are not on applicant's property, provided that M-NCPPC acquires the ownership or easement rights across the needed property along the trail alignment and funds the proportionate cost to Applicant for construction of these additional sections of trail.
3. Applicant will construct Foreman Boulevard to allow for grade separated crossing for the hiker/biker Greenway Trail. The trail crossing should be constructed to accommodate the trail under the road without changing the natural location, configuration or composition of the stream channel, and should be located to minimize flooding of the trail and minimize surface water runoff from the paved trail directly into the stream. Trail crossing to meet the

"staff guidelines" as set out in the attached Meeting Summary of March 18, 2002 unless otherwise agreed to by M-NCPPC staff and Applicant. Due to the substantial length of the trail under Foreman Boulevard, Applicant to install adequate lighting along the trail under the road. Final trail/road crossing details to be submitted to M-NCPPC staff for approval.

4. The property within the delineated Clarksburg Greenway along Little Seneca Creek and Little Seneca Tributary will be dedicated to M-NCPPC and the hiker/biker trail constructed or clearly delineated and marked prior to construction of the residences that abut the Greenway. Dedication to be made at time of record plat and boundaries to be clearly staked to delineate between parkland and private property. Dedicated property to be transferred free of trash and unnatural debris.
5. The school/park site off of Midcounty Highway will be graded, surfaced with topsoil, fine graded to a maximum of +/- 6" over 100', and seeded as appropriate for ball field cover. The entire site, including the ball field area at the north end, will be maintained by the Board of Education for use as an elementary school if such school is constructed. If the school is not constructed by the Board of Education, the entire school/park site will be owned and managed by M-NCPPC for use as parkland.

**Meeting Summary**  
*Prepared by Lyn Coleman*

TOPIC: Reaching Staff Consensus on How Clarksburg Greenway Will Cross Roads  
DATE: March 18, 2002  
ATTENDING: Lyn Coleman, Karen Kumm, Wynn Witthans, Mark Pfefferle, Larry Cole, Marian Elsasser, Art Nelligan  
SUMMARY PREPARED BY: Lyn Coleman

The focus of the meeting was to develop planning and design guidelines for two road-trail intersections that are part of the Clarksburg Village subdivision application: Foreman Blvd and Midcounty Arterial.

First, we developed some general guidelines for trail crossings under roads:

1. Minimum clearance of 12' to accommodate rescue and maintenance vehicles.
2. Tread or path width of 10' in constricted area under road; 12" to 24" cleared area on either side of path.
3. Trail must be located above floodplain. Construction practices that help convey water from the trail are encouraged.
4. Construction approaches that minimize length of tunnel are encouraged including use of wing walls, 45 degrees off centerline of trail to maximize light in tunnel.
5. At least a 2-1/2 foot head wall should be provided over the entrance to the tunnel.
6. When trail length under road is less than 50 feet, no artificial light will be required (NOTE: staff is continuing to research whether this is the correct standard)
7. Minimize the extent of riprap needed to stabilize stream banks outside of the tunnel itself.
8. A corrugated tunnel interior helps reduce graffiti. Any surface used in the bridge should allow easy maintenance and cleaning by park staff.

**FOREMAN BLVD. GUIDELINES**

**THE TRAIL MUST GO UNDER THE ROAD.** The length of the trail under Foreman Blvd. will be approximately 35 to 40 feet. The basic issue at Foreman Blvd. is whether there should be single bottomless culvert where the trail and the creek are both located or whether a double arch should be provided to separate the trail from the creek. The second arch does not have to be connected to the first. It can be separated from the first and outside the floodplain. Each approach has advantages and disadvantages. The developer may pursue either approach assuming the following standards are achieved:

Single bottomless culvert: The trail must be located above the 100-year floodplain. The trail should not routinely require maintenance to remove mud and debris after storm events. The road may have to be elevated to provide trail clearance.



Double arches: For aesthetic reasons, do not mix arch and box culverts—use one type or the other. Do not place arch supports in the stream. Prefer continuous head wall over both arches or culvers for aesthetic reasons.

## MIDCOUNTY ARTERIAL GUIDELINES

The length of trail tunnel beneath Midcounty Highway would be 120 to 130 feet.

Three options are possible where the trail traverses Midcounty Arterial: 1. Cross at grade, relying on bikepath along Newcut Road Extended. 2. Cross beneath Midcounty Arterial using culvert. 3. If a bridge is built for Midcounty Arterial to traverse the stream, place the trail below the bridge at a location that minimizes impact to the stream.

In terms of option 3, the Planning Board has supported a bridge as part of a Taxing District for Clarksburg. Whether it will happen is not known yet. The bridge would be outside the floodplain.

In terms of option 2, separate bottomless arches are suggested. There should be openings in the median of Midcounty Arterial to provide natural light for the trail users and a guardrail should be provided on the road. Staff will ask parks as to whether more height clearance and width for the trail should be requested than for Foreman because of the length of the tunnel.

Option 1 would require trail users to cross at a roundabout at the intersection of Newcut Road and Midcounty where no traffic light is planned.

Staff will continue to keep informed on the status of Option 3.

Lyn agreed to prepare a map showing all trail proposals for Clarksburg so we can make decisions on these bridge crossings based on what is being proposed on adjoining properties. We all agreed this meeting was very useful and should continue meeting to address other road/trail crossing issues, including Skylark Road at Ovid Hazen Wells Park and trail location on Martens and Clarksburg Triangle.



DEPARTMENT OF PERMITTING SERVICES

Douglas M. Duncan  
County Executive

Robert C. Hubbard  
Director

MEMORANDUM

June 24, 2003

TO: Wynn Witthans  
Development Review Division - MNCPPC

FROM: Sarah R. Navid *Sarah Navid*  
Right-of-Way Permitting and Plan Review Section

SUBJECT: Site Plan Review #8-003002 Phase I - Clarksburg Village

We have reviewed the subject site plan and recommend approval. The following comments will apply when the plan is submitted for roadway permitting review:

- The geometrics for Snowdens Farm Parkway (A-305) including the intersection with Stringtown Road will be reviewed in greater detail at permitting review. For most intersections, the left turn lanes will be 175' long with 150' reverse curve tapers. These dimensions will be shortened or lengthened according to the specific intersection characteristics and intersection spacing. A 7' wide bikeway is acceptable on the east side of the road from Blue Sky Drive to Grand Elm Street to supplement bikeway access to the school.
- The following fillet radii are acceptable: 30' for primary/arterial roads, 25' for secondary roads, 20' for tertiary roads and 15' for alleys. These are appropriate for the entire Clarksburg Village development.
- Rainbow Arch Drive should be widened to 36-40' as feasible, for the short section between Stringtown Road and Derby Post Place to accommodate left turns in both directions. Derby Post Place is acceptable as shown.
- Two curb ramps will be provided on each corner of four-leg intersections and on one corner of T-intersections (not including alleys or driveways) wherever feasible. DPS will work with the applicant at permitting review, for the specific designs and locations of the ramps.
- We concur with the traffic circle at Granite Rock Road and Grand Elm Street with landscaping to be maintained by the HOA. Per our most recent criteria, a 4' wide traffic bearing brick collar should be provided. The driveway to the house on the southwest corner should be relocated from Granite Rock Road to Grand Elm Street to provide clearance of 25' from the handicapped ramp.



248

- One mid-block handicapped ramp at a consistent location will be provided for pedestrian crossings for the mews between Rainbow Arch Drive and Bent Arrow Drive. A one side, mid-block choker on the east side of Bent Arrow Drive will be provided for the crossing between the park areas.
- The west leg of Foreman Boulevard should be 36' wide between Snowdens Farm Parkway and Turtle Rock Terrace. The 26' wide alternative primary design is appropriate south of Turtle Rock Terrace through the stream valley. The bike path should be concrete rather than asphalt adjacent to the front of lots 1-3.
- The right turn channelization at Horseshoe Bend Circle and Snowdens Manor Parkway is not required or recommended.
- Tree spacing of 40 feet is acceptable on the internal neighborhood streets. Standard county spacing (50') should be used on arterials, including the median on Stringtown Road.
- DPS will work with the applicant during permitting review to resolve any less than standard driveway setbacks from intersections and the design of the temporary turnaround on Cool Valley Court.

Thank you for the opportunity to review this plan. Please let me know if you have any questions.

srn\clarksburgvillage.doc

cc: Joe Cheung  
David Flanagan  
Les Powell  
Jeff Seidleck  
Jeff Riese



November 7, 2002

Mr. Malcolm Shaneman  
Development Review Division  
MNCP&P Commission  
8787 Georgia Avenue  
Silver Spring, MD 20910-3760

Re: Final Clarksburg Village TDR Requirement

Dear Malcolm,

The Clarksburg Village Preliminary Plan will be going back to the Planning Board to add the 24 lots in Nanna along with three more MPDU's and to modify the traffic conditions to match those recently approved for Greenway Village. If possible, I would like to also settle on the number of TDR's needed for Clarksburg Village.

In my memo of August 2, 2001, I presented four different ways to calculate the number of MPDU's and TDR's for Clarksburg Village. I propose we now agree on Method 4 as revised for the slight different number of acres and units due to the Nanna Property addition. This calculation is attached for your review and it indicates that we should have 337 MPDU's and 521 TDR's.

If you agree, I would like to get these numbers approved with the revised preliminary plan. These revised numbers could then be used in the review and approval of our Section One site plan which should be in front of the Planning Board fairly soon.

I would also request that the size of the approved day care building be increased from 2,500 S.F. to 5,000 S.F. This building size is what the day care companies require today. Thank you for your consideration of my request.

Sincerely,

David D. Flanagan  
President

DDF:klc  
cc: Nellie Maskal

250

Method 4

Preliminary Plan Tabulations:      Permitted Density = 2,708 units  
Proposed Density = 2,590 units  
741.4 acres

Based on "Example C" of TDR/MPDU memo

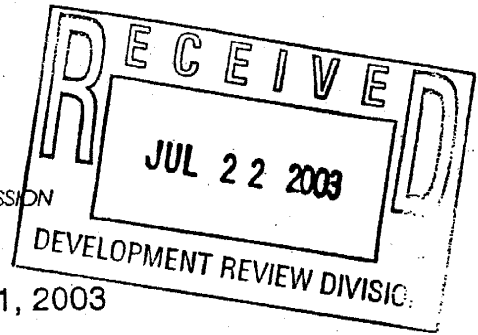
Applicant wishes to minimize number of MPDU's

1.    Percent Density Bonus:  
2590 - 1482 (base density) - 500 (250 multi TDR's) - 495 (1 for 1 TDR) = 113  
units, minimum density bonus  
 $113 \div (1482 + 995) = 4.6\%$  density bonus
2.    Number MPDU's (from table):  
4.6% density bonus requires 13% MPDU  
 $2590 \times .13 = 337$  MPDU
3.    Number TDR's:  
Since number of MPDU's (337) is greater than density bonus (113), no bonus  
market rate units are obtained. Number of units from TDR's is, therefore;  $2590 -$   
 $1482$  (base density) -  $337$  MPDU = 771 units from TDR's

250 (multi 2 for 1) = 500 units  
271 (1 for 1 TDR) = 271 units  
521 TDR's create    771 units from TDR's

4.    Unit Summary:	
Base Density	1482
TDR's (1 for 1) units	271
250 TDR's (2 for 1 multi) units	500
MPDU's	<u>337</u>
Total	2,590

Total TDR's            521  
Total MPDU's          337



July 21, 2003

## MEMORANDUM

TO: Wynn E. Witthans, Urban Designer  
Development Review Division

VIA: Sue Edwards, I-270 Corridor Team Leader *Sue*  
Community-Based Planning Division

FROM: Nellie Shields Maskal, Community Planner *NH*  
Community-Based Planning Division

SUBJECT: Clarksburg Village, Phase 1 (Site Plan No. 8-03002)

### RELATION TO THE 1994 CLARKSBURG MASTER PLAN

Clarksburg Village is located in the Newcut Road Neighborhood District of the 1994 Clarksburg Master Plan Area and will be traversed by the proposed A-302 (Newcut Road Extended) and proposed A-305 (Midcounty Arterial). It is also located south of Stringtown Road, northeast of Ridge Road, and northeast of MD 355.

This neighborhood includes approximately 1,060 acres, most of which is vacant. It is separated from the Clarksburg Town Center and Transit Corridor Districts by Stringtown Road and Little Seneca Greenway and will be traversed by the proposed Midcounty Arterial (A-305).

As shown in Figure 1, the land use recommendations for the Newcut Road Neighborhood propose a mixed-use center on Newcut Road, approximately midway between A-305 and Skylark Road. This will provide a concentration of activity and density in the middle of the neighborhood while promoting lower densities at the edges. This concept also clusters development near the greenway system and enhances public access to Ovid Hazen Wells Park.

The Clarksburg Master Plan recommends a mixed-use neighborhood with transit-oriented land use patterns for this District. The proposed site plan recommends a significant number of new residential units. In combination with Greenway Village located directly to the east, these two large projects will provide approximately 3,900 residential units and 109,000 square feet of commercial space.

The proposed site plan complies with the Master Plan land use objectives as follows:

1. Range of Units

The Master Plan emphasizes 45-55 percent single-family detached, 35-45 percent single-family attached, and 10-20 percent multi-family dwelling units. The proposal provides for a mix of units that satisfies the range of residential unit types proposed in the Master Plan.

2. Street Oriented Buildings

Street oriented buildings are one of the major principles of the Master Plan. The Planning Board at time of Preliminary Plan approval recommended that dwelling unit orientation along all road right-of-ways be addressed at the time of site plan review.

Conformance to the Master Plan's Policy 7, on street orientation and specific language in the Newcut Road Neighborhood, page 62, is very important if Clarksburg is to be a different, neo-traditional type of community that will make Clarksburg unique and appealing. See Figures 2 and 3.

To assure that rear yards shall not be seen from adjacent roadways, especially at street intersections, unit orientation should be to major streets. The proposed site plan generally conforms to this Master Plan objective.

3. Windows into the Park

The "park bordered by a street" relationship opens up views of the Greenway and is a significant design principle of the Master Plan. This important relationship allows the community to visually experience the beauty of Clarksburg's stream valley parks and not have the open space hidden behind a row of residential lots. In general, along the Master Plan roadways (A-305 and A-302), there will be significant vistas of the Little Seneca Creek Greenway.

The proposed site plan satisfies this Master Plan objective.

4. Bikeway Connection

The Master Plan emphasizes bikeway access from neighborhoods to shopping and employment areas as well as to key community facilities. The applicant should provide a bikeway connection through the greenway trail to the adjacent Greenway Village community, Ovid Hazen Wells Regional Park, and the proposed elementary school. This will improve access to the neighborhoods, school, and the park.

The Greenway bikeway trail needs to run under A-305 within a structure and continue up to the Greenway Village community. Connections to the Greenway bikeway trail need to be shown from the traffic roundabout.

## CONCLUSION

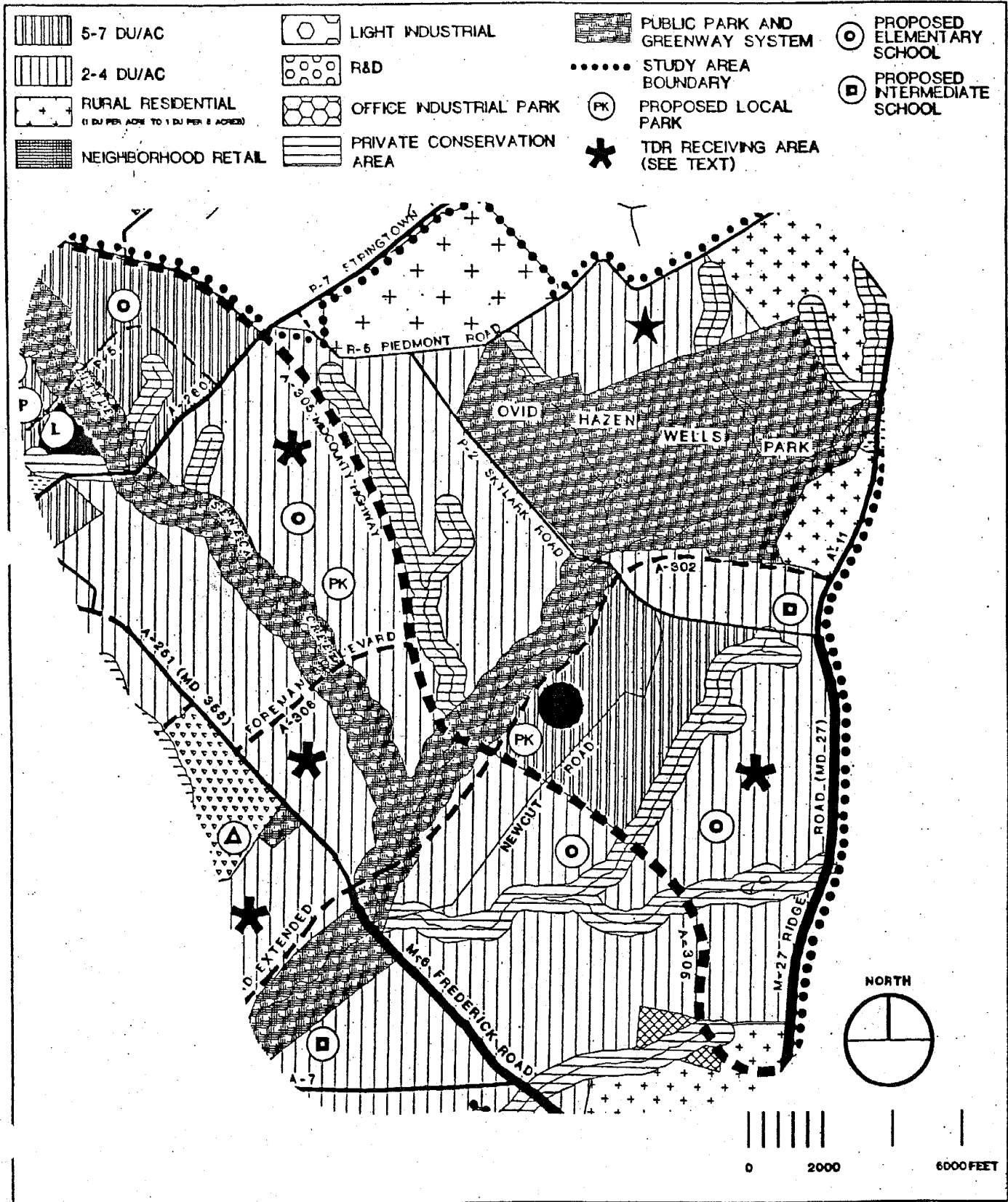
Staff recommends approval of the proposed site plan subject to the conditions mentioned above.

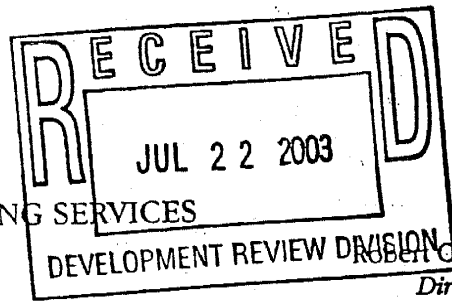
## Attachments

NSM:tv: N:/8-03002.doc



# Newcut Road Neighborhood Land Use Plan





DEPARTMENT OF PERMITTING SERVICES

Douglas M. Duncan  
County Executive

July 18, 2003

ROBERT C. Hubbard  
Director

Mr. Alan Barney  
Charles P. Johnson Associates, Inc.  
1751 Elton Road  
Silver Spring, Maryland 20903

Re: Final Water Quality Plan for Clarksburg Village-  
Phase I  
SM File #: 200006  
Preliminary Plan No.: 1-01030  
Tract Size, Zone: 333 Ac., R-200/TDR-4,  
R-200/TDR-3, R-200 and PD-4  
Tax Plate: EW, EV, FV 123 and FV 122  
Watershed: Little Seneca Creek

**SPECIAL PROTECTION AREA**

Dear Mr. Barney:

Based on a review by the Department of Permitting Services Review Staff, the Final Water Quality Plan (FWQP) for the above mentioned site is conditionally approved. This approval is for the elements of the Final Water Quality Plan of which DPS has lead agency responsibility, and does not include limits on imperviousness or stream buffer encroachments.

**Site Description:** Phase I of the site consists of 333 acres located on the east side of Stringtown Road across from the intersection with Clarks Crossing Drive. The proposed zoning of the site is R-200/TDR-3 & 4, R-200 and PD-4. The development will consist of mixed residential (single-family detached, townhouses, and multi-family units) along with the associated infrastructure. This site is located in the Clarksburg Special Protection Area (SPA) of the Little Seneca Creek Watershed.

**Stormwater Management:** Water quantity control for this site will be provided via several dry ponds. These structures will provide channel protection volume for the one-year storm with a maximum detention time of 12 hours per state standards. Quality control will be provided via a treatment train that consists of vegetated conveyance swales, dry swales (vegetated swales underlain with infiltration structures), bioretention structures, surface sand filters, structural sand filters and infiltration/recharge structures. Non-structural measures for the backs of some lots that are draining to the stream valley buffer have also been used. In areas where open section roads are not feasible, additional water quality measures are required to offset the lost benefits that open section roadways provide. These offsetting measures include maximizing the sand surface area in the surface sand filters (sand on the entire footprint), providing structural pretreatment prior to all filtering structures and providing additional recharge volume. Areas that are intended for vehicular use are to be pretreated prior to entering filtration and infiltration structures. The water quality structures must be sized to treat a minimum of one-inch over the proposed impervious area without subtracting the recharge volume.



256

**Sediment Control:** Redundant sediment control structures are to be used throughout the site. These are to include upland sediment traps which drain to secondary traps down grade, or when this is not feasible sediment traps with forebays will be acceptable.

All sediment trapping structures are to be equipped with dewatering devices. Also, due to the sensitive nature of the watershed coupled with the large amount of proposed development, the use of flocculants or other measures to increase the effectiveness of sediment control removal will be required in the detailed sediment control plan. The following features are to be incorporated into the detailed sediment control plan:

1. The earth dikes that feed the sediment traps are to be constructed using trapezoidal channels to reduce flow rates.
2. The site grading shall be phased whenever possible to limit disturbance and immediate stabilization is to be emphasized.
3. Silt fence alone will not be allowed as a perimeter control. The use of super silt fence will be acceptable for small areas of disturbance.

**Performance Goals:** The performance goals that were established at the pre-application meeting are to be met as specified in the Preliminary Water Quality Plan and further refined in the Final Water Quality Plan. They are as follows:

1. Protect the streams and aquatic habitat.
2. Maintain the natural on-site stream channels.
3. Minimize storm flow run off increases.
4. Identify and protect stream banks prone to erosion and slumping.
5. Minimize increases to ambient water temperatures.
6. Minimize sediment loading.
7. Maintain stream base flows.
8. Protect springs, seeps, and wetlands.
9. Minimize pollutant loading (nutrient and toxic substances).

**Monitoring:** The monitoring must be in accordance with the BMP monitoring protocols which have been established by the Department of Permitting Services (DPS) and Department of Environmental Protection (DEP). Prior to the start of any monitoring activity, a meeting is to be held on site with DEP, DPS and those responsible for conducting the monitoring to establish the monitoring parameters. **The pre-construction monitoring must be completed prior to the issuance of a sediment control permit.** See the attachment to this approval letter for Phase I titled "Description of Monitoring Requirements" for during construction and post construction detailed monitoring requirements.

The "during construction" monitoring requirements are to last through the construction phase of the development, and the "post construction" monitoring will last for five years after construction is complete.

**Conditions of Approval:** The following conditions must be addressed in the initial submission of the detailed sediment control/stormwater management plan. This list may not be all inclusive and may change based on available information at the time of the review:

1. The stream channels on-site are to be walked to determine if channel restoration is necessary.
2. The proposed roadway dry swales are to have under drains that tie into the proposed storm drain structures. This will require approval from the Department of Public Works and Transportation.
3. Percolation tests must be performed to determine the feasibility of providing infiltration structures for water quality and ground water recharge.
4. Provide clear access to all stormwater management structures from a public right-of-way.
5. Water quality structures that are to be used for sediment control must have a minimum undisturbed buffer of two feet from the bottom of the sediment trap to the bottom of the stormwater structure.
6. The channel protection volume compensation for surface sand filter "S" must be provided in Pond "C".
7. Move the dry wells on lots 105-114, block T off of the lots and down slope of the PUE. Also, move the dry well for lots 47-50, block R off of lot 47 and down slope of the sanitary sewer line.
8. Structural pretreatment devices are to be sized for their entire contributing drainage area.
9. Additional pretreatment (other than road side swales), such as water quality inlets, will be required for surface sand filters that are treating large drainage areas (greater than 5 acres).
10. Prior to permanent vegetative stabilization, all disturbed areas must be topsoiled per the latest Montgomery County Standards and Specifications for Topsoiling.
11. Provide level spreaders and/or plunge pools at all of the quantity pond outfalls and at the storm drain outfall at surface sand filter "S".
12. Channel protection volume is to be provided separately from water quality volume.
13. Provide four inches of pea gravel on top of all of the proposed surface sand filters.
14. All of the proposed stream crossings are to be constructed using environmentally sensitive design criteria. Bottomless arch culverts as proposed in the preliminary Water Quality Plan will be acceptable.

15. At a minimum one foot of stone (dead storage) is to be provided below the outlet pipe of the surface sand filters to allow for groundwater recharge.
16. Minimize the use of insecticides and fertilizers via a residential Integrated Pest Management Plan as part of the Homeowners Association (HOA) documents. A draft of this plan/document is to be submitted at the detailed sediment control plan stage, and the final document is to be submitted prior to bond release.
17. MCDPS reserves the right to require the developer to provide full time, third-party, on-site, sediment control inspection if the Department decides the goals of the Water Quality Plan are not being met.

Any divergence from the information provided to this office; or additional information received during the development process; or a change in an applicable Executive Regulation may constitute grounds to rescind or amend any approval actions taken, and to reevaluate the site for additional or amended Water Quality Plan requirements.

If you have any questions regarding these actions, please feel free to contact Leo Galanko at (240) 777-6242.

Sincerely,



Richard R. Brush, Manager  
Water Resources Section  
Division of Land Development Services

RRB:CN200006

cc: W. Witthans  
S. Federline  
M. Pfefferle  
L. Galanko  
D. Marshall  
SM File # 200006

On on-site 333 ac.  
QI on-site 333 ac.

259



DEPARTMENT OF ENVIRONMENTAL PROTECTION

Douglas M. Duncan  
County Executive

James A. Caldwell  
Director

Attachment to the Final Water Quality Plan for Clarksburg Village Phase I  
Description of BMP Monitoring Requirements

SM # 200006 (Phase I)  
Date: July 16, 2003

The purpose of this attachment is to add specificity to the standard monitoring requirements and procedures contained in the BMP monitoring protocols. Some supplemental QA/QC, data analysis, reporting and record keeping tasks will be explained in this attachment.

This BMP monitoring is being done to address whether the site performance goals are met. The purpose of the data analysis and reporting is to describe quantitatively how performance goals are met. Monitoring efforts and reports must employ scientific methods in an attempt to determine effectiveness of BMPs. Monitoring is to be done according to BMP Monitoring Protocols. However, these monitoring protocols are intended to provide a framework only. Some supplemental requirements are provided in this attachment. Prior to initiation of monitoring, consultants must contact DEP to review procedures and requirements. Thorough and careful analysis of data is required. Method(s) of data analysis and required statistical procedures may vary depending on the results obtained. Methods and assumptions should be detailed. BMP Monitoring Protocols are available at <http://www.co.mo.md.us/services/dep/Publications/pdf%20files/bmpprotocols.pdf>

**Monitoring Requirements**

1. BMP monitoring reports must include a table with dates of all major construction activities which take place on the site. (Groundbreaking, clearing, grading, BMP construction, BMP conversion, pond maintenance, etc.) Information should refer to specific structures and portions of the site.
2. Provide a record of continuous stream flow at two locations (Little Seneca Creek mainstem and downstream of the confluence of tributaries 109 and 110). The purpose of this monitoring is to document how development changes stream hydrology. Installation, maintenance, rating curve and data analysis must meet USGS standards. Pre-development conditions are to be compared with post-development conditions examining



Watershed Management Division

260

any relevant parameters including average flows, peak flows, hydrograph shape, lag time, etc. Conclusions regarding hydrologic impacts must be provided with graphs of supporting data.

3. A rain gage will be installed and maintained. Data will be collected on 15 minute intervals. Data collected will be used in the analysis of flow and groundwater data. Instruments are to be calibrated according to manufacturer's recommendations.
4. Stream water temperature will be monitored at seven (7) locations. This monitoring will occur from June 1 through September 30 each year. Accuracy of the temperature logger is to be checked prior to use in spring. An accuracy check after retrieval in fall may be necessary depending on results obtained. Consult with equipment manufacturer or DEP for appropriate procedures. All accuracy checks are to be submitted with data analysis and reports. Temperature loggers should be set to take readings at 24 minute intervals. Consult with DEP if readings will be taken at different intervals. Water temperature data is to be compared to air temperatures and precipitation during the period of June 1 through September 30 to evaluate development impacts. An on-site temperature logger will be required to obtain temperature data. Pre-construction results should be compared with data from subsequent periods. Results should also be compared among stations to evaluate temperature patterns over stream distance.
5. Ten (10) cross sections specified in the Greenway Village Trail PWQP will be monitored annually to evaluate the impact of the Clarksburg Village on stream geomorphology. Results should be plotted and compared to pre-construction conditions. DEP will be consulted before locating the cross sections. Cross sections surveys may need to be extended to the nearest reliable benchmark to allow accurate mapping of locations.
6. Stream channel embeddedness is to be monitored at the six (6) discrete flow stations. Photos of the stream bottom are to be taken concurrently with embeddedness readings. Frequency of embeddedness readings is one (1) per quarter year. Pre-construction results are to be compared with during and post-construction results to determine effectiveness of sediment control on the site. Graphs should be presented along with conclusions.
7. Photographs of the stream bed and channels are to be taken annually at temperature, discrete flow and continuous flow stations. The photographs are to be compared over time to evaluate development impacts.
8. Eighteen (18) groundwater monitoring wells are to be maintained. Well installation logs should be provided. Each groundwater well is to be surveyed to determine exact elevation. Groundwater levels are to be reported as actual elevations (surface elevation - depth to water). Frequency of readings is to be one per month at each well. Data should be analyzed to determine the effectiveness of site design and stormwater management in maintaining groundwater levels. Data from the pre-construction period should be compared to results obtained in subsequent periods. Graphs should be provided to

support conclusions. Groundwater level data will be compared to stream flow data and rainfall data.

9. Water chemistry sampling is required at nine of the groundwater wells. The wells to be monitored will be numbers 2, 4, 5, 6, 7, 9, 14, 15 and 16. Parameters include: nitrate, nitrite, TKN, total nitrogen, ortho-phosphorus, total phosphorus, lead, zinc, copper, cadmium. See Table 1 for relevant methods and detection limits. Sampling is to be done quarterly along with groundwater elevation readings. This monitoring is intended to evaluate the effect of construction impacts, BMPs that promote infiltration and residential land use impacts. Results will be compared among wells and also over time to evaluate how groundwater nutrient levels are impacted by development. Results will also be compared to stream nutrient data to evaluate the impact of groundwater nutrients on streams.
10. Discrete stream flow readings will be taken at six locations. The purpose of this monitoring is to compare baseflow stream discharge with groundwater elevation. Therefore, flow readings are to be done concurrently with the monthly groundwater well readings. Instruments are to be calibrated annually for low flow conditions.
11. Stream nutrients are to be monitored in the vicinity of temperature monitoring site number 1. One base flow grab and one automated flow-weighted composite storm flow sample is to be collected each quarter and analyzed for the parameters in Table 1. Storm sampling is to be done during rain events of at least 0.6 inches over a 24 hour period. Required laboratory methods and detection limits are also listed in table 1.

Table 1. Pollutant parameters, lab methods and detection limits

Parameter	Method	Detection Limit
Nitrate	EPA 353.2	0.05 mg/L as N
Nitrite	EPA 354.1	0.02 mg/L as N
TKN	EPA 351.3	0.2 mg/L as N
Orthophosphorus	EPA 365.3	0.01 mg/L
Total Phosphorus	EPA 365.3	0.05 mg/L
Total Suspended Solids	EPA 160.2	1.0 mg/L
Total Cadmium	EPA 213.2	0.6 µg/L
Total Copper	EPA 220.2	1.2 µg/L
Total Lead	EPA 239.2	0.4 µg/L
Total Zinc	EPA 289.2	3.4 µg/L

Concentrations and storm event loadings will be calculated. The storms during which the samples are collected should be characterized for duration and total rainfall.



Reports are to include analysis comparing pre-construction with post-construction results and draw conclusions on whether or not pollutant concentrations or loadings have changed in any significant way.

12. TSS grab sample locations will be established at the two (2) largest sediment ponds on the site during construction. Exact sampling locations will be determined by DEP in the field to allow evaluation of the effectiveness of redundant sediment traps. Sampling is to be done quarterly during storm events throughout the construction phase. Storms should have at least one half inch of rainfall in a 24 hour period to be counted towards this requirement. Samples should be collected within 24 hours after the storm. The storms during which the data was collected should also be characterized for duration and total rainfall. Storm frequency (return interval) should be reported as described in Technical Paper #40 of USDOC Weather Bureau. Results should be examined to determine the efficiency of the structure and percent removal of pollutants. Data should be compared to past periods and published results for similar structures. Graphs should be provided to support conclusions.
13. Pollutant removal efficiency will be determined for three (3) individual BMP structures. The water quality structures above ponds F, S and T will be monitored to evaluate BMP effectiveness under different site designs. Pollutants to be analyzed are listed in table 1. This monitoring will require the collection of automated flow-weighted storm composite samples at the inflow and outflow points of each structure. Qualifying storm events will be between one half (0.5) inch and one and one half (1.5) inches of rain in a twenty-four hour period. All three structures are to be monitored quarterly. Analysis will evaluate effects of differing site designs, whether pollutant removal efficiency changes over time, and compare removal efficiencies with published results. Drainage area, percent imperviousness, percent and total area of road surface, amount of open section or closed section roadways, and water quality pre-treatment approaches are to be reported and considered in the analysis.

One year of baseline data on items 2 (continuous flow), 4 (water temperatures), 6 (embeddedness), 7 (photos), 8 (groundwater levels) and 10 (discrete discharge measurements) must be collected as specified above before construction begins. Collection of data on items 3 (rainfall), 5 (cross sections), 9 (groundwater chemistry) and 11 (stream nutrients) should commence as soon as possible and continue for up to one year prior to construction. These items (3, 5, 9 and 11) do not need to be included in the pre-construction monitoring report. All items above with the exception of numbers 12 (sediment pond TSS) and 13 (water quality structure efficiency) should continue throughout the construction period and for five years post-construction. Item 12 (sediment pond TSS) is required only during construction. Item 13 (water quality structure efficiency) is only required during the post-construction period. A report on pre-construction conditions must be deemed acceptable by DEP prior to the issuance of a sediment control permit. For subsequent periods a draft annual report on BMP monitoring is due

to DEP by **October 31** each year. A final report is due annually by December 1. County code requires that reports be submitted quarterly. These quarterly reports may be incorporated in the annual report. This should be reflected in the title of the document. BMP monitoring reports are to be delivered with data in an electronic format to Mark Sommerfield at Montgomery County DEP and also to Leo Galanko at Montgomery County DPS. All information submitted to DEP will be public information that DEP may freely copy and distribute. Questions on the monitoring requirements and procedures may be directed to the following personnel.

Mark Sommerfield  
(240) 777-7737  
[mark.sommerfield@co.mo.md.us](mailto:mark.sommerfield@co.mo.md.us)

Doug Marshall  
(240) 777-7740  
[douglas.marshall@co.mo.md.us](mailto:douglas.marshall@co.mo.md.us)

Leo Galanko  
(240) 777-6242  
[leo.galanko@co.mo.md.us](mailto:leo.galanko@co.mo.md.us)



THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

Date Mailed: September 12, 2002  
Action: Approved Staff Recommendation  
Motion of Comm. Bryant, seconded by  
Comm. Perdue with a vote of 4-0;  
Comms. Bryant, Holmes, Perdue and  
Wellington voting in favor

**CORRECTED**  
**MONTGOMERY COUNTY PLANNING BOARD**

**OPINION**

Preliminary Plan 1-01030

NAME OF PLAN: CLARKSBURG VILLAGE AND SPECIAL PROTECTION AREA WATER QUALITY PLAN

On 11/29/00, CLARKSBURG VILLAGE, LLC submitted an application for the approval of a preliminary plan of subdivision of property in the R-200/TDR-3 and TDR-4, R-200 and PD-4 zones. The application proposed to create 2,563 lots on approximately 700 acres of land. The application was designated Preliminary Plan 1-01030. On 07/30/01, Preliminary Plan 1-01030 was brought before the Montgomery County Planning Board for a public hearing. At the public hearing, the Montgomery County Planning Board heard testimony and received evidence submitted in the record on the application. Based upon the testimony and evidence presented by staff and on the information on the Preliminary Subdivision Plan Application Form, attached hereto and made a part hereof, the Montgomery County Planning Board finds Preliminary Plan 1-01030 to be in accordance with the purposes and requirements of the Subdivision Regulations (Chapter 50, Montgomery County Code, as amended) and approves Preliminary Plan 1-01030.

- (1) Approval under this preliminary plan is limited to a maximum of 2,563 Residential Dwelling Units, 20,000 Square Feet Office/Retail Use and 2,500 Square Feet Daycare Facility
- (2) At least sixty (60) days prior to the submission of a complete Site Plan application the applicant shall submit an "Infrastructure Plan" for Planning Board review. The plan shall include the following:
  - a) Location and types of stormwater management facilities for quality and quantity controls that comply with the conditions of MCDPS' preliminary water quality plan
  - b) Delineate bike and pedestrian access pathways including all at grade and below grade crossings along all road rights of way and at stream crossings
  - c) All roadway networks including both private and public connections. Streetscape, lighting, sidewalks and paving materials
  - d) Delineation of "Greenway" and other open space areas including all environmental buffers
  - e) School sites and Park areas (adequate to provide for current programming needs)
  - f) Recreation guideline concept plan
  - g) Proposed schedule for clearing and grading of site

265

(3) To satisfy Policy Area Transportation Review:

- a. The applicant shall participate in widening MD 27 to six through travel lanes from Observation Drive in Germantown through the Brink Road intersection, and to four through travel lanes through the A-305 intersection; continue two northbound travel lanes through the Skylark Road intersection, including dedication along the site frontage. This improvement along MD 27 is consistent with the master plan recommendation. If, after master plan dedication along the west side of MD 27, sufficient right-of-way is not available for the proposed widening, the applicant has to either acquire additional right-of-way on the east side of MD 27 or dedicate additional right-of-way and widen MD 27 on their development side.
- b. The applicant shall dedicate on-site portions and participate in constructing Relocated Newcut Road (A-302) as a two lane divided arterial roadway between MD 27 and the A-305 intersection and as a four lane divided roadway between A-305 and MD 355
- c. The applicant shall dedicate and participate in constructing A-305 as a four lane divided arterial roadway between MD 27 and Stringtown Road
- d. The applicant shall dedicate and participate in constructing Foreman Boulevard as a two lane arterial roadway from its current terminus at Timber Creek Lane to A-305
- e. The applicant shall dedicate and participate in widening Stringtown Road as a four lane arterial along their frontage. This roadway improvement can be implemented by either the Department of Public Works and Transportation's CIP project, as a developer participation project or as the Clarksburg Town Center Development District.

(4) To satisfy Local Area Transportation Review:

- a. The applicant shall participate in constructing a second left-turn lane from northbound MD 355 to westbound MD 27
- b. The applicant shall participate in constructing additional turn/approach lanes on MD 27 and Brink Road at the intersection of MD 27/Brink Road
- c. The applicant shall participate in providing a separate left-turn lane from southbound MD 355 to eastbound Brink Road and a separate left-turn lane from westbound Brink Road to southbound MD 355.

(5) The applicant shall agree that the roadway improvements listed as conditions of approval are under construction in accordance with the phasing of road improvements for Clarksburg/DiMaio development as described in David D. Flanagan's letter dated March 14, 2001 and confirmed in our letter dated March 29, 2001.

(6) The applicant shall construct the following roads as standard closed section primary residential streets:

- Street "C" between A-305 and Street "I"
- Street "M" between A-305 and Street "E"
- Street "E" between A-305 and Street "M"
- Street "T" between A-305 and Street "W"
- Street "Y" between Streets "T" and "Z"
- Street "GG" between its intersections with A-305
- Street "R" – approximately 400' from A-305 (or correspond to first intersection)
- Street "Z" next to School

- (7) The applicant shall construct two roundabouts on A-305 as shown on the preliminary plan to define the boundaries of the business district portion of this roadway.
- (8) The applicant shall construct A-305 as a business district street between the two roundabouts in accordance with DPWT Standard No. MC-219.03
- (9) All roads rights of way shown on the approved preliminary plan shall be dedicated by the applicant, to the full width mandated by the Clarksburg Master Plan, unless otherwise designated on the preliminary plan
- (10) All roads shown on the approved preliminary plan shall be constructed by the applicant to the full width mandated by the approved and adopted Master Plan, and to the design standards imposed by all applicable road codes. Only those roads (or portions thereof) expressly designated on the preliminary plan "To be Constructed by \_\_\_\_\_" are excluded from this condition
- (11) Additional forest save areas to be created adjacent to the environmental buffer at the northwestern portion of the property. This will require reconfiguration of the layout for that portion of the property at site plan
- (12) At site plan, the following stormwater management facilities to be reconfigured to maintain at least half of the environmental buffer widths as undisturbed areas: Ponds B, C, L, N, and V. Reconfigure Pond Q and adjacent sewer line to maintain most of the environmental buffer as undisturbed area. Eliminate, if possible, or minimize the footprint of Pond J by providing stormwater management quantity and quality controls at alternative locations. For remaining stormwater management facilities, any environmental buffer encroachments to be no more than that shown on the concept study, dated 4/12/01
- (13) Compliance with the conditions of approval for the preliminary forest conservation plan dated July 25, 2001. The applicant must meet all conditions prior to MCDPS issuance of sediment and erosion control permits, as appropriate. Conditions include, but are not limited to, the following:
  - a. Prior to the submission of the first site plan, submit a plan identifying specific areas proposed for natural regeneration and justifying its use in these specific areas. The plan should include measures to enhance the success of natural regeneration. At this time, areas proposed for natural regeneration must be identified in the field so that M-NCPPC may evaluate these areas as to the feasibility of natural regeneration
  - b. Environmental buffers, forest conservation and planting areas, and any natural regeneration areas to be within park dedication areas or in Category I conservation easements. Conservation easements to be shown on record plats
- (14) Conformance to the conditions as stated in DPS preliminary water quality plan approval letter, dated 7-25-01.
- (15) Measures to mitigate traffic noise impacts on residential uses to be shown at site plan. Mitigation measures to be shown along Ridge Road. Mitigation measures may also be needed along Stringtown Rd., A-302, and A-305
- (16) At site plan, provide permanent signage along conservation easement areas to make identify environmentally sensitive areas that are to remain protected Applicant to construct an 8 foot wide paved hiker/biker trail in the Clarksburg Greenway on the property applicant currently owns. The alignment will follow the approximate route as set out in Phase I of the Trail Facility Plan, with the detailed trail location and other design and construction considerations to be worked out by the time of the Infrastructure Plan

- (17) Applicant will construct the portions of the hiker/biker trail from Stringtown Road east to Newcut Road and north to the DiMaio Property that are not on applicant's property, provided that M-NCPPC acquires the ownership or easement rights across the needed property along the trail alignment and funds the proportionate cost to Applicant for construction of these additional sections of trail
- (18) Applicant will construct Foreman Boulevard and Midcounty Highway to allow for grade separated crossing for the hiker/biker Greenway Trail. The trail crossings should be constructed to accommodate the trail under the roads without changing the natural location, configuration or composition of the stream channel, and should be located to minimize flooding of the trail and minimize surface water runoff from the paved trail directly into the stream
- (19) The property within the delineated Clarksburg Greenway along Little Seneca Creek and Little Seneca Tributary will be dedicated to M-NCPPC and the hiker/biker trail constructed or clearly delineated and marked prior to construction of the residences that abut the Greenway
- (20) The park area marked as Jeane Onufry Local Park will be graded, surfaced with topsoil, fine graded to a maximum of +/- 6" over 100', and seeded as appropriate for ball field cover. Grading plans will be submitted to park staff for review and approval. The park area will be dedicated to M-NCPPC
- (21) The school/park site off of Midcounty Highway will be graded, surfaced with topsoil, fine graded to a maximum of +/- 6" over 100', and seeded as appropriate for ball field cover. Grading plans will be submitted to park staff for review and approval. The parking and ball field area at the north end of the site will be separately delineated and dedicated to M-NCPPC
- (22) Phasing of the dedication of the school/parks sites shall be incorporated as part of the phasing schedule included with site plan approval
- (23) At site plan address specifically the following:
  - a. Dwelling unit type and layout within the mixed use center
  - b. Coordinate with adjoining property owner to achieve a well integrated and designed commercial center that locates parking to the rear and provides special treatment for paving, seating, landscaping, lighting and other pedestrian amenities
  - c. Provide adequate "windows" into open space areas
  - d. Dwelling unit orientation along all road rights of way
- (24) Provide a minimum of 600 TDR's pursuant to the objectives of the Clarksburg Master Plan based on current dwelling unit approval
- (25) Final number and location of units including number of TDR's to be determined at site plan
- (26) Final number of MPDU's to be determined at site plan dependent on Condition #23
- (27) No clearing, grading, unless designated on "Infrastructure Plan" and recording of lots prior to site plan approval
- (28) The validity of the Preliminary Plan will remain valid until July 30, 2013 and shall be phased for recordation of lots as follows:
  1. Phase One: 300 lots by July 30, 2004
  2. Phase Two: 1,000 lots by July 30, 2007
  3. Phase Three: 1,700 Lots by July 30, 2010
  4. Phase Four: All lots by July 30 2012

Prior to the expiration of the validity periods, a final record plat for all the property delineated in each phase must be recorded or a request for an extension must be filed